



The 2010 Osprey Project in New Jersey

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The surveys are complete, and New Jersey ospreys had an excellent year. We recorded an all-time high of 2.0 young per nest, which is rarely seen in these coastal raptors. In addition, the nesting population is quite near the level that existed in pre-DDT 1940's, approximately 500 pairs. We won't know the population with certainty until we conduct the next state-wide census, probably in 2012. However, Endangered and Nongame Species Program (ENSP) and Conserve Wildlife Foundation (CWF) staff, as well as many dedicated volunteers, conducted nest checks by ground and covered 71% of the known nests this year. The ground work was essential to make accurate assessments of the osprey population.

Mild weather conditions are largely responsible for the excellent nest success ospreys had this year. Temperatures in the nesting season (April through July) were well above normal, with April and June setting new records for heat. Precipitation was below average, with the summer ranking the sixth driest on record. Nest success was higher in nearly all colonies (see Table 1 for detailed results). Not only are the mild temperatures good for ospreys, but calm conditions tend to increase water clarity and visibility of fish. Good fishing generally means larger broods, and this year we recorded three nests that produced four young each. This is quite a rare occurrence. However, isolated storms in some areas like Absecon and Oceanville resulted in some nest losses, but those storms were infrequent during June when osprey nestlings were the most vulnerable.

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 355 nests this year, more than previous ground-only surveys. Data from 308 known-outcome nests (246 on the Atlantic Coast and 62 on Delaware Bay) were recorded. Productivity averaged 1.97 young per active nest, which is well above the minimum for a stable population (0.80 young/active nest). A record-setting 607 young were produced from 308 known-outcome nests. Two-thirds of those known young, 392, were banded by volunteers and staff with USGS leg bands for future tracking. In addition, one fledgling was found floating on the water in Wildwood. It was rescued and transported to Toms River Avian Care for rehabilitation. It had no major injuries and was banded and released in late July.

Most ospreys (75%) continued to nest on the single-post platforms that have been specifically designed for them, while others nested on available structures like cell towers (8%), channel markers (4%), duck blinds (3%), dead trees (2%), and other structures (7%). While we encourage the placement of new platforms, we do ask that platform locations be submitted to us for annual monitoring. Anyone needing technical assistance with choosing a suitable location to place a platform should contact us. We are focusing our efforts on replacing damaged and old platforms to ensure that ospreys have the best chance at successfully raising young. It is our goal to help the population return to historic numbers of over 500 pairs. Anyone who would like to help may 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/ensphome.htm.

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Visit http://www.njfishandwildlife.com/ensp/osprey_nest_plcmnt.htm for detailed plans on how to construct a nesting platform for ospreys.

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!

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One nestling disobeys its parent's calls to lay low in its nest. © Eric Sambol

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Table 1. Osprey nesting and productivity in 2010 in all major nesting areas. Productivity was determined by ground surveys in June-July. Productivity rates in 2007-2009 provided for comparison.

Nesting Area	# Nests	Known-Outcome Nests	# Young	# Banded	Production 2010	Previous Years		
						2009	2008	2007
Delaware River & North Jersey	3	1	1	n/a		n/a	n/a	n/a
Raritan Bay area (w/Cheesequake)	34	26	43	7	1.65	1.54	1.67	1.38
Monmouth County	10	7	13	9	1.86	1.25	n/a	n/a
Barnegat Bay	44	34	65	24	1.91	1.78	2.25	2.06
Sedge Islands WMA	28	24	31	27	1.29	1.57	1.75	1.15
Great Bay to Atlantic City	44	39	80	37	2.05	1.53	2.09	1.95
Great Egg Harbor/Ocean City	50	47	112	88	2.38	1.71	1.72	1.52
Sea Isle City	15	15	31	17	2.07	1.06	1.55	1.75
Avalon/Stone Harbor Bays	46	43	81	76	1.88	1.45	1.76	1.93
Wildwood Bays & Cape May	12	10	15	14	1.50	1.39	1.88	1.89
Maurice River & Estuary Marshes	56	50	105	79	2.10	1.78	2.11	2.07
Salem Co./ Artificial Island / Delaware	13	12	30	14	2.50	1.81	1.80	1.70
TOTAL of Study Areas	355	308	607	392	1.97	1.58	1.88	1.78
Atlantic Coast only	286	246	472	299	1.92	1.53	1.82	1.72
Delaware Bay only	69	62	135	93	2.18	1.78	2.05	2.00
Total Statewide	355	308	607	392	--	486	--	--

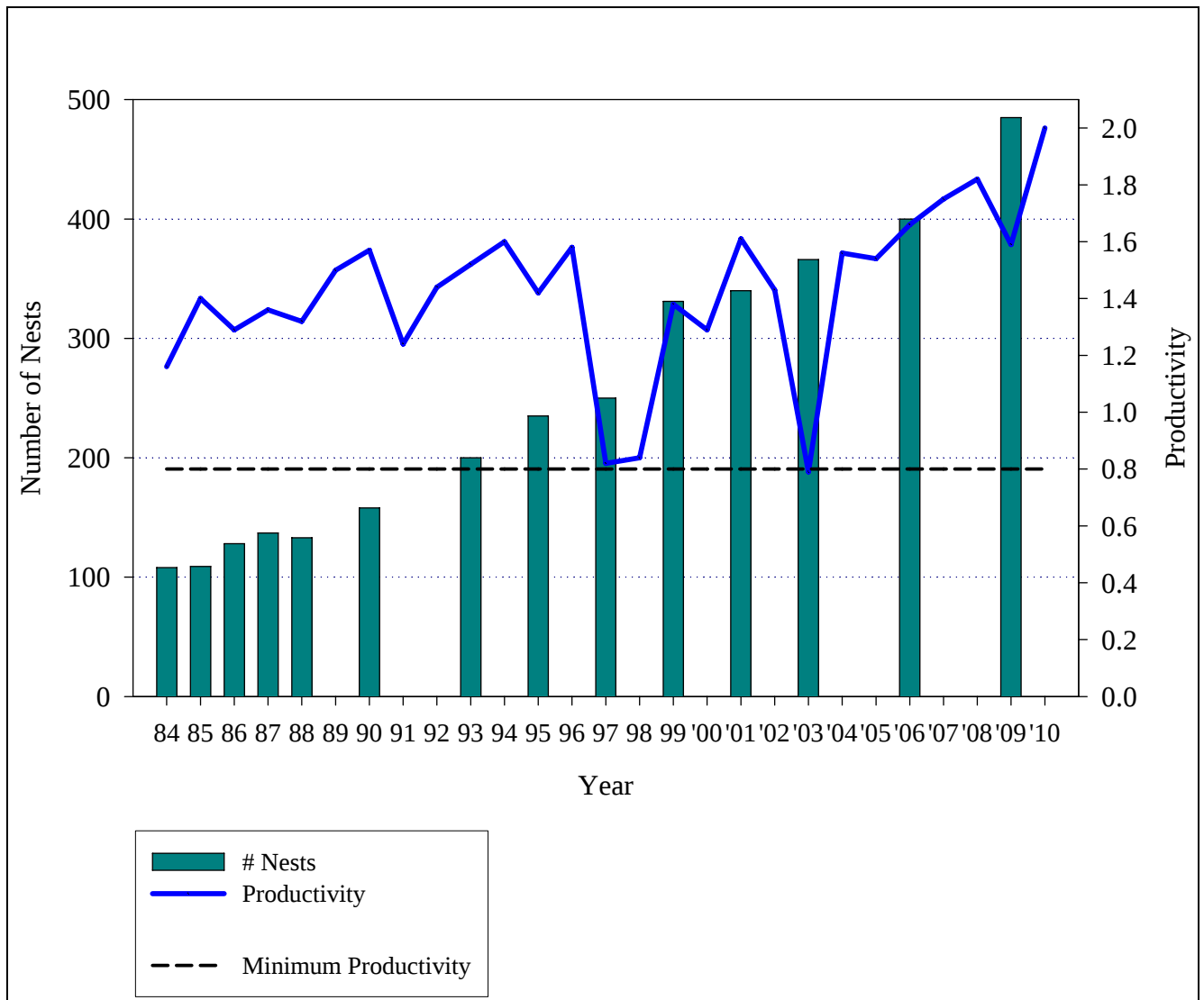


Figure 1. Osprey nesting population (bar) and productivity (heavy line) 1984-2010 in New Jersey.