TO CONSERVE AND PROTECT: EXAMINING LAW ENFORCEMENT RANGER
CULTURE AND OPERATIONS IN QUEEN ELIZABETH NATIONAL PARK,
UGANDA

by

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Abstract

To Conserve and Protect: Examining Law Enforcement Ranger Culture and
Operations in Queen Elizabeth National Park, Uganda

By William De Jesus Moreto
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Guided by the police organizational culture and police time use literature, this
dissertation presents the findings from an exploratory case study of law enforcement in
Queen Elizabeth National Park (QENP) in Uganda. Based on 24 interviews with law
enforcement rangers and supervisors and participant observations of ten routine law
enforcement patrols, the study sought to address two research objectives: First, what
perceptions and opinions do law enforcement rangers and supervisors hold about law
enforcement and illegal activities in QENP? And second, what types of activities and
decision-making occur during routine law enforcement patrols?

It was found that themes within the police culture literature exist within law enforcement
rangers in QENP. Due to the requirements of living on-site, law enforcement rangers
displayed a unique 'ranger culture' that was directly affected by both occupational and
personal factors. In addition, respondents shed light on the various tactics utilized by
poachers within the park, as well as motivations that influenced poaching. Moreover,
respondents provided insight on ranger-related misconduct and illegal activities, job
satisfaction and law enforcement needs.

For the second objective, it was found patrol groups utilized their time participating in
four main types of activities during routine patrols: active patrolling, investigative
patrolling, cross-checks and passive/resting periods. Patrol group activities and
capabilities were greatly affected by the surrounding environment with various settings
providing distinct advantages and disadvantages. Further, given the vast area of QENP,
rangers' decisions on where to patrol were guided by wildlife behavior, environment and
landscape features, experience and signs of human activity.

Theoretically, the implications of the study are two-fold: first, it provides a foundation by
which future studies assessing 'ranger culture', and ranger-related misconduct and illegal
activity can be based upon; second, the study establishes a base for future time use
studies on law enforcement ranger patrols. From a practical perspective, the study
provides insight for PA managers on how the conditions of the job can facilitate a 'ranger
culture' resulting in both positive (e.g. willingness to collaborate on community-based
forms of policing) and negative impacts (e.g. ranger misconduct) on ranger perceptions,
opinions and behaviors.
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Introduction

Despite having significant ecological, social and economic costs, wildlife crime is a neglected topic in criminology and criminal justice (Gibbs et al., 2009; Herbig and Joubert, 2006; Wilson-Wilde, 2010). While wildlife crime can occur at a local level (e.g. poaching), such crimes can have substantial regional, national and international implications. Given the repercussions associated with various types of wildlife crime, practical and applied forms of research are needed, particularly those that incorporate a multi-disciplinary approach. Moreover, responses to address issues related to wildlife crimes, ranging from poverty to human-wildlife conflict, must also be acknowledged in order to provide short-term benefits while long-term policies are developed, implemented and assessed.

Up to this point the majority of research on wildlife crime has predominantly been conducted by biological conservationists and non-governmental organizations (NGOs) (Pires and Moreto, 2011). Not surprisingly, research on the issue has tended to take a biocentric approach with much focus on particular mega-fauna, such as elephants, rhinoceros and tigers. Further, research examining the human dimensions of wildlife-related crime have typically centered upon the communities that depend, exploit and/or are affected by such wildlife. Unfortunately, researchers have largely neglected the examination of individuals responsible for the protection of such wildlife.
Within the criminological scope, wildlife law enforcement has generated little interest from criminologists, particularly outside of North America and Europe. Such enforcement can range from park ranger patrols within protected areas (PAs) to intelligence-led investigations conducted by international policing organizations like Interpol. Recognizing this range of wildlife law enforcement, the study primarily focused on local-level responses. As mentioned, while some studies have investigated local wildlife law enforcement, the majority of the research has been conducted in western, industrialized countries (Carter, 2006; Eliason, 2003, 2006a, 2006b, 2008, 2011a, 2011b, 2011c; Forsyth 1993a, 1993b, 2008; Forsyth and Forsyth 2009; Palmer and Bryant, 1985; Pendleton, 1998; Shelly and Crow, 2009; Walsh and Donovan, 1984; Wynveen, Bixler and Hammitt, 2006). Even less research focused on wildlife law enforcement has been conducted in foreign states, including African countries, which arguably have a more vested interest in the preservation of natural resources given the ecological and economic impact they possess. Indeed, the dearth of research on wildlife law enforcement is surprising given the overall research conducted on wildlife conservation in such countries (Warchol and Kapla, 2012). Given the historical and socio-cultural differences in wildlife crimes between developed and developing countries, the comparability of such settings and crimes may be limited. Further, wildlife crimes that occur outside of PA boundaries may be different from those that occur within such boundaries.

*Understanding Law Enforcement Rangers’ Organizational Culture*

Law enforcement has been recognized to be a critical component in the monitoring and management of PAs in Africa (Brockelman *et al.*, 2002; Hilborn *et al.*, 2006; Morse,
1973; Norgrove and Hulme, 2006). As a result, it is important to examine and better understand the organizational culture of law enforcement rangers within agencies responsible for the monitoring and enforcement of PAs throughout the world. Indeed, a number of studies investigating 'police culture' has resulted in the development of a viable and sustained research agenda within the social sciences (Cockcroft, 2013; Hassell, 2006; Loftus, 2009; Manning and Van Maanen, 1978; Paoline, 2003; Skolnick, 1966/1975; Westley, 1970). Recently, Loftus (2009) in summarizing the literature on police culture concluded that researching the topic is an important and worthwhile endeavor given that the police represent and provide a ground-level presence for the criminal justice system, are provided with legitimate forms of coercive powers and exercise discretion in which crimes they focus on and how they respond. Such research, however, has been primarily Anglo-Saxon in nature (Terpstra and Schaap, 2013) with little empirical work conducted outside of North America and Europe, particularly within the scope of wildlife law enforcement.

**Understanding Law Enforcement Ranger Behavior and Activities**

Ranger foot patrols are the primary method of monitoring, detecting and preventing illegal activities within PAs (Jachmann, 2008; Jachmann and Billiouw, 1997; Hilborn *et al.*, 2006; Gray and Kalpers, 2005; Leader-Williams, Albon and Berry, 1990; Mokombo and Schmitt, 2003; Pantel, 2007; Stokes, 2010). As PAs are geographically vast and difficult to maneuver through, park ranger deployments need to be efficient and comprehensive. In many cases, limited resources highlight the need to increase the effectiveness and efficiency of on-hand personnel (Jachmann, 1997; Sheil, 2001; Soden
and Hester 1989); thus, increasing the effective and efficient use of 'man-hours' without increasing 'man-power' is of utmost importance to PA managers.

Up to this point in the literature patrol effectiveness and ranger performance has been measured in various means including distance travelled, time spent on effective patrol and measures of catch per unit effort (CPUE), with specific illegal activities (e.g. poaching) measured as the ‘catch’ (Hilborn et al., 2006; Jachmann, 2008; Jachmann and Billiouw, 1997; Kakira, 2010; Leader-Williams, Albon and Berry, 1990; McShane, 1990). While standardized measures are useful for providing an overview of how well park management is responding to wildlife crimes and illegal activities within park borders, such measures are often superficial and only provide a glimpse into ranger patrols. Further, such measures highlight the role of rangers as agencies that are primarily response for detecting and suppressing crime, rather than those responsible for preventing it.

As mentioned the effective and efficient use of man-hours is a vital facet of law enforcement in PAs. Not all minutes or hours are equal thus meriting further inspection. The realization of the importance of time use and work load studies has been recognized in the policing literature and findings from prior research have been invaluable in understanding how police patrol the streets (Cordner, 1980; Famega, 2005; Kelling et al., 1974; Smith, Novak and Frank, 2001; Webster, 1970; Whitaker, 1982). As will be discussed later, such time use studies can also be found within the wildlife law enforcement literature (Carter, 2006; Charles, 1982; Pendleton, 1998; Warchol and
Kapla, 2012). Such studies have typically focused on understanding ranger interactions and discretion with suspects and citizens; however, information generated by observing patrols would also be valuable in providing the opportunity to establish baseline performance measures useful for policy or intervention purposes.

The Current Study

Guided by the police culture and police time use literature and using an ethnographic approach that relied on interviews and participant observations, this exploratory case study sought to answer two main research questions:

1. What perceptions and opinions do law enforcement rangers and supervisors hold about law enforcement and illegal activities in QENP?
2. What types of activities and decision-making occur during routine law enforcement patrols in QENP?

The research questions posed for the current study are admittedly broad. However, as the study is an early and modest attempt to better understand the organizational culture of law enforcement rangers and ground-level patrols behaviors and activities, the framing of such questions are warranted. Further, the author attempted to conduct the study in a manner analogous to the early police researchers. Referring to early police patrol methods, Hassel (2006) states:

Early police scholars studied the police using a "walking around approach". That is, early police scholars approached field research with open minds, intense curiosity and exploratory qualitative methods. They were scholars who allowed themselves to be educated by their research subjects. They watched, inquired, recorded, and analyzed. The data and analyses from these studies form the early foundation of knowledge on police patrol practices (63)
Data collection occurred between September and October 2012 and involved the author staying in the Katunguru headquarters located in QENP for a six-week period. Within this time period, the author interviewed 20 law enforcement rangers and four supervisors, and was a participant observer during ten routine foot patrols with law enforcement rangers. Additionally, the author had numerous informal conversations with a number of rangers during daily interactions and encounters.

From a theoretical perspective, the study contributes to the policing literature by investigating concepts predominantly examined within urban North American and European settings. As a result, the findings facilitate the possibility for comparative purposes resulting in the identification and examination of divergent and convergent themes within policing in general. Further, the study identifies and highlights important topics associated with organizational culture of ground-level personnel that may be useful for those managing PAs. By better understanding the perspectives, opinions and day-to-day experiences of law enforcement rangers and supervisors, PA managers may be better equipped in the allocation of resources and responding to the needs and concerns of those in the field. Lastly, the study provides an avenue to qualitatively assess the effectiveness of current law enforcement practices within QENP, identify alternatives and assess whether the current organizational context facilitates such change.
Chapter 1 - Wildlife Crime and The Situation in Uganda

1.1. Wildlife Crimes and Threats to Biodiversity

The International Consortium on Combating Wildlife Crime (ICCWC) defines wildlife crime as "acts committed contrary to national laws and regulations to protect natural resources and to administer their management and use"\(^1\). The ICCWC also includes acts that contravene international treaties, including the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)\(^2\). Examples of wildlife crime include poaching, or the illegal taking of wildlife and wild plants; the illegal trade of wildlife products for commercial purposes; the smuggling and transporting of illegally taken products and; the illegal killing of protected, endangered species (Broad, Mulliken and Roe, 2005; Reeve, 2002; Schneider, 2008; Wilson-Wilde, 2010).

Wildlife crime can occur on multiple levels, can have varying impacts and cross various sectors (Wellsmith, 2011). For instance, poaching can be associated with the extinction of species, economic loss at a local and national level and ecological impact within a specific region, particularly if keystone species\(^3\) are affected (Emmert and LaDelfa, 1997; Schneider, 2008). The illegal trade in wildlife can also raise concerns related to local and national security, as such issues may be associated with internal (e.g. inability to enforce specific, local laws) and external threats (e.g. inability to control borders) (Emmert and LaDelfa, 1997). The illegal trade in wildlife also transcends ecological, economic and security sectors as well. From a health and sanitation viewpoint, the introduction of

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\(^2\) CITES is a multilateral treaty between governments to ensure that the international trade of wild animals and plants does not threaten their survival (Reeve 2002).

\(^3\) Keystone species are species that have a large, disproportionate impact on a particular eco-system relative to their abundance or biomass (Payton, Fenner and Lee, 2002; Paine, 1969, 1995).
unsanitary or unhygienic wildlife products may result in unhealthy consumption or use of such products resulting in the possibility of introducing pathogens (Karesh et al., 2005; Wyler and Sheikh, 2008). As many diseases are zoonotic - animal borne diseases that can be passed onto humans - the consumption of products like bushmeat can have some serious implications for human populations locally, regionally and globally. This issue is highlighted with the recent outbreak of Severe Acute Respiratory Syndrome (SARS) and Avian Influenza (H5N1) (Wyler and Sheikh, 2008).

In addition to wildlife crime, there are other threats to world's biodiversity, including population pressure and migration, land use changes, climatic changes, encroachment, and invasive species (Kameri-Mbote, 2005; Sheil, 2001). Most threats are not mutually exclusive and in many cases, the presence of one threat increases the likelihood of another. For example, population pressure may result in individuals encroaching with PAs thereby increasing the possibility of human-wildlife conflict. Such a situation was found by Moghari (2009) in his study of human-lion conflict in Queen Elizabeth National Park (QENP). Moghari found that situations of human-lion conflict involving encroachers often lead to deadly retaliation against lions.

1.2. The Republic of Uganda

Located in the eastern region of Africa and neighbored by Kenya, Tanzania, Rwanda, South Sudan and the Democratic Republic of Congo (DRC), Uganda has an approximate total area of 241,551km² (See Figure 1.1). Uganda has an estimated population of 30
Figure 1.1. The Location of Uganda within the African Continent
million people, 90% of whom are living in rural areas (Emerton and Muramira, 1999; NEMA, 2008). As a result of a significant majority of the population living in rural areas, Uganda's economy is driven primarily by agriculture, followed by forestry, fisheries and tourism (AmanigaRuhanga and Manyindo, 2010; Emerton and Muramira, 1999; NEMA 2005, 2008). Comprised of three broad groups of ecosystems: savannas, wetlands and forests (Eilu and Olanya, 2008), Uganda is considered to be one of the most biodiversity-rich countries in the world (AmanigaRuhanga and Manyindo, 2010; Howard et al., 2000; NEMA, 2009). Indeed "within Africa, Eastern Africa has the highest number of endemic species of mammals, birds, reptiles and amphibians" (World Conservation Monitoring Centre, 1992 as cited in Kameri-Mbote, 2005: 2). Uganda’s biodiversity has significant implications by providing resources that can be used for consumption, manufacturing and production at the local, national and global level (Emerton and Muramira, 1999).

Uganda has ten national parks, 12 wildlife game reserves, six wildlife sanctuaries, ten community wildlife areas and 506 central forest reserves (NEMA, 2008). In total, PAs account for approximately 20% of Uganda’s total area (Kamanyire, 2000). In addition to the establishment of PAs, regulatory bodies responsible for monitoring and governing issues that directly impact Uganda's biodiversity have been established. Unfortunately, due to a myriad of factors, including significant population growth and a lack of ground-level resources for monitoring and enforcement of protected areas, Uganda's biodiversity

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4 It is important to note that these categorizations can be further categorized into sub-categories. For example, ‘forests’ can be divided into Natural/Tropical high forests and Plantations. These two categories can then also be divided into primary forests, modified natural forests, semi-natural forest, productive forest plantation and protective forest plantation (Eilu and Olanya, 2008).
has been decreasing on a yearly basis (Pomeroy and Tushabe, 2008). In general, USAID (2006) reports that there are four principal direct threats to biodiversity in Uganda: habitat loss/degradation/fragmentation, unsustainable harvesting and over-exploiting of resources, invasive species and pollution/contamination. Similarly, NEMA (2008, 2009) states that poaching, human-wildlife conflict, overfishing and overgrazing also threaten Uganda’s biodiversity.

1.3. Wildlife Policies, Laws and Regulatory Bodies

1.3.1. The National Environment Management Policy and the National Environment Management Authority

Developed from the National Environment Action Plan (NEAP), the National Environment Management Policy (NEMP) was established in 1994 (Akello, 2007). The goal of the NEMP is to facilitate social and economic development while sustaining or enhancing environmental resource productivity. The NEMP "provides strategies to guide and assist decision makers and resource users in determining priorities in the national context and also at the sectoral, private sector and individual level" (Akello, 2007: 22). Of particular importance for the study, the NEMP acknowledged the importance of individual sectoral policies to address particular environmental concerns which led to the development of the Uganda Wildlife Act.

Created under the National Environment Act\(^5\), the National Environment Management Authority (NEMA) was created. The NEMA was established as a means to guide and

\(^5\) Section 7 of the National Environment Act Cap 153 of the Laws of Uganda.
assist policy makers in prioritizing decisions that address current social, economic and environmental concerns while recognizing the long-term impacts of such decisions (Akello, 2007; Cirelli and Morgera, 2009). Like the NEAP, such decisions can be made at the national, sectoral, private and individual levels. The NEMA paved the way for policy makers and stakeholders to incorporate environmental issues and concerns within the broader socio-economic climate of Uganda; thus resulting in the direct integration of environmental issues within the socio-economic development of the country (Akello, 2007).

1.3.2. Uganda Wildlife Act and Uganda Wildlife Policy

In 1996 the Uganda Wildlife Act (cap. 200 of 2000) was enacted as a means to establish a coordinated body that oversaw the monitoring and supervision of wildlife. In addition, the statute was developed to outline laws and punishments, while highlighting the importance of community participation in the management of wildlife. Importantly, the Uganda Wildlife Act defines 'wildlife' as "any wild plant or wild animal of a species native to Uganda and includes animals which migrate through Uganda"\(^6\); while 'protected species' refers to "any plant or animal that has been given a higher level of protection by the Minister or an international convention or treaty"\(^7\). An example of an international convention would be CITES which Uganda became a party to CITES in 1991\(^8\).

---
\(^6\) Section 1 (jj) of the Uganda Wildlife Act Cap 200 of the Laws of Uganda.
\(^7\) Section 27(1) and 27(2) of the Uganda Wildlife Act Cap 200 of the Laws of Uganda.
Used in conjunction with the Uganda Wildlife Act, the Uganda Wildlife Policy was implemented in 1999 to "promote the long term conservation of the country's wildlife and biodiversity in a cost effective manner which maximises the benefits to the people of Uganda" (Uganda Wildlife Policy Review, 1999: 12). The Uganda Wildlife Policy focuses on highlighting and utilizing wildlife as a sustainable resource, in other words, as a resource that can be used by the present population without sacrificing such access and use of the same resources by future generations. The policy promotes the importance of a participatory approach by incorporating local communities as a viable and valuable stakeholder in the conservation and management of Uganda's wildlife⁹.

1.3.3. Uganda Wildlife Authority

Established in 1996 through the Uganda Wildlife statute and the merging of the Uganda National Parks and the Game Department, the Uganda Wildlife Authority (UWA) is the governing body responsible for the monitoring and management of Uganda's PAs, including national parks, wildlife reserves, sanctuaries and community wildlife areas. UWA is also responsible for the management and conservation of wildlife species within and outside of PAs, promoting and enhancing the socio-economic benefits of wildlife management, appropriately handling reported problem species in a timely manner and enforcing and implementing relevant international treaties, conventions or other arrangements to which Uganda is party to. In sum, UWA is responsible for the control and management of wildlife in Uganda (Kameri-Mbote, 2005).

⁹ It should be noted that the policy was never actually approved by Cabinet; however, is used as a de facto policy framework for wildlife management (NEMA 2008).
1.4. Summary

Wildlife crimes pose a significant threat to the world's biodiversity. Ranging from local-level subsistence poaching to international smuggling organizations, wildlife crimes have deleterious ecological, economic and social costs. The situation in Uganda is no exception. As a nation rich in biodiversity, Uganda has experienced its share of biodiversity loss. Recognizing the negative impact that various forms of wildlife crime have, as well as other threats including population pressure, Uganda has developed regulatory laws, policies and agencies focused on the monitoring and protection of wildlife and wild lands. In particular, the inclusion of the Uganda Wildlife Act in 1996 (cap.200 of 2000) and the establishment of the Uganda Wildlife Authority has had a profound impact in the way wildlife crimes are addressed.
Chapter 2 - Protected Areas, National Parks and Illegal Activities

2.1. Protected Areas and National Parks

Originally founded in 1948, the International Union for Conservation of Nature (IUCN) is an international organization that identifies environmental challenges, conducts scientific research and supports practical responses at the local and national level. While the IUCN is best known for its Red List, which is a compilation from various conservation organizations rating which fauna and flora species are most endangered, the IUCN is also known for its collaborative work with the United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) in the development of the World Database on Protected Areas (WDPA).

There are over 105,000 PAs throughout the world covering about 20-22 million km², which is about 12% of total land area in the world (Wells and McShane, 2004; West et al., 2006). The IUCN defines PAs as "a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long term conservation of nature with associated ecosystem services and cultural values". Due to the broad nature of this definition and the various management purposes (Wright and Mattson, 1996), there are several protected area categories: strict nature reserve (Ia), wilderness area (Ib), national park (II), natural monument or feature (III), habitat/species management area (IV), protected landscape/seascape (V) and protected area with sustainable use of natural resources (VI). Of particular relevance to the study is Category II, which defines National Parks.

---

National parks, along with reserves, are vital in the preservation of global biological diversity (Brandon, 1995; Norgrove and Hulme, 2006). Brown (2002) noted that, "Protected areas, in different forms, will continue to play a major role in the conservation of biodiversity world-wide for the foreseeable future" (6).

As defined by the IUCN, national parks are "large natural or near natural areas set aside to protect large-scale ecological processes, along with the complement of species and ecosystems characteristic of the area, which also provide a foundation for environmentally and culturally compatible spiritual, scientific, educational, recreational and visitor opportunities". In Uganda, PAs cover an estimated 33,000 km², about 14% of Uganda’s total land area, and generally fall within three categories: national parks, wildlife reserves and forest reserves (World Conservation Union, 1992 as cited by Howard et al., 2000).

As shown in Table 2.1., the establishment of a national park has several objectives. Although the overreaching objective of national parks is to protect the biodiversity within its borders, the IUCN explicitly recognizes the importance of human involvement. For example, one of the sub-objectives of national parks acknowledge the fact that such lands may have been a source for resources by local communities for centuries; therefore, a balance between community needs and the protection of resources is crucial. Moreover, the establishment of a national park should be seen as beneficial to the communities that are impacted rather than be seen as a nuisance.
### Table 2.1. IUCN National Park Objectives

<table>
<thead>
<tr>
<th><strong>Primary Objective</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1) To protect natural biodiversity along with its underlying ecological structure and supporting environmental processes, and to promote education and recreation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Other Objectives</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>2) To manage the area in order to perpetuate, in as natural as state as possible, representative examples of physiographic regions, biotic communities, genetic resources and unimpaired natural processes.</td>
</tr>
<tr>
<td>3) To maintain viable and ecologically functional populations and assemblages of native species at densities sufficient to conserve ecosystem integrity and resilience in the long term.</td>
</tr>
<tr>
<td>4) To contribute in particular to conservation of wide-ranging species, regional ecological processes and migration routes.</td>
</tr>
<tr>
<td>5) To manage visitor use for inspirational, educational, cultural and recreational purposes at a level which will not cause significant biological or ecological degradation to the natural resources.</td>
</tr>
<tr>
<td>6) To take into account the needs of indigenous people and local communities, including subsistence resource use, in so far as these will not adversely affect the primary management objective.</td>
</tr>
<tr>
<td>7) To contribute to local economies through tourism.</td>
</tr>
</tbody>
</table>

Adapted from www.iucn.org.

### 2.2. Critiques of Protected Areas

Although the creation of PAs, including national parks, may seem necessary to ensure that the biodiversity and natural resources of countries is kept at a sustainable level, some have raised concerns towards PAs as a means for conservation. In many cases, however, arguments are posed against the way PAs were originally conceived or still are in some cases and highlight the *human or social* costs of PAs (see Wells, 1992). For example, Hayes (2006) highlights the division amongst those who advocate for the traditional park
model and a community participation model. The former argues that the establishment of PAs by the state are required to restrict human residents thereby regulating human consumptive and non-consumptive use of resources, while the latter argues that successful conservation requires the active participation of communities in the establishment and control of PAs and not their alienation from much needed resources.

Generally speaking two main critiques are leveled against PAs: first, PAs explicitly remove resources from communities that rely on them the most and have been sustainably using such resources for centuries (Agrawal and Gibson, 1999; Brandon, 1995; Duffy, 2010; McShane, 1990). Not only does the establishment of PAs reduce the resources readily available to communities, but it indirectly places onus and blame associated with the unsustainable use of resources squarely on such communities. As argued by some commentators, the establishment of PAs, especially national parks, impose a western bias or perception of “conservation” ill-suited for the realities where such places are established (Duffy, 2010; McShane, 1990). Such biases explicitly neglect factors that impact the unsustainable use of resources that are beyond the control of communities, including population growth, deforestation, land conversion and socio-political instability (Brandon, 1995; Duffy, 2010).

The second critique is that by being touted under the guise of protecting the biodiversity of an area, PAs place a specific emphasis on wildlife and wild lands and overlook how such areas detrimentally impact humans living in and around PAs. This biocentric-focus highlights the need to identify threats to wildlife species, and implement and enforce
appropriate responses to such threats. Unfortunately, the overt focus on wildlife species may result in neglecting the interconnected nature of wildlife species and humans and the impact of conservation-driven, species-centered policies on human beings. As put by Duffy (2010): “Biodiversity thus provides a rationale for the creation and maintenance of areas where wildlife is protected, but people are *forced out*” (53; emphasis added).

Arguably, the stereotypical perception of the African wilderness may be characterized by roaming beasts, lush forests and tropical savannas, all undisturbed and away from human interference.

While the aforementioned critiques are important and relevant, it must be noted that the Ugandan approach to conservation has been credited with attempting to recognize and incorporate local communities. In fact, specific provisions within the Wildlife Statute promote the co-existence of humans and wildlife (Section 20(2)), as well as recognize historic resource use rights for those residing before the establishment of game reserves on July 1st, 1959; individuals who acquired rights in National Parks before April 3rd, 1952 and; those living in forests after being exempted from provisions of the Forests Act (Section 26). In addition, Section 69 establishes the Wildlife Fund and Section 70 promotes the sharing of benefits generated from PAs, for example, 20 percent of National Park entrance fees are paid to the local government surrounding the particular park from which fees are collected (Kameri-Mbote, 2005).
2.3. Illegal Activities in Protected Areas

While not an exhaustive list, the following are considered to pose significant threats to PAs and national parks. It must be noted, however, that illegal activities and threats are not necessarily synonymous concepts. While most illegal activities can be considered to pose a threat to a PA, not all threats to PAs are illegal in nature. For instance the loss, conversion and degradation of wildlife migration and dispersal corridors, agricultural expansion and land use changes and pollutants have been identified as threats to PAs in Kenya (Okello and Kiringe, 2004).

There are a variety of illegal activities that can occur within a PA. Much of the illegal activity has impact on the biodiversity and resources of an area. The identification of threats, the understanding of their causes and the analysis of their prevalence, frequency, intensity and impact is vital for park management (Okello and Kiringe, 2004). One of the most problematic illegal activities occurring in national parks in many developing countries is the illegal taking or poaching of resources (herein referred solely as "poaching") (Bruner et al., 2001; Plumptre et al., 2003; Skonhoft and Solstad, 1996).

Poaching can be conducted for various purposes. In many cases, poaching is conducted by local villagers for subsistence purposes and includes forms of small-game hunting, fishing, plants for medicinal purposes and timber for construction. However, poaching by locals and outsiders for commercial trade also occurs (Dobson and Lynes, 2008; Jachmann, 2008; Terborgh and Peres, 2002). In addition to poaching, encroachment also
poses a threat to many PAs. Essentially, encroachment is the illegal settlement of humans inside the PA or illegal use of the PA for activities such as cattle grazing, agriculture and honey gathering. Encroachment can lead to poaching, overgrazing, destruction of habitat and human-animal conflicts (Uganda Wildlife Policy Review, 1999). Human-animal conflict, while not an illegal activity itself, can result in the illegal killing of species, including protected species. For example, large carnivores may be targeted in circumstances where local villagers' livestock are killed or when villagers themselves are attacked (Bagchi and Mishra, 2006; Treves and Karanth, 2003; Woodroffe, 2000) or when encroachers retaliate against large carnivores (Moghari, 2009).

2.4. Summary

Protected areas (PAs), including national parks, have been established to protect the natural resources and biodiversity in many areas all around the world. Unfortunately many PAs, particularly those in developing countries, are controversial as a result of their impact on local communities. In some cases, the establishment of PAs explicitly removes land and resources away from communities that need them most. Importantly, illegal activities that occur within PAs sometimes overlap with other illegal activities resulting in a multi-faceted problem. For example, in situations where encroachment can lead to poaching. Recognizing the need to incorporate communities impacted by the presence of PAs as stakeholders, Uganda has included specific provisions that recognize traditional land uses and promotes the allocation of earnings generating from parks to nearby communities. Despite these provisions, Ugandan PAs are still subject to various threats and illegal activities.
Chapter 3 - Policing in Africa and Uganda

3.1. Brief Overview of Police and Policing Literature in Africa

Although the main focus of the study is wildlife law enforcement, an overview of the police and policing literature is warranted given the differences in North American and European policing practices and those African countries. Much of what is known about modern police and policing has derived from North America and Europe, particularly the United States and Britain (Hinton and Newburn, 2009; also see Committee to Review Research, 2004; Newburn, 2005, 2008). Such a comparison is warranted as policing needs to be acknowledged within the broader context in order to fully appreciate the capabilities and limitations of policing bodies. Further, by recognizing the socio-political and cultural underpinnings of general policing, one may be able to better understand the policing of PAs.

Historically, research on policing policies and practices have tended to operate from a critical or a policy perspective (Bradley and Nixon, 2009). Critical approaches function from a disconnected and - as the name suggests - critical perspective often highlighting the limitations of policing practices and/or faults of the police. Policy approaches, on the other hand, work from a theoretical or applied perspective in an attempt to identify evidence to support or refute and thus improve police and policing practices (Bradley and Nixon, 2009).

Irrespective of the research agenda, research on police and policing has increased significantly within the last three decades (Braga and Weisburd, 2007; Weisburd and
Braga, 2006a). Such research has typically focused on policing innovations that shifts from the professional model of policing, including community policing, problem-oriented policing, hot spots policing and intelligence-led policing (Braga, 2008; Braga and Weisburd, 2010; Weisburd and Braga, 2006b; Ratcliffe, 2008; Sherman and Eck, 2002). It should be noted, however, that the literature has predominantly focused on the policies and practices related to urban policing (Mawby and Yarwood, 2011). Therefore, the question of ‘what works’ in policing and law enforcement has been more attentive to policing in the urban context (Sherman and Eck, 2002).

3.2. Police and Policing in Contemporary Africa

The heterogonous and varied nature of policing coupled with the turbulent past and present in many African countries poses a multi-faceted problem for those interested in policing research throughout Africa. Attempts to establish western models of policing in Africa have been futile in most cases (Baker, 2006). As succinctly put by Baker (2008), "The complexity of African policing is no accident. It is a product of intense social and political upheaval brought about by colonial conquest, self-serving and predatory rulers, weak states, violent rebels and economic transformation and hardship" (30). Police and policing in Africa can be distinguished into two broad categories: formal, state policing and informal, non-state policing.

Formal policing in Africa is divided into two sub-categories: regime protection and reactive policing (Alemika, 2009). Regime protection policing is premised on the protection of those in power, including public officials from crime and forms of
insecurity. Surveillance and investigation resources are spent on potential threats to authority figures. Such forms of policing are considered to be repressive (Alemika, 2009). Akin to North America and Europe, reactive policing is dependent on the reporting of crimes by victims and community members. Unfortunately, such reactive approaches are only effective with the cooperation of the community and dominant perceptions of the police as ineffective and corrupt are prevalent in many areas in Africa (Alemika, 2005 as cited in Alemika, 2009).

The cooperation and participation of the public is dependent on whether the public has trust and confidence in the police as a legitimate agency (Tyler, 2006). As put by Alemika (2009), "[t]he two forms of police practice on the continent have created triple fundamental problems of police forces in Africa - legitimacy, performance, and accountability" (484). Public perceptions governed by distrust of the police is not surprising given the historical association of police forces and colonialism in many areas in Africa, where relationships between police forces and communities tended to be tense and hostile (Alemika, 2009; Deflem, 1994). Notably, as shown in Table 3.1., a recent survey conducted by Afrobarometer\(^{11}\) shows that in the 20\(^{12}\) sampled countries, approximately 44% of respondents had little or no trust in the police, while just over 50% had some or a lot of trust in the police. However, like many forms of aggregated data, important differences between countries may be obscured.

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\(^{11}\) Afrobarometer is "an independent, nonpartisan research project that measures the social, political and economic atmosphere in Africa...surveys are conducted in more than a dozen African countries and are repeated on a regular cycle" (Afrobarometer 2012). Surveys collected by Afrobarometer are standardized allowing for systematic cross-country comparisons.

\(^{12}\) The sampled countries included: Benin, Botswana, Burkina Faso, Cape Verde, Ghana, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mozambique, Namibia, Nigeria, Senegal, South Africa, Tanzania, Uganda, Zambia, and Zimbabwe.
It is important to note that simply focusing on formal forms of policing in Africa is shortsighted. Due in part to the limited resources afforded to formal, state forms of policing (Baker, 2010a, 2010c; Hills, 2000) and the strained relationship with the public, many communities have implemented their own forms of policing and subsequent resolutions, with or without state approval (Baker, 2008). Such forms of non-state policing are enforced by various groups and individuals, including private citizens, religious groups, ethnic defense forces and customary chiefs (Baker, 2010a, 2010b, 2010c). As shown in Table 3.2., there are several formal (state or state-sponsored) and informal (non-state approved) forms of policing throughout the Africa. Although, each body of policing may strive to achieve a range of objectives, similarities in practices have resulted in the blurring of state and non-state policing activities (Baker, 2002).

Not without their own limitations, non-state forms of policing are considered to be "the dominant police providers, often enjoying local ownership, cultural relevance, accessibility, sustainability, and effectiveness" (Baker, 2001a: 4; emphasis in original).
Acknowledging the locality of non-state policing, such forms of policing can be considered a variant of community policing in that it directly incorporates the community and promotes the idea of the community policing itself. Due to the diversity of police bodies and policing options potentially available and the overlap that may occur, Baker (2008) argues that the policing context in many areas in Africa is one of *multi-choice policing*. In other words, the public has the ability to exercise discretion in choosing how they wish to deal with crime, grievance or conflict.

**Table 3.2. Policing Bodies in Africa**

<table>
<thead>
<tr>
<th>Type</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>State policing bodies</td>
<td><em>State police, gendarmerie, international security units, presidential guards, local militias, anti-corruption police, anti-organized crime paramilitaries, forest guards, tax fraud officers</em></td>
</tr>
<tr>
<td>State approved-community based policing</td>
<td><em>Neighborhood watch groups, community policing forums, local government crime prevention bodies, street patrols</em></td>
</tr>
<tr>
<td>Informal or Autonomous Citizen Groups</td>
<td><em>Anti-crime groups, religious police, ethnic militias, car guards, vigilantes</em></td>
</tr>
</tbody>
</table>

Adapted from Baker (2008)

### 3.3. Contemporary Policing in Uganda

Like the rest of Africa, policing in Uganda has had a tumultuous past and one influenced by civil wars, corruption and political upheaval (Kasingye, 2003). As a historical overview of policing in Uganda is beyond the scope of the current study (see Baker, 2008; Hills, 2000) the discussion herein will center on contemporary policing in Uganda. As shown in Table 3.3., there are several policing bodies in Uganda. Similar to other
African countries, Uganda has state policing bodies, state-sponsored or approved policing bodies and informal, non-state policing bodies.

Established under Article 212 of the Constitution of Uganda and introduced in 1906 by the colonial government, the Uganda police force (UPF) is the primary, formal police force in Uganda (Karungi, 2006). Severely understaffed, the UPF is comprised of approximately 13,000 personnel, far beneath the goal of 40,000 (Baker, 2008). Baker (2010a) estimates that the ratio of police officers to the population is about 1:1,839 in Uganda compared to the United States ratio of 1:346-500. Despite being understaffed and operating with limited available, the UPF have made significant headway since the early 1990s with the addition of a community affairs department, legal department and a research and planning department, amongst others (Baker, 2008). More recently, the incorporation of the Local Authority Police (LAP) has proven beneficial for both forces as it extends the reach of the Uganda police, while providing additional resources for the LAP.

The establishment of the community affairs department in particular is viewed as a major move away from the repressive identity the UPF has incurred during colonial and post-colonial times (Karungi, 2006; Kasingye, 2003). Recognizing the importance and need in community partnership in addressing crime, various attempts to implement community policing have been conducted. In most cases, community policing is used as a means to open lines of communication between the public and the police, generate a greater understanding of community needs and establish a sense of accountability in policing.
(Kasingye, 2003). Such attempts have included police dialogues, neighborhood watch schemes and crime prevention panels (Karungi, 2006). Baker (2008) asserts that the biggest change in contemporary policing in Uganda is the relationship with the public. In the fieldwork he conducted in 2004, Baker (2008) found that the public generally found the police "were now friendly, approachable and showed respect to all citizens" (109).

However, the public also raised various concerns ranging from response times to corruption. Looking at recent surveys conducted, perceptions of corruption are still

<table>
<thead>
<tr>
<th>Policing Body</th>
<th>Authorizer</th>
<th>Powers</th>
<th>Key Function</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State bodies</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local Councils L1</td>
<td>Central Government; Locally elected</td>
<td>Local law and order; courts</td>
<td>Courts; night patrols</td>
</tr>
<tr>
<td>Uganda Police Force (UPF)</td>
<td>Central Government</td>
<td>Standard police powers</td>
<td>Serious crime</td>
</tr>
<tr>
<td>Violent Crime Crack Unit (VCCU)</td>
<td>Military</td>
<td>Unclear</td>
<td>Organized violent crime</td>
</tr>
<tr>
<td><strong>State-sponsored bodies</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crime Prevention Panels (CPP)</td>
<td>Uganda Police Force</td>
<td>Citizen</td>
<td>Intelligence to police; peer pressure</td>
</tr>
<tr>
<td>Traders Associations</td>
<td>Elected leaders of association</td>
<td>Citizen</td>
<td>Security of trading area</td>
</tr>
<tr>
<td>Commercial Security</td>
<td>Private companies</td>
<td>Licensed by police</td>
<td>Guarding</td>
</tr>
<tr>
<td><strong>Non-state bodies</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mob Justice</td>
<td>N/A</td>
<td>N/A</td>
<td>Assaults on alleged criminals</td>
</tr>
</tbody>
</table>

Table 3.3. Policing Bodies in Uganda

evident today (see Table 3.4). In fact, over 30% of respondents believed that all police officers were involved in some form of corruption and over 67% believed that most or at least some were involved in corrupt behavior. Further, over 61% of Ugandans had little or no trust in police. Despite this, the majority of respondents agreed that the police had the right to make police obey the law.

**Table 3.4. Ugandans Responses to Police-Related Questions on Trust, Corruption and Obeying the Law (2008-2009)**

<table>
<thead>
<tr>
<th>&quot;Trust&quot; Percentage*</th>
<th>&quot;Corruption&quot; Percentage**</th>
<th>&quot;Obey&quot; Percentage***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all - 24%</td>
<td>None - 2.0%</td>
<td>Strongly Disagree - 3.5%</td>
</tr>
<tr>
<td>Just a little - 37.8%</td>
<td>Some of them - 25.1%</td>
<td>Disagree - 7.7%</td>
</tr>
<tr>
<td>Somewhat - 28.4%</td>
<td>Most of them - 42.2%</td>
<td>Neither Agree or Disagree - 7.4%</td>
</tr>
<tr>
<td>A lot - 9.8%</td>
<td>All of them - 30.7%</td>
<td>Agree - 52.1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strongly Agree - 29%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Missing - 0.3%</td>
</tr>
</tbody>
</table>

* Response to "How much do you trust the police?"
** Response to "How many of the police do you think are involved in Corruption?"
*** Response to the statement "The police always have the right to make people obey the law"

Source: Afrobarometer (2012)

### 3.4. Summary

The majority of the policing literature in criminology has come from the United States and Britain. The history and contemporary context of policing in many African countries is markedly different. Recognizing the differences in general forms of policing is important to gain a better understanding of the overall context for different types of policing authorities within a country. Although the focus of the study is on a specific form of wildlife law enforcement, it is nevertheless important to understand the surrounding context by which such enforcement occurs.
Chapter 4 - Wildlife Law Enforcement

4.1. Overview of the Wildlife Law Enforcement Literature

Wildlife law enforcement can be conducted at various levels, including ground-level, PA ranger patrols to national and international anti-smuggling groups. In most cases, countries are responsible for establishing laws and regulatory bodies at various levels in order to detect and respond to different types of wildlife crime; however, multi-lateral and international organizations (e.g. CITES) can also be used as a resource to monitor, maintain and enforce wildlife policies. For the purposes of the current discussion, only ground-level forms of wildlife law enforcement will be discussed.

As has been noted, research on wildlife law enforcement is limited relative to most forms of policing; however, there has been sufficient research conducted to provide a foundation for empirical research. Forsyth (1993a) argues that one of the reasons for the lack of research is due to the rural setting of such law enforcement. For the purposes of the current discussion, Walsh and Donovan (1984) definition of a rural setting as a "large, sparsely populated land area" (334) will be used. In general, rural forms of law enforcement is an under-researched topic (Mawby and Yarwood, 2011). As put by Falcone and colleagues (2002), "portrayed by popular culture as amateurs, rural and small-town police seemingly represent only a pale reflection of the dominant policing model - the large-urban police department - and have been woefully ignored by police scholars and public policy makers alike" (372).
In general, research on wildlife law enforcement can be separated into two broad research agendas: 1) qualitative studies examining wildlife law enforcement personnel opinions and attitudes, as well as ground-level operations and; 2) quantitative studies which measures law enforcement effort or effectiveness. The majority of research focused on the first research agenda has taken place within developed nations like the United States, England and Canada with an emphasis on game wardens, conservation officers and park rangers (Carter, 2006; Eliason, 2006a, 2006b, 2008, 2011a, 2011b, 2011c; Forsyth 1993a, 1993b, 2008; Forsyth and Forsyth, 2009; Pendleton, 1998; Shelly and Crow, 2009). Notable qualitative studies conducted outside of these settings include Warchol and Kapla (2012). Conversely, the second research agenda has been predominantly focused on developing nations, particularly within Africa and focusing on park rangers (Brockelman et al., 2002; Bruner et al., 2001; Jackmann and Billiouw, 1997; Morse, 1973; Norgrove and Hulme, 2006). Generally speaking, law enforcement, at whatever degree and level, has been recognized as an important component in the management of PAs (Brockelman et al., 2002; Bruner et al., 2001; Jackmann and Billiouw, 1997; Morse, 1973; Norgrove and Hulme, 2006).

4.1.1. Qualitative studies examining wildlife law enforcement

Although the current study is based in Uganda, it is nevertheless useful to discuss the research that has been conducted in North American and European settings given the limited number of qualitative studies conducted beyond such contexts. Primarily centered on interviews, surveys and participant observations, qualitative research on wildlife law enforcement up to this point has provided a useful and sufficient foundation for the current study.
Duties and Responsibilities

Charles (1982) spent three months (June-August) conducting surveys, interviews and participant observations with park rangers in Yellowstone National Park. Notably, due to practical limitations, including geographical area and scheduling, Charles (1982) was only able to interview nine rangers who were chosen because of position, experience and location within the park. To supplement the observations and interviews (both formal and informal), the author also sent out surveys to an estimated 100 rangers with a 56% response rate. As described by Charles (1982), it is important to note that the National Park Service has two divisions of rangers: protection and naturalists. As the protection division is the one bestowed with the law enforcement role, this was the focus of the study. In general, Charles (1982) found that law enforcement rangers operated from a service or "low key" perspective and typically believed that law enforcement was but one aspect of their job (219). Indeed, most rangers believed that most of their time was taken up by non-law enforcement responsibilities, including search and rescue. Interestingly, "many protection personnel do not see themselves as law enforcement officers; they are rangers, who among other things perform police duties" (219). Charles (1982) also described how the socialization of new or first-year rangers to the job involved becoming familiar with the geographical features of their assigned areas and the legal and illegal activities in the area; learning how to perform duties independently and with minimal supervision and; hearing 'war stories' from veteran rangers.
In another study, Palmer and Bryant (1985) also administered surveys and conducted interviews and participant observations on game wardens in Virginia to provide a profile of a game warden. Further, the authors sought to describe law enforcement behavior and activities, describe techniques used during a variety of law enforcement duties and provide a comparison to other rural law enforcement. Palmer and Bryant (1985) found that respondents listed a variety of reasons why they decided to become a game warden with the most referred to reason being the fact that the occupation involved working outdoors. Other reasons included being conservation-minded, enjoyed working with people, enjoyed law enforcement, preferred job autonomy and having a steady income. When asked what they believed was the main aspect of their job, over half of the respondents stated law enforcement and the rest replying with conservation, public relations and education. However, as noted by the authors, "while most of the wardens' activities could be called conservation oriented, actual conservation efforts are rather minimal in their overall functioning" (Palmer and Bryant, 1985: 116; emphasis added), including responding to problem-animal species and providing licenses for hunting.

As described by Palmer and Bryant (1985), law enforcement activities are comprised of observation and patrol, using informers, deduction, sneakiness and focusing on hot spots. Observation and patrol comprised of riding around in a specific area attentively observing for unlawful behavior. As a result of the sheer size of the geographic area they were required to patrol, wardens' often were only able to cover a relatively small size. Notably, the authors described how an experienced warden would be able to maneuver through the environment in a fairly effective and efficient manner targeting areas they expected to be
problematic. This was especially the case during hunting and fishing seasons (Palmer and Bryant, 1985). For example, the authors described how wardens' may direct patrols to places where hunters would leave their vehicles to enter a wooded area during hunting season. In addition to vehicle patrols, wardens also participated in marine patrols to monitor fishing licenses and boat registration, among other things. Although foot patrols and aerial patrols did occur, most patrolling activity involved a vehicle or boat.

Some respondents described the use of deduction during ground-level investigations and decision-making (e.g. observing physical evidence like shell casings and tracking mud). Interestingly, some respondents even discussed developing a 'sixth sense' (Palmer and Bryant, 1985: 122) in being able to psychological deduce simply by observing individual. Such deduction skills also seemed to be useful for employing 'sneaky' techniques to counter evasive tactics used by offenders (Palmer and Bryant, 1985: 123). Such evasive tactics may include constructing and hiding illegally hunted game in secret compartments in vehicles.

Palmer and Bryant (1985) also found that wardens' also actively participated in hot spots patrolling, whereby they would patrol places with high levels of hunting and fishing activity. In particular places expected to have high numbers of wildlife would be frequented by wardens. Such hot spot patrolling also had a temporal component as operations would also be influenced by hunting and fishing seasons as referred to earlier. At times wardens would work with other wardens in a coordinated effort. Such efforts have been found to include conducting patrols with several other law enforcement
officers, undercover operations, and road blocks. Palmer and Bryant (1985: 124) described such "blitzing" tactics to be important in promoting a unified front by wardens' to address illegal activities and violations, while also providing a greater sense of monitoring.

The use of informers was also found to be useful (Palmer and Bryant, 1985). Most respondents used informers and believed that such an approach was very important for their day-to-day operations. Most informers were community members and often became an informer after developing positive relationships with wardens as a result of collaborative activities (e.g. trout stocking programs), as well as when wardens are needed for law enforcement duties (e.g. investigating complaints of trespassing or checking crop damage). Again, given the geographical extent of the land they were responsible for, wardens recognized the value of having "a second set of eyes in the area" (Palmer and Bryant, 1985: 121).

_Discretion_

In his study, Charles (1982) found a number of "loosely defined criteria" (220) would influence ranger discretion. First, rangers would take into account the attitude of the suspect and conduct an 'attitude test'. The attitude test involved attempting to determine what was the motivation of the suspect or why they committed the violation. In other words, the ranger would attempt to determine whether there was malice forethought or if it was sheer ignorance of the rules and regulations of the park. Second, the rangers would conduct a 'victimless crime test'. In essence, this test involved determining "whether any
visitors, the park itself, or park animals were harmed due to the actions of the violator” (Charles, 1982: 221). The third test, referred to as the 'work test', is two-folded: first, the ranger considers the amount of time and effort required to apprehend a suspect. In situations, where a ranger must exhaust a considerable amount of effort, it can be assumed that the suspect is also expending effort to avoid detection; thereby, negating the aforementioned first test. Second, if backcountry patrolling is required, the likelihood of more severe penalties would be imposed simply due to the physical difficulty of apprehending these offenders and again the belief that violators would be going out of their way to avoid detection. The final test is the 'practical test' and like the last test is also two-fold: first, the ranger evaluates the level of inconvenience an arrest or citation may impose, like having to go to court, especially since such overtime is not compensated.

Forsyth (1993b) interviewed 31 game wardens and identified six factors that influenced how the respondents dealt with suspects: seriousness of the offense, reason for crime, social class, age, demeanor of suspect and prior record and/or contact. With particular relevance to the current study, Forsyth found that respondents were almost unanimous on the importance of protecting endangered species and the weight of punishment on poachers who target such species. Perceived to be the most serious offense, game wardens believed that "hardly anyone uses discretion when it comes to endangered species being poached" (Forsyth, 1993b: 053). Related to this was whether the suspect poached for commercial or subsistence purposes with the former having a higher chance of being approached. Additionally, whether the individual had a history of poaching also impacted the responses by game wardens. Lastly, respondents tended to be more lenient
to suspects who were of old age and of higher social classes. Interestingly, Forsyth (1993b) found that game warden discretion was influenced by organizational deviance due to political interference.

In particular, game wardens were more likely to arrest a suspect if the offense committed was considered serious; although, Carter found that game warden's perceptions of 'seriousness' did not necessarily correspond with legal classifications. Additionally, an individual who was known to be an "outlaw" (Carter, 2006: 601) or habitual offender was found to impact warden discretion. Such outlaw status was often a result of prior arrests or encounters, citizen complaints and association by virtue of friends and family. Warden discretion was also found to be influenced by judges' dispositions and sentencing practices.

Carter (2006) also found that extralegal factors also affected warden discretion confirming prior research. As succinctly put by Carter (2006), "situational encounters are normalized providing officers a routine formula with standard deals for arrest/summons decisions" (624). For example, suspects that were disrespectful were more likely to be summoned by game wardens. Interestingly, wardens were also more lenient on juveniles but not older offenders. This was attributed mainly to the legal (e.g. age requirements for licenses) and cultural (e.g. hunting perceived as a rite of passage, accompanied by an adult).
The demeanor of the youth would also impact warden discretion with a 'smart mouth' more likely to be given a summon compared to a 'good kid' (Carter, 2006: 609). Notably, wardens also perceived juvenile court and judges to be a 'waste of time' due to the leniency of the court and lax laws (Carter, 2006: 610). In addition to demeanor and age, Carter (2006) found that gender played some role in warden discretion. However, such discretion was often as a result of underlying gender roles associated with the hunting and fishing culture. In essence, women were rarely encountered by respondents and if so, they would be accompanied by a male counterpart. Most respondents described such companionship within the context of gender roles and perceived offending may be perceived secondary to the more serious offenses conducted by men. Notably, warden discretion was also influenced by 'professional courtesy' (Carter, 2006: 618) in that respondents expected other policing bodies (e.g. local police) to give them leeway (e.g. traffic violations), while they in return turned a blind eye to variety of boat, fish and game offenses. However, that wardens did not simply provide a carte blanche and would base such discretion on the severity of the act and prior offenses committed by the officer.

Notably, social class and ethnicity was not found to affect warden discretion. Carter (2006) also found two organizational factors that influenced warden discretion: directives from supervisors and departmental policies eliminating the inclusion of citations as a form of performance measure in annual evaluations.

Wynveen and colleagues (2006) found that law enforcement ranger discretion was also influenced by the spatial proximity to an urban area. The authors found that the closer a park was to an urban area, the more likely that rangers were to enforce 'hard' rather than

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13 Defined as an area with a population greater than 75,000 people (Wynveen et al., 2006).
'soft' forms of enforcement. The authors argued that such discretion supported prior research noting that increased levels of urban encroachment would result in more incidents in crime subsequently leading to tougher responses by rangers (Chavez and Tynon, 2000; Pendleton, 1998; Shore, 1994).

**Dangers**

The majority of the literature on occupational dangers related to police work has focused on urban police and limited research has been conducted on rural policing, including wildlife law enforcement (Forsyth and Forsyth, 2009; Walsh and Donovan, 1984). However, wildlife law enforcement officers face a number of challenges and dangers on the job, including the harsh physical environments (Carter, 2004; Forsyth and Forsyth, 2009) and potentially encountering armed and well-trained suspects resulting in injury or even death (Eliason, 2006a; Forsyth, 1993a; Forsyth and Forsyth, 2009; Palmer and Bryant, 1985). As put by Palmer and Bryant (1985) regarding game wardens, "the feeling of brotherhood and *esprit de corps*, found in police organizations and among game wardens, develops partially around the dangerous element of the work and around the feeling that they are 'professional' in dealing with the danger" (132-133; emphasis in original).

Moreover, wildlife law enforcement officers often work in solitary as their 'jurisdiction' tends to be in rural and remote places (Eliason, 2006a) resulting in any form of backup or support taking a significant amount of time and effort (Carter, 2004; Forsyth and Forsyth, 2009). Eliason (2011b) found that wildlife law enforcement officers perceived suspects,
particularly in situations where they were alone in a secluded area, to be a constant source of danger. Few wardens actually reported being physically attacked while on the job and oftentimes relied on their training and communication skills to contain a problematic situation. In addition to human encounters, Eliason (2011b) also found that wildlife law enforcement officers were also mindful of technological (e.g. automobile) and environmental dangers (e.g. terrain, animals) that they might encounter as well.

Despite these dangers, Eliason (2011a) found that death was a relatively rare event for game wardens. Analyzing game wardens' deaths in the United States between 1886-2009, only 253 game wardens died while on the line of duty with causes of death ranging from gunfire, aircraft and automobile accidents, drowning and heart attacks. Notably, only two deaths associated with gunfire were found between 2001 to 2009 with the majority of such gun-related deaths peaking in early to mid-20th century. In a separate study, although some conservation officers (COs) reported situations of being shot at, it was found that verbal assaults tend to occur more often than physical assaults (Eliason, 2006a).

It should be noted that this is may not necessarily be the case in Uganda. For instance, three recent events indicate that physical violence to rangers may be more common than their North American and European counterparts: In 2011, a ranger in Mount Elgon National Park sustained stab wounds from poachers and bite marks from hunting dogs (Mafabi, 2011). Six months earlier, a ranger was killed after gun traffickers raided an outpost in an attempt to steal firearms. The death marked the fourth attributed to gun
traffickers since 2005 with 16 other rangers injured in related attacks (Elunya, n.d.; Mafabi, 2011). More recently, in 2012, one UWA ranger was killed by a South Sudan warrior tribe, the *Toposa*, after the tribe had poached a buffalo and UWA personnel attempted to apprehend tribe members (Tenywa, 2012). Marshall (2003) reported that a survey released at the 4th World Ranger Congress in 2003 described a situation involving the kidnapping and murder of ten rangers by rebels from Murchinson Falls National Park. With relevance to the current study area, nearby Virunga National Park in the Democratic Republic of Congo (DRC) has had approximately 132 rangers killed between 1996 and 2011 (Smith, 2012).

*Job satisfaction*

Examining job satisfaction has been recognized to be important in better understanding and alleviating negative outcomes associated with the occupation and workplace as such outcomes can lead to low morale, burnout and other forms of stress (Buzawa *et al.*, 1994; Eliason, 2006b; Seltzer *et al.*, 1996). Indeed, as noted by Seltzer and colleagues (1996), analyzing job satisfaction directly impacts job productivity and performance; thus, impacting job effectiveness. Generally speaking, prior research has found that wildlife law enforcement officers are satisfied with their position due to a variety of reasons. First and foremost, the position involved working in the outdoors or environment (Charles, 1982; Eliason, 2006b; Palmer and Bryant, 1985). Many of the respondents in their respective studies were found to have a general interest in the outdoors and genuinely liked outdoor activities. Respondents also liked their job because it provided them with a salary and it was related to conservation (Charles, 1982). It was also found that that
wildlife law enforcement officers liked their occupation because of the opportunity to meet new people, interact in social settings or simply that they would be helping people (Charles, 1982; Eliason, 2006b).

Prior studies have also found that wildlife law enforcement officers also liked the sense of autonomy provided by their work in that they are often able to decide when and where to conduct their operations (Eliason, 2006b; Palmer and Bryant, 1985). Additionally, a common theme amongst game wardens was that they liked enforcing the law and apprehending offenders (Eliason, 2006b). For example, Palmer and Bryant (1985) found that game wardens had their own perception of what was considered to be "real police work" akin to what policing researchers have found in the past (see Manning and Van Maanen, 1978). In their study, Palmer and Bryant (1985) attributed such 'real' work to finding and arresting habitual offenders, spotlighters and "market poachers\(^\text{14}\)" (127). The aforementioned point is even more interesting given that Charles (1982) found that park rangers in Yellowstone National Park were disillusioned with increasing law enforcement responsibilities. However, such differences in opinion may simply be a product of when the studies were conducted, organizational shifts and expectations throughout the years and differences in roles and responsibilities between different types of wildlife law enforcement officers.

\(^{14}\) Palmer and Bryant (1985) define this as "someone who kills large game and sells it to individuals, grocery stores or restaurants (127). Essentially, someone who does not poach for subsistence purposes."
Occupational stress and concerns

Walsh and Donovan (1984) administered a survey addressing various aspects of occupational stress, including attitudes towards the role of law enforcement, personal stress, internal stress and environmental stress to 139 game conservation officers, 26 land managers and 29 law enforcement division supervisors. Of the factors found to be significant, most game conservation officers believed that occupational stress as a result of their law enforcement role was associated with the fact that their work was dangerous, demanding and involved working too many hours. Moreover, just over half of the game warden respondents stated that stress also derived from the fact that they could be physically threatened and their authority challenged. In regards to internal stress, game conservation officers attributed stress to lack of management support in decision-making and administrative responsibilities. Lastly, personal stress was attributed to isolation from their family. Notably, Walsh and Donovan (1984) highlighted the reality that game conservation officers face as highly visible members of the communities they serve. Often times living within such communities, game conservation officers can be closely monitored by community members.

Eliason (2011c) identified five major concerns of game wardens: inadequate funding, low salaries, lack of support from the court system, and changing socio-political context. Some of the respondents also highlighted the increase of non-wildlife law enforcement duties, including administrative tasks and responding to calls for issues related to urban/problem wildlife. Palmer and Bryant (1985) found that wardens at times felt they
were understaffed and were unable to establish a visible presence in the areas they were responsible for.

In regards to law enforcement issues, law enforcement rangers were found to believe that they should have in-service, high-level training and be supervised by other law enforcement officers compared to their non-law enforcement counterparts (Wynveen et al., 2006). Moreover, law enforcement rangers believed that the law enforcement division was not as adequately funded as other departments and that they themselves were not properly equipped to perform their duties. Law enforcement rangers also believed that there was differential treatment by the managers with non-law enforcement employees treated in a preferred manner. Lastly, law enforcement rangers believed that they had more of workload compared to non-law enforcement staff.

4.1.2. Quantifying patrol effort and ranger-based law enforcement monitoring

Lind and Lipsky (1971) argue that police output measures are useful ways for police personnel to measure and maintain acceptable performance standards. Such measures also allow the possibility to better separate the potential impact that police practices have on crime factoring in other issues. Importantly, in situations where police practices and strategies are developed and evaluated, performance indicators enable policy makers and police personnel to evaluate whether a particular strategy was effective, how effective it was and how the strategy compares to alternatives. Further, performance measures also establish a sense of accountability for the organization as a whole, as well as providing the opportunity to identify problems as they arise (Roberts, 2006).
As mentioned, one of the primary methods of law enforcement within PAs is ranger patrols. In most cases, patrols are used to provide security to wildlife and tourists, as well as preventing and investigating illegal activities. Not only can law enforcement involving foot patrols and investigation operations be useful for the management, monitoring and enforcement of PAs, they can also be used as a means for conflict resolution (Lewis, 1996). However, given the opportunistic nature of patrolling in the wild (Makombo and Schmitt, 2003) and the minimum training and equipment required (Stokes, 2010; Gray and Kalpers, 2005), ranger patrols are especially useful for data collection.

Simply put, ranger-based law enforcement monitoring (LEM) data is collected by park rangers while on patrol (Stokes, 2010; Gray and Kalpers, 2005). Information that is collected is often standardized and is therefore readily available and useable for park managers (Stokes, 2010). Ranged-based LEM collect data points via GPS devices, which consist of time stamped x-, y-coordinates. Collected information includes observed signs of documented illegal activities and the presence of wildlife species. In addition to being used as a means to collect data on illegal activities and wildlife species, data points collected can be used as an indicator of park ranger patrols as all data is geo-referenced and collected every 30 minutes (Makombo and Schmitt, 2003). By obtaining recordings every 30 minutes, distance covered by each patrol can be calculated at a reasonably accurate level. Although the primary purpose for ranger-based LEM data is to document illegal activities and the status of wildlife within a specific area, such data is also useful
for documenting and measuring patrol behavior; thus, potentially providing a means for evaluating ranger performance.

Originally developed in conjunction with the Uganda Wildlife Authority (UWA), the Management Information SysTem (MIST) acts as a central depository for all incoming multi-sectoral data obtained from various PAs within Uganda (Pantel, 2007; Schmitt and Sallee, 2002). In addition to acting as a depository, MIST also serves as an internal decision-support tool for UWA, provides information that can be used for planning and evaluation and provides data and information to other institutions. MIST is currently used in nine PAs in Uganda, in the UWA headquarters in an Information Management Unit and in one PA in Cambodia (Makombo and Schmitt, 2003)\textsuperscript{15}.

It is important to note that since many types of patrols are deployed in places considered 'hot spots' of illegal activity, LEM data should not be considered a systematic survey of the study area (Kakira, 2010; Stokes, 2010). As pointed out by Stokes (2010), "the principal objective of ranger-based LEM is to provide regular, rapid and standardized information on illegal activities and patrol performance in order to help site managers make informed decisions regarding patrol deployment and efficient allocation of resources (364-365; emphasis added). However, Makombo and Schmitt (2003) argue that the opportunistic nature of ranger-based LEM and data collection will resemble random sampling, if the bias in spatial distribution is low and the number of kilometers patrolled is high. However, this can only be achieved if a PA is separated into sectors, which have

\textsuperscript{15} See Makombo and Schmitt (2003), for a more descriptive introduction on the MIST program.
similar levels of patrol intensity. Once established, indices like snares per kilometer can be established for monitoring purposes.

4.1.3. Prior studies of patrol effort and effectiveness

The majority of the literature evaluating ranger patrols has looked at measures of patrol effort, particularly as it relates to a catch per unit effort (CPUE) measure first used by Bell (1986; as cited in Leader-Williams et al., 1990; Jachmann, 2003; Jachmann and Billiouw, 1997; Kakira, 2010; McShane, 1990). Other studies have also looked at alternative measures of patrol effort and effectiveness by looking at factors beyond the actual patrol itself. In an evaluation of the effectiveness of enforcement against illegal harvesting in Serengeti National Park, the authors used the capture of poachers per patrol as a measure of poaching intensity (Hilborn et al., 2006). The authors operationalized anti-poaching effort as the number of ranger patrols per day and poaching effort as the ratio of arrests to patrols. Hilborn and colleagues (2006) found that the decline in poaching could be attributed to anti-poaching practices. In another study, looking at elephant poaching and law enforcement resource allocation in Luangwa Valley in Zambia, Jachmann (2003) used two broad categories of law enforcement (budget and manpower) to determine their impact on the number of elephants killed in the area. Results showed that all manpower variables (km²/scout, km²/carrier, effective patrol days/km² and effective investigation days) and three budgetary variables (expenditure/km², emoluments/km² and number of bonus claims made) were significantly related to the number of elephants killed. Interestingly, the number of bonus claims made was the most influential predictor variable. Jachmann (2008) concluded that law
enforcement within the region was mostly successful due to the rise in overall budget spent on law enforcement, increased manpower and the use of an incentive system.

4.2. Limitations of Wildlife Law Enforcement

Like other forms of enforcement, wildlife law enforcement has its limitations, including a lack of resources and funds, corruption and its deterrent value (Du Rees, 2001; Akella and Cannon, 2004; Kakira, 2010; Wellsmith, 2010, 2011). In addition, wildlife crimes are often not taken as seriously as other more 'mainstream' crimes resulting in wildlife-related issues being viewed as low priority (Cook, Roberts and Lowther, 2002; Environmental Investigation Agency (EIA), 2006; Wellsmith, 2011). This is despite the fact that various forms of wildlife enforcement are just as dangerous as traditional forms of law enforcement. As mentioned earlier, wildlife law enforcement officers may at times engage with violators who are armed and proficient with weapons and must transcend through unforgiving terrain with limited or no back-up.

Many forms of wildlife law enforcement are also reactive (Pires and Moreto, 2011). This is problematic for several reasons, including the difficulty finding and apprehending perpetrators and in cases where a species is killed, particularly an endangered species, such forms of policing can be viewed as being ineffective. Moreover, such reactive forms of enforcement do not address underlying factors that may influence how, why, when and who commits specific types of wildlife crimes. In fact, the push for increasing enforcement should be premised on a preventative mandate rather than one on increasing the capability of enforcement to catch and prosecute a larger number of offenders.
(Brockelman et al., 2002). Proactive, community-involved, intelligence-led and problem-oriented forms of enforcement are well-suited for addressing wildlife crimes and generating alternative responses that are contextualized, involves key stakeholders and results in the allocation of responsibility to other agencies beyond resource-strapped wildlife law enforcement personnel.

Within PAs and national parks, the capability of wildlife law enforcement is also limited in its ability to protect the large number of potential target species within the vast landscape of PAs (Kakira, 2010; Leader-Williams et al., 1990). Even the suggested figure of one ranger per 23.8km$^2$ (Jachmann and Billiouw, 1997) seems minute compared to the 126 officers/km$^2$ available in New York City or even 32 officers/km$^2$ in London (Johnston, 2001). Although such references may be moot considering the differences in responsibilities and clientele of urban city forces compared to rangers in PAs, such differences do highlight the limitations faced by park managers and ground-level rangers in their capacity to effectively monitor such a large landscape. Further, even the suggested figure of one ranger/23.8km$^2$ is unrealistic in many settings. For example, Holmern and colleagues (2007) found that in the Ikorongo and Grumeti Game Reserve in Tanzania, there was one scout (ranger) per 167km$^2$.

Lastly, many forms of illegal activities are driven by forces beyond the control of wildlife law enforcement officers. Such forces, some of which have been already discussed, include the socio-political and cultural backdrop surrounding the establishment of parks, the displacement of indigenous communities, poverty and local and international demand
for wildlife products (Brockelman et al., 2002). Unfortunately, wildlife law enforcement officers are confronted with the burden of addressing a multi-faceted problem with a limited set of tools at their disposal.

### 4.3. Summary

The majority of the policing literature in criminology has derived from the United States and Britain. However, the history and contemporary context of policing in many countries in Africa is markedly different. Recognizing the differences in general forms of policing is important to gain a better understanding of the overall context for different types of policing authorities within a country. Operating at various levels, wildlife law enforcement is responsible for monitoring and enforcing laws and policies relevant to the protection and/or regulation of wildlife and wild lands. One form of wildlife law enforcement is ranger foot patrols – the primary form of law enforcement within PAs. In addition to law enforcement, ranger patrols are also used as a means to monitor and collect data on wildlife and illegal activities within PAs. Unfortunately, given the reality of policing PAs, ranger patrols are often hindered in their capacity to truly address various illegal activities. Of the few studies conducted on ranger patrols, the majority have focused on attempting to conduct measures of patrol effort and effectiveness; while even fewer studies have examined ranger perceptions of law enforcement or illegal activities within their respective parks. Up to this point there has been no systematic analysis of ranger patrol activities and time use. Such research is not only beneficial in contributing to the current literature, but may produce new insights in how patrols can also be studied.
Chapter 5 - Theoretical Framework

5.1. Overview of Theoretical Framework

As the majority of policing research has been conducted within North American or European settings, the generalizability of such findings to African forms of policing is limited. Despite this the theoretical foundation which has propelled and supported the policing literature remains useful in researching various types of policing in African states, including wildlife law enforcement. Indeed, examining the potential differences and similarities of different forms of policing in different contexts is useful in contributing to the development of a holistic account of policing organizations and behavior\(^\text{16}\). Moreover, although still relatively limited compared to urban policing research, studies on wildlife law enforcement provides a foundation which for the current study. Given the objectives and goals, the theoretical framework that will be used in the will be based the police culture and police time use literature.

5.2. Police Culture

In his review of the literature, Paoline (2003) argued that police culture provided an avenue by which scholars could conduct insightful research on police daily operations, the learning and transference of how to be a police officer, deviance and misconduct, variability in law enforcement practices and the impact and influence of reform initiatives. Therefore, given the exploratory objectives of the study, the police culture

\(^{16}\) The use of the term 'holistic' should not be confused with the concept of 'universal'. Given the variability in historical and current contexts and settings where policing organizations may operate, the development of a universal theory of policing may be hard-pressed. Instead of attempting to develop a universal theory of policing, it is potentially more feasible
literature and its key themes will prove as a useful framework. It should be noted that the current study will incorporate police corruption within the theoretical framework as well as it has been considered relevant to the understanding of police culture (Cockcroft, 2013).

5.2.1. Defining and conceptualizing police culture

Rather than provide an in-depth, historical overview on police culture (see Cockcroft, 2013 and Loftus, 2009), the following will provide a discussion of key themes found within the literature. Pioneered by early research conducted by Banton (1964), Skolnick (1966/1975) and Westley (1970), the topic of police occupational culture has generated a significant amount of research from policing scholars throughout the last 50 years with findings suggesting a direct link between the formal and informal aspects of policing organizations (Cockcroft, 2013; Loftus, 2010). Police culture as a concept has at times been viewed in a negative light despite its potentially positive impact on police officers (Chan, 1996; Goldsmith, 1990; Paoline, 2003; Waddington, 1999).

Early research on the topic tended to present police culture in a simplistic and homogenous manner (Cockcroft, 2013; Loftus, 2009; Paoline, Myers and Worden, 2000). Recent research, however, has recognized the heterogeneous nature of the concept and has raised issue regarding the existence of a universal and deterministic police culture (Chan, 1996). Variability amongst and within organizations (Paoline, 2003, 2004; Reuss-Ianni, 1983) has also been acknowledged, as well as disparity in occupational attitudes and behaviors between urban and rural police officers (Cain, 1973). Importantly, the realization that police culture can be influenced by the changing surrounding context and
organizational characteristics and objectives of a department has led to scholars to expand their investigation on the topic (Cockcroft, 2013; Loftus, 2009).

Despite having an extensive empirical foundation, the actual definition of 'police culture' is clouded in ambiguity. This is been partly attributed to the difficulty in attempting to define such an intangible concept in tangible terms. Moreover, the changing state of policing practices and objectives, as well as the fact that early research on the topic never explicitly used the term further complicates the topic (see Cockcroft, 2013; Paoline, 2003). For example, in his early study on the subject, Skolnick (1966/1975) referred to what could be considered police culture as the "working personality" (42) of police officers.

Police culture has been defined in a number of ways. Manning (1989) describes it as the "core skills, cognitions" which influence or affect "good police work" (360). Reiner (1992) refers to it as the "values, norms, perspectives and craft rules" which influence police behavior (109). Chan (1996) defines police culture as the "informal occupational norms and values operating under the apparently rigid hierarchical structure of police organisations" (110). Waddington (1999) refers to it as "the mix of informal prejudices, values, attitudes and working practices commonly found among the lower ranks of the police that influences the exercise of discretion" (203).
Reflecting on the main themes highlighted by prior definitions, Cockcroft (2013) summarizes police culture as:

A diverse selection of themes that identify, respectively, the importance of culture in promoting accepted ways of 'doing policing', a framework of meaning that helps officers to make sense of work-based issues and, finally, a means of resolving the tension between formality and informality within formal institutional structures (36).

Cockcroft cautions that while prior definitions have highlighted key themes prevalent in the literature, such definitions nevertheless are unable to truly grasp the extent of the concept and are only able to provide a broad description. As such, the aforementioned definition provided by Cockcroft will suffice in an attempt to identify themes central to being a law enforcement ranger in Uganda.

5.2.2. Key Themes of police culture

As mentioned, recent research on police culture has brought into question some early findings on the topic. However, it is worthwhile to discuss central themes that have been identified, some of which have been found to transcend through time and space (Loftus, 2009). It should also be noted that such themes are not mutually exclusive and interaction effects may exist. For instance, Skolnick (1966/1975) argued that the "outstanding elements in the police milieu, danger, authority, and efficiency" combined to "generate distinctive cognitive and behavioral responses" resulting in the developing of a police officer's 'working personality' (42). In other words, it was not simply just one facet that resulted in the police officer's working personality, but rather a confluence of several aspects leading to its development. For the purposes of the current study, three main
themes associated with police culture will be outlined: sense of mission, cynicism/suspicion and isolation/solidarity.

**Sense of mission**

Police officers have been found to have a deep belief or sense of mission grounded in morality, righteousness and duty (Cockcroft, 2013; Loftus, 2009; Reiner, 2000). Despite the majority of police work being relatively mundane (Manning, 1997; Van Maanen, 1978a), researchers have found that police officers actively thrill-seek and find activities that solidify their belief in their role as crime fighters. As described by Prenzler (1997) such belief results in "a macho, action-oriented, culture and a paramilitary command-style management that stifles consultation, evaluation and creative problem solving" (48). In other words, not only do such activities reinforce the 'crime fighter' image, but it may result in police officers' becoming reluctant to change or innovation that shifts away from this crime control model (Reiner, 2000). Due in part to this reluctance, previous research has identified police culture to be recognized as a common barrier to organizational change and the acceptance and implementation of innovative approaches to policing, including the shift from the traditional 'crime-fighting' model to the community and problem-solving models in the United States (Chappell, 2008; Lurigio and Skogan, 1994; Paoline, Myers and Worden, 2000).

**Cynicism/Suspicion**

In addition to having a sense of mission, cynicism has also been identified as a main theme within the police organizational culture literature. Police cynicism has been
attributed in part to the "discord between the police officers' sense of mission and their experiences within the 'reality' of their occupational world" (Cockcroft, 2013: 54). In particular, the types of interactions that the police have with the community (McLaughlin, 2007; Manning, 1997; Van Maanen, 1978a) results in a "profound cynicism towards the unreliability and criminality of the public" (Loftus, 2009: 108). As a result, citizens of the community are viewed in a negatively resulting in a "we-versus-they outlook" (Paoline, 2004: 208). Due in part to this cynical perspective on the community they serve, police officers tend to be acutely suspicious of the citizenry (Banton, 1964; Skolnick, 1966/1975). This sense of suspicion is further exacerbated by the perceived level of danger associated with the occupation as well (Skolnick, 1966/1975).

**Solidarity/Isolation**

An established sense of mission combined with cynicism and suspicion results in a deepened solidarity with fellow police officers, while at the same time isolating them from the general public. Although such solidarity has been recognized as a potential factor in the officers covering up their colleagues inappropriate or illegal behavior (Skolnick and Fyfe, 1993; Westley, 1970), it also has also been identified as a useful coping mechanism against the strains of the occupation (Reiner, 2000).

### 5.2.3. *The blue code of silence’ and corruption*

Although a topic on its own, police corruption has also found a place within the police culture literature. Cockcroft (2013) noted that, "police culture has been presented as one
possible means of explaining some forms of police corruption, from bribery and manipulation of evidence to illicit use of physical force" (120). In general, corruption has been recognized as a multi-faceted, complex issue that can range from 'conventional forms' of corruption premised on individual gain (e.g. bribery) to collective behavior resulting in some form of positive recognition (Punch, 2009). Within the context of the police culture literature, it has been argued that as a result of the solidarity and loyalty amongst police officers, a 'Blue Code of Silence' develops (Skolnick, 2004). This 'Blue Code' exerts a strong influence on police officers resulting in facilitating, sustaining and covering up police misbehavior. Similarly, Punch (2009) observed, "Running through the cases and literature is the powerful pull of officers wanting to belong to a group or clique and how that solidarity can be related to a code of silence and to engaging in deviance as a condition of that acceptance" (45). As a result, a sense of peer group secrecy occurs shielding the public from the indiscretions and misconducts of the police (Sherman, 1974). Recent research suggests that the existence of police culture belief systems may be associated with police corruption and misconduct behavior (Westmarland, 2005). While it has been argued that police corruption far too complex to be explained by solely by police culture (Cockcroft, 2013), the issue is still an avenue worth exploring within the current theoretical framework as it may elucidate components of 'ranger culture' that otherwise may not be identified.
5.3. Police Time Use

5.3.1. Patrol time use and work load

Police time use studies, also known as work load studies, have been used to identify, document, categorize and analyze police behavior and activities (Cordner, 1979, 1980; Famega, 2005; Famega, Frank and Mazerolle, 2005; Frank, Brandl and Watkins, 1997; Kelling et al., 1974; Smith, Novak and Frank, 2001; Reiss, 1971; Webster, 1970; Wilson, 1968; Whitaker, 1982). As described by Palmiotto (1997), "Patrol is often called the backbone of the police department" (142; emphasis in original). Further, Webster (1970) suggests that such studies are beneficial as they better inform management in the allocation of resources and manpower while establishing more realistic goals. However, "Despite their importance for performance measurement and planning, many police activities receive little attention and are not known in any systematic way" (Whitaker, 1982: 22). Using a variety of techniques, including analyzing dispatch records, obtaining activity reports and conducting surveys, time use studies have addressed a wide range of police behavior and settings (Cordner, 1979, 1980; Whitaker, 1982). Notably, given the limitations associated with official reports and surveys, the use of participant observations and systematic social observations have become invaluable techniques in documenting, analyzing and understanding police practices and activities (Famega, 2005; Mastrofski and Parks, 1990; Reiss, 1971; Skolnick, 1966/1975; Wilson, 1970).

Early studies on patrol time use typically operated within a general examination of organizational police behavior and practices. Not limited to solely investigating the activities of patrol officers, early studies attempted to provide an overview of police
patrols within the broader scope of police organizations. One such study was conducted by Wilson (1968) on police behavior in eight communities in the United States. Wilson's exploratory study provided the foundation for future scholars interested in patrol behavior, police discretion, administrative and legalistic aspects of policing and the politics surrounding police organizations. In another in-depth study, Reiss (1971) observed and investigated police behavior and activities, including patrols (both vehicle and foot), in Boston, Chicago and Washington, D.C. The study produced a wealth of knowledge on how officers conducted patrols and the relationship and interactions between patrol officers and community members. For instance, Reiss (1971) found that approximately 87 percent of crimes known to the police were reported by the public and that policing was mostly reactive in nature. Importantly, the study also provided information on the varying police subcultures prevalent in all sites studied. Notably, it provided an interesting glimpse on the misconduct of patrol officers. For example, approximately 25 percent of observed patrol officers participated in some infraction including the acceptance of bribes (Reiss, 1971).

Time use and work load studies have unraveled many important and interesting aspects related to ground-level operations, specifically police patrols. One of the most important findings is the realization that patrolling activities can be broadly divided into crime and non-crime related activities with a large portion of patrol time being used for non-crime related activities (Cordner, 1979; 1980; Gay, Schell and Schack, 1977). Realizing that patrol officers are actively participating in a variety of activities, researchers have looked at distinguishing between committed and non-committed activities (Kelling et al., 1974;
Webster 1970) and variation in time use during periods of downtime and the level of
discretion afforded to officers (Famega, 2003). Additionally, studies have looked at
comparing police strategies and approaches like community policing to traditional forms
of policing (Frank, Brandl and Watkins, 1997; Smith, Novak and Frank, 2001) and
comparing rural (Liederbach and Frank, 2003) and suburban (Liederbach, 2005) police
officers to their urban counterparts. In general, findings from time use and work load
studies can be summarized in the following:

- In general, police officers participate in significantly more activities that are
  related to non-committed/downtime than crime-related activities.
- Police have a significant amount of discretion on how they use their time while on
  shift
- Time use and work load will vary depending on the 'type' of police officer (e.g.
  community specialist v. generalist).
- Time use and work load studies allow the possibility to compare policing
  strategies (e.g. community-oriented v. traditional, beat).
- Urban, suburban and rural police officers have similar amounts of non-
  committed/downtime.
- Systematic social observations/field observations have been found to be the most
  accurate in time use and work load studies.

As highlighted above, time use and work load studies has provided valuable information
on how patrol officers use their time and how frequently such activities occur. In
addition, those studies allowed the possibility to unravel ground-level decision making, particularly as it related to police-community interactions. It must be cautioned, however, that such studies have typically been generated from full scale studies that have covered a large number of observed shift hours. For example, Kelling and colleagues (1974) observed 1,230 hours; Famega (2003) observed 1,720 hours; Smith and colleagues (2001) observed 3,536 hours; Liederbach (2005) observed 3,536 hours and; Parks and colleagues observed 5,700 hours. In most cases, researchers were able to observe police officers during set routine schedules for long periods of time. Further, most studies also incorporated the use of multiple trained observers in addition to the main researchers and required a significant amount of resources. As such, more systematic and extensive time use and work load studies may require an extensive amount of time and resources.

5.3.2. Police patrol studies and the hot spots perspective

Police agencies have a wide range of strategies at their disposal including foot and vehicle patrols and criminal investigations. As patrols often represent the bulk of most police work (Whitaker, 1982) and are of particular relevance to the current study, the following discussion will focus on police patrols. Much of the early research on policing strategies has been focused on deterrence and preventative patrol (Clarke and Hough, 1984). This should not be surprising given the importance of police patrols for the
respective police agencies and the public they serve. As described by Gay and colleagues (1977):

> Whether it be gauged in terms of the number of police patrol personnel, the portion of the budget allocated to patrol operations, or the fact the uniformed officer is frequently the most visible component of the law enforcement network, patrol is the mainstay of police work (1)

Many of the early studies conducted on police patrols analyzed the effectiveness of random preventative patrol. During this time it was believed that police could effectively deter criminal behavior by establishing a sense of police omnipresence (Wilson and McLaren, 1977). In other words, the presence or perceived presence of police would discourage potential offenders from committing crime (Braga and Weisburd, 2010). Moreover, the random and continual nature of patrolling would further increase the deterrent value of such patrols as offenders would not know when or where to expect a patrol officer. This was especially believed to be true given the increased capabilities of the police through motorized transportation and technological advancements (Kelling et al., 1974).

An early study conducted in three British cities by Bright (1969; cited in Clarke and Hough, 1984) examined the effectiveness of increased patrol strength on reported crime. Bright concluded that increased police patrols on a beat had little impact on reported levels of crime. The author cautioned, however, that the results are based on the notion that an area is subject to some form of police patrol. In situations where patrols were completely removed in an area, reported crime increased. The relationship between the absence of police activity (e.g. police strikes) and an increase in crime has also been discussed by Sherman and Eck (2002).
Arguably, the most famous study on police patrol is the Kansas City Preventative Patrol Experiment conducted by the Police Foundation in 1974. The year-long experiment comprised of dividing 15 Kansas City patrol beats into three different equal groups: beats that received higher levels of preventative patrol ('proactive' beats), beats that received 'normal' levels of preventative patrol ('control' beats) and, beats that received no preventative patrols ('reactive' beats) (Kelling et al., 1974). The study found that unequivocally preventative patrol had no measurable impact on crime or citizen feelings of security. In other words, the Kansas City Preventative Patrol Experiment showed that police presence does not deter offenders nor does it make members of the community feel safer. It should be noted that the Kansas City experiment was not only known for its results but also for how it came to such results. At the time, the methodological approach utilized by Kelling and his colleagues was significantly different in scope and rigor compared to prior studies on police strategies (Weisburd and Braga, 2006a).

In another study conducted by the Police Foundation, the Newark Foot Patrol Experiment looked at the impact of police foot patrols on police-citizen relationships, citizens' perceptions of safety, and crime, amongst other factors (Police Foundation, 1981). Using a similar strategy to the one used in the Kansas City Experiment, the year-long experiment consisted of 12 equally divided foot patrol beats: four continued foot patrols, four ceased and four initiated foot patrols where it had not been used previously. The results from the Newark Experiment found that additional foot patrol did not reduce
serious crime; however, it did have an effect on public perceptions related to fear and positive attitudes of the police (Police Foundation, 1981).

Findings from the early patrol studies painted a fairly bleak picture of police patrols. Other studies, however, have found evidence suggesting that increased police presence may have an effect on crime rates. Schnelle and colleagues (1977) examined whether increased police patrol had an effect on reported levels of Part I crimes in Nashville, Tennessee, USA. Employing a multiple-baseline experimental design and using time-series analyses, the authors found that increased patrolling significantly impacted the reporting of Part I crimes during night patrols but not during day patrols (Schnelle et al., 1977).

Drawing from the growing literature on hot spots, Sherman and Weisburd (1995) examined the practicality and effectiveness of hot spots policing in the Minneapolis Hot Spots Experiment. The authors questioned the findings from the earlier Kansas City Experiment and challenged the notion that police patrol had little or no effect on crime. They argued that based on the growing empirical literature on crime concentrations at micro-places, police patrol may be effective if allocated in areas where crime clustered. In essence, Sherman and Weisburd (1995) argued that focused patrols would be more effective than simply dispersing patrols randomly and/or equally throughout a police beat. To test their hypothesis, the authors randomized 110 crime hot spots to experiment and control conditions whereby experiment groups received on average between two to three times more preventative patrols than control groups. Results from the Minneapolis
Hot Spots Experiment showed significant differences between the experiment and control groups in regards to crime calls to the police and observations of disorder (Sherman and Weisburd, 1995). The authors concluded that the study showed that preventative approaches may be effective if such approaches are allocated to places where crime is concentrated.

Since the Minneapolis Hot Spots Experiment, several other studies have looked at the effectiveness of directed patrols based on the identification of hot spots. Reviewing the literature, Braga (2001) conducted an analysis on hot spot policing studies that specifically employed either an experimental or a quasi-experimental design. The author analyzed nine total studies, including the Minneapolis Hot Spots Experiment (Sherman and Weisburd, 1995), to determine the effectiveness of hot spots policing. The author found that out of the nine studies looked at, seven had significant crime reductions. In a more systematic follow-up, Braga (2005) conducted a meta-analysis solely on five studies that utilized randomized controlled trials to test the effectiveness of police efforts on hot spots. Similar to the findings of his earlier review, Braga found that specifically focused police strategies resulted in significant decreases in crime in four of the five studies assessed.

In sum, research on policing in the last four decades has found that allocating police personnel and resources to particular risk factors has proven to be empirically supported and more effective than simply increasing police numbers or randomly allocate (Sherman and Eck, 2002; Committee to Review Research, 2004). In other words, the hot spots
perspective posits that crime can be reduced if police specifically target the small number of places that generate a majority of crime problems (Sherman and Weisburd, 1995; Eck and Weisburd, 1995b; Braga and Weisburd, 2010).

5.4. Summary

Research on police organizational culture has led to a wealth of knowledge on the opinions, attitudes and behaviors of police officers with the literature suggesting that key themes, while adaptable, transcend through time and space. Furthermore, research on police patrols have also generated a significant amount of interest from researchers. In particular, research has examined the effectiveness of preventative patrols. Recognizing the importance of police patrol research, criminologists have also looked at how police utilize their time while on patrol. Such time use and work load studies have provided a wealth of knowledge on how patrols are conducted, what patrol officers do, how patrol officers manage their time and the dynamics associated with police-community interactions. As the study is an exploratory study on the overall workings of law enforcement within QENP, a theoretical framework based on the police organizational culture and police time use will be used to guide the research.
Chapter 6 - Research Design and Methodology

6.1. Overview

The study is an ethnographic case study utilizing both interviews with law enforcement rangers and supervisors and participant observations of routine foot patrols in Queen Elizabeth National Park (QENP) in Uganda. A case study approach is appropriate when the focus of study will be investigated in detail within its own context. By using various methods, data can be triangulated to produce a holistic explanation of the phenomenon that is investigated through corroboration (Yin, 2009), while also minimizing the limitations associated with single method designs (Brewer and Hunter, 1989). As “an ethnographic approach is undoubtedly the most appropriate method to access the inner world of policing” (Loftus, 2009: 201), this was utilized for the study given its exploratory objectives.

Living in QENP for a six week period, the author collected data between September and October, 2012. The two parts of data collection were conducted concurrently given time constraints and to foster informed investigation during each individual phase. Analysis of both interviews and participant observations involved first order initial coding and second order pattern coding. All data was analyzed using NVivo 10.
6.2. Study Area

Established in 1952 after the passage of the National Park Act, QENP is one of ten national parks in Uganda. As one of four savanna parks\textsuperscript{17}, QENP is part of the larger Queen Elizabeth Protected Area (QEPA), which includes Kiegezi Wildlife Reserve and Kyambura Wildlife Reserve (Olupot et al., 2010). The park is located in the southwest region of Uganda, near the Rwenzori Mountains and Lakes Edward and George, and has a total area of 1,978 km\textsuperscript{2} (Olupot et al., 2010) (see Figure 5.1). There are two rainy seasons: March to May and September to November, respectively (Olupot et al., 2010).

QENP is home to eleven fishing villages - five located on Lake Edward and six on the Kazinga Channel and Lake George (Risby et al., 2002). From the establishment of QENP to around 1969, such communities were allotted limited grazing rights within the park (within 500m of village borders), permit-based resource access and revenue sharing; however, due to perceived increased pressure on park resources, QENP management strategies shifted from a 'carrot' to a 'stick' approach starting in 1969. As a result, communities within QENP were restricted from all resource use (Risby et al., 2002). Due in part to this change in park management strategy, relations between community members, park management and park rangers have been strained throughout the years (Nampindo and Plumptre, 2005; Risby et al., 2002). Like other PAs in Uganda, QENP is susceptible to various threats, including poaching, resource harvesting, bush fires, political instability and the growth of fishing communities (Plumptre et al., 2003). In addition to such threats, park boundaries of QENP have historically been poorly

\textsuperscript{17} The other three being Murchison Falls, Kidepo Valley and Lake Mburo (Olupot et al. 2010).
Figure 6.1. Queen Elizabeth National Park (QENP), Uganda
marked and when such boundary markers have been placed, may have been moved or simply removed (Moghari, 2009). Such threats are especially problematic to QENP, which boasts other important ecological designations, including being listed as an Important Bird Area by Birdlife International\(^\text{18}\) and a biosphere reserve by the Man and the Biosphere Programme (MAB) of the United Nations Educational, Scientific and Cultural Organization's (UNESCO)\(^\text{19}\). In addition, QENP is also home to a RAMSAR\(^\text{20}\) wetland (Lake George). Given these characteristics, QENP has significant conservation implications and importance (Muhweezi, 2003).

The organizational hierarchy of QENP is displayed in Figure 5.3. In addition to the Katunguru headquarters, which is where the author stayed, there are 25 additional ranger posts, gates and sub-headquarters located within six sectors: Dura, Katunguru, Kigezi, Kyambura, Mweya and Ishasha. For each sector there are managers responsible for providing necessary information to the wardens of each department, who are located at headquarters. Importantly, due to limited manpower, law enforcement rangers sometimes operate alongside the Uganda People's Defense Force (UPDF) in a joint coalition referred to as the Special Wildlife Tourism Protection Force (SWIFT)\(^\text{21}\).

\(^{18}\) Birdlife International is a global partnership of conservation organizations emphasizing the conservation of birds and their habitats, while also promoting sustainably and global biodiversity (Birdlife International, 2012). QENP became an International Bird Area in 2001.

\(^{19}\) The MAB is an intergovernmental scientific program that utilizes scientific studies to improve the relationship between people and the environment. Biosphere reserves are sites established by countries privy to the MAB which are used to promote sustainable development based on scientific evidence and local community efforts and participation (UNESCO, 2012). There are only two biosphere reserves in Uganda: QENP and Mount Elgon. QENP became a biosphere reserve in 1979.

\(^{20}\) The Ramsar Convention on Wetlands is an intergovernmental treaty that is premised on the agreement of member countries in the maintaining of ecological wetlands designated as Wetlands of International Importance (RAMSAR, 2012).

\(^{21}\) In these circumstances, UPDF personnel are referred to as 'SWIFT' rangers.
6.3. Gaining Access

6.3.1. Formal Permission

Gaining permission to conduct research in QENP and in Uganda required the author to deal with a number formalities in order to gain access to the study area. In February, 2012, the author submitted a formal request seeking to gain permission to conduct research from both the UWA and the Uganda National Council for Science and Technology (UNCST). The UNCST is the government agency responsible for overseeing research projects that are conducted in Uganda. After submitting the forms via email, the author and one of his committee members spent three weeks in Uganda in March 2013. This was done to further expedite the process of obtaining clearance to conduct the study by paying research fees in person, as well as discussing the project with key gatekeepers at both the UWA headquarters in Kampala and Katunguru headquarters in QENP. Formal approval to conduct the study and gain access to QENP was given by the UWA during this visit, while approval from the UNCST was given in early April via email.

Once approval from both the UWA and the UNCST was granted, the author submitted a formal request to the Institutional Review Board (IRB) at Rutgers University. After addressing some concerns from the IRB, the author submitted a successful application and was granted IRB approval in June, 2012. It should be noted that the original study had only included interviews with law enforcement rangers; however, as will be discussed, the author had the opportunity to interview law enforcement supervisors as well during the data collection phase of the study.
Figure 6.2. Organizational Hierarchy of the Uganda Wildlife Authority in Queen Elizabeth National Park
Given the difficulty in gaining internet access in the study area, the author was unable to submit an IRB amendment prior to interviewing these respondents. Further, given that the author was restricted in the amount of time spent in QENP, applying for IRB amendment and awaiting for approval may have resulted in losing useful information. The author applied for an IRB amendment upon returning from the study area and was granted approval in March, 2013.

6.3.2. Informal Permission: Gatekeepers, establishing an identity, sponsorship and rapport

As with any ethnographic study, seeking and gaining formal permission is only one part of the equation with informal forms of permission from 'gatekeepers' just as, if not more, important in some cases. The initial trip in March, 2012 proved to be a vital component of the overall study as the author met with the main gatekeepers at QENP. Continual interaction with these gatekeepers proved to be invaluable in addressing early concerns, as well as gaining input on the designing of the interview questionnaire. As has been noted by prior researchers studying police organizations (Loftus, 2009), negotiation with various personnel occurred. During the visit in March, 2012, the author met with two main gatekeepers who asked about the value of the study to them. After explaining the potential practical implications useful for managing the park, the gatekeepers seemed content with the current study and provided the author with additional suggestions for future studies. Upon his return in September, 2012 discussions continued. In other words, the negotiation process that occurred during the current study was not simply a
one-off situation, but rather an attempt by both parties to establish a continuing relationship.

Despite the formal clearance given by the UWA and the blessing of the gatekeepers at Katunguru headquarters, it is without a doubt that the law enforcement rangers - the intended sample population - would view the study with some level of suspicion. As noted by Reuss-Ianni (1983): "A general rule of thumb is that the greater the distance, in terms of organizational size and complexity, the greater the level of suspicion and resistance encountered" (30). Despite this being a very real possibility, there were a number of factors that may have helped mitigate such suspicion and resistance. First, outside researchers are quite common in QENP albeit mostly for conservation purposes rather than for law enforcement. The fact that law enforcement rangers would often be required to escort outside researchers may have helped to reduce suspicion and resistance to outsiders by providing a sense of familiarity.

Second, the author was accompanied by a committee member who had already established a working relationship with the management at QENP. This was beneficial in reducing suspicion and resistance in three ways: first, the committee member had already established key informants within the ranger community whom the author had met in the initial trip to the park. As will be discussed shortly, these informants subsequently became important sponsors for the author. Second, the positive working relationship between the committee member and management in QENP facilitated a professional environment, which the author was able to integrate himself into. Third, as the committee
member fulfilled a supervisory role, the author was able to employ the role of a subordinate. In all situations, formal or informal, the author was quick to identify himself as a graduate student which afforded the possibility of being able to establish an identity apart of his committee member. By assuming the 'student' position, the author may have been able to narrow the organizational gap that otherwise would be present from the 'researcher' position, thus reducing suspicion and resistance.

Third, as mentioned the author was able to establish a strong relationship with his committee member's informants. Recognizing that such relationships can be considered a form of "ongoing negotiation" (Maxwell, 2005: 83), the author spent a considerable amount of time further developing these relationships. As the author lived in Katunguru headquarters for a six-week period, there was ample opportunity to engage in daily conversation and participate in numerous activities. Nearly every day during the six-week period the author would share a meal with his sponsors, whether it be lunch, supper or both. Additionally, spending time watching television, playing omweso22 and taking weekly trips to the nearest trading center to buy groceries for the upcoming week, all helped strengthen the relationship between the author and the informants. By further developing these relationships, the informants subsequently became key sponsors for the author and for the study itself. In fact, several informal introductions with law enforcement rangers occurred as a result of the aforementioned sponsors.

Fourth, having gained access to the ranger population, the author utilized his free time to informally interact with the rangers on a daily basis in order to establish a sense of

22 A traditional Ugandan game.
rapport with the ranger community. It was hoped that facilitating some form of rapport
with the general community would help in the establishment of rapport with individual
law enforcement rangers who may become involved in the study. In other words, the
author attempted to create a foundation for continual interaction rather than simply a
'one-off' transaction. As noted by Maxwell (2005):

> Conceptualizing your relationships in terms of "rapport" is also problematic,
because it represents a relationship by a single continuous variable, rather
than emphasizing the nature of that relationship...I would add that it is the
kind of rapport, as well as the amount, that is critical (83; emphasis in original)

This resulted in engaging in numerous conversations with law enforcement rangers, as
well as other rangers, including those involved within the research and monitoring
department and the tourism department. The author would spend time both at the main
headquarter building as well as the store located within the camp, engaging with rangers
over a soda and the occasional beer.

Moreover, it was not long until the author would be having discussions with rangers
while holding hands. Although caught off guard at first, the author eventually became
familiar with this sign of friendship. Beyond discussions regarding why the author was
not a fan of the Arsenal Football Club (or football in general), the rangers showed a
general interest in the study. Again, this can be partly explained by the fact that most
researchers who come to QENP are interested in conducting research on conservation-
related issues and not law enforcement, the author was often met with a puzzled look
when he described his research goals in the park. In fact, after explaining to one ranger
that he was there to study law enforcement, the ranger simply stated, "Nobody studies
law enforcement". This response eventually dissipated after the author spent a few days
in the park. Indeed one of the respondents, Paul, discussed the importance of conducting research with law enforcement:

Mine is an appreciation for like continuity of what you are doing. Because we have always had researchers who come, they go and research in tourism, go to research and monitoring. They leave the core aspect of law enforcement [alone]. Because without law enforcement, there is no tourism. Without law enforcement, there is no research and monitoring. There isn't any wildlife at all.

Fifth, throughout the study, the author assumed the role of an 'outsider' (Lofland et al., 2006) and never participated in any covert tactics to obtain any information. Whenever he was asked about the research goals and objectives, the author answered in a forth-right and honest manner. Such an approach proved to be extremely useful as some law enforcement rangers would at times call on the author to discuss information relevant to the study. An example of one such encounter was noted by the author:

As I began to walk to the main headquarters building after getting ready for patrol, a ranger called out to me and walked over. He introduced himself and asked, "You're here to study law enforcement?" I replied in the affirmative and he began to discuss the problems that the department was facing related to specific illegal activities. We discussed the different types of illegal activities while we walked together until we reached the main headquarters building. Once we arrived, he abruptly stopped and said, "You have time? I have photos in my camera. Let me go get". Before I could respond, he was off running back to his home (September 25th, 2012: Personal fieldnote)

Finally, similar to Carter (2006), the author wore identical clothing as worn by the law enforcement rangers during patrol with some slight modifications. For example, the author wore field boots while the rangers wore gum boots. It should be noted that the use of the UWA uniform during patrol was originally not planned at the onset of the study as the author had intended to bring his own patrol clothing. Unfortunately due to some unforeseen circumstances, the author was provided with a UWA uniform to wear

Author's Note: During my flight to Uganda, I had the unfortunate and disheartening experience of having one of my bags either lost or stolen. Particularly frustrating was the fact that the lost bag contained most of
during the field observations. Initially, the author was concerned about how the UWA personnel would perceive his wearing of the uniform during patrols, but such concerns were lessened upon the first encounter with some of the rangers:

Donning the UWA uniform for the first time, I walked over to the main [headquarter] building. After a few glances, one of the law enforcement rangers responsible for communications greeted me with, "Ah! You look smart!" In other words, 'well-dressed' or 'appropriately dressed'. Other rangers also commented in a positive manner, while some others looked simply disinterested (September 19th, 2012: Personal fieldnote)

As the study progressed, the concerns of the author regarding the use of the uniform further dissipated and it became clear that the uniform acted as a means for starting conversation. As indicated in the following encounter, the uniform which was covered in sweat, indicated that the author had just returned from patrol:

Upon returning from an extremely demanding patrol, I walked over to the store located within the headquarters to grab a drink. I saw one of the law enforcement rangers I had patrolled with a couple of days ago sitting there. He greeted me with a smile and asked, "Just got back from patrol? How was it? Hectic?" I agreed and we had a laugh (October 19, 2012: Personal fieldnote)

the gear and clothing needed for the participant observation portion of the study. After spending a week in Kampala dealing with the airline and filing the appropriate claims, I finally decided to buy attire that would be suitable for the Ugandan bush. The only clothing I could find, however, with fabric that could withstand the bush was a car mechanic suit. Upon arrival to Katunguru headquarters, I was greeted with laughter from the assistant warden of law enforcement after showing him my choice of patrol clothing. He simply stated, "That's what a ranger wears when he fixes a car!" He subsequently provided me with an old uniform that I could use for the duration of the study.
6.4. Part I: Research Objectives, Data Collection and Analytical Strategy

6.4.1. Research question 1

The first research question derived from the police culture literature and is stated as:

1. What perceptions and opinions do law enforcement rangers and supervisors hold about law enforcement and illegal activities in QENP?

Shown in Table 6.1., seven topics were addressed using open-ended semi-structured interviews to address the first research question. As indicated in the table, information was also obtained to help supplement the participant observations explained in the next part; therefore, were also included within the analysis for the second research question.

<table>
<thead>
<tr>
<th>Topics</th>
<th>Research Question</th>
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<tbody>
<tr>
<td>Examine perceptions and opinions related to:</td>
<td></td>
</tr>
<tr>
<td>General duties of law enforcement rangers in QENP</td>
<td>RQ1</td>
</tr>
<tr>
<td>Life as a law enforcement ranger in QENP</td>
<td>RQ1</td>
</tr>
<tr>
<td>Relationship between law enforcement rangers and communities in QENP</td>
<td>RQ1</td>
</tr>
<tr>
<td>Ground-level law enforcement operations in QENP</td>
<td>RQ1 and RQ2</td>
</tr>
<tr>
<td>Poaching in QENP</td>
<td>RQ1 and RQ2</td>
</tr>
<tr>
<td>Law enforcement ranger misconduct and illegal activity in QENP</td>
<td>RQ1</td>
</tr>
<tr>
<td>Job satisfaction and law enforcement needs in QENP</td>
<td>RQ1</td>
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</tbody>
</table>

6.4.2. Sampling and setting for interviews

Purposeful or purposive sampling was used to select potential ranger and supervisor respondents, specifically operational construct sampling. As there are different types of departments within the UWA operating within QENP (e.g. Research and Monitoring, Community Conservation), only law enforcement rangers and supervisors operating were
approached to participate in the study. Provided by the assistant warden of law enforcement, the sampling frame used was the administrative staff list of all law enforcement personnel stationed in the study area. Importantly, potential respondents were randomly selected in order to increase the credibility of the results by allowing equal chance to all law enforcement rangers within QENP to participate in the study. While it may have been more convenient to select respondents within headquarters given the amount of time spent there and the logistical requirements to access respondents in other locations (e.g. long travel distance, access to vehicle, scheduling), the author felt it was important to randomly select respondents to reduce the potential issues associated with selectivity bias (Patton, 2002). Further, randomly selecting respondents may have also reduced suspicion from respondents as to why they were asked to participate.

As discussed, originally the author was not intending to interview any law enforcement supervisors for the study; however, after having several informal discussions with such supervisors, it became obvious that their insight would be useful in better understanding the law enforcement situation in QENP. In other words, including supervisors within the sample could result in identifying information that otherwise would not be obtained from the ranger sample. Given the small number of law enforcement supervisors operating within QENP, such respondents were simply approached and asked to participate in the study.

There are currently 79 UWA law enforcement field rangers in QENP, nine of which are female. As the author would not be able to ensure anonymity or confidentiality to the
female law enforcement rangers, they were removed from the study population resulting in 70 potential respondents. The author randomly selected 20 law enforcement rangers to be interviewed and contacted each by phone to ask whether they would like to participate in the study. Of the 20 selected, one was unavailable due to injury and therefore another potential respondent was randomly selected. In addition to the 20 law enforcement rangers, four supervisors were approached and agreed to participate. Such a sample size was not only practical given resource and time constraints, but was considered sufficient given the total number of law enforcement rangers, including supervisors, present within QENP. Moreover, as with most qualitative studies, there often comes a point when theoretical saturation may be reached and additional interviews or observations begin to display diminishing returns (Crang and Cook, 2007; Ritchie, Lewis and Elam, 2003).

Of the 20 selected ranger respondents, five were stationed at headquarters with the remaining 15 located at outposts or gates. All four supervisors lived and worked in the headquarters. As will be discussed shortly, access to transportation is a major issue within the park and it was difficult to arrange interviews with respondents located at outposts or gates. Further, scheduling conflicts also made it cumbersome to gain access to respondents. As described earlier, such issues were also noted by Charles (1982) in his study of Yellowstone park rangers. As such, the following was done to overcome issues related to physically accessing such respondents: First, the author was driven by a dissertation committee member who had a personal vehicle for four of the interviews. Second, the author was offered and provided a ride by one of the law enforcement supervisors in their own vehicle for one interview. Third, for two respondents interviews
were conducted after the author had participated on patrol with them. And lastly, the respondent agreed to meet the next time they would be at headquarters for official business.

Interviews were conducted in three settings: in the home or nearby the home of the respondent, in the home of the warden of law enforcement and a conference room located at headquarters. In all cases, interviews were conducted in private with only the author and the respondent present. The choice to conduct interviews in the home of the assistant warden of law enforcement was due to the difficulty in gaining access to a private room at the headquarters. In fact, one of the early interviews conducted at headquarters was done at a conference room in the main building. While private, the interview was often interrupted by people either looking for someone or wanting to use the room for a meeting. Although the respondent did not seem to mind the interruptions, the author felt that for future interviews a setting which was less likely to be prone to interruption was required. As a result, the assistant warden of law enforcement gave permission to the author to use his home, when necessary, to conduct any interviews. The assistant warden of law enforcement was often out of town and this provided a private setting within headquarters to conduct interviews for respondents coming from outside headquarters.

6.4.3. Data source: Interviews

The interview was semi-structured with open-ended questions and probes. Due to the relative lack of qualitative knowledge related to law enforcement within national parks in Africa within the criminological literature, it was believed that an open-ended approach
would be best-suited to unravel crucial information. In addition, the interviews were used to help corroborate the observed patrols by further probing into patrol activities and ground-level decision-making. In other words, the interviews enabled the author to explore the perceptions and feelings of participants that would otherwise be difficult, if not impossible, to obtain solely from observations (Patton, 2002). It is believed that the use of structured questions and related probes would also increase response comparability as well as theory confirmation or divergence (Patton, 2002). Importantly, the use of interviews also afforded the possibility to identify in vivo concepts or emic categories (words or concepts that come from the participant rather than the researchers) (Glaser and Strauss, 1967; Maxwell, 2005; Strauss and Corbin, 1998).

An initial interview guide was shown to the assistant warden of law enforcement of QENP during the March, 2012 visit in order to confirm whether the questions were worded in a clear and straightforward manner, as well as to incorporate any questions that he believed would be useful for the UWA. As some questions were changed, added and removed from the interview guide between the first and second visit, the author again showed the assistant warden the new interview guide prior to beginning interviews. No questions were modified or additional questions included by the assistant warden of law enforcement in QENP.

The duration of interviews ranged from one hour to approximately three hours. Prior to each interview, each respondent was verbally read the informed consent form, which was recorded using a digital voice recorder. The informed consent form provided a
description of the purpose and objectives of the study, the extent of their participation, the
potential dangers or threats associated with their involvement and the benefits of the
study. In addition, each respondent was informed that their participation was completely
voluntary, that their responses would be confidential and that they could refuse to answer
and/or stop the interview at any time without penalty. Further, the respondents were
informed of their right to remove themselves from the study should they decide to do so
at a later date. The author also provided each respondent with his contact information,
including his Ugandan and American phone numbers, as well as the contact information
for the institutional review board at Rutgers University. All this information was within
the informed consent form that each respondent was provided for their own records.

In addition to consenting to participate in the study, each respondent was asked
separately whether they consented to having the interview digitally voice recorded. Of
the 24 respondents who consented to be interviewed, two declined to have the interviews
digitally voice recorded. After each respondent consented to participate in the study they
were compensated 25,000 Ugandan shillings (UGX) which is equivalent to
approximately $10USD. It should be noted that in some cases, respondents did not want
any form of compensation and often stated that their information was "free". This is
exemplified in the following fieldnote:

After the respondent consented for the interview, I presented them with the
25,000 shillings. He looked at me with a surprised look and stated, "Ah! No
need, 'Tis fine!". After I insisted and explained that I had expected to reimburse
him for his time, he accepted and said, "Thank you! This will buy airtime [for
cell phone]" (October 17, 2012: Personal fieldnote)

In the end, all respondents accepted the compensation. Once the interviews were
completed, each respondent was asked whether they had any questions for the author and
most of them did. Most questions revolved around why the author was interested in them and what the author believed would occur as a result from the study being completed. In some cases, the respondents thanked the author for including them within the study and welcomed him to come back and do a similar study in the future.

6.4.4. Documentation and data integrity

Data recording modes vary among two factors: fidelity and structure (Lincoln and Guba, 1985). Fidelity refers to the ability of the researcher to reproduce data collected in the manner it presented itself originally, while structure refers to how such data collection is arranged. As audio recording is considered to be of 'high fidelity', the author voice recorded interviews with respondents when they consented. Again, two respondents consented to be interviewed but declined to have their interview recorded.

During the course of the interviews, the author also took notes. This was done for several reasons including the ability to document key points that may require more investigation, note the author's own thoughts or insights relevant to the particular interview and study in general, help ensure that the author stayed alert and attentive and to provide a form of real-time backup in the event that either/or both recording devices failed (Lincoln and Guba, 1985). Furthermore, key phrases and words that seemed relevant to the study were written verbatim. It should be noted that in addition to a digital voice recorder, the author also used a digital voice recording pen (Livescribe Echo 8GB Smartpen) to take notes. The digital pen acted as a back-up in the event that the voice recorder stopped working. This occurred during one interview and the author was fortunate to be able to refer to the
missing information on the second device. For the respondents that consented to have their interview voice recorded, they were informed of the presence and use of the pen; while for the two respondents who declined to have recorded, a regular pen was used to take notes.

After each interview was completed, and when appropriate, the digital voice recording was immediately uploaded onto the author's password-protected computer and deleted from the voice recorder. To ensure anonymity the each respondent was given a unique identifier which was randomly generated. No master list was used that matched the identity of the respondent to the identifier to further ensure that the identity of the respondent would be kept anonymous and that their answers would be kept confidential. In addition to saving the information on the laptop, all digital voice recordings were encrypted and saved on a separate hard drive. The computer and all notes taken during the interviews were kept in a pad-locked case in a secure room at QENP headquarters.

6.4.5. Analytical strategy

Both digitally recorded and hand-written notes were transcribed into Microsoft Word for ease of analysis. All interviews were transcribed verbatim. In some cases, transcription occurred within QSR International's NVivo 10, a computer-assisted qualitative data analysis (CAQDAS) software and then exported as a Microsoft Word document for future analyses. For ease of analysis, organizational categories were first developed. It should be noted that as the interviews were semi-structured, the author was able to establish organizational categories which guided the placement of the subsequent codes.
As described by Maxwell (2005), "organizational categories primarily function as 'bins' for sorting the data for further analysis" (97).

After organizational categories were created, substantive categories were developed. Substantive categories are "primarily descriptive, in a broad sense that includes description of participants' concepts and beliefs; they stay close to the data categorized, and don't inherently imply a more abstract theory" (Maxwell, 2005: 97; emphasis in original). Given the exploratory objective of the study, interviews were first analyzed through initial coding, also referred to as open coding, which involved breaking down interviews into sections and examining each section for commonalities and differences (Saldana, 2009; Strauss and Corbin, 1998). Initial coding was useful for discovering categories of the study worth further exploring (see Appendix for code list). For example, the following interview excerpt was coded as 'Animal Routes':

For example, when you are moving you are trying to check with the animal, where animals pass. When we are moving and we find that this is the new trail of the animals, we have to follow that one because you never know.

Once initial coding was completed, second cycle pattern coding was performed. As described by Miles and Huberman (1994), pattern coding is used to identify underlying and overreaching themes or constructs, which can then be used to categorize segments of data. Codes were developed based on first cycle descriptive coding, which provided a manageable way to discern commonalities and discrepancies between participants needed for second cycle pattern coding and the establishment of theoretical categories (Maxwell, 2005). An example of second cycle coding is shown below in Figure 6.3., 'Suspicion towards community' as being the main theme underlying the initial codes of 'threat of being attacked', 'retaliation on family', 'poisoning' and 'bewitching'.

Figure 6.3. Example of Second Cycle Pattern Coding for First Cycle Initial Codes

Suspicion towards community

- Threat of being attacked
- Threat of being poisoned
- Threat of being bewitched

For the analysis and discussion sections of the study, the quoted material presented was chosen by the author as the most suitable and representative of the respondents' perceptions and opinions. All excerpts were presented verbatim with minor changes when deemed appropriate. Lastly, pseudonyms were fictionalized for each respondent to ensure anonymity, as well as for ease of presentation.
6.5. Part II: Research Objectives, Data Collection and Analytical Strategy

6.5.1. Research question 2

The second section of the study addressed the second research question:

2. What types of activities and decision-making occur during routine ranger patrols in QENP?

As this question is centered on obtaining information on what types of activities law enforcement rangers in QENP engage in during routine patrols, two research objectives were performed:

2a. Document and describe activities during routine patrol in QENP for a two month period between September - October 2012.

2b. Document and describe decision-making during round patrols in QENP for a two month period between September - October 2012.

6.5.2. Unit of analysis and sampling

The unit of analysis for the second part were the patrol groups which were observed by the author. While prior studies on patrol activities and time use have been at the individual-level, the current study focused on group patrols since general group activities and dynamics were the focus of the study (e.g. entire group stops to inspect a snare; entire group stops to rest) rather than individual activities. This was done for three main reasons: first, focusing on general group behavior was more manageable than attempting to document all the activities and time use behavior of individual rangers. Second, focusing on general characteristics of patrols helped ensure the confidentiality of
individual rangers. Third, focusing on group characteristics was more appropriate given the nature of patrols in identifying group dynamics (e.g. group operation rather than individual).

Purposive or purposeful sampling was used. Purposeful sampling is a non-probability type of sampling in which participants or groups are chosen based on characteristics relevant to the current study (Maxwell, 2005). For the current study, operational construct sampling was employed (Patton, 2002). Operational construct sampling is useful when real-world, operational examples of constructs have been identified (Patton, 2002). For the current study, only routine patrols were observed. As will be discussed, routine patrols are single day patrols. Given the time restrictions imposed by the two month study period, routine patrols were chosen for the following reasons: first, focusing on routine patrols allowed the author to participate in as many routine patrols as possible resulting in a larger sample size rather than smaller sample sizes of different types of patrols. In fact, participating in extended patrols, which would require the author to spend at least two days in the bush, would have made it even more difficult to schedule interviews required for the second part of the study. Second, by solely observing routine patrols, a more in-depth analysis of said patrols could be conducted as opposed to a more general and shallow examination of all types of patrol. Third, observing as many routine patrols as possible allowed the author to analyze more law enforcement rangers and different iterations of groups as opposed to a single group over multiple days (e.g. extended patrol). Such observations may enable the author to identify a wider range of behaviors and interactions.
The author attempted to observe as many patrol hours as possible. Although originally not planned, the assistant warden of law enforcement, the head law enforcement ranger and the lead prosecutor at QENP actively sought to ensure that the patrols observed varied in location, terrain and topography. This allowed the researcher to personally experience, observe and document the different landscapes and environment. Indeed, the assistant warden explained to the author afterwards when the author commented on influence of the terrain on patrolling activities and dynamics: "You wanted to know about patrol. Only way to know what patrol is about is to experience the environments".\(^{24}\)

As will be discussed, the ability to participate in and observe patrols in a number of environmental contexts was vital in witnessing a number of different behaviors, activities and group-dynamics and also helped solidify the sampling method chosen for the study. Arguably, if the author only participated in patrols that occurred within a specific area within the park, the observations may be more open to scrutiny both in terms of the findings and the methodology. The decision to patrol on any given day was dependent on: whether transportation was available for drop-off and extraction, whether an interview was scheduled and whether the author could physical participate in a patrol. In fact, after some of the more strenuous patrols, the author required a day to recover.

The time period chosen for patrol observations was chosen for practical reasons. First, as the author defended his prospectus defense in May, 2012, the months prior to the defense were not an option. Second, the summer months were also unavailable as the author had

\(^{24}\) Personal communication, Assistant Warden of Law Enforcement, October 25, 2012
to get IRB approval before conducting the study. In addition, he also had to get the appropriate gear and equipment ready as well. Third, the Dissertation Fellowship that was awarded to the author required the study to be completed within a specific time frame (September 2012 - July 2013). The author identified the time period between January and April 2013 to be a sufficient enough time period for transcribing, coding, analyzing and writing the final product. Fourth, to help mitigate the potential influence of seasonal variation for the patrols, the author sought to conduct the study entirely within either a dry or rainy season. Given the time restrictions, the September, 2012 - October, 2012 time period, which falls completely within the second rainy season in Uganda, was identified as the most appropriate time to conduct the study.

6.5.3. Data Source: Participant observations and interviews

Patton (2002) describes that the primary purpose of observational data is to "describe the setting that was observed, the activities that took place in that setting, the people who participated in those activities, and the meanings of what was observed from the perspectives of those observed" (262; emphasis in original). While prior studies on patrol time use and work load have used a variety of techniques, systematic social observations (SSOs) are considered to provide the most accurate representation of patrol activities.

Unfortunately, the use of SSOs is inappropriate for the study for three main reasons: first, there is limited knowledge related to what activities rangers participate in while on patrol. In other words, descriptive information based on participant observations, which guide
the formulation of protocol for SSOs, is currently lacking in the literature. Indeed, in his early study of police behavior, Wilson (1968) argued that:

> In an exploratory study such as this, it is rarely possible to collect precise, numerical data sufficient to permit rigorous analysis. To answer the question of what is to be measured, or whether anything can be measured, is one reason for doing an exploratory study in the first place" (13)

Second, given the exploratory nature of the study, a structured approach would hinder the documentation of information that may otherwise prove to be important. Indeed, the purpose of this part of the study was to maximize discovery, rather than follow a set of concepts, definitions or measures determined a priori. Third, conducting a full-scale, time use and work load study incorporating SSOs was not feasible or practical for the current study. Prior studies have tended to incorporate multiple trained observers, have used a considerable amount of resources (e.g. time, financial) and have amassed a significant amount of observed patrol hours. Based on these reasons, participant observations rather than SSOs will be conducted in the study with the hopes that the results will provide as foundation for future studies incorporating SSOs.

The use of participant observations for the second phase of the study is based on the notion that through direct, naturalistic observations, the author will be able to gain a better understanding of the general context in which rangers operate in (DeWalt and DeWalt, 2011; Patton, 2002). Moreover, using this 'action perspective' approach recognizes that the "investigator can best perceive the meaning of events through the eyes of the participant" (Skolnick, 1966/1975: 26). As put by Van Maanen (1978b): "While observation of the police in naturally occurring situations is difficult, lengthy, and often threatening, it is imperative" (293). In essence, the use of participation observations has
been identified as a vital method in the investigation of the police and was believed to be useful for the objectives of the current study.

Importantly, the use of participant observations for routine patrols enabled the author to engage in both *insider* and *outsider experiences*. As a result, the author had to be cognizant of how being on patrol influenced his abilities to observe, as well as how it impacted the extent of his participation. As noted by Spradley (1980), the continuum between insider and outsider can vary throughout the course of any study:

The ordinary participant in a social situation usually experiences it in an immediate, subjective manner. We see some of what goes on around us; we experience our own movements; we move through a sequence of activities as subjects, as the ones engaging in the activities. In short, we are *insiders*...The participant observer, on the other hand, will experience both insider and outsider simultaneously...You probably won't have this simultaneous insider/outsider experience all the time. On some occasions you may suddenly realize you have been acting as full participant, without observing as an outsider. At other times you will probably be able to find an observation post and become a more detached observer. Doing ethographic fieldwork involves alternating between the insider and outsider experience, and having both simultaneously (56-57)

Further, as a moderate participant, the physical and psychological impact of patrol had a direct impact on how the observer participated and observed. Indeed, there were times where the author had to focus more on being a participant for a number of reasons, including personal and group safety (e.g. being attentive to wildlife). In other cases, the author was *forced* to become more of a participant than an observer (e.g. attacked by bees). Moreover, given the extraneous nature of patrolling on foot, the author had to

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25 Author's note: As a moderate participant (Spradley, 1980), my role as a participant observer fluctuated, varied and was dependent on the situation. While I was actively engaged in patrolling, I would be technically a passive observer during particular situations. For example, when we encountered wildlife, I would simply watch to see what the rangers would do. I, myself, would not attempt to scare away the wildlife. However, it should be noted that given the characteristics of patrol, it is questionable whether one can truly be a passive participant as any change of a situation can force one to be actively engaged.
constantly engage in 'observer checks' to ensure that he was still actively observing when he became physically tired. In other words, during some patrols the author noticed that his observation abilities would become somewhat hindered as a result of physical fatigue. When such situations occurred, the author was mindful to note such circumstances and would further elaborate on how such situations may have impacted his observations in his jot notes. Essentially, the role of insider at times overpowered the role of outsider due to the characteristics of patrol. The following narrative exemplified this:

As we continued to walk, I could feel the patrol taking its toll on me. It becomes difficult to actively observe group activities when physical exhaustion sets in as one begins to focus more on oneself. I've felt like this before on other patrols and I was able to usually to snap out of it by being able to take quick breaks while patrol members checked specific locations. Such observations were often not at the same physical pace compared to when the patrol group would be actively patrolling. Also, I was able to compose myself when I inquired about a particular event or when a ranger would take a brief moment to explain something of relevance to the study. Today was particularly difficult and it can probably be attributed to a combination of an extremely long and arduous patrol yesterday and the adrenalin wasted while running away during the bee attack (Patrol 9: Narrative)

Regarding the current study, by identifying, documenting and analyzing the overall, surrounding context of 'patrols', a more accurate description of ranger time use or 'patrol effort' can be provided. Indeed, prior measures of patrol effort do not provide much information on what actually constitutes as 'effective' enforcement. Participant observations also provide the opportunity for the author to identify aspects of the study that may not be recalled by participants during interviews (DeWalt and DeWalt, 2011; Patton, 2002). Further, since the daily lives of participants may become routine, they may not be able to provide additional information that may be beneficial for the study. As an observer, the researcher can pay attention to activities, interactions and behaviors that may be habitual to the participants. Furthermore direct observations may be able to
counteract the potential of selective perceptions of participants during interviews (Patton, 2002). Lastly, as the researcher is considered a 'tool' for data collection during observations, the researcher's own perceptions and descriptions can be provide insight and be included within the analysis and interpretation of observations.

Prior to each patrol, informed consent and confidentiality protocol was conducted for all participants involved as part of the patrol group. The informed consent form for the patrols provided a description of the purpose and objectives of the study, the extent of participation, the potential dangers or threats associated with their involvement, especially with the author being present and the potential benefits of the study. Each patrol group participant was informed that their participation was completely voluntary, that their identity would be kept confidential and that they could refuse to participate at any time, including during and after the patrol was over. The author also asked separately whether each patrol participant consented to allow the author to take photographs during the patrol. Importantly, any photographs that were taken which included rangers were altered in order to hide the identity of the rangers.

Both informed consent procedures were recorded using a digital voice recorder. All group members that were asked to participate in the study consented to both participation in the study as well as for photographs to be taken by the author. The informed consent form for the patrol was given to the commanding ranger of the patrol group which included the author's contact information, including his Ugandan and American phone
numbers, as well as the contact information for the institutional review board at Rutgers University.

In addition to the participant observations, information derived from the interviews was also be used for this part of the study, specifically questions on ground-level law enforcement operations and illegal activities. As mentioned, such triangulation may foster a better understanding of a phenomenon rather than relying on one approach.

6.5.4. Documentation and data integrity

Observation data was collected using the following methods: jot notes, digital voice recording, and photography. In addition to these forms of observational data, the author also collected GPS information from the patrols. This was mainly done to measure the time spent while on patrol and the distance covered. Originally, the author planned to rely on digital voice recordings given the perceived ease of use while patrolling. However, such an approach proved to be inappropriate for the field for three main reasons: 1) the use of a voice recorder seemed to distract the patrol group which impacted participant reactivity, 2) one of the objectives of patrol is to be as quiet as possible, particularly within the forest and, 3) the voice recorder used by the author was ill-suited for such fieldwork. This was made evidently clear during the first patrol when the author had lost his footing and fell into a swamp - along with the recorder. The remainder of the patrol required the author to rely on jot notes, which subsequently became the main method of data collection for patrols. Importantly, confirmatory information or secondary
observations (observations from rangers) was documented by the author in order to limit the identification of any respondents within the group.

Although the author was able to take notes during stationary situations (e.g. resting periods), the unique mobile nature of the observations required the author to establish short-hand terminology for jot notes. For example, the following were short-hand for the following environments: thickets ("thkt"), savanna ("sav") and forest ("for"). Short-hand terminology was only used for situations or events that occurred on a repeated basis and when necessary the author would elaborate as much as possible during resting periods. In addition, in cases where it was difficult (e.g. through thickets) or inappropriate (e.g. being on the lookout for nearby wildlife) to take jot notes in his notepad, the author had to rely on two techniques until he was able to take jot notes: 1) through mental notes or "headnotes" and 2) through temporary jot notes on his hand and arm²⁶.

Given the need to document as much information as possible and the potential threat of memory loss, the author attempted to write narratives based on jot notes taken immediately after each patrol. Such "end-point" perspectives are useful in providing an overall description of an event by having more information after-the-fact rather than simply information about the event at that point in time (Emerson, Fretz and Shaw, 2011). In other words, follow-up questions or other events throughout the observed patrol may further clarify an event which then the author could reflect on, thus, providing a more informed description.

²⁶ Author's Note: I would attempt to perform the latter first, however, given particular conditions (e.g. raining, arm was being too sweaty), I would at times have to rely on the former.
Prior to writing a narrative, the author first transcribed jot notes from that day's patrol using Microsoft Word. Afterwards, the author wrote an in-depth narrative of the patrol that was just observed. Unfortunately, the physical strain of being on patrol made it difficult to produce written narratives for all patrols. In some cases, the author was exhausted and found narratives either difficult to write immediately and/or such narratives lacked clarity and depth and needed to be revisited the next day. The decision to change methods is described in the following narrative excerpt:

I'm deciding to use this technique instead of writing [the narrative] out because I've noticed how tired I get [after patrols] and it leads to neglecting writing the narrative or writing it half-assed. So this seems to be a better approach and we'll find out how it works out (October 19th, 2012: Fieldnote narrative)

As a result, in circumstances when the author was physically exhausted, voice narratives were performed with the intention of transcription in the future. Each voice recorded patrol narrative was subsequently transcribed the next day for immediate coding. As mentioned, photographs were also taken during patrols. Photographs were primarily taken as a reference guide in future analyses. In other words, photographs were used to mitigate observer fatigue or memory loss.

To ensure the protection of the participants, written and voice narratives were saved under a unique identifier consisting of a sequence of letters and numbers randomly chosen by the author. Digital voice recordings of informed consent and photographs taken during the patrol were also uploaded onto the laptop and removed from the recording device and camera. Voice recordings and photographs from the same patrol were given the same unique identifier as the transcribed notes and placed in the same
folder. The author's laptop was password protected and kept in a locked case in a secure room at QENP headquarters.

6.5.5. Analytical strategy

As mentioned, transcribed jot notes and narratives, voice recordings and photographs from observations uploaded onto the author's laptop. Narratives and photographs for each patrol were coded and analyzed using QSR International's NVivo 10, which is a qualitative data analysis computer software package. Given that various forms of data were collected, NVivo will be used both as a repository and as a means for data analysis. More recent updates to the software afforded the ability to upload digital voice recordings and photographs, which could were then linked with to specific jot notes and narratives.

The use of narrative descriptions is appropriate for the current study given its exploratory objective. As Bakeman and Gottman (1997) argue “the preparation of narrative reports, or something akin to it, is an important part of code development, a process that must precede systematic observation” (2). Narrative descriptions were generated from the author's jot notes, narratives and photographs. As noted, in some cases written transcripts were produced immediately after patrol while in other cases voice narratives were created for future transcription. Once narrative descriptions were completed, initial and pattern coding were also conducted similar to the interviews.
6.6. Exiting the Field

The author physically left QENP Katunguru headquarters in late October 2012. After leaving the field, the author still remained in contact via phone and email with some of the rangers, some of whom did not participate in the study. Contact with some key informants occurred on a more frequent basis, particularly to discuss future research ideas. Indeed, the question of "When are you coming back to Uganda?" is heard by the author during each form of communication.

6.7. Summary

This will be an case study on law enforcement and illegal activities in Queen Elizabeth National Park in Uganda. Utilizing an ethnographic approach, the study will be based on two data collection methods: interviews and participant observations. Initial and pattern coding will be used to analyze both responses derived from the interviews and narrative descriptions collected during participant observations.
Chapter 7 - Results and Analysis for Research Question 1

7.1. Overview

The first research question focused on attempting to examine the perceptions and opinions of law enforcement rangers and supervisors regarding law enforcement issues in QENP, including the general duties of law enforcement rangers, life as a law enforcement ranger living in the park, the relationship between the communities and the law enforcement rangers, ground-level law enforcement operations, poaching, ranger misconduct and illegal activity and job satisfaction and law enforcement needs. In total, 24 respondents were interviewed using semi-structured, open-ended questions.

7.2. Descriptive Information on Respondents

Before discussing the findings from the interviews, demographic characteristics of the respondents will be provided. As shown in Table 7.1., respondents' age ranged from 23 to 54 with the average age being 33.8. From the 24 respondents, only three were not married, while five did not have children. On average, the respondents had been working within the UWA for just over nine years (9.06), while the average time spent working in QENP specifically was just over eight years (8.05).
Table 7.1. Respondent Demographic Information

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Respondent Code</th>
<th>Age</th>
<th>Marital Status</th>
<th>Children</th>
<th>Time with the UWA (Years)</th>
<th>Time in QENP (Years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tom</td>
<td>94CH4A</td>
<td>54</td>
<td>Married</td>
<td>Yes</td>
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7.3. Overview of the General Duties of Law Enforcement Rangers in QENP

As shown in Figure 7.1., the law enforcement rangers are responsible for a number of activities in QENP. These activities can be divided into three categories: traditional law enforcement, community service and research-based. Given the responsibilities assigned
to the law enforcement rangers, most study participants emphasized the importance of the law enforcement department. For instance, Sam referred to the law enforcement department as the "mother of all departments." Dennis described that law enforcement rangers need to always be alert and ready. He remarked: "I'm always ready! That's why sometimes even at night I sleep in my uniform [laughs]."

These duties and responsibilities will be discussed in depth throughout the study, therefore only a brief overview will be provided here. It is important to note that as an organization, the UWA staff all go through paramilitary training once hired. This is done to ensure that all rangers are able to perform law enforcement duties if required. In some situations, rangers may be transferred from one department to another. However, due to limited manpower, most rangers stay within their respective departments.

**Figure 7.1. General Law Enforcement Ranger Duties**
7.3.1. "We're the defense of this area": Traditional law enforcement duties

Respondents described that the main role of the law enforcement department was, as Chris put it, "basically [to look] for illegal activities being done in the park." Tony adds that as a law enforcement ranger, his job was to "fight against wrong doers". Despite the park being subject to a number of illegal activities including encroachment, illegal grazing, illegal firewood collection, illegal fishing and tourist-related activities, most of the study participants specifically referred to poaching activities and poachers in their responses. For instance, Dennis explained, "I would say my role as a law enforcement ranger: we need to stop poachers from poaching." Sam stated that his role revolves around "checking on the people like poachers who enter illegally in the park", while Felix explained that the law enforcement department was "put [in QENP] to crack down the illegal poaching." David simply replied that his job was "to apprehend the poachers."

Despite various other illegal activities occurring in QENP, most respondents explicitly focused on poachers and poaching behavior throughout the course of the interviews. As will be discussed later, such emphasis on poaching behavior can be attributed to the level of severity associated with such activities. Moreover, the development of alternatives for other illegal activities including firewood collection and illegal fishing, may have also led to respondents to focus more on poaching activities.

It was clear that the respondents had a sense of pride in being a "field ranger", a term synonymous with law enforcement ranger. In particular, some respondents described how the law enforcement department was responsible for establishing a ground-level
presence within the park. For instance, Benjamin described how "the role of law enforcement is to make patrols". While other departments also conducted their own "operations" in the field, law enforcement rangers readily distinguished their work from other rangers by referring to traditional law enforcement responsibilities (e.g. arresting suspects). Further, respondents highlighted the fact that they spent the majority of their time conducting said patrols, while other rangers in different departments predominantly spent their time at headquarters. Michael's response typified the general belief of respondents when comparing themselves to other departments: "For [law enforcement rangers], they see action. They don't see theory only. They study theory, they go for action".

Study participants also discussed how law enforcement rangers were responsible for escorting suspects to court, guarding the UWA properties, providing security to guests, intelligence-gathering and preparing monthly reports. Additionally, some respondents described how law enforcement rangers were also responsible for conducting 'spot-checks' or conducting house investigations of suspected offenders. Lastly, respondents described how they would conduct internal investigations on rangers suspected to be implicated in various illegal activities.

7.3.2. "We have to harmonize the relationship with the entire community":

Community services

In addition to more traditional forms of law enforcement duties, law enforcement rangers also participate in a number of other activities. Most respondents described how law
enforcement rangers were responsible for educating and informing the community of the benefits of the park, as well as the potential ramifications of poaching, illegal firewood collection and other illegal activities. As Richard put it, law enforcement rangers are essentially required to "sensitize the people about wildlife." Lawrence elaborated by explaining how as a law enforcement ranger, he was responsible for educating the community on how "the wildlife is useful to them." This will be discussed in more depth later on, but it is worth mentioning here as community sensitization is viewed as a key component of law enforcement.

Directly related to sensitizing the community, respondents described that one of their main duties was to respond to problem-animals or problem-species. Problem-animals were known to invade the crops and kill the livestock of nearby communities leading to community resentment towards the animals, the park and the UWA. Respondents identified a number of problem-animals in QENP, including elephants and crocodiles. In order to address the concerns faced by the communities and to alleviate the potential for retaliatory killings, law enforcement rangers would be required to respond to such situations. As clarified by Francis, "[Problem-animal control] also is the work of the law enforcement: to send, we the rangers, to control those [problem] animal." Douglas described his role in responding to concerns of the communities pertaining to problem-animals when he explained: "I do the work of problem-animal control, whereby when the animal enters the people's crops. Where we go and assist the communities by chasing [the animals]. Scaring them with some [gun] shots. And they go away into the park."
Additionally, study respondents described how they were also responsible for fire management as well. As will be explained later, while some fires in the park may be accidental or natural, others are purposely started by poachers. Some respondents also described how they provided guiding services to tourists as well. In fact, law enforcement rangers are often required to fill-in if other departments are short-staffed. In most cases, respondents did not dispute such services as they saw this as a temporary reprieve. Some respondents even believed that due to their experience in the field, they would be able to provide the best kind of information regarding the park as well. Michael even suggested that the knowledge of law enforcement rangers would rival those within other departments, including tourism:

Yes, that is the work of the law enforcement. [Management] cannot give you somebody who is not on law enforcement to go and guide you...We law enforcement people, we're the ones who know all corners and behaviors of animals... If you go to tourism [department] or any other department, they cannot tell you those things.

As indicated by Michael, the experience of the law enforcement rangers as a result from their day-to-day operations provided them with knowledge that may not be at the disposal of other rangers. While this may or may not necessarily be true given that rangers can be rotated to different departments, such a remark shows the inherent pride in being a law enforcement ranger. In addition, such opinions also raise the perceptions that some rangers have towards other departments as well.

7.3.3. "We are the base of the information": Ranger-based data collection

Lastly, respondents described their role in collecting information for research purposes. As discussed earlier, law enforcement rangers participate in forms of ranger-based data
collection (RBDC), also known as law enforcement monitoring (LEM). Such data collection is conducted during law enforcement ranger patrols and involve the GPS marking of not only illegal activities but of key wildlife species. Further, rangers also document and note any noticeable changes in the vegetation and environment. From the responses, it was evident that respondents recognized their importance in research initiatives in QENP. As exemplified by David:

And law enforcement is the only one charged with the collection of data: ranger based data collection - RBDC. They collect the data and that data they bring and give it to the M and R - monitoring and research to enter into the MIST to analyze and see the report how the park is fairing. That's law enforcement.

Given the importance of data collected during field patrols for other departments, especially monitoring and research, it is not surprising that respondents attribute data collection as a key responsibility of law enforcement. Again referring back to the ground-level presence of law enforcement rangers, Dennis discussed how "someone who has moved on the ground is better than someone who sits in the office because [the person on the ground] brings first class information." In other words, since law enforcement rangers are coming directly from the field, they were also bringing timely information needed by management and other departments within the organization.

In addition to collecting data for research-based purposes, the collection of GPS coordinates is also meant as a means to identify areas patrolled during a specific time period. This was meant to provide management and law enforcement supervisors information on areas that had been patrolled. Moreover, such information was used as a means to gauge the work being conducted by each outpost. Notably, as described by Michael: "When you go for patrol without a GPS, your patrol is nothing." Other
respondents echoed this point and described that since one of the primary objectives of patrol was to collect GPS data, patrols without GPS readings would be viewed worthless at best and suspicious at worst. In other words, not only would management not be able to utilize any information obtained from patrols but that they would not be able to confirm that a patrol had even gone out since there was no physical evidence suggesting so. Dennis referred to his personal experiences to further illustrate this point: "I was the best ranger of the year...Why? Because I was using the GPS. And always when you send me to an outpost without a GPS, I'll rather say you leave me at the headquarters when you always send me to the gate...Because if I stay there, you will not value that I'm working."

7.4. Life as a Law Enforcement Ranger Living in the Park

7.4.1. General opinions of living on-site

An important aspect of law enforcement in QENP is that law enforcement rangers are required to live on-site either within headquarters or at an outpost or a gate. Currently, law enforcement rangers are also living in some communities as a result of not having enough outposts built. As a result, it is important to also examine the opinions and perceptions of respondents regarding the living situation in QENP, especially since such living conditions would undoubtedly have a direct impact on the way in which law enforcement rangers would be able to perform their responsibilities and interact with the surrounding community.
All the law enforcement rangers interviewed had lived both within and outside of headquarters. The four supervisors had only lived within headquarters. When asked what it was like to live in QENP, most study participants believed that the requirement to live on-site was not a problem and that they were content with the general idea. One respondent, Daniel, described it as "just normal life." As will be discussed momentarily, while the requirement to live in QENP was generally viewed as acceptable, and even seen as an important component of being able to perform the work of a law enforcement ranger, there were stark differences between living at the headquarters and living at an outpost.

"It's a continuity of my job": Living arrangements as a component of law enforcement

Most respondents felt that living on-site was simply an extension of their occupation. Respondents appeared to understand and recognize the value of living in QENP from an operational standpoint and that such a living arrangement was needed in order to perform their responsibilities and fulfill their obligations as a law enforcement ranger. Ivan explained, "It's not a challenge. It's a continuity of my job and I don't find it challenging." He further clarified that living on-site is "what [he's] meant to do." Similarly, Douglas stated: "As far as my job description is concerned, I like to stay in because that's where I carry out my duties when I'm protecting these [park] resources." In particular, several respondents felt that living on-site was required in order to respond quickly when called upon. Tony said, "It's the nature of a field worker and the department we are in...You
need to be able to react." Brian further explained, while living in the park was not his choice, he understood its value:

I don't live in Queen Elizabeth purposely because I want to live in Queen Elizabeth. But that's where I work and I am given accommodation... If I stay far away from Queen Elizabeth National Park... outside the park and when I am called for duty, I would delay. So it is better to stay within so that in case of any activity, I'm called, I respond very fast. That is why I stay within Queen Elizabeth National Park. But it is not my own like that should stay here. But because of the nature of the job allows me to stay within here.

David, who is a supervisor, also felt that staying in the park was useful for him to handle his workload, as well as supervise his fellow staff. Especially in urgent situations requiring immediate attention:

Living in the park is one of the best ways to manage these illegal activities and to manage the staff. Because with law enforcement, if you live outside the protected area, it is quite difficult. All the time you find when the rangers have gone [and] left the camp, and whenever there is an emergency, to get them to go and respond to that emergency, it becomes a challenge. So I prefer staying inside the park than staying outside due to respond to this urgent instances which always happen in the park.

Study participants also felt that in addition to being simply a part of their job, living in the park allowed them to perform their job more effectively by gaining a better understanding and appreciation for the wildlife. Tom described: "Living in the park is good for me, because our work is conservation of wildlife, so you should be with the wildlife together, so you can learn also the behavior of the animals," he continued, "You should not stay out of the park. You will not learn how the animal behaves." Moreover, living in the park enabled rangers to focus on their work without being distracted by family- or business-related problems. Other respondents described how living on-site also allowed them to save some of their earnings since the organization would provide them with accommodation. Moreover, by living within the park, some respondents described
how they would not be tempted to spend their money. Adam explained:

The life here generally it is okay. You see the environment also matters and it gives me at least to save. Here I don't use a lot of money because I'm saving. I'm saving. I don't buy, I don't see this. When I would be like in town, I would wish, like now that let me buy water, let me buy food, let me buy this, something that is not on your program. But because you have the money and you're seeing the things, so the money goes like that. But now here, you can save the money... And I like the place more than being in town! [laughs]

Matthew echoed Adam when he said that living in the park, "kept [him] away from the noise [of the city]" and that his "boredness and idleness is reduced." In similar vein, Isaac described how living in the park also helped him from spending his time and money on unnecessarily on leisurely activities when he said, "Since I'm living inside the park, I'm not exposed to the outside things like how, you know, leisure things. To go for disco, what and what. So I'm here. I concentrate on my work."

**Difficulties of living on-site**

In general, while some respondents felt that there were no difficulties associated with living on-site, others discussed a number of issues and concerns. Most respondents discussed the difficulty of gaining access to transportation. Such issues were also identified by Ogunjinmi and colleagues (2008) in their study. Currently, there are ten vehicles used throughout the entire PA. One vehicle is designated specifically for the law enforcement department. Unfortunately, mechanical problems and lack of fuel often result in having only two or three vehicles operating at one point. As David stated, "the only thing that would be difficult is only finding some time to get transport when you are inside the protected area...You see Queen [Elizabeth National Park] is too big!" The issue of transportation becomes especially problematic during daily operations (e.g. drop-off and extraction for patrols). As will be touched upon later, the author personally
experienced this during a couple of the patrols where he along with the patrol group had to wait a few hours before being extracted. Further, this lack of transportation results in law enforcement rangers being unable to respond to situations requiring their immediate attention (e.g. gun shots fired).

In addition, transportation becomes an issue during medical emergencies, especially when one is stationed at the outpost. Benjamin elaborated, "Sometimes you find that you don't have transport when somebody's sick, then you find [after] going to call headquarter, the vehicle has another work or whatever, so it takes time." Exacerbating the lack of transportation is that most of the feeder roads going to and from the outposts to the main road are difficult to cross as many of them are in poor condition. Furthermore, depending on the weather conditions, such feeder roads may become impossible to traverse during heavy rains.27

Some study participants also discussed how the costs of living within the park was high since they were unable to cultivate their own food and are required to purchase goods at nearby villages, towns and trading centers. In other words, while respondents were saving money by not being tempted to buy goods or services they did not necessarily need, they were spending more of their money on necessities, like food, which they could grow, harvest or graze if they had lived outside of the park.

27 Author's Note: During one of the interviews at an outpost, I was caught in the middle of a thunderstorm. Fortunately, the interview was completed before the rain got really bad as the feeder road from that specific outpost was known to get flooded during heavy rains, making it impassable.
One respondent, Paul, remarked:

    You know here in the parks, we don't cultivate. The cost of living seems to be a little bit higher because you see we have to keep buying food items... We don't have any other thing. There's no gardens here. And yet we need to eat. We need to survive. Yeah.

Additionally, some respondents discussed the hardships of being away from their families and loved ones echoing prior findings (Walsh and Donovan, 1984). A common theme that was identified from both formal interviews and informal discussions with the rangers was the fact that they were required to be on-call 24 hours a day, seven days a week. This was especially true when they were stationed in headquarters since they could be deployed at anytime, anywhere. Furthermore, as will be discussed shortly, rangers are also required to fulfill other responsibilities, including night guarding duties, when they are living in headquarters. Due to this work schedule, rangers do not have much opportunity to see their families. Further, when they were provided with time off to visit their home towns or villages, it was only for a short amount of time, usually two to three days. Even when their families were able to visit, it was only for a short amount of time. Francis, for example, explained how he felt about being away from his family and compares his situation with rangers who are live with their families in the park:

    Your family is somewhere or they're here for some time. You are not with your people at home, so...but due to condition of the work, you have to persevere for it... Because you know if you are with the family, being in the park also is not much difficult but if you are compare with those who are staying with their family. Somehow okay or developed. But for we are here in the park just to protect these animal. You go [back home], you know maybe twice in a year. So that is why I've said somehow it is difficult a bit. Not like the person who is staying at home with his family.

Although Douglas was able to see his family once a month, he was visibly frustrated and upset with having to live apart from them as he lamented, "At times, I feel it difficult. Yeah. For the [sake] of sharing information, yeah. Feel it." Additionally, Lawrence
referring back to the issue of accessing transportation described how his wife may find it especially difficult to visit him when he is living in an outpost:

A problem from the outpost to town: where we'll be able to get transport? So that is one of the problem we are getting. Like if you are now transferred to that place and maybe your wife is in the village and wants to come and visit you, you find that you have got a problem of your wife to come from the town to the outposts where you are.

It was clear from the respondents that a lack of transportation was not only difficult from a occupational standpoint, but also from a personal one as well. Respondents who did live with their families did not seem to raise any major concerns regarding any difficulties associated with living in the park and their families. Interestingly, respondents who were not living with their families pointed out that rangers who were living with their families needed to have better social amenities, including schools for their children.

Paul, who did not have any children and who's wife lived in Kampala, elaborated:

Then the other side of the coin, you see, most of our parks have very little social amenities. We don't have schools here. We don't have...some of them don't have any hospitals. Yes. So we need schools so that...you know these rangers have families. Their children need to study. So they need schools around.

Notably, during one informal conversation, one ranger explained his irritation with rangers who lived with their families in the park. This encounter is exemplified by in the following fieldnote:

After discussing his own family, whom lived outside of the park, the ranger described how he understood why other rangers would want to live with their families, but given the lack of accessible schools in the park, he believed that it was "not good" for rangers to not live with their children in the park. He further explained how frustrated he was with the situation since the children had "nothing to do here" and that the children were just "wasting" when they could be "learning" (September 25, 2012: Fieldnote)

Lastly, while some respondents felt that they had adjusted to living amongst the wild animals, most still believed there was always an inherent danger due to their close
proximity. As Francis simply stated, "To live within the park it is quiet difficult, because you are always within the park with the animal", while Tom cautioned: "Sometimes when you meet a wild animal, animals also have their own behavior." Asked to elaborate, he said, "Like a hippo, a hippo after hearing someone has come, it keeps quiet. So when it is dark, you find that you have already reached the animal and that is also very dangerous...Because wild animals remain wild animals. It will not change its behavior." Felix referred to his current situation: "Yeah, now the basic challenge is now sometime, like in Ishasha, there are many lions. At night, you find they are coming. They are staying around our homes, our staff quarters." Even day-to-day activities like using the bathroom can be a harrowing experience as Paul recollected about an incident that occurred with a UPDF soldier personnel:

We had one time when a soldier went to ease himself and he had left the door open. And when he left the door open, there was a warthog which had sneaked inside. By the time he was to come inside, the warthog realized and as it was going out, it hurt the man.

Additionally, informal discussions with rangers also highlighted the simple reality that the wildlife did not differentiate between friend or foe. In other words, the wildlife simply viewed the rangers, not as guardians, but as human beings - akin to poachers. In general, most respondents described that being cautious of animal behaviors was an important component of living and surviving in the park.

As there may be important differences between the living conditions and situations inside headquarters compared to outside of headquarters, it was necessary to examine the respondents opinions of living in the different settings. Prior to that discussion, however, ranger rotations and transfers will first need to be explained.
7.4.2. Ranger rotations and transfers

As mentioned, all the respondents, except for two of the supervisors, had experienced living in and outside of headquarters during their time in QENP. In most cases, law enforcement rangers rotated and transferred to a different area every three to six months. Such rotation seemed to be conducted for two main reasons: First, as explained by Isaac: "When we are rotating, you'll find that we have mastered the whole park." In other words, by rotating to different locations, the law enforcement rangers would be able to gain experience maneuvering through the environment and understanding the specific problems of that area. In addition, rangers would also be able to establish a number of community informers throughout the park. Such experience is useful for ground-level operations, especially foot patrols, given the lack the overall lack of manpower in QENP. In essence by moving law enforcement rangers to different locations, the management would be able to use their limited resources more efficiently since law enforcement rangers could be transferred for additional support when required.

Interestingly, as will later be discussed, while the establishment of community informers or informants is considered to be an important component of law enforcement, supervisors are also wary of rangers becoming overly "comfortable" with the community. As such, the second reason why rotations happened - and so frequently - was in an effort to reduce the potential of collusion between law enforcement rangers and community
members. As explained by David:

You get use to the people around [the outpost]. It becomes normal and you get very many friends who want resources from the park. And that one tempts you to make your friend happy by doing illegal activity...So basically, when the ranger become very comfortable. That's why we just keep moving them [the rangers] within three months. So by the time you [the ranger] want to settle and get friends and what. Move you out. Take you to another ranger post

It was clear from the interviews that there were mixed feelings regarding the continual rotation of rangers with some respondents feeling that such rotation was indeed needed in order to become more experienced with the park and to reduce the potential for ranger misconduct; while others believed that such rotation hindered their ability to establish meaningful relationships with the communities. Moreover, these respondents believed that the overall logistics of rotating the rangers were at times cumbersome and overly time-consuming. This is exemplified by the following as Isaac explains the process of transferring a ranger:

Again, that transfer process will take like two weeks or one and a half weeks. To me, I can see that's a wastage of time, because let's say that they want to transfer me, they will put me on standby... They will come and pick me up from here. They will put me at the headquarters. The will bring another one from another outpost, they put him in headquarters so we can go together... You will find that we have wasted two weeks!

Conversely, Benjamin believed that such transfers operated in a fairly simple manner since all rangers had to worry about was their own personal goods, which was often not very much:

If we are at camp, if it is just a transfer, you just go with your small mattress or if you know a mattress is there, you just come with your bed sheets there. So you find the movements of transferring is easy. Yeah that is the...but they have a vehicle they can give us or whatever. So the load is not a problem. We are soldiers. ...[Transfers] is not difficult. They can even make at any time. They can transfer in a group. They can transfer one by one. Yeah depending.
7.4.3. Differentiating between headquarters and outposts

Law enforcement rangers could be stationed at one of the following locations: headquarters, outpost, gate or posts within the community. It should be noted that most respondents did not distinguish between the outposts, gates and community posts, but rather differentiated being stationed within and outside of headquarters. Therefore, the following discussion will combine outposts, gates and community posts under one single heading: outposts. Where it was important to distinguish between the different outposts, the author did so.

HEADQUARTERS

Advantages

Access to supervisors and colleagues

Some respondents felt that by living at the headquarters, they had easier access to their supervisors and colleagues which resulted in a positive learning environment. As Dennis noted, "Information gathering if also easy when you are at headquarters," he clarified, "because you have access. You have access to reach people. Even sharing knowledge. You can share it with your colleagues. You can share it with your supervisor." In addition to being able to share information with more of their colleagues and supervisors, some respondents felt that having direct constant contact with their colleagues and supervisors allowed them to obtain guidance leading them to become a better ranger. Sam explained:

Because I am interacting with people from different levels and they do advise me as I am doing my work. So they do advise me that on this one, "You should have done a-b-c-d"...Then now, I have improved my skills.

Lawrence adds that living in headquarters enabled him to obtain help when needed: "If I get any problem that needs my immediate supervisor, like the warden to handle, it shall
be easier for me to get the warden who will help me solve my problem." Felix echoed this belief when he said, "Then another thing, if you have your problem, you can explain to the higher authorities, because you are staying with them."

Additionally, some respondents felt that living in headquarters also allowed them to perform their jobs more in line with the expectations of their supervisors. These respondents felt that by being directly instructed by their supervisors rather than being able to establish their own work plans or agenda, they would be able to appease their superiors. Indeed, as will be discussed shortly, a main concern of most of the respondents regarding living outside of the headquarters involves being perceived as ineffective or incompetent. Patrick clarified:

> Sometimes it is easy to come to the supervisor and he tells you what to do and I can't be pressurized, 'cause they are making me work. I go and do the work...Because they tell me, "Go on to this place. Do patrol in this area and this area." So it becomes easy.

Interestingly, respondents who were supervisors also believed that living at the headquarters enabled them to have easier access to the rangers, which made it easier to supervise and direct them. Additionally, the supervisors that were interviewed believed that rangers who were stationed at the headquarters had a higher level of professionalism compared to rangers who were stationed in the outposts. As further elaborated by Paul:

> It is easy to supervise them when they are closer because now like what you do, you keep directing them. [Outside the headquarters] it is so much less supervision, but you see like the rangers who are here, they have a lot of spirit...I mean professional integrity than the rangers outside. I think when they reach outside they relax! They relax a bit. But when they are here, they keep seeing supervisors and of course now here, there are principles. The requirements of UWA. Nobody can manufacture his own.
Dennis, who is not a supervisor, echoed this point as he explained that rangers who are stationed at the outposts have the opportunity to become lazy and not conduct their operations if they are not responsible:

> You know, when you stay at the outpost, sometimes if you're not serious, you become idle. You know why I'm saying that? You are the master of your own fate. You have to plan for what to do. And in case you fail to plan what to do, what happens? You sit and relax.

"Eyes can easily reach you": Recognition and promotion

Some study participants also described how living at headquarters also facilitated the potential to be recognized by supervisors and management. As noted by Dennis, living in the headquarters "builds you administratively." Dennis went on to describe how "outside [in the outposts], no one knows that I'm existing. Yeah. So really, I prefer headquarters."

Dennis felt that living in the outposts detached him both physically and organizationally by limiting his exposure to his supervisors and to the management. In other words, by being physically present at headquarters, he believed that he was more likely to be noticed; thus, increasing his chances of being promoted when an opportunity arises.

In addition, by being present at the headquarters respondents felt that they would have the opportunity to not only be called upon to conduct a number of tasks, which may be viewed favorably by their superiors, but they would also have the opportunity to interact informally as well. Isaac succinctly described this belief:

> When you are living in the headquarters, you'll be more known by the seniors, because they see you around. You're working with them. But it will be hard to be known when you are deep in the outposts. For example, [in the headquarters] they'll be knowing your behaviors in any case of promotion.
Isaac went on to further explain scenarios whereby rangers living in headquarters would be able to accompany supervisors and management, including the Conservation Area Manager (CAM), to various outings and functions further raising their profile as a dependable and hard-working ranger.

**Administrative tasks**

Another important aspect of living in headquarters was the ability to conduct personal administrative tasks in a relatively easy manner. For example, as requests for time off need to be submitted in person and given the difficulty and cost of accessing transportation from the outposts and community posts, the ability to simply walk over to the main headquarter building to speak to their supervisors was seen as a major benefit by most respondents. Patrick said, "It even becomes easy for me to ask for an off." Likewise, Felix summarized: "Even permission, you are near the office. You can quickly get off or leave." Isaac further elaborated:

In any case, you have the papers [that] you want those seniors to sign for you. It will be easy for you, as it is just moving from your quarters to the main office. But when you are in the outpost, first you have to put in your own money [to] transport yourself to the headquarters. You find that the big man [assistant warden of law enforcement] is not there. You come back [home]. Then, you have to go there [again] next time.

In addition, respondents also believed that living at the headquarters facilitated easier access to organizational benefits, such as the daily safari allowance (DSA), which is given to a ranger upon returning from extended patrols. Lawrence observed: "As soon as you reach [the headquarters], if there is money in the account's office, they give you your allowance very quickly. As soon as you reach there. The allowance don't delay."
Experience and knowledge of the park

From an operational stand-point, rangers from headquarters can be deployed to any area, whether it be for an operation (e.g. patrol, fire management, problem-animal control) originating from the headquarters or as reinforcement for an operation being deployed from an outpost. As a result, rangers living at headquarters have the opportunity to see a number of areas within the park within a short amount of time. As put by Daniel, "in the outpost, you patrol some small portion of the [park], but headquarters, you patrol the whole [park]." Patrick further elaborated:

Then I even get a chance of knowing other areas. Because of the headquarter, they give you patrol in many areas. Next time, you may be in this area, another time you're in another outpost doing an area of another outpost. So it helps me to know other areas, how they are and then how big the park is.

Access to Information and Equipment

Some respondents described how those stationed in headquarters get first access to information, equipment and benefits before those stationed outside of headquarters. Respondents explained that in cases where important information is sent to the headquarters from Kampala, from other PAs or even from other outposts, those stationed at the headquarters are able to access such information immediately. For example, Felix described, "You are near the information, because if something comes and they communicate with the people of headquarters, then when you are at the outpost, they communicate again to outpost", he elaborated, "But when you are here, you have firsthand information." Michael concurred and said, "Now you know the headquarter, it is the head of all quarters!", he continued, "when things come from Kampala to the headquarter, people from the headquarter, they will first get. After getting, it go where? To another sub-sector. So people in the headquarter, they will be number one."
In addition to information, Michael also referred to the equipment sent from Kampala. Isaac also believed that those living at the headquarters would also gain access first to equipment before any of the rangers living in the outposts. Isaac explained:

> When you are living in the headquarters, all the services will be reaching you quickly. For example, they have brought you new uniform. You have to get the chance of selecting the good size of yours since you are at the headquarters.

Indeed, the issue of limited and inadequate equipment was identified throughout the study, including during observed patrols. There were several occasions whereby rangers observed would discuss the difficulty of patrolling with limited or poor equipment. Indeed, on several occasions the author witnessed rangers having to remove thorns that had pierced through the bottom of their gumboots. As one observed ranger put it regarding the overall lack of equipment, "You send me to a garden without a hoe, I will produce less" (Patrol 3: Jot Note). Given the limited available equipment for the rangers, it is not surprising that study participants believed that gaining first access to equipment was an important benefit of living at headquarters.

**Housing, access to amenities and transportation**

Lastly, all respondents believed that a major advantage of living in the headquarters was the accommodation. Compared to the outposts, some of which are simply large mud huts, the homes at headquarters are fully constructed. Lawrence noted: "In the headquarters, like here because every staff here is well-maintained...No one will say, 'My house is leaking'." In addition to the housing itself, Felix described how "in headquarters, there's
electricity [and] there's water", while Jude referred to having "access to medicine" as another benefit with living in headquarters.

Notably, while study participants still raised issue with the difficulty in accessing transportation, they believed that it was easier to get access at headquarters compared to the outposts. The easier accessibility to transportation at headquarters is not surprising since the vehicles are parked and maintained there. Chris referred to the operational value of living in headquarters: "When it comes time of deployment, you're being deployed, the means of transport for deployment is very easy here at headquarters than the outpost."

Chris further explained the difference between the headquarters and the outpost by highlighting that with the outposts, rangers would need to walk to gain access to any road whereas with headquarters, if transportation is available, they would be driven at least partway:

And when come to the outpost, you find there's no means of going very far 'cause there's no transport means. From the headquarter...I mean the outpost you walk then from walking maybe where you think you reach. You don't reach there, 'cause you have no means. You may be planning to walk ten kilometers, then you fail 'cause when you walk ten kilometers going and back, that's 20. Automatically you can't do it by foot only. And here at the headquarter at least when there is...when you...where you go certain point, first they push you a bit with vehicle. They drop you then you star from there okay. That's why I prefer headquarters over the outpost.

Some respondents explained that even if the UWA transportation was unavailable, the proximity of the headquarters to the main road was close enough to get access to other forms of transportation. Felix remarked: "Even headquarters [it is] near the roads. Like here you can just go [to the road], we walk and you get a vehicle", while Jude simply said that the "access to the main road [for] transport" was better at the headquarters.
Disadvantage

Overworked

While some respondents believed that there were no disadvantages to living in headquarters, most believed that there was simply too much work when living in the headquarters. Richard noted that by living at headquarters, "you work on command." Daniel echoed Richard when he said, "you work tirelessly because of many commands", he continued, "there's too much work... All patrol. Every day. Every night." In addition to patrols, Richard and Daniel also referred to the supplementary tasks required of law enforcement rangers including night guarding duties. Likewise, Isaac explained: "To me, what I prefer to living in the outpost than the headquarter, there is night duty [at headquarters]. Night guarding. I don't like that one." Felix described how the work schedule at the headquarters leaves little room for rest and that sometimes law enforcement rangers "don't have time for sleeping in the house." Similarly, Lawrence observed:

The life here. The life here is actually not very hard. Yeah. Because what we signed for was to protect UWA properties; otherwise, what I would say is here what I see is not good. To sleep outside throughout consecutively. Here if you stay here, this night guards, you find that you are outside five days without even resting.

As exemplified by Lawrence, while rangers were unhappy with the workload at headquarters, they realized it was all part of the job that they had agreed to do. Indeed, as Brian explained, the law enforcement ranger must understand that "there is a lot of work to do. You will be required to [night] guard or escort visitors. You will be called anytime [and when] you're called for work as a ranger, you must respond." Such a work
agreement becomes especially prominent at the headquarters since the ranger is physically present and available.

OUTPOSTS

Advantages

*Ability to do field duties more often*

As discussed, law enforcement rangers are required to participate in a number of activities, including patrol. Patrol was considered to be the archetypal law enforcement activity by respondents. Respondents felt that by living in the outposts, they would have more time and opportunity to conduct fieldwork, like patrols, without having their time taken up by non-field related work (e.g. guarding duties). Felix explained: "When you are in the outpost, the advantage that you go for patrols, I mean, you don't make guard at night", he went on to explain, "you only make patrols: day patrols and night patrols. But when you are at headquarters here, you have to make guard."

Felix's response highlighted a stark difference between the type of work he preferred to do as a ranger. In general, most study participants seemed to prefer conducting fieldwork over stationary or administrative work. In other words, the work conducted at the outposts was viewed by respondents to be more important and relevant for their role within the organization. As exemplified by Jude's response:

> With outpost, we do a lot of studies. Researches. Like I've ever been trained animal mortality rate. So with headquarters, we cannot access such things. You have to go outside in the field...It cannot be done at the headquarters, so we have to continue in the forests. In outposts. So with headquarters, it's not all... you cannot study, let me say. Because it has a lot of office work, but with outpost we do field work. A lot of research.
Indeed, during informal discussions with law enforcement rangers, some made it very clear to the author that they were "field men" by regaling him with their experiences in the field, particularly emphasizing dangerous encounters with poachers or the wildlife.

"You plan duty on your own time": Ability to set work plan and establish autonomy

Respondents also described how being stationed at the outpost was beneficial as it enabled them to exercise autonomy and develop their own work plans and schedules. As described by Richard: "Yeah, with the outpost, you can work at your own time", while Daniel stated: "At the outpost, you command yourself." The ability to plan and execute their own work schedules was seen as advantageous by Patrick as he felt it provided a foundation for professional growth as he was able to "learn how to make decision [himself]" as opposed to simply following orders. He further went on to say: "[The supervisors] plan for you work to do [at the headquarters], but when you're in the outpost, [work plan] is easy. You can make it yourself." Patrick elaborated that such decision-making is further developed when a ranger is assigned as the 'in-charge' of an outpost:

Yeah, you can learn how to make decisions. Sometimes you're in charge when you're the in-charge in outpost, because it is your role to plan where you're going to go to do work, which place is poachers are many, which place for pit-sawing and you plan, "This time I have to go to this place. Today, I have to go this place". So it helps you to learn how to make decision than the headquarters, because at the headquarters you can't make your decision for work.

This sense of autonomy was found to be important by Isaac as well as he believed that his opinion was not recognized or respected by his superiors at headquarters. He elaborated:

To me, when you are living in the outposts, you plan duty on your own time. And you see, when you are junior, they say juniors can't be [more] wise than seniors, but you can get sometimes, you find that a junior could bring a good decision. But see there is a senior. You can't...your decision will not be heard.
It is clear from both Patrick and Isaac's responses that being stationed at the outposts helped in the development of rangers' autonomy.

_Familiarity with specific area_

Another benefit of being stationed in an outpost identified by respondents was the ability to become familiar with a specific geographic area. While all respondents seemed to recognize the benefit of rotating to various areas in order to develop a greater awareness of the entire park, some respondents were quick to point out that it was not simply patrolling multiple places that mattered but also the _amount_ of time spent in an area that was crucial. By investing time and effort in a specific area, respondents believed that they would be able to become familiar with the geographical and environmental characteristics of a place. Moreover, they were able to identify key problems and where such problems were most likely to occur. As Patrick explained: "Another thing that helps you [at the outpost] is because you know areas. You learn areas, how they are." Michael explained how such familiarity is generated:

> And what makes it a bit easier to get the information [about the area], there is what we call 'rotation'. Rotation of work. For you can rotate, you move like this: today you are here [points to one end of the park], tomorrow you are there [points to the opposite end], another time you are there [points to the ground]. You rotate.

In short, rangers can become knowledgeable about their area of operation simply by patrolling various cross-sections as often as possible. Relating back to the first advantage of living in the outposts, rangers have the ability to generate a profile of a specific area of QENP as a result of constantly being in the field. As will be discussed later, having in-depth knowledge and experience in a particular place is crucial in the deployment of patrol groups since there has to be at least one person within the group who is a "senior of
that place." In other words, the familiarity of an area takes seniority over official rank or title during patrols.

"Your eyes cannot reach there": Interacting with the communities, intelligence-gathering and developing informers

Another important advantage of living in the outposts was having more time and opportunity to interact with the community. Some respondents believed that by interacting with the community, they would be better able to understand the community members' perspectives, thereby opening lines of communication between the rangers and the communities. This relationship will be discussed in more detail later, but generally speaking respondents believed that constant contact with community members and local leaders was important in facilitating an environment of legitimacy. Paul described that by living at the outposts rangers were able to interact with the community which helped in the "building [of] our image." When asked to elaborate, he continued, "Because [the rangers] are able to interact with the local leaders. With the community, generally."

Dennis further clarified on the benefit of living in closer proximity to the communities:

"You can also interact with the community and know their views. Because if you interact with them, then definitely, you will also know their side of their story." By obtaining a grasp on the opinions and perspectives of the community members, Dennis explained that rangers would be better equipped to address their needs and concerns; thus, facilitating an
environment where a working relationship can be developed. As he noted:

You know, when you interact with [the community], you create a kind of relationship. And that relationship sometimes is your work. Because in a situation whereby you don't meet with the community, then definitely life becomes difficult. Because such information you can't get. You see like the way we do our patrols, park is generally wide. Today if you choose to move in this direction, remember the other side is unattended. And your eyes cannot reach there. But those ones who are outside, if well polished, they can bring information...And with that, I've achieved a lot. I've achieved a lot. You know, getting information...like recently I arrested three people and they were brought here. I managed to arrest them through information gathering from? The community. They come to us, they say, "See! For us we know. You are good to us. We always interact freely. But there is something wrong somewhere". Then, we also ask them, "Please can you lead us to that place?". Then, because you interact freely with them, they will say, "Fine! Although, we don't want to be identified to the community, we can lead you. Give you the clues. Then you [snaps fingers] you carry on."

As indicated by Dennis, developing a relationship with the community is considered to be part of the responsibility of the law enforcement ranger as it can directly lead to the establishment of informers within the community. As a result, rangers are able to gather intelligence that may be useful for ground-level operations, including patrols and spot-checks. Michael also believed that outposts was "where [rangers] can get full information." Chris further explained the occupational benefit of living in the outposts:

When you're at the outpost, it is very easy to get information about what is taking place in the park than there at the headquarters, 'cause at least at the outpost, you are near the communities. And automatically in the communities you cannot fail to get at least one, two people who can tell you what is going on, what is taking place in the park. Yeah.

"It spreads out presence": Monitoring the community and ranger omnipresence

Recognizing the limitations of the field, some respondents believed that a key advantage of living in the outpost was the ability to monitor the activities of community members within their respective communities. As some outposts were located nearby or even within communities, respondents believed that they would be better able to identify the
routines and behaviors of community members, particularly those that they suspected to be involved in forms of illegal activities. Patrick observed:

And another thing about living in the outpost, the good thing in it, it helps to make sure, since you are living near the communities, it is easier to manage them. You can easily know that these people have passed here, these are the doing these activity. And you can easily know the village.

Interestingly, despite recognizing the difficulty in being able to effectively monitor the entire park given its size and their limited resources, Paul described how living in the outpost (and generally the existence of outposts) was useful in establishing a sense of ranger omnipresence. In other words, he believed that the placement of rangers throughout the park would raise their profile as physical guardians, potentially deterring offenders. He noted: "We are even able...because you know, we cannot be everywhere. You can see it. But it spreads our presence. You know it is also like...it scares, it deters the would-be poachers. Because then they see [us], they think we're everywhere."

Disadvantages

Lack of access to management/supervisors

In contrast to the headquarters, some respondents felt that living in the outposts made it particularly difficult to access the management or their supervisors. Dennis described: "When you're in the outposts, sometimes linking you up with management is difficult."

He further explained:

Like now there we don't have the proper, you know, charging system. So sometimes, like I have the radio there for communication systems. Communication is poor generally, if I have to say. Now we don't have proper charging system. If I'm to charge, I always charge once in a month.

Dennis mentioned how most of the outposts in QENP are without electricity and as a result rangers are often unable to keep their radios. Further, even though all the
respondents interviewed had their own personal cell phone (some even had two or three) that could be used to contact the headquarters, the limited access to electricity hindered their ability to charge their cell phones when they had exhausted the battery. Some respondents even described how they were only able to charge their cell phones a few times a month either when they were able to get to a trading center or when they had to go to headquarters for official business (e.g. dropping off monthly patrol reports).

This lack of communication is also problematic for the management and supervisors as well. Paul, who is a supervisor, indicated that vital information from the headquarters (or the "nucleus" as he refers to it) may not reach those in the outposts:

And then also... you know we lack communication. Now when we're lacking communication, there's some critical information that would be to the benefit of all staff. But it's only the people at the nucleus here that can get that information...So they [the rangers stationed at the outpost] miss out in many occasions. They miss out.

In addition, since most paperwork must be conducted in person at headquarters, living in the outposts can be especially burdensome administratively for rangers. As mentioned earlier, this issue is further exacerbated by the difficulty in accessing transportation at outposts. As Patrick explained:

Yeah, it becomes difficult, because you may not use the phone. You have to go back to the headquarter to ask for off. Write on off sheet, then they permit you to go. So it even becomes expensive when you live in the outpost.

"Sometimes you find it is a challenge to live with the communities": Issues with the communities

Despite the importance and potential benefits of living near the communities, some respondents believed that such close proximity was also problematic. These issues will be
discussed in more depth below but it is important to briefly touch upon them at this juncture given how such issues are particularly relevant to the rangers living in the outposts. Generally speaking, respondents believed that most communities located near the outposts were cooperative. However, some communities did pose a problem as Daniel explained:

Sometimes you don't cooperate with the communities around, because sometimes you are on the outpost and that community around they're all poachers. They never cooperate and they will give you hard time. Because you are at one station, you are not changed. Sometimes you get that challenge of the communities...They will never like you. They give you hard time.

Patrick described how "living in the outpost is also tiresome, because sometimes outposts are near the communities, so sometimes you find it is a challenge to live with the communities." Patrick continued, "They can hate you, because you are arresting them and you are stopping them from doing what they want from the park, like illegal activities. So even living with them is not good." This tension between some communities and the rangers stationed in the outposts has even led to what study participants believed were false accusations of other rangers. For instance, Paul referred to "scenarios where rangers, our rangers, have always been alleged to have defiled [women]." Paul further went on to describe a situation where one ranger was alleged to have "stole a bicycle and robbed [someone] of some money." Some respondents believed that such accusations would especially occur when the rangers were effectively performing their jobs. As explained by Benjamin, "If they know you're a hard working person...they may, okay, yeah terminate rangers' name. Just saying that, 'Rangers do this and this...Only just to favor their side." Paul recalled:

Then also we have had some colleagues of ours losing their jobs innocently. Because when the community frames you up and they strongly stand on this falsehood, by the time you have realized that this is false, you have really
sacked the staff... They frame up because what? If a ranger is hardworking and he constantly keeps arresting poachers, arresting poachers in that area. For them [the community] to defeat the effort of the organization is sometimes to frame up the person.

Benjamin surmised that living in the outposts hindered the rangers' ability to effectively conduct their operations, including patrols, as community members would be able to "monitor them at anytime." In other words, those involved in illegal activities would simply observe the rangers and base their offending patterns on the schedules of the rangers. As mentioned earlier, Walsh and Donovan (1984) also identified this issue in their study. Dennis noted, "then too sometimes [the community members] monitor our movement. That is one problem we have. They monitor our movement." Asked why the community would monitor the rangers' movements, he added, "Once they have monitored you, they know that, 'Ah! He has gone. We are now free to enter [the park]." Both Lawrence and Paul highlighted how such community monitoring of the rangers is a greater issue when rangers are required to live within the communities. Lawrence said: "Maybe you are planning your patrol, the civilian shall know it very quickly before you have succeeded [in going]." And Paul explained:

Imagine in some scenarios where we don't have accommodation inside the park and [we're] renting for the rangers outside. And then where we are renting for them is the very place where poachers are. So the poachers instead monitor the rangers, instead of the rangers monitoring them. So in that...in that it's bad.
Inadequate housing, lack of amenities and no first aid

While some outposts had newly constructed homes, similar to the homes found at headquarters, some still only had mud or uniport\(^\text{28}\) huts. In cases where rangers had to rent within the community, they were often provided with old or temporary houses. As a result, one disadvantage of living in most outposts is the poor accommodation. Jude described, ":[There's] no houses [at the outposts]. If they are there, they're very old. Dilapidated." Paul echoed Jude's sentiment when he said: "The disadvantage [at] most of our outpost are, now first of all, I would say some of them are dilapidated...Their conditions are not good at all. They're not fit. I would say they're really not good for human habitation." Sam simply stated that the " accommodation is not good."

Lawrence described how the housing can become uncomfortable during specific times of the day: "Some of the outposts, they are still with uniports, which becomes very hot like during in the sunshine. Even during at night, you find it being very cold, whereby you don't feel your life properly." Lawrence went to further describe how the poor construction of the uniports would result in other issues:

>But those in the outposts, some of the outposts as I have told you, those who are still in the uniports, you may find the uniport is leaking. Even the mattress you find it wet if the...if it was raining while you were on the patrol. You shall find you mattress being wet!

Alex also described his annoyance with the poorly constructed accommodation at the outposts, as well as his frustration with the management as he believed that management

\(^{28}\) Uniport huts have metal sidings and a metal roof.
was not overly concerned about the housing accommodation of the rangers at the outposts:

Can you imagine? When you talk of renovate the houses...I mean to build the good houses, which is also that one...the management is thinking about it. Those are the... [slaps legs twice]. Either you just tell them that the house is leaking, like here [points to roof top of his mud hut], like here [pointing to another part], here inside [points to the front door] [slaps legs]. They don't mind about you. You *talk* a hundred times and they don't mind about you. You just keep quiet.

In addition to the housing, most respondents also raised issue to having limited access to water at the outposts. While most outposts had water tanks which were refilled intermittently throughout the month, respondents described how they often would run out of water. When asked what the most difficult part of living in an outpost was, Richard replied, "Some outpost you find water is not there...The water runs out. If you want some, the water runs out always", while Felix simply said, "There's no water ". Alex explained that, "We are in the field. We are in the bush where it is very hard to access water. Water also becomes a problem." And Benjamin observed that "that some [outposts are] very far [from] water sources."

Some respondents described that it was not just accessing water that was a problem, but accessing *safe* water was the issue. Jude remarked, "You find accessing safe water is a problem", while Tony described how a "lack of *good* water" would often lead to "sickness." Felix described the added precaution of drinking from a nearby well: "So you have to, for drinking water, you have to get that [water] and boil." Alex expressed his
frustration with having to find ways to get water from the nearby communities:

Of course, we are human beings, we have to eat, we have to bathe, we have to wash our clothes. So what we do...that water at times when it is completely finished, to get water, it becomes a problem. You either take two weeks. And what will you do? So sending a boda-boda\textsuperscript{29} to come and pick for you...I mean to bring for you water which is very expensive. You either find two jerry-cans, it is maybe two thousand [shillings]. And if you do that every day, how much money are you earning?

In addition to lacking water, respondents also described how most outposts did not have access to any form of medical aid, including first aid kits. Given the difficulty in acquiring timely transportation, the issue of having convenient and direct access to medical aid is further intensified at the outposts. As Benjamin observed, "We don't have first aid. We have to go back to headquarter which is very far." Jude explained how this overall lack of medical aid was problematic from a day-to-day perspective as he described that "if anything happens as night, maybe you're bitten by a snake. There's no way you can get treatment because we stay without a doctor." He further added: "We just stay in one group. You are four rangers [and you] don't have first aid books." He went on to describe a recent incident where a female UWA staff member was bitten by a snake in Murchinson National Park and died as a result. Jude further noted that even if one is able to get transport, the difficulty in accessing some of the outposts may prove to be fatal:

If there's transport, you can raise the headquarters to come with a vehicle. But if it's muddy like the way you're seeing our roads in Queen Elizabeth, the driver may not reach where you are. So eventually you'll die. That one I'm honest. You'll die!

\textsuperscript{29} A boda-boda is a form of public transportation involving small motorcycles.
From an operational point of view, Benjamin added how if a ranger is injured during patrol, they simply make due and return to the outpost:

In the outpost, we don't have first aid boxes. We don't have. Only you find they are based in the headquarters. Yeah. So when you feel like whatever [during patrol], you have again to go back to where? The outpost. So when you find we're going to the field, we don't have these first aid kid and whatever.

*Lacking manpower, overworked and under pressure*

A general theme that was found in the interviews was the fact that the law enforcement department at QENP was severely undermanned. This reality was especially highlighted by respondents when discussing the disadvantages of living in the outposts. Indeed, in some cases, there are only two rangers responsible for one outpost. Due to being short staffed, respondents described how they felt they were overworked at the outposts. Tony said that living in the outposts was "more tiresome due to only few [rangers]." He went on to explain that as a result of being committed to the job, there are times when "you don't even eat [and even] sleep hungry."

Patrick also emphasized that the commitment to work coupled with the lack of manpower resulted in little down time:

And another thing there is much work in outpost, because you must work hard to make sure [the management] know you are doing [work] and you make sure in your place, in your area, there is no illegal activities. So you have to do work muchly. Time for resting becomes less.

In addition to having little time for rest, Patrick also described how he felt he needed to work hard in order to prove to the management that he was properly conducting his operations. The ability to create and execute his own work plan combined with limited manpower resulted in unwanted pressure from the management as Patrick continued,
"First of all, you can...even you get pressurized, eh? And think that if they [the management] come and find illegal activity near my area, then they might think that I am not doing what? I'm not doing work."

Manpower becomes even more of an issue when a ranger from an outpost is given time off, both from a personal (e.g. loneliness) and occupational (e.g. inability to conduct patrols) perspective. Sam explained that "at times you may find you are four or two and one requests for an off going home. Then it becomes difficult for you to stay at the outpost alone. And even the work becomes now difficult." Asked as to why work becomes more difficult, he continued:

> Because now you may hear sometime like poachers are going to the park... You can't go in the park alone, so [by] the time you communicate to the headquarters, as they arrange for [additional rangers] going there. You find that the [poachers] have already gone.

In addition to time off, Chris explained how illness can further disrupt operations originating from the outposts:

> It is lack of manpower. You find the outpost you are two people. When one fell sick, automatically work first stop a bit until that [ranger] recovers. But at the headquarters, at least a good number of staff [are there]. If one, two are sick at least you may find some other people who can go, who can conduct patrols. That's most of the difficulty at the outpost.

As indicated by Chris' response, the impact that diminished manpower can be mitigated at the headquarters by the additional staff on hand. Importantly, when rangers would need to go on leave at the outpost, reinforcements are temporarily sent from the headquarters. Patrick observed: "So when you go for off, [the management] bring another [ranger] to replace you those days. After your off, then they do what? He goes back [to headquarters]." Patrick clarified that whether additional support is provided depends on
the number of rangers left at the outpost. He noted that "when you find there is more than three or four, that means when one person goes for off, then these [others] can work. There [the management] may not send for those people. There are enough [rangers] for the work. [Management] won't send." When asked what would happen if there were only two rangers at the outpost, Patrick continued, "then [management] send. They must send somebody to work there."

Patrick further explained that access to additional manpower can be provided to outposts should the ranger in-charge request for it. As explained by Patrick: "Well, what I do because of [limited] manpower, if the area is big and there is a lot of work...I call for manpower from the headquarter so they come and help me do the work." In fact, on some of the patrols observed by the author, additional rangers were sent from the headquarters or picked up from other outposts to supplement the manpower at a specific outpost. Interestingly, since his outpost was near a UPDF camp, Patrick described how he would, "go to the soldiers and get some [help]" when needed. In other words, as a sister agency, rangers would be able to ask for support from the UPDF if needed.

Confrontation with rebels
Lastly, despite being a relatively peaceful time in QENP and in Uganda in general, some study participants described their apprehension about potential political uprisings and encountering rebels while living at the outposts. Matthew said that he was, "suspicious of political instabilities" since there were only three or four rangers at living at the outposts and that if attacked, the outcome would be "really worse" compared to at headquarters.
Due to being undermanned outposts, rangers would be severely outgunned in a chance encounter with a rebel group.

Paul described how this perceived threat is partly due to QENP's history of rebels and militias living within and operating within park borders. Isaac remarked that "rebels [are] always hiding in the forest", while Paul explained how PAs "sometime use to be rebel zones" and that since "our deployment is very thin in number, two or three. So in the event of such kind of rebel hostilities, [the rangers] are prey to attacks, eh. Because [the rebels] have guns." Jude elaborated, "You're in Africa. We have rebellions. So [rebels] tend [to go] for the forests and that's where we stay...So rebels tend to come in the forest. And those are the most challenging issues staying the forest here." Felix described that this history is one of the reasons why the UWA is operating alongside the UPDF:

Then also even security reason. You find the rebels are there. They are not poachers but they are rebels. That's why they mixed us with UPDF, for that reason. Because they know like in some protected areas, they're used for hiding. Hideouts for some rebels. So that one also when we are going [for patrol], we are expected those ones, yeah.

Indeed, on one patrol observed by the author, the patrol group found several old bullet shells that the rangers identified as originating from rebel activity several years ago. It should be noted that most respondents had never encountered during their time as a law enforcement ranger. Those that had encountered rebels described that such encounters occurred in the late 1990s and early 2000s. Numerous informal conversations with rangers also indicated that the threat of rebel activity in QENP is currently low.

Some study participants alluded to the current socio-political situation in nearby Democratic Republic of Congo (DRC) as a source for uneasiness. Frank described how
"even the insecurities [in the DRC], because now Queen [Elizabeth National Park], where I am in Ishasha, we are bordering DRC. The Virunga National Park. And there are people, there are very many rebel groups which are there." Jude further explained:

Okay there's that rumor, "All the time be on standby". Anything can happen all the time. The neighboring Congo. You know Congo is now having...is having with Bosco Ntaganda. M23... So that instability within Congo, it is also threat to Uganda since Queen Elizabeth [National Park] is bordering Congo.

Indeed, the socio-political context of the DRC and specifically Virunga National Park may heighten the perceived risk associated with rebel groups. For instance, as of August 2012, there are at least four militia groups operating and living within Virunga National Park. Moreover, one of these groups was recently responsible for the killing of 11 rangers (Smith, 2012). Given the history of rebel activity in QENP and the current socio-political situation in the DRC, it is not surprising that rangers identified encountering rebels to be a disadvantage of living in the outposts. In general, living at the outposts resulted in an aura of uncertainty and fear for rangers living in the outposts due to being outnumbered and outgunned.

7.5. Relationship between the Law Enforcement Rangers and the Communities

As the UWA is responsible for monitoring and overseeing the status of QENP, the organization must find ways to effectively collaborate and develop a partnership with the communities that are within and surrounding the park. In order to better understand the context that the law enforcement rangers operate within, it was important to first examine the respondents perceptions of the relationship between the UWA and the communities.
Moreover, as front-line representatives for the UWA, there may be similarities or differences between the relationship the law enforcement rangers had with the communities compared to the organization.

7.5.1. "Yes, now the relationship, we are now just trying to bring in": Developing a collaborative relationship between the UWA and communities

Study participants had differing opinions on the current relationship between the nearby communities and the UWA. For instance, Francis described that the relationship between the UWA and the communities "is now somehow okay. There is no more problem", while Daniel remarked that "the relationship is not that bad." Paul cautiously said, "I would say [the relationship], it's fifty-fifty."

Some compared the current relationship to the past and described how they felt that it had improved. For instance, Dennis compared the relationship to when he first became a ranger: "Sometimes back before I joined the park, I was told [the relationship] has not been very well. But, you know, things keep on changing. Things keep on changing...Even right now as I talk, the relationship is quite good. It's quite good compared to some time, some years back." On the other hand, Alex believed that "the communities, for sure, they don't like UWA." Asked to explain why he felt this way, Alex explained:

Those people that are neighboring the park, they have their things that they want from the park and for us here we say, "No, you're not doing what? You're not going to take these things". So they feel that they have [a right] on everything that is good is in the park. Or, I mean, the good resources. Most of the resources that the communities around want [are] in the park. So for us, our work to say, "No. You are not taking this." And do you expect that person to really love you? I don't think so. So there's no any relationship at all.
Other respondents seemed to understand that the relationship between the communities and the UWA could vary from day-to-day and place-to-place. Michael explained that "the relations is not so very, it is not so very bad. But nowadays, you know, there are times, you find that today it is okay. Tomorrow it is bad", while Isaac noted that the relationship between the UWA and the communities was dependent on the community: "To some parts, some parts, I can say the relationship of UWA and the community is good and in some parts, it is bad." Isaac elaborated:

This is because in some parts you will find that there is a rampant of poaching or in some communities, there are many poachers. As you keep on arresting them and arresting them, the family members will not like you, because they have been benefiting from the park. And then again, you have stopped [the] benefit, that way of benefiting so they will not like you.

Ivan echoed Michael's sentiment when he said, "The relationship wouldn't be bad, apart from the poachers. Poachers are [the] problem. Poachers they don't understand. But other communities who are not poaching, they are okay." In general, most respondents believed that such a relationship was still a work-in-progress given the inherent issues associated with communities situated within and surrounding the park.

As summarized in Table 7.2., respondents identified a number of issues that led to a gap between the UWA and the communities, including disturbances caused by problem-animals, limiting access to resources within the park, lack of space and access to facilities, lack of perceived benefit from the park and, lack of employment to work in the park. David surmised that the issues with the communities could be primarily attributed to the existence of problem-animals and the UWAs role in limiting access to park
Table 7.2. Issues with the Communities Identified by Respondents

<table>
<thead>
<tr>
<th>Issue</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to resources</td>
<td>QENP has an abundance of resources that are sought after by the communities which the UWA restricts them from accessing.</td>
</tr>
<tr>
<td>Problem-species</td>
<td>Wildlife entering the community and raiding the crops and livestock of the community members. Community members are also not compensated for loss crops or livestock. In some cases, wildlife have also attacked community members.</td>
</tr>
<tr>
<td>Lack of space/access to facilities</td>
<td>Communities within and bordering the park have grown significantly since QENP was originally gazetted. This has led to conflict related to park boundaries and also a general lack of facilities within the park.</td>
</tr>
<tr>
<td>Perceived lack of benefits</td>
<td>Community members often complain that they receive no benefits from the park, including the revenue-sharing that is supposed to be used as an incentive for communities to establish capacity building projects.</td>
</tr>
<tr>
<td>Lack of employment</td>
<td>Community members believe that the UWA should explicitly hire community members to work in QENP and that such employment did not occur often enough.</td>
</tr>
</tbody>
</table>
resources. David first explained, however, the different types of communities bordering and within the park:

See this park is surrounded by [three] different types of communities: the first group is the pastoralists - the cattle keepers. And these cattle keepers are known as basongora. Then the second group, these are the cultivators. And these cultivators, this one group known as the bakonjo. Then we also have another group of the banyabutumbi. Those are also cultivators. So those are the [three] major groups. But there is a minor group, which is there, it involves, meets some bakonjo and the banyabutumbi who are the fishermen. Fishermen. Those who fish within the water lakes...To the cultivators, they cultivate along the park boundaries, and as they cultivate along the park boundaries, sometimes these [wild] animals go and destroy their crops. And these ones who are fishing in water, they go and fish in water but forgetting that the water, that's the habitat of the crocodile. Sometimes this crocodile injures them when they are fishing and sometimes [the crocodiles] injures them when they have gone to fetch water. So you find that there is a negative attitude towards the park, because of the crocodile, problem crocodile. Because of the problem animal destroying their crops. And the other one, because of restricting them to get resources from the park.

Similar to David, Felix also believed that issues with problem-animals and communities illegally accessing resources caused a divide between the UWA and the communities. He explained that "right now [the relationship] is good but for me, I see what is disturbing [the communities]. People are not happy because of those lions." He continued:

The relationship between UWA and the community is not so bad. But however, we can't rule out that there is that pulling of crops. The relationship is not very good. It is not fair. But I can say that it is good. Why am I saying it is good? Because it is less than we normally we fight each other but it would have been very good but still our animal invade the communities

As shown, Felix also alluded to the current status of the relationship. Indeed, it seemed that most respondents were conscious of the fluidity of the relationship between the communities and the UWA and recognized the relationship could change at any time. While the respondents admit that the UWA has not been able to address all the concerns of the community, the UWA had attempted to address some in order to alleviate the tension between the UWA and the communities. In particular, respondents listed the following to be important in the development of UWA-community relations: revenue
sharing, the community conservation department and memorandums of understanding (MoU).

*Revenue sharing*

Established after the enactment of the Uganda Wildlife Act and the UWA, revenue sharing was developed as a policy for neighboring communities around PAs to obtain 20 percent of the revenue collected from park entrance fees. This was done in order to provide communities funding that would be useful in the development of social amenities and infrastructure, as well as projects such as bee keeping and goat rearing to generate income. In addition, such funds would help alleviate the costs associated with living in close proximity or within a PA (e.g. problem-animals). As Manyindo and Makumbi (2005) summarized:

> The obligation is based on the acknowledgement that communities on the frontline of protected areas endure a disproportionate burden of the costs associated with the conservation of protected areas, and yet the benefits they gain are minimal...The overall goal for sharing this revenue was to enable communities living adjacent to protected areas to experience the economic benefits they accumulate so that the communities may improve their welfare, and ultimately work in partnership with UWA and local governments to sustainably manage the resources in and around protected areas (1)

Most respondents believed that the existence of the revenue sharing was crucial in the development and sustainment of UWA-community relations. Tony described how the "20 percent [revenue sharing was] pulling them to us." Likewise, Isaac commented that "another thing that is promoting that relationship is that [20] percent money they take back to the community." Francis surmised that "[the community] are the one [benefitting]. Because every year they are getting revenue sharing from the UWA. The good amount of money for making their project. They're benefiting from it. Most of them
now are happy with the UWA." Felix added that the "[UWA] give them 20 percent of
 gate collection, so that one help in constructing schools, health centers, social
 infrastructure." Lawrence described how the revenue sharing was also useful in
 alleviating the damage caused by problem-animals: "Whenever his or her crops were
destroyed, that one the community surrounding the park has a chance to get on that
money, the 20 [percent] revenue sharing." He added that:

> At the same time, this 20 percent revenue sharing that is being given to the
community surrounding the park, if they are well planned or well organized,
this is the money that helps them to make some bridges, to help them in the
churches; to buy some benches so that the people can sit, like that.

Some respondents, however, recognized inherent problems with the way revenue sharing
was currently practiced\(^\text{30}\). For instance, as the revenue sharing is provided to the highest
local council\(^\text{31}\), the district level (LC5), there was a potential for corrupt leaders to take
some of the funds for themselves before moving them down to where the funds would
make the most impact, the village level (LC1). Adam explained:

> A problem is when we used to give them money for revenue collection for the
park. We give it to the LC5, at the district level. Then the district level would
chew the money. It don't reach the community surrounding along the park
boundary. It doesn't reach them.

Felix observed: "Yeah, it goes to district [level]. Now it reaches [the village level] when
it is little. You find people they are not even informed this is...So then when you ask
them, [they say] "For us, we don't see that money'." Benjamin also noted: "You find [the
revenue sharing] doesn't reach at the lower level. So it can keep disappearing like
this...So like for us when we're in the field, they say, 'After all we have not seen the

\(^{30}\) Additional issues were also raised by Manyindo and Makumbi (2005).

\(^{31}\) Local Council or LC is a form of local government within the districts of Uganda. There are five levels:
District-level (LC5), county-level (LC4), sub-county (LC3), parish (LC2) and village (LC1) (Kavuma, 2009)
importance of the park’. Benjamin went on to further discuss how changes to the allocation of revenue sharing were required:

Even when you talk of revenue sharing, they say, "That one has no use to us. Because the people who are signing for that money are the people at the top of the offices, so you find here at the whatever, we are suffering." So for them they wanted that money to be giving it at the sub-county level or parishes. So at least they make something for...which can be development for everybody. Yeah. If you find it's a school, if it's a church, if it's a whatever. If they have formed like...if they have bought like the goats. So for them that's what they were proposing.

Indeed this issue of misappropriating funds has also been recognized by other scholars. A recent study conducted in Bwindi Impenetrable National Park by Tumusiime and Vedeld (2012) found evidence suggesting that local leaders would redistribute such funds for their own benefit, including providing a disproportionate amount to their electorate. As indicated in the current study, such issues may also be present in QENP. By not receiving the funds that would help appease the costs associated with the existence of the park, local communities may harbor resentment towards the UWA, its employees, including the law enforcement rangers, and the park itself.

Community Conservation Department

Responding to the concerns of the community has required a multi-faceted approach primarily driven by the importance of "sensitizing the community" or educating them on the benefits and the importance of the park and conservation. The primary responsibility of the Community Conservation (CC) department is to perform such sensitizations. Jude described how "we have got a department that handles the community. We call it community conservation. So as they go in the communities polishing them, the relationship is coming." Similarly, Frank explained the role of the CC department: "They
go there and teach them, sensitize them. There is a good relationship now." Echoing Jude and Frank, David explained that the CC department "sensitize the communities about conservation, they tell them the benefits, why conservation should be done and tell them the importance of national parks around."

In addition to sensitizing the communities on the benefits of the park, the CC department is also responsible for educating the communities on the potential dangers of entering the park unlawfully. Brian provided an example:

They say, "Look if you do this...I'm stopping you from going [to the park] for this reason: if you go there, an animal will kill you. You are teasing the animal, to give them food. And once the food is not there, you are moving the other side. Another wild animal will think that you are bringing it food. It will have to attack you. Please don't."

Brian went to further describe how the law enforcement rangers would also become involved during such discussions so that community members would understand why the law enforcement rangers would arrest them when they were found in the park or conducting other illegal activities:

But still, they will not understand, so we are combining all the effort to sensitize the community so that they understand the instance when we are stopping them from extending the pillars or extending into the lake shores. Because we have crocodiles that are hostile. They are man-eaters. They will eat them. We have even Buffaloes. Some will go collect firewood within the park. We say "Don't!" And communities they need firewood for fuel, for cooking, for doing heat and everything. In so doing, they don't look at UWA as a good organization because it is tiring them from receiving, getting what they're supposed to be getting.

Brian and others highlighted another important aspect of the CC department: it acted as a conduit to connect the UWA, including the law enforcement department, with the communities. As David expressed: "[The UWA] has a unit known as community conservation and within community conservation, this where their empowered to
sensitize the communities. They act as a bridge between Uganda Wildlife Authority and the communities." And Frank simply stated that "we call [the CC department] for joining the communities with UWA." Essentially, the CC department held a unique position by being part of the UWA, while having its duties and responsibilities directly alongside and within the communities.

In addition to sensitizing and educating the communities, the CC department is also responsible for hearing their needs and concerns. Douglas stated that "the [community conservation rangers] interact with these people and these people to share with them their views, to give their problems." Likewise, Frank added that "[the CC department] is concerned for the communities." In other words, the CC department helps represent the community to the management and other departments of the UWA. This association with the communities is also evident in the manner in which the CC department conducts their operations. For example, the CC rangers go to the communities in civilian clothing rather than the UWA uniform.

As described by some respondents, given the position of the CC department and personnel within the community, they would be able to provide useful information for law enforcement personnel. For instance, when asked how the relationship was between the law enforcement department and the CC department, Sam replied that "there's a very good relationship. In case they also get information, they ought to inform us, 'Ah! You be careful with area: a,b,c,d'. So we have to put more effort to make sure that we clear that
area." Benjamin also noted that operational value of the CC department from a law enforcement perspective:

In areas where [the CC rangers] are, they try...like there is where you find those community conservation rangers. They get information. This is where they work with the [law enforcement] rangers. So for them, they go in the community, they sensitize them. So you find that he or she has got a friend there, so keep on feeding information. So as he [community conservation ranger] gets information, "Eh, I’ve heard..." So he's also like somebody who does intelligence...Because for that [community conservation ranger] will be knowing every part of that community.

In general, all respondents interviewed displayed a high level of respect for those involved within the CC department. The value placed upon the CC department from the study participants can be attributed in part to the believe that the communities are vital in the effective management of QENP. As Matthew observed: "UWA cannot do it [themselves]." Indeed, respondents described the importance of community members establishing a sense of ownership for the park and believed that one way to do so would be through the CC department. One respondent, Dennis, explained his hope: "And I really pray, you know, that management put a lot of effort such that we can bring up the what? The community. To really understand their role."

Memorandums of Understanding

Another way that the UWA has attempted to help communities establish a sense of ownership for QENP is through direct, yet controlled, access to specific park resources. As mentioned, restriction of resource access and use was highlighted as one of the most problematic factors that divided the UWA and the communities. To address this, the UWA uses memorandums of understanding (MoU), a bilateral agreement with communities for members to access resources within PAs. These agreements specify that
specific resources (e.g. firewood, fish) can be harvested during particular days and only from UWA determined locations. The MoU works in the following manner: community members would seek formal permission from the UWA at the headquarters. Once a request has been filed, the UWA sends a representative from to the community to identify areas near the community where resources may be removed. Decisions on providing an MoU are based on whether the harvesting of such resources can be conducted in a sustainable way. Michael explained the process:

We have also [the MoU]. If community members come to ask, request from us, we agree, they can go [into the park] and look for what? For example, for the herbal medicine. We can agree for them because they are our people. They go there with us, not alone. We give them guide, a ranger to go with them. They pick. Ah! But not animals.

Patrick also elaborated:

So they don't... they're not supposed to use all resources, because they have to make an MoU. According to the resource they've agreed to use, like here, like these ones. These ones they have an MoU of harvesting fish. Sometimes they make an MoU, whether getting some firewood. But without an MoU, they're not supposed to. And not all the resources, they have to use those resources. They first have to sit down and first make the MoU with the organization.

All respondents agreed that the use of the MoU was needed as a supplement to more traditional forms of law enforcement, including patrol. Along with the CC department, the MoU indicated the willingness of the UWA to work with the local communities. For instance, Dennis believed that the MoU is an indicator that "we are working hand-in-hand with the neighboring community." Specifically, respondents believed that the MoU was a means for the communities to experience first-hand the benefits of the park. Patrick described how the MoU "has been a very good thing because communities have also seen what they are gaining from the park." In other words, while sensitizing communities to the importance and benefits of the park was perceived to be useful, respondents believed
that unless the communities were able to receive such benefits in a tangible way, such messages would be viewed as pure rhetoric.

Unlike the relationship with the UWA and the communities, respondents were mixed on the relationship between the law enforcement rangers and the communities. For example, Lawrence described how "when [he] go to the community, they treat [him] in good manners." Francis surmised that the communities "are also happy to see when we are together with them. We are interacting together. They're happy." Referring to his own experiences, Daniel explained: "I have very good languages with the communities. Excellent! Everywhere I go, they praise me", he continued, "We work together jointly. Very good terms. I've never met any difficult problems with the communities. I haven't got."

Conversely, Richard believed that the relationship with the communities was "not 100 percent" and Douglas remarked that "some are good people and some are bad people. There are those that like illegalities and those who knows what is being protected."

Dennis explained that the communities had a "mixed opinion" of the rangers. He went on to elaborate:

Others have mixed opinion. Others think for us we are the ones who stop them from getting what they want, especially poaching. There's some other illegal activities, you know, like pit-sawing. Like where I am, there's a lot of pit-sawing. So the community, when they look at me, they always think ill of me saying, "This is the man that is stopping us from, you know, pit-sawing"...Definitely, I can't hide that.
It is important to note that the following is an overview of respondents perceptions and opinions regarding the general relationship with the communities and that such relationships varied amongst and within communities.

7.5.2. "Here I can say that we are not in bad terms with the community": Positive encounters with the communities

Some study participants attributed their own personal positive experiences with the communities to the belief that communities appreciated the work that the rangers were doing. For example, Isaac surmised that community members recognized the value of the work being conducted by the rangers on their own well-being:

These community members, one, they respect us. They know that we are doing a big job and a good job. For example, here they know we are controlling poaching. And some...some people understand...Then again, we are controlling illegal fishing...In controlling illegal fishing, they will get good fish and big fish, which will sell in the market. Yeah.

Chris explained how his experiences with the community were affected by his ability to lend a helping hand. He said: "According to me, how I handle the communities, I have no problem with the communities...Because when there's a problem to help them, I act very quickly to assist them." Douglas also discussed how being able and willing to help the community members was important in developing a working relationship. In other words, being unapproachable would be detrimental in ranger-community relations. He explained:

It's good, it's good. It's good because since you hear somebody, you also help the way he asks. So if you are away from them, it will be difficult for you to do your work. You will not get information. Yeah. You will not get information. "They will say, 'Ah! This one is selfish. He does not want to talk with people'. Which is bad. They will also neglect you."
Respondents believed that this mutual relationship was progressing due in part to the involvement of the community conservation (CC) department. As the CC department fostered an environment for communication between the law enforcement department and the communities, respondents viewed the department to be advantageous for both sides. Jude described how "the ranger who is within [the CC] department is the one to link between me and the community because I'm with law enforcement." He continued:

For [the CC ranger], he's within...he's a ranger, but he's on the side of the community. So if I'm going astray, he guides me...So, the way I look at the situation right now, there's a lot of conversation taking place between the rangers and the community.

Frank described how the CC department would actively engage with various stakeholders within the community in order to sensitize them. He discussed:

Yeah, there is a the team, which I told you: the community conservation rangers. So that team, they are the people who at least help us reduce the [illegal activities] by sensitizing [the communities], making some programs. They meet them at the schools and the churches, giving them a word about wildlife. How it is good to them and to the group.

In addition to the work of the CC department, respondents also believed that their own forms of education and sensitization with the community contributed to the development of a working relationship in QENP. In particular, respondents described how they would also interact with the communities in order to educate them on the benefits of the park and its resources. Dennis recognized his role as a law enforcement ranger in sensitizing the community when he said: "I need to work also in and with the neighboring communities. Sensitizing them about the roles of the park and its values." Patrick also explained: "We do meetings to the communities, teaching them on the roles of the park. And how they benefit from the park." Patrick went on to note that such meetings were used to also educate the community members on their roles in managing the park: "How
they can help us to manage the protected area... Because they're also involved in conservation. We include them in conservation." Ivan further elaborated:

You gather people. You sensitize them about conservation. It's very good. It has worked [in developing a relationship with the rangers]. Yeah. It has worked, because many people don't know. They think animals are there for source, for eating, you have to cut firewood, you have to do what, you have to graze cows in the park. But when you go there and tell them, they get to know. And when you arrest, no one will complain.

As evidenced in his response, Ivan believed that sensitizing the communities had been helpful in developing a relationship by educating the community on the importance of conserving park resources but also the role of the law enforcement rangers. In other words, Ivan believed that communities would be able to better understand why law enforcement rangers would be arresting their fellow community members if they were caught offending.

In addition to this, respondents also described how attending to problem-animals also enabled the law enforcement rangers and the communities to develop a constructive relationship. In particular, study participants described the importance of responding quickly when problem-animals threaten or harm the communities. Chris said: "Yeah, it's very important for a ranger because when there's wild animal attacking communities, you have to act very quickly to help the communities." Felix observed that the communities, "they feel happy...Because they will know we shall help them in chasing the animal. So that is the relationship. It's good." Francis described: "Oh, for the community? They feel very happy if they us moving, Patrolling the boundary or we're together with them to protect their garden. Scaring those animal away."
Sam explained how the communities "are welcoming us very well, because we have tried to control problem animals...[The problem animals] are not destroying like they use to destroy. So [the communities] appreciate when we interact with them." In addition to directly responding to problem-species, Daniel described how it was also important to educate the communities on the dangers of the problem-animals as well:

> Just you go to the communities, then you carry out...conduct a meeting. You first teach them, tell them the dangers of such animal. Problem that's associated with it, then you tell them how you're going to conduct an operation that they can give a hand in assisting. They don't react [negatively], because they know what you're doing with assisting them or benefited them...So once I have reacted immediately, they know that park [rangers] know that they are people. There are there. That's why we have reacted immediately, so they don't become bias.

In general, respondents believed that the involvement of the CC department, their own interaction with the community and assisting with problem-animals helped in the development of a positive relationship with some of the communities.

### 7.5.3. "They are looking at us as enemies": Issues between law enforcement rangers and communities

While some respondents believed that the relationship between the law enforcement rangers and communities was good or improving, others believed that some community members did not view the law enforcement rangers favorably at the present time. Benjamin simply stated that "law enforcement are hated" by the community members since the "park was theirs before." It is important to note that most respondents believed that any form of resentment or animosity between the communities and rangers was not universal and that problems were mostly attributed to poachers living within the communities.
"We're denying them from enjoyment of the natural gifts": Denying access to park resources

Most study participants attributed the divergence between the law enforcement rangers and communities to the fact that the rangers were responsible for preventing communities from accessing resources within the park. Sam explained how "the rangers are doing good work but the communities are not appreciating the work. Because [the rangers] are limiting them from accessing the wildlife. So you find there is a big gap." In essence, limiting access to resources that community members perceived to be available, necessary and in some cases within their right led to a divide between the rangers and the communities. David described how he felt that generally the rangers were treated okay by the community members, except for those engaging in illegal activities: "Okay, the treatment is not bad to those who don't do illegal activities. But to those who do illegal [activities], their treatment [of the rangers] is not good." Asked to elaborate, he continued:

They can't treat you well if you are a ranger...Because you are stopping them from getting resources from the national park. Because there are people who, like there, there are people who decide to make themselves dependent on wild animals: eating, selling, like that. So when you stop them from getting those things, they see you as an enemy. Yeah.

Paul describes the paradoxical relationship between the rangers and the communities whereby the rangers rely on the local communities for goods and services, which also benefit the community as they are able to make an income. However, the proverbial 'elephant in the room' of rangers being responsible for stopping the community members
from accessing resources in the park leads to an uneasy relationship:

You know it is pretense when we go. Sometimes when we go because, of course, we can't do without them. The food we eat we buy from them. The tablets, all these other social incentives that we need, eh. We get from them. But it is because we have money and they have something to be sold. That is why really, but the relationship is not hundred percent okay. It is forced I would say. Because most of them would wish to be sustaining their livelihood in the parks, which they can't. And most of them would have also wished to have settled, say maybe have buildings here. Because they look at this as wasted land. So...they believe that we're really stumbling block, they would have accessed. So that is the problem we have. We have that big problem.

"At the end of the day, they will invade the park": Monitoring illegal activities and arresting suspects

Not surprisingly, study participants described how conducting their law enforcement responsibilities did not bode well with some community members. For example, Francis differentiated and separated 'poachers' from the rest of the community members: "No any problem, except in some other areas where it is if you go in the areas, mostly where it is the poachers. The area of the poachers, they don't like to see us going there." Asked to clarify why, he continued, "Because they're saying we are their enemy. After getting them in the park, we have to arrest them, taking them to court, oh! Running after them to arrest them. So with the poachers, there is no relationship." Daniel also acknowledged the variation amongst and between communities as he observed: "Sometimes it's difficult. Not all people are good. You know the people who are poachers, criminals, so those are the people whom don't cooperate with." He added, "but a big percentage [of the community members], we cooperate. Only the poachers. Even if we go in the villages, we
have some villages which are well-known for poaching." Echoing both Francis and Daniel, Brian said:

This relationship? Well, the relationship between the community and the rangers that one depends on what activities the communities do. Because you find those who don't go for illegal activities, the relationship is not bad. But those who go for illegal activities, the relationship can't be good. Because the communities cannot love you when you are stopping them from doing what they want. Most like poachers. The relationship with poachers is not good, because the poachers cannot love you when you are stopping them from getting meat. But those who don't do illegal activities, you find that the relationship is good, 'cause you will know he's not disturbing the management or he's not disturbing the park and also you are not disturbing and you are not arresting them.

Essentially, respondents noted how their behavior as law enforcement rangers was contingent upon the behavior of the communities. For example, Jude explained: "So the relationship becomes little bit parallel. As they force you do to this, you also force them to do this." He continued to say: "We are protecting [the park], not selling it. So when you try to tell them like that, they will not look at you as a good person." Michael also explained that the relationship between the rangers and the communities varied and was dependent on prior interactions: "[The relationship] depends on the time we have interacted...When you take someone to the court whom you've arrested three times, when he comes back, he will not be happy with you." Alex succinctly described:

We are workers, law enforcement rangers. We enforce the law. Of course we put a lot of force, "No. We don't want this, we fight we them!" You see that scuffle? So, which will really...which you'll not expect somebody to really will be in good relationship. Which is very hard. Because for us our work is to enforce the law, whether you like it or you don't like it.

Related to restricting access to park resources, informal discussions with rangers described how arresting community members would make it difficult to establish a relationship with other members of the community. For instance, relatives and friends of community members who have been arrested would also have grievances towards the rangers. Even in situations where suspects are not family or friends, they may be
providing the community with resources that otherwise would be unavailable to the community.

"They feel the rangers have failed to control these animals": Problem-animals

As mentioned earlier, while the rangers have been assisting the communities with problem-animals, community members still felt that the rangers were not doing enough to address this issue. As Matthew put it, communities believed that the rangers "didn't do anything" about the problem-animals. Paul described: "Yeah, communities around the park, ideally, most of them they don't look at rangers working in the park, they don't look at them in a good way." He elaborated: "Because for them, they feel [the rangers] have failed to control animals to go and destroy their crops." Community members were justifiably frustrated and unhappy with problem-animals raiding their crops, killing their livestock or attacking and even killing community members.

Respondents described how communities not only expected the rangers to address these animals but that communities also believed it was the responsibility of the rangers as the animals were owned by the park or the UWA. In other words, since the rangers were responsible for protecting the park, they should also be held accountable for the park and its resources. Francis described how the community members "are still crying about these animal problems...Because they are saying these animals, it is ours and not theirs." Jude also observed that, "So with the communities, they think that they are our animals. They don't look at animals as our animals as a country." He added, "They say, 'Animals belong to the rangers. The park belongs to the rangers'." Similarly, Benjamin elaborated:
So the most problem we have, it is about wild animals raiding their crops. Yeah, that is a big problem. So whenever you pass, even if whatever, mostly we law enforcement people we face that problem. When we're in the community, they say, "Hey these people, your animal! You people, you're disturbing! Your animal! You come and get!"

In addition to the perception of the community that the wildlife are by the UWA, respondents also described how some community members believed that the rangers were purposely sending wildlife to disrupt their crops or livestock. Jude described how community members "think that for us we just bring in animals to eat their crops!"

Unfortunately, due to the size of the park, the mobility of the animals and having limited manpower, respondents felt that they were unable to respond to or prevent all situations involving problem animals. Jude illustrated:

For them they have cows, goats. So lions tend to go and kill them. So you find that the relationship between the park rangers and the community is not good. They expect us to keep on guarding them. And you now with Queen [Elizabeth National Park], we don't have a fence. It's a big park. And even find at an outpost, we are only four. So anything can happen from the other side when you're on this side. But in the morning, they will not look at you as a good person...With communities, they think that for us we just bring in animals to eat their crops. But as you look at this national park, animals are free to move. Corner to corner.

Respondents also described how some community members would retaliate against problem-species further deepening the conflict with the rangers. For instance, Frank described: "You know these cattle keepers, who are rearing their animals near the protected areas, so they usually get problems from the elephants and leopards." He continued, "When their cows are killed and they tend making a revenge also like they kill an animal, a wild animal." Adam likewise noted that that communities "not very happy because even our animals eat their crops. So this is why I see the other side, they're not happy, eh. They're not happy generally." Adam further explained how the community members would react: "Of course, they started now poisoning our lions, eh? They sacrifice and look for a small bull. Small bull, the cow, eh? And they kill, they slaughter
it and put poison [in it]. The lion comes [eats it] and dies." Note how Adam referred to
the wildlife as "our animals" indicating a sense of personal ownership for the wildlife in
the park. Brian further explained how such retaliatory killings can have unintended
consequences on other species, especially scavengers like vultures or hyenas: "When the
owners of those cows come and finds those carcasses, they put in some poison [in the
carcass]...Maybe you find the hyena. Other birds are eating in it. The birds that preys on
those ones. They end up dying."

Another issue exacerbating the impact of problem-animals is that communities do not
receive any form of compensation for loss livestock or damaged crops. When asked
whether communities received any form of compensation for damaged crops or lost
livestock, Chris explained: "No, they don't have any compensation. And that is...they
even complain about that." Chris further remarked, "In my opinion, at least [the]
government would see how to compensate these people. Because that's why they hate our
wild animals." Like Chris, Adam also felt that "compensation must be done. It is a must!
Must be done." On the other hand, Tony described how such compensation was not
needed since the communities do not have to reimburse the rangers for their services:
"Do [they] pay us? This is how UWA helps [them]."

7.5.4. "It is not good as a ranger to go [in the community] when you are alone":

Suspicion from and towards the community

Due in part to the challenging relationship with some of the communities, most
respondents indicated that they were often suspicious of community members. Some
rangers commented that they were even fearful for their life due to their own personal experiences with the communities or situations they heard that occurred involving rangers being targeted. Isaac exclaimed: "Of course you have to be suspicious! Of course as you come, you are performing your duty, your work. You do know people who like you and people who don't like you." And Michael simply said that the communities can be "hostile" at times. Francis referred to a particular community to illustrate his belief. He explained that the community members "might attack. They're just saying if they get the ranger, they have also to kill [the ranger] because they're already tired every day [the ranger] arresting them, taking them to court." Likewise, Paul expressed his concern:

So for [the community members], they say it is so or they can always want to revenge on any other [ranger] they get. So that is why rangers fear because you can really be a victim of the circumstances. A victim of somebody who wants to revenge. Revenge is on you and finishes you.

In addition to the suspicion the rangers had of the community, respondents also described how community members would also be suspicious of rangers as well. First, however, the suspicions of rangers will be discussed. Respondents identified three main reasons why they were suspicious of the community: threat of being attacked, threat of poisoning and threat of bewitching.

"Because now you're a targeted man": Threat of being attacked

Study participants believed that as law enforcement rangers the threat of being physically attacked was constantly present. Not surprisingly, this was particularly a concern when rangers would go for patrols as they would be encountering suspects who were armed with weapons and may be more willing to engage in physical altercation. In particular, respondents described stories of rangers in other parks being attacked and even killed by
poachers. Such stories may reinforce the perceived threats associated with the community and may even further entrench the notion of an 'us versus them' mentality in some of the rangers. Incidents described by respondents included rangers being attacked by pangas\textsuperscript{32}, speared and shot at. Daniel said: "Sometimes [the community members] lay ambush [and] harm you." And Brian noted:

> Sometimes when we are in an operation, you find communities cutting us. Some rangers have been have been cut with pangas. Some rangers have been speared... You can see that tension. Because the other one looks at a ranger like an enemy. Of course, he ends up hanging him.

Notably, Michael explained how such suspicion influenced day-to-day behaviors and activities as well:

> At night. Avoid moving at night... Moving at night, you know, when you move at night even an enemy gets a gap for track you. For example, not to see somebody very far there, you've not seen somebody from here, you may just feel, for example, a stone just landing on you! When a stone lands on you, then it gets harm to you. That is one of the problem and people will fail to identify who's who. "Who has stoned him? Who has shoot him? Who has done so? How should we do?" Then they shoot you from there, you die.

Paul even described situations where rangers had been seriously injured or killed: "The other year we had somebody who was actually to near death. Previous year some two people were killed. Yes." He further went on to explain the graphic death of one ranger

\textsuperscript{32} East African variant of a machete.
and one SWIFT personnel at the hands of known poachers and other community members in nearby Rwenzori National Park:

[The poachers] were disguised and called to community. Then now the other people served them food. "Ah! We're friends. Very good friends. So don't be worried"... Immediately [the ranger and the SWIFT] put their guns on the separate side. [The poachers] caught them, "You people have been torturing us! Today's your day." Because now [the poachers] had disarmed them. They hacked one who was a ranger. They hacked the leg and then gave him sticks that, "You climb the mountain. Go up because you have been making us go there. Then the soldier, the SWIFT, they just cut him. Terribly. I think what helped the SWIFT boy, by the time they were hacking him like that, it was cold. So the cold breathe sustained his life a bit. But the other ranger was killed completely. Hacked into pieces.

In addition to their own personal safety, Brian described how rangers were also concerned about the potential repercussions on their families. He explained how some rangers were afraid of conducting operations in locations where they were known as they believed community members would retaliate on their family members or even friends. He elaborated that the community members "may not retaliate on you, but on your family. So for that case, [the rangers] say, 'I'm going to carry out an arrest on the other person. The other person knows me. How is my family going to survive?'"

"We fear them. You can be poisoned": Threat of poisoning

Study participants also described their suspicion of receiving food or drink from community members that they did not know or from stores or restaurants they did not frequent. Again, this was attributed to the underlying relationship between the rangers and the communities. Brian explained: "Sometimes we fear [the community members]."
He might give me a drink and I don't take it...because in fear of security purposes...he might do a bad thing to me." Alex described:

So, you see even us, even us ourselves, it is very hard to go and request somebody, you give me water. We are very suspicious. You go and buy something that you are seeing there, physically. You have to be buying, I mean you buy something when you are doing what? When you are seeing, you are looking at that [store]. So have that suspicious. You cannot bring me something and I eat. I fear. Because we are not in good relationship...[You] either may put something for [me], either poison or what, such as those things... Makes you sick and eventually you die. So that's why you see, we are very suspicious of those things [laughs].

Daniel also expressed his concern of purchasing food from the community: "Yes, dangerous, because communities they can try to poison you...When you're buying food in a place, they can connive with that person sending your food. They put poison in it or you leave your water there and just come and put poison there." Some respondents explained precautions they would take in order to ensure that they were not poisoned. Michael, for example, described how he avoided being poisoned:

Avoiding drinking alcohol. At least drinking your soda. Opened when you are there. There's some tactics we use. For example, when we are ten on the table and I have opened by soda. I feel like going for short call. If I go for short call, that soda I have left which remain there, if I'm not with my friend or colleague whom I trust, I will not take that soda when I come back. 'Cause I've seen the situation where I am, 'tis not nice. You may go after urination, you find that people have poisoned [your drink]. Then you die.

Both Isaac and Patrick described how rangers were suspicious of being poisoned from the community because community members may be relatives or friends of suspects that were arrested by a specific ranger. Patrick cautioned:

This depends on the nature of their work, because when you are a ranger, you know the other challenges. I first told you that you might find that you may not have friendship with these communities, because you are stopping them from doing what? What they are doing. And when you arrest their relative, then he gives you food, he might put in poison and he kills you. That's why when they give you like food, you say, "No". You don't take their food, because they don't like you when you have arrested their relatives.

33 "Short call" is a Ugandan term for excusing oneself to go urinate.
Dennis explained that the fear is sometimes so serious that rangers would not even obtain water from the communities, even if they had just returned from patrolling and were thirsty: "You know sometimes when you are tired as a human being you need to drink water, you need to do that. We don't even ask for water from the community. Yeah. Because we fear them...You can be poisoned."

Although none of the respondents interviewed had been poisoned, some of them had heard of situations where rangers were suspected to have been poisoned by community members. For example, Patrick described how "there [was] a ranger that died some time back and there was those allegations that the communities could have been the one. It was an allegation, but we don't know... Yeah, but the allegation and some rumors." Similarly, Tony also had "suspicion but no proof" of poisoning, while Matthew described how there were "instances of [rangers] falling sick, but [they] cannot detect whether it was poisoning.

"Some of them are witches": Threat of bewitching

Some respondents also expressed their concern of being bewitched by community members as well. These respondents described how local witches would use local medicines to bewitch or curse the rangers. For instance, Isaac explained how he believed "somebody bewitched [my] colleague [and that] the community members only [know for
sure]...so for you, you have to be suspicious." Patrick referred to a personal experience he had where a fellow ranger was bewitched:

Then another instance that happened, you know these, sometimes these communities, some of them are witches... These local witches. African witches. So, there was even my friend who was bewitched. The leg, then the leg had to swell. When it swelled, he could not move... So when we went to other witches, then they had to tell us that that person has been between bewitched with a medicine and they had to remove.

"When they see the uniform, at times it threatens them": Implications of being in uniform and suspicions from the community

In addition to their own suspicions of the communities, study participants also described how the communities would also be apprehensive about the rangers as well. As Matthew put it, there are "many implications for not put uniform." Some respondents described how the uniform acted as a symbol which automatically delineated social roles between the communities and the rangers. Patrick described how he felt when he wore his uniform in the community: "Yeah, you feel different because when you are in the uniform, you have to feel that everybody must know [who] you [are]." Alex recalled: "When I'm putting on uniform, of course, when I'm [in the community] all people will just be, 'Eh!' What they call in our local language, 'Sitani'. That they call devil! [laughs]." Frank explained the impact of wearing a uniform was especially heightened in communities believed to have poachers:

Because sometimes in those communities, sometimes it's where those poachers are, and poachers, they don't like to see any person who's protecting the wildlife. For them, they want to destroy the wildlife. So whenever they see a person and they identify that you are, you put on a uniform, so you're a person who are affecting them to finish their programs. So they have to look you, they have to bias about you, so and for you also you have to bias about them that maybe they might harm you.
In general, respondents described that the UWA uniform was viewed by community members as threatening and indicated that the rangers were in the community to investigate or to arrest. Richard described: "Whenever you go there with uniform, 'Ah! He's coming to check on us! Why? Why?' And so forth. 'He's looking for something!' It is also a challenge also." Sam explained: "Yeah, at times [the uniform] threatens some people. They suspect that maybe we are going to arrest them, so they become suspicious of us." Daniel also surmised that "when you are putting on uniform, sometimes communities tend to react to the uniform. Because they know once the uniform is there, that's arresting."

Respondents also discussed that when rangers went into the community to gather intelligence, it was better to wear civilian clothes in order to reduce hesitation, anxiety or resistance on the part of the community. Isaac explained: "When you are in a civilian [clothing], it will be easier for you to get information from [the community]. You'll get information." Asked to elaborate why it would be easier to get information, he continued, "When you are in uniform, it will be hard, because everyone will be identifying you directly that this is a ranger." Patrick described how "communities fear uniform. The community fear you" and as a result "they can't even come near you. Then getting information becomes difficult." Matthew believed that wearing civilian clothes was important for intelligence-gathering since it allowed rangers to "visit like any other [and to] hide [themselves]" from the community in order for them to "pose questions" they would not be able to ask if in uniform. And Benjamin said: "We don't want people to
identify us. And again, it will not be easy to get information." Similarly, Daniel explained the impact of the UWA uniform on intelligence-gathering operations:

> So it depends on the nature of work you are going to do. Like, when you are going for intelligence or information gathering, it's not good that you go with uniform, because somebody will hide what? Information. But when you're are putting on civilian clothes, that is good... But when you're putting on civilian, somebody can give you information, which is relevant to what you are going for...When you are getting information from communities, don't put on uniform. That's barrier. They will not give you, because he will know when you're in uniform, you're armed. And he give you information, you may turn against him and arrest him. So that's why sometimes rangers don't put on uniform when they go for such operations.

In addition, study participants described how wearing civilian clothes made it easier for their community informers to provide them with information. Patrick believed that "when you are with a uniform, if you have an informer, it becomes difficult for him to come near you." Similarly, Chris surmised that informers "can't give you the information in uniform. And that one who's going to give you information will also fear." He further explained that "when other [community members] are seeing him with you, [they] say, 'Hmm. Why is this one with the UWA staff?'" Similarly, Francis recognized the importance of concealing the identities of informers when he said: "We need to protect our informers. Not to give them problem", while Matthew remarked: "When you put on the uniform, the informer may not be safe...others will think [the informer is] conniving [with us]." In other words, Francis and Matthew believed that speaking to an informer while in uniform would result in other community members, possibly those involved in illegal activities, suspecting the informer's involvement in law enforcement operations.

This focus on informer anonymity and safety can be attributed to the threat of retribution from other community members. Respondents believed that by speaking with rangers,
informers would be implicating themselves which could result in other community members retaliating on them or their families. Douglas described how "even an informer has a problem if a village mate revealed that he is the one who is [informing]...That is also dangerous to him." In addition, Adam said, "So there are those challenges, whenever those informers feed us with information there and then, the poachers realize it, [the poachers] chase [the informer] from their family and burn their houses." Patrick explained:

The reason why it becomes so difficult, you know, these people in these communities, some of them are hostile. When they identify that it's this one who is giving information about poachers then try to react on what? On that person. So when he also makes sure that he does not saw these people that he has been with who? With you. When you're in your uniform he will think that everybody will see that this one is talking with what? With the ranger. So when you arrest people they will think that he's the one who did what? Who told you.

Francis recalled one incident when community members "had attacked [an informer], burned his house and he had survived narrowly. He ran [away] with his family." Patrick described one incident where an informer was attacked by poachers: "One time when we arrested people and [the poachers] suspected that person to be the one who gave us information." He continued: "Now, what [the poachers] did, they went and beat the man. They beat him. Those poachers surrounded him and started beating him." In addition to physically attacking the informer, the poachers also "cut his matoke\(^{34}\) in the banana plantation...Yeah, they had to destroy his crops. Because they want to make him fear so

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\(^{34}\) A type of banana.
that he cannot give information another day." Dennis also referred to an incident where an informer was retaliated against:

Oh yes, I have the experience. One time it happened, we made an arrest and we recovered meat in about three home-stays and we arrested all of [the suspects]. So the guy who led us, who leaked the information to us, had a nice family. He had planted coffee. But what the community did, the community members, after us now leaving the place, they went and cut down all the coffee. His houses were burned. And as I talk, the man is not in that village. You see. That is the problem the community also get after leaking the information to us. Because you know when it reaches to meat, those people think the other person who go and earned is so good to them because he take meat for them. He's not supposed to be revealed. So those people always get a lot of problems. That's why sometimes we always protect them not to be identified.

Lastly, respondents also believed it was important to sensitize the community in civilian clothes as such an approach would be less intimidating to the community members.

Indeed, this was the approach utilized by the CC rangers when they sensitized the communities. Sam observed: "Mostly these community conservation rangers, when they go for sensitization, they put on the civilian attire. Because at times when [the communities] see the uniform, at times it threatens them." In similar vein, Daniel said, "When you are carrying out community conservation awareness meetings, uniforms are not good...because communities react to the uniform so much." Essentially, respondents believed that wearing a uniform hindered their ability to sensitize the community as it visually separated them, whereas civilian clothes represented more of a collective identity.

7.6. Poaching in Queen Elizabeth National Park

Respondents identified a number of illegal activities that occur within the park, including trespassing, illegal grazing, illegal fishing, illegal firewood collection, illegal charcoal burning, encroachment, pit-sawing, tourist-related illegal activities (e.g. off-tracking, not paying park fees) and poaching. As poaching was discussed in more depth by most
respondents, poaching will be discussed here in-depth. Most respondents believed that the poaching of wildlife was the most harmful and frequent illegal activity in QENT and highlighted the severity and impact of such activities from an ecological and conservation perspective. As described by Dennis:

The most harmful, generally, I would say poaching. Do you know why I choose poaching? [Because] once you kill an animal, doesn't come back to life. Once an animal is dead. It's dead. It's like we human beings. Once you're dead: finished. No more. So that's why I pick poaching as being the main and generally we need to put a lot of effort on poaching. Animals like big mammals like an elephant, when an elephant is killed, it takes time for you to again what? Get another elephant. Yeah.

As indicated from Dennis' response, the finality of poaching is primarily why he believes it is the most harmful illegal activity. Isaac described that the reason why poaching is the most harmful is because some tactics (e.g. snare traps) may not necessarily kill the animal, but may injure and harm them. In other words, in the pursuit of the hunt, poachers may attack, injure and even kill animals that they do not even want. He explained: "Because those people who go inside to poach, they will reach there, they will injure some animals and they will not kill them. The animal has got injured and has a wound. Then again, they will kill some animals." He added: "When they are chasing the animals, some animals, these young animals can knock over the trees and fell down. They die. Those poachers don't want them, because they still small, so you can see that it is so harmful." Isaac's response raises an interesting component of poaching that is overshadowed by successful poaching incidents: the collateral damage to wildlife.

Indeed, official figures attempting to document the severity of poaching activities is often based on identifiable measures (e.g. carcass of a dead elephant with missing tusks), which has proven to be a difficult enough task. Attempting to quantify the collateral damage of poaching may be nearly impossible; however, it was clear that some respondents, like
Isaac, were aware of such additional problems caused by poaching aside from the animals that are *actually* removed from the park.

In addition to the ecological impact of poaching, some respondents also highlighted the harm associated with the human dimension of poaching. As respondents were directly responsible for monitoring QENP, they recognized the potential of encountering poachers, who may be armed. In his response, Felix referring specifically to armed poachers described how poachers can also harm people: "Yeah, because some the people who involved, the poachers, some they use guns. And they have [some]thing can harm someone. So I take it as a dangerous what? Illegal activity." Other respondents also discussed the economic harm caused by poaching as well. In fact, in 2012, Uganda placed first in Lonely Planet's 'Best in Travel' List and this is in large part because of the wildlife inhabiting the country. It was clear that some respondents recognized the important role that QENP and its resources had in Uganda. For instance, Francis said that "without animal, there will be no tourism to come in the park." And Alex illustrated how "we get clients to come and do what? To visit Uganda. Of course, if the animals are...nowhere to be seen. What do you expect? There's no tourism now. There's nothing."

### 7.6.1. General poaching characteristics

From a general standpoint, respondents believed that the characteristics of the park facilitated an opportunity for poachers to operate with relative impunity. Both formal interviews and informal discussions with rangers revealed that three main factors of

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QENP were believed to facilitate an environment conducive for poaching: 1) the abundance of targets, 2) the close proximity to the communities where most of the suspects originate from and, 3) the sheer size of the park allowing for easy access and escape, while also making it difficult to monitor the park for law enforcement. This belief was best exemplified by David's response:

Yes, the abundance of animals and the proximity of these animals moving to [the] community. [The communities] say that animals are many so communities will be forced to come and follow these animals to? Poach them. Two: the park itself is situated in an area whereby when poachers go there and the size of the park, it's too big! They are access of reaching there. They have a chance of entering, poaching and going away, because of the wide range...With very many areas of escaping. Various routes. Routes of escaping. You keep here [points to one area], they pass to the other side.

Directly related to these factors, respondents were asked about specific spatial and temporal characteristics of poaching in QENP. Given that the respondents were field rangers, it was believed that they would possess important ground-level insight on the behaviors of poachers who operate within the park. Further, such information may provide information useful in better understanding patrol deployment and behavior.

"They can't go where there's no animals": Spatial characteristics of poaching

Study participants believed that majority of poachers who operated within QENP came from the communities bordering and within the park. Not surprisingly, this was attributed to the proximity to the park and the availability to gain needed resources. Notably, some respondents described how community members from the communities bordering the park were more likely to poach than the communities within the park. Sam explained: "At times you find the communities living within the park, they don't poach. But most those ones that are outside the park, which are just surrounding the park, they just...those are
the ones that poach.” This fact was also brought up before one of the patrols that the
author participated in as one of the rangers explained that since some of the fishing
villages within the park are able to legitimately gain access to resources that communities
border the park might not. Unfortunately, as the ranger further explained, the pressures on
illegal fishing are leading to under-sized catch for the fishermen. As a result of this
situation, villagers within the park are now beginning to resort to poaching to
compensate.

In addition to the communities within and bordering the park, some respondents also
believed that poachers from the neighboring Democratic Republic of Congo (DRC) also
operated in QENP as well. Paul explained that Congolese poaching activity in QENP
could be attributed to the mobility of the animals between the two countries:

So now the biggest problem is this animals are not sensible... The [animals] in Congo crosses here. The [animals] of Uganda cross to Congo. They get
killed in Congo. That's why we have a problem at the borderline. Because we try to give them really conducive atmosphere but we cannot restrain
them from crossing the border. When they cross there, they are shot...Sometimes they have been shot there and run and die on our side.

The mobility of the wildlife was also brought up during an informal discussion the author
had with rangers while being dropped off for a patrol:

During our drive I was able to talk to one of the rangers on our way down
to the drop-off point. He basically mentioned that big game was beginning
to physically shift from the DRC to Uganda due to the pressure [of poaching]
that was happening in DRC. In particular, elephants were moving to Uganda.
And as a result of this, more poaching - elephant poaching - was happening
in the Ugandan side, particularly within the last 5 months (October 13, 2012:
Fieldnote)

Essentially, the ranger described how he believed that poaching had altered the behavior
of the elephants in the DRC resulting in their migration to Uganda. The ranger went on to
further describe how poachers from the DRC recognized this shift and had begun poaching more in QENP.

In addition to the mobility of the animals, Paul also referred to the "porous borders" separating the DRC and Uganda. In fact, it is not simply the close proximity of QENP to the DRC, but it is also the easy of crossing undetected which enabled poachers from the DRC to poach in QENP relatively undisturbed. Indeed, the author was able to see how easy it was for poachers from the DRC to enter QENP as one of the patrols observed was along the Ishasha River, which is the river separating Virunga National Park (DRC) and QENP. Only the river separated the two countries and it could easily be crossed if need be.

While some respondents believed that poaching can happen, as Francis put it, "just anywhere", others believed that poaching occurred in specific areas within the park due to the behavioral patterns and activities of wildlife. For instance, Chris described:

Okay you know these, our animals they have some areas where they graze mostly. Like the hippopotamus, they have their routes where they pass. Daily, daily, daily. And that's why these poachers spot some points where they can get animals. They can't go where there's no animals.

Ivan also referred to the animal routes in his response when asked where poachers would most likely place wire snares: "In the routes. They put [wire snares] in the routes of the animals, when they are going for water or when they are going for shade. Or they're going towards the communities. So [the poachers] put [wire snares] in the routes."
These micro-places, which are referred to within the criminological literature as crime attractors (Brantingham and Brantingham, 1995) draw offenders due to the perceived high opportunity to offend in such areas. Respondents described since animals have distinct, identifiable routines, poachers would be able to know the prime locations to place wire snares and traps or they would know where to go in order to hunt with guns. In other words, while the park offers a large landscape to operate and offend within, poachers would target specific places which were believed to offer the best chance of success.

As highlighted by respondents and as witnessed by the author during patrol observations, the most identifiable type of crime attractor that rangers believed to be within the park were bodies of water, particularly watering holes. Douglas described how there were "very many animals along the water place[s]. And you find the poacher goes along that side." Jude described how "you suspect the wire snares, they are surrounding this water pond here." Jude also explained that bodies of water were also places where poaching camps could be found since "poachers also need this water, because they come and sleep in the park." The author also had this explained to him during a number of observed patrols as well. For example, the author noted on one patrol:

"During this point in time, we were basically patrolling near the water edge mainly because of the fact that this was a good area for poachers to move back and forth between the DRC and Uganda...We were able to find a camp that was used by poachers. This camp itself was very close to the water and the ranger in command explained that these poachers were probably poaching hippos due to the proximity of the water and since the area had a large number of hippos. In other words, poachers were staying in places where they could actually engage in poaching with the least amount of inconvenience to themselves. The ranger also explained that the same was close to water because the poachers themselves would need the water as well, either to cook with or to drink (Patrol 7: Fieldnote narrative)"
"So this is the time whereby we should open our eyes wide": Temporal characteristics of poaching

From a micro-level (e.g. time of day), most respondents believed that poaching can happen at any time of the day depending on the tactic being used. As will be discussed shortly, poaching can be committed through a variety of methods and the choice of method will inherently impact when poachers would go into the park. However, some respondents described how poachers would operate very early in the morning in order to target animals at watering holes, as well as avoid rangers. Frank observed, 'During daytime, someone can say, 'No, if I enter maybe at 6AM in the morning, I will be safe [from the rangers].' That one can also happen." Conversely, Alex described how "those [poachers] they will walk at night."

From a macro-temporal perspective, the relationship between seasonality and crime has generated much empirical research (Baumer and Wright, 1996; Cohn and Rotton, 2003; Farrell and Pease, 1994; Hipp et al., 2004; Quetelet, 1842/2013; Van Koppen and James, 1999) and season was found to also play a part in poaching in QENP. Although some respondents believed that poaching was, as Lawrence described, "a continuous exercise" and that it "has no season", others described that poaching increased during the "festive seasons". For instance, Douglas explained how poaching "becomes very serious during festival seasons, especially the 25th of December on Christmas [and] Easter", while Daniel said that "during the holiday festive, during Christmas days. Yeah. When there's a holiday, like in November and December, poaching is high". Adam also described the
When respondents were asked why they believed that poaching increased during the festive seasons, respondents described how poachers would be attempting to get meat for consumption or to sell in order to get money to buy gifts for their family and friends. Paul described the link between the festive season and poaching: "You know towards Christmas season, those festivals. There's Christmas, there's Easter. Because people will attach those festive seasons to eating a lot of meat...Festive seasons. Yeah. Because everyone wants meat!" Adam also explained how "poachers are very many looking for what they will eat, looking for what they will put on, clothes [after selling the meat]."

Similarly, Frank said how poaching "mostly increases during the Christmas days. People are working hard to get meat for Christmas to get money for buying luxuries." Following Adam and Frank, Dennis described how poachers "believe that when it is Christmas period or festive season, one: they will also be looking for money. Two: they will also be looking for meat." Sam summarized:

Yeah! You find these festival seasons like during Christmas, Easter seasons. So you find that people are poaching such as that they can get money they will use during those festival seasons. Or the meat that they will eat during the festival season. That's why you find the poaching being at a high rate. So you find also when the work becomes too much to the rangers. You find that they have shot here a hippo and on the other side they have already shot like that.

Other respondents also described how poaching would increase during the dry season as the limited amount of grass in the park results in animals coming closer to the
communities in order to graze. This would result in wildlife becoming easier targets for poachers. In fact, some respondents described how poachers would start fires in order to facilitate germination near their home area. As this is considered to be a poaching technique, this will be discussed later. Although not mentioned by the respondents, it can be assumed that bringing animals closer to the communities would increase the potential for human-animal conflict. Incidentally, it may be possible that this could further increase the divide between the communities from the UWA and the law enforcement rangers. Further, it may be possible that poachers may be viewed favorably by other villagers if they hunt the problem-species. Lastly, Patrick surmised that poaching increased during the harvesting season to accommodate increased demand from the community. He noted: "Like harvesting season, that's when the crops have grown and why [poaching] becomes too much. Because now the communities, those who are harvested their foods, they get money [so] that they can buy the meat."

It is important to note that respondents were also keen on the interaction between space and time on poaching behavior. As discussed earlier by Tom, poachers would start fires during the dry season to force animals to graze near their communities. Further Tom discussed how law enforcement rangers would patrol near watering holes because those areas were where poachers were expected to frequent, especially during the dry season. Conversations with rangers on patrols helped confirm Tom's statements as the author found out that patrols would tend to focus on large bodies of water, like rivers and lakes, during the dry season since watering holes would typically be dried up. During the rainy
season, patrols would focus on all bodies of water. Jude also explained how the spatio-temporal nature of poachers would impact patrol deployment and decision-making:

On this one, it depends on the season. We have seasons. We have wet season then dry season. So when we are doing our patrols, we always target during dry season, poachers tend to enter where there is water. Because they expect all animals to come here and take water. That's what we normally target when we are taking our patrols. You suspect the wire snares, they are surrounding this water pond here.

7.6.2. Poaching techniques and strategies

As summarized in Table 7.3., poachers operating within QENP utilize a number of techniques and strategies to offend. It is important to note that the following techniques are not mutually exclusive and poachers may employ a number of methods during any given time. For example, a poacher may spear an animal that has been caught in a hunting net or a wire snare. Generally speaking, most respondents referred to the use of spears throughout these discussions irrespective of the main method utilized by the poachers. However, it should be acknowledged that the use of spears on their own is also a technique (e.g. poachers chasing and spearing buffalo). Respondents believed that the most utilized technique was the use of wire snares.

Usually made out of electric wire or motorcycle break, there were two ways respondents described how wire snares were used in QENP: first, the wire snare is placed on the ground, while being attached sturdy tree branch or tree log. When the animal steps into the trap and gets 'snared', the wire tightens on the leg as it attempts to pull away. The second method involves tying a wire snare at an elevated level around a tree and involves
Table 7.3. Poaching Techniques in Queen Elizabeth National Park, Uganda

<table>
<thead>
<tr>
<th>Technique</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Embedded Nail</td>
<td>A nail implanted within a thick piece of wood and placed on an animal path. Used to limit animal mobility. Typically used in order to target large animals like elephants.</td>
</tr>
<tr>
<td>Wire Snares</td>
<td>Wire snare traps vary in size and material and depend on the animal being targeted. In order to be useful, wire snares are tied to a tree branch or log (depending on the size of the wire and intended animal) along animal paths, especially near watering holes.</td>
</tr>
<tr>
<td>Metal traps</td>
<td>Heavy-duty metal traps would be placed in a small hole created by the poacher and covered with grass and stones.</td>
</tr>
<tr>
<td>Pit traps/ Ditches</td>
<td>Deeps pits that are dug by poachers to trap animals. Is not used as frequently as other methods.</td>
</tr>
<tr>
<td>Dogs</td>
<td>Hunting dogs are used to chase after animals to the point where the animal is exhausted. Bells are tied around the neck of the dog so that the poachers are able to determine its location. Once located, the poachers would spear the animal. Hunting dogs are also used to gather and herd animals, as well as scare animals into separating from the herd. Can also be used in conjunction with hunting nets.</td>
</tr>
<tr>
<td>Spears</td>
<td>Used either by itself or within another technique, spears are used as an instrument to kill the animal.</td>
</tr>
<tr>
<td>Hunting nets</td>
<td>Used primarily in the savanna, hunting nets are tied to two trees and poachers chase the animals, usually kobs, into the nets where other poachers are waiting to spear the animals. Poachers can either do this alone or with the assistance of hunting dogs.</td>
</tr>
<tr>
<td>Fire burning</td>
<td>Poachers would burn specific areas of the park in order for the area to germinate faster. This technique would be used to alter the behaviors of the animals so that they would graze in such areas known to the poachers. In some cases, these areas would be nearby the community. Fire burning would also be used to burn tall grass in order for the poachers to be able to see potential targets and rangers better.</td>
</tr>
<tr>
<td>Poison</td>
<td>Poachers would take specific fruit (e.g. pineapple, jackfruit, bananas) and fill the inside with battery acid. This technique is specifically for elephants as poachers know that they like to eat such fruit.</td>
</tr>
<tr>
<td>Guns</td>
<td>Primarily used to kill larger species, including elephants, buffaloes and hippos. Guns are believed to come from a number of sources, including the DRC.</td>
</tr>
</tbody>
</table>


the animal putting its head through the snare like a noose. Similar to the first method, as the animal pulls away the snare tightens.

Most respondents believed that the reason why wire snares were so prevalent in QENP was due to the ease of access to the materials which are used to construct the snares. As Isaac explained: "So [the poachers] buy those wire snares from, I think the market...They go there and just buy, just the [wires] as usual. This ones of electricity, these wires, they also use those wires." Respondents also described how the material used would indicate the type of species the poachers would be targeting. Sam described how wire snares "are for specific animals...You find these small wires [made out of] motorcycle breaks. Have you ever seen a motorcycle break? The wire." He clarified: "Like that one can trap a warthog, a kob, even those small antelopes. Then there's these ones, like electric wires, which can trap a hippo, an elephant, buffalo. Those other big mammals. Yes, so there's traps [for] specific species or animals." Likewise, Ivan elaborated:

> Depending on the size and the weight. Of course, they can't put a net on buffalo, it will break it. But antelope, it'll get there. What else? You know all those depends on the size of the animals. Then, if there is a big wires, big wires here...they can make a big trap and the big trap can kill a buffalo. But the wires, snares, they're used for hippo, kobs, antelope. For that range.

It should be noted, however, wire snares are an indiscriminate method of poaching. As Tom noted, wire snares "doesn't select who has come." In other words, regardless of the intended animal, wire snares can trap and injure a number of other animals. As will be discussed later, on one patrol observed by the author, the group found a broken snare and the rangers decided to investigate the immediate area to assess whether the animal that had broken free was still around and if it was injured.
In addition to wire snares, Sam explained that poachers would also use heavy-duty metal traps as well: "Then there's others, heavy machines. It is just open. When the animal steps on it, then [clasps hands together], it just gets stuck on the what? On the leg or any part of [the animal] which it has caught." Dennis also described how poachers would also use ditches and pit traps, combined with wire snares to catch animals:

But these days, they've developed a system, you know, they did a hole like half meter deep. Then they tie the stick on the wire, then they put down there. Then on top they put what? Stones. And they make it what? Firm. Now, once it happens to trap the animal, it can't pull it what? It can't pull out that wire, because it's deep on the ground. And you know, after reaching there, if this is the stick, they just tie and put it across there. And put the stones on top and they make sure that it's very firm. Yeah. So that one, if you're not wise, if you're not careful, you may not even see.

Another technique used by poachers involved the use of an embedded nail within a piece of wood and is meant to incapacitate the movement of the animal. Sam described the technique in detail:

As I told you, there is different types of traps: there are wire snares, there are those ones where [the poachers] get a piece of timber, then they put some nails pointing up. So they just target those areas, the routes these animals pass. Then, if it doesn't see that trap, then it steps on it. Then it's movement is lowered. So they immediately come up or they just go looking along, then they spear it.

Frank also referred to this technique but specifically discussed how it was used by poachers to target elephants. He observed: "For elephants, they use nails. They prepare the nails and when an elephant step on it, then it can't move very far. It keeps around [the
area], and [the poachers] come and spear it." Paul also explained that this technique was used for elephants as well when he said:

And then there's some traps that [poachers] inject, you've seen our traditional [wooden] stool, they go and cut really a piece of wood. Cut like that stool. Then they put a six-inch nail, put a...spread a six-inch nail on [the wood]. Then make it stand along the footpath track of elephants. When an elephant comes and it steps on it. You know given [the elephant's] weight, the whole [nail] will enter. And that makes the [elephant] stand there. It will definitely just get stuck there. And [poachers] just come and hack it either with knives and just kill it. They take the ivory.

In addition to such traps, respondents also explained how poachers would use hunting nets as a means to poach, particularly in the savanna. Respondents described how poachers would simply tie large nets around adjacent trees or poles and would then chase animals, usually kobs or other antelopes, into the net where they would then spear the caught animals. Daniel described how this technique was used by poachers:

The just cast the net, you know hunting nets. They use some poles, they place a pole in the middle, they can put like two poles, like three [on each side]. They just cast [the net]. After casting [the net], then they go around. Surround the what? The antelopes, the Ugandan kob. They start chasing them. And once an antelope, a kob comes, it enters in the net. That net falls down with the animal, then [the poachers] spear it."

Similarly Sam noted how poachers would "just tie the net to the other tree, then [the other end] to this [tree], then they start running after them...[The antelope] have horns or whatever, so the horns get stuck in the what? In the net." Douglas explained that poachers "lay their nets, then they go and chase the animals. [Other poachers] remain on the nets, then when [the animal] falls into the nets, they spear it."
Study participants described how poachers would also use dogs in a number of ways. For instance, Sam explained how poachers would use dogs to identify where potential targets are located:

And at times, they use these hunting dogs. We have these domestic dogs, which we normally keep in our homes. So they go with them, they put ringing bells on their necks, so as they reach inside of...you know when they are going, they put some grass within the ringing bells so they are not heard by the communities. So as they reach inside the park, they remove the grass, so when the animal is running after the...when the dog is running after the animals, those bells keep on ringing for identification to...you know that the dog is faster than you, then he may know that "Ah, he has reached a certain place".

Brian described how dogs would be used to distract animals: "Dogs assist [poachers] in carrying out the hunting. When [the dogs] are barking, an animal will not run. When [the dog] is there, an animal wants to maybe [kill] a dog, a poacher comes and spears it there."

Similarly, Adam explained:

Also, [poachers] come with dogs so whenever a buffalo insists wants to kill a dog, they spear on it. They spear, they spear until it is down. So the dog convinces that buffalo not to move a step, if he insists on fighting the dog, then it will die there. So this is how they manage to kill the buffalo, these poachers...They go with dogs. They chase a buffalo. The buffalo resists, wanting to fight the what? The dogs. The poachers comes very close with spears. So this is how the buffalo dies.

Frank and Douglas explained that dogs were also used to herd and tire wildlife. Frank said how "the dogs just like a herd of cattle, a herd of buffalo, herd of these antelopes here...[The dogs] keep on the animal until the animal is tired. Then, the poachers also they come and spear [the animal]." Douglas described how poachers would "go with the dogs, then, [the dogs] run after the animal until it gets tired...They will kill the animal." Felix added that poachers would use dogs to also scare animals so that they would be separated from a larger group. He illustrated: "Yeah, [poachers] use dogs...they use dogs
to scare [the animals], then the [animal] that goes astray [from the herd], they spear it from there."

Respondents also described how poachers had recently been poisoning elephants, especially in the Ishasha sector, using fruit. Sam explained:

Mostly, it is happening on elephants...Mostly, you find that [the poachers] use pineapples. They [have] to put acid. Or they get those jackfruits. So what they do, they put those fruits that I’ve mentioned within the routes of the elephants. So as the elephant passed, they have to get that [fruit], smells it and starts eating it. At times, you find when [the elephant] has just died, within that area.

Jude also described how poisoned fruits were used to kill elephants:

Poachers sometimes they use poison. Mostly with elephants. They poison them. And how do they poison them. You know with elephants they need some fruits. So somebody can buy yellow banana, somebody can come with pineapple. Somebody can bring like fruits like jackfruit. He poisons then he dumps it along the trail. So when they come across it, eat and move and then die a [short] distance.

Michael recalled a recent incident where the organization "had caught two poachers who put poison in pineapple. Dangerous poison in pineapple...So we suspected them they were looking for what? For ivory. That one was real ivory." Upon further informal discussion with other rangers, the author found out that the poison used by poachers was battery acid.

As mentioned earlier, poachers also start fires during the dry season in order to reduce the vegetation in the PA and forcing animals to look for food near the communities. In other
words, poachers would alter the routines and behaviors of the animals to make them
easier targets. Tom explained the intention behind the fires caused by poachers:

When the poacher puts the fire, the fire can destroy everything... So that means
there is no food left for the animal. Then the animal will address for the food
in the village. To where the people, the poachers stay. Then the poachers will
put their wire snares and target the animal from there. Sometimes even hunt them
physically at night from there. They spear...It's very easy now. Something has
come nearer. You don't go and look for it in the park. You've destroyed the vege-
tation which it feeds on, the vegetation is now on your side...It changes now the
behavior, because the animal does not want to die. Without food, of course,
it needs to eat something.

Similarly, Alex described how "when it is dry season, the whole place, this park, the
grass gets dry. And now the poachers tend to do what? To burn those, I mean, they tend
to burn those grasses, so that it can be easier for them to do what? To poach." Asked to
further elaborate, he continued:

Because you know these young...I mean...these grasses which are very green
when they are coming out. So the animals, they like those grasses. They come
from the other place which is not burned, they run to this place which is already
burned. So on that point, the poachers they get the chances of doing what? Of
getting the animals when they are gathering at that place. When they are getting
the good grasses. You get me?

Echoing Tom and Alex, Felix illustrated:

Yeah, sometimes you find poaching is more like when there's like during dry
season. Because by that time, animals they...grass is not enough pasture. So
and in the community, you find that there is grass. So these animals, they'll be
targeted from the community land...And those poachers they know that in the
protected area the dry season is starting, so they burn in their area. So when
their area is not germinating, the animals will run to their grass, so they will
target them from there. So during the dry season, it is when poaching is high.

Recognizing that poachers start fires for their own benefit, the UWA conducts "early
burning" or "controlled burning" during the rainy season in response. Tom explained how
"we do early burning so that we can plan on our animals earlier, so that when the poacher
burns during dry season, there is where these animals can go to get food in the park." In
other words, early burnings are conducted so that germination can occur within the park,
thus providing animals with more options rather than having to go near the communities.

Tom further clarified the rationale behind the early burnings and where they were specifically conducted:

> Early burning what we do mostly, we target areas near the road where visitors always pass. So that the new grass...we do it during rainy season, like now, this is October, we are doing it. Early burning. When you burn near the road, the new grass grows very fast because there's moisture, there is rain. You find that most of the animals move because they need fresh grass. They come nearer to the roads and be easily seen by tourists. And then also we target areas where we think fire breaks very easily...so that nobody puts fire which will continue to the park. We block. We block that area. We also burn [near] water areas, but inside the park. So that during dry season, the animals concentrate on those areas. Yeah. So that they don't go away to look for food. There is already food in the park. If you've not done that, you have not planned for your animals.

Notably, Tom further discussed how burning near the roads was to help ensure that tourists were more likely to see the animals. From a preventative, however, this can be seen as increasing the guardianship of the animals as well. In addition, when the author asked whether poachers would just go target the areas that the UWA had burned earlier, Tom replied: "Our rangers are also well sensitized. During dry season, they monitor areas where there is water so that they reduce the poaching."

Lastly, respondents referred to the use of firearms as a poaching technique. Some study participants attributed the use of guns to the recent increase in the poaching of elephants within the park. Adam described: "What is not so rampant these days is killing of elephant with guns. That one has been so rampant and we don't have rest with that." In his opinion, Felix described that the use of guns in QENP could be attributed to a small group of poachers seeking ivory: "[Other poachers] use guns, but those of guns, they are few. Especially who are getting ivory. Killing elephants. They're the one who use the gun." In addition to killing elephants, some respondents described how guns were also
used to kill other large wildlife as well. Daniel explained how, in general, guns were used for the larger wildlife: "Many of those poachers that use guns poach elephants for tusks and hippos [for meat]. Those big animals." While Ivan noted: "For buffaloes, [the poachers] can use the dogs and spears, but mostly, they are using guns. Guns are what they will use."

When asked where the poachers would attain the guns, some respondents admitted that they did not know. For instance, Alex said, "I'm not so sure where exactly [the poachers] get the guns...You know, the guns now are many in Uganda [laughs]." Others believed that the proliferation of weapons during past political uprisings are partially responsible for providing easy access to guns. As Paul explained in detail:

Then also we have the Ugandan setting itself. You see, where we have in Kidepo [National Park], we have little ivory poaching. Where we have this much ivory poaching is Queen Elizabeth and Murchinson Falls [National Park]. And sometime back when we had rebel activities, when we had several uprisings, we had them in Queen Elizabeth and Murchinson Falls. And there's a belief that so many people kept quiet with the guns in their hands. So it is like these guns are the ones now that are cropping up with these activities. Yes. Because they have...not all people manage to declare guns. So they just went back home with the guns. And they're using them now.

Adam also described how "during the time of war, soldiers would throw the guns anyhow. And the local people so have the guns, eh? You see?" Adam went on to further describe how poachers would be able to borrow weapons from security personnel and officials, especially those involved in elephant poaching: "The guns of course this is at the top officers, the top officers are included in this business of ivory, so they have guns with them." Similarly, Isaac noted: "You know, there are [poachers] that use guns. Firearms. So you find, they hire [the guns] from these other security organizations. [The poachers] enter the park and they start shooting." Paul also described that other security
forces may also be involved in providing poachers with weaponry used for poaching. He recalled a personal experience:

And then we have our own security systems, because many occasions when we arrest [a poacher] we get either UPDF attached, police officer attached, or you know our own internal security who has entered with his gun. Because one time we actually arrested some poachers with a gun, then we asked [and] he revealed the owner of the gun...When we went [to investigate], actually I participated in the operation, we went to [the UPDF personnel and] say, "Where's your gun? We need to go for operation." [He] Say, "No my gun is in the police." [We] say, "No, put on uniform and we go and pick the gun. This operation needs a gun." When we're now nearing [the police station], [He] say, "Now my gun was taken." [We] Say, "No, we need!". So later on he said, "No my gun is in the bush". So we said, "Is this not your gun?" [Referring to the confiscated gun obtained from the poacher]. We took [the UPDF personnel] to court.

Lastly, some study participants described that the use of firearms for poaching can be attributed to the involvement of poachers from the neighboring DRC. Paul surmised:

"Congo is there. And in Congo I would say now every village has its own army force. So those guns are dotted everywhere. They're the ones causing wreckage to wildlife, specifically elephants and hippos." Interestingly, Jude believed that poachers using guns were "in Congo" and that "they always come across, hit, they remove the ivory and then [go] back. But when you come to Uganda, we don't have those illegal guns." He went on to explain that this was the reason why poachers in Uganda were using other techniques like poisoning.

As shown, there are a number of techniques utilized by poachers in QENP with the techniques and strategies with such strategies often depending on the motivation of the poacher, which will be discussed next. For example, the poaching of elephants using poison displays the explicit focus on killing elephants for ivory and not for meat. Indeed, while some consumption of elephant meat does occur, respondents described it was a relatively rare event compared to the
hunting for ivory. In such cases, the consumption of elephant meat might be more of a by-product of hunting for ivory. The use of poison to kill elephants may indicate this reality as it would be unlikely that poachers and community members would consume poisoned meat. However, this highlights a potentially problematic issue related from a public health perspective if people unknowingly consume poisoned meat.

7.6.3. Motivations for poaching

As mentioned the techniques and strategies used by poachers in QENP will often depend on the motivations of the poachers. Prior studies have identified the homogenous nature poaching various settings and contexts (Ahmed, 2012; Eliason, 1999; 2003, 2008; Forsyth, 1993a; Forsyth and Marckese, 1993; McMullan and Perrier, 2002; Mishra et al., 2003; Muth and Bowe, 1998; Plowden and Bowles, 1997; Shepherd and Magnus, 2004; Raymakers, 2002; Tailby and Gant, 2002; Theile, 2003; Wyatt, 2009). The current study participants identified a number of motivating factors which they believed led to poaching in QENP. These motivations were categorized under the following: subsistence, profit-driven and local customs or cultural beliefs. It is interesting to note that respondents did not associate forms of retaliatory killings against problem-animals, which will be discussed later, with poaching. It seemed that respondents differentiated between human- and animal-instigated forms of hunting or killing. In other words, the poaching motivations discussed here would be classified under human-instigated, while retaliatory killings are animal-instigated.
"It is just poverty just forcing them to look for survival": Subsistence-based motivations

Poaching for subsistence was identified by respondents to be the main reason why poaching occurred within QENP. An underlying theme found within the responses was the idea that members of the communities within and bordering the park are impoverished and have limited employment opportunities; thus, leading them to access the resources of the park both as a means to generate income and as a resource for food. As a result, subsistence-based poaching can be separated further into two sub-categories: personal consumption and income.

Respondents described how poachers would enter the park in order to poach for their own personal consumption. Benjamin described how poachers would "poach to get domestic meat" and that "they want for just home use or whatever." Daniel simply said that "sometimes there's [poaching for] home consumption." Tom explained how "only few people, one special tribe which keeps animals, that is the Basongora. But the rest of the tribes not keep any animal, so [the wildlife] is the only source of meat, protein for them." And Frank said how "these local people that come here, use [the meat] for consumption...The communities, they use it to eat for consumption." Patrick added how "some poach because of meat. They want food. They poach meat for food." Similarly, Adam explained that poachers hunt "for local consumption within the community surrounding the park." Notably, Francis differentiated between a poacher who hunts elephants for ivory and those "who poach hippo or this kob, that [poacher] it is poverty that is forcing them to look for survival. To something for him to eat." As indicated by
Francis, some poachers who hunt for personal consumption do so because they are forced by their impoverished situation.

While most respondents described how poachers would poach for survival, others explained that it was due to a preference for meat, especially wild meat. Sam explained that it was a combination of having a preference for meat but not having the means to buy it from the market which led to poaching. He said:

"For poaching, just...people...just I can say when somebody is addicted to eating meat. So he may not have money to afford buying meat so what he does is he goes to the bush or to the park and he poaches. He takes meat at home for his food. Just for food purposes. When it gets finished, he goes back to the park."

Felix surmised that such poachers are "used to that wild meat, so when he spend like a year without tasting wild meat, he feels that is not good. So he has to look for it." This preference for wild meat or bushmeat has been identified in the literature with evidence suggesting that some people would even pay more for bushmeat compared to domestic (Chardonnet et al., 1995). In addition to personal consumption, some respondents described that people would poach as a form of employment in order to generate income. Patrick described his experiences with poachers and how "some say they poach because of income", while Felix noted how poachers were "unemployed" and "they're fighting for livelihood." Similar to Patrick and Felix, Jude described how poachers simply wanted to "earn a living" and Daniel attributed poaching due to a "lack of employment" in the area.

This type of poaching is different from the profit-driven commercial motivations that will be described next poachers are not attempting to go above and beyond obtaining basic necessities. Moreover, most poachers sell the meat to members of their community.
Frank stated how poachers simply wanted "to get money for home management, but mostly the meat is being sold in the communities." Sam elaborated how "others poach because using meat for commercial purposes. You find that somebody is poor and wants to get money. That's why he goes to the park for poaching. Then sells [the meat] to the community as he gets money." Alex provided an interesting perspective as he surmised:

> During Christmas because some of them in the villages, not all people there are okay. There's some who are really...they're looking for survival. Just comes and says, "Now, instead of stealing people's property...properties. Why can't I go and kill an animal in the park? And I sell it, then I get something". To get money for buying clothes, what, what...those kind of things. Yeah, that's what they do.

Essentially, Alex believed that rather than committing crimes against their fellow community members, poachers would simply commit crimes against the park.

Additionally by poaching and then selling the meat to the community, poachers would be providing a service that otherwise would not exist.

"I think another one is need for wealth": Profit-driven motivations

As shown while some respondents attributed poaching to generate some basic income, others believed it was in order to attain wealth. This is not an issue of semantics but rather an important difference to recognize from both a theoretical and practical perspective. There is an important distinction between poaching due to unemployment
and poaching to quickly attain a certain standard of living. For instance, Ivan rejected the idea that that poaching was conducted in due to poverty or unemployment:

Yeah, 'cause I wouldn't say unemployment. Unemployment wouldn't be for something to force them to poach. No, there is so many things to do apart from poaching. See, people always want collar jobs, white collar jobs rather. But jobs are there. Yeah. Jobs are there. People can farm, people can do brick laying, but people don't want. They want the standard of white collar, and they are not, don't have the standards. They don't meet the qualifications. So, I wouldn't say there is no jobs. Jobs are there. The jobs are there... They don't want to start from zero level. Someone wants to start from buying a car to buy an airplane [laughs]. But you'll start from riding a bicycle, you get a motorcycle, then sorry, sorry. Yeah. But they don't want that. They want faster way to get to the money. The greed for money now. They want faster, faster money. Because after killing, get money. They want to earn wages and salary.

Essentially, Ivan described how it was not a lack of options for poachers but rather it was a lack of suitable options. He believed that poachers wanted a standard of living that was beyond the means accessible to them which led them to go after more profitable ventures, including poaching. As highlighted Ivan, poachers of this nature are not doing so in order to survive but in order to survive well. Alex described how "some of them, they are poaching because they make it as a business...Some of them, they become rich."

Similarly, Paul explained: "I would first of all say that this poaching would be categorized into commercial...because the elephant poaching, buffalo poaching and hippo poaching are actually commercial. These people poach because they’re selling [the meat]."

Some respondents explained that poaching for profit is influenced and driven by a wider market and is not limited to the park, for example hippos and buffaloes were hunted for profit as they could be sold in larger markets outside of QENP, for example like the DRC. Chris explained how "big animals like the hippopotamus is for commercial." And Ivan said how the poachers "get this meat and they sell it in Congo, so it's business." Alex
described how "after killing the animal, [the poacher] takes them across, I meant, abroad like Congo, he sells it and gets maybe ten million, eight million [shillings]."

The most cited target for profit by respondents were elephants for their tusks. Isaac observed: "I think another [reason for poaching] is need for wealth...Most people, those who are poaching elephants for ivory." Jude explained that "with elephants 'tis for commercial [purposes]. [The poachers] sell the ivory." Paul believed that poaching for ivory had significantly increased as of late due to the established and growing markets in China. He explained: "There's an attachment to the prevailing market now in China, eh...'Cause there's a lot of market in China and they don't have elephants, so they will, of course, they need raw materials." He concluded that such raw materials "can easily get from here." Paul continued to explain the progression of the ivory obtained from Uganda and indicating a complex system with numerous actors, stages and transportation:

Ivory is transported. This one is like transported it is taken to Kampala. Most of them take to Kampala. Then in Kampala they disguise. Cut it and then take it. There's always been before suspicion, they could use the airport. They could use the airport... Sometimes what they do, they smuggle it through from here... They put it in sacks, then punch in ivory. There's sacks of maybe beans, maize, coffee, eh. Or remove matooke. Break it from its bunch. Put it into bags. Then put ivory. A piece of ivory inside where it's very difficult to detect... Initially it use to pass by Kampala. They could compromise the customs clearing officers. Clearing agents could work out, then the thing flies. But right now we have deployed at the airport. So what they do, they sneak through Malaba...It goes to Nairobi. It goes through Kenya. But Kenya has always been doing a fundamental role. It has always attempted to intercept it. But of course you know it has not been usual. Sometimes it escapes...It has always gone to Shanghai, because most of it goes to Shanghai...Sometimes they've always like in Kampala, if it reaches Kampala, what they do is they grind it like flour. We got that tactic also. They just ground it and pack it like somebody exporting cassava to China.
Paul continued to describe how ivory would also be sent through the postal service as well:

There was also a time...Ivory was intercepted in Kenya. What happened was they came and instead of now, I think they had seen that using the airport was difficult, so what they went to courier service of post. They went and posted it. So they were posting it, there's this, is it called EMS. Yeah. They were putting it on that EMS.

Although beyond the scope of the current study, viewing how the larger market operates from the perspective of a law enforcement ranger provides a unique glimpse into the trade. As Broad and colleagues (2003) argue, "The journey of any given wildlife product from the collector at the source to the final consumer can involve a wide range of intermediaries and other stakeholders" (15). It is clear from Paul's response that some law enforcement rangers were able to provide insight into this journey.

Moreover, the logistics and the high profit associated with the trade may lead credence to the belief that organized crime groups may be involved in various components of the illegal wildlife market, including the ivory trade (Elliot, 2009; Gray, 2012; UNODC, 2010; Zimmerman, 2003). However, respondents explained that poachers were simply hired to poach but did not necessarily have any direct links with whom Paul refers to as "bigger funders". Therefore, it is more likely that at the poaching stage the trade operates from informal relationships between independent individuals and groups (Hayman and Brack, 2002) resembling more of a loose 'network model' (Natarajan and Clarke, 2004) rather than a structured organized crime ring.

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36 EMS is a Uganda courier service.
Ivan's response supports this claim when he said: "Of course they look for the other poachers who are poaching usual meat. And they bring in other [suggestion] of killing elephant." Asked to elaborate, he explained how "the same gun that they are using to kill the buffalo is the same gun that they are using to kill the elephant." Paul also said how:

These [poachers] are just hired. The persons who hire them, you get like the Chinese, West Africans. They come and just settle in town. Then they get the local operatives who will go, hit [the elephant] and then after it's been hit. They say, "No, come to a certain area. That's where we can load and you go."

As evidenced by Ivan and Paul's responses, middlemen would come to a local community, identify poachers and solicit them to poach elephants. Given such a relationship, it is unlikely that the poachers would have any definitive knowledge of what happens with the ivory once they drop it off to their employers as their involvement is specifically confined to the 'poaching stage' of the market. Beyond the poachers, however, Adam surmised that corrupt officials, including government employees, may be implicated in the latter stages of the ivory trade indicating a higher level of organization:

And this business, why it's become so rampant, because someone may ask you, "Why is it so rampant? Killing of elephants. Why is it so rampant?" The reason is it is united with many, many big, big people. Even the security personnel, the politicians...You find people, big people with high ranks involved in poaching. So the government is looking into it, because we have revealed those things for several times...Yeah, so this is how poaching has been just like that. Because poaching generally of the killing of elephants is involving a lot of people. Big, big people. Of course you arrest them like today, like today, these ones we've arrested recently. They never even spend a month in a cell. In a jail. They are released.

"You find they are forced by their ancestors and whatever to go and poach": Family traditions, local customs and cultural beliefs

The third and final type of motivation identified by respondents were family traditions, local customs and cultural beliefs. Lawrence described how "we normally hear that there is some families that are naturally hunters in their customs." Asked to elaborate, he further explained how "you find that they are hunters. Whenever you take them to court,
they penalize them. The day he gets out from the jail, you find him again in the park. So those are the ones are customary hunters.” Benjamin also described how the "Bakonjo, formerly they were poachers, hunters...It is their belief...If you feel like you want meat and whatever, you just go...They don't go and buy. The just go in the park.” Additionally, Ivan said how poachers believed "that the meat from the park is the sweetest meat as ever that have been using by the grand, grandfathers.” Sam surmised that "at times you find that these [poaching traits] are inherited. Like if my grandparents were poachers, there is a gene that is a developed gene that the grandchildren, so they continue with that habit of poaching." Essentially these respondents believed that some community members poached because of long- withstanding family hunting and sustenance traditions, as well as the belief that poachers may be genetically predisposed.

Some study participants also emphasized how some individual’s may be inclined to poach in order to achieve a sense of acceptance from their family members. For instance, Dennis recalled a discussion he had with an elder from a nearby community:

The man told me that some time back when they were still in their youth, if you want your father to love you or to trust you, you have to bring him the jaw of a buffalo. Now, bringing a jaw of a buffalo means that you have to go what? Poaching.

Others explained that poaching was a form of rite of passage that was performed in order to become a man. Brian discussed how in some local communities "if somebody has not yet killed a lion or a buffalo, he's not regarded as a man. That is cultural.” He continued, "So [the poacher's] seen in the village as a hero. So you can see how the culture also [influences poaching]. But if somebody has it in culture, [they] may not stop poaching.” Moreover, Brian emphasized that "somebody [who] sees poaching as culture has not
poached." In other words, such beliefs may be so engrained within the local culture that legal definitions of what constitutes as right or wrong are simply overshadowed. Isaac also described how poaching would represent a person's bravery:

Others it is cultural beliefs. In some cultures, they say that if you want to prove that you are brave, you have to kill a certain kind of animal. They can think that you have to kill a lion and somebody will go and look for a lion to kill and he brings the head or what to prove that he has killed it. So that he cannot go and deceive them, "Ah! I have killed it!"

Respondents also described how bushmeat, specifically hippo meat, was believed to be associated with the fertility and loyalty of women. Sam explained: "They say if a woman does not eat hippo meat, she is not fertile! [laughs] Yeah! Fertile. That is the thing that comes cultural." And Dennis described:

Now before the girl produces in the family or in your family, she has to eat wild meat. And the most she eats wild meat, she will produce a baby boy. And she will not what? Leave that family. She will stay there forever. So that is their belief. But then with time, you know, they are changing now from those kind of, you know, beliefs.

Tom also said how poachers would hunt wildlife for medicinal beliefs and superstitions. He explained how poachers "want the oil of the lion. The fats. They think it's treatment. They go and kill the lion because they want fats from it." Tom also described how "tribal superstitions" would result in poaching as well. He explained how poachers will "be needing lion skins for their kings. [Also] they'll be needed leopard skins to show that the kings are fierce." In addition, Tom observed that poachers use "the nails of the lion" as well as "they say that they wear them so that when you're walking at night, you look fierce to other people, so they don't come nearer to you. They don't attack you."

Lastly, Dennis described how some poachers believed that they were driven to poach by their Gods. He noted how poachers would even explain that they were being either
controlled by a spiritual entity and that under such guidance, they would be able to poach unseen. Dennis said:

Some do believe that they have their Gods who have always sent them for poaching. You can even enter without even your consent. You just surprise and you get yourself in the park. So they believe that their Gods always send them to hunt. And some of them said after, if he's there poaching, if he follows what the Gods has told them, even if you are passing, you can't see him. Because he's following the command of what? The God. And if he happens to get meat, the first to benefit the meat is the God. And they said their god is [named] Nyabibwya.

7.7. Law Enforcement Patrol Operations

7.7.1. Types of Patrols

Shown in Table 7.4., respondents identified three general types of patrols: marine patrols, aerial patrols and foot patrols. As foot patrols, specifically routine patrols, are the focus of the current study, these patrols will be discussed in more depth. Those stationed at a specific post are responsible for patrolling within their operation area of range; while, those stationed at headquarters can be deployed in all areas. It should be noted, however, that rangers that are stationed within their own outpost or camp can also be brought into areas as reinforcement. Patrol groups are deployed in a rotating manner whereby groups are determined by who is currently at the headquarters, outpost or gate.

7.7.2. Types of foot patrols

Out of the three categories, foot patrols are the most frequent types of patrols that occur in QENP. Foot patrols can be further separated into five types: routine day, extended, ambush, emergency response and trans-boundary patrols. Routine day patrols are
conducted in one day and usually involve the patrolling of an area relatively near the headquarters or an outpost in areas. *Extended patrols*, on the other hand, are multi-day excursions that end once the patrol reaches either a specified extraction point or an area suitable for extraction. *Ambush patrols* are dispatched after receiving information that suspects have entered the park (e.g. information provided by a community informer) or when an illegal activity has been identified by another patrol (e.g. a wire snare) which is unable to extend its patrol. Such patrols typically require the patrol group to remain stationary in an area where potential suspects are expected to pass through with most ambushes lasting for several hours, if not days. In situations where an immediate response is required, *emergency response patrols* are sent into the field. Similar to ambush patrols, the law enforcement may be contacted by community members are witnessing or hearing an incident occurring. For example, a gunshot has been fired or an animal has come and attacked a village.

Law enforcement rangers also participate in *trans-boundary* initiatives with other governing authorities in other countries, such as the Office Rwandais du Tourisme et des Parcs Nationaux (ORTPN) in Rwanda and the Institut Congolais pour la Conservation de la Nature (ICCN) in the DRC in a collaborative effort to monitor the Virunga-Bwindi region (Gray and Kalpers, 2005). Such collaboration is especially important due to the trans-boundary migration of wildlife species and the various internal and external threats to which wildlife species and PAs are exposed to.
Table 7.4. Types of Patrols Conducted in Queen Elizabeth National Park, Uganda

<table>
<thead>
<tr>
<th>Patrol Type</th>
<th>Deployment</th>
<th>Frequency</th>
<th>Purpose</th>
</tr>
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<tbody>
<tr>
<td>Marine patrol</td>
<td>Originates from one of the marine outposts within Lake George, Lake Edward and the Kazinga Channel.</td>
<td>As often as possible and fuel permitting.</td>
<td>Monitor protected waterways and areas for illegal fishing, as well as potential poachers operating boats. Such patrols are useful for identifying poachers on land as well.</td>
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</table>
| Aerial patrol | Originates from headquarters in Kampala                                       | Quarterly.                          | Survey areas to identify wildlife population and environmental/vegetation changes.  
Can also identify poachers and poaching camps. GPS coordinates of such locations are taken and transmitted back to stand-by patrols on the ground. |
| Foot patrols  | Originates from headquarters and outposts. However, patrol deployment can typically occur from any of the main roads and feeder roads throughout the park. | Daily for routine and extended patrols.  
Randomly for ambushes and emergencies.  
Trans-boundary patrols occur approximately every month. | Monitor the park for illegal activities.  
Monitoring and documenting the status of wildlife and vegetation.  
Collect GPS data (e.g. illegal activities, wildlife, environment) for research purposes.  
Security against potential rebel forces.  
Check park boundaries (e.g. boundary pillars).  
Responding to information provided by the community.  
Responding to problem-animals. |
7.7.3. Deployment of foot patrols

Due to the size of QENP and the limited resources and manpower afforded to the UWA within the area, the deployment of patrols are conducted in three main ways: data- and experience-driven, informer-based information and abrupt/random checks.

Data- and experience-based deployments

Data- and experience-based deployments are based on information derived from prior patrols. Data-based information refers to the reports derived from the GPS observations collected by the rangers, which are analyzed at headquarters and then reported by to the rangers by the head ranger or their immediate supervisor. Patrick explained that how deployment "is mostly done by the head ranger and the operational commander, because he's the one who gets the information that is given from the outpost and the data using the GPS. So they know this place has a lot of illegal activities, so we can send day patrol."

Similarly, Daniel stated how "sometimes [deployment] also depend on the reports. The rangers normally come, they write the report...So some weeks later, we also deploy. We go and check what is happening there." In addition, Paul explained that data-based deployments can be useful for targeting hot spots as well as areas that require attention: "You know, out of suspicion, you know, sometimes we come after when we analyze our maps [and] say, 'Eh! We've taken long without covering this area, yes'. So we now say, 'Now let us, for avoidance of doubt, let us check'."

On the other hand, experience-based deployments are based on the rangers' personal experiences within a specified area. Dennis described how "generally, when you are
doing your planning, sometimes you may not even get any information. What is important is to know your area of operation." He continued to explain that if rangers were well-aware of their surrounding area, they would be able to identify areas that require their attention: "If you know the area coverage of where you are, you can even plan your [patrol] activities without any information." Likewise, Isaac noted:

If we don't have any information, we have to sit and say that, "But we have these points, these points and this point. But this point, poachers don't always use this side. This point. They always poach from this point". So many of patrols have to be on that one, that area. That is the criteria we use... So you have to concentrate on that area.

In addition to being familiar with the area and the behavior of poachers, Ivan described how he also incorporated his knowledge and experience of the wildlife in when he deployed patrols. He illustrated:

We don't patrol the whole park, because the park is very big, but those spots which we know which are neighboring communities, there's illegal activities... But basically, to me, I prefer the preying in the hot spots, 'cause the animals which are targeted, the species which are targeted, they are not all over the whole park. Especially the hippos, they don't move anywhere. They want to move nearby where there is water... We know the movements of the animals and deploy against their enemies, which are poachers.

_Informer-based information_

As described earlier, most respondents believed that a good relationship with the community would result in the development of key informers that would be able to provide information on suspicious activity occurring both within the community and within the park. Information derived from informants is especially useful for deploying ambush patrols; however, such information is also utilized for guiding routine day and extended patrols as well. Alex described how "at times, we do have what they call the 'informers'...He gives you information." Similarly Isaac mentioned: "At times we have
the informers...You get the information from that informer, 'I saw people entering from this side'. So from there you know you have to go begin that...As you have the clear information from your informer. You have to patrol that side." Douglas referred to informers as "intelligence personnel" and explained that "of course, they are village mates [with the poachers], they're friends. And he also intelligence [on] them, so he ring to [us] that such a that and that, [the poachers] want to go. So [we'll] go and make an ambush." Despite such information, Douglas admitted that "at times we succeed them, at times they doge us."

As explained by Felix, informers were compensated with money in exchange for that information provided. He said how "the organization pays them. Each outpost, they give money for paying informers. [The informers are] the ones who bring information, so we make patrols following those people." Alex explained the importance of compensating an informer: "Yeah, you have to give him something. To motivate him, so that he can do what? He can be happy."

Some study participants explained that they would often screen their informers by developing a friendship first. Chris described that "you have to at least look for some wise people. You can befriend them. Become your friends." Chris believed that by developing a friendship, informers would provide the truth on what actually occurred within the community. He explained that "when somebody is your friend, automatically
he can't hide you what is taking place. At least, he can tell you something concerning your job. Yeah.” Alex explained this process in detail:

Informer mostly we get them, this person we befriend him. First of all, you first study that person that you want to befriend... You have to study the characters. The behaviors of that person. At least you have to study that person, "This person can he really work for me?"... After you have [known] that person and you have really identified that really that person can really is trustworthy, then you decide. You say, "Now, what you are going to do for me, can you manage...can you manage this and this and this?... I want you to assist me on this and this and this because you, you are a civilian. And me, which is very hard to access that information because I am a ranger. They know me. But you, you can be so easier for you to get some information". So that person, you really need to make an agreement with him that, "No, don't let me down, my friend. If you have decided to this and this, let us agree, I mean, we should agree each other"... And what he does really, if he is trustworthy, is he will do something [for] you.

Similarly, Lawrence noted that the development of informers was necessary for law enforcement rangers and for field operations, especially when rangers were deployed to a new outpost: "This is now a system which was introduced by UWA to have some informers as well as you are deployed to a new place of work...Tis a must to reach [the community]." Alex also believed that the development of informers was important for rangers staying at the outposts. Moreover, he discussed how it may be easier to develop informers when rangers stayed near the communities, echoing what respondents discussed earlier regarding the benefits of living in the outposts: "So at times the informers, they do assist us. Mostly when you are neighboring the communities [because] you may not access that information because they know you are a range." He clarified: "But somebody who is a civilian, who is staying with them may access enough information."
Importantly, while some respondents did believe that the use of informers was crucial and had proven to be an effective means to deploy patrols, some also described situations when they were deceived by informers as well. Lawrence cautioned: "You should not trust the informer a hundred percent." Some respondents described how some informers would provide rangers with false information. As Sam noted: "We may not be knowing that [the informer is] conniving and such a things. But at times you find he's giving you information...Where the poachers wasn't there. But then later you hear after that they have killed a buffalo and it's the other side." Sam also added that the reason why informers would do this was "because maybe making money in two ways."

Alex also mentioned that informers may gain the trust of the rangers in order to gain information on their operations. He explained:

> Because there's some even informers who are not really trustworthy. You find an informer, he has given you the information for the first time, you succeeded. Now because he has entered into deep [relationship with you]... he's knowing all your corners. Again, he changes. He starts giving out the information [to the poachers].

Similarly, Chris added: "Somebody can bring information then take back to their poacher. Yeah, that one's also there. The double-dealers." Isaac also referred to "double-dealers" in his response and explained for the most part he did not trust the information obtained from the community:

> Because in most cases, these community people, we don't trust them. They are double dealers. He will come here and give you information that, "You know, I saw three men with spear or with what going this side, eh". Then you go there. Then he will run and tell his men that, "Oh! Do you know I sent the rangers this side".

Notably, Richard also believed that rangers could be mislead by poachers posing as informers. He described how the informer "can tell at such a place there is something,
people are poaching. And when you go there, he goes on the other side. Him, himself after directing you somewhere, he moves and makes another direction." The contrast between some of the respondents displays an interesting dynamic involving the use of informers. While the rangers recognized their own limitations of accessing information that informers may be privy to, they also realized that informers could choose what kind of information they provided.

_Abrupt/random checks_

In addition to patrols being deployed based on information or experience, patrols are also deployed simply to check the status of an area. Jude explained: "You just sit and say... 'We have not even covered this area here. Why don't use move in the middle here and see what is happening?' So you just make abrupt patrol to check the area where you have not been moving." Francis explained that in conjunction with other types of patrols, abrupt checks results in rangers "[covering] all the corner of the park." Similar to Francis, Benjamin noted that how he was "supposed to patrol everywhere. So you find you have patrolled that side, we have patrolled another side. We have know what is there!" And Patrick added: "So if I work this side for two days, two times, then I have to check another place, because I want all the area for patrolling all to be safe." He further explained: "Because if you concentrate on one area that means another area will be what? You will find when it is already destroyed. So you have to sit down and have that sense of feeling, 'If I go this time, so I should also check another place'."
Alex explained that even if rangers are provided with information, they should still patrol other areas, since they might fortuitously run into suspects:

Okay, if we don't use the informers, you just make your own patrols. You just patrol. Yeah. You make your patrols and go. It is not only [information] that [patrols are] reliant on. That's what happens there. Much of the time we don't rely on informers. We do, but on the other hand, we just decide and say, "No guys, we have to go and patrol". And at times, it does not mean that if you have decided to go on patrol without any information that [you] will not succeed. No. At times we succeed, we don't have any information but we're just patrolling, we come across the poachers.

Ivan added that such patrols would also occur after activity in hot spot areas decreased:

"If we like have intensified our patrols on hot spots and things are calm, you know we divide our forces now. We check other places." From an operational perspective, reducing patrols in a hot spot area after it has 'cooled' and reallocate patrols to check other areas naturally makes sense; however, most respondents seemed to understand the notion that poachers would move to other areas in order to offend if they realized that an area is being intensely monitored by the rangers.

This potential displacement effect has long been debated within the criminological literature (Repetto, 1976; see Guerette and Bowers, 2009). In particular, scholars have been especially focused on forms of spatial displacement as a result of crime prevention initiatives (Eck, 1993). In the current study, respondents also recognized the potential for displacement and therefore highlighted the importance of conducting abrupt patrols.

Chris mentioned how "some other areas we just go to check, because [the poachers] may be [there] when they know you have that [other] area. They change to a certain area again. So that means you check here and there, the other direction." Dennis suggested
that offenders may be able to identify areas that are highly patrolled leading them to
offend in other areas, thereby requiring rangers to patrol in such areas as well:

Much as we concentrate on those areas [hot spots for illegal activities], there
are other areas whereby you look at them and you think maybe they are calm.
But sometimes, you know, poachers are wise. As they hit the other end and if
they know that you really concentrate in those areas, they can say, "Now, let
us withdraw from this way and we go back on the other side." So [the rangers]
keep on balancing it. Keep on balancing it. Like the way we do our patrols...
You keep on changing the what? Your mode of operation.

Interestingly, Isaac explained the basis for conducting abrupt patrols from a law
enforcement perspective and added that given their supplementary roles, such patrols
were also needed in order to assess the status of the wildlife and the environment as
well:

Like I said, you don't have any information, and then, let's say yesterday, you
were on this point where you expect many poachers. Like today, you can say,
"Ah, we don't have any information. Yesterday we are there, but yesterday
when we were there. So let us check this area." Yeah. So that's the criteria...To
check. You never know. Poachers they can decide since you have disturbed
them [at] this point, they can decided to migrate and such poach this side...And
again, as I have said, we don't patrol to look for poachers or to check for illegal
activities only. We also monitor the animal's health and the vegetation change.
So we have to patrol each area.

Isaac's response shows the importance of understanding the multi-dimensional nature of
law enforcement in QENP. As discussed earlier, ground-level operations are not simply
meant to identify, apprehend and arrest suspects, but also to monitor the status of the
environment and the wildlife in the park. From a practical perspective, any type of
program or initiative must consider these other responsibilities in order to not disrupt the
balance disproportionately towards solely a law enforcement-centered agenda.
7.7.4. Opinions on the effectiveness of foot patrols

Given the difficulty in effectively patrolling QENP, it was important to unravel the opinions of the respondents on the effectiveness of foot patrols as a means to reduce or eliminate illegal activities within the park. Again, foot patrols are conducted for a number of additional reasons including the monitoring of wildlife species, so the author specifically queried respondents on the law enforcement component of patrols. In general, most respondents believed that foot patrols were effective in reducing illegal activities that occur in QENP. Alex said: "Of course [patrols are effective]! If we are not doing patrols, it means that the animals will disappear." And Daniel noted that patrols are "effective...At least some illegal activities have reduced. At least some good percentage have reduced poaching, through we still have that problem, but it has reduced to an extent." Likewise, Daniel described how patrols did help reduce poaching, even though it is still an issue:

Yes, I believe that it is true. Patrols also limit the illegal activities taking place in the park... But when we intensified our patrols, it has gone down. The armed poaching has gone down. You can even take a month without hearing a gun shot. But we can't say that it has stopped totally. But it is rare now to hear gun shots.

Lawrence noted that "Not all neighbors to the park have ever got a heart of stopping hunting... And if we don't put more effort in patrolling, this very few people that are still having this heart of poaching shall still continue."

Some respondents believed that that foot patrols instilled fear in the communities and worked as a deterrent against people unlawfully entering the park and committing illegal acts. For example, Jude believed that poachers "are no longer free to access the national park. They fear because of the patrols. In and out. In and out. [The patrols] have done a
lot!" while Douglas simply stated that: "[Patrols are] good to limit illegalities. To limit the illegalities in the park." Similarly, Dennis and Brian explained that patrolling not only deterred illegal activities conducted in the park, but it also provided evidence to the communities that rangers were serious about protecting the park. As noted by Dennis, "when you don't go for patrol, [the community] know that, 'These people, they just stay here. They don't patrol.' So they enter and they do whatever they want. But if all the time you're busy patrolling, they also fear...You need to go on the ground and work and arrest them. That's when they'll fear you. But if you don't do patrols, no one will fear you". And Brian said, "If you don't conduct patrols, if you relax, communities will also invade the conservation area. Will invade the ecosystem. Will destroy. Because you don't go there and you will not even know. So patrols are effective and are necessary. And they're good in deterring those illegal activities." In addition, Felix stated:

Because now if [poachers] see that [rangers] are always on patrol, [poachers] don't go [into the park]. Because they will know that they will be arrested from there. But if they take time and they are not seeing people, they are not seeing vehicles taking people [into the park]. They will know that, 'Ah! This area, they're not patrolling it. Let us go and hunt'. But if patrols, even if you don't go inside your own parts, but when they've known that you've gone [into the park]. They'll not enter there.

Further, Frank surmised that if rangers stopped or reduced patrols, illegal activities in the park would simply increase. He explained:

Actually patrolling reduces illegal activities, because when we stop patrolling and we use another method of monitoring and the illegal activities increases. So you know these people, they also have informers. There are people who their hearts are on these wild animals. They were sensitized but their hearts were not satisfied because they want money from the protected areas, so they keep on monitoring. If they know now that you reduced the patrols [claps hands and shrugged]. So our patrolling also have helped controlling the illegal activities.
Interestingly, Benjamin believed that patrolling was not effective on its own that that patrols needed to be supplemented with forms of community sensitization, including collaborating with the CC department. As he explained:

Patrolling? Yeah...not as...not as such. Because you may patrol and after coming back, [the offenders] go there. So there is patrolling and sensitizing them... You know we have specific areas where mostly poachers come from. So you need warden, warden of [community conservation] and with the conservation ranger. They have to go sit with the leaders of in the village. Then they say, "Leaders, mobilize the people, see how they can teach them". Yeah...But with patrols only, 'cause with the patrols people will just be in the field. And we'll not be getting the group in the community. So even sensitizing them is very important. Not only patrolling.

As indicated by Benjamin's response, patrolling may not have as much of a deterrent effect as some respondents believed since offenders would simply go into the park whenever patrols would return from the field. Referring back to the concern of being monitored by the communities which living at an outpost, it is possible that offenders may simply base their offending pattern on ranger patrols. Moreover, Benjamin highlighted the importance of implementing initiatives that incorporated the communities, particularly local leaders, in addressing illegal activities. This will be discussed in more depth later, however, it is worth noting the distinction between Benjamin's answer and his fellow rangers.

In addition to providing their opinions on the effectiveness of patrols on illegal activities, some respondents went beyond and explained that patrols were also 'effective' in other ways. For instance, Dennis explained that patrols were needed in order to become better aware of an area. He noted that "When you patrol, that's when you know what is wrong...So I believe patrol is good because if you patrol that's when you know what
happens in the park." Alex also described: "Even you get to know where you don't know."

And it gives you really even you get to know where you are...So, you are confident of your area, where you are." Such experience would prove useful in future patrols as rangers would be able to utilize such experiences to better effectively and efficiency patrol a specific area by recognizing areas that needed more attention or to abruptly check areas that have not been investigated.

From both a law enforcement and a research-based perspective, respondents explained that patrols were effective in reducing illegal activities as such patrols would be able to provide a status on the area simply from the data that was collected during the patrols (e.g. signs of illegal activities, census of wildlife). Adam observed how patrols "are effective because you find, of course, collecting data is not an easy thing. It is effective because you always need to keep going there just for data collection...You need to know what is actually taking place within the park." Again, this emphasis on the other responsibilities of law enforcement rangers signify the importance of viewing the occupation beyond solely a law enforcement standpoint.

In addition to being asked whether they believed whether patrols were effective, respondents were also asked how they felt after returned from a patrol where they did not find any signs of illegal activities or suspects. This was an important issue to address as it further tapped into not only perceptions on patrol effectiveness, but also personal measures of success for the rangers. For example, did respondents measure their success
as a ranger on arrests of suspects or an area that was free from illegalities? Again, this inquiry focused on the law enforcement aspect of the respondents' occupation.

In most cases, study respondents were happy to come back from a patrol where they did not identify any illegal activities or suspects. Lawrence described how rangers felt "happy" because "the area that [they] are controlling, there is no illegal activity." Adam, referred to his own experiences when he said: "When I move like three nights I'm [in the park], I don't come across anything, then I'm happy. I say, I'm protecting. Those people have started fearing.' Ah, so I'm happy! Don't get demoralized but very happy." This is echoed by Jude when he stated, "If you move and you don't see any illegal activity, you feel good. You feel good." He continued: "Because when you see animals are not scared. You see the place good. You feel happy. Come back when you're happy. And you write your report when you know really, 'Where I patrolled, I did not encounter anything'."

Similarly, Tony described how he felt "happy" and that "the work [was] done properly." He further described that not seeing any illegal activities was actually "our target" and that rangers are "disappointed when [they] see" signs of illegal activities on patrol. One respondent, Michael, used an analogy of a locked home to explain how he felt upon returning from a patrol which did not involve finding any illegal activities:

That is very nice! You patrolled and you didn't get anything. That is very nice. You reach to your house, you find the house is locked like the way how you left it. For example, you are in Uganda. I know you left your house in your country. You have locked it. You come back from Uganda, you go back to your country. You find your house is locked the way how you locked it. How will you feel? You will feel okay! You say will, "Ah! This is very nice! I found the way I locked my house. It is very nice." But when you find that they have broken the house, you'll feel bad. So park is our house.
Although these respondents described that they would be content and feel a sense of relief know that the area they were responsible for was protected, as a supervisor Paul raised concern over how such results may also be viewed with suspicion. As he explained:

Well, it is two-edged. As a supervisor somewhere, somehow you know because the essence of the patrol is to deter the possible poaching activities. If I've reached an area, I've sent a patrol and it has reached in a given area, they have come [and] scanned. The animals are there [and] they feel really very calm. They have really total peace and there's isn't anything, I feel like I've done good job. Because it's like I've deterred the poaching activities. Really the subversive activities in that area. Whereas on the other side, if I get information as a supervisor that from [the rangers’] area yesterday the hippo was killed and the meat taken. This area I sent a patrol and they come like that then I will also start doubting. Possibly there's a bit of double-standard in this. So it's two-edged. On the other side, if the animal population is appreciating, I don't get any other feedback. I mean, negative feedback from outside that the meat is getting out. Then I would feel I've done a good job. But now if the news is skyrocketing: elephants have been killed and you are not getting anything, then really I feel like I've not done a good job. Possibly I'm a weak person or the persons I've sent are double-edged.

In essence, Paul recognizes the potential for poachers displacing or operating in other areas, as well as rangers falsifying reports or even being implicated in illegal activities in the areas they are responsible for. Further, the respondent recognizes that indicators of success for law enforcement is not only attributed to the identification of illegal activities or suspects, but also included the status of the wildlife within the park.

7.7.5. Dangers on foot patrol

As mentioned earlier, prior research has identified a number of dangers associated with wildlife law enforcement in North American settings. Ranging from dangerous and remote settings (Carter, 2004; Eliason, 2006a; Forsyth and Forsyth, 2009) to potentially encountering armed suspects (Eliason, 2006a; Forsyth, 1993a; Forsyth and Forsyth, 2009;
Palmer and Bryant, 1985; Warchol and Kapla, 2012), wildlife law enforcement has been recognized as a potentially dangerous occupation. In the current study, respondents identified a number of dangers they were exposed to during field patrols, some of which echoed prior studies conducted in the aforementioned studies. For ease of discussion the dangers identified by respondents will be categorized under human- and environment-based dangers. As will be discussed later, despite the dangers described by the respondents, the perception of whether the job itself was 'dangerous' resulted in mixed opinions.

"If he sees you first, must react on you": Human-based dangers

Most respondents described that one of the main dangers of being on patrol was the potential to encounter armed suspects, particularly poachers with firearms. Respondents felt that suspects would not hesitate to attack the rangers and described various circumstances where rangers were attacked on patrols. For instance, Frank said that being a ranger was "so very risky. So when we are going there for patrolling, if [the poacher] happens to see you before you see him, then you can't know because he's armed. So it's a big challenge." And Richard noted that how "you might meet armed people. They react on you. They pick you down...They might fire [at] you." In addition to poachers armed with guns, Richard mentioned that poachers with spears "have ever reacted on us." Douglas observed that armed "especially with these [armed] poachers, they hold their gun, they use their gun. So you find it is difficult to find somebody who is armed and you are armed. What he is looking for is what you don't want him to do, so exchange of fire is also risky for me as a ranger." When asked whether he himself has had gunfire exchange
with a poacher during patrols, he responded, "Yeah, yeah. Yeah. Several times. Yeah." In fact, other respondents also provided examples of situations when rangers had been attacked while patrolling. Richard recalled how "some time back, I think it was 2000. [The poachers] shoot one of our rangers. Two of them. And some years back, how can I say...[they] used a *panga* to cut one of our rangers, like twice. There are many using a *panga.*" In addition, Sam described another situation:

One of our rangers was cut on the arm when he was on the process of arrest. So those people are pit-sawers, they were cutting timber. As he tried to call them, as he was in the process of the arrest, then the other one just came and cut the ranger on the arm...And even another one was cut on the head. Some of the veins were cut! So those are the dangers we're getting. Before for us, we're not allowed to shoot at somebody. We're just protecting people's lives. But for them, they just come aggressively. They want to finish the rangers.

In addition to the potential of being attacked by weapons, Ivan described how physical altercations can occur during patrols as well between the rangers and suspects. Indeed, Ivan's response indicated a sense of bravado and machismo associated with the law enforcement ranger role that had yet been identified in the study. First, however, he noted the presence of armed poachers: "Of course, those people that are armed, as you are looking for them, they are also looking for you [laughs]...But my boys, they're always been, they're fairing with them, physically. You get a poacher, you fight! [laughs] He wants to spear you, things like that." He continued:

We always want to use minimal force of arrest, because we want him alive. In that course, of course, you have to hassle with him. Yeah, it's not like he's going to let you take him easily...There's a lot of exchange. So if you're weak, the man will put you down and run away...If someone put a gun on you in close range, you don't wait for him to shoot, of course. But most cases we don't have that. What we have is this physically fight. Physically with him to arrest him. 'Cause our boys are beefed, we want [the suspects] alive. If you get someone alive, they give you information that can help you tomorrow.
Sam also described how poacher traps would also be dangerous for the rangers as well. He explained:

Yeah, at the same time, you find that you may even fall into a pit! Yeah! Those are other challenges. You see, sometimes you find other pits which have already been covered with grass. So you may not expect something may happen. You find that you are falling into a pit. But the others will just limping when they are not seriously injured [laughs]. When they are not seriously injured. Or you get into a trap which has been laid! [laughs].

In addition to suspects and their traps, some respondents also described the potential danger of encountering rebels during patrols. Again it must be reiterated that currently the actual threat of encountering rebels is currently low in QENP; however, the perceived threat is still high. Felix simply noted that "when you are making patrol, you may encounter [rebels] and you may exchange fire and you are killed." Jude explained that the potential threat of rebels is exacerbated by the limited number of rangers that go on patrol: "We are exposed to rebels, 'cause you go on patrol four and in case you get rebels, they don't move in a group of four. They in hundreds. So we are exposed to that danger."

"We are exposed to wild animals": Environment-based dangers

In addition to human-based dangers, respondents described the dangers that derived from the environment. Given the requirement of patrolling in an area populated by wild animals, it was not surprising that respondents listed wildlife as the most dangerous component of patrols. Chris described how "we have some dangerous animals, like the buffaloes...And these elephants, they're also a danger to our patrols." Jude referred specifically to the wild cats in the area: "We are exposed to wild animals. Potential [of encountering] like cats. That's a lion. That's the most dangerous one. Leopard." And Sam discussed the potential for encountering snakes: "While you are patrolling? Like at times
when we have night patrols, when we are in the bush area, you find snakes biting
rangers." Douglas recalled a situation where he had been hit by a buffalo during patrol:

> Again, we have also problem of animal when we are patrolling. Me, myself, I was already knocked by the buffalo. But due to the experience, I just lied down just immediately when it came to me. It came and kneeled down. It wanted to remove me with the horns, but you know the horns of the buffalo are curved. So it slide and it could not get me the way it wanted. So my colleagues I had on the patrol...that's why they say never go on patrol alone...so they shoot away the bullets scaring it. Then it went away. With God's mercy you move also and God's prayer.

Felix also described the potential danger of encountering a wild animal and further
discussed how rangers would need to be aware of the behaviors of animals during their
patrols. He said:

> Yeah like there are some aggressive animals like buffaloes. Because we have got many challenges with those buffaloes, especially they like going in thickets hiding, especially when it's warm. So you may find that's why not what we do, when we are moving, we move in open area to avoid these thickets, because those buffaloes, they hide in those thickets. And for you come, for them they use the noise [that you make]. They have known that you are coming, but for you, you don't know. So it ambushes you and [snaps fingers] knocks you down. Because they have knocked down many rangers when they don't know." In fact, on a number of patrols observed, the author noticed that patrol groups would be cautious whenever they were in the thickets or in the savanna walking by thickets.

Benjamin also explained that "it depends on the situation...You find these buffaloes, they do ambush us in the park. So you pass unknowingly, come and just hit you. And it has ever done it. It's not just a gamble." He then provided an example with elephants: "And again so you find, for example, like in the thickets, it's the only route and you have met a group of elephants. So there again sometime you find they are isolated, others are just, they are upset or whatever. They have charged you so sometimes if you are not lucky, it can injure you." And Patrick described: "Here I may say hostile animals. It's also problem because you may be intending to go to a point then you find elephants there. And there is no way you can remove those elephants from the paths, from where you're going. Then it
forces you to? To make a wrong route." The examples provided by both Benjamin and Patrick are something that the author can personally relate to. During one observed patrol, the patrol group had to maneuver through heavy thickets; however, a group of elephants had just entered within the thickets:

After that we immediately saw three elephants behind us and they started to actually start to run behind us so we narrowly escaped them. From what we could see, they had just entered a patch of thicket that we needed to get past in order to continue with the patrol. Now during this point in time, we decided to wait a little bit to make sure that the elephants were moving through the thickets ahead of us and kind of going in their own path. The rangers began to discuss what we should do. We waited about five minutes and then began to make our way into the thickets. I was extremely anxious during this part of the patrol and I could tell that the rangers were on high alert. Any rustling from the bush resulted in immediate stand-still. Again the reason why we decided to wait for the elephants to move through the thickets was because of the fact that in the thickets, there's nowhere to actually run. In fact, it would have probably been a very bad outcome if an elephant had just emerged from the thickets or if we startled it while we made our way through (Patrol 10: Narrative)

Adam, referring to extended patrols, described how elephants would sometimes disturb rangers when they camped in the in the park: "Elephants, whenever we're near, we put our camp here at night. Ah! They come and chase us at night. They and chase us! They make us move from that place." Michael described how rangers would need to be especially concerned about animals that were harmed or injured as such animals would be more likely to attack. He said: "You may meet a dangerous harmed animal, for example, poachers have speared an animal and it is now very, very afraid...You find that the animal has started to fight with you because of what? Of his spearing. It starts disturbing you." In other words, these animals would not be able to differentiate between
those that harmed it and those meant to protect it. Brian noted that sometimes rangers must act in deadly force in order to save their colleagues. He explained:

If an animal attacks you, you call, they come and that one has happened several times. Rangers have been knocked by buffaloes. Yeah. You are moving in a group and all of a sudden, a buffalo knocks one of you down. Breaks him. But we fight hard. We fight those animals. If a buffalo attacks us and puts one of our colleague down, of course, to rescue that person, of course, we climb off that animal. We shoot it. Because he's not releasing the other one...It goes down, then you remove your colleague. Yeah, we have done that. That's what we do. Of course, nothing you can do.

Several informal conversations with rangers also highlighted the potential dangers of being in the field. Most rangers described how they were particularly wary of buffaloes who were separated from the herd since "there would be something wrong with them" and therefore would be more defensive and willing to attack. Other rangers described how they feared hippos, especially when they were with their young.

In addition to the wildlife, Alex described how the terrain and the environment would prove to be dangerous as well. In particular, he referred to the difficulty and dangers associated with conducting patrols in the forests:

There's like Maramagambo [Forest] here, which is very, very, you can even disappear from there. They don't even get you. Even it has some hills, some of the valleys, is it? Some of those...those things, like this [indicates valley gesture]. There are very many things! Either we have really big challenges. Either you may be running after a poacher, just fall into a ditch. Of course, what do you expect? What do you think? How do you think about that one? The moment you just fall into a ditch, of course you expect your leg to be [slaps leg]. You lose your leg.

As will be discussed in the next chapter, the various environmental settings and terrains pose unique advantages and disadvantages for rangers on patrol. Finally as part of the environment-based factors, some respondents described how mosquitoes and tsetse flies are dangerous as well. Notably, Felix explained that while mosquito nets were useful for the rangers' personal comfort, they were counterproductive from an operational point of
view. He explained: "Even mosquitoes at night...Mosquitoes there are many there. You may find you have not gone with a mosquito net. When you put also the mosquito net, it will be seen from a distance. So [the poachers] will know that here there are people."
The potential danger associated with flies and insects was also experienced by the author as well. During one of the patrols in Maramagambo forest, the patrol group that the author was observing was attacked by bees:

I was walking on the path and the commanding ranger stepped over a fallen tree. Immediately I noticed many bees coming from within the log. Visually, the formation of looked like a man covered in bees climbing out of the log. I attempted to move around the log. Andrew (outside dissertation committee member) decided to try and step over the log, which most likely irritated the bees more. Instantaneously, I began to get swarmed with bees as Andrew ran towards the commander. The sound of the buzzing was deafening. I flanked left instead and began to run into the bush in an attempt to get away from the bees. I felt a painful sting in my neck and on both my legs as I was running. I looked down and began to flick the bees from my pants while also trying to swat away the one bee from my neck. All while I was running further, blindly, through the bush. I heard one of the rangers behind me yelling at me to keep running. I kept doing so while I was getting hit in the face by branches. We eventually got to a place where we could stop. The two rangers behind me began to help pull the bee stinger out of my neck, while continually saying, "Sorry, sorry." Afterwards, we began to move towards the path and eventually caught up with Andrew and the commander. Everyone on the patrol got stung except for one of the rangers. Upon confirming that everyone was alright, we continued on with the patrol. But before we did so, the commander looked at me and said with a chuckle, "This is what patrol is about."37 (Patrol 9: Narrative)

7.7.6. Alternatives to support law enforcement

Study participants were queried on what alternative approaches they believed would be useful in addressing illegal activities, including poaching, in QENP in addition to

37 Author's Note: Fortunately I am not allergic, although I did not know this before being stung. Admittedly, there was a part of me that was worried I was allergic after I was stung and I began to think about the difficulties of extracting patrol groups during emergency situations. Given the often remote conditions of patrolling, an emergency extraction would take a significant amount of time or may be virtually impossible with the resources available at QENP. For example, on this specific patrol, the bee incident occurred when we were approximately eight kilometers from the outpost. On this particular day, we were patrolling nearby a lake, so an extraction could have been sent via boat. However, other foot patrols would not have this as an available option.
traditional law enforcement activities like foot patrols. Specifically, respondents were asked to discuss alternatives that were currently not implemented by the UWA; however, in most cases, respondents referred to alternatives that were already being utilized by the organization. Regardless, it was clear that most study participants recognized that monitoring and protecting the PA would require more than just law enforcement patrols. In most cases, respondents referred discussed the importance of working with the local communities echoing sentiments mentioned earlier. Matthew remarked that it was important to "involve the community", while Douglas explained: "Yeah, we had got community sensitization, so we teach the communities, we say, 'Please don't do this'.'

And Daniel said, "Other than patrols? Just community awareness and sensitization."

Brian drawing from his earlier response believed that "community sensitization can work more better" patrols.

Some respondents referred explicitly to the community conservation (CC) department as well. For instance, Sam stated, "that one I have told you: sensitization by community conservation." Matthew noted that the "community conservation department" would "involve the community" in attempting to identify ways to better manage and protect the park. Richard elaborated on the role of the CC department: "By moving to the community and they teach them the useful of the park. The useful of the park to them." Likewise, Adam observed: "Yeah, [alternative] is there. It is through sensitization. You sensitize. Sensitization of the community...Conservation ranger, conservation warden. That is their role to keep within the community and sensitize." Echoing Richard and Adam, David
said, "Community conservation rangers, they're sensitizing these communities. Sensitizing these communities, telling them the benefit of the park."

Ivan described that while community sensitization is useful, it needs to be combined with tangible alternatives for community members. He described, "community sensitization [and] projects. Give projects to the communities to change from illegal activities to self-employed or whatever. Jobs, maybe bee keeping or goat keeping." Richard also described how the UWA would help provide communities "with projects like bee keeping, piggery, poultry and so forth." Dennis also emphasized the importance of providing communities with projects after sensitizing them to the importance and benefits of the park:

Sometimes back I told you about community sensitization. You know after sensitizing someone, it's like taking you to school, right? I take you to school and I don't buy books for you. It is next to nothing. You get the point? So, me in my view, I would advise management after sensitizing the community, they should be given something to do. They should be given something to do, like a project. Something to do. 'Cause now if maybe they, in this area, they give them poultry keeping. You can raise up your poultry, sell them and get what? Money. For us those think that if they poach they sell meat and they get money. Now what about those ones who are raising poultry? Are they not getting money? So definitely, people will way, "I'd rather come back for poultry keeping other than being arrested and taking to what? To prison." So I would urge the management to put a lot of effort after sensitizing the community, they should not be left like that. They should be given something to do.

Dennis raised an important point in that sensitization would may educate communities on the importance of the park, but such importance may not necessarily translate for community members unless they're provided with an alternative. In other words, sensitization is only part of the equation and unless community members are provided with ways to benefit from the park themselves, the impact of community collaboration may not be fully realized. Importantly, as highlighted by Dennis, alternatives provided may be developed with the UWA, but such programs or "projects" need to be self-
sustaining in order to be effective. Essentially, projects need to be provided to community members which not only provide them with tangible returns (e.g. income), but also a vested interest in the park which may lead to establishing a sense of ownership.

Additionally, some respondents described that hiring community members would also be an appropriate alternative to law enforcement. David remarked that it was important that the UWA actively engaged in "employing [the communities] children" to be part of [them]”, while Chris stated: "To give [community members] job. Deploy their sons and daughters. At least give them a chance."

Lawrence described how hiring from nearby communities would result in communities generating a greater respect for the park since it would be providing them with employment: "If they recruit children depending on their places, this one can help a bit more better. Because the village that a ranger coming, this area [will] respect the park or resources." Similarly, Adam expressed how "employing the neighboring villages, communities, employing them [is important] because it also assists us very much." Brian surmised how such assistance might work:

If you employ the son and the daughter, will also be near to either mother or father. Educate him or her. Because you have him [in the UWA], [the son] says, "No, look once we arrest such a people, we do this. Don't do this. You look! Now, I have come with a bar of soap. I have come with meat. Now if I'm chased [from the UWA], now you know I will not come back with this."...So for that case, I agitate that the park management should be employing at least employing those people [from the nearby communities].

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38 Author's note: Although respondents used the terms "children" and "kids", they were referring to adults who were legally old enough to work for the UWA.
Essentially, Brian explained how rangers hired from nearby communities may be able to
discourage their friends or family now to conduct illegal activities since he or she would
be able to provide them with goods as a result of being employed. Indeed, the hiring of
community members does currently occur and some of the study participants, as well as
rangers not included within the study that the author befriended were even from nearby
communities. As will discussed in the next section, however, rangers also recognized the
potential problems associated with hiring community members to become rangers nearby
their home communities.

Related to this, Brian described how the MoU can also be a useful component in the
providing community members with alternatives. For instance, he noted that while the
MoU is useful for providing community members with access to resources that they
personally need, they may also access resources which can be useful in the development
of their own projects or businesses. He explained:

But there is where they have sensitized and they have tried to put some Memorandum of Understanding. So that is also another way of making relationship to the community. You know there is where you find the traditionalist, you find they know the herbs or the leaves which can help them...Yeah, so you find they're allowed on some days to go in the park to collect herbs. To collect firewood. To collect medicine. To collect papyrus. Papyrus materials. The papyrus materials they use them into making mats to the women. Weaving baskets. Weaving round hats or caps. In so doing, when they say they get money from that and those communities, they see the benefit of the park because he's conserving those materials, at the same time they allow them to go and harvest those things and they get the living from there. As visitors are coming in, those are the baskets you have put on their food crops...Visitors are buying. Find if somebody has a small basket like this, this 10 thousand shillings. He earns a living for meat. Those are some of the things. Some of them collect palm reeds. They make them very well. They use them in culture dances and groups are hired to go and dance and when they're hired, they repay money to those groups. In so doing, they find that they're getting again some money.
Additionally, both Richard and Adam further discussed how sensitization would also include directly working with community leaders. Richard explained that the UWA would work with "the local leaders, the stakeholders" in a form of "collaborative management" in order for local leaders to "help [the rangers] to do what? To teach [the communities]." Adam explained how collaborating with local leaders would allow them to specifically target poachers within the communities:

"Then another thing is would organize through local council chairpersons of their areas. We make meetings with them and ask them to enumerate to us the family which poaches in the park. Then we sensitize them and say no, "Do you know, eh? We want a list of all the poachers in this district." They list themselves. You find like there's 70 [poachers]. They don't hide [the information]. We tell them, "Sensitize [the poachers] to surrender their weapons." They do it. They surrender the spears, wire snares, dogs, these dogs which are hunting dogs, they surrender traps, metal traps to us. To UWA. Even today it is happening. Then, [we] say now, "Eh, make your project for poachers."

In addition to providing poachers with projects that they can collaborate with other community members on, the UWA would at times take poachers out to enjoy various aspects of the park, including the Kazinga channel boat ride. Brian explained how this process had worked before in the past with "reformed poachers":

"The reformed poachers when they're coming in, we say, "You bring all the tools you are using to hunt." You find some people bring in dogs...They bring in spears. We had very many spears. They were disposed of. They were giving it out as scraps. And when they're giving it out as scraps, people turn a spear into an iron bar that will be used in constructing houses. In so doing, we're destroying those equipments. People bring in wire snares. People bring in bells. Dog bells. People bring in pangas. Knives. So many things...In return, that is maybe, in return they don't get anything. Anything that they get, that is to socialize. We take them to the boat, we give them [a ride]."

Importantly, some respondents recognized that community sensitization was not always effective and that some community members would still continue to commit illegalities despite even giving away weapons. Alex explained, "[The communities] have done their best outside there. But some of them, they've handed [us] their [poaching] tools, but..."
there's [still] no any change. There's no any change at all. Sensitization is given outside but still they come and do what? Kill the animals." Despite this, Brian surmised how even if reformed poachers go back to poaching, it will take time for them to get equipment again: "And when we remove those equipments from them, it will take time for time to re-organize and have those equipments again so that they invade the park again. So that is why we carry out that thing."

Currently, the UWA does engage in hiring former poachers as casual laborers. As discussed earlier, one of the reasons identified by the respondents as to why poaching occurred was due to poverty and unemployment; therefore, the UWA has attempted to provide poachers with an alternative to generate income other than poaching. In most cases, causal laborers can be identified after an arrest or after poachers give up their weapons to the UWA. Felix described:

Even giving some casual work to those poachers. Because poachers they are known. When you call them and when you arrest them, they say that, "We don't have work so we are looking for money to sustain our families." Even for them, they tell you, "That if...me when I get work, I leave poaching". So that is the only way that can stop completely poaching. When you give them, at least, even if it is just a small work of 20 thousand shillings. And he knows every month he's getting it, he'll not go out for poaching. Yeah.

Sam discussed how "at times we use [former poachers] as a guide. Then we give them allowances we get for when we go on patrol. So if he gets used to us, he's even directing us to the prone areas of poaching." In addition to providing rangers information and acting as guides during patrol, Sam also explained how former poachers would also participate in various tasks like slashing grass. He said how "at times, you can get these poachers who are coming, then we give them casual work. Others, like these ones who you are seeing [at the headquarters], who are slashing [grass]. At times, may are former
poachers." Likewise, Richard described how "we have casual laborers also and within the park working with us. Whenever we have a problem, let me say slashing [grass] close to our tracks. We bring them around these ex-poachers. They cut down and they get some [money]." Richard went on to add "that [job] can stop someone to do what? To go to the park [and offend]."

In addition to being patrol guides, Douglas explained how former poachers can also become informants for the rangers as well:

We recruit those who are poachers, we say, "You bring your old tools". Some are given casual labor, so you find these ones they are most informants. They go away to their home areas, they investigate. They know, since all along they have been a poacher, he knows the routes they are using. Some are guides we go with them, yeah, in the patrols. So you find it is much good.

Lastly, in addition to hiring community members, some respondents described how hiring identified poachers is a useful approach as well. For example, Adam described how identifying "notorious family poachers" within the communities and then hiring their children would help alleviate the pressures of poaching. He explained, "Then out of the notorious family poachers, we get like two kids from those of all level to come and join rangership. Whenever they go back to their family, where are poachers, they say, 'Let's leave poaching. Poaching is not good'."

7.8. Law Enforcement Ranger Misconduct and Illegal Activities

Discussed earlier, police culture has been attributed to influencing various forms of police misconduct and corruption by establishing a 'blue wall of silence' amongst police officers. As the current study is guided by the police culture literature, it seemed
necessary to also investigate the potential for ranger misconduct and corruption. It should be noted that the author had several informal conversations with rangers at the headquarters, as well as during the patrols. Indeed, during such information conversations, the rangers whom the author interacted with were the ones that brought up the issue of ranger misconduct and corruption.

7.8.1. Examples of law enforcement ranger misconduct and illegal activities in QENP

Originally the interview tool simply stated 'misconduct'; however, after discussing with a gate keeper that difference between misconducts and more serious 'illegal activities', the author decided to utilize both terms during this section of the study. Indeed, discussing the interview tool with the gate keeper for this portion of the study was especially valuable in order to identify the nuances related to the local use and meanings of specific terms. As a result, the author distinguished between 'misconduct' and 'illegal activities' in order to differentiate between low-level forms of inappropriate behavior (e.g. drinking on the job) and more serious acts (e.g. poaching animals). Notably, by using the term 'illegal activity' the author was also fully aware that respondents may also assume it also referred to acts of ranger criminality (e.g. robbery). As a result, the author asked respondents what they considered to be 'misconduct' or 'illegal activity' prior to and during this section of the interview. It was clear that respondents understood what that the author was asking by the examples they provided and only one respondent described situations that went beyond ranger corruption and into ranger criminality.\textsuperscript{39}

\textsuperscript{39} The respondent described how he had heard of a ranger committing acts of burglary, robbery and defilement of women.
While most respondents described that they had heard or witnessed forms of ranger misconduct occurring in QENP, some explained that they had never heard or witnessed a ranger committing an illegal activity. For example, Francis said: "No, no I have never seen it", while Richard responded: "No, that one I can't tell [because] I've never heard of [it]". Similarly, Frank stated, "I've never witnessed of anyone [and] even I've never heard." Some respondents explained that while they had not heard of any rangers conducting illegal activities in QENP, they had heard of rangers in other national parks becoming involved in illegal activities. For instance, Michael described: "At my outpost, I [have] never witnessed...But I do hear from other neighboring [parks]." Asked to elaborate, Michael explained:

We do heard. We do heard rumors. You know rumors is circulating. They may say for you are a poacher. But when you get information, when you look for investigation, we make what they are telling us is very wrong. That's why we make intelligence. Intelligence tells us that this man is it [innocent], they leave you. If you are guilty, they chase you.

As will be discussed throughout this section, the term 'chase' or 'chasing' refers to rangers being terminated from the organization. Notably, the majority of respondents had heard of, witnessed and even participated in forms of illegal activity. First, however, the following will discuss examples of ranger misconduct. Based on the responses obtained, examples of law enforcement misconduct can be separated into: falsifying patrols, failure to report or "absconding" and drinking on the job and negligence of duty. As this section was much shorter than the section on ranger illegal activities, when applicable the motivations provided by respondents will also be discussed here; whereas, examples of ranger illegal activity and motivations will be separated into two sub-sections.
RANGER MISCONDUCT

Falsifying reports

One type of misconduct described by respondents involved the falsification of official reports. This typically involved rangers who are stationed at outposts as these rangers are responsible for establishing their own work plans and reporting back to the headquarters. Such reports often were based on the patrols that were conducted or supposedly conducted by the rangers. In these instances, rangers would simply put GPS coordinates on the report to indicate that work had completed. Paul described: "You know somewhere, somehow some of these rangers can come and give false report. Falsified reports here." Asked to elaborate, he said, "[They say], 'I reached this and this area and I did not get this'." Alluding to earlier responses made by study participants, Dennis further highlighted the importance of having a GPS device as a means to monitor the work conducted by rangers. He explained:

Now, if my outpost is not having the GPS, there is no way you will know that I've been in the forest [doing] what? Patrolling. Because I can just sit under the tree and write what I want. But if you have the GPS, coordinates are supposed to be there. You can't [just] mark coordinates. You know [the supervisors] put [the GPS coordinates] in the computer, the computer will also what? Reject it...Because sometime we had a seminar with Research and Monitoring [department], they were trying to compare how people do their patrols. The reports which they bring from the outposts, they could plot in the computer. Then computer will show how you have been what? Moving. Sometimes you see other coordinates in a straight line. Have you ever experienced that?!

Dennis, knowing that the author had been participating in patrols, drew on this knowledge to make a point: patrols do not happen in a straight line. As will be discussed in the next chapter, patrol coordinates should "zig-zag" as patrol groups often have to move around obstacles and follow animal paths. In other words, any report that visually shows a patrol moving only in a straight-line clearly fabricated. When asked whether he
had witnessed any rangers fabricating or falsifying patrols, he responded, "Certainly, I can say that I have witnessed any ranger doing that." Dennis further explained why he believed some rangers may fabricate their reports when he surmised: "We as human beings, we have different levels of what? Understanding. We have a different level of understanding." Dennis was referring to the level of education that the rangers had and their appreciation for protocol. He went on to further describe how he collected such information on patrol in a detailed manner: "You can even see my book here [grabs small notebook and opens it]. It's full of what? These are all coordinates. You see. All these are coordinates. You see. All these are coordinates. You see. This is how we always [should] do it!"

*Failure to report for duty on time or "absconding"*

Another type of misconduct identified by respondents was failure to report for duty or what respondents referred to as "absconding." Alex simply described absconding when "somebody just disappears for about two days, three days." Interestingly, respondents described that such absconding tend to occur after rangers have been given permission to go visit their families for a short period of time. David explained: "Absconding from duty, they disappear. They disappear. You look for them, they are nowhere to be seen. They have gone to their homes. Then others, they get permission to go home and they don't come back." Brian also discussed how such failure to report for duty on time had a direct impact on organization operations. He observed, "When [the ranger] goes for off, he doesn't come back. He stays there for many days now. And he's distracting the organizations work. Such misconducts don't make a good ranger." In response to why
rangers would abscond, Matthew believed that ranger absconding was related to being over-worked at the park. He explained, "People are committed so much [at the park so] given days off, they add days." In addition, Frank discussed how such failure to appear on time may simply be due to the difficulty to traveling to and from the park. He noted:

Yeah, sometimes they can give you enough to go home for a week, and you come after two days. You're late. So sometimes we find that people are coming from very far, sometimes you find that the village where the people are coming from, they don't have [cellular phone] network. Even the money is bankrupt. The money has got finished. You have failed to get a quick transport, so he delays. He finds himself has made such misconduct.

**Drinking on the job and negligence of duty**

Lastly, respondents described how some rangers would drink alcohol while on duty. Alex commented, "Yeah, those things have ever happened...They have every happened and I think they're happening. Some of them take something like alcohol [and] of course, they fail to go to work", while David said, "Others go on duty when they are drunk." Brian remarked how drinking on the job was especially problematic since as law enforcement rangers, they are required to be on standby 24 hours a day. He observed how "some rangers drink and they fail to respond for their work. And he knows he's on standby. Any time he's going for work. By the time he's called, he's totally drunk." Brian further added how these rangers were viewed as being "always a drunkard." Chris referred to a situation where a ranger had been removed from the organization due to drinking on the job: "There's one also that's been...his duty was terminated [claps hands]. He was drunk while on duty."

Some respondents also discussed how drinking on the job also led to rangers' negligence of duty, including fighting with the communities or inappropriately discharging weapons.
Ivan explained: "Yeah, of course, of course. Like that one is obvious. It's obvious... Someone may be drinking excessively and at the end, he starts fighting the civilians."

Similarly, Sam and Daniel also referred to rangers fighting with the communities. Sam noted: "Such a thing you find [the ranger] has fought with somebody [in the community]", while Daniel simply stated that some rangers have been found "fighting while on duty."

When respondents were asked what factors they believed might lead to drinking on the job and negligence of duty, some respondents referred to character- or trait-based factors. For instance, Benjamin surmised that such behavior was based on how one was raised: "I think, to me, I think it depends on how one has grown up. Depending on how somebody [and] their behaviors. Where he has grown up from." Dennis said: "We are brought [up] in a different environment." Alex, on the other hand, attributed such behavior to dependency and habit. He described: "I think maybe that person, you know how somebody do I say somebody has addiction? Habitual? From home even before he joined [UWA]. It means he had that [addiction], you get me?" He continued: "Because somebody, if you are not habitual, you can really limit yourself." Similarly, Ivan stated: "Someone's habits are different. We are having different habits."

**RANGER-RELATED ILLEGAL ACTIVITY**

"Ah, your rangers connive": Collaborating with the community for resource access

The most common form of ranger illegal activity described by the respondents was permitting community members access to the park and its resources. Throughout the
interviews, respondents described a number of scenarios involving law enforcement rangers collaborating or "conniving" with community members. In return, respondents described how rangers would receive money or food in return.

Some study participants described how they had heard or witnessed rangers working with the communities to gain access to firewood or trees in the park. For instance, Matthew had "heard from senior officers that rangers had connived with firewood collection", while David mentioned, "some of them are [conniving with] firewood collection." Paul explained a current suspicion he had with rangers at a specific outpost: "There's this current one that I have not confirmed but there's high suspicion [because] what we're seeing is that when a patrol goes from [headquarters], it arrests people...But when it is those people [at the outpost], they don't arrest." Ivan explained that while he personally had not seen any rangers allowing or providing community members access to firewood, he did suspect that it occurred. He surmised:

But mostly the rangers what I think they can connive about is firewood [with] communities. Because communities can come crying, "We have nothing to use for cooking at home and trees are dry there. They're dead". So maybe someone can let the community to go and get firewood. Of course, to say thank you [the communities] give them a bunch of matoke, bunch of potatoes ...This is what I think actually. I have not got that physical [evidence] that these are doing so. But as a normal person, you assume it happens that way .... So I think that's what they're doing, but I'm not sure about it really. But it's what I've been hearing.

In addition to illegal firewood collection, respondents described how some rangers may allow pastoralists to graze their livestock within park borders. Ivan said that rangers were at times found to be "conniving with community [members] to do some illegal activities, like illegal grazing." Felix recalled a situation where a ranger "had allowed people to graze in the park and [the community members] paid, gave him money." However, Felix
was quick to note that the ranger "was chased" from the organization. Indeed, in most situations when respondents admitted to hearing or witnessing ranger misconduct or illegal activities, respondents were quick to point that the alleged ranger had been "chased" by the organization. In other words, the organization had conducted an investigation and if found guilty, the accused ranger was subsequently terminated or moved to another PA.

Dennis described a situation where it was believed that rangers were conniving simply due to the close proximity of cows grazing to the outpost. He explained how the rangers allowed "cows to graze near the [outpost] camp. Because if the camp is just 500 meters and cows are grazing, in your opinion, what do you think? What do you really think if they're grazing just 500 meters away?" Dennis went on to further discuss the possibility of either the rangers at that specific outpost being bribed by the cattle keepers or that cattle keepers simply neglected their cows. David also discussed how some rangers may warn cattle keepers that other rangers were on their way to arrest them. He observed: "Yes, sometimes it happens. Like the cattle keepers whenever you want to go there and arrest them, they communicate [with the rangers]. At which time you find nobody there, but the cows are grazing. But the people have disappeared. That's because of communication from their staff who are here." Note how David referred to rangers who were working with community members as the "staff" of the community.

Lastly, some respondents referred to circumstances where rangers had allowed poachers to hunt and kill wildlife within park borders. Michael said, "We do hear rumors of
poaching...Conniving with the community members", while Brian noted how "Some
rangers connive with communities. They allow them to go and kill the animals."
Similarly, Isaac explained: "It is not too much, but I have ever heard, yes...Those who are
chased [for] mostly conniving with poachers...Yeah, [the ranger would say], 'You go and
when you come back, you come and see me'." Isaac was referring to how poachers would
need to pay the ranger upon returning from the park. Unlike Isaac, Paul believed that
rangers conniving with poachers occurred on a more frequent basis. He discussed one
specific incident:

Eh, we have had! We have had. We have had so many. Like one time we had
a ranger here who's wife came with wire snares and this ranger could recover
the wire snares, instead of forwarding them to the headquarters here, he could
keep them in his room. Then gives to the brothers. Then the brothers again go
and plant these wire snares, so it was like a cycle. Yeah...When they keep there,
they give to the person. They give back. So the same wire snare, you can keep
recovering the same wire snares several times.

In addition to providing poachers with access to the park or to equipment, David and
Douglas explained how some rangers would actually direct poachers to operate in
specific areas of the park where patrols would not be conducted. As David stated: "There
are others, they have been involved in poaching. Coordinating with the poachers...Yeah
coordination. Give them the information that we are not there...Yeah, those ones helping,
in most cases, they get in turn some money." And Douglas reported:

We connive with the poachers, then they go to the park. And if they arrest the
suspect, say, "Such so and so, we agreed this and this, to have this animal to
share something". Which is bad and you'll be risking your job though little
payment. But little is better than nothing...[So] you connive, you can allow the
poacher to enter, "You go such a place maybe on such a time". They agreed, "I
will not be there, so get what you get"... 'Cause [the ranger] doesn't want him-
[self] to fall into the act directly, he want to use another person.

As indicated by Douglas' response, becoming involved with poachers may be seen as
beneficial for some rangers since they are not directly implicating themselves in poaching
but are receiving something in return. However, Douglas also discussed how poachers who were apprehended would simply "reveal the information" or incriminate the rangers they were associated with. Sam also noted this as he observed: "[The ranger] just allowed them to go and trap. Then, a hippo was trapped...Then after the arrest of the suspects, [the suspects] had to mention the name of the ranger."

"You can see! It was a fountain of illegal activities": Direct participation in illegal activities

To a lesser extent, some respondents also described situations where rangers themselves had also directly participated in illegal activities, specifically poaching. Brian described: "Rangers killed animals...Yeah, they killed animals and sell them for commercial purposes. Yeah. And they use gun. Guns." Adam referred to one situation involving a ranger stationed at an outpost:

You see on the outpost we used to give two rangers every outpost, so with him, when he was left alone, he went and shot a hippo and sold it 300 to the community. Then we came to know the information through the community...When he was in the camp alone, he killed a buffalo. He sold it to the community. When we realized it beyond, then he was dismissed, eh.

Paul also recalled a situation where a ranger was implicated in the poaching of elephants in QENP: "There was a ranger in 2003, when I was just coming in, who went and actually, I think shot elephants in this other side of Kiyanga, northern part there. Went and shot I think two elephants." He also described another incident where a law enforcement ranger collaborated with his brother, a police officer, in order to kill animals for poachers: "[The] ranger had a brother who's a police officer. So the police officer could give him extra bullets, because [the ranger] had a gun. When [the ranger] was patrolling, he shoots an animal. Shoots for poachers, then poachers take the animal." Paul
also illustrated his own personal experience in being involved with colleagues who poached during a patrol:

I give you a personal example: when I just joined here, I just joined here, but there was somebody, he was in the system and we were new. We were like training still. This man said, "You know the system that you need to get use to: when we're in the bush, we don't eat beans". So he scouted and shot a kob, eh. Shot a kob. When he shot this kob, he called us to carry. Because I was, I think...me and my colleague, I think we're around two, three months in the system. We had to carry. What else could we do?

The personal example provided by Paul suggests the potential for peer group secrecy and solidarity amongst law enforcement rangers. As this can be categorized as a factor that may influence ranger-related illegal activities, this will be discussed in more depth shortly. In addition to law enforcement rangers, Brian described how SWIFT personnel had also been found to participate in poaching activities as well. Note how Brian distinguished between the SWIFT personnel and the law enforcement rangers:

I have told you we have SWIFT, those are UPDF. And there are traditional ranger. And for the SWIFT's on many occasions, they have been caught killing animals. Some have been given what we call "RTU", Return to Unit. We say, "Please we are not going to stay with you". Take this one back. We arrest them, after arresting them, we take them back to their former units, we say, "We can't work with this person". But rangers are more disciplined, more committed to conserve. Rangers are more committed to conserve than our colleagues.

_Selling of resources/goods_

Other respondents described how rangers would also collaborate with community members to obtain resources _found_ during patrol (e.g. trapped animals) or to obtain goods
confiscated by the organization (e.g. elephant ivory). Paul recalled situation when he first began the job:

While we were patrolling we got a giant forest hog on a wire. What my supervisor did then instead of say maybe calling, reporting this one, what he had to do was to call other people, "Okay man, pay me some money!" Now the question that lingered in me was, "How did the man get to know this was a potential buyers if he was not collaborating? If he had never dealt with them sometime back?" See? Eh, so those are the confirmatory points that really helped me believe that, yeah, there was [rangers involved in illegal activities].

As Paul mentioned such early situations provided him with evidence that some rangers were involved in illegal activities. David described how rangers had also been found to be involved in selling ivory as well. He noted: "Others have been got in involved selling the ivory, which is a gross misconduct. [It is] punishable by dismissal with disgrace without any benefit." Additionally, Paul and others also referred to an incident which involved a law enforcement ranger who had been responsible for managing and overseeing collected evidence. Dennis described how "our ranger sold an elephant tusk", while Chris said, "I heard that somebody, okay, that he was involved in stealing [elephant] tusks in the store. I don't know if it is true or not." Like Dennis and Chris, Alex also referred to this incident: "Yeah, I have ever heard...But me I have never seen them...They connived, they sell the ivory or whatever." Tom also alluded to the
aforementioned situation and described that "[the UWA] have terminated [the rangers] services because of that." Paul, who was well aware of the incident, described it in detail:

The ivory got lost from the store [evidence storage] in Ishasha. Then after getting lost there was no explanation. And yet that person [person in charge of managing the store] did not report that the store had been broken [into]. So we lost the that ivory. And when we lost that ivory, the person could not account. The person in charge of the store could not account for the whereabouts for that ivory....The room had been under lock and key, but the seven pieces of ivory were got into town. Somebody was trying to market them. So when he was got marketing them, they were arrested. Police actually arrested. He was selling, but he did not know whom he was selling. Yeah. He was selling to the police detectives. So he was arrested and he revealed that he collaborated with the store people. The store in charge. When [the person in charge of managing the store] was picked [up], could not have an explanation. [He] could not have an explanation. Obviously he had participation.

7.8.2. Opinions on ranger misconduct or ranger involvement in illegal activities

Some respondents were asked how they felt when they had heard that a fellow ranger had been implicated in forms of misconduct or illegal activities. In regards to ranger misconduct, particularly involving the community, Ivan described: "You feel bad and you have to react immediately. You have to go there. Investigate, both the communities and the rangers. Make sure that you settle with the communities." Jude, who knew the ranger who had stolen the elephant tusks, described how he felt about the situation:

Of course when you're working in a group, you are all friends. You're like one family. So when we hear that your friend has been caught with this, you feel sad. You feel sad. In fact, I felt it because it was already in the storage. He picked it in the store. He was the manager of that store. So I felt it. In fact, I felt it...Yeah, for him. Of course. He has a family. And this where he was earning a living...He was not even willing to go home. So when I looked him, I felt it. 'Cause now the family is suffering as I speak right now.
Adam, on the other hand, described how he would be disappointed to hear about rangers becoming involved in illegal activities. He described:

Then today I hear that you have arrested someone and you have got some money from and he released. I think if I get you, I would chase you. I can't allow you that. It's very bad. 'Cause now even you are showing it to others to continue doing the same thing, which is very bad.

Adam continued to describe how rangers should recognize the value of their job and that rangers should establish a sense of pride, respect and reverence for their occupation. He illustrated:

Now, you and your national park, it is one now. And make sure now, that your job is your mother, your job is your father, is your friend, is your boss, is your everything. So take it in the way that you have sought it...Funny enough, you find [a suspect] who wants to give you like 10 thousand [shillings], 20, eh, so that you release him. And if your bosses have heard, they will chase you of 20 thousand [shillings] and yet you are getting 500 [thousand shillings for salary]. It is such a kind of nonsense! So there if it comes to you if you are a leader, you can't! But these guys they can convince you, "Afande⁴⁰, let's eat this money! Our boss, let's eat this money! Now you see we are getting sweat for nothing". But yet they don't know that they are getting good money and they want them to sweat... Their salary is increased. They can't think about that [anymore]. They're short-sighted. People are short-sight. They look very shorter. They don't think what is tomorrow.

As can be derived from Adam's response, he believed that some rangers were "short-sighted" and did recognize the potential significant loss (e.g. job and salary) that could occur from accepting a small bribe. Further, he did not understand the why rangers complained about doing their job or 'sweating', when that was what they were hired and paid to do. Lastly, and as it will be discussed in upcoming sections, Adam described how the recent salary increase should alleviate most of these issues.

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⁴⁰ *Afande* is a term used by rangers to address rangers of a higher rank.
Lastly, Paul described how he felt as a supervisor when a ranger had been implicated in illegal activities:

You know, first of all the aspect of the spirit of brotherhood is so much strong. You see like even if you have an enemy, when he's going down, you feel a human being has gone. But now look at a person you've been always with, eh. We look at a person we've always been with. You know you get so much haunted. As a supervisor, you start thinking that there could be more, eh? Eh, and then also now it affect your decision-making. Because now after you've punished, you can sometimes become irrational. Hostile. Even to the innocent, eh? So it is a big challenge if you encounter it. It takes you, it needs a bit of time for you to really refine yourself and then get which appropriate approach [is needed]. Of course now you get emotionally stressed... [Also] it casts a lot of doubt into your integrity. They also of course now because like in the organization here, you know there's a common saying that "a fish does not develop from the tail, it starts from the head". So sometimes they will look at a supervisor as being a very weak person. He has not been able to spend strongly to his subordinates what they are supposed to do. Yeah...It boomerangs into you also.

A number of important themes can be identified from Paul's response. First, Paul explained the inherent sense of "brotherhood" amongst the rangers and how such camaraderie was further deepened by the constant interaction. This can be attributed to the both the occupational and personal components of the job. As a result of a ranger becoming involved in an illegal activity, Paul also described how it may lead to him becoming overly suspicious of other rangers. Additionally, due to his position, others may suspect that he was involved in such illegal activities as well or that he may simply be ineffective as a supervisor. It was clear that Paul recognized the residual impact of ranger participation in illegal activities on himself and on others.

7.8.3. Disciplining rangers

Importantly, regardless of whether the respondent had heard of rangers participating in misconduct or illegal activity, most respondents believed that rangers would be disciplined if found guilty of such acts. Michael expressed his support for the disciplining
rangers and explained how the organization was serious about addressing ranger misconduct and illegal activity. He referred specifically to drinking on the job in his response: "So that is why we say rangers should be doing what? Shouldn't be drunk. And we're serious on it. When we find you drunk, we take you to disciplinary...You've violated the law and you cannot perform what we want. So there it is." Later in the interview, Michael further described how the organization would approach a ranger who was found to be implicated in poaching: "And when you get poaching, a ranger, direct chasing. We chase you. But when we chase you, we also monitor you [in the community] because we know you will be an external poacher. [Here] that one we call it, 'internal poacher'." Paul also emphasized how the "UWA does not condone any criminal activity...Whenever there is anything that is seen to be criminal in nature, the organization opens its eye and looks at it...It does what it can."

David explained how the disciplinary protocol worked in QENP. He noted: "[The disciplinary committee] starts at the PA, protected area. There's a disciplinary committee for protected area. Then there's disciplinary committee at the [Conservation Area]. Then we have the top management, which is Kampala, the human resource manager," he further added, "When we see that [the offense is] too much, it's beyond acceptable, we give recommendations [to] headquarters to stop his contract or to terminate him. If it's gross [misconduct], we request to stop him and pay him off the three month. But if it's continuous, he has not changed, we advise headquarters not to renew his or her contract. There are two [responses]: advise to terminate, two: advise not to renew." Similarly, Paul
explained that the decision to discipline a ranger and what kind of punishment would be handed down depended "on the magnitude" of the offense."

Paul also provided insight on the disciplinary protocol at QENP:

Because you know we have what we call the human resource manual. That is like a standing procedure book. What we need to do is standing order. What is expected from staff from bottom to top. So in that it spells out some other activities that awards somebody summary dismissal or a warning. So always when we get like a person has collaborated that one earns, if we prove really, manage to tag a person to a particular happening. So the disciplinary actions have taken like I’ve told you we've had scenarios where we've had people go. We've really had people go. Immediately we prove. The only thing is sometimes proving. You know they're skillful. They do with a lot of concealment. But if there's really an open ground for proof then we have no option other than really casting them off.

Isaac explained how the disciplinary committee would "go and do their research [first]."

Asked to elaborate, he said:

For example, they have arrested a poacher and the poacher said, "Ah! Somebody, a ranger is the one who accepted me to enter and to do this and this." So [the disciplinary committee will] go and do their research from the community, how has [the ranger] been doing and from them [the disciplinary committee] know how to get the information and the evidence.

In other words, the supervisors or management would conduct follow-up investigations in the communities which were frequented by the ranger in order to gather information on
the ranger. Additionally, Paul explained how "deceptive patrols" would be conducted in order to investigate rangers within the organization. He recalled one operation which he led:

One time in Maramagambo [Forest]... I could always sense that timber, trees were being cut. There was timber lumbering in the park. In the forest. Deploy. Nothing. Could not see. Deploy. Nothing. So what I did I also caused like what I told you, "Deceptive deployment." Deceptive with a very good objective. I caused the ranger in that area of Maramagambo, I caused him to deploy at the other extreme area of Kyambura. Told him, "Your skills are desired. We've had another problem at the other side". So when we went to the other side, I also deployed other people that I participated in. So when we deployed like this, we managed to arrest [suspects]. And when we arrested, these people got there was a book where there for calculation of now so and so is entitled to this fraction of money, this one... And a name of a ranger featured also here. So of course that also leaves no other doubt that to for any other person we confirmed because there was that and all along nobody was reporting that there was that activity. But I suspected out of my own information gathering system, I got to know that there was that and I got...I got the person.

When asked whether any rangers had been disciplined or terminated within the last year, David responded: "Yes! Yes, last month. One because of over drinking and low performance. The contract was not renewed from recommendation from here. Then there are several ones that have been disciplined because of misconduct. And the misconduct which they did was negligence of duty." Benjamin also provided a recent example of rangers who "were accepting bribes" and subsequently "were chased" from the organization. Benjamin added that some rangers may simply be transferred to another PA if the ranger has shown to be hard-working but is prone to some infractions, including drinking on the job. Benjamin said:

So sometimes you could find, they were hard working but when they all the time when he has just gone to town, he's taking booze and doesn't recall. So when he comes, you find he wants to go and work when he's drunk. Yeah. So they first warned, then again transferred to the other [PA]. Because they know that maybe they wanted to discover the cause. Whether it is because of getting familiar to the staff or to the bosses. So they wanted to put them in different areas to see how [he] would react. So if they again do the same thing, then I think management take action.
7.8.4. Factors that lead to law enforcement ranger illegal activity

As summarized in Table 7.5., respondents provided a number of personal, organizational and contextual explanations why rangers would engage in illegal activities. In addition to the factors provided by the respondents in this section, the author identified two other factors from earlier responses: compassion and learning the system. It should be noted that the following factors are not mutually exclusive and overlap may occur in some cases. For example, while a ranger may be especially compassionate to close friends and families.

*Personal Factors*

As referred to earlier, some respondents described how rangers would work with family relatives. Felix reiterated this possibility when he said: "Another reason why you may find, those [rangers conniving], the suspects are maybe they are relatives. That [ranger] can also close one because of relative. Yeah." David explained that the possibility of rangers working with friends or family members is one of the reasons why they usually send rangers to PAs that are not near their home village. As David pointed out, community members tend to believe that the UWA should hire community members to
Table 7.5. Factors Identified by Respondents that Influence Ranger Illegal Activity

<table>
<thead>
<tr>
<th>Factors</th>
<th>Explanation</th>
</tr>
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<tbody>
<tr>
<td><strong>Personal</strong></td>
<td></td>
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<tr>
<td>Familiarity</td>
<td>Community members are friends or relatives of ranger.</td>
</tr>
<tr>
<td>Compassion¹</td>
<td>Empathizes with the community members and allows access to specific resources (e.g. firewood).</td>
</tr>
<tr>
<td>Greed</td>
<td>&quot;Money-hungry&quot; or &quot;money-minded&quot; and is not satisfied with the money he/she is currently making.</td>
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<tr>
<td><strong>Organizational</strong></td>
<td></td>
</tr>
<tr>
<td>Low pay and over worked</td>
<td>Believes that he/she is poorly paid or that the salary for the position is too low. Additionally, they believe that they are overworked and not provided with enough time off.</td>
</tr>
<tr>
<td>Poorly facilitated</td>
<td>The provided food during patrols and subsequent allowance provided afterwards is not sufficient given the work that is required in the bush. In addition, rangers have to spend their wage on foodstuffs as they are unable to cultivate while living in the park.</td>
</tr>
<tr>
<td>Lack of supervision, guidance or training</td>
<td>Rangers are not properly supervised by their supervisors, are not provided with enough training or are not given enough guidance.</td>
</tr>
<tr>
<td>Access to targets or opportunity</td>
<td>Given their close proximity to wildlife and other resources, their on-site living situation and their role as guardians of the park, rangers have access to suitable targets on a regular basis.</td>
</tr>
<tr>
<td>Learning the system¹</td>
<td>High level of internal solidarity and secrecy associated with learning the system of being a law enforcement ranger.</td>
</tr>
<tr>
<td><strong>Contextual</strong></td>
<td></td>
</tr>
<tr>
<td>Involvement of other service personnel</td>
<td>Other service organizations, including the local police, may be implicated in corrupt practices as well leading to rangers being able to rationalize their behaviors.</td>
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</tbody>
</table>

¹Derived from examples of misconduct and illegal activities provided by respondents. This was not discussed by respondents during this part of the study.
work within the PA yet do not realize that community members are hired but are just sent away. He explained this issue in depth:

There's [rangers] which we selected, we recruited from the villages within. But for [the community members], they wanted the number to be big from the village. And they forget the rangers from whom we recruited from here and check them to another protected area. For instance, Kibale we have rangers from here, Elgon we have rangers from here... so for them [claps hands] they don't consider that...they want rangers who are recruited from this area to work within their national park...[Because] for them... they look for that because if [we] recruit rangers from the same community here, they expect these rangers to assist them. To assist them... Other want them to be there in order to cover them in case they have done something bad, these are my relatives. They don't report. And also to get when we are going to do operations to get informations that they are coming to get out of the park. Which is a challenge to us.

It should be noted that David also recognized the potential benefits of hiring a community member to work nearby his home village as they would be able to explain more clearly the "benefit of the park [through] sensitizing them." Nevertheless, it was clear that such a potential benefit was outweighed by the threat of rangers conniving with their family and friends. Notably, Paul also explained how he felt that rangers who originated from nearby the PA would be more sensitive to the problems of that area and would "understand their people more than others". However, like David, Paul also illustrated the challenges associated with hiring rangers from nearby communities:

Although of course you know [the community members] also their argument is sometimes bent on concealed interest. Hidden agenda. Because they'll need their person whom they can actually [work with]. They can collaborate and do erratic activities. That is also the other thing. Yes. Yeah...But we've seen so many of them, I mean, so many of [the rangers] collaborate with their relatives.

Arguably, such collaboration may also be linked with feelings of compassion for close friends and family members. However, Ivan also believed that rangers would empathize
with particular community members as well, including elders, who may not be familiar with the MoU or may fear or simply hate interacting with the UWA. Ivan explained:

Those [community members] who are not educated, who can't come and write and given memorandums of understandings to collect firewood. Who fear [the rangers], the old women, the old men. So when you're someone at the outpost, it get good relationship from the people of course...So I think that's the only I could say conniving between communities and rangers. That kind of situation...Still it's bad because the post is there. If the community wants firewood, they [can] write, they get into memorandum of understanding with the organization. Then, they give them days of collecting firewood, eh. It's very bad. But as I've told you, this is what I think is taking place. Yeah. Basically, I think this is what's taking place. Maybe they get in relationship with community about firewood. But the right procedure is coming to the offices, and get some agreement with the organization. normal person, you assume it happens that way. As anyone assumes. Yeah. People can't stay here near the park and they lack firewood and water. And you can't give them water for cooking. How will they survive? And not all, as I told you, they're not ready to come here and ask officially. No. The people, their hatred, they fear. Even people with transport they can't come here.

In addition, Ivan discussed how providing community members with access to specific resources may lead to the development of working relationship with the communities. By participating in 'lower-level' infractions, rangers may be able to gain information on more severe crimes, including poaching. He added: "When somebody killed an animal and took it to the community. If [the ranger] had a good relationship with those people, they'll keep you [informed] and say, 'Ah! Where are you? There's meat here! [The poacher is] so and so'." Despite this, it can be seen from Ivan's response that such informal agreements are still frowned upon and viewed negatively.

While the aforementioned personal factors can be viewed from an altruistic perspective, most respondents who discussed ranger participation in illegal activities ascribed such behavior to greed. Richard stated remarked: "Let me say, they're money-minded. They like money very much", while Isaac stated: "I think it is the need for too much wealth."
And Daniel said: "Sometimes, money hungry. Yeah. Money hungry." Similarly, Frank described this greed in a unique manner when he explained, "This one depends on one's heart. One's heart. There are people who actually, their heart is not satisfied." Alex also referred to the "heart" of the ranger as he explained:

[Laughs] That question is somehow very hard. But I will explain from my understanding. I think some, you know, all of us here we have different hearts. There are those who like bribes. There are those who like being rich faster. They enter the organization put in their two years, three years. But he wants to get rich within that period. And yeah of course all of us, they don't have that heart of the organization. They were given [a bribe], "No, I cannot leave this".

Alex raised an interesting point when he explained that rangers who connived in their pursuit for wealth did not have the "heart of the organization". In other words, the ranger did not internalize the objective and mission of the UWA and placed their own personal goals before the organization. Michael also believed that greedy rangers were doing "something that is not right for their organization." He further added that such greed could also be related to the inability of rangers to be content with their current financial situation. He said:

Don't be money hungry. If you don't have money, agree that you don't have money. If you have money, you agree you have money. But if you don't have money and say, "I am looking for money up and down". Then that's why you fall into problems.

**Organizational Factors**

Study participants identified a number of organizational factors which may lead to ranger illegal activity, including low pay and overworking, inadequate food/ration or allowance, lack of supervision and guidance and access to targets/opportunity. In addition to this, the author identified the potential influence of solidarity and peer group secrecy associated
with 'learning the system.' In general, most respondents believed that low pay or salary was the main reason that rangers would become involved in illegal activities.

Study participants described how some rangers would connive with community members or participate directly in illegal activities in order to supplement their income. Francis noted: "Little payment of the salary", while Dennis simply stated: "Poor payment." And Tony said: "Under payment." Similarly, Daniel speculated: "Maybe low salary. They're not paid well." Jude admitted that, "the salary is not enough...I will be tempted to receive that bribe to finish my problems at home." Asked what he referred to as 'problems', he explained, "[For example] You may be working, you have a problem. Like I'm having kids, therefore, they're studying. I must be paying school fees." Similarly, Richard described that rangers who connived or directly participated in illegalities believed that "they're not paid well." He went on to add, "Everybody has his own decision on anything, but it comes as a result of low salary. You find me...If I kill a buffalo, my children can go to school. Such a kind of decisions of different behaviors of people."

Interestingly, in May of this year, salaries for all the UWA staff were doubled. When asked why the salary was increased, most respondents believed that the salary was doubled to address ranger misconduct and illegal activities by motivating rangers and providing them with additional income that they would have otherwise received through illegal means. Chris described: "Mostly, sometimes back, most of the staff were complaining of salary being very little. But at least nowadays, salary's a bit fair. So I don't know why rangers would be involved in [illegal activities]." Ivan discussed how a higher
salary would influence the decision-making of rangers when encountered with an opportunity to connive or even poach: "Maybe they are paying them not so much money, small money and they've decided to go for bribe and poaching, but if they are paid small money, then they can do that. But if they are paid highly, then there wouldn't be any reason to be doing bribe with poachers." Felix explained the rationale behind the salary increase: "It increased because many people now, rangers, had started doing illegal activities. Conniving with poachers. Because they are getting little money. So people, many staff could be easily bribed." David also discussed what he believed was the underlying reason why a salary increase was implemented: "Yeah, average salary for a ranger now has been increased. Raised up. [The management] want rangers motivated. They want rangers motivated. They wanted them not to get involved in the illegal activities. Motivated and trying to avoid them involved [in] illegal activities."

Indeed, some study respondents believed that the recent increase has already had an immediate impact on ranger behavior. Brian believed that the doubling of the salary had led to a decrease in ranger illegal activities. He explained:

But [the increased salary] was also limiting also rangers from committing illegal activities 'cause salaries have been increased. This is the third month. And if you look between this new months and the former years, there were many illegal activities committed by rangers compared to today. Because somebody who was getting 200,000 shillings, today is getting 400,000. The 200,00 shilling top-up has compensated illegal activity that person would be doing.

Note how Brian believed that the additional salary would help "compensate" the rangers for the money that they would have made from becoming involved in illegal activity. Indeed, this echoes Ivan's statement that the increased salary should remove a incentive for rangers to accept bribes from poachers. Similarly, Michael also speculated that the
salary increase had led to a decrease in rangers participating in illegal activities. He said, "In fact, by the other time [ranger] poaching was increasing, but now since they have increased the salary, it is now decreasing! So it means that people were very bad the other time. So nowadays when they have increased the salary, people are stopping carrying out such exercises." Like Brian and Michael, Adam believed that the recent increase also had an impact on ranger illegal activities: "Rangers reduced [participating in illegal activities] and totally now they can't do anything. So today now rangers are okay, because even now the salary's increased...These days now they're no longer do how they use to do, eh? So it's now okay."

Matthew and Michael also described how rangers may become involved in illegal activities because they were overworked or did not have enough time off. As Matthew simply stated: "[Rangers] are always at work!" As a result of being always at work, Michael described rangers were unable to develop investments in their home villages. As a result, some rangers may supplement their income through to illegitimate means to make up for perceived loss opportunity. Matthew explained:

Now, another thing that can make somebody to participate in illegal activity, at least rangers. Since they live in the park, others they leave families. They go there for area of work. At least a week, a ranger should be given a few days every week. Should go for off days in a week. Every week. Weekend, should go for weekend...Now, when you have days off, every for example, every weekend. Those weekends can help you. If you want, for example, you have investment at home, you'll go run your investment at home...Now one of the reason why [days off] can reduce [ranger illegal activities], for example, private businesses. Private business are very important. It can stop them. Rangers they will also have small, small organizations. Small organizations.

Mentioned earlier, as rangers are required to live on-site, they are unable to cultivate their own food and therefore must spend money on purchasing foodstuffs. Some respondents believed that rangers may supplement their income in order to make up for wages spend
on food. Benjamin stated: "And mostly you find much of the things, we cater for ourselves. Like food...For example, if I want a matoke. I'll have to go and buy it from that salary of mine." And Chris said: "Mostly rangers, they're not given food ration. For instance, you're only given [ration] when you are going for patrol. And then when you're at the camp, you have to feed yourself, maybe you have a family." Incidentally, and as discussed earlier, the lack of food ration given for patrols may also lead to rangers engaging in illegal activities. As will be discussed shortly, this issue is further exacerbated by the increasing standard of living throughout the country.

In addition to not being provided with food or enough ration, some respondents described that the allowance provided for patrols was not sufficient, especially given the work. Jude simply stated that rangers "don't have any allowance," while Benjamin expressed his frustration by saying: "So only now where there is still bargain it is on that allowances, night patrol allowance and whatever. There's still looking at it a bit small. Because 2500 [shillings] a patrol. It doesn't make sense! And yet you have slept in the bush."

Some study participants also believed that ranger-related illegal activities occurred simply because of a lack of supervision. Such lack of supervision can be problematic from both an occupational (e.g. conducting illegal activities on patrol) and personal (e.g. conniving with community members). Ivan discussed the problems with being unable to monitor the behaviors of all rangers. He explained: "As I told you, lack of supervision. If you supervise and you're not [physically] close to your rangers, they will be tempted to do what they want to do. So you need to be close to your rangers all the time, so that you
know how they behave. How they’re doing [and] how they rate with the communities."

Similarly, David surmised:

If rangers are not supervised well. They do not have good supervisors to be in touch with them, they [will] feel they have power in their own. They feel they do not have supervisors. They take power in their own hands and do whatever they want. They will be doing what. Because they do not have someone who will come and cross-check.

This lack of supervision may be especially problematic at the outposts as was noted earlier. Indeed, as mentioned earlier, some respondents believed that a major benefit of living at the headquarters was the ability to gain insight and guidance directly from their superiors, while living in an outpost hinders that possibility. David recognized the importance of guidance when he also attributed ranger illegal activity to "lack of guidance." When asked what he meant by 'guidance', he explained: "Guidance is when you're gone there, you find that they have done a mistake. First: approach, tell them the mistake that they have done. And after informing them the mistake that they have done, you give them the advice that you'd have done like this, 'If such a things happen, this is how you're supposed to handle it.'"

Related to this, some respondents attributed ranger illegal activity to a lack of training. Dennis mentioned, "If a ranger is not trained. If you're not trained, you can easily be bribed." When asked to elaborate, he responded:

If you're not trained, for example, if a ranger is not trained, you may not even know your roles...If someone is not trained, he can even pick his own gun and direct to the what? To the kob and gun down! Because he's not trained. But if you are really trained, you'll really know what you're after. You can't do that.

Essentially, Dennis believed that rangers who lacked appropriate training may not be able to perform the roles and responsibilities of a law enforcement ranger properly. As a
result, participation in illegal activities may be due to a genuine ignorance or lack of knowledge regarding what constitutes as appropriate or inappropriate behavior. Both Patrick and Jude echoed this sentiment. Patrick speculated that "maybe it might be ignorance. To me, I might say it be ignorance." While Jude said, "I think that one is lack of knowledge. You get a job and you fail to know the rules and regulations governing the organization. So people are just not aware." Additionally, Dennis illustrated how rangers, when properly trained, may be better able to understand to identify with their roles and may have a clearer idea of what they idea of what they are meant to do. Isaac also alluded to the importance of establishing a sense of ownership for the rangers: "Somebody who doesn't love his job. He's working for conservation, but really, you can see that somebody is not a conservationist. How can you connive with a poacher? You are the one who is supposed to protect the animals, but you are the one who's selling them. You don't like your job!"

Paul described that since rangers live on-site and operate in a rural, remote setting, the rangers have direct access to a number of targets. Indeed, if they so choose to engage in illegal activities, they effectively mitigate the abilities of a capable guardian: themselves. Paul referred to the exploitation of such access as the "11th commandment":

"The 11th commandment' people use to call it, "The man eateth from where he worketh"...Eh, in loose translation: "You eat from where you're working". Yeah so meaning you cannot starve when you have food at a proximity. So you have to survive from where you are. So we have animals, so you cannot starve when you have this. So better pick one and survive.

In essence, Paul explained that rangers have the ability to utilize their role as law enforcement rangers for their own benefit simply by having unimpeded access to resources that they can either use themselves or they could sell.
Lastly, while study participants did not mention how 'learning the system' or some form of peer group influence may influence ranger-related illegal activities, the personal example provided by Paul earlier suggests that such a factor may exist. Arguably, as a new ranger to the department, he may have felt obligated to follow the behavior of a senior ranger in order to fit in or prove his worth as a new ranger. It may very well be that such an incident was part of a rite of passage or act of acceptance for Paul. Notably, when the author followed-up with Paul, he discussed how he did not report the incident to his superiors further indicating, at least in this case, the presence of solidarity or secrecy amongst rangers. In other words, Paul may have been able to establish his position within the ranger community by proving that he would not report the inappropriate behavior of others.

**Contextual Factors**

The final category described by study participants moved beyond personal and organizational and referred to factors that were related to the general context in which rangers operated. Paul described how corruption is pervasive within the nation resulting in particular practices becoming normative. He observed: "I would say that from the national level, first of all, corruption is denting our country. We don't have a strong stand against corruption. So [the rangers] see it happens everywhere...It's like a normal thing." Jude also referred to the surrounding context when he said, "Sometimes when the salary is not enough, people tend to take bribe to top on their money to do some other things. That's why you're even hearing in the government of Uganda, the minister take the whole money donated to maybe AIDS, things like maybe roads."
The underlying context whereby rangers operate within cannot be understated, particularly when coupled with the aforementioned organizational factors described. As Goldstein (1977) remarked regarding police officer corruption:

> Given the temptations for additional income, it is easy to see how corrupt police rationalize their behavior and minimize its gravity. Whether accurate or not, the impression that corruption pervades society leads an officer to reflect on his own plight (199)

Such temptations may be further exacerbated when such beliefs are manifested through the behaviors of other service personnel. As Sam observed, rangers frustrated with seeing other service personnel profiting from corrupt practices, may begin to engage in such behaviors as well:

> And at times, [the bribe] comes when you take a suspect to police, then police take bribes from those suspects and then they do what? They act as advocates for the suspects, then at times you find a ranger getting tempted, "Now, if I arrest then I'm just making money for other people. Now why can't I also take this [bribe]?

In essence, Sam described how rangers may be more willing to partake in particular forms of illegal activities when they witness other service personnel doing so, especially when it simply results in the ranger not obtaining his perceived share of the pot. The involvement of other service personnel, including the police and UPDF, in corrupt practices may facilitate a context by which rangers are able to rationalize their behaviors more easily.
7.9. Ranger Attitudes on Job Satisfaction and Law Enforcement Needs in QENP

7.9.1. Salary

As just discussed, respondents believed that low wages were attributed to ranger-related illegal activities. It was therefore important to obtain the opinions of respondents on whether they believed they were paid fairly in QENP. Further, prior studies have also found that other wildlife law enforcement officers believed they were underpaid and had low salaries (Eliason, 2011b; Ogunjinmi et al., 2008). It is important to note that the author took into account the recent increase of salary and specifically asked whether the current salary provided to rangers was fair. When appropriate the author inquired as to whether the respondent felt that the amount prior to the increase was fair as well.

The opinion of the respondents was mixed. Matthew believed that the salary was "currently fair." And Paul stated: "You know in a nutshell, I must say that yeah, the money is fair. It is fair." As would be expected, some respondents compared the current salary to the previous one; therefore, it is not surprising that these respondents felt that the current pay structure was favorable. For instance, Lawrence explained: "These days actually the amount that we are paid these days is at least good. Is a good figure. Now like the other one that we're being paid...Now these days, what we are getting is good figure." Similarly, David described: "The salary was low but now it's okay...Yes, currently, the pay for the staff is fair. It is fair." When asked how his opinions on the previous salary, he responded: "A 100 percent it was unfair! It was little money and things were expensive!"
Jude enthusiastically explained how the new pay structure helped with boosting the morale of the rangers: "Yeah, I'm happy with the money! I'm happy...We are paid well."

When the author referred to the recent salary increase, Jude said, "A-ha! That's when I'm saying, 'At least.' That's why I've used that word [now], 'At least.' But behind there, it was really misery. It was misery...But from May, our guys are now smiling." In addition, Adam described how the rangers were now motivated: "We have morale with [the pay increase]. We have the morale and this is why we are allowing now our job seriously."

Conversely, other study participants did not feel the current salary was fair. For example, while Patrick recognized that the current pay structure was better at the present, he still believed that the pay was unfair. He explained why he believed rangers should be paid more: "Why we should get more is because we work hard. The work we do is too tiresome. And according to, now you see Uganda, the things have become expensive. So you find that even if you are paid, it may not be enough to sustain the family." Other respondents also echoed Patrick's sentiment on the work being difficult and how a higher salary would help justify or mitigate against the hardships. Richard described: "No, not really...Should be paid more. They overwork [us]...More, more, more. Because they overwork and the conditions." And Douglas explained:

No. Yeah, because depending on my job description and conditions of work, I need higher payments. Yeah. Higher payments. 'Cause my job, it is a risky job where I interact with other gun people who are poaching. So conditions... I sleep outside. I don't stay with my family. So at least, I should be compensated with higher payments. Yeah.

Following Douglas, Frank further elaborated on the risks, dangers and difficulties of the job as a major determinant factor in his belief why rangers were not paid sufficiently.
Moreover, he believed that law enforcement rangers, as field rangers, should be provided with a higher salary given where they conduct their operations. He explained:

It is not fair...As you've seen the other time [on patrol], elephants are there waiting for you. You are sleeping in the bushes for three nights, two days. There are lions, there's what. And we do not have anything to protect us from them eating us when we are sitting down on their space! [laughs] We, rangers, the field rangers, we are supposed to get the high money...Because we are the people in the organization who are facing a lot of risks and [we're] the hard-working people. Every appointment you go for, it is so very tiresome. There is no simple work or work which is not risky. But when you look in the salary scale, actually for us people who are working hard, we are the people who are on the lower payments [laughs]

Isaac also referred to both occupational and personal issues as he described his frustrations with the salary:

It's not fair...I think it's, to me, there's a need to increase our salary, because you can see, you are here working, you are a ranger, that amount of money is not enough to satisfy our needs. For example, we, rangers, we are feeding ourselves. We do not get food from [the organization] and again you can find that you've eaten a quarter of your salary on food when you are in the outpost. And your family is also there in the village. They also want to eat. Because like this type of our job, I will not deceive you, I will cook for myself. At times, it will be hard or impossible. I woke up early in the morning and I have to go for patrol. Let's say, I can prepare my tea then I go for patrols and I come very late at around two. I'm tired. I can't prepare my lunch, so I rush over [to the community] to [buy] my lunch. So you find that to me this money is not enough.

Notably, the issue of ranger misconduct and illegal activities was raised by some respondents here as well further emphasizing the link of between salary and ranger deviance. For instance, Paul noted: "You see, just like I told you, payment is another thing that can cushion people from being subdued to acting, I mean, acting really what I would say in reverse manner, eh." Benjamin noted that: "At least some people have also started appreciating [their work]. And others have now also started developing a heart of protecting so much," he went on to add, "[The salary] is now forcing people now to choose. If you bring a bribe of 50,000 [shillings], [the ranger now] says, 'Now that 50,000, I eat for how long? If now [the management] know that I get that bribe for 50,000
that means I will get it but I will never get another salary." In other words, the increased salary now provides incentive for the rangers to think twice before they would engage in illegal activities because they would be losing out in the long run. Brian also illustrated how the increased salary may influence rangers decisions to engage in illegal activities. Further, he believed that as a result of the current pay, ranger-related illegal activities would become non-existent:

"Yeah, it is a fair amount. Everybody's happy with it. There is in fact, there's nobody's grumbling. In fact, others who we've interacted say, "No. If I had any intentions of committing crimes, poaching, doing this, me I think this [salary] is enough. Because maybe I would get involved in firewood collection, the firewood collection, I would get how much? One thousand [shillings]. But now at the end of the month, I find I'm getting 100 from [my salary], but now I'm given 200. I will return with that. If you're going in for firewood collection, go do it alone. If I get you, I arrest you". With time such a things were disappear completely.

Finally, some respondents seemed to recognize the relative nature of their salary. For example, Paul said, "I must say that [the salary] it is fair comparing to other departments. Comparing to what I earn in other departments, it is fair" ,while Jude compared the UWA salary to rangers in the DRC. He observed: "Rangers in Uganda, they were not as poorly [paid]. These [rangers] in Congo here, they earn little money." Michael referred to the recent increase and commented, "It is not a bit. So meaning that if they can also increase again, it's okay. No problem." In other words, since the UWA was able to increase the salary this time around, they should be able to increase it again. Regardless of whether the respondent believed the current salary was fair or not, it seemed most respondents would prefer to be paid more. Indeed, as Tony put it: "In Uganda, there is a saying: a man is born crying, live complaining and die unsatisfied."\(^{41}\) Asked what he meant by the

\(^{41}\) Author's note: When I heard the respondent say this, I made a note to check and see if this quote was specific to Uganda. I later found out that the quote is similar to one provided by Thomas Fuller whereby he stated: "We are born crying, live complaining and die disappointed".
aforementioned saying, Tony simply replied: "When a main is born, he is crying because
he has started problems of this world...He will always complain and will always want
more...It is difficult for a ranger to be satisfied."

7.9.2. Advantages and benefits of being a law enforcement ranger

"I love my work because of the wildlife": Protecting and encountering wildlife

When respondents were asked what they liked about being a law enforcement ranger,
most respondents responded that they liked their job because they were directly involved
in conservation by being responsible for the protection of the wildlife in Uganda. Daniel
explained: "First of all, I like conservation. That's why I like to be ranger, because I like
conservation. Yes." Likewise, Douglas responded: "What I like with my job? Since I'm a
conservationist, I like being to control the resources of the people." Tony also described
how he liked being "responsible for protecting [the wildlife]." Further, when referring to
the elephants in QENP, Tony displayed a sense of ownership when he proclaimed:

"Those are my herds." David explained how he grew up wanting to protect the wildlife:

Yeah, to me I like being a ranger. You see when I was young I use to love wild
animals and I was a guide. A scout. So I said, "It is better for me to be a scout.
To ensure that these animals are protected." And even to enjoy these animals
in their wilderness. Because I saw that even when animals are there, even the
enjoyment. The visitors enjoy seeing the animals in the wild. So when I started
doing this work, it became too simple for me. I command myself in the field
without any difficulties.

In addition to protecting the wildlife, study participants also described how they liked the
opportunity to encounter and interact with the wildlife firsthand. Sam noted: "Now, I've
like a ranger by seeing how wildlife is. Yeah. And I love my work because of wildlife.
All along while I was studying I wanted to be a wildlife manager. So I appreciate." Some
respondents described how working with wildlife had been a life-long ambition that started from their youth. For example, Felix responded, "I liked wildlife from my school days." And Francis recalled:

About being a ranger, I like because I have learned many things which have been hidden from me since my childhood. When I joined a ranger, I saw very many things which I have never seen. I have never seen. Like seeing the elephants physically, these lions, leopard. Actually, I appreciate being a ranger, because I would have maybe have died without seeing them. So apart from those ones, even I have seen and experienced a lot of things. Yeah.

Further, Paul described how working as a law enforcement ranger has provided him with a better sense of appreciation for the wildlife as a result of the exposure he has had. As exemplified by his response:

I have had very good exposure, yes? Initially in my place, we didn't think there was value in conservation. Like the Ugandan kob, the only animals that we used to know was the Uganda kobs and the crested crane because they appear on our coat of arms. But the rest, we thought that was food, eh! But now this existence, I mean, being here has made me really know the interaction I've had with wildlife has made me know that these animals are value...Because now the appreciation I have, it's not that they are only creatures that need to be protected. You know they're like our helpless brothers that need our hand! [In order] for them to also sustain. Because it's not an accident that they are alive... [Also] the role they play in foreign exchange is so much important...If these favorable attractions existed, so many of the people who wanted to spend their moneys here would leave a lot. That would benefit the nation and have the provision of these things, because the nation could reap out of this.

It is also evident from Paul's response that he recognizes his role from a national scale and how protecting the wildlife benefits the entire country. In fact, it was clear from the observed patrols that rangers had a deep appreciation and respect for the wildlife. As exemplified by the following narrative, the sighting of chimpanzees during one of the patrols resulted in much excitement from the rangers on patrol:

During this patrol, probably within about 45 minutes in, we saw a bunch of chimpanzees moving. They were very quick! As explained by the rangers afterwards, the chimps were not habituated. In other words, they were not familiar with humans. It was very interesting to witness the reaction of the rangers as the rangers themselves were very excited as well. However, such excitement seemed to be reserved for particular animals. They would quiet down and they
would point with us. They would also start hurrying their pace whenever we'd see a sign of a chimpanzee. And even at one point the rangers decided to take out their camera and take photos. So it was very interesting to see that. It's not very often you kind of see that excitement for a law enforcement position ( Patrol 7: Narrative).

In addition to their own personal experiences, respondents also liked their job as it helped in the conservation of wildlife for the enjoyment of future generations, including their own children. Francis explained: "Since I am a ranger, I've seen the goodness in those animal. I've seen them physically. That's why I like to be a ranger. To protect them so that tomorrow my children will also grow and come to see them. That's why I like [it].

Likewise, Michael also described how the wildlife were meant to be preserved for the future generations as they were preserved by our ancestors. He noted:

We protect, we conserve. But we don't what? We don't destroy. And we are conserving for what? For generations. The grands, the grands, the grands of a long time ago also came and they conserved. They also left for us [these animals]. We all see those things. We shall also leave and we leave for our children. And that's why we conserve: for generations. So we need to make sure we protect.

"It has boosted my support to my family": Financial stability and familial support

Another reason why respondents liked their job was the financial stability afforded by their salary. Jude stated: "I'm earning a living", while Isaac replied: "I'm earning some money." Patrick similarly commented, "Ah! [I like] very many things. First of all, why I like being a ranger is that I earn a living." And Alex said, "What I like about it? Maybe I should say because I'm getting salary. That's what I should say. Because I'm earning money. I'm getting money."

Some respondents described by working as a law enforcement ranger they were able to provide for their families. Ivan stated: "So my family earns a living. It's my life." And
Dennis explained: "Yeah, I like being a ranger because it has boosted my support to my family...It has changed my life." Likewise, Francis explained how "it's where I getting the money for my family and school fees for my children." Richard also specifically mentioned how his "children are going to school" as a result of his earnings. Similar to Francis and Richard, Benjamin also described how his salary was allowing him to send his child to school. He described his the aspiration he had for his child: "I know that my kid will also be more educated than me! So that you never know, he may be a warden! [laughs] Or if not a warden, executive director [of the UWA]."

In addition to their monthly salary, respondents also described how the UWA also supported them in obtaining bank loans and other financial services. As a government employee, respondents described how they would be able to further supplement their income by obtaining loans that would be extremely difficult to obtain otherwise. Michael explained that the UWA "recommends you [to the bank], after recommending you, you go to the bank direct...They give you a loan within two days or one day." Benjamin further elaborated: "At least now, they have also started, they have agreed to give us this introductory letter to get [bank] loans." Benjamin continued, "[The] introductory letter, like from our superior, like from CAM. So that [the letter would say], 'This man is working for us. He's so and so. He's getting this much. So I think he's free, so if you can get him this money, it's enough for him'."

Such loans were viewed by respondents vital in the development of their own personal projects outside from their work. For instance, Dennis described: "I've constructed! Yes, I now have where to sleep." Interestingly, Brian explained how the additional support
provided by the organization was a mitigating factor against becoming involved in poaching: "On top of that, the salary has not been enough, but me I never went on to poaching. What did I do? I went on the loans. I paid entire loans. I get loan from the bank that many of the people cannot do."

Aside from bank loans, Lawrence explained how the organization would vouch for him during particular financial difficulties. For instance, he explained how the organization would

This address of been saying that, "Lawrence is a ranger. Works with the Uganda Wildlife Authority." That one I have a chance, though, I have not managed to raise any amount of money, I have a chance to go to school to the headmaster and talk to him, "Please help me persevere. Let my boy be in class". Within a period of two or three weeks, I would have brought the money. Then you find that my boy either my girl is not chased from school. Now it is another point that I like to be a ranger because of such points. Yeah.

In addition to being more financial secure, some respondents also described how they were also able to provide medical support for their families as well. As Benjamin explained, the UWA provides medical benefits to the ranger, their spouse and up to four children: "Yeah, so with you, okay, the staff, the wife and four children. Yeah. So they get free [medical] treatment." Lawrence illustrated how such medical benefits were helpful for him.

Now to my life, me as a ranger, compared to a man either a boy in the village who has no any job. I find that my life is not difficult like the other one in the village. If my child get sick, I have a chance of treating four children and one wife of mine and then plus me individually. So now the organization treats me sick people, this is now one point I like [of becoming] a ranger.

"You study everything in the environment!": Educational opportunities

Some respondents described that being a law enforcement ranger also provided them with an opportunity to learn about the environment and the wildlife. Respondents explained
how by being a ranger, they were able to take courses and attend seminars related to their work. Sam mentioned, "I have gone for courses, which I was not expecting when I came from home before I joined the park. 'Cause so far I have attended the course of Radio Communications; I have learned how to handle these machines. I have attended courses like Wildlife Health. I have attended courses like Prosecuting. So like those things have assisted and I have more skills when I joined the park." Frank likewise commented, "I have actually learned some other education, I have got some other education, where I didn't know birds. I didn't know that you could recognize that this is a such and such a bird. For me, I just called them birds. When I came in the organization, I could meet some seminars, and they could bring some courses...So I learned many things now. I'm experienced wildlife person."

Additionally, respondents also described how simply working in the field was an important educational experience as well. As noted by Jude, "Being a ranger, you study a lot. When I [first] came, I was not aware in the forest, we have these species." He continued to explain that such experience was directly attributed to working in the field: "So being a ranger, a field ranger, you study a lot. Academics. Movements of animals."

Similarly, Michael explained that the best kind of information is obtained from first-hand accounts obtained from the field:

Now, what I like about being a ranger, you become a nice historian, eh! A nice historian and a nice researcher. 'Cause every route, you exist too. Every route, we exist too. This world it lies under parks. If you want to get the highest information, go in the park. It's where you can get [information]: on the ground.
"Friendship creation also. I create friendship": Meeting and interacting with various people

Some study participants described how they liked having the opportunity to meet and interact with people who visited the park. Patrick remarked: "It also gives me time to express myself to people. Because if I am a ranger, I get time to interact with people."

Likewise, David explained how he liked having the ability to meet visitors from different countries: "I interact with visitors from various countries. The local and the international. And I create a lot of friends in conservation." Paul expressed his appreciation for being able to interact with tourists and developing friendships:

It has made me also know friends 'cause so many in Africa, people when they come, they don't look at people in gardens. But the people who stand chances of getting friends, are these ones [at the park]. Because tourists come. I wouldn't have met you if I was really not attached to tourism, conservation [laughs]. This I would say, this is a really rare field. A rare gift that I've got. I stayed without having a friend for very long time. But now that I started [working in the park], I started in the shortest pail of time, I have managed to get really enriched myself, you know, with friends. Yeah.

7.9.3. Disadvantages and difficulties of being a law enforcement ranger

"Because you cannot talk. You are a ranger. You cannot talk": Organizational issues associated with management and other rangers

While some respondents believed that there were no organizational problems, others described a number of issues associated with management and other rangers. Some respondents described that despite having the most responsibilities, working on a continual basis and risking their lives in the field, management and other departments within the UWA considered law enforcement rangers to be on the lowest rung of the organization. Tony expressed his frustration, "[They] think we are stupid, but we are the heart! [We] are the one going out getting information." While all respondents had no
overt issues with other departments within the UWA, it was clear that respondents recognized clear differences between themselves and rangers in other departments. This difference was particularly exacerbated given the similar pay that rangers in each department received. Frank displayed his frustration:

> Some [law enforcement] rangers they are not happy. They go in the bush when they are not happy, because they know that they're the people that are going to have to work very hard today. And the people working in other fields, they are not working tiresome... Even there are some rangers in the [organization], on other departments: the clerks, the accountants, like the guides, research and monitoring, the community rangers. You see, we're all paid on one level, but the work they're not balancing with the work that we are doing. They can't work for 24 hours. They work from morning to 6[pm]. They go and rest.

Some respondents also felt that they were unable to provide input or that their supervisors would simply not listen to them when they did. Respondents referred to situations where they believed their opinions on operational decisions were quelled due to their rank and circumstances where they had asked for replacements for damaged equipment and salary increases in their yearly appraisals. This further elucidates what was discussed earlier as to why some respondents preferred living in the outpost as opposed to the headquarters since they would be able to develop their own operational work plans. Alex described:

> Of course, what you talk, I mean, we rangers, we still rangers on the low ranks. They don't hear you, what you talk. Well, you have good advice but they don't mind about you. Yeah, so you find that we are really that thing, just keep quiet... We like the job. We really like the work, but some extent, you feel that you really [taps chest] You are tired of work. You get me?... They don't mind about you. You talk hundred times and they don't mind about you. You just keep quiet... I think what [the management] should do, they should really consider us as human beings [laughs].

The respondent went to further describe how this was partly attributed to supervisors having a "big head" or ego and did not want any support or advice from lower ranked personnel. Benjamin explained the concern that some rangers would have about speaking
up as they feared being identified as trouble-makers: "And again sometimes we would fear. Fear to say that we...Because we may caught [by] somebody, [they] say that, 'Ah! But the problem with this one [referring to himself] So you just keep quiet." Benjamin went on to further discuss how issues with management or their supervisors and underlying favoritism hindered their potential for promotion. Benjamin illustrated:

And another thing you find is that others are just praised or being promoted because they are known by the big people. So that one is also a big problem.
And it has also demoralized a few. like recently, when they had very many people were expecting to be at least promoted by like when you are a private at least you are at certain level, corporal, what. Certain level. So people got demoralized...At the end of it, you're nowhere to be seen. It's demoralized very many!

Adam provided a different take and explained how being passed for promotion made rangers feel worried that

Now other people would come, pass you [for promotion]. People come, pass you. Then you ask yourself, "Am I not compiling a well report? Have I done mistake? Have I done now what?" So there is bosses who come and specifically like to love you. And if the boss loves you, then you have gone [and] you will put on and have a lot of money. If he doesn't love you, your blood is not marching with him, he sees you as a normal person...When you realize that this boss doesn't love me, it is also a danger. And you also stress, stress and stress, "And now, my boss, if I make a mistake, he's going to chase me [away from the organization]."

In addition to issues with the management and their supervisors, some respondents also described how issues with fellow rangers can also lead to a difficult work environment. In his response, David expressed his frustration with rangers who were idle which lead to increasing the workload for other rangers. He observed: "The things which sometimes makes me not like being a ranger is to have staff who don't want to work, yet they know that it is their right to work. And they're paid monthly salary. Paid for money which they have not worked for. Overstretching the staff on duty." In addition, Michael discussed how he didn't like working with friends who were not friendly towards him: "If I'm going
for patrol, I like being friendly. If you are not friendly, then I dislike. I dislike the unfriendly.”

One respondent, Brian, described that the only issue he had with being a law enforcement ranger was the potential animosity he felt from his fellow rangers as a result of being promoted. Ironically, he believed that as a motivated ranger he believed that his "colleagues won't appreciate [him]". The respondent went on to further state that while he saw this type of reaction to be counterproductive for the organization, he personally viewed it as "a sign of motivation":

> Of course you can't rule out [difficulties]. I like being a ranger, but of course there is hatred among us...Hatred. People don't like each other. You find you're here, somebody doesn't like you. He says, "I entered with Brian, [he's] been promoted." He hates you for that.

Supervisor respondents also discussed this disconnect between the rangers and the supervisors. One supervisor, David, admitted that due to this position, he would be unable to appease to all the rangers. As he explains, he must constantly reinforce his authority to achieve his objectives as a supervisor, ensure that rangers are working and to monitor potential deviant rangers. He explained:

> I cannot be in good terms with all the rangers, because I keep on stepping on their heads. Because I want them to implement my activities. It is through them I achieve my objectives, because they're on the ground. So I have to be on their neck to ensure that they are not here. They're in the field. Which is also sometime very complicated. Rangers come, they go..they come back, I want them to..they come back, I get information, I tell them to go and cross-check. I want reports and what. So that one I always say that I'm always on them. Two: others I'm always on their neck in case they're involved in illegal activity and I got information. Yes, I get them...Which is a challenging to them and painful to them.
Another supervisor, Paul, elaborated on the detrimental impact that "conniving rangers" may have on their immediate supervisors. In other words, the misbehavior of a ranger not only reflects poorly on the ranger but also on the supervisor as well:

The most challenging part is seeing your ranger involved in the activity that he was supposed to have protected, eh? If a ranger is involved in the poaching, you know taking the decision like that, you know this is your person. You feel like you should have been a good team. Now again, you start worrying, "How long has he been doing that? How am I also being taken?" You know the way that some people reason out, some of them say, "You know, you supervisor must have been part of it!". That is the most challenging part...So it affects your name as a person. It affects your name.

"You're disappointed with these light punishments of the suspects": Inadequate laws and leniency of the criminal justice system

Most respondents also voiced frustration over the inadequacy of the Uganda Wildlife Act and the leniency of the criminal justice system. In particular respondents discussed issues related to the difficulties they faced with dealing with poachers. This may be partly attributed to the fact that other illegal activities may have other alternatives (e.g. MoU for illegal firewood collection). In general, respondents described their frustration with the ambiguity of the Wildlife Act and the leniency of punishments. David expressed his dissatisfaction: "And when you get a suspect...You're disappointed by these light punishments of the suspects." Alex explained that suspects would simply pay the small fine handed down by the courts and then would return to the park:

Somebody will come and pay [the fine] and will go away. Again, this is the same person you'll find where? In the park. You find somebody, you have arrested him about five times...Of course we have to do our best, we arrest and [slaps legs], if he goes back, we go and arrest. Like that, like that. But is that the solution? I don't think.
He went on to convey his frustration:

What is this? You also, I mean, you are demoralized...Somebody should go there and understand that, "Eh! Going inside the park it is bad!". But when somebody, if the money he is paid, this is the money he has been selling, I mean, selling the animal that he has been killing. That money is not his from his pocket. These are the animals he has killed, he went and sold. That money again is the real money which is going to do what? To rescue him from where? And he's going back to work for more money. To compensate for the money he used in where? In the court.

Like Alex, Paul believed that such punishments did not deter offenders and may actually motivate offenders to continue poaching. He illustrated:

You know the biggest problem as I told you, the law is very weak. If you arrest a person, he pays one million [shillings]. He has 30 million [shillings] in his pocket! Ivory worth 30 million [shillings] is confiscated. The perpetrator is also got but he pays only one million [shillings]. So if the law is like rewarding instead of pinching him, you get it? Because it's like you're just giving him morale boosting. 'Cause he can actually go out and kill because he knows that little money get him out of the big damage that [he] would have caused.

Adam also described how loop-holes within the criminal justice system would enable poachers to go unpunished. He provided an example where a group of poachers would all put the blame on one of the poachers. The one poacher would be sentenced while the others would be released. Their employer would subsequently pay his fine later on if need be. He explained the process:

Of course, one among the poachers, they say, "Now with you, don't say the ivory was mine. Among the group, you say, 'The ivory was mine". So you find the five are released at the police bond. One is remaining with exhibits and the one will be removed. These [released] ones are going to look for other more money and inform the boss who send them. And you find him before the court. Even if you say 20 million [shillings], they just pay fine. You see that's the problem.

Such leniency led to respondents believing that the current laws need to become more punitive in order to become a deterrent against illegal activities conducted in the park.
This belief is exemplified by Ivan's response. Note again the focus on poaching, particularly elephant poaching:

Then government policy. Government policy. The government should change the laws, 'cause the laws against illegal activities in the parks are a bit soft. Should be tough so that people should fear. Should fear to intervene in with the conservation. Yeah, so government policy, if the laws are changed, someone does kills an elephant, he's given life imprisonment or 7 years in jail. People will fear. Not like when one year or two years. So the government should change the policy.

Lastly, Felix attributed the inability to effectively punish suspects as a result of insufficient evidence. For example, as he explained suspects would just deny that they had been arrested within the park:

The poachers, when you arrest them, when they take in court, they deny that for them they are not in the park. So that is the challenge. When you and you take into court, you find the courts, they are releasing them...So there's the challenge that poachers are left to go in the courts of law. Because we don't have cameras to get their photo, that one can act as evidence. Because there they can't deny. But we go, we only have the GPS. We don't have evidence for that. Even only meat. It is one they take. But still they deny that one is not theirs.

"It is also one of the problem we are having in the park: Politics. It is a lot of politics": Political interference

Exacerbating issues with the Wildlife Act and the criminal justice system is the involvement of local politicians and leaders. Some respondents described how some political leaders would often take the side of the community in situations where there was conflict between the rangers and community members. Most respondents attributed this to some politicians wanting to bolster their image in order to win the vote of the communities. Dennis observed:

And you know politicians because they want to be voted. They, you know tends to come in, [say to the community], "Silence. You see we shall handle this" [They go to the rangers], "You leave this people, what, what". You know talking all those kinds of things...Yeah, trying to convince the community or trying to convince park management to leave [the community alone].
Similarly, Richard explained, "with the local leaders and politicians, I mean, they come and sit with [the community] around, [they tell us], 'You see we are going to the parliament to make you [do] this'." He went continued, "and again you find the law can't work with that. [The politicians] come down and deceive the people, eh! Because they're looking for what? The votes. Yeah. Those are the problems mostly with the local leaders and the politicians." Brian also expressed his views on the matter:

Some of [the politicians], some of them for those who know conservation, they're on our side. There are some who are on the other side. You see, the MPs, for them they're interested in votes. And where do you get the votes? They get them from communities. Not in the park. So they're not with us.

As signified by these responses, study participants believed that rather than supporting the rangers or working as a mediator between the rangers and the communities, some politicians would utilize their position to further divide the rangers and the community members for their own gain. As a result, respondents felt that politicians undermined the legitimacy of both the laws established to protect the PAs and the work being done by the rangers.

"We don't have much manpower and in law enforcement, we have a lot of activities to do": Overworked and lack of manpower

Lastly, a general theme that has been discussed throughout the study has been the limited resources afforded to the law enforcement department. Most respondents believed that the overall lack of manpower throughout the department is a major impediment in performing their responsibilities, including patrol. Additionally, it leads to the rangers being overworked and are unable to take days off. Indeed, this issue of being overworked is not particular to QENP as previous studies examining wildlife law enforcement have
also identified this as well (Walsh and Donovan, 1984). As Alex remarked, there is "no rest in law enforcement." This inability to leave the park results in rangers being unable to visit their families as well. Frank expressed in detail the difficulties associated with being overworked. Note how he also discussed the hesitation he felt about complaining about his situation:

I was telling you about the hardness in rangership... You can find that you are doing, you are working time to time after this [operation]. After you finish it then you have to go to another one. After this one, you go to another one, without getting like at least two hours to rest. So sometimes we lack manpower. There are times when we miss manpower. Like they have deployed them somewhere there's an emergency. You go to the headquarters and they only left a few. So operating those duties that are around can come from patrol, they say you are going on night guard. From night guard in the morning, now you are going for day patrol. After that you come back, then at night you are going for three days patrol. They're going to pick you at night. So there are times when work happens like that. You feel like, "Wow! I like the job, but I'm getting tired!" When you say that now you are complaining, [the management] say, "Now you applied and you agreed to work 24 hours. So you have to work". And because you agreed that you would work 24 hours, even you fear to argue that you are tired [laughs]. You have to continue until the manpower is there.

As can be derived from Frank's response, he felt obligated to continue working despite feeling exhausted because it was what he had agreed to do. Likewise, David also discussed the troubles associated with working as a law enforcement officer, particularly in QENP:

Yeah, Queen Elizabeth [National Park] is a challenging park! Because you work 24 hours. So it is a real stress. And the needs require you to be determined and strong. But if you're not determined and you're weak, working in Queen as a ranger will become too tough and can reduce even your life span, 'cause of working day and night running after the poachers.

In addition to depicting the difficulties with constantly working in the QENP, David's response also displayed a sense of pride in his ability to perform such activities as well. David believed that due to the work conditions, rangers needed to be not only be strong-willed by physically strong as well. Indeed, the importance of physical fitness was
highlighted by other respondents as well, especially when they talked about patrolling.

For example, Alex proudly stated: "It makes somebody physically fit!...Because I'm used
to it. I'm fit physically!" And Daniel observed how patrolling "makes me fit, because of
walking every day. It makes me physically fit."

7.9.4. Law enforcement ranger as a dangerous occupation

It is interesting to note that despite the dangers identified on patrols, the potential issues
with nearby communities and the perceived threat of rebels, respondents were divided on
whether being a law enforcement ranger was a dangerous job. For instance, Tony
specifically referred to patrols and described the occupation as "risky and dangerous", he
clarified, "Anytime you can die: killed by an animal, killed by a poacher, killed by
terrain". On the other hand, Patrick simply stated that being a ranger was "not very
dangerous. Not so dangerous."

Respondents who described being a ranger as a dangerous job referenced mainly patrols
as the main cause for concern and described similar human-based and environment-based
dangers discussed earlier. For example, Michael discussed to the potential of
encountering wildlife during patrols:

You are moving with and between these big animals. So that work must be
dangerous. When you find a poacher has harmed an animal, what do you expect
to that animal? It will be very dangerous. And when it becomes dangerous,
what about you? Do you think the animal knows you? That you are not the one
that harmed it. When it sees you, it will know that this is the real person! Those
are the difficulties that we do get in the field.

Dennis referred to specifically poachers when he said: "All of them are dangerous. You
know, there's others, if you come to arrest him, he can even grab the gun from you. So I
consider all poachers dangerous to us", while Jude mentioned the environment: "Ah! We have poisonous grass. Sometimes you may be walking, then you step on maybe thorn. And you'll find the whole leg paralyzed and you may be paralyzed for good. So we are exposed to many dangers in [the] national park as far as Uganda's concerned." In addition, Jude described how rangers may also be exposed to biohazards:

So we are exposed to any hazard. Anthrax... And for us sometimes you find that somebody has nothing like protective gear. You go, you are moving. You get a hippo dead. You'll not examine it from a distance. You have to move near and find out the cause of this death. So at the end of the day, you'll inhale whatever's within. So as you come back, you'll die. Yeah. We're exposed to all the dangers.

Other study participants believed that the job was not dangerous and explained that this was because of the fact that they were trained personnel. In other words, while some believed that the job was had its share of risks and dangers, they were well prepared to address them when needed. For example, Benjamin explained that being a ranger was "not a dangerous job...To get trained about, know how you can deal with [the dangers]. But it's not dangerous." And Dennis said, "All jobs are dangerous! But it depends on how knowledgeable you are." Likewise, David described: "No, it's not a dangerous job. If you have taken precautions, the 'do's and don'ts'. It's not a dangerous job. It's the most interesting job and I like that!" Adam elaborated:

Yeah, it is danger, but of course, that's why they take you for training. That because you're going to join is dangerous, so you have the skills to prevent yourself and to protect the animals and what? And plants. And so this is what you'll do. They put the skills, ideas in you. That now you go and implement. So they first alert you. Yeah.

Sam had mentioned a number of dangers but still believed that being a ranger is "not a dangerous job" and remarked, "those [dangers] are some minor things, so it just comes once in a while. We do these things not expecting them to happen. Yeah, of course, when
you are doing something, you have also to expect some negative aspects.” In other words, Sam believed that chance encounters with potential dangers did warrant designating being a law enforcement ranger as a dangerous job. Ivan, too, was quick to distinguish between what constituted as a risky and a dangerous job. He explained:

[Being a ranger is] not dangerous, but it's a risky job. It's a risky job. But not dangerous. Because you don't know when you're going to get into an accident. Maybe for example, you risk going into a bush, you don't know what's in the bush. Maybe you are chasing a poacher, he takes you through the thicket, you also go in the thicket, you risk your life going in the what? The thicket. The thorns, the what. So, it's a risky job of course, but not dangerous, 'cause you train for it. You do train for it then it's not dangerous.

7.9.5. Needs of the law enforcement rangers

Lastly, respondents were asked to identify a number of needs that would help in their ability to perform their jobs more effectively. Notably, respondents also identified a number of personal needs associated with patrols further emphasizing the explicit link between their personal and occupational lives. This is undoubtedly linked to the on-site living requirements of the job and the expectation that they are required to be ready when called upon.

Table 7.6. summarizes the needs identified by the respondents. The most often discussed need by respondents was equipment, especially field equipment. As touched upon earlier, others have also described how rangers are often ill-equipped to conduct their operations in the harsh conditions they are required to do so (Ogunjinmi et al., 2008; Wynveen et al., 2006; Warchol and Kapla, 2012). For example, Benjamin explained that the need for equipment was partly attributed to the damage caused by going on patrol. Specifically referring to gum boots he said, "If we could get good gum boots and at least in a year,
two times. Because if we really doing these routine patrols, they get worn out very faster.

Like as I talk, mine are is cut down." Francis provided an overview of that exemplified the general concerns of most respondents:

The equipment mostly: uniform, gumboot, warm suit, rain coat. Because like we are in the rainy season. You need such a kind of thing. Such equipment to protect you when you are in the field. And water bottle for carrying your water when you are in the field. Bag when you are moving for patrol. Such equipment it make your work to be easy and you'll be happy at the work.

<table>
<thead>
<tr>
<th>Need</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allowance</td>
<td>Patrol allowances should be paid on a regular basis and increased.</td>
</tr>
<tr>
<td>Transportation</td>
<td>Access to vehicles on a more regular basis for operations.</td>
</tr>
<tr>
<td>Medical support</td>
<td>First aid kits for homes and for patrols. Currently, there are no first aid kits taken on patrols.</td>
</tr>
<tr>
<td>Funding for intelligence-gathering</td>
<td>Funds to pay informers for information. In most cases, rangers are paying informers.</td>
</tr>
<tr>
<td>Equipment</td>
<td>Inadequate equipment for field work. Gum boots, jungle boots, stronger uniforms, water bottles, tents, mosquito nets are examples of equipment needed.</td>
</tr>
<tr>
<td>Education and training</td>
<td>Courses, workshops and educational resources that can educate the rangers on a number of different topics, including wildlife management.</td>
</tr>
<tr>
<td>Food ration</td>
<td>Improved food ration for patrols.</td>
</tr>
</tbody>
</table>

Study participants described how there was often a delay from management in obtaining new equipment. Frank discussed the delay and referred to equipment issues that occurred during the patrol to emphasize his point: "Actually, sometimes we get problem with our
boots or shoes. Yeah. The management sometimes delay to give us some boots and as you saw that time [on patrol], the thorns passed through the boots because the boots are old. It needs to be replaced by another one.

Directly related to the biohazard issue mentioned earlier, Chris also discussed the need for having "the masks when there's dead animals. And when you are burning some dead animals. We also need it." In addition, Chris mentioned how rangers needed sleeping mats and mosquito nets for extended patrols: "And [we need] sleeping mats...And the mosquito nets." Felix added that rangers also needed tents as well: "Everything that needs when in the jungle, staying in the jungle. Even tents for rainfall." Also, some respondents described the need for binoculars as well. Brian said, "There is some things we're lacking that the management has not provided, like binoculars...Binoculars are very, very important." And Benjamin explained he needed binoculars as it would help "the work [to be] better." Jude also described how law enforcement rangers needed to have stronger uniforms than rangers in other departments. He explained:

I'm a field ranger, so the uniforms they bring, these ones [grabs uniform collar] they are not favoring the weather outside. So the people who are doing the designing, they are not field rangers... So I think that one, to me, that's why I can say the management could at least consider. Field equipments. There should be a difference between a clerk who's in the office and a field ranger who's in the field.

In addition to field equipment, respondents described how on-hand first aid was needed for field operations. Given the potential for injury and sickness, the remote nature of where patrols are conducted and the lack of available transportation, first aid kits were
viewed to be a crucial missing component by respondents. As Michael explained:

> Whatever patrol goes, must have first aid kit. Should have first aid kit. Because you never know, somebody's life. Somebody's life you go [on patrol], he gets sick. After getting sick, where will he get medicine? In the bush? However, they go with little medicine, but we need to improve. We need to improve! You know a kit is very necessary.

Some respondents also described how the food ration provided for patrols was not sufficient since rangers often are only provided a small amount of ration for patrols (e.g. packets of biscuits for routine patrols). As put by Douglas: "It's not a matter of holding a gun and when I don't have enough ration to [do] my work. I need also ration, enough ration in my work." Indeed, on one of the patrols observed one of the rangers said, "They're generous today" referring to the management after the author gave him another packet of biscuits. From an operational standpoint and in particular to extended patrols, some respondents described how canned goods would be useful in situations where it is difficult or inappropriate to cook. For example, Paul discussed how weather conditions can hinder the ability of rangers to cook during extended patrols:

> Why we need those even food ration: You see like you went to Maramagambo [forest], sometimes the rain can occupy you for three days and yet you are supposed to light a fire cook, eh, at night...You know we need to also categorize if the patrol is going to this area, which food ration should go the patrol go with. We need to plan along that. If it is Maramagambo that we believe the rain is going to really disorganize these people's cooking for three days. And yet cooking is a necessity if they are to perform. If it is maybe canned fish, beef..something like that.

Sam provided a different perspective and explained how canned goods would limit the need to even create fires to cook. Not only would this help mitigate the impact of the
weather, but as Sam illustrated, not starting a fire to cook also had other operational benefits:

Or getting these other food, which cannot take long to cook or provide these tins of beans or these fish which are in tins. You know you may go to an area which has no water. You may go to an area which doesn't want people to cook. Like I can say, when you are waiting at any time...any time you have got information, you are waiting for some [suspects]. Then, for them to say to you, you need not to what? To cook so that they cannot sight the smoke. So those are the things that should be provided.

From a monetary perspective, some respondents also felt that they needed an increase in patrol allowances. Tony simply stated: "Allowances should be increased." Paul discussed the discrepancy between day allowances, which are provided to rangers when they escort their superiors, and patrol allowances or night allowances: "You see like a ranger gets six thousand [shillings] as his lunch entitlement...Most of the hotels you just go and maybe add even 'cause we always move with [the management]. You get a meal, it's ten thousand [shillings], eh? So it is still not fair there. A ranger goes to sleep in the bush and night allowance that is given is 2500. And yet he's had coldness. See?" Dennis simply wanted the allowance to be provided on time: "To perform my job effectively, I need facilitation...You know we have patrol allowances, if it is paid in time and regularly, that one can give morale."

Additionally, Tony and Ivan discussed the need to get more funding for intelligence gathering. Tony explained that in some cases the rangers are responsible for paying informers and that if they are unable to pay them, it "may discourage [the] informants", which would result in losing potentially valuable information. Ivan further added: "Then maybe more funds, more funds will be there for gathering information, for intelligence."
'Cause information is the key to of everything. Of all the activities you're doing. Without information, you can't do anything. So the information should be funded the most."

Some respondents described how on-site educational courses, training and workshops and access to educational resources would also be useful in skill development. David explained, "I need the training, on-job training of my staff to gain experience and skills. To gain skills...To train the staff according to assessment needs". And Matthew said he needed to attend "workshops" for education. Similar to David and Matthew, Douglas explained: "Especially as a ranger, I need to be taken under training. So when I'm going on training, several times, several times, on different courses, you find it keeps my mind fresh." He went on to add that simply providing educational resources would be sufficient, "as far as my work is concerned. Books. I need books. So if there were free libraries here, anybody wants to research something on the park, I go there and get the book."

Lastly, some respondents also referred to the need for transportation as well. As this issue has been discussed throughout the study, it will only be briefly touched upon here. In general, respondents believed that having better access to transportation would increase the efficiency of conducting operations. For instance, Ivan emphasized the need for the law enforcement department to get access to more transportation given the responsibilities they are required to perform in the park. He remarked: "Transport. Transport for efficiency...[Law enforcement] have one [vehicle]. Mostly, the law enforcement, which needs a lot of attention. Without the law enforcement, nothing
can take place in the park." David described how added transportation was required in order to respond to emergencies that may arise: "I need transport. Standby transport...I need standby and sound transport to respond to any emergency which comes up."

Interestingly, Benjamin noted that while transportation is needed, he would prefer that management focus on the equipment. He explained: "But our area, because of the terrains, there's where vehicles do not do what? Don't work. Much like when you go to Lake George. There is stagnant water, muddy, thickets. Where the vehicles cannot penetrate. But, if we could get the [patrol] gears to use mostly."
Chapter 8 - Results and Analysis for Research Question 2

8.1. Overview
The second research question centered upon attempting to understand what types of activities, group dynamics and decision-making occurred during routine law enforcement patrols. The research question was addressed through both interviews with law enforcement rangers and supervisors, as well as participant observations of said patrols.

8.2. Descriptive Information of Routine Patrols
Basic descriptive information on the ten observed routine patrols are provided in Table 8.1. The author patrolled approximately 131 kilometers by foot and spent just under 50 hours in the field. As shown, there is a discrepancy in the patrol time and the total patrol time, which includes travel time. Travel time comprises of time spent being driven to patrol deployment and from extraction, as well as time spent waiting for extraction.

Waiting periods varied with the longest wait time just under three hours. As discussed earlier, the waiting period for extraction is reflective of the issues associated with a lack of transportation at the park. In fact, on one patrol the author and the patrol group had to wait for over two hours to be extracted because the law enforcement vehicle had to go to a nearby trading center (Kasese) for rangers to run errands, including picking up a mattress. Patrol group sizes ranged from two to four members and on some occasions included SWIFT personnel.
Table 8.1. Distance and Patrol Time of Observed Routine Patrols, September - October, 2012

<table>
<thead>
<tr>
<th>Patrol</th>
<th>Distance Patrolled (kms)</th>
<th>Patrol Time (hrs/mins)</th>
<th>Total Patrol Time Incl. Travel (hrs/mins)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patrol 1</td>
<td>21.07</td>
<td>7:30</td>
<td>8:30</td>
</tr>
<tr>
<td>Patrol 2</td>
<td>12.61</td>
<td>4:01</td>
<td>4:15</td>
</tr>
<tr>
<td>Patrol 3</td>
<td>8.41</td>
<td>3:45</td>
<td>5:00</td>
</tr>
<tr>
<td>Patrol 4</td>
<td>8.00</td>
<td>4:03</td>
<td>5:30</td>
</tr>
<tr>
<td>Patrol 5</td>
<td>14.64</td>
<td>5:15</td>
<td>7:25</td>
</tr>
<tr>
<td>Patrol 6</td>
<td>10.05</td>
<td>3:00</td>
<td>5:40</td>
</tr>
<tr>
<td>Patrol 7</td>
<td>11.56</td>
<td>4:02</td>
<td>7:35</td>
</tr>
<tr>
<td>Patrol 8</td>
<td>15.56</td>
<td>4:32</td>
<td>7:05</td>
</tr>
<tr>
<td>Patrol 9</td>
<td>14.06</td>
<td>5:05</td>
<td>6:35</td>
</tr>
<tr>
<td>Patrol 10</td>
<td>15.12</td>
<td>6:15</td>
<td>10:12</td>
</tr>
<tr>
<td>TOTAL</td>
<td>131.08</td>
<td>46:55</td>
<td>68:18</td>
</tr>
</tbody>
</table>

Shown in Figure 8.1., the author was able to observe routine patrols in a variety of different environments and settings. Again, the reader is reminded that originally the author did not plan on participating in a variety of environmental settings, but rather simply wanted to observe as many routine patrols as possible. Given that patrols operate on a daily basis and occur throughout the park and recognizing the goals of the study, the assistant warden of law enforcement, the head ranger and the head prosecutor facilitated the opportunity for the author to participate in as many routine patrols as possible in a variety of settings.
Figure 8.1. Routine Patrols Observed During September - October, 2012
8.3. Routine patrol activities

8.3.1. Pre-patrol Activities

Deployment

Deployment often only occurred from headquarters when an entire patrol group would be leaving from headquarters or when law enforcement rangers would be driven to an outpost or gate for additional support. In either circumstance, the law enforcement rangers would not be told where they were going to be deployed and they would not know their destination until they arrived there. Adam explained that the main reason for this was to avoid rangers potentially contacting friends or families that were involved in illegal activities:

'Cause now rangers sometimes...others are very weak in mind...Even he talks to wife, he talks to family. So you find everything whom even among the family, even other people are conniving with those poachers. You say, "How did these people you miss?" They are not there. But fresh...fresh signs are there. You say, "How did these people know?" So this is why we don't want to reveal to rangers before you take them to the position.

The deployment of additional manpower to outposts and gates occurs when there is a shortage of manpower (e.g. a law enforcement ranger is sick, on leave) and a patrol is scheduled for that day. Brian described how strength in numbers is an important component on patrols. He said, "we don't normally allow one person to go alone [on patrol]. We go three. Because if you go alone, poachers are strong. You may end up being overpowered by the other one." On the patrols observed by the author, the number of patrol members ranged from two to four.

Briefing and Role Designation
Before most patrols, the ranger-in-command (RIC) would brief all members of the patrol group on the area that was to be patrolled, what they were expected to find and the intended extraction point. The RIC was usually determined by rank. In cases where a supervising ranger was present (e.g. head ranger, sergeant major), the supervising ranger would brief the patrol group before the patrol began. Sam explained this succinctly:

 Yeah, when a patrol goes out, we have to first brief them: what they are supposed to do. We have to brief them, "You have to see the number of animals you have seen. You have to record them. You have to check if there is any illegal activity or the environmental changes so that as you come, then you have to write down a report for us to know what is happening, then we take action."

In addition to this briefing, group members would be required to sign a patrol order form. This form, which would include all the GPS points and observations identified on patrol, would be submitted by the RIC upon returning to headquarters. In some cases, each individual group member would be designated a specific role. Brian explained: "There is a patrol commander that will lead the group. They have observers, they have GPS users. Sometimes we have porters that carry the food...There are [also] other supporting rifle men in the group".

Such designated roles were evident in all patrols the author observed. In one circumstance, a member from a nearby community who was hired by the UWA as a guide led one of the patrols that the author observed. On patrols where SWIFT personnel were involved, they often only seemed to fulfill the role of additional manpower and security. For example, on one patrol observed, one law enforcement ranger was accompanied by two SWIFT personnel. The law enforcement ranger was not only the RIC, but was also responsible for using the GPS and documenting observations. Such circumstances further solidified the role that SWIFT personnel had within the patrols.
As mentioned earlier, role designation was often fluid in nature. Given the importance of familiarity with an area, the RIC was not always in the front of the patrol and there would be times when rangers would alternate based on who was more experienced with an area. As indicated by the following narrative, the surrounding environment often dictated who would lead a patrol:

> As we walked, I briefly asked the RIC why he was not currently leading the patrol. He explained that patrols "do not follow a person" but rather "follow the surroundings." In other words, he explained that depending on the surroundings and the location of the patrol, rangers would rotate and change who led the group (Patrol 3: Narrative).

### Notifying Sister Agencies

In circumstances where a sister agency, like the UPDF, was nearby, the patrol group would first need to inform the agency that they would be patrolling in that area as shown by the following narrative excerpt taken from one patrol:

> Prior to the patrol beginning, the commanding ranger asked one of the SWIFT members to run over and inform other UPDF personnel that we would be patrolling in the area. The commanding ranger explained that this was a necessary step in order to reduce the potential for exchange of friendly fire. In other words, the UPDF was notified of our presence so that we would not be shot. To alleviate this potential threat, UPDF personnel were notified of our physical characteristics and the type of clothing we were wearing (Patrol 3: Narrative).

In addition to ensuring that any nearby sister agencies would not engage the UWA rangers, the commanding ranger on this specific patrol explained that informing other agencies was considered to be a form of common courtesy.

### 8.3.2. Patrol activities

**Types of Effective Patrolling**
As noted earlier, prior research looking at quantifying patrol effort have referred to time spent in the bush as effective patrolling or effective days on patrol. Based on the observations noted in this study, effective patrol can be further disaggregated into four types of activities: active patrolling, cross-checks, investigative patrolling and passive observation/resting period.

*Active patrolling* refers to situations when the patrol group would be walking through the area attempting to monitor the status of the park (e.g. wildlife and vegetation), identify, if necessary attend to, illegal activities and generally act as a physical deterrence to potential offenders. Not surprisingly, this type of patrolling took the most amount of time as patrol groups conducting routine patrols were required to cover a specific area and reach an extraction point by the afternoon.

Active patrols occurred in two formations: single-file and extended (spread formation). All patrols began in a single-line formation. The use of single-file and extended patrol formations often depended on the environment being patrolled and the benefits and limitations such formations would have on the rangers' ability to conduct a patrol. As Adam explained:

> When there is grass, tall grass, they use single file. When there is open, you can still open if you want to look for anything. If you suspect something has been shot in an open place, you extend. In thickets, you put a single file to avoid people to get lost. Always! Why you are going in a single file? So that if one sights something bad in front, will let the one following him know [claps hands]. So if there's a problem, he will see it. The front person.
As shown in Table 8.2., the different environments experienced during the observed routine patrols posed unique benefits and challenges. It should be noted that such benefits and challenges will also be affected by the elevation of where a patrol is conducted.

*Cross-checks* refers to circumstances where one group member would briefly separate from the group during active patrolling to quickly investigate an area for group position and signs of illegal activity. Such cross-checks would often occur in areas where law enforcement rangers expected illegal activities to occur. As discussed earlier, animal paths near watering holes would be checked for wire snares as poachers would often target these areas due to the routine activities of animals. In all cases, the rest of the patrol group would simply keep moving at a regular pace unless one of the group members felt it was necessary to stop and wait for the other group member. This type of activity is described in the following patrol narratives:

Throughout the patrol, one ranger would flank to investigate an area. For instance, in one case the ranger would walk to the lake edge to identify the position of the group, check animal paths for snares and observe around the lake. During this part of the patrol, we walked near the edge [of the lake] and every so often one ranger would break off to investigate the lake edge for signs of illegal activity, particularly signs of illegal fishing. The rest of the patrol would move forward and eventually the ranger would join us again (Patrol 4: Narrative).

*Investigative patrolling* refers to situations when recent signs of illegal activity have been identified and the patrol group separates to investigate the immediate area for other signs of illegality. Such investigations were limited within a specific vicinity of the originally identified sign, typically around 100 meters from or less from the initial illegal activity observation. As such investigations required the group to separate, the author consciously attempted to observe different individuals throughout the same patrol in
order to generate an understanding of what individual members would do in an attempt to produce a group account of such behavior. The following narrative illustrates an investigation by the patrol group after finding drag marks on the ground:

The commanding ranger suspected that maybe it was a snare which an animal dragged along as it tried to move forward. So we began to investigate the area trying to find signs of blood, as well as looking for footprints either from the animal or a potential poacher. As described by the ranger, poachers would follow the footprints as well. One ranger and one SWIFT branched to the left and basically started to investigate this part of the summit that kind of sloped down a bit. And one of the SWIFT members went forward investigating another area. (Patrol 8: Narrative)

On another patrol, signs of a poaching camp, as indicated by burnt wood and ash, identified by the patrol group resulting in the patrol group to further investigate the immediate area. As illustrated in the following narrative, such investigation would at times lead to identifying other signs of illegal activity:

The investigation of the surrounding area was not more than five minutes with all members spreading out to nearby surrounding areas. During this time, the ranger I was following was looking attentively on the ground trying to find footmarks or any other signs of poachers or poaching activity. Once we reconvened near the original camp area, one of the other rangers indicated that he had found a pile of firewood. We all then preceded to move to where the firewood was and then began to do another quick investigation of the area surrounding that location (Patrol 7: Narrative).
Table 8.2. Environmental Benefits and Challenges Identified on Observed Routine Patrols, September - October, 2012

<table>
<thead>
<tr>
<th>Environment</th>
<th>Benefits</th>
<th>Challenges</th>
<th>Patrol Formation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grassland savannah</td>
<td>• Easy to maneuver through when using animal path</td>
<td>• Risk of losing group members in tall grass</td>
<td>• Single-file formation when tall grass</td>
</tr>
<tr>
<td></td>
<td>• Able to do an extend patrol in short grass to cover more space</td>
<td>• Visibility is hindered in tall grass</td>
<td>• Single-line or extended formation when short grass</td>
</tr>
<tr>
<td></td>
<td>• Can see far in short grass; easier to identify animals and potential threats</td>
<td>• Lead ranger has most visibility</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Able to identify position relatively easy in short grass</td>
<td>• Unable to see dangers on paths (e.g. termite holes)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• In short grass, full observational ability by all group members</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Woodland thickets</td>
<td>• Able to identify position relatively easy</td>
<td>• Unfavorable vegetation (e.g. thorns)</td>
<td>• Single-file formation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Poor visibility</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Lead ranger has most visibility</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Difficult to see animals</td>
<td></td>
</tr>
<tr>
<td>Swamp/marshland</td>
<td>• Vegetation easy to move away</td>
<td>• Can be difficult to maneuver</td>
<td>• Single-file formation</td>
</tr>
<tr>
<td></td>
<td>• Visibility is okay</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Able to identify position relatively easy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forest</td>
<td>• Shield against intense heat or rainfall</td>
<td>• Visibility greatly diminished; reliance on various other senses (e.g. hearing)</td>
<td>• Single-file formation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Lead ranger has most visibility</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Physical obstacles (e.g. downed trees)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Forest canopy makes it difficult to identify position</td>
<td></td>
</tr>
</tbody>
</table>
Lastly, *passive observation/resting period* occurred during periods when the patrol group would take a break. Given the arduous nature of conducting patrols, such patrols served the main purpose of allowing the patrol group to rest, eat and drink in order to re-energize themselves. Resting periods were considered to be an important component of conducting a successful patrol. Indeed, a tired patrol group or patrol member would result in diminished capabilities to effectively patrol, identify potential signs of illegal activities and if necessary respond to altercations with wildlife or suspects. As put by one commander, "If you do not comfort your men, they will simply walk but not patrol" (Patrol 3: Jot note). Essentially, the actual act of patrolling would simply become an laborious hike. Indeed, there were a number of occasions that the author became exhausted while on patrol and welcomed such resting periods when they occurred. Moreover, in addition to being physically tired, it was also psychologically draining as the author had to constantly 'check himself' to make sure that he was still properly observing and documenting.

In addition to resting, such periods were also helpful from an operational stand-point. For one, resting periods were also used by the groups observed to gauge their current position and establish a plan for the rest of the patrol. In all patrols observed, patrol groups were wary of the time and seemed to be cautious of the area that could be covered within a specific amount of time. Second, such periods were also used for passive forms of observation. The term 'passive' refers to the fact that the rangers were observing but were not actively maneuvering through the terrain. During resting periods and depending on
the landscape, the rangers would monitor the nearby area in an attempt to possibly identify suspects or wildlife. On many occasions, the operational value of such passive observation was noted on a number of patrols. For example, on one patrol, the author commented that "during resting breaks, we would listen and watch for poachers as this was still considered a form of patrolling" (Patrol 4: Narrative). On another patrol, the author described how "the ranger also mentioned the importance of just sitting and observing to kind of see what's going on with the area" (Patrol 10: Narrative). Observing the behavior of the RIC on one patrol, the author commented, "The commander would look around to make sure that [the area] was okay for us to rest at. He then acted as an LP [or lookout person] for a short while to make sure that no animals or poachers were nearby" (Patrol 9: Narrative). The author observed similar behavior on another patrol as well:

> During this time when we were taking a break, there was an LP [Lookout point/person] on the lookout to basically make sure we didn't get ambushed. It was evident that the ranger in command was actively looking over the savannah as we were in a good position to see a good distance away. He explained that in that specific area, poachers would hunt buffaloes with spears (Patrol 7: Narrative).

On one occasion, one ranger described to the author how taking resting breaks could result in advantageously encountering suspects: "The ranger in command discussed the fact that resting and taking breaks can be considered a 'tactic': by being stationary, it is possible that suspects may simply walk by them" (Patrol 2: Narrative).

**GPS Documentation**

In cases where a GPS device was available (nine out of the ten patrols observed used a GPS device), the law enforcement ranger responsible for documenting GPS information
would document the starting waypoint to indicate the start of the patrol. Following the
MIST procedures described earlier, GPS documentation would occur every 30 minutes
unless an observation worth noting (e.g. sign of illegal activity, wildlife, etc) was
identified. If so, another position waypoint would be documented from that observation
waypoint. Resting periods were also documented to indicate when they started and when
they ended. As discussed throughout the study, from a law enforcement perspective GPS
documentation is used to note signs of illegal activities and areas that have been
patrolled. From a data-collection perspective and from a conservation perspective, GPS
documentation is used for monitoring wildlife and vegetation status. Francis described
the importance of using the GPS device for both law enforcement purposes, as well as for
conservation purposes:

Mostly we are going with the GPS. After getting the footmark or any sign of
poaching, we have to take the GPS coordinate. And the animal scene, we have
to take the GPS coordinate to record the data on the animals. So we are
recording the GPS to make sure, to know what activities have been taking
place in the park. The animals, are they safe? Are they dying or not? Or is
there poaching activity? Is it there also?

The frequency and detail of GPS documentation varied amongst different types of
observations. For instance, the documentation of wild animals occurred almost every
time. When possible, the law enforcement ranger responsible for documentation would
note the number of animals identified and the sex. They would also note whenever young
were present. On the other hand, signs of illegal activity were not documented in all
situations. This occurred on a number of the patrols observed and when asked why, law
enforcement rangers stated that it was simply to avoid double counts:

We reached a location where several signs of poachers were found. Specifically, we entered a path which the RIC referred to as a 'poacher path'. In other words, the path would be used by poachers to gain easy access and exit from the park. When I asked how he was able to identify how this was a poacher path, the RIC showed me markings made by pangas on a number of nearby tree branches. As we proceeded to move forward, he explained that these markings were about a month old and he had noticed them on previous patrols, therefore, it was not required to note them on the GPS since it would technically "double-count" the observation (Patrol 9: Narrative)

The rangers stated that signs of illegal activity would not be documented in situations due to 1) their experience with the area (e.g. they had already documented the observation on a previous patrol), 2) assumption that such a sign would have already been documented and 3) such documentation would not be useful. The latter two were found to be especially relevant in situations where deteriorating bones were found. As found on the patrols, such experience and familiarity with an area is an interesting counter-measure against official data problems that could arise from double-counts.

Arming Weapons

In some cases, upon entering the field law enforcement rangers and SWIFT personnel would arm their weapons, which were AK-47s. When the author asked one commander why group members immediately armed their weapons, the commander stated that they would arm their weapons "just in case anything started to happen." Asked to elaborate further, the commander described the potential dangers that one may encounter on patrol including the animals, poachers and even rebels.
**Attending to Suspects**

Only one patrol observed by the author involved any form of interaction with suspects from the community. On this patrol, the patrol group could hear the chopping of wood nearby. The RIC and the two SWIFT personnel separated with the two SWIFT moving towards the chopping sound while the RIC and the author moved in another direction. The RIC later explained that this direction was taken to cut-off and block the suspects if they had decided to run. Fortunately, the suspects did not run and were apprehended in a relatively easy manner. The suspects, three women, had been cutting firewood. Based on the amount of wood that had been cut, it was obvious that the women had cut wood for immediate removal and were planning to come back in the future. It should be noted that prior to this arrest, the patrol group had found several piles of firewood cut throughout the patrol indicating that the area was often targeted for firewood collection.

The RIC immediately called the assistant warden of law enforcement to receive further instruction. After ending the conversation with the assistant warden and speaking with the suspects and the SWIFT personnel, the RIC explained to the author that the women had been told that they were under arrest for firewood collection. The RIC went on to further explain that the patrol group would escort the suspects to the nearest community where they would then meet with the Local Council chairman (LC1) where they would then receive a 'caution and release'. A caution and release is essentially an official warning provided by the LC1 and witnessed by an UWA official. This is an alternative form of reprimand used for offenses that are considered too severe (e.g. firewood
collection compared to poaching). Interestingly, the suspects also played an active role in the return back to the community as exemplified in the following narrative:

As we had begun to walk back to the community, the weather turned suddenly and we were caught in extremely heavy rainfall. The commander [RIC] spoke to one of the suspects and asked her to lead us to the community. Talking later with the commander, he explained that while he was familiar with the area enough with the area to get to the community, the women would know the quickest way out. He explained that their familiarity with the area would be an asset, especially given the weather conditions we had faced. Indeed, it seemed that the women were very experienced with the area and led us out with little problem (Patrol 1: Narrative)

As we neared the community, we called the UWA law enforcement ranger in-charge (I/C) of that area. The I/C came and took custody of the suspects to bring them to the LC1 of the community. The RIC of the patrol explained that the reason why he handed the suspects over to the I/C of the area was because it would be better for the patrol since the suspects were "a burden on the patrol" (Patrol 1: Jot note).

8.3.3. Post-patrol activities

Extraction and submission of patrol report

In situations where patrol groups required an extraction, they would stop at a main road or feeder road considered that would be accessible for a vehicle. If within a reasonable distance, patrol groups would just walk back to the outpost or headquarters. As briefly touched upon earlier, due to the lack of transportation available to the UWA at QENP, there were times when patrol groups would need to wait several hours prior to being picked up. In some cases, the vehicle would also need to pick up other patrol groups as well further extending the total time out for patrol. As the following narrative shows,
'patrol' does not end until the patrol group reached headquarters or an outpost:

But once we got to one of the main roads, or at least one of the game drives, we had to walk all the way back which was kind of a distance as well too. So again one of the important things about the patrol that needs to be recognized is that such patrols don't necessarily end once they're 'done'. Due to the lack of transportation, the rangers might either have to wait or they might actually have to walk back, which is at some distance in some cases, so this shows the difficulty in the job. One of the things that one of the rangers once said was that, "You know, the patrol is over but we still have to find our way home". So it's kind of one of those things that it's kind of important to recognize the difficulties of this job, you can't just clock out. You still have to get home (Patrol Patrol 7: Narrative)

Upon returning to headquarters, the RIC would fill-out and submit the patrol form which included all GPS coordinates documented and observations. In cases where patrol groups originated and ended at an outpost, such reports would be submitted the next time the ranger-in-charge of the outpost traveled to the headquarters.

8.4. Decision-making on routine patrols

Knowing how to maneuver through the environment while on patrol is a crucial component of a successful and safe operation. Aside from using a GPS device for directional purposes, responses obtained from interviews and observations made by the author resulted in the identification of the following factors which influenced ranger group decision-making on patrols: wildlife behavior, environment and landscape characteristics, personal experience and intuition and signs of human activity.
8.4.1. *Wildlife behavior*

It was clear from observing patrols that patrol groups were attempting to find and follow animal paths. As animals routinely used such paths, rangers believed that poachers would also be using such paths to track animals and would also target such paths for wire snares. This was discussed in more depth earlier, but it is worth mentioning again.

Benjamin illustrated, "like, for example, like hippos. Here there are hippos but they don't just pass everywhere. They have a route. So poachers just go and do what? Check those routes." And Douglas said:

At times, if you see the route of animal, of course even a poacher will follow the routes of the animals where they will lay the wires. So you say, "This is route of animal. Let's check this one and see what is taking on that route". And if you have not found anything, you just take this one because there are very many routes of animals. Yeah. An enemy follow the trails of the animals. At times you find the wires, wire snares, Yeah.

Following animal paths was also important to identify behavioral changes by animals as well. In other words, rangers did not simply just follow paths that were being actively used by animals. Rangers also investigated 'inactive' routes as well. As explained in the following narrative, rangers believed it was important to check both routes to identify why a once active route became inactive: "Visually the route two routes differed and it was clear that one was being actively used by animals, while one was not. We stopped for a few minutes and the rangers explained that routes that become inactive or non-active are often due to human involvement and may indicate the presence of poachers" (Patrol 3: Narrative). In addition, following animal paths also offered a path of least resistance which made it easier to move through the bush. For example, a number of patrols
observed which involved tall grass, patrol groups would often try to find paths created by large animals, especially elephants.

8.4.2. Environment and landscape characteristics

In addition to the behavior of the wildlife, patrol decision-making was also based on the features of the environment. Some rangers on patrol referred to this as "terrain-based route decision-making" (Patrol 3: Jot Note). It was apparent from the patrols observed that rangers would use the "pictures" (Patrol 2: Jot Note) of the environment to guide the direction of the patrol. For example, patrol groups used the Rwenzori mountains, Kazinga channel and the Ishasha River as environmental landmarks to guide patrol movement.

Interview respondents also noted the importance of the surrounding environment for patrol-decision making. For instance, Patrick explained rangers "mostly [use] those features". Asked to clarify, he said, "Features? I mean permanent features like maybe lakes...It gives you the direction of where you're supposed to go." Likewise, Frank described, "Actually the park is so very big! Sometimes when we go [on patrol], we find ourselves very far and can't even tell where you're coming from...[So] I just follow the features, [for example], surrounding mountains...They are the quickest one to identify where we are." And Paul elaborated:

You know there's physical features. Physical features. You can sometimes use hills. Some areas you can, you know, for Queen Elizabeth there's mountains. See these mountain. Then in Maramagambo [Forest] there's hills which are prominent, eh?...So those are kind of things that help us so, so much. Majorly most of these people have mastered the physical features, yeah.
Other study participants also described how they would also use the sun as a reference. Dennis explained, "Sometimes if you're looking at the sun, it gives you what? Direction." And Alex said, "You have know that the sun is coming from this side and it is going to the other side. So, where we are? We are supposed to be going back this side either the other side." Additionally, Ivan explained how such environmental characteristics were useful when preparing a patrol report that did not involve a GPS: "We have reference points, maybe a hill. Maybe a crater lake. Maybe junctions...Then you are making a report, how you patrolled will be making those reference points."

Similar to patrol activities, the surrounding environment had a direct impact on how patrol groups would be able to decide how to maneuver. For example, while rangers may be able to use the mountains in the savanna, rangers in the forest would are unable to use such features. As a result, rangers would need to use other senses (e.g. hearing the sound of a nearby river, etc) or they would need to establish a lookout point. As Lawrence explained:

Now, this is how we, if we don't have a GPS, and you are in the field, maybe you are very deep in the forest. Now you have to use your intelligent knowledge. Either you climb in the tree, you reach to a certain point, you climb in a tree. You look around and see which direction should we now take.

8.4.3. Personal experience and intuition

Most respondents also described how personal experience with an area also helped guide patrols. Matthew referred to this as having a "map in the head", while Dennis described it as an "IQ of understanding the place." Similarly, Daniel described such experience as one being "conversant with the areas." Echoing his fellow rangers, Jude simply remarked:
"Geography is needed! You must be having the geography in your head." As mentioned earlier, one of the benefits of living in an outpost meant that the ranger would become familiar with an area. All patrol groups required at least one person who was familiar with the area being patrolled. Indeed in all patrols observed, depending on the particular area where the group was currently located, group rotations would occur with the more knowledgeable ranger taking the lead.

Additionally, akin to the deducing "sixth sense" capabilities that Palmer and Bryant (1985) found in their study mentioned earlier, respondents in the current study described how maneuvering through the environment also required some form of intuition. Alex referred to this as having "in-born knowledge" while Patrick described it as the "feeling in your brain."

### 8.4.4. Signs of human activity

Lastly, all respondents explained that whenever signs of human activity are found, rangers must maneuver patrols accordingly. Since this has been discussed in detail throughout the study, it will only be touched upon here. As described earlier, cross-checks or investigative patrolling behavior may occur in such situations. In addition, active patrols following signs of illegal activity may occur as well depending on how 'fresh' or new the sign is. Daniel explained noted: "Sometimes when you patrol, you come across a footmark or a suspected person, that's when you follow that foot mark. That's the way we conduct." Michael described the decision-making process of rangers: "Look on the ground, are there footmarks? Is it from today? When is it? Are there any sign of
poaching?" Patrick explained that rangers would be able to follow markings left by poachers:

Sometimes you might follow animal paths and sometimes you...Get like poachers’ path where poachers pass. And like in the forest, they have that tendency of making marks. So when you find those marks you make sure you follow those marks. How they are cutting. Cutting. Until you come to the point where he was what? If he was laying a snare, because he also has to mark and make sure when he comes back, he doesn't get lost his wire. So you follow that until it takes you to that point.
Chapter 9 - Implications and Limitations

9.1. Theoretical Implications

9.1.1. The identification of ranger organizational culture themes

To conserve and protect: conservation-driven sense of mission

In general, respondents had a clear idea of what they, as law enforcement rangers, were responsible for in the park. While respondents primarily focused on discussing their role in protecting QENP against illegal activities, especially poaching, they also underscored their role in other areas, including community-centered services and research-based activities. It was clear from the interviews that respondents had a sense of pride in their ability to be useful in a variety of circumstances. In general, study participants were proud to be rangers. As exemplified by one respondent, Tony, when he stated, "I'm proud of being a ranger. Putting my uniform, getting my gun and going on duty...When going on duty, I am proud". This sense of pride could be attributed to the fact that the law enforcement rangers had a number of responsibilities and duties that they were required to fulfill and therefore had a central role in QENP. This belief that the ground-level work conducted by law enforcement rangers was pivotal to overall workings of the park was held by respondents. In other words, respondents recognized that being a law enforcement ranger meant far more than simply just patrolling and arresting suspects.

As shown in Figure 9.1, the main underlying component of the rangers 'sense of mission' was the conservation of resources found in QENP. This belief could be attributed to both occupational and personal factors. From an organizational standpoint, the monitoring of the park was meant to ensure that the resources within the park were not illegally
removed or damaged. Community-based services were meant to alleviate issues with wildlife, while also demonstrating the benefits that communities could derive from the park's existence. Lastly, the collecting of data was useful in monitoring the status of the park. This sense of mission and pride can be directly traced to the ground-level operations conducted by the rangers, in particular the foot patrols. Although difficult and prone to a number of dangers, most respondents seemed to genuinely like patrolling in the bush as they felt they were protecting the park. Further, despite under-manned and responsible for policing such a vast landscape, most respondents believed that such ground-level operations were effective in reducing illegalities throughout the park.

Moreover, given that QENP is a major tourist attraction in Uganda, the law enforcement rangers are responsible for monitoring an area that has significant ecological and economic value to the country. Indeed, respondents recognize this role and referred often to the need to protect the park so that the "tourists may come". From a personal aspect and further solidifying this sense of mission was the fact that law enforcement rangers seemed to internalize and accept the UWA's motto of "Conserving for Generations" as some respondents described how they were personally able to protect the wildlife in order for their children to see them in the future.

Notably, while early researchers have identified that "central to traditional thinking about police culture is the idea that policing represents a way of life, different to those associated with occupational groupings" (Cockcroft, 2013: 52), the present study corroborates more recent research highlighting the difference within one single
organization. By having a good grasp on their own identity within the organization, respondents were quick to differentiate between their role and other departments. In some cases, even highlighting the strength of others relative to their own capabilities. In other words, as study participants seemed to have a general understanding of what their role is within the organization, they were able to recognize their own strengths and limitations.

In particular, while they had the capabilities of sensitizing, as well as obtaining information from the communities, respondents believed the community conservation department would be able to perform the aforementioned duties in a more effective and efficient way. In essence, while law enforcement rangers believed that they were important in monitoring the park, they also believed that the involvement of additional departments was required in order to address the illegalities occurring throughout within park.
Aspects of ranger cynicism were also found in the study. Such cynicism could be attributed to the fact that most of the rangers believed that they were overworked, underpaid and inadequately equipped. Furthermore, rangers believed that their position within the organization was looked down upon despite their vital role. Rangers were also disappointed with the influence exerted by local leaders and the inability of the criminal justice system to adequately deter and punish offenders. Additionally, unlike the dangers found in urban forms of policing, the rangers must deal with policing in an area that is...
environmentally inhospitable (e.g. difficult terrain, weather) and difficult to access leading to potential problems in the event of injury. Law enforcement rangers are also well aware that they may encounter armed suspects or even rebel forces during their patrols. Further, they are constantly under threat of being attacked by the very wildlife that they are responsible for protecting. Interestingly, despite these dangers, some respondents believed that being a ranger was not necessarily a dangerous job *per se*, but rather a job with a number of dangers.

In addition to these occupational issues, the rangers described how their living conditions in some of the outposts were difficult and they lacked basic social amenities. Moreover, the rangers may come in conflict with the community members as well. As a result and as shown in Figure 9.2., ranger cynicism is separated into occupational and personal factors.
In addition, as their role is to protect QENP's resources - resources which communities around and within the park need - law enforcement rangers may feel a "discord between [their] sense of mission and their experiences of the 'reality' of their occupational world" (Cockcroft, 2013: 54). In other words, some respondents described the conflict they had with keeping resources away from impoverished community members and the realization that unless the park is properly monitored, such resources would be unsustainably harvested. As described by Niederhoffer (1969), "cynicism is an ideological plank deeply entrenched in the ethos of the police world... When they succumb, they lose faith in people, society, and eventually themselves"(9). Indeed, one of the rangers during an
observed patrol said in regards to communities illegally harvesting from the park: "They are doing good thing in wrong place". In other words, the ranger empathized with the plight of the community members who were simply harvesting resources in order to survive.

As shown in Figure 9.3., similar to ranger cynicism, the theme of ranger suspicion also involved both occupational and personal factors as well. From an occupational perspective, law enforcement rangers were suspicious of information obtained from community informers and also believed that community members monitored their behaviors. Due to previous encounters with informants acting as "double-dealers", law enforcement rangers were cautious of any information obtained from informants. From a personal perspective, rangers were also suspicious of encounters with community members with fear of being attacked, poisoned or bewitched.
Solidarity/Isolation

Lastly, both solidarity and isolation could also be identified from the respondents interviewed. As described earlier, law enforcement rangers are required to live on-site. This results in rangers being on-call 24 hours a day. Such constant interaction with fellow rangers results in the development of solidarity and camaraderie amongst the rangers.

This solidarity is especially useful when a ranger is stationed at an outpost given the lack of manpower. As shown in Figure 9.4., solidarity would arise due to occupational and personal factors as well.

From an occupational point of view, establishing a sense of solidarity would prove useful during patrols given the potential situations that may occur. Respondents described how
they had been saved by fellow rangers during attacks from poachers or were helped when they were injured during patrol. Indeed, due to the remote nature of patrols, the difficulty of accessing transportation and lack of medical aid, the reliance and trust placed upon each other contributes to generating an overall sense of solidarity. Furthermore, as rangers were at times suspicious of some communities, the divide between ranger and civilian may further enhance the solidarity amongst the rangers. It was clear from some respondents that there was an inherent 'us versus them' mentality akin to what has been found in the police culture literature. Respondents not only had experiences or had heard of situations where community members had attacked rangers in QENP, but stories from other PAs in Uganda also resonated with them as well further solidifying such a mentality.

Solidarity has an important personal component as well. Most law enforcement rangers do not live with their families leading to a sense of personal and emotional isolation. Evidence of solidarity amongst the ranger population was witnessed by the author during his stay at the headquarters as well as during his visits to the outposts. In many occasions, rangers would refer to one another as "Brother". Such solidarity enacts as a buffer against the hardships of the job and is perceived as a necessary coping mechanism against the physical isolation from loved ones.
9.1.2. Ranger-related misconduct and illegal activity

As identified by some study participants, various forms of misconduct and illegal activities are committed by rangers in QENP. Respondents provided a number of examples of ranger indiscretion ranging from drinking on the job to accepting bribes. Some respondents even described how rangers had directly participated in the poaching of wildlife species. Notably, respondents provided their opinions on what may lead to rangers engaging in misconduct or illegal activity. In general, respondents identified
personal (e.g. greed), organizational (e.g. low salary) and contextual (e.g. involvement of other service personnel) factors in their explanations.

As found in the study, the influence of particular ranger culture themes, in particular cynicism and solidarity, could lead to some rangers participating in illegal activities. Some respondents discussed that low salary would result in rangers supplementing their income through bribes and through selling wildlife resources. Further, such behavior could be rationalized and be deemed acceptable as a result of other service personnel (e.g. police) also engaging in such activities. Combined with the realization that other rangers may be involved in such activity, the cynicism of rangers may further deepen as they may begin to view "corruption as a game in which every person is out to get a share" (Goldstein, 1977: 199). If this is the case, such a belief may become embedded within the organizational culture of rangers.

Although only one example where solidarity and peer group secrecy, referred to here as 'learning the system', was identified in influencing ranger-related illegal activity, it is possible that such solidarity and secrecy may have more of an impact than identified in the current study. Given that rangers operate with limited supervision and have the opportunity to access particular resources, it is possible that rangers may engage in illegal activities along with or in the presence of other rangers. While purely speculative at this point, the personal example provided in this study hints at this possibility.
Regardless of the degree of influence that ranger culture may have on ranger-related illegal activities, it was clear that such behavior is driven by other factors as well, including greed and even compassion. Recognizing the multi-faceted nature of such behavior in QENP is important in controlling such activities. As noted earlier, a recent pay salary increase in QENP was established partly in response to ranger illegalities. Some of the respondents believed that the increased salary already had an immediate impact as a mitigating factor against inappropriate and illegal behavior performed by rangers. However, if 'learning the system' is more prevalent within QENP, such increased salary may not necessarily stop rangers from participating in illegal activities, especially if fellow rangers will not report such behavior. In general, it is clear that more research on ranger misconduct and illegal activities is required.

9.1.3. Law enforcement ranger time use and decision-making

The study also presented an analysis of routine patrol activities and decision-making. As discussed, prior research examining patrol activities has predominantly been conducted in North American and European settings. The current study is a welcome addition to the literature as it facilitates the possibility of cross-cultural comparisons of an under-researched topic in policing: wildlife law enforcement. Results from the patrol observations show that routine patrol can be disaggregated into four main types of activities: active patrol, investigative patrol, cross-checks and passive/resting breaks. Unlike time use studies of urban police which showed various differences in committed and non-committed activities, law enforcement rangers were technically always committed once they entered the field. While it can be argued that passive/resting breaks is a form of uncommitted activity, it was clear from the respondents that such an activity
also serves a purpose. In fact, given the potential of being ambushed by poachers or attacked by wild animals, the idea that rangers are uncommitted when they are patrolling seems moot.

Notably, an interesting finding of the current study is the fact that rangers would often target areas that they perceived to be hot spots for particular activities. This fact was supported by the interviews, the participant observations and informal conversations with rangers. In many occasions, rangers would refer to specific areas as being problematic for particular illegal activities, including poaching and firewood collection. Although not as specific as micro-places which have been identified within the criminological literature recently (e.g. street segments), rangers did have a general 'feel' for an area and which areas within particular places would be targeted by offenders. As mentioned earlier, poachers would often target crime attractors like watering holes; therefore, rangers would also investigate those places as well. Essentially, while patrolling in the field may seem random or undirected, it was clear from the interviews and the participant observations that this is far from the truth. Rangers utilized various information sources not only to deploy a patrol but also to conduct one.

9.1.4. Poaching, environmental criminology and crime prevention

Another important finding of the study were the spatial and temporal aspects of poaching activities identified by the study participants. Based on the responses, poaching behavior supported general themes and concepts found within the environmental criminology literature (see Andresen, Brantingham and Kinney, 2010 for a collection of the 'classics'
of environmental criminology). It is evident from the interviews that respondents believed poachers were influenced by spatial and temporal dimensions. In particular, poachers were attracted to specific areas within the park believed to have an abundance of wildlife (e.g. watering holes). Moreover, poaching activities were seasonally influenced as evidenced by increased poaching activity during "festival seasons" like Christmas and Easter and during the dry season.

From a micro-level, respondents described how poachers who used guns or spears would poach during the early hours of the day or at night; while, poachers who used traps could 'offend' at any given time. In other words, by being left in the bush, traps like wire snares would act as a proxy for the poacher until upon return. From a criminological viewpoint, this is particularly interesting as it provides a different perspective on the routine activities perspective (Cohen and Felson, 1979), which argues that crime occurs through the intersection in time and space of a likely offender and a suitable target in the absence of a capable guardian. In other words, the placing of a wire snare as a physical substitute for a poacher results in a delayed convergence in time but not necessarily space.

From a preventative perspective, the study also highlighted interesting insight as well. Crime prevention through environmental design (CPTED) is a multi-disciplinary approach to crime prevention that highlights the importance of the built environment and its impact and influence on individual criminal behavior (Cozen, 2008; Crowe, 2000; Jeffery, 1971/1977). Originally based on urban environments, CPTED looks at the identification of physical and social environment and outlines how modifying such
environments may be useful in crime prevention. In general, CPTED is focused on "territorial reinforcement, natural surveillance and natural access control" (Cozen, 2008: 162). Interestingly, opposite to the preventative approaches found within CPTED, which are meant to dissuade offenders, respondents described how poachers would alter places (e.g. fire burning) in order to create an environment suitable for offending. In the case of fire burning, poachers would burn areas near their communities so that animals would graze at those locations; thus, making it easier for poachers to access targets.

However, respondents also described how rangers would attempt to counter such activities by conducting 'early burnings'. Explained earlier, early burnings would be conducted nearby places of water in order to provide animals with alternatives to graze. Such areas would also be known to rangers who frequent those areas as well. Additionally, early burnings would be conducted nearby roads so that tourists may be able to view the animals. Although fulfilling a tourism role, by burning near the roads, the UWA also increases the chance that the wildlife will be more visible to potential guardians.

9.2. Policy Implications

9.2.1. The limitations of law enforcement patrols as a form of deterrent policing in QENP

It is clear from the interviews that current law enforcement practices, particularly patrols, in QENP are premised on primarily on the concept of deterrence with the threat of arrest and prosecution. This was evidenced by the belief of most respondents that their constant
presence in the bush patrolling would act as a deterrent to would-be offenders.

Unfortunately, this "professional model" of ranger enforcement and its potential deterrent effect of patrols in QENP may be questioned from a number of different perspectives: first, while respondents did identify a number of techniques and strategies that they used to narrow the scope of operation for their patrols, the size of QENP is simply too large.

This issue is further exacerbated by the fact that most patrols are conducted on foot and require a significant amount of due diligence on the part of the rangers. Second, the law enforcement department is severely under-staffed with current limited resources spread thin. Third, as most wildlife crimes occur deep within the park, it is difficult to even assess the effectiveness of such patrols. Lastly, in order to deter offenders, especially poachers, the law enforcement department needs to be supported by a criminal justice system that appropriately punishes offenders that are caught. Such is not the case with most respondents describing how suspects simply receive a small fine or are provided bail from their poaching counterparts.

As a result of these factors, it is difficult to confirm whether the current patrolling practices in QENP alone are effective in reducing illegal activities in the park. In addition, at its current state, there is limited scope for further enhancing the impact which the law enforcement ranger patrols already have on illegal activities within the park. This is not to say that patrols do not have a place within a holistic approach, but rather that patrols single-handedly will not stop people from illegally harvesting resources or encroaching in the park, and that other approaches need to be considered or further developed.
9.2.2. Collaborative community policing

Community policing is considered to be "arguably the most important development in policing in the past quarter century" (Committee to Review Research, 2004: 85). Based on the notion that the police can extend beyond the objectives and activities of the traditional model of policing, community policing aims to improve and sustain the relationship between the police and the community. Such positive relationships could be developed through long-term investment and greater involvement of the police within the community, elicitation of the opinions and perspectives of community members and interaction with key stakeholders that may be useful agents in crime prevention.

Such an approach is inherently needed in the prevention of wildlife crime and illegal activities within PAs. As noted by Leader-Williams and Albon (1988):

In poor countries, large conservation areas and sizeable populations of valuable species can probably be maintained by a radical change in approach, combining the rectification of socio-economic problems with more investment in park infrastructure and policing. The most realistic option lies with appropriately directed conservation and rural development projects funded by international aid agencies, either directly or through debt-swap schemes. In particular, residents of the areas concerned must be allowed to participate in plans for their local conservation areas (3).

In her assessment of the literature, Brown (2002) described how "the conservation-oriented literature traditionally viewed local community welfare and development as directly conflicting with the objectives and practice of biodiversity conservation" (6). More recently, however, 'new conservation' practices that recognize the importance of community involvement have developed. Brown identified three broad types: integrated conservation and development projects (ICDPs), community-based conservation and
wildlife utilization and extractive resources. Generally speaking, such approaches recognize the importance of direct community involvement in the protection and management of PAs around the world.

Discussed throughout the study, various community initiatives are currently being conducted in QENP primarily through the community conservation department. Although the law enforcement department has also attempted to develop ways to work with the adjacent communities, such approaches are often reactive (e.g. responding to problem species) or based on obtaining intelligence for operations (e.g. establishing informers). A collaborative approach working with the community conservation department based on a more proactive stance would be more beneficial.

It is important to reiterate that this form of community policing needs to be conducted in a collaborative manner, otherwise, the end result might be counterproductive. For instance, the community conservation department currently acts as a conduit for communication between the communities and the UWA. While this may be useful in addressing immediate issues and problems, it automatically results in symbolically separating the organization. This results in other departments, namely the law enforcement department and law enforcement rangers, at opposite ends of the community, while the community conservation department is viewed as a representative. This inadvertent 'good ranger', 'bad ranger' scenario would not benefit the law enforcement department and may inadvertently further distance the law enforcement rangers from the communities they need to establish a relationship with.
In order to generate and establish a platform for community policing, the UWA would need to overcome three major hurdles that may resonate beyond QENP and embedded within the broader Ugandan context: first, policing bodies in Uganda are often viewed negatively and with mistrust (Musiime, 2012). As discussed earlier, Ugandans have little confidence in the police and believe that most police officers are involved in corruption. Further, accusations of repressive practices obstruct the development of community-centered policing approaches (Musiime, 2012).

With relevance to the current study, Moghari (2009) found that, in general, adjacent communities in QENP "seem to have a negative perception of the QENP Law Enforcement officers" (151). These negative opinions were attributed to slow or non-response by law enforcement rangers to emergency situations, as well as circumstances of "verbal hostilities, alleged beatings, and attempted extortion" (Moghari, 2009: 151). Coupled with the findings in the current study, it is clear that there is a divide between the law enforcement rangers and the community members living within and around QENP.

Second, and directly related to the first issue, is the perceived legitimacy of the UWA and the law enforcement rangers. Defined as the "judgments that ordinary citizens make about the rightfulness of police conduct and the organizations that employ and supervise them" (Committee to Review Research, 2004: 291), legitimacy is a crucial component in the development of police-community relations. The underlying context of QENP may prove problematic in establishing the legitimacy of the UWA and the law enforcement
rangers, since the existence of the park itself may be viewed negatively. For instance, Moghari (2009) found in his survey of community members in QENP that the majority of respondents believed that the park had more of a limiting rather than a beneficial impact on communities, there were not visible benefits to the community and that the park should be degazetted. This issue of legitimacy for law enforcement rangers may be further worsened due to ranger involvement in misconduct and illegal activity. Indeed, if community members believe that the existence of the park, as well as the organization responsible for its monitoring are unfair or corrupt, their willingness to have a vested interest in the protection will undoubtedly be impacted.

Lastly, community perception of the capabilities and resources of the UWA in QENP may further expand the disconnect between the communities and the rangers. In his study, Moghari (2009) found that community members had a number of expectations of the UWA and of the law enforcement department that went beyond the resources of the organization. As a result, community members have been dissatisfied with the activities or capabilities of the UWA further leading to resentment.

In order to address these concerns, the law enforcement department must continue to actively engage the community, identify key stakeholders and communicate with local leaders. In addition, directly incorporating visiting local schools and churches would further help foster the development of a positive image for the law enforcement rangers and the organization in general. Further, the UWA needs to be willing to work with the public in assessing the realistic goals from both the perspective of the community and the
organization. In his discussion on the shift from repressive policing practices to community policing by the Uganda Police Force, Musiime (2012) described:

Uganda Police Force should carry out performance auditing in order to allow communities to take stock and evaluate the efficiency, effectiveness, and corrupt tendencies in their police. An accountable Police is one that invites and allows the community to audit and critique their performance. The community must inform the Police of their priorities and expectations and then hold them accountable for their performance (119-120)

Such transparency would also be useful in developing a positive and reputable identity for the organization, particularly the law enforcement department. Such collaboration may also solidify the UWA's stance against ranger-related misconduct or illegal activity. Indeed, it may be possible that community members are unaware of the disciplinary protocol initiated by the UWA and may believe that inappropriate behavior is simply tolerated.

9.2.3. Addressing problems: Problem-oriented policing and problem solving

Recognizing the limitations of the professional or 'incident-driven' model of policing (Braga, 2008), a problem-oriented approach was proposed by Herman Goldstein (Goldstein, 1979, 1990). Problem-oriented policing (POP) is based on the idea that the traditional, professional approach of policing only dealt with a particular criminal event, which may be recurring, rather than the underlying factors that facilitated such an event to occur in the first place (Goldstein, 1990). POP proposes that the police are not simply an entity that should be relevant when a criminal incident occurs, instead the police would be actively identifying, understanding and designing responses that address underlying conditions which lead to problems resulting in crime. Such a preventative and proactive approach results in placing emphasis on responses that are not reliant on the criminal justice system. Moreover, such an approach actively incorporates other agencies
within the community in a collaborative effort. Lastly, employing a POP framework enables police bodies to establish more realistic expectations, develop more efficient and effective strategies that make better use of limited resources and prioritize preventative approaches (Goldstein, 2003).

POP is a knowledge-driven enterprise. Not only does it generate, collect and analyze data on specific problems, but it also examines current policing strategies. As put by Goldstein (2003):

The fundamental premise underlying the concept of problem-oriented policing is that police practices, in responding to common problems that arise in the community, should be informed by the best knowledge that can be acquired about the nature of those problems and about the effectiveness of various strategies for dealing with them (19)

POP includes the following parts: conceptualization of problems in a precise and specific manner, researching the problem, assessing the current state of police responses, reviewing the capability and capacity of the police bodies as well as their resources, exploration and identification of alternative responses, and choosing the most appropriate response (Goldstein, 1979, 1990). However, as Eck (2006) argued, POP has evolved since it was originally conceived by Goldstein, including the development of SARA (Scanning, Analysis, Response, and Assessment). The SARA process can be summed up in the following way: by scanning an area, the police should be able to determine whether a problem exists leading to the analysis of the problem through the collection and examination of data resulting in the design and implementation of a response and the subsequent assessment or evaluation of the problem and response itself (Eck and Spelman, 1987).
Although evidence suggests that POP is promising in its ability to address a variety of crimes, some have found that in many circumstances POP initiatives did not mirror the principles originally outlined by Goldstein (Clarke, 1998; Eck and Spelman, 1987; Goldstein, 2003). In many cases, it was evident that a 'shallow' form of POP was sufficient to effectively address crime in problem places. Such shallow, problem-solving practices "are smaller in scope, involve rudimentary analysis, and lack formal assessments" (Braga and Weisburd, 2006: 146). It is important to differentiate between shallow, problem-solving and general forms of problem-solving as the former has some elements of the SARA, while the latter does not.

Given the limitations and problems associated with the implementation of an ideal POP approach in real-world circumstances, it has been argued that a problem-solving approach may be better suited and more practical for ground-level police officers (Braga and Weisburd, 2006; Cordner, 1998). As police bodies and personnel may not be equipped or have access to the requisite analytical and evaluative skills and training, theoretical background, resources or internal/external support required to engage in a fully implemented POP initiative (Goldstein, 2003; Scott, 2003), shallow approaches may be more feasible and favorable. Moreover, despite being shallow, such a POP approach can still generate knowledge about the five Ks of crime prevention: know-about, know-what, know-how, know-who and know-why (see Ekblom, 2002).

Shallow approaches may be especially applicable and well-suited for conservation issues. While experiments and evaluations are important from a scientific perspective, such
results may not generate much in the attempt to curb an immediate problem. As put by Sheil (2001):

The most immediate challenge is less one of science than of common sense and the effective allocation of resources [as] realistic priorities are important for effective management...It is far more valuable to identify problems, threats, and prevention strategies early and ensure that adequate management interventions can be taken (1179-1181)

Based on the current study, it can be argued that a framework for a shallow form of problem-solving is in place in QENP, specifically for poaching. It was clear that most respondents were able to disaggregate the general problem of poaching and distinguish between different types, including for subsistence and for commercial gain. Further, respondents were able to provide a number of motivations that would result in poaching to occur in the park, as well as the techniques that would be used by poachers. Such information not only derived from their own personal experiences in the field, but because of their interaction with the community. Indeed, as mentioned by some respondents earlier, the UWA has been working with local leaders in some type of "collaborative management." Moreover, and as just discussed, it was evident that respondents had ground-level knowledge on the spatial and temporal characteristics of poaching behavior.

Recognizing the underlying problems associated with various poaching activities, the UWA has developed a multi-faceted approach which was relied on ranger patrols, community sensitization, problem-animal control, community projects and employment. However, the question arises whether this approach has led to a reduction in poaching and given the lack of formal assessment, such a question cannot be answered. Despite
this, it may be enough to assume that such an approach will be more effective than solely relying simply on patrols.

9.3. Avenues for Future Research

The current study provided a foundation for which future studies on ranger culture could be based on. In particular, more research investigating the differences between rangers and supervisors is warranted. Although the interview sample did include four supervisors, there was no attempt to distinguish and analyze the responses between the rangers and supervisors.

Future research could also examine the organizational cultures of the different departments operating within the UWA. Of particular interest would be identifying whether an organizational culture exists within the community conservation department and compare it to the results of the current study.

Further, as shown in the current study, some respondents felt that their work within the organization was often taken for granted. Generally speaking, law enforcement rangers believed that they were viewed at the lower end of the organizational hierarchy of UWA despite their front-line efforts, which included their law enforcement duties and data collection responsibilities. Following in line with the research conducted by Wynveen and colleagues (2006), it would be interesting to examine whether such perceptions were evident in other staff and personnel operating within UWA, particularly those who are not responsible for any law enforcement duties, to assess whether their opinions corresponded with the findings found here. Moreover, it would be interesting to assess
whether such opinions differed between staff that have had prior roles as law enforcement rangers.

In addition to further unraveling organizational cultures within the UWA, it would also be useful to assess the impact that the recent salary increase has had on ranger misconduct and illegal activities. As some respondents believed, the salary increase had led to a reduction in ranger misconduct. It would be beneficial to both the UWA and other organizations responsible for managing PAs to empirically determine whether salary increments can help in decreasing ranger-related misconduct and illegal activity.

Lastly, future research can replicate the participant observations conducted in the current study to advance knowledge on ranger time use during foot patrols. Generating more observed hours may result in corroborating or adjusting the findings of the current study. In addition, participant observations of other foot patrols (e.g. extended) may also help in distinguishing between patrol activities and group decision-making.

9.4. Limitations

Given the ethnographic approach utilized by the author, methodological limitations related to the validity and reliability of the research is considered inappropriate. As noted by Lincoln and Guba (1985), the ethnographic equivalent to the aforementioned limitations are: credibility, dependability, and transferability (or generalizability). In addition to these limitations, the issues of interaction effects and the time period of the participant observations also needs to be discussed (Maxwell, 2005; Miles and
Huberman, 1994; Patton, 2002). In order to strengthen the study against the credibility and dependability of the study, the author incorporated the following measures: 1) used a variety of methods to record fieldnotes in a timely manner; 2) triangulated data sources and 3) had most of the interviews digitally voice recorded.

Another limitation is the lack of transferability or generalizability associated with in-depth case studies, particularly those that incorporate qualitative methods. As the study focuses solely on one national park in Uganda, the findings of the study may not be applicable to other national parks, especially those in developed countries. However, as discussed, the purpose of the study is to provide a sufficient, accurate account and analysis of law enforcement and illegal activities in QENP (Maxwell, 2005). Moreover, while the study may not yield much statistical generalization, it may be "generalizable to theoretical propositions" (Yin, 2009: 15). In other words, the study will produce results that can expand to the literature on policing, particularly wildlife law enforcement.

Another important potential limitation is the interaction effects that may arise during data collection. As noted by Lincoln and Guba (1985):

Observation not only disturbs and shapes but is shaped by what is observed...
In a very real sense, then, the investigator and respondent together create the data of the research [as a result] interactions between the investigator and respondents cannot be eliminated from the research equation even if one wishes to do so, as we have tried to show. But one can regard their presence either an intrusion leading to error or as an opportunity to be exploited (98-101)

Webb and colleagues (1966) refer to interaction effects or reactivity as "error from the respondent" and explain:

The most understated risk to valid interpretation is the error produced by the
respondent. Even when he is well-intentioned and cooperative, the research subject's knowledge that he is participating in a scholarly search may confound the investigator's data. Four classes of this error are discussed here: awareness of being tested, role selection, measurement as a change agent, and response sets (13).

In essence, the presence of the researcher results in the participant changing or adapting their behavior or opinions. In addition, the presence and influence of the setting itself on the author is also a potential limitation of the study, whereby the researcher reacts in accordance to the reaction of the participants (e.g. becoming more reassuring or investigatory) (Miles and Huberman, 1994). As reactivity can never fully be eliminated, it is the researcher's responsibility to recognize and understand it. Indeed, in some cases, reactivity can even be used as a valuable data source (Maxwell, 2005).

It is argued that such interaction effects, at least the negative components, were partly alleviated as a result of the prolonged engagement of the author. By living with the ranger population for six weeks the initial intrusion of the author may have dissipated as the rangers became familiar with seeing the author on a daily basis. Importantly, the fact that the respondents and patrol participants were informed of the aims and objectives of the study, the interaction effects, especially for patrols, proved to be beneficial. For example, on most of the patrols observed, patrol group members often provided the author with information regarding activities and decision-making even when the author did not ask; thus, potentially limiting the more obtrusive impact of the researcher asking himself.

Lastly, the participant observations were conducted within a six week period cross-section of all patrols conducted throughout the year. As such, the patrols observed may not be representative of other patrols that occur throughout the year (Miles and
Huberman, 1994). This limitation is particularly highlighted with the fact that observations occurred completely within the second rainy season. Since the observed patrols may not be representative of patrols during different times of the year, the representativeness of documented activities and time use characteristics may also be limited. While further studies are required in order to better describe the behaviors and activities that occur during routine law enforcement patrols, the six-week period used in the current study satisfy its exploratory objectives. Further, since all observations were conducted within the second rainy season, issues associated with seasonal overlap (i.e., observations in both dry and rainy seasons) are alleviated.
References


Appendix A. Letters to the Uganda Wildlife Authority and Queen Elizabeth National Park

Uganda Wildlife Authority Monitoring and Research Unit
PO Box 3530
Kampala, Uganda

To whom it may concern,

Rutgers, The State University of New Jersey, is the largest institution of higher learning in New Jersey, United States. As a premier research university, Rutgers is home to some of the best rated programs in the United States, including the School of Criminal Justice (SCJ) located at the Newark campus. The SCJ doctoral program is consistently ranked among the best criminal justice programs in the United States. The SCJ is a research-intensive program emphasizing a broad range of topics and boasting a world-renowned faculty.

In an effort to extend evidence-based research, crime prevention and international criminology and criminal justice, the SCJ hopes to work with the Uganda Wildlife Authority (UWA) in addressing local concerns related to wildlife law enforcement and illegal activities within National Parks in Uganda. Through a reciprocal and ground-level approach, it is believed that the potential collaborative work between the SCJ and UWA would be beneficial for both organizations. More specifically, it is believed that the current proposed study will be informative and useful as it relates to UWA's agenda on protecting Uganda's wildlife, improving wildlife law enforcement and preventing illegal activities within National Parks and Protected Areas.

We hope that UWA will join us in our mission to extend our breadth and depth in innovative research. For more information about the SCJ, its faculty and students and the current research being conducted, please visit: http://rscj.newark.rutgers.edu/.

Thank you for your time.

Sincerely,

William D. Moreto, M.A
Appendix B. Informed Consent for Participant Observations for Patrols

Attachment 4a. Informed Consent Form for Patrol

Hello, thank you for taking the time to meet with me today. You are invited to participate in a case study on Queen Elizabeth National Park in order to better understand law enforcement and illegal activities within the park. For this part of the study, I would like to observe your group while it patrols Queen Elizabeth National Park today. Observations conducted today will result in the identification and documentation of activities conducted during patrol. During the course of the patrol and when appropriate, I may ask you to confirm specific observed activities as well as gain insight on decision-making while on patrol. The frequency and duration of activities may also be documented. Lastly, in situations where an illegal activity is identified, I will take photographs of the surrounding environment in order to analyze the situational factors related to such activities.

An increased level of risk may be associated with my presence as part of the patrol; however, I will make sure to stay in close proximity with the group and will listen to instructions throughout the course of the patrol. As this part of the study is focused on group activities and dynamics, your identity will be kept confidential. In addition, the group itself will be kept confidential and future discussion will not include any identifiable information that can be traced back to the group. Your participation is completely voluntary. No penalty will be assessed to you should you decide not to participate. In addition, should you decide to withdraw your participation at a later time, including during and after the patrol, no penalty will be assessed. In such an event, all collected information will be immediately destroyed. While your participation may not benefit you directly, it is expected that the information generated from these observations will be useful for the Uganda Wildlife Authority, other park rangers and supervisors, and those with a vested interest in conservation and law enforcement within protected areas in Africa and throughout the world. At this point in time, do you have any questions?

Do you give consent to be observed for the aforementioned study?

Group Code: ___________________________ Date: ___________________________

Consent Given: ___________________________ (PI on behalf of respondent)  PI: ___________________________

Photographs: Every effort will be made to ensure that you are not included in any photographs. Photographs will be used primarily during future analysis of situational characteristics of identified illegal activities; however, they may also be used for presentation or publication purposes. Once the patrol has been completed, photographs will be uploaded into my computer and will be password encrypted. Once uploaded, the photographs will be deleted from the camera.

Do you give consent for photographs to be taken during today’s patrol?

Group Code: ___________________________ Date: ___________________________

Consent Given: ___________________________ (PI on behalf of respondent)  PI: ___________________________

If you have any questions about your rights as a research subject, you may contact the IRB Administrator at Rutgers University at:
Rutgers University Institutional Review Board for the Protection of Human Subjects
Office of Research and Sponsored Programs
3 Rutgers Plaza
New Brunswick, NJ 08901-8559
Tel: 848-932-4038
Email: humansubjects@rosp.rutgers.edu

EXPIRES JUN 05 2013

APPROVED

Date: 5/1/13

Approved by the
Rutgers IRB
Appendix C.  IRB Approved Informed Consent Form for Ranger and Supervisor Interviews

Attachment 4. Informed Consent Form for Interview

Hello, thank you for taking the time to meet with me today. You are invited to participate in a case study on Queen Elizabeth National Park in order to better understand law enforcement and illegal activities within the park. For this part of the study, I am interested in interviewing rangers and supervisors to obtain perceptions, opinions and experiences related to organizational structure of UWU patrol activities and deployment, decision-making during patrols; job satisfaction and difficulties; decision-making and motivations of offenders who operate within QENP; community-relations; ranger accountability and disciplinary protocol; and law enforcement needs and alternatives.

The interview should take approximately 1 to 2 hours of your time and all your responses will be kept anonymous. No identifier will be used to link your answers to you. I will, however, be using a code for transcripts, digital voice recordings and this informed consent recording/form to ensure that such files are kept in order. There are no foreseeable risks associated with your participation; however, recalling and discussing your particular experiences may be uncomfortable. In such circumstances, you do not have to answer such questions. Your participation is completely voluntary and you are free to stop the interview at any time. If at a later date you decide that you do not want to have your responses included within the study, your responses will be removed and destroyed. There is no penalty should you decide to stop the interview or should you remove yourself from the study. You will be compensated $100 USD (approximately 25,000UGX) for participating in the study. You will be paid whether or not you decide to complete the interview or if you decide to remove yourself from the study. It is expected that the information generated from this interview will be useful for the Uganda Wildlife Authority, other park rangers and supervisors, and those with a vested interest in conservation and law enforcement within national parks in Africa and throughout the world. At this point in time, do you have any questions?

Do you give consent to be interviewed for the aforementioned study?

Respondent Code: _______________ Date: _______________

Consent Given: ___________________ (PI on behalf of respondent) PI: _______________

Voice Recording: The interview will also be recorded by an electronic voice recorder. No tapes will be used, however, digital audio files will be created. Once the interview has been completed, they will be uploaded into my computer and will be encrypted and password protected. Once uploaded, the interview will be deleted from the recorder.

Do you give consent for the interview to be digitally voice recorded?

Respondent Code: _______________ Date: _______________

Consent Given: ___________________ (PI on behalf of respondent) PI: _______________

I am available to answer your questions about this research and can be contacted at:
William D. Moreno
School of Criminal Justice
123 Washington Street, Newark, NJ 07866
Tel: (Provide Local Number)
Tel: 973-270-7122
Email: wmoreno@andromeda.rutgers.edu

If you have any questions about your rights as a research subject, you may contact the IRB Administrator at Rutgers University at:
Rutgers University Institutional Review Board for the Protection of Human Subjects
Office of Research and Sponsored Programs
3 Rutgers Plaza
New Brunswick, NJ (888) 881-8339
Tel: 888 932-4058
Email: humantests@juno.rutgers.edu

APPROVED
Date: 2-26-13

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JUN 08 2013

Approved by the
Rutgers IRB
Appendix D.  Interview Guide for Law Enforcement Rangers and Supervisors

Before we begin, I would like to take a few minutes to briefly obtain some basic information from you:

1. What is your current age? ____

2. Are you single or married? ____
   If married, does your family live with you in QENP? Yes / No

3. How long have you worked as a park ranger at Queen Elizabeth National Park? ____

4. How long have you worked for the Uganda Wildlife Authority? ____

Now I would like to discuss with you your perspective on law enforcement, as well as illegal activities within Queen Elizabeth National Park.

Context

1. As a ranger stationed in QENP, you are currently living in the park. Can you please describe what it is like to live within the park?

2. You are currently stationed [within headquarters/outside of headquarters], have you also stayed [within headquarters/outside of headquarters]?

3. Is there anything you like about living [within headquarters/outside headquarters] compared to living [within headquarters/outside headquarters]?

4. Is there anything you do not like about living [within headquarters/outside headquarters] compared to living [within headquarters/outside headquarters]?

5. Where do you prefer to live: within headquarters or outside of headquarters? Why?

6. Can you please describe the relationship between the law enforcement rangers and the communities within and surrounding QENP?
   Probes: Have you had personal interactions with community members? If so, how were you typically treated?
Illegal Activities in Queen Elizabeth National Park

7. If you could list the most harmful illegal activities in QENP, what would they be and in what order?
Probes: What illegal activity do you believe occurs the most in QENP?

8. What factors do you believe contribute to _______ (refer to the aforementioned individual illegal activities identified by respondent)?
Probes: Is there a particular time of the year when _______ (refer to the aforementioned illegal activities identified by respondent) may occur more?

9. What techniques or strategies do offenders use when _______ (refer to aforementioned illegal activities identified by respondent)?

10. What is the protocol when _______ (refer to the aforementioned illegal activities identified by respondent) has been suspected to occur or has occurred?
Probes: What is the protocol when a suspected offender of _______ (refer to the aforementioned illegal activities identified by respondent) has been identified during a patrol?

Law Enforcement Patrol Operations in Queen Elizabeth National Park

11. How are patrols typically deployed in QENP?
Probes: What information is used in the deployment of patrols?

12. What are the purposes of patrol?

13. What kind of activities typically occur on patrol?
Probes: How do rangers decide where to patrol once deployed?

Are there any restrictions or constraints that limit ranger activity during patrol?

14. What is the protocol when you encounter a sign of illegal activity?

15. What is the protocol when you encounter a suspect while on patrol?
Probes: Are suspects always arrested?

What factors may influence whether a suspect is arrested?

16. What do you like about being on patrol?
17. What do you not like about being on patrol?

18. What kind of dangers could you encounter while on patrol?

19. Do you believe that patrols are effective in limiting or deterring illegal activities in QENP?
   Probes: Are there any other approaches conducted in QENP that are used to deter illegal activities other than patrol?
   How do you feel when you return from a patrol and you do not see any sign of illegal activity?

20. What alternative approaches, if any, do you believe would be helpful in limiting or deterring illegal activities?

   **Ranger Misconduct and Illegal Activities**

21. Recently six rangers from Virunga nature reserve were accused of accepting bribes from loggers. What factors do you believe may contribute to ranger's participating in illegal activities?

22. Have you ever witnessed or heard of a ranger committing an illegal activity in QENP?
   Probes: [If yes] Could you please describe what you heard or witnessed?

23. Have you ever heard or witnessed a ranger participating in acts of misconduct?
   Probes: [If yes] Could you please describe what you heard or witnessed?

   **Job Satisfaction and Law Enforcement Needs**

24. Do you believe that you are paid a fair amount as a ranger?
   Probes: Are there any incentives for identifying an illegal activity and/or a suspect?

25. What do you like about being a ranger?
   Probes: What would you consider to be the most rewarding part of being a ranger?

26. What do you not like about being a ranger?
   Probes: What do you consider to be the most difficult part of being a ranger?

27. Would you consider being a ranger in QENP a dangerous job?
28. Would you consider being a ranger in QENP a stressful job?

29. What do you need in order to perform your job more effectively?
   Probes: What kind of equipment, if any, do you need as a ranger?

   What kind of support, if any, do you need as a ranger?

30. Is there any additional information that you would like to tell me that we might not have discussed?

This concludes our interview. At this time, do you have any questions for me?

Thank you again for sharing your experiences and opinions. They will be helpful in my ability to understand your organization and the situation in Queen Elizabeth National Park.
Appendix E. Coding Rationale and Chain of Evidence for Interviews

Coding Rationale and Chain of Evidence for Interviews

12/05/2012 - 1/23/2013
I began transcribing the interviews in December 2012 and subsequently finished in January 2013. I used both Microsoft Word 2007 and QSR International's NVivo 10 to transcribe all digitally recorded interviews and the interview notes from the two respondents who did not consent to being digitally voice recorded. All interviews were imported into NVivo 10, unless already transcribed within NVivo 10.

1/24/2013
I began coding interviews in January 2013. If applicable, before I coded each interview, I read each transcript while listening to each recorded interview. This was done in order to identify any nuances (e.g. tone of voice) that may be important to better understanding the respondent's response. As mentioned earlier, prior to coding, organizational categories were created in order to guide the author during the initial coding process. The following are the organizational categories used for the study:

General duties of a law enforcement ranger

Life as a law enforcement ranger in the park

Law enforcement rangers' relationship with communities

Illegal activities (poaching)

Law enforcement patrol operations

Ranger misconduct and illegal activities

Job satisfaction and law enforcement needs
Initial coding was used for the first part of the analysis. Again, the purpose of this coding was meant to identify basic concepts useful for second cycle pattern coding. It should be noted that in some cases, subcodes (Miles and Huberman, 1994) were used. For example, 'Conniving with community' had subcodes 'Illegal fishing-related', 'Poaching-related', 'Encroachment-related', 'Firewood-related' and 'Grazing-related'. The full list of first cycle codes were as follows:

1. Life as a law enforcement ranger in the park
   - Work-related
   - Transport
   - Training of rangers
   - Standard of living
   - Roads
   - Not with family
   - Not difficult
   - Monitored by community
   - Lack of manpower
   - Lack of amenities
   - Animals
   - Keeps rangers from being compromised
   - Interaction with community
   - Concentrate on work
   - Conceals the ranger
   - Accommodation
   - Wearing uniform
   - Access to the park
   - Access to first aid
   - Sharing ideas with colleagues

2. Law enforcement rangers' relationship with the communities
   - Ranger omnipresence
   - Ranger intelligence-gathering
   - Less work and pressure
   - Experience and knowledge
   - Able to set work plan
   - Wilderness
   - Water tanks
   - Quiet
   - Housing
   - Bicycles
   - Access to food
   - Rebels
   - Become idle
   - Lack of or access to electricity
Pressure from management
Lot of work
Limited access to management
Equipment
Absconding
Community false accusations
Cooperate with UPDF
Positive relationship
Negative relationship
Moderate relationship ("okay")
Sensitization
Revenue sharing
Projects
MoU
Information about illegal activities
Employment
Infrastructure
Hiring ex-poachers
Involvement of CCR
Land and space
Recruitment
Problem species
Population increase
Legal issues, Wildlife Act
Involvement of local leaders
Illegal activities
Access to resources
Problems with Revenue sharing
Revenue sharing
Involvement of CCR
Guarding and escorting during MoU
Employment
Education and sensitization
Uniform
Ranger misconduct
Problem animals
Limiting access to resources
Language limitations
Involvement of local leaders and politicians
Illegal activities
Being monitored
Poisoning
Moving at night
Arresting suspects
Transport
Bewitching
3. Illegal activities (poaching)
  Trespassing
  Tourist-related illegal activities
  Pole collection
  Poaching
  Wire snares
  Wood-nail
  Temporal influence
  Spears
  Routine activities of animals
  Poison
  Pit traps and ditches
  Metal traps
  Informants
  Indication of using multiple methods
  Hunting nets and spears
  Home of suspect
  Guns
  Fire burning
  Dogs and spears
  UPDF involvement
  Pit-sawing
  Illegal wildlife trafficking
  Ivory
  Game meat
  Illegal grazing
  Illegal fishing
  Illegal firewood collection
  Illegal charcoal burning
  Plant collection for medicinal or herbal purposes
  Encroachment
  Poverty or survival
  Local customs or cultural beliefs
  Local consumption
  Lack of knowledge of information
  Lack of employment
  Animals
  Lack of land

4. Law enforcement patrol operations
  Routine patrol
  Extended patrol
  Ambushes
  Boundary patrol
Aerial patrol
Marine patrol
Emergency response
Joint patrol with UPDF
Trans-boundary patrol
Security
Protect UWA properties
Monitor wildlife
Monitor vegetation
Deterrence and omnipresence
Hot spots
Monitor illegal activities
Data collection for research
Information for supervisors
Experience
Conservation and tourism
Criminal history
Arresting decisions
Armed
Age of suspect
Home investigations
Signs of illegal activities
Suspect questioning
Outpost protocol
Secure area
LCs
Police involvement
Charging of suspects
Call HQ
Stimulating staff
Frighten staff
First-hand information
Become more analytical
Physical fitness
Performing job
Not being idle
Getting information
Arresting suspects
Allowance
Weather
Tiresome
Sleeping in bush
Supervisor
Problems with other rangers
Nothing
Mosquitoes and pests
Limits time to do other things  
Lack of food  
Isolation  
Inadequate transportation  
First aid, injury or sickness  
Animals  
Weather  
Traps  
Suspects  
Rebels  
Foot patrol effectiveness  
Foot patrol results  
Time and distance  
Might get lost  
Obstacles  
Landscape and terrain  
Lack of sleep  
Lack of food  
Lack of and access to water  
Carrying exhibits or evidence back  
Equipment  
Work plan  
Abrupt responses  
Time of day  
Season  
Routine patrol and cross-check  
Reinforcements  
Random  
Information from informants  
Issues with informants  
Information from previous patrols  
Expected areas based on experience  
Aerial patrol information  
Ex-poachers  
Training

5. Ranger misconduct and illegal activities  
Proximity and relationship with communities  
Over-working  
Different background  
Suspects are known  
Lack of education  
Greed  
Burden of family  
Crucial problem  
Transport
Overstaying
Not enough time at home or away from work
Low pay and salary
Lack of supervision
Lack of knowledge, training, guidance and discipline
Food ration
Delaying of salary
Allowance
Access
Underlying culture
Standard of living
Other service personnel are involved
Negligence of duty
Late
Fraud
Firing weapon in community
Fighting
Falsifying patrols
Drinking
Absconding
UPDF involvement
Sold ivory
Poaching
Illegal charcoal burning
Have not heard
Deceptive patrols
Conniving with community, illegal fishing-related
Conniving with community, poaching-related
Conniving with community, grazing-related
Conniving with community, firewood-related
Collaborating with relatives
Heard but charge unknown
Conniving with community, encroachment-related

6. Job Satisfaction and law enforcement needs

Reasons for salary increase
Salary amounts
Performance-based incentives
Working with wildlife
Working for government
Travel
Time off
Something to do
Pride in work
Potential for more
Physical fitness
Meet people
Medical aid
Learning new language
Salary
Bank loans and financial assistance
Support family
Education and knowledge
Discipline
Respect from community
Nothing
No time for family/Not living with family
Living conditions
Problems with other rangers
Low pay/income
Ostracized by the community
Threat of revenge
Perceived as low within organization
Carrying a gun
Lack of communication technology
Lack of manpower
Overworking
Potential for dismissal
Problems with the legal system
Relationship with management
Training
Transport
Walking long distance
Rebels
Lack of equipment
Transportation
Technology to aid patrols
Recognition of work
Promotion
Medical support
Funding for intelligence gathering
Food and ration
Contracts
Allowances
Biohazards and disease
Relaxing effect of animals
Opinions from colleagues
Momentary stress
Lack of facilitation
Abuse from co-workers
CURRICULUM VITAE

Date and Place of Birth
May 17th, 1984
Quezon City, Philippines

Secondary School Attended
Fleetwood Park Secondary School, Surrey, British Columbia
High School Diploma (June, 2002)

College/Universities Attended
Kwantlen University-College (2002-2005)
   Associate of Arts (May, 2005)
      Criminology

Simon Fraser University (2006-2008)
   Bachelor of Arts (May, 2008)
      Criminology

Rutgers University (2009-2013)
   Master of Arts (May, 2011)
      Doctor of Philosophy (May, 2013)
      Criminal Justice

Occupations
Teaching Assistant, School of Criminal Justice
Rutgers University (2009-2012)

Research Assistant, Rutgers Center for Public Security
Rutgers University (2009-2011)

Research Assistant to Professor Ronald Clarke
Rutgers University (2011-Present)

List of Publications
   Risks, Repeats and Reconsiderations of Urban Residential Burglary. Justice
   Quarterly. Online First. DOI: 10.1080/07418825.2012.754921

   Overcome the 'Tragedy of the Commons'. European Journal of Criminal
   Policy and Research, 17, 101-123.