

The 2007 Osprey Project in New Jersey

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Since we have now reached just over 400 nesting pairs of ospreys in New Jersey, we are now set on reaching our next milestone: 500 nests. Amazingly enough, the population of ospreys in New Jersey grew by 61% in the last ten years; from 250 nests in 1997 to just over 400 in 2006.

In late June and early July volunteers and staff surveyed all major nesting colonies along the Atlantic Coast and the Delaware Bay. Surveyors visited and/or observed a total of 288 nests this year, more than any previous year. Data from 238 known-outcome nests (185 on the Atlantic Coast and 53 on Delaware Bay) was collected and submitted. Of 34 new nest structures available in 2007, fully half (17) had nesting pairs, with eight producing 18 young...a great outcome for new nests. As we have come to expect, most ospreys nested on man-made 1-post structures (57%) and channel markers (10%), while only a few nested on antiquated 4-post nest platforms (3%). The occurrence of ospreys nesting on cell towers (2%) is continuing to rise. Other nests can be found on transmission towers (2%), old duck blinds (2%), and in dead trees (6%). One pair even nested on an old mosquito ditcher, named the "Bug Crusher," in Longport. Our next aerial statewide survey of the population is scheduled for 2009.

In late April and early May when ospreys were laying and starting to incubate, weather was mild with average temperatures around 60°F. During hatching in late May and early June, temperatures were also mild with an average temperature of 70°F. May had less precipitation than normal, while June had almost double the normal amount of precipitation. As a result of these generally good weather conditions, a remarkably small number of nests failed (8%), compared to previous years' surveys when the failure rate averaged 19% (2003-2006).

Productivity averaged 1.78 young per active nest statewide; more than twice the minimum reproductive rate thought to be required to maintain a stable population. In all, 424 young were produced from 238 known-outcome nests – another post DDT milestone – of which 270 (64%) were banded, more than any other year.

Many thanks to our skilled and dedicated nest watchers and bird banders! Congratulations and thank you for being part of these new records in New Jersey's osprey population!

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We also recognize Linn Pierson, who passed away in spring 2007. Her love of raptors and the natural world will be remembered.

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



Banded breeding adult nesting on channel marker in Cape May Harbor in 2007 (Photo by Ben W.)

Table 1. Osprey nesting and productivity in 2007 in all NJ nesting areas. Productivity determined by ground surveys in June-July. Productivity rates in 2004-2006 provided for comparison.

Previous Yrs.

		Known-						
	# Nests	Outcome			Production			
Nesting Area	Surveyed	Nests	# Young	# Banded	2007	2006	2005	2004
Delaware River & North								
Jersey	n/a	n/a	n/a	n/a	n/a	1.00	n/a	n/a
Raritan Bay area								
(w/cheesquk)	22	13	18	5	1.38	1.35	1.91	1.15
Barnegat Bay	19	16	33	9	2.06	0.00	n/a	n/a
Sedge Islands WMA	28	27	31	11	1.15	1.57	1.33	1.70
Great Bay to Atlantic								
City	31	21	41	21	1.95	1.56	1.91	1.91
Great Egg Harbor/Ocean								
City	32	25	38	23	1.52	1.65	1.44	1.06
Sea Isle City	12	12	21	10	1.75	2.10	1.22	1.20
Avalon/Stone Harbor								
Bays	57	43	83	56	1.93	1.64	1.28	1.81
Wildwood Bays & Cape								
May	30	28	53	36	1.89	1.89	1.89	1.67
Maurice River & Estuary								
Marshes	47	43	89	89	2.07	1.84	1.37	2.00
Salem Co./ Artificial								
Island / Delaware	10	10	17	10	1.70	2.00		
Other-Atlantic (no area								
designation)	n/a	n/a	n/a	n/a	n/a	1.29		
TOTAL of Study Areas	288	238	424	270	1.78	1.66	1.54	1.56
Atlantic Coast only	231	185	318	171	1.72	1.74	1.53	1.57
Delaware Bay only	57	53	106	99	2.00	2.06	1.37	2.00
Total Statewide (survey)						400		

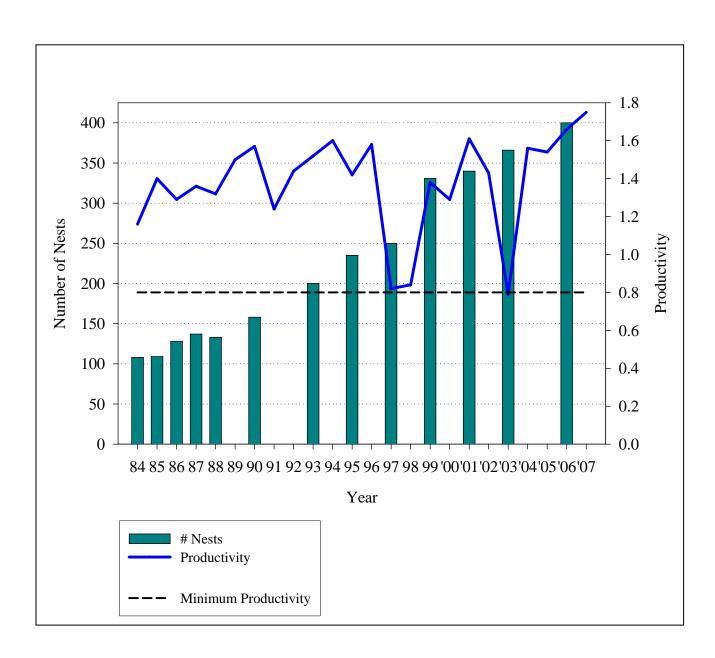


Figure 1. Osprey nesting population (bar) and productivity (heavy line) from 1984 through 2007 in New Jersey. Productivity in 2007 was at it highest recorded level.