We have some exciting results from the aerial and ground surveys this year. Four hundred eighty-five pairs of ospreys were observed nesting in 2009, closing the gap between historic records of approximately 500 nesting pairs before DDT, habitat loss and persecution decimated the population. Reproductive success was slightly depressed this year due to high precipitation and cool temperatures in June. However, 56 new nests were discovered this year, and the population has grown by 21% since the last census was done in 2006. The aerial survey that was conducted this year covered the marshes and bays along the Atlantic Coast from Manasquan Inlet to Cape May. A second survey was conducted in mid-June and covered the marshes along Delaware Bay, from Goshen to Salem.

In April and early May temperatures were seasonally normal, around 63°F, as was precipitation. In June, temperatures were below normal and precipitation was well above average: precipitation was recorded in Atlantic City every day for 30 days. It is likely that this high precipitation contributed to the slightly depressed reproductive rates observed statewide, as it occurred when osprey eggs were hatching and the young require close parental care. The wet weather may have also affected the male’s ability to successfully catch fish. In the case of limited food deliveries to the nest, the first-hatched nestling will be fed before younger and smaller ones, which can lead to smaller broods.

In late June and early July volunteers and staff surveyed all the major nesting colonies along the Atlantic Coast and Delaware Bay. We documented a total of 485 nests this year. Data from 345 known-outcome nests (266 on the Atlantic Coast and 79 on Delaware Bay) were recorded. Productivity averaged 1.59 young per active nest, which is well above the minimum for a stable population (0.80 young/active nest), and somewhat higher than the average of the last 12 years (1.40 young/active nest). A record-setting 547 young were produced from 345 known-outcome nests – another all time (post-DDT) high. Two-thirds of those known young, 348, were banded by volunteers and staff with USGS leg bands for future tracking.

This year 56 new nests were active, many on nest structures installed in the past year by volunteers and the Conserve Wildlife Foundation of NJ. Most ospreys (75%) use the single-post platforms that have been designed for them, while others to nest on available structures like cell towers (8%), channel markers (4%), duck blinds (3%), dead trees (2%), and other structures (7%). More emphasis is now being placed on replacing old, unsuitable and damaged platforms. Anyone who would like to help can donate to the Conserve Wildlife Foundation of NJ (www.ConserveWildlifeNJ.org), which helps fund this project. For more information visit Ben’s blog: (http://njospreyproject.blogspot.com) and www.NJFishandWildlife.com.
Project Staff: Kathy Clark, Ben Wurst, Michael Davenport, Larissa Smith and Dave Golden

Thanks to: Pete McLain, Jane and Peter Galetto, Giselle and John Smisko, Hans Toft, Don and Karen Bonica, Elmer and Bunny Clegg, Dr. Stephen Wurst, Ed Hazard, Fred Akers, Bill Stumpfig, Cristina Frank, Don Krider, Roberta Puican, Helen Swanson, Bernie Tice, Dr. Erica Miller-Tri-State Bird Rescue & Research, Damon Noe-The Nature Conservancy, Jeanne Heuser-Sandy Hook Unit of Gateway National Recreation Area, Bill Schultz-Raritan Riverkeeper, Patricia Korotky-Cattus Island Park-Ocean County Parks, Joe Reynolds-Monmouth County Parks, Citizens United to Protect the Maurice River and its Tributaries, Jim Faczak-Cheesequake State Park; Atlantic County Utilities Authority, Great Egg Harbor Watershed Assoc., Island Beach State Park, Kevin Holcomb, Vinny Turner, Jeff Sloane -Forsythe National Wildlife Refuge, Toms River Avian Care, Barnegat Animal Clinic, The Raptor Trust, Nancy Eriksen & Jackie Parker- Oyster Creek Generating Station, K. Strait of PSE&G-Salem, NJ-NY Baykeeper, NJ Audubon, Bill Clarke, and all other donors and volunteers who assist with and support the project.


Thanks to everyone who contributes to the Endangered and Nongame Species Program through the Check-Off for Wildlife on their NJ State Income Tax, and by purchasing Conserve Wildlife License Plates!

Funding was also provided by the U.S. Fish & Wildlife Service’s State Wildlife Grants program, with matching contributions from Osprey Project volunteers.
Table 1. Osprey nesting and productivity in 2009 in all major nesting areas. Productivity was determined by ground surveys in June-July. Productivity rates in 2006-2008 provided for comparison.

<table>
<thead>
<tr>
<th>Nesting Area</th>
<th># Nests</th>
<th>Known-Outcome Nests</th>
<th># Young</th>
<th># Banded</th>
<th>Production 2009</th>
<th>2008</th>
<th>2007</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delaware River &amp; North Jersey</td>
<td>6</td>
<td>0</td>
<td>unk</td>
<td>unk</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
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<tr>
<td>Raritan Bay area (w/Cheesequake)</td>
<td>34</td>
<td>26</td>
<td>40</td>
<td>16</td>
<td>1.54</td>
<td>1.67</td>
<td>1.38</td>
<td>1.35</td>
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<tr>
<td>Monmouth County</td>
<td>18</td>
<td>11</td>
<td>12</td>
<td>0</td>
<td>1.09</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
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<tr>
<td>Barnegat Bay</td>
<td>48</td>
<td>32</td>
<td>57</td>
<td>36</td>
<td>1.78</td>
<td>2.25</td>
<td>2.06</td>
<td>n/a</td>
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<tr>
<td>Sedge Islands WMA</td>
<td>30</td>
<td>28</td>
<td>44</td>
<td>28</td>
<td>1.57</td>
<td>1.75</td>
<td>1.15</td>
<td>1.57</td>
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<tr>
<td>Great Bay to Atlantic City</td>
<td>56</td>
<td>36</td>
<td>55</td>
<td>35</td>
<td>1.53</td>
<td>2.09</td>
<td>1.95</td>
<td>1.56</td>
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<tr>
<td>Great Egg Harbor/Ocean City</td>
<td>55</td>
<td>49</td>
<td>84</td>
<td>46</td>
<td>1.71</td>
<td>1.72</td>
<td>1.52</td>
<td>1.65</td>
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<tr>
<td>Sea Isle City</td>
<td>22</td>
<td>17</td>
<td>18</td>
<td>15</td>
<td>1.06</td>
<td>1.55</td>
<td>1.75</td>
<td>2.10</td>
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<tr>
<td>Avalon/Stone Harbor Bays</td>
<td>77</td>
<td>49</td>
<td>71</td>
<td>58</td>
<td>1.45</td>
<td>1.76</td>
<td>1.93</td>
<td>1.64</td>
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<tr>
<td>Wildwood Bays &amp; Cape May</td>
<td>40</td>
<td>18</td>
<td>25</td>
<td>16</td>
<td>1.39</td>
<td>1.88</td>
<td>1.89</td>
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<td>Maurice River &amp; Estuary Marshes</td>
<td>76</td>
<td>63</td>
<td>112</td>
<td>89</td>
<td>1.78</td>
<td>2.11</td>
<td>2.07</td>
<td>1.84</td>
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<tr>
<td>Salem Co./ Artificial Island / Delaware</td>
<td>23</td>
<td>16</td>
<td>29</td>
<td>9</td>
<td>1.81</td>
<td>1.80</td>
<td>1.70</td>
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<tr>
<td>TOTAL of Study Areas</td>
<td>485</td>
<td>345</td>
<td>547</td>
<td>348</td>
<td>1.59</td>
<td>1.88</td>
<td>1.78</td>
<td>1.66</td>
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<tr>
<td>Atlantic Coast only</td>
<td>386</td>
<td>266</td>
<td>406</td>
<td>250</td>
<td>1.53</td>
<td>1.82</td>
<td>1.72</td>
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<tr>
<td>Delaware Bay only</td>
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<td>79</td>
<td>141</td>
<td>98</td>
<td>1.78</td>
<td>2.05</td>
<td>2.00</td>
<td>2.06</td>
</tr>
<tr>
<td>Total Statewide</td>
<td>485</td>
<td>345</td>
<td>547</td>
<td>348</td>
<td>--</td>
<td>--</td>
<td>400</td>
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Figure 1. Osprey nesting population (bar) and productivity (heavy line) 1984-2009 in New Jersey.