Expanding the Vision for Blueberry Extension

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\textbf{Subject Category}: Extension and Outreach

\textbf{ABSTRACT}

Cooperative Extension programs are in a state of flux as new methods of information delivery are adopted by agents, specialists, and clientele. Online methods are crucial tools as the number of Extension specialists with specialization in blueberries shrink. Therefore, increased communications to develop collaborations among Extension personnel should be a priority. The All About Blueberries (AAB) Community of Practice (CoP) launched in 2010 and was motivated by six goals: (1) to improve insect and disease identification; (2) to improve blueberry production efficiency and productivity; (3) to educate about blueberry cultivation; (4) to improve grower profit margins; (5) to hasten adoption of new innovations and technologies; and (6) to improve the safe handling of fresh produce by emphasizing the importance of food safety in the consumer section and harvesting in the grower section. The AAB portal and its 36 contributing authors represent an ideal venue to showcase nationwide blueberry consumer and producer

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research and educational efforts. The AAB CoP can provide a platform for enhanced and strategic coordination among blueberry Extension specialists nationwide. Better coordination can lead to positive outcomes that result in more recognition of Extension as a critical aspect of the research-to-end user continuum. Pursuing online methods meets clientele needs and strengthens Extension’s reach to all stakeholders and audiences, nationally and internationally. Support and expansion of the blueberry eXtension portal has great potential to be a leader in developing efficient and effective Extension methods to reach existing clientele and new audiences.

**Index words:** blueberry Extension, eXtension, information dissemination, social media

**INTRODUCTION**

Cooperative Extension programs are changing as new methods of information delivery are adopted by agents, specialists, and clientele. Most of the platforms are via the internet, allowing information creators and consumers to intersect quickly and efficiently. Informational websites are a critical part of Extension information dissemination (i.e., state-based Extension websites as well as others like [www.smallfruits.org](http://www.smallfruits.org)); however, social media and other innovative methods give Extension workers a new way to reach, engage, and impact clientele. Although these new methods exist and are used, they are not embraced in totality within branded Extension outlets because of numerous obstacles (Stafne, 2013). As a group, blueberry Extension specialists (as do all Extension personnel) need to do a better job of developing methodology to communicate research to clientele.
For many years, the primary avenues were state university-based communications. Although an accepted standard method, could other options better reach audiences, especially research work that has a more regional or national focus, as is emphasized in most competitive funding opportunities? Earlier this year the American Society for Horticultural Science (ASHS) initiated a survey to its members on the potential benefits to peer-review of Extension materials through ASHS vs. university review process. Pursuing this avenue may open up highly beneficial options for both Extension authors and clientele, such as more national and international collaborations.

**Improved Intra-Disciplinary Communications**

The number of Extension specialists with specialization in blueberries is stagnant or shrinking. Therefore, increased communications to develop collaborations among Extension personnel should be a priority. One potential method could include establishing a blueberry-specific Multi-State coordinated project as a way to interact on an annual basis and provide initiative for greater collaboration. A complementary technique would be to use existing online methods for better communications (e.g. Google Hangout, Adobe Connect, etc.) to increase frequency of communications between annual meetings or the less frequent North American Blueberry Research and Extension Workers’ (NABREW) conferences.

**All About Blueberries Community of Practice on eXtension.org**

The All About Blueberries CoP was motivated by six goals: (1) to improve insect and disease identification; (2) to improve blueberry production efficiency and productivity; (3) to educate about blueberry cultivation; (4) to improve grower profit margins; (5) to hasten adoption of new
innovations and technologies; and (6) to improve the safe handling of fresh produce by emphasizing the importance of food safety in the consumer section and harvesting in the grower section (Hummel, 2012). To meet this goal, twenty CES experts on blueberries, youth and education, production and management, horticulture disease and pest management, human nutrition, economics, marketing, extension program evaluation, web and graphic design, and communications joined forces across five institutions and successfully received funding from the USDA-NIFA Specialty Crop Research Initiative in Fall 2009. Less than a year later, on August 31, 2010, the All About Blueberries (AAB) eXtension.org portal was launched, and offered farm-to-fork blueberry-related national research and extension products. The team utilized consumer-centric technologies, sought out advisory panel contributors and their feedback, and pursued multi-stage communication strategies via social media, peer-reviewed publications, and numerous presentations at specialist conferences and meetings. Overall, the AAB portal provides a real-time gateway to market channel and pricing information, practical risk management knowledge and tools, consumer education about health benefits and food safety information, and nationwide expert advice.

The AAB team has grown from the initial team of 20 land-grant faculty to include 55 university contributors representing 15 states and nine types of Land Grant positions ranging from faculty to communicator to regional educator. Currently, there are 115 Frequently Asked Questions (FAQs), 436 published articles, 61 news items, 14 learning lessons, and one learning module posted on the AAB community website. The All About Blueberries Facebook page has over 1,660 followers located in the U.S., Canada, U.K., Mexico, and 16 additional countries, with 66% ranging in age from 35 to 64 years of whom the majority (68%) is female. The AAB team
also maintains a Twitter page (@BluesberryBush) that has published 1,130 tweets and gathered 298 followers. An “allaboutblueberries” YouTube channel featuring educational videos is maintained and currently has 27 subscribers and 8,972 video views. A review of the Google Analytics report from October 2011-12 revealed a total of 38,825 visitors to the AAB site, with AAB site visitors averaging two minutes per visit. In this twelve-month period, viewers spending an average of 1.5 minutes per page reviewing the material recorded 92,319 blueberry-related page views and 63,851 unique page views. Almost 60% of the search traffic originated from search engines, such as Google (76% of visitors), Bing (11%), and Yahoo (10%). Another 25% of search traffic was routed to the AAB from referral sites including Facebook (14%) and the www.smallfruits.org site (10%). Visitors to eXtension.org who searched the AAB site are termed “direct traffic” and these represented 16% of all visitors. The most common keyword searches used by viewers who accessed the AAB site were “how many blueberries in a serving,” “blueberry diseases,” and “when to fertilize blueberries”. Articles related to Blueberry Production, Soil Testing, Composting and Improvement, Blueberry Diseases and the Health Benefits of Blueberries attract the greatest number of total and average weekly views.

The creation of the AAB portal resulted from a select group of diverse idea generators participating in a successful team effort fueled by competitive grant funding. Challenges encountered throughout the three-year project timeline were largely due to the complexities of communication across five institutions and among twenty individuals hailing from different disciplines. The AAB communication strategy hinged on connecting and cross-listing with blueberry promotional organizations, state grower associations, state agricultural departments, specialists’ colleagues, national associations, professional societies and other national Extension-
based internet portals such as Market Maker and Ag Marketing Resource Center. A key feature underlying the successful launch was the hiring of a full-time Project Manager, wholly devoted to meeting deadlines and collating expertise and materials into the AAB portal. The AAB portal and its 36 contributing authors present an ideal venue to showcase nationwide blueberry consumer and producer research and educational efforts; however, concerns about future content management, engagement of new AAB members, and maintenance and provision of fresh, relevant materials beyond the grant funding cycle persist.

The eXtension requirement is still part of the United States Department of Agriculture-National Institute for Food and Agriculture-Specialty Crops Research Initiative (USDA-NIFA-SCRI) request for application (RFA) ([http://www.nifa.usda.gov/fo/specialtycropresearchinitiative.cfm](http://www.nifa.usda.gov/fo/specialtycropresearchinitiative.cfm)), and development of content suitable for delivery through eXtension is strongly encouraged in the 2014 USDA-AFRI Integrated Projects RFA as well; therefore, established leadership, group structure, and defined goals and strategies are needed to move the CoP forward in order to accommodate potential grant partners. Beyond funding opportunities through the SCRI, the AAB CoP can provide a platform for enhanced and strategic coordination among blueberry Extension specialists nationwide. Better coordination can lead to positive outcomes that lead to more recognition of Extension as a critical aspect of the research-to-end user continuum. For example, eXtension is doing a pilot project with Australia to introduce online Extension to that country. Certainly this may provide international collaboration opportunities for the AAB CoP.

Online communication is vital to furthering Extension. Included in this is social media. Extension personnel around the country are using social media to interact with clientele in a way
that transcends the status quo. Social media efforts within blueberry Extension can be enhanced via use of Facebook, Twitter, Blogs, etc. This can be done in association with the AAB CoP (Attaway et al., 2012) and/or outside with other projects. Online education methods can be explored by increasing webinar offerings, online videos, and looking at the potential of massive open online courses (MOOCs). Another area to be pursued is smartphone applications. As in-field communication becomes easier and more accessible, smartphone applications should be a priority to give growers and producers immediate answers to their questions.

Clientele needs are changing and the prospective opportunities are exciting, yet challenging. Pursuing online methods can meet the clientele needs and strengthen Extension’s reach to all stakeholders and audiences, nationally and internationally.

**Future of the All About Blueberry Community of Practice**

The future of the AAB CoP will depend on having established goals, objectives, committed leadership, and, of course, funding. Stakeholder input from the blueberry industry should provide a natural course of action to follow, thus an advisory council should be initiated as soon as possible.

A Blueberry Industry Advisory Council (BIAC) should be established as a way to guide blueberry research and Extension efforts. It would be comprised of blueberry industry members and other individuals who have a vested interest in the success of the industry and support the role of Extension in that success. The BIAC shall have the responsibility of providing guidance and counsel to the blueberry Extension leadership from an industry practice perspective. Such
guidance and counsel shall address relevant curricula, programs, and activities as they relate to the expectations of blueberry growers on a national level and the future demands and opportunities associated with the industry at large.

The BIAC will be asked to review and comment on the goals and objectives established by the blueberry Extension leadership in its constant search for excellence and to provide advice on the most effective ways to meet them. At times, members will also be asked to provide additional input on program effectiveness. The BIAC shall also advise on the ways and means to achieve stronger and lasting connections between blueberry research and Extension, the blueberry industry, and other interested parties.

The BIAC may be called upon to help communicate the needs and aspirations of blueberry Extension to its communities of interest which includes the industry organizations (blueberry grower associations, etc.) and blueberry industries throughout the nation and the world.

Proposed Annual Budget and Timeline

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<tr>
<th>Need</th>
<th>Cost</th>
<th>Timeframe</th>
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<tbody>
<tr>
<td>Part-time Director</td>
<td>$20,000</td>
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<tr>
<td>Full-time Coordinator</td>
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<td>Annual Meeting</td>
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<tr>
<td>Marketing</td>
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<td>2015</td>
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<td>Travel for Director and Coordinator</td>
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<td>2015</td>
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<tr>
<td>Publications</td>
<td>$1,000</td>
<td>2015</td>
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A part-time director would be a faculty member who is interested in leading the group. The coordinator would be a person entirely dedicated to the group and makes sure the day-to-day needs are met. A face-to-face annual meeting would help sustain cohesion among the group members and keep the focus on meeting, reviewing, and establishing goals and objectives. Travel in the budget is for the director and coordinator to travel to the annual meeting as well as other appropriate venues to interact with stakeholders. Establishing awareness of blueberry Extension activities is crucial for recognition and future funding; therefore marketing costs are included to promote this activity. Publication costs may include refereed journal publications, paper advertising, copies, and other appropriate items. Other expenses may include website upkeep costs, editing, computer and equipment, and other costs both foreseen and unforeseen.

**Funding Options**

Funding opportunities for blueberries are few and are often competitive with other fruit crops. The United States Highbush Blueberry Council (USHBC) has funded projects in the past, but they were primarily directed at research that produced easily marketable results (i.e. health-related studies). Is it possible to approach USHBC and others to form strong ties that could lead to funding and marketing of blueberry Extension efforts similar to what has been done in grapes (Stafne et al., 2012) or other crops? Establishment of target opportunities and having projects in place prior to the request for applications (RFA) release would place blueberry research and Extension in a better position to compete for available funds. State specialty crop block grants (SCBG) should be a prime source for blueberry work, and more should be done to
coordinate multi-state projects under this funding source. Financial support is also required to connect all university personnel across the Land Grant system, such as faculty, specialists, and agents from 1862, 1890, and tribal universities, to justify time and resource commitments of these individuals to a specific commodity. However, it should be kept in mind that grant funding is not a sustainable model and thus other options need to be explored to ensure uninterrupted effort.

**Final Comments and Conclusions**

Blueberry Extension has great potential to be a leader in new Extension methods to reach clientele. Although many current growers are in an older demographic, that demographic will change and so will expectations of Extension, particularly as new producers enter regional and global blueberry markets. Online methods to educate and engage clients are becoming more important, but blueberry Extension has yet to fully integrate these technologies. Obstacles exist, but focusing on serving the clientele is of paramount importance. The new Extension specialist should target innovation as a way to keep ahead of client’s needs. Person-to-person interaction will always be an important part of Extension, but with resources being continually reduced, more efficient options need to be developed that strike a balance between old and new methods. The continuation of the eXtension blueberry community of practice is one way to do this.

**Literature Cited**

