



## The 2008 Osprey Project in New Jersey

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In 2008, right in the middle of the nesting season New Jersey saw one of the strongest nor'easter coastal storms in a long time. The storm hit on May 12<sup>th</sup> and had wind gusts to almost 60mph and major coastal flooding. Surprisingly that storm did not cause lasting damage to the osprey nesting season. The results of this season's ground surveys were amazing.

In late June and early July volunteers and staff surveyed all major nesting colonies along the Atlantic Coast and Delaware Bay. Surveyors visited or observed a total of 286 nests this year, a good portion of the 400+ pair population. Data from 240 known-outcome nests (185 on the Atlantic Coast and 55 on Delaware Bay) was recorded. Productivity averaged 1.87 young per active nest, roughly twice the minimum reproductive rate required to maintain a stable population. That translates to 448 young produced from 240 known-outcome nests – an all time (post-DDT) high. Our staff and volunteers banded an amazing 357 nestlings, more than any other year. These bird bands will pay off in the future as ospreys are encountered in New Jersey and at migration and wintering sites across the hemisphere.

In late April and early May when ospreys were laying and starting to incubate, weather was mild with average temperatures around 55-60°F. In mid-May we experienced that very strong nor'easter that brought heavy rains for two days and high winds. During hatching in late May and early June, temperatures were also mild. May had more precipitation than normal, while June was normal. During ground surveys, banders reported healthy young that appeared well fed. This year more nests resulted in failure (15%) than last year, but this is within the normal range for annual nest failures. Overall, failures were offset by high productivity rates in nests that succeeded.

Thirty-eight new nest structures were erected or discovered in 2008: more than half (21) were occupied, and fourteen produced 25 young. In typical fashion for NJ (and the East), most ospreys nested on man-made single-post structures (77%) and channel markers (5%), while only a few nested on antiquated 4-post nest platforms (3%). The occurrence of ospreys nesting on cell towers (1%) fluctuates from year to year, but that's a structure favored by inland-nesting ospreys. Other nests can be found on transmission towers (3%), duck blinds (3%), and in dead trees (2%).

In some areas of the state where nest platforms are limited, ospreys try to build nests on many different structures including lighting poles on sports fields, weather stations, telephone poles, cranes, houses, and almost anything tall and stable. We are working closely with the Conserve Wildlife Foundation of NJ (CWF) to use private donations to fund nest platform and habitat restoration projects along the Atlantic Coast. In the last three years, over forty nest platforms have been built and installed with private donations to CWF. We have also been gaining more publicity for the project by working with local newspapers; with their help, citizens learn the scope of the project how their contributions help.

The statewide census is scheduled for 2009: we will attempt to count all active nests during aerial and ground surveys. The surveys will cover all known nests (we maintain a detailed database and mapping), but sightings of new nests are welcome to ensure a complete count. The last census, in 2006, just reached 400 pairs.

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**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 buying Conserve Wildlife License Plates!**



An adult osprey showing its aggression by dragging its feet in the water while its young were being banding. (Photo courtesy of Damon Noe/TNC)

Table 1. Osprey nesting and productivity in 2008 in all major nesting areas. Productivity determined by ground surveys in June-July. Productivity rates in 2005-2007 provided for comparison.

Nesting Area	# Nests Surveyed	Known-Outcome Nests	# Young	# Banded	Production 2008	2007	Previous Yrs.	
							2006	2005
Delaware River & North Jersey	n/a	n/a	n/a	n/a	n/a	n/a	1.00	n/a
Raritan Bay area (w/Cheesequake)	20	15	25	9	1.67	1.38	1.35	1.91
Barneget Bay	17	12	27	16	2.25	2.06	n/a	n/a
Sedge Islands WMA	24	20	35	22	1.75	1.15	1.57	1.33
Great Bay to Atlantic City	30	21	42	40	2.00	1.95	1.56	1.91
Great Egg Harbor/Ocean City	42	36	62	53	1.72	1.52	1.65	1.44
Sea Isle City	13	11	17	10	1.55	1.75	2.10	1.22
Avalon/Stone Harbor Bays	47	38	67	56	1.76	1.93	1.64	1.28
Wildwood Bays & Cape May	34	32	60	51	1.88	1.89	1.89	1.89
Maurice River & Estuary Marshes	48	45	95	93	2.11	2.07	1.84	1.37
Salem Co./ Artificial Island / Delaware	11	10	18	7	1.80	1.70	2.00	n/a
Other-Atlantic (no area designation)	n/a	n/a	n/a	n/a	n/a	n/a	1.29	n/a
<b>TOTAL of Study Areas</b>	<b>286</b>	<b>240</b>	<b>448</b>	<b>357</b>	<b>1.87</b>	1.78	1.66	1.54
Atlantic Coast only	227	185	335	257	1.81	1.72	1.74	1.53
Delaware Bay only	59	55	113	100	2.05	2.00	2.06	1.37
<b>Total Statewide (survey)</b>							400	



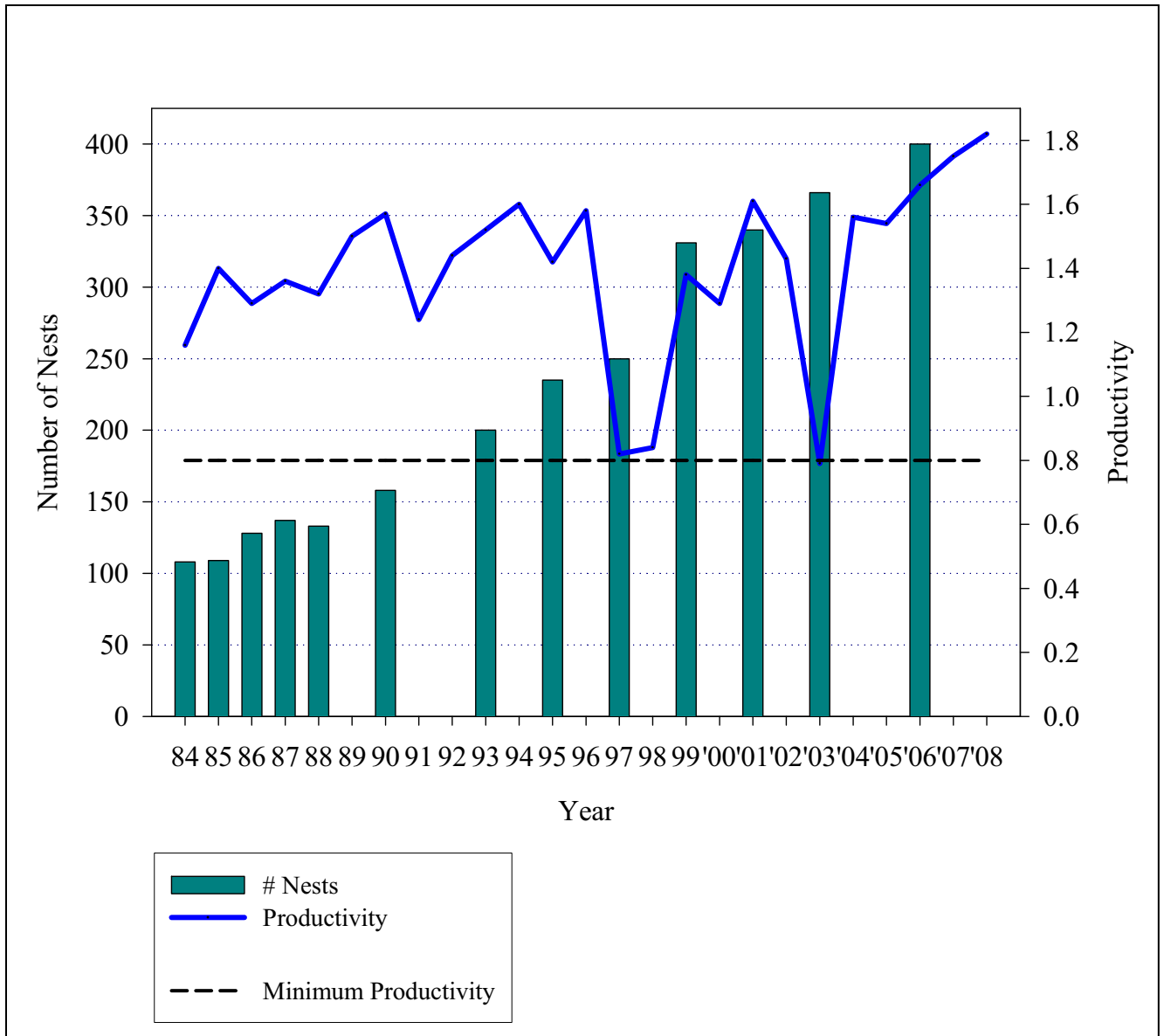


Figure 1. Osprey nesting population (bar) and productivity (heavy line) 1984-2008 in New Jersey. Productivity in 2008 was at its highest recorded level.