

The 2002 Osprey Project in New Jersey

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In 2002 biologists and volunteers checked 174 nests during the season, and banded 201 young in nests. The statewide census is done every two years, and we counted 340 nests in 2001. We are looking forward to the 2003 survey and an expected higher population total.

Osprey productivity statewide in 2002 was average at 1.4 young per nest. As has become the pattern, Delaware Bay coastal areas had greater productivity (2.29) than the Atlantic coast (1.04). Nest observers and banders collected information on 174 nests – half the population – enabling us to estimate these figures with confidence.

Unfortunately, we don't have a good explanation for the reduced productivity in Atlantic coast ospreys. Most nest failures seemed to occur during the incubation or early hatching stages, as opposed to the widespread nestling losses we observed in 1997 and 1998. Weather patterns, especially heavy rainfall in early spring, could have reduced water visibility, making hunting difficult for the adults. This is a problem, however, that probably would have affected both Delaware Bay and Atlantic coast nesting. We still suspect that prey availability along the Atlantic coast may be reduced, and thus limiting nest success.

Some New Jersey ospreys continue to transmit data from their satellite transmitters, placed by biologists from the University of Minnesota's Raptor Center and sponsored by local groups. No new transmitters were employed in 2002, but you can still follow the action at this website: www.raptor.cvm.umn.edu (go to "Migration Tracking" then "Ospreys").

Also in 2002, staff and volunteers replaced about 10 nest structures along the coast. We thank everyone who helped with this essential work.

We are *most grateful* to our project volunteers for their good work recording nest results, and installing and repairing nest structures. You're helping to sustain ospreys in NJ, and with your help we'll head-off any future problems.

2003 is a population survey year, so please report new nests (or even those you believe are new) to the Tuckahoe office, with a map if possible, and we'll make sure to include them in the survey!

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Table 1. Osprey nesting and productivity in New Jersey in 2002, in the major nesting areas. Productivity figures from 1997-2001 are included for comparison.

Nesting Area	No. Nests Surveyed	Known-outcome nests	# Young	#Banded	Production 2002	Production				
						2001	2000	1999	1998	1997
Raritan Bay area	9	9	5	5	0.56	1.38	1.67	1.00	0.78	1.57
Sedge Islands WMA	11	11	22	22	2.00	1.77	1.54	1.57	1.27	0.30
Great Bay to Atlantic City	18	18	26	20	1.44	1.37	2.00	1.07	0.23	0.15
Great Egg Harbor/Ocean City	25	24	21	17	0.88	1.09	0.67	n/a	n/a	n/a
Sea Isle City	18	18	25	25	1.39	1.82	n/a	n/a	n/a	n/a
Avalon/Stone Harbor Bays	51	50	30	22	0.60	1.88	0.88	1.35	0.36	0.96
Wildwood Bays	11	10	17	16	1.70	1.23	1.06	0.93	0.53	0.71
Maurice River & Estuary marshes	34	33	76	72	2.30	1.77	1.85	2.36	2.05	2.07
Salem / Artificial Island / Delaware	1	1	2	2	2.00	1.79	1.40	2.00	0.72	1.10
TOTAL of Study Areas	178	174	224	201	1.43	1.61	1.29	1.46	0.88	0.82
Atlantic Coast only	143	140	146	127	1.04	1.57	1.10 ^a	1.26	0.66	0.59
Delaware Bay only	35	34	78	74	2.29	1.78	1.74	2.27	1.57	1.59
						^a Total and AC figures exclude Brigantine in 2000				
Total Statewide Nest Count						340		331		250

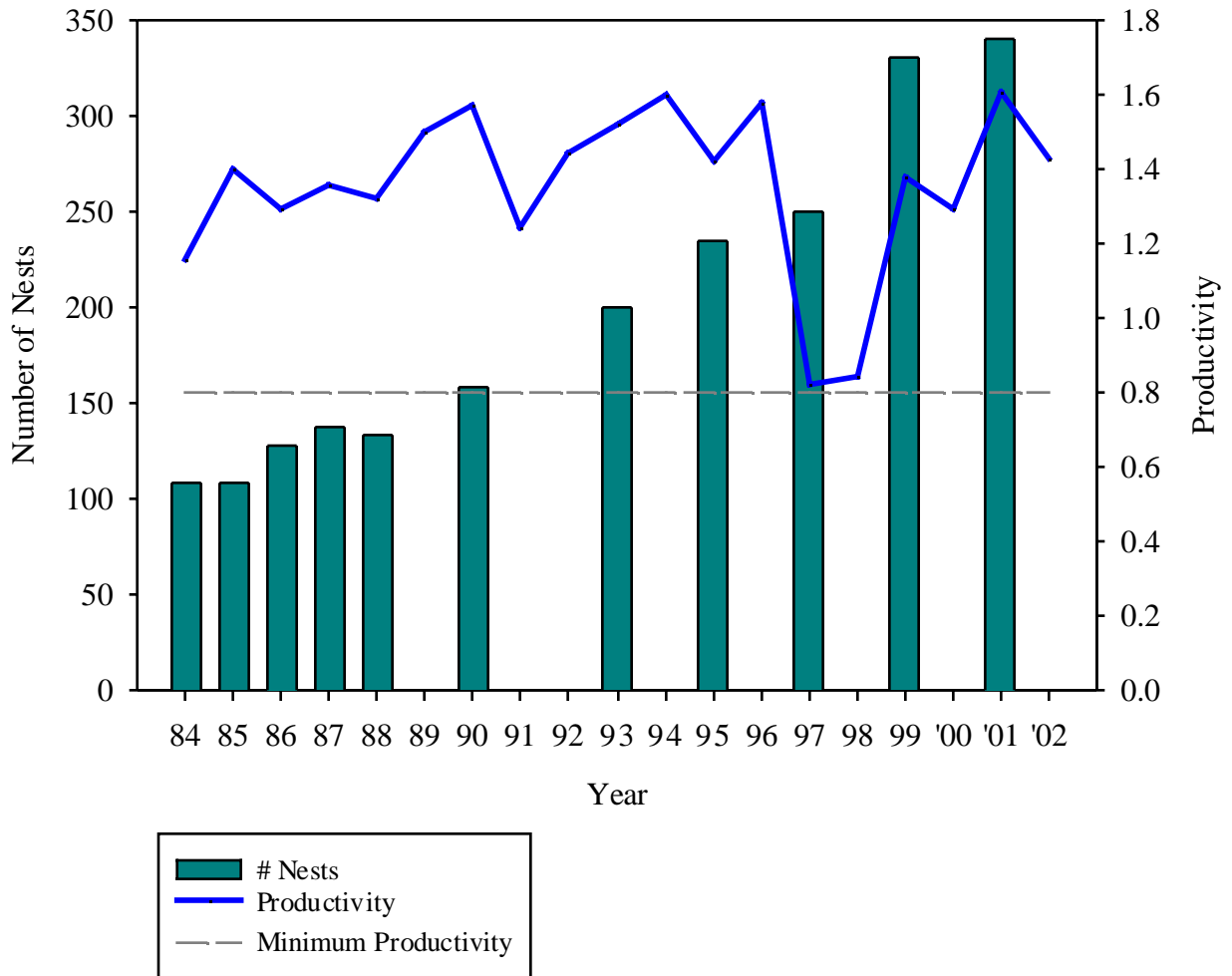


Figure 1. Osprey nesting population (bar) and productivity (heavy line) from 1984 through 2001 in New Jersey. Statewide productivity was above the minimum necessary in 2002, but was close to the minimum in Atlantic coast nests.