



## The 2007 Osprey Project in New Jersey

Prepared by Kathleen Clark and Benjamin Wurst  
Endangered and Nongame Species Program  
NJ Division of Fish and Wildlife



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!

Project Staff: Kathy Clark, Ben Wurst, Michael Davenport, Todd Pover, Larissa Smith, Kris Schantz

*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, Tom Virzi, John Healy, Jon Dean, Pat Sutton, Don Krider, Jim Faczak, Stephanie Belvidere, Roberta Puican, Ginny Diehm, Helen Swanson, George Coulter, Bernie Tice, Fred Akers, Dr. Erica Miller-Tri-State Bird Rescue & Research, Damon Noe-The Nature Conservancy, Jeanne Heuser-Sandy Hook Unit of Gateway National Recreation Area, Vinny Turner and Kevin Holcomb-USFWS-Forsythe NWR, Patricia Korotky-Cattis Island Park-Ocean County Parks, Bill Schultz-Raritan Riverkeeper, Citizens United to Protect the Maurice River and its Tributaries, Bob and Linda Carlough-The Skimmer; Jim Faczak-Cheesequake State Park; Atlantic County Utilities Authority, Island Beach State Park, Forsythe National Wildlife Refuge, Toms River Avian Care, Barnegat Animal Clinic, The Raptor Trust, K. Strait of PSE&G-Salem, NJ-NY Baykeeper, NJ Audubon, Bob Jubie-Conectiv, The Wetlands Institute, Point Pleasant Borough and all other volunteers who assist with the project.

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

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.

Nesting Area	# Nests Surveyed	Known- Outcome Nests	# Young	# Banded	Production 2007	Previous Yrs.		
						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/cheesquik)	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 Other-Atlantic (no area designation)	10	10	17	10	1.70	2.00		
	n/a	n/a	n/a	n/a	n/a	1.29		
<b>TOTAL of Study Areas</b>	<b>288</b>	<b>238</b>	<b>424</b>	<b>270</b>	<b>1.78</b>	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
<b>Total Statewide (survey)</b>						400		

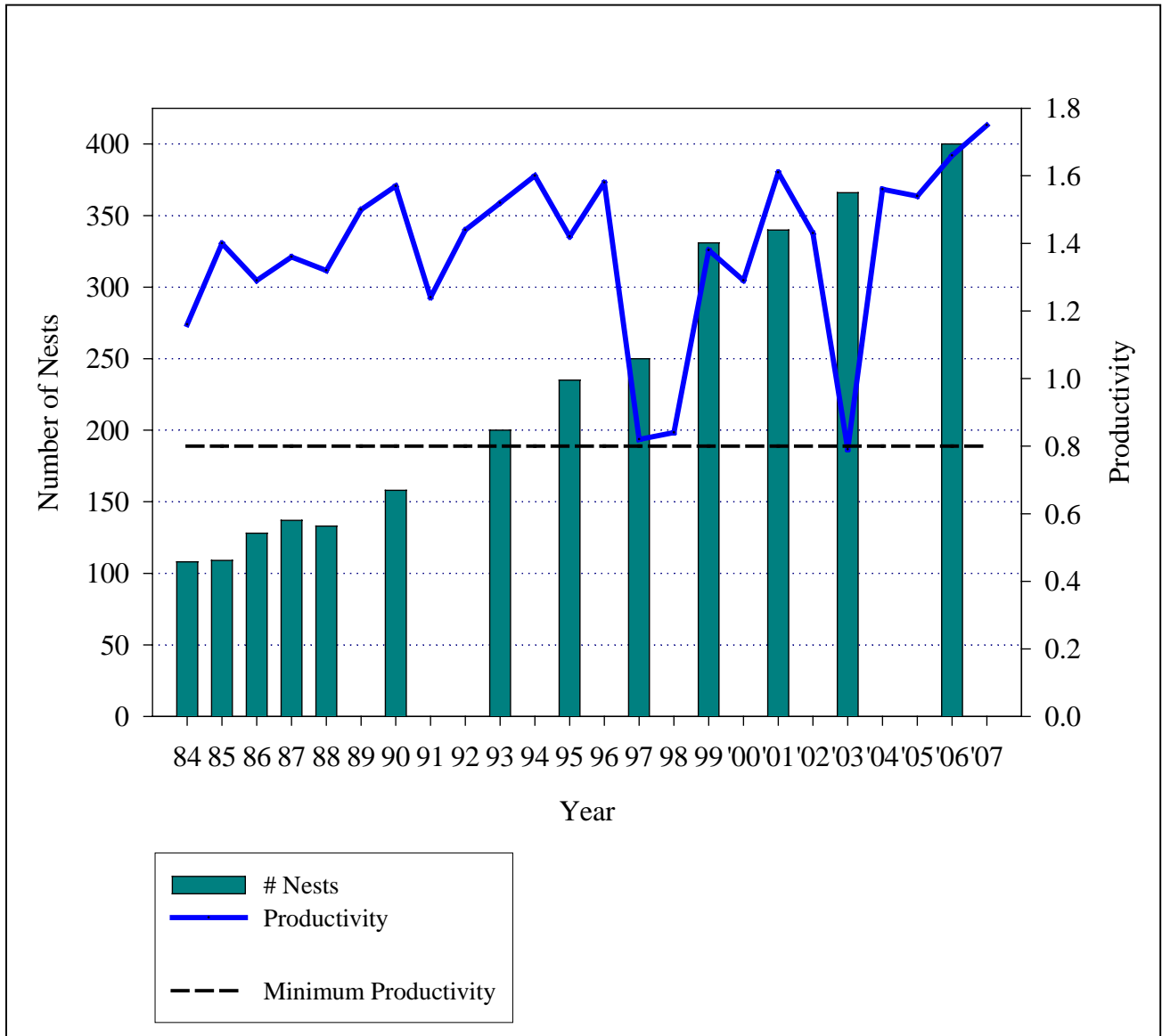


Figure 1. Osprey nesting population (bar) and productivity (heavy line) from 1984 through 2007 in New Jersey. Productivity in 2007 was at it highest recorded level.