



## The 2009 Osprey Project in New Jersey

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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](http://www.ConserveWildlifeNJ.org)), which helps fund this project. For more information visit Ben's blog: (<http://njospreyproject.blogspot.com>) and [www.NJFishandWildlife.com](http://www.NJFishandWildlife.com).

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Visit [http://www.njfishandwildlife.com/ensp/osprey\\_nest\\_plcmnt.htm](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!**

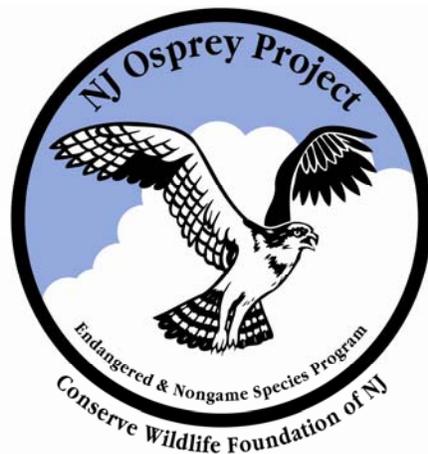
Funding was also provided by the U.S. Fish & Wildlife Service's State Wildlife Grants program, with matching contributions from Osprey Project volunteers.

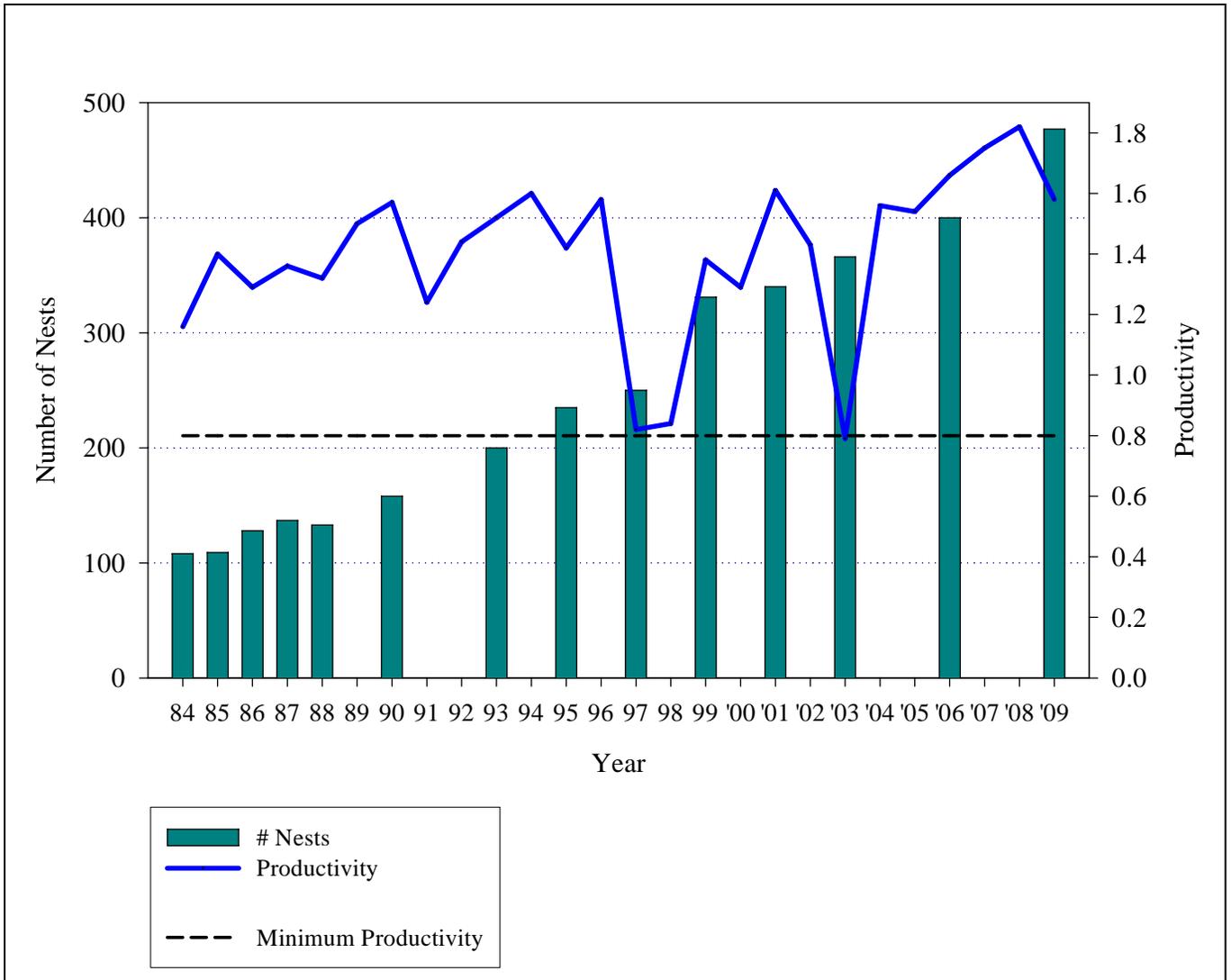


Ben Wurst checks a nest at Great Bay Boulevard Wildlife Management Area in Little Egg Harbor, NJ. Photo by Bill Steiner.

**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.

Nesting Area	# Nests	Known-Outcome Nests	# Young	# Banded	Production 2009	Previous Years		
						2008	2007	2006
Delaware River & North Jersey	6	0	unk	unk	n/a	n/a	n/a	1.00
Raritan Bay area (w/Cheesequake)	34	26	40	16	1.54	1.67	1.38	1.35
Monmouth County	18	11	12	0	1.09	n/a	n/a	n/a
Barnegat Bay	48	32	57	36	1.78	2.25	2.06	n/a
Sedge Islands WMA	30	28	44	28	1.57	1.75	1.15	1.57
Great Bay to Atlantic City	56	36	55	35	1.53	2.09	1.95	1.56
Great Egg Harbor/Ocean City	55	49	84	46	1.71	1.72	1.52	1.65
Sea Isle City	22	17	18	15	1.06	1.55	1.75	2.10
Avalon/Stone Harbor Bays	77	49	71	58	1.45	1.76	1.93	1.64
Wildwood Bays & Cape May	40	18	25	16	1.39	1.88	1.89	1.89
Maurice River & Estuary Marshes	76	63	112	89	1.78	2.11	2.07	1.84
Salem Co./ Artificial Island / Delaware	23	16	29	9	1.81	1.80	1.70	2.00
<b>TOTAL of Study Areas</b>	<b>485</b>	<b>345</b>	<b>547</b>	<b>348</b>	<b>1.59</b>	1.88	1.78	1.66
Atlantic Coast only	386	266	406	250	1.53	1.82	1.72	1.74
Delaware Bay only	99	79	141	98	1.78	2.05	2.00	2.06
<b>Total Statewide</b>	<b>485</b>	<b>345</b>	<b>547</b>	<b>348</b>		--	--	<b>400</b>





**Figure 1.** Osprey nesting population (bar) and productivity (heavy line) 1984-2009 in New Jersey.