



The 2006 Osprey Project in New Jersey

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



Greetings everyone! In 2006 we reached a new and exciting milestone for ospreys: 400 nesting pairs in New Jersey! This is a long way from the 100-or so pairs in 1984, and double the 200 pair mark reached in 1993. While the rate of population growth has slowed in the last seven years, nest success remains above minimum, suggesting the population should continue to grow.

The Endangered and Nongame Species Program staff and our cooperators surveyed nesting areas in May and June by aircraft, ground and boat to tally the population count. Most nests (309, 77%) continue to be located on the Atlantic coast, but nesting is increasing along Delaware Bay and north up the Delaware River. The few “inland” nests are associated with lakes and reservoirs. Nests on the Atlantic coast and Delaware Bay marshes were mostly on structures made for ospreys, while in the upper Delaware Bay and Delaware River nests were found on cell-phone or power transmission towers, providing for higher nesting than other structures.

During nest checks in June and July, biologists and volunteers surveyed 235 nests, 59% of the total population, and found that osprey production was excellent. On average, 1.66 young were produced per active nest, about twice the 0.80 young per active nest required to maintain a stable population. Atlantic coast colonies averaged 1.61 young per nest, while Delaware Bay nests produced slightly better, averaging 1.88 young per nest. Banders tagged a new high of 265 young with federal identification bands for future tracking. This is a level of work that would be impossible without volunteer bird-banders, and we are grateful for their continued enthusiasm and cooperation.

These great results suggest that conditions were really favorable for ospreys in 2006. Spring weather, during incubation, was not particularly harsh or wet. The high nest success also suggests that food – fish abundance – was not a limiting factor for most areas.

Staff and volunteers did great work in getting new nest platforms installed along the coast. Successful osprey nesting requires maintenance of nests and predator guards. We’ve also had help replacing old 4-post style platforms with new 1-post platforms, which are more easily protected from predators and have great long-term success.

We remain grateful to all the osprey-faithful, those who contribute days of hard work and some, the funding to carry it out, to make the osprey project an ongoing success. We would not have this rebounding osprey population were it not for the dedication and support of all our volunteers and contributors: those who build nests, protect nests, observe and check nests, band chicks, donate materials, rehabilitate birds, and support habitat conservation. Thank you all!

Project Staff: Kathy Clark, Ben Wurst, Todd Pover, Larissa Smith, Kris Schantz, Melissa Craddock

Thanks to: Pete McLain, Jane and Peter Galetto, Giselle and John Smisko, Hans Toft, Tom Virzi, Jeanne MacArthur-Heuser, Don and Karen Bonica, Dr. Stephen Wurst, Ed Hazard, John Healy, Jon Dean, Pat Sutton, Don Krider, Jim Faczak, Stephanie Belvidere, Roberta Puican, Ginny Diehm, Helen Swanson, George Coulter, Bernie Tice, Elmer and Bunny Clegg, Fred Akers, Linn Pierson, Dr. Erica Miller-Tri-State Bird Rescue & Research, Damon Noe-The Nature Conservancy, 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 Jubic-Conectiv, The Wetlands Institute, City and Township of Neptune, Point Pleasant Borough.

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!



Table 1. Osprey nesting and productivity in 2006 in all NJ nesting areas. Population determined by aerial and ground surveys in May-June; productivity determined by ground surveys in June-July. Productivity rates in 2003-2005 provided for comparison.

Nesting Area	#Nests Surveyed	Known-Outcome		#Young	#Banded	Prod. Rate 2006	2005	2004	2003
		Nests	%Known						
Raritan Bay area	32	17	53%	23	3	1.35	1.91	1.15	1.07
Sedge Islands WMA	28	28	100%	44	38	1.57	1.33	1.70	0.83
Barnegat Bay (except Sedge Is)	31	5	16%	0	0	0.00	n/a	n/a	n/a
Great Bay, Atlantic City, LEH	41	16	39%	25	11	1.56	1.91	1.91	0.78
Great Egg Harbor/Ocean City	42	23	55%	38	29	1.65	1.44	1.06	0.87
Sea Isle City	12	10	83%	21	3	2.10	1.22	1.20	1.13
Avalon/Stone Harbor Bays	67	44	66%	72	50	1.64	1.28	1.81	0.48
Wildwood Bays & Cape May	36	27	75%	51	35	1.89	1.89	1.67	0.46
Maurice River & Del Bay	55	45	82%	83	96	1.84	1.37	2.00	1.09
Salem & Cohansey River	24	12	50%	24	0	2.00	n/a	n/a	1.00
Delaware River	12	1	8%	1	0	1.00	n/a	n/a	n/a
Other-Atlantic (no area designation)	20	7	35%	9	0	1.29	n/a	n/a	n/a
Total of all study areas	400	235	59%	391	265	1.66	1.54	1.56	0.86
Atlantic Coast only	289	170	59%	274	169	1.61	1.53	1.57	0.73
Delaware Bay only	79	57	72%	107	96	1.88	1.37	2.00	1.09

Statewide population estimate

400

366

Figure 1. Osprey nesting population (bar) and productivity (heavy line) from 1984 through 2006 in New Jersey. The population level reached a new high of 400 nesting pairs. Productivity in 2006 remained at a high level after the recent low point in 2003.

