

New Jersey Department of Environmental Protection

Division of Fish and Wildlife

Dave Chanda, Director
Dave Jenkins, Chief
Endangered and Nongame Species Program

New Jersey Bald Eagle Project, 2015

Prepared by: Larissa Smith and Kathleen E. Clark

Project Staff:

Kathleen Clark, Larissa Smith, Robert Somes,
Ben Wurst, Brian Henderson, John Heilferty, William Pitts



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Cover photo by Brian Kushner. Bald eagle perched on a Forsythe National Wildlife
Refuge osprey nest in December 2014. D/29 was banded at Fort Dix in 2011.

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Project personnel: Kathleen Clark, Larissa Smith, Robert Somes, Ben Wurst, and Brian Henderson, John Heilferty, William Pitts

Summary

The Division of Fish and Wildlife's Endangered and Nongame Species Program (ENSP) biologists, Conserve Wildlife Foundation (CWF) staff, and volunteer observers located and monitored bald eagle nests and territories. One hundred ninety-one nest sites were monitored during the nesting season, of which 150 were documented to be active (with eggs) and eleven were territorial or housekeeping pairs. Thirteen new eagle pairs were found this season, nine in the south, two in central and two in northern NJ. One hundred twenty-two nests (81%) of the 150 known-outcome nests produced 199 young, for a productivity rate of 1.33 young per active and known-outcome nest. Including a foster chick from MD that was fledged from New Jersey the total fledged was 200. Twenty-eight (19%) nests failed to fledge young. The Delaware Bay region remained the state's eagle stronghold, with 40% of all nests located in Cumberland and Salem counties.

The state's eagle population would not be thriving without the efforts of the dedicated eagle volunteers who observe nests, report sightings, and help protect critical habitat.

Introduction

Historic records are incomplete, but one study indicated New Jersey hosted more than 20 pairs of nesting bald eagles in the Delaware Bay region of the state (Holstrom 1985). As a result of the use of the pesticide dichloro-diphenyl-trichloroethane, commonly known as DDT, the number of nesting pairs of bald eagles in the state declined to only one by 1970 and remained there into the early 1980s. Use of DDT was banned in the United States in 1972. That ban, combined with restoration and management efforts by the Division of Fish and Wildlife's Endangered and Nongame Species Program (ENSP), resulted in population increases to 23 pairs by 2000, 48 pairs by 2005, and 82 pairs by 2010. ENSP recovery efforts – implemented since the early 1980's – have resulted in a steady recovery as New Jersey's eagle population has rebounded from the edge of extirpation.

Recovery efforts were multifaceted. In 1982, after the Bear Swamp nest – New Jersey's only remaining nest since 1970 – had failed at least six consecutive years, ENSP biologists removed the egg for artificial incubation at Patuxent Wildlife Research Center in Maryland, and fostered the young nestling back to the nest. As a result of residual DDT contamination, the Bear Swamp eggs were too thin to withstand normal incubation. Artificial incubation and fostering chicks continued with success until 1989, when the female of the pair was replaced and the pair was able to hatch their own eggs.

Increasing the production from a single nest, however, was not enough to boost the state's population in a reasonable period of time. Mortality rates are high in young eagles (as high as 80%), and they do not reproduce until about five years of age. ENSP instituted a hacking project in 1983 that resulted in the release of 60 young eagles in NJ over an eight-year period (Niles et al. 1991). These eagles contributed to the increase in nesting pairs since 1990.

Bald eagles nesting in NJ face many threats, with disturbance and habitat loss the greatest threats in our state. In addition, contaminants in the food web may negatively affect the eagles nesting in some areas of NJ.

Disturbance is defined as any human activity that causes eagles to change their behavior, and takes many forms, including mere presence of people in nesting or foraging areas. In general, people on foot evoke the strongest negative reaction (see Buehler 2000). When eagles change their behavior in reaction to people, they cease doing what is best for their survival and the well-being of their eggs and young; ultimately, that reduces the survival of individuals and the population. ENSP biologists work to manage and reduce disturbance in eagle habitats, especially around nest sites. A corps of experienced volunteer observers, as well as education and safe viewing areas, are essential to this effort. Viewing eagles from safe distances, where eagles continue to act normally, is best for eagles and satisfies our natural desire to see them. Biologists also protect habitat in a variety of ways, including working with landowners, land acquisition and management, and applying the state's land use regulations. ENSP is continuing to investigate the impacts of organochlorines and heavy metals in eagles and other raptors nesting in the Delaware Bay region. Bald eagles, ospreys, and peregrine falcons nesting in the region exhibited some reproductive impairment relative to other areas (Steidl et al. 1991, Clark et al. 1998), but recent research indicates problems may be limited to very local areas of contamination (Clark et al. 2001). ENSP biologists collect samples that allow monitoring of contaminants in eagles during the nesting season, and monitoring nest success is an integral part of this research.

ENSP biologists, with the Division's Bureau of Law Enforcement staff and project volunteers, work year round to protect bald eagle nest sites. However, with increasing competition for space in the most densely populated state in the nation, it is clear that critical habitat needs to be identified and, where possible, protected. Critical habitat for eagles includes areas used for foraging, roosting and nesting, and is included in the program's Landscape Project mapping of critical wildlife habitats.

The population of wintering bald eagles has grown along with the nesting population, especially in the last ten years. This growth reflects increasing populations in NJ and the northeast, as each state's recovery efforts continue to pay off for eagles.

The federal government removed the bald eagle from its list of Endangered Species in August, 2007, in recognition of the national resurgence in the eagle population in the lower 48 states. The U.S. Fish and Wildlife Service oversees a 20-year monitoring period (through 2027) to watch for and investigate any problems that could compromise the eagle recovery. In addition, a revised version of the Bald and Golden Eagle Protection Act remains in effect to protect nest and roost sites for bald eagles nationwide. The bald eagle's official New Jersey status remains state-

endangered for the breeding season and state-threatened for the non-breeding season, and state regulatory protection remained unchanged by the federal action.

Objectives of the New Jersey bald eagle program:

- 1) monitor the recovery of the bald eagle in the state by documenting the status, distribution, and productivity of breeding bald eagles in NJ;
- 2) enhance nest success by protecting bald eagles and their nest sites;
- 3) monitor wintering areas and other concentration areas and plan for their protection;
- 4) document locational data in the Biotics database and apply it to identify critical habitat using the Landscape Project mapping;
- 5) provide information and guidance to landowners and land managers with regard to bald eagles on their properties;
- 6) increase our understanding of bald eagle natural history in New Jersey.

Methods

Nest Survey

All known nest sites are monitored January through July or through fledging. Volunteer observers watch most nests from a distance of 1,000 feet, using binoculars and spotting scopes, for periods of two or more hours each week. Observers record all data including number of birds, courtship or nesting behaviors, incubation, feeding, and other parental care behaviors that provide essential information on nesting status. ENSP or CWF staff contact volunteers weekly with an update and are available to discuss observer questions and data. Dates are recorded for incubation, hatching, banding, fledging, and, if applicable, nest failure. A nesting territory is considered “occupied” if a pair of eagles is observed in association with the nest and there is some evidence of recent nest maintenance. Nests are considered “active” if a bird is observed in an incubating position or if eggs or young are detected in the nest.

Observers report other bald eagle sightings to ENSP or CWF biologists, who review the information for clues to potential new nest locations. ENSP staff and volunteers investigate territorial bald eagles for possible nests through field observations. When enough evidence has been collected to suggest a probable location, biologists may conduct aerial surveys of the region to locate a nest. Following guidance from the US Fish and Wildlife Service’s post-delisting monitoring plan (USFWS 2009), we maintain a list of occupied nests and territories for population monitoring.

When necessary, nests are protected from disturbance with barriers or posted signs. Staff works in partnership with landowners and land managers to cooperatively protect each nest. Volunteers notify ENSP staff immediately if any unusual or threatening activities are seen around the nest site. The Division’s Bureau of Law Enforcement conservation officers act to enforce protection measures as needed, and provide routine assistance as well.

At select nests, biologists enter the nest site to band young when nestlings are between five and eight weeks old. A biologist climbs the tree and places nestlings into a large duffel bag and

lowers them, one at a time, to the ground. A team records measurements (bill depth and length, eighth primary length, tarsal width, and weight) and bands each eaglet with a federal band and a green state color band with an alpha-numeric code. A veterinarian examines each bird and takes a blood sample for contaminant analysis. Blood is collected and stored following techniques in Bowerman et al. (1994). Samples are stored frozen pending analysis by a technical lab. Nest trees are generally not climbed the first season to avoid associating disturbance with the new site.

Wintering Eagle Survey

In 2014 and 2015, New Jersey did not participate in the National Mid-Winter Eagle survey in January. As the eagle numbers have increased in NJ we have found that the count no longer covered all important eagle areas, and that volunteer efforts could be put to better use. Biologists asked eagle project volunteers to find and identify eagle roosts and winter concentrations during the months of January and February.

Results

Nest Survey

The statewide population increased to 161 territorial pairs in 2015, up from 156 last year. One hundred-fifty pairs were known active (meaning they laid eggs), up from 146 last year. One hundred twenty-two nests (81%) were known to be successful in producing 199 young, for a productivity rate of 1.33 young per known-outcome active nest, which is above the required range of 0.9-1.1 young per nest for population maintenance (Figure 2). One chick, orphaned from a Maryland nest, was fostered into a Cumberland County nest and fledged, bringing the total fledged to 200. Eleven pairs maintained territories but did not lay eggs. Excluded from our 2015 figures are 30 previous nest sites that were unoccupied, and where no new nest could be found (or search effort was lacking).

Most nests were located in the southern portion of the state, particularly within 20 km of Delaware River and Bay (Figure 4). All nests and significant dates are listed in Table 1. The majority of nests were located on private land, while the rest were on state, federal, county and conservation-organization lands. Disturbance was a management issue at many nests, and posting and regular surveillance by staff and nest observers were essential to increase the chance of success.

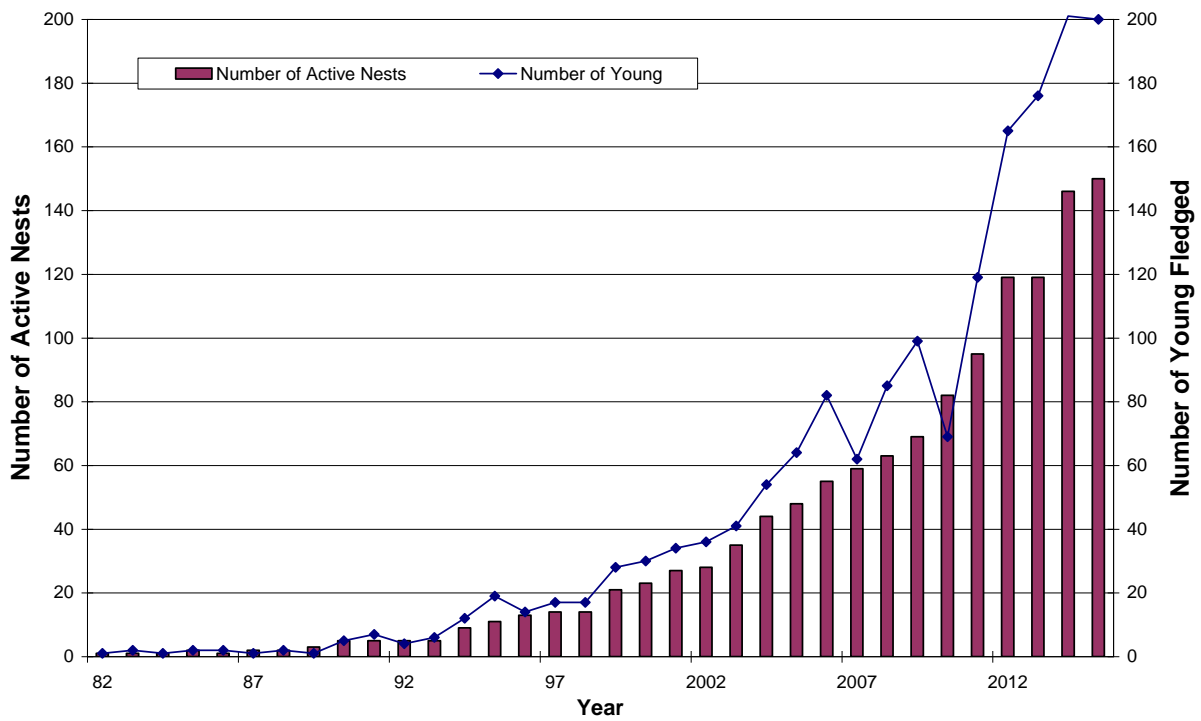


Figure 1. Number of bald eagle nests and young produced in NJ, 1982-2015

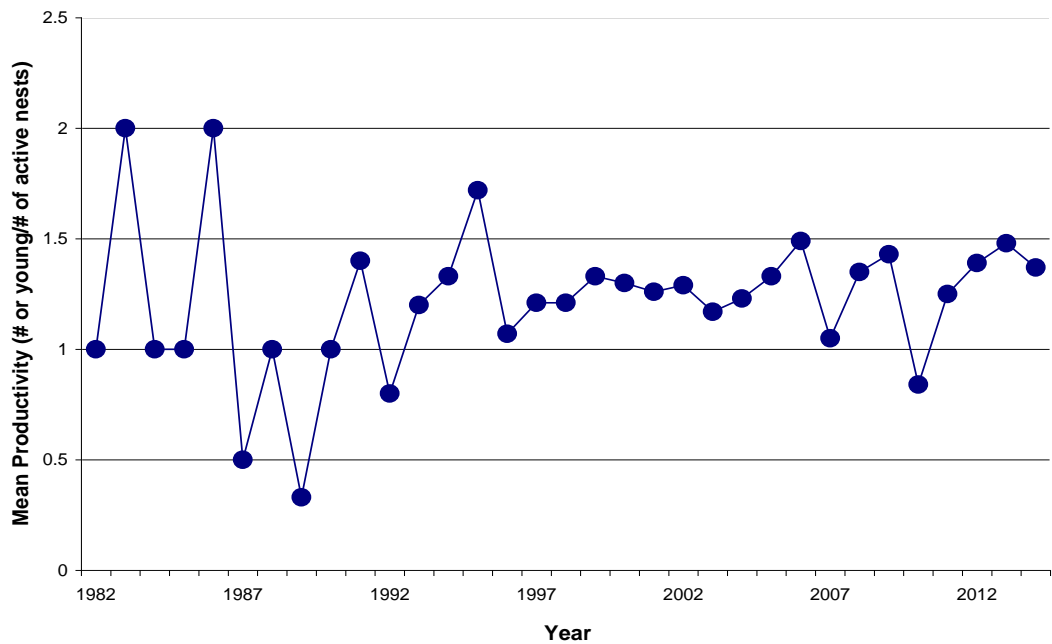
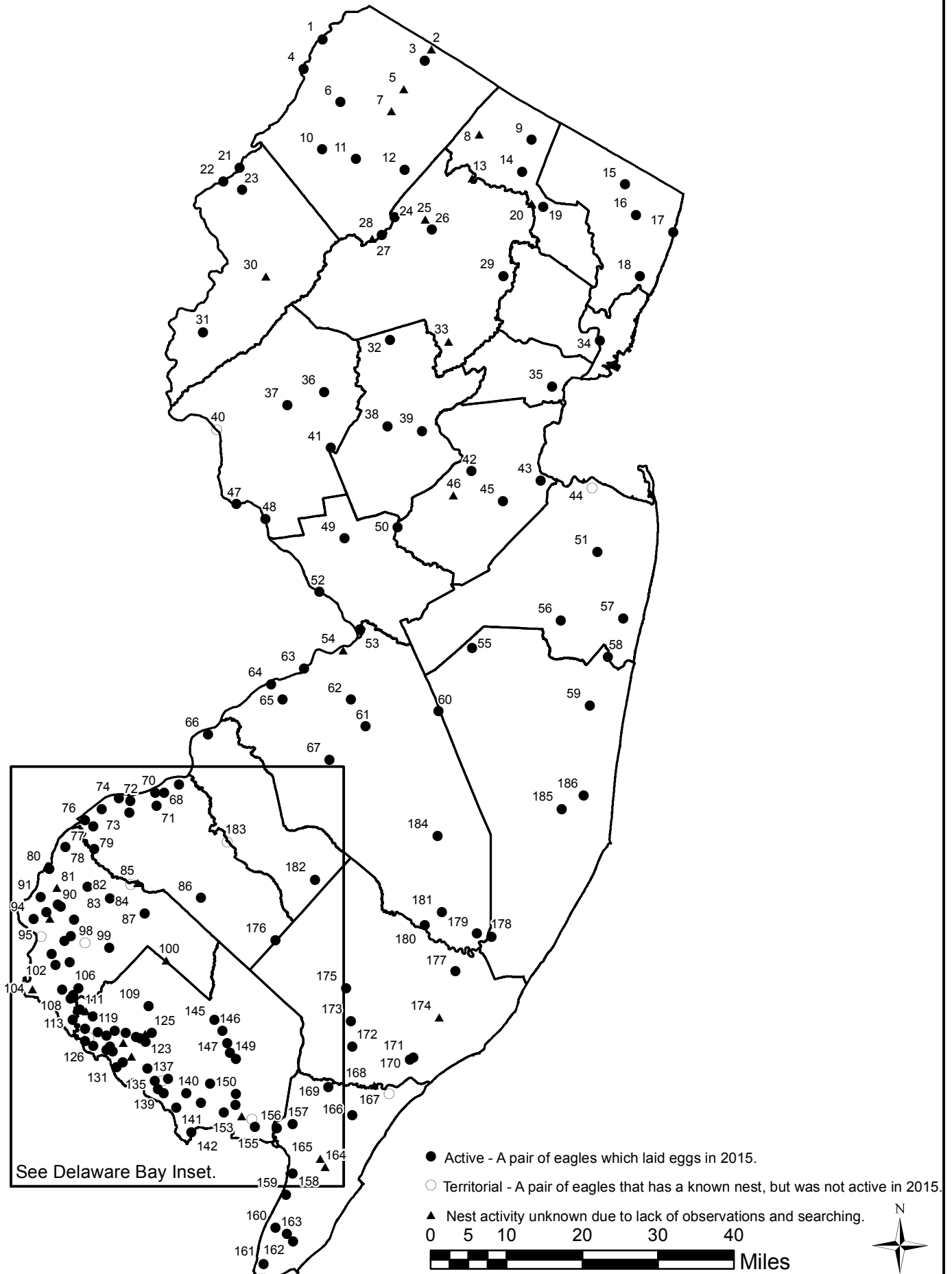


Figure 2. Productivity of bald eagles nesting in New Jersey, 1982-2015.

Figure 3. Bald Eagle nest sites, 2015.

01 Minisink Island	51 Navesink River/Reservoir	101 Elsinboro	151 Maurice River (Bowkers)
02 Liberty Loop	52 Trenton	102 Alloways Creek F	152 Port Norris
03 Bassetts Bridge	53 Crosswicks Creek	103 Alloways Creek C	153 Matts Landing
04 Dingmans Ferry	54 Burlington Co. (Newbold)	104 Alloways Hope Creek	154 Heislerville
05 Wantage	55 Prospertown	105 Silver Lake Tower	155 Riggins Ditch
06 Culvers Gap	56 Manasquan Reservoir	106 Canton Sheep Farm	156 Stipson Island
07 Lewisburg Swamp	57 Shark River	107 Stow Creek A (Canton)	157 Belleplaine
08 Cedar Pond (Passaic)	58 Manasquan River	108 Stow Creek C	158 Bidwell Creek
09 Wanaque A	59 Kettle Creek	109 Sunset	159 Dias Creek West
10 Little Swartswood	60 Fort Dix	110 Newport Meadows	160 Fishing Creek
11 Hyper Humus	61 Pemberton	111 Stow Creek B	161 Higbee
12 Newton Reservoir	62 Fairgrounds	112 Davis Mill	162 Wildwood Bay
13 Charlottesburg Rockaway	63 Burlington Island	113 Mad Horse Creek	163 Rio Grande
14 Wanaque B	64 Delanco	114 Wheaton Island	164 Swainton
15 Woodcliff Lake	65 Rancocas Creek A	115 Bayside A	165 South Dennis A3
16 Oradell Reservoir	66 Camden County	116 Bayside B	166 Cedar Swamp Creek
17 Palisades B	67 Medford	117 Cohansey (Greenwich A)	167 Beesleys Point
18 Overpeck Creek	68 Eagle Point	118 Cohansey (Greenwich B)	168 Tuckahoe B
19 Point View Reservoir	69 Woodbury Creek	119 Cohansey (Sheppards Mill)	169 Tuckahoe A
20 Pompton Lakes	70 Mantua A4	120 Cohansey (Loatman)	170 Patcong Creek A
21 Poxono Island	71 Mantua Creek B	121 Cohansey (Hopewell West)	171 Patcong Creek B
22 Tocks Island	72 DuPont/Raccoon Creek	122 Cohansey (Hopewell Central)	172 Egg Harbor River
23 Yards Creek	73 Gibbstown	123 Cohansey (Tindells)	173 South River-Atlantic
24 Lake Hopatcong A	74 Mond's Island	124 Cohansey (Hopewell East)	174 Absecon Creek
25 Picatinny/Lake Denmark	75 Bridgeport	125 Cohansey CC	175 Lake Lenape
26 Mount Hope Lake	76 Birch Creek B	126 Tindall Island	176 Cedar Lake (Gloucester)
27 Lake Musconetcong	77 Swedesboro (Birch Creek)	127 Cohansey (Middle Marsh C)	177 Galloway
28 Lake Hopatcong B	78 Penns Grove	128 Cohansey (Middle Marsh A)	178 Ballanger Creek East
29 Parsippany	79 Oldman's Creek	129 Cohansey (Middle Marsh B)	179 Ballanger Creek West
30 Pequest	80 Deepwater	130 Cohansey (Green Swamp)	180 Mullica River
31 Merrill Creek	81 Salem River Tower	131 Seabreeze B2	181 Wading River
32 Far Hills/Ravine Lake	82 Pilesgrove	132 Seabreeze A	182 Blue Anchor
33 Great Swamp	83 Salem River	133 Husteds Landing	183 Turnersville
34 Kearny	84 Upper Oldmans	134 Sayre's Neck	184 Chatsworth
35 Linden	85 Harrisonville	135 Bay Point Road	185 Oyster Creek
36 Round Valley	86 Silver Lake	136 Nantuxent Creek A	186 Forked River
37 Stanton Station	87 Daretown	137 Nantuxent Creek C	
38 Duke (Raritan River)	88 Mannington B (Halls Run)	138 Nantuxent Creek D	The following nests
39 Manville	89 Mannington A (Horne Run)	139 Nantuxent Creek B	are not shown be-
40 Milford Tower	90 Marshaltown	140 Turkey Point A	cause their location
41 Three Bridges	91 Pennsville	141 Fortescue	is unknown: Green
42 Westons Mill Pond	92 Penns Neck	142 Egg Island	Pond & Spruce Run.
43 Cheesequake Creek	93 Penns Neck (lower)	143 Dividing Creek	
44 Keansburg Cell	94 Supawna Meadows B	144 Bear Swamp	
45 Old Bridge	95 Supawna Meadows A	145 Union Lake	
46 Farrington Lake	96 Keasbeys Creek	146 Maurice River (Millville North)	
47 Bulls Island	97 Fenwick Creek	147 Maurice River (Millville)	
48 Lambertville Tower	98 Quinton	148 Maurice River (Bluffs)	
49 Pennington	99 Alloways Creek B-CE	149 Maurice River (Burcham)	
50 Princeton	100 Centerton (Elmer)	150 Maurice River (Mauricetown)	

2015 Bald Eagle Nest Status



2015 Bald Eagle Nest Status

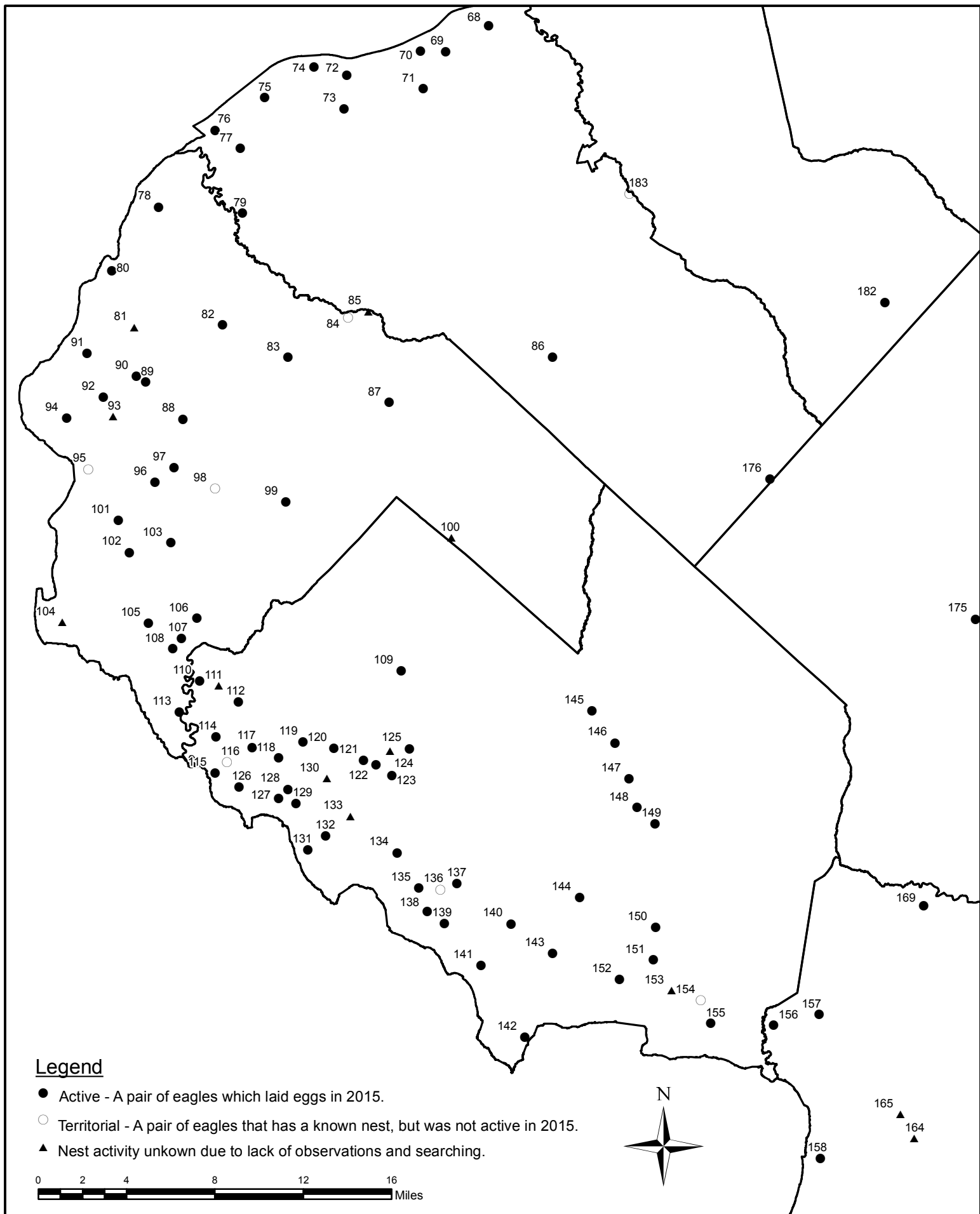


Table 1. Production and estimated dates for bald eagle nests in NJ, 2015. T=Territorial, U=Unknown, A?=probably Active.

NEST SITE	Incubation	Hatching	Banding	Fledging	No. Fledged	Failed date	Notes
Absecon	U						
Alloways Creek B-CE	2/14				0	3/29	
Alloways Creek C	2/15	3/20		6/14	1		
Alloways Creek E	INAC						
Alloways Creek F	3/1	4/12		6/28	1		
Alloways-Hope Creek	U						
Ballanger Creek East	2/23	3/30		6/21	2		
Ballanger Creek West	2/23	4/7		6/30	1		
Bassett's Bridge	2/26	3/26		6/18	2		
Bay Point Road	2/6	3/21		6/13	3		
Bayside A	2/19	4/6		6/29	2		
Bayside B	T						
Bear Swamp	2/23	4/1		6/24	1		
Beesley's Point	T						New Pair
Belleplain	U				0	4/2	Aerial survey 4/2
Bidwell Creek	3/20				0	4/12	
Birch Creek B	2/22				0	4/30	
Blue Anchor	2/27	4/3		6/26	2		
Bridgeport	2/8	3/16		6/7	1		
Bulls Island	2/23	3/29		6/24	1		
Burlington Co./Del. R.	U						
Burlington Island	2/8	3/17		6/9	1		
Camden	2/28	3/4		5/27	1		
Canton Sheep Farm	U				≥1		New pair
Cedar Lake (Gloucester)	U	3/12		U	1		
Cedar Pond (Passaic)	U						
Cedar Swamp Creek	2/21	3/23		6/14	2		
Centerton (Elmer)	U						
Charlottesburg (Rockaway)	U						
Chatsworth	2/9	4/2		7/6	1		
Cheesequake Creek	2/17	3/24		6/16	1		
Cohansey (Green Swamp)	U						
Cohansey (Greenwich A)	2/11	U		U	1		
Cohansey (Greenwich B)	2/24	3/31		6/23	1		
Cohansey(HopewellCentral)	2/26	4/2		6/25	2		
Cohansey (Hopewell East)	U						
Cohansey(Hopewell West)	2/26	4/2	5/4	6/25	1		

Cohansey (Loatman)	2/26	4/2		6/25	1		
Cohansey (Middle Marsh A)	2/7	3/13		6/5	1		
Cohansey (Middle Marsh B)	2/14	3/22		6/14	2		
Cohansey (Middle Marsh C)	2/14	3/22		6/14	2		
Cohansey(Sheppard's Mill)	2/24	4/2		6/25	1		
Cohansey(Tindells Landing)	2/8	3/14		6/6	2		
Cohansey CC	2/21	4/3		6/20	1		New pair
Crosswicks Creek	2/25				0	4/5	
Culvers Gap	3/7	4/14		7/7	3		
Daretown	2/5	3/15		5/26	1		
Davis Mill	2/11	4/6		6/29	2		
Deepwater	3/18	4/17		7/8	2		
Delanco	2/24				0	5/6	
Dias Creek West	2/6				0	3/15	
Dingman's Ferry	U				2		
Dividing Creek	2/8	3/21		6/13	2		
Duke (Raritan River)	2/17	3/27		6/19	2		
Dupont/Raccoon Creek	2/20	3/27			0	4/16	
Eagle Point	2/19				0	3/29	
Egg Harbor River	1/31	3/6		5/29	2		
Egg Island	2/13	3/20	5/18	5/31	2		Transmitter #366 attached
Elsinboro	2/3	3/15		6/8	2		
Fairgrounds	2/8	3/15		6/14	1		
Far Hills/Ravine Lake	3/23	4/23		7/16	2		
Farrington Lake	U						
Fenwick Creek	3/8	4/11		7/6	1		
Fishing Creek	U				≥1		Aerial survey 4/29
Forked River	~2/11	~3/18			2		
Fort Dix	2/26	4/1		U	2		
Fortescue	2/14	3/28		6/20	1		New pair
Galloway	2/6	3/2		6/5	2		
Gibbstown	2/2				0	3/20	
Great Swamp	A?						
Green Pond	U						
Harrisonville	U						
Heislerville	T						
Higbee	2/27				0	4/3	
Husted's Landing	U						
Hyper Humus	3/18	4/24		7/19	1		
Keansburg Cell	T						New pair
Kearny	U	4/15		U	≥1		New pair

Keasbeys Creek	2/6	3/2		6/5	3		
Kettle Creek	2/15	3/26		6/17	1		
Lake Hopatcong A	2/18	4/5		6/28	2		
Lake Hopatcong B	3/10	4/17		7/10	1		New pair, poss. Musconetcong pr
Lake Lenape	U	4/1			≥1		Aerial survey 4/2
Lake Musconetcong	U						
Lambertville Tower	U				1		
Lewisburg Swamp	U						
Liberty Loop	U						
Linden	3/4				0	4/14	
Little Swartswood	2/25	3/25	6/24	5/18	2		
Mad Horse Creek	2/20	3/27	6/19		1		
Manasquan Reservoir	1/22	3/2			0	4/15	
Manasquan River	3/28	5/2	7/21	6/10	2		
Mannington Meadows A	2/12	3/26		6/12	1		
Mannington Meadows B	2/26				0	4/8	
Mannington Meadows D	Inactive						
Mannington Meadows C (Marshalltown)	1/24	3/8		5/28	2		
Mantua Creek A	3/4	4/8	5/13	7/1	1		
Mantua Creek B	2/8	3/18		6/10	2		
Manville	2/28	4/8		6/21	2		
Matts Landing	U						
Maurice River- Bluffs	1/31	3/6		5/29	3		
Maurice River- Bowkers	1/31	3/6		5/29	2		
Maurice River- Burcham	2/6	4/19		7/12	2		
Maurice River-Mauricetown	2/15				≥1		Aerial survey 4/2
Maurice River-Millville	2/22	3/26			0	4/10	
Maurice River-Millville North	2/6	3/13	6/5		2		
Medford	3/2	4/6		6/29	2		
Merrill Creek Res.	3/31	5/9		7/4	1		
Milford Tower	T						
Minisink Island	U				≥1		
Mond's Island	2/25	4/1		6/24	2		
Mount Hope Lake	3/15			7/12	2		
Mullica River	U	2/28		5/23	1		
Nantuxent Creek A	T						
Nantuxent Creek B	2/1	3/13		6/20	3		
Nantuxent Creek C	2/21				0	3/28	
Nantuxent Creek D	2/28	4/3		6/29	3		
Navesink River	U			7/2	1		

Newport Meadows	2/20	3/24		6/9	2		
Newton Reservoir	3/27	5/1		7/24	2		
Old Bridge	4/22	7/15		8/20	1		
Oldmans Creek	2/8				0	3/15	
Oradell Reservoir	U			7/19	2		
Overpeck Creek	2/16	3/23		6/14	3		
Oyster Creek	U				0	3/12	
Palisades A	Inactive						
Palisades B	2/11	3/18		6/10	2		
Parsippany	3/13	4/23		7/17	1		
Patcong Creek A	2/7	3/14		6/6	3		
Patcong Creek B	2/14	3/21		6/6	2		
Pemberton	1/14	2/20		5/19	1		
Pennington	4/4				0	5/25	
Penns Grove	4/4	5/9		7/11	1		
Penns Neck	3/8	4/12		6/23	1		
Penns Neck (lower)	U						
Pennsville	3/12				0	4/30	
Pequest	U						
Picatinny/Lake Denmark	U						
Pilesgrove	2/3	3/14		6/4	2		
Point View Reservoir	2/23	3/30		6/22	1		
Prompton Lakes	U						
Port Norris	2/14	4/2		6/25	3		
Poxono Island	U				2		
Princeton	2/25	4/2		6/20	1		
Prospertown	2/4	3/12		6/24	2		
Quinton	T						
Rancocas Creek	2/16				0	3/27	
Riggins Ditch	2/13	3/20		6/12	3		
Rio Grande	2/22	3/29		6/21	2		New pair
Round Valley	3/11	4/15		7/7	1		
Salem River	1/31	3/14		6/6	1		
Salem River Tower	U						
Sayres Neck	2/1	3/13	4/25	6/13	2		Foster chick from MD 5/1
Sea Breeze A	2/1	3/7			0	3/25	
Sea Breeze B2	2/28	4/4		6/27	2		New nest tree
Shark River	2/26	4/3		6/21	2		
Silver Lake	2/6	3/14		5/30	2		
Silver Lake Tower	2/20				0	4/1	
South Dennis A	U						

South River-Atlantic	2/23	4/2		7/5	2		
Spruce Run	U						
Stanton Station	3/13	4/19		7/6	2		
Stipson Island	2/21	3/28		6/20	1		
Stow Creek A	2/11	3/21		6/9	2		
Stow Creek B	U						
Stow Creek C	2/11	3/21		6/9	2		
Sunset	1/27	3/3		5/26	2		
Supawna Meadows A	T						
Supawna Meadows B	3/11	4/2		7/29	1		
Swainton	U						
Swedesboro-Birch Creek	2/7				0	3/20	
Three Bridges	4/2	4/6	5/14	6/29	2		
Tindall Island	2/27	4/7		6/30	2		
Tocks Island	U			7/25	1		
Trenton	2/17				0	3/30	
Tuckahoe A	U	4/2			≥1		Aerial survey 4/2
Tuckahoe B	U						
Turkey Point A	2/14	3/28	5/24,27	6/4	3		Nest fell 5/22; young renested.
Turnersville	T						New pair
Union Lake	U				0	3/17	
Upper Oldmans	T						New pair
Wading River	4/15			7/30	1		
Wanaque A	3/30			8/1	1		
Wanaque B	3/30			8/2	2		
Wantage	U						
Westons Mill Pond	U			6/15	1		
Wheaton Island	2/11	4/6		6/29	2		
Wildwood Bay	U				0		Aerial survey 4/29
Woodbury Creek	2/15	3/25			0	4/30	
Woodcliff Lake	2/26	4/2		6/25	2		
Yards Creek	U	U		U	1		
Total Nests Monitored	191						
Total Nests Active/Known Outcome	150						
Successful Nests	122						
Failed Nests	28						
Young Fledged	200						

New Nesting Pairs/Territories

In 2015, thirteen new pairs of eagles were found in New Jersey, noted here:

Alloways Creek F – This new pair build a nest near Hancock’s Bridge, Salem County, on private property bordering a Wildlife Management Area. The pair successfully raised one chick.

Beesley’s Point – The remains of a dead eagle were found by a hunter under a nest in Upper Township, Cape May County, on March 21, 2015. The bird was a male (# 0679-01704, C/70) banded in Avalon on June 20, 2008. The body was found under a nest that was in disrepair. The assumption is this was one of a nesting pair. We will continue to monitor this nest/area.

Canton Sheep Farm – This previously unknown nest was found by a state biologist while surveying for waterfowl. At the time it was found, one adult was in the nest either incubating or brooding young chicks, the other adult was perched close by. This nest is on private property and difficult to access.

Cohansey CC – This new pair built a nest in a Wildlife Management Area in Cumberland County along the Cohansey River. The pair successfully raised one chick.

Fortescue – This new nest is located along the marsh near Fortescue, Cumberland County. They raised and fledged one chick.

Keansburg Cell – This housekeeping pair of eagles built on a cell tower in Keansburg but never laid eggs. As of October, they were back at this site and are expected to use it in 2016.

Kearny – This new pair was discovered when they already had nestlings, in a tree near the confluence of the Hackensack and Passaic Rivers. The nest was originally observed from across the river in Jersey City.

Milford Tower – This housekeeping pair of eagles occupied an old osprey nest on a high tension tower near Milford, but never laid eggs. There were several battles observed between the eagle pair and the osprey pair. The ospreys eventually relocated across the river and built another nest on a different tower of the same power line.

Oyster Creek – This new nest was reported to be incubating after the pair failed during the early spring. The nest had been at this location for several years but never reported by local residents. They fledged two young in 2014, and incubated but failed in 2015.

Quinton – A housekeeping pair built a nest along the edge of a farm field near Quinton, Salem County.

Rio Grande – Two young were successfully raised by this new pair nesting in Lower Township, Cape May County.

Turnersville – This housekeeping pair built a nest in a residential neighborhood in Gloucester County.

Upper Oldmans – This housekeeping pair built a nest on the edge of a farm field near Oldman’s Creek in Salem County.

2015 Season Highlights

Telemetry

The Conserve Wildlife Foundation, in partnership with NJ Division of Fish and Wildlife’s Endangered and Nongame Species Program (ENSP), has placed GPS transmitters on several eagle fledglings over the past four years. Currently four birds are being tracked, and the movements of two of these birds, nicknamed Nacote and Oran, can be viewed on the CWF website. “Nacote” was banded as a nestling in the summer of 2014, and surprised everyone when he made a big northern movement in August, heading due north and out of transmission range. He returned to northern New York where his transmitter’s data downloaded to our computers, showing he’d spent most of the fall in a remote area of Quebec. He returned to southern NJ in November and in January and was photographed at Forsythe NWR. He spent the winter in Atlantic County, and spent time in Cape May and Cumberland counties throughout 2015.

In 2014 we reported on “Millville,” the eagle from Maurice River who was outfitted with a transmitter. She remained on the Maurice until mid-September, when she crossed Delaware Bay and moved through Delaware to the upper Chesapeake Bay. Unfortunately, she ventured back to Delaware farmland, where she was electrocuted on a power distribution line and found dead on November 24. Dr. Erica Miller conducted the post-mortem and recovered the tracking device.

The recovered transmitter was refurbished and placed on a male eagle nestling on May 18, 2015, at a nest along on Delaware Bay. This eagle, nicknamed “Oran,” fledged on June 4 and spent late summer and fall moving all across Cumberland and Cape May counties. On November 17, he flew across Delaware Bay into Delaware, and as of November 30 he was in the farmland and woodlands of Maryland’s eastern shore.

Two other eagles are being tracked but their movements are not yet available on CWF’s website. Merrill Creek fledgling D/64, nicknamed “Harmony,” fledged in July, 2012 and spent the fall/winter of 2012 in Chesapeake Bay. She moved through south Jersey in the spring of 2013 and summered in New England before wintering along the Housatonic River in CT. She spent the summer months of 2014 in MA and headed to southern CT in late September. In 2015 she mainly stayed on Connecticut’s rivers and lakes, and returned to Massachusetts’ Quabbin Reservoir in the cold months. Eagle D/88, nicknamed “Haliae,” fledged in 2013 and spent the winter of 2013-14 ranging around northern Chesapeake Bay in MD. In April, 2014, she headed north into PA and in May travelled through NY and into Canada. In June she was back in NJ’s Warren County, though she continued to wander and spent that summer in northern Maine. She spent the remainder of the 2014 summer ranging around Canada. In fall, 2014, she headed south to eastern PA. In 2015, Haliae spent most of her time on Maryland’s eastern shore.

Potential Nest Sites

Biologists and observers actively searched for possible nesting eagles in several locations. The searches were in response to reports of eagles engaging in breeding behaviors. Areas that remain promising are Big Timber Creek, Batsto Lake, Oswego Lake, Indian Mills Lake, Williamstown, Evesham, Flemington/Raritan River, Canoe Brook Reservoir, White Lake, Musconetcong River and middle Delaware River, which all have year-round eagle activity. In addition, several inland reservoirs in the north hold promise for eagle nesting.

Recoveries of Eagles in New Jersey

During this reporting period, 28 eagles were recovered, and of those, three were treated and released after injuries. The remaining birds were found dead or were euthanized for these reasons: electrocution (5), impacts with vehicles (7) or unknown objects (5); eagle-eagle fighting (2), and unknown circumstances (6). The details follow below.

An adult male eagle was seen hit by a vehicle while scavenging road kill in Lower Alloways Township, Salem County on November 18, 2014. The bird died; a necropsy confirmed death by vehicle impact.

On November 23, 2014, a third-year eagle was found dead along a road in Upper Township, Cape May County. A necropsy confirmed death by acute impact trauma, most likely hit by a vehicle.

On November 24, 2014, ENSP was notified that one of the telemetered eagles, named "Millville," had been found dead on a roadside in Greenwood, Delaware. Banded on May 19, 2014 (0709-01595, E/05), and outfitted with a transmitter, her movements had been followed online. A necropsy determined cause of death to be electrocution. ENSP discussed this with the power company in Delaware.

An unbanded adult female eagle was reported dead on roadside on December 1, 2014, at Willow Grove Lake, in Pittsgrove, Gloucester County. Necropsy results showed cause of death was acute impact trauma.

On January 6, 2015, an adult eagle was found dead in the Supawna Meadows NWR, Salem County, of unknown causes.

On January 20, 2015, a fourth year male eagle was found under power lines in Lower Alloways Creek Township, Salem County. A necropsy showed the bird died from electrocution.

On February 12, 2015, an adult male eagle was found injured in Hopewell Township, Cumberland County, and taken to Tri-State Bird Rescue and Research. The injuries were severe and the bird was euthanized.

ENSP received a call on February 17, 2015, that two eagles were hanging about 45 feet up in a pine tree in Tuckerton, Atlantic County. Ben Wurst (CWF) responded and secured a bucket

truck that enabled him to access the birds. The eagles had apparently fought to the death, a talon-locked fall that ended in the tree. One of the eagles was dead and the survivor was a female that had been banded (#0629-46866, C/58) on May 1, 2008, at Merrill Creek Reservoir. She was taken to Mercer County Wildlife Center and later transferred to Tri-State Bird Rescue and Research. Due to severe injuries the bird had to be euthanized.

On March 12, 2015, fishermen found a dead bald eagle floating in the Mullica River, Atlantic County; unknown cause of death.

The body of a decomposed eagle was found by a hunter under a nest in Upper Township, Cape May County, on March 21, 2015. The bird was a male banded in Avalon on June 20, 2008 (band #0679-01704, C/70).

A second-year female was found dead on the roadside near Greenwich, Cumberland County, on March 31, 2015. The bird was banded (#0709-01565, D/75) on May 3, 2013, at the Nantuxent B nest. A necropsy determined the cause of death was electrocution.

On April 17, 2015, a third-year male was found dead in the Delaware River, Mercer County. The bird was not banded. A necropsy found the cause of death was most likely impact that resulted in wing fracture and eventual drowning.

On May 1, 2015, an adult eagle was found dead in Middle Township, Cape May County. Cause of death was most likely due to impact with electrical wires.

On May 19, 2015, an eagle was found dead roadside in Rockaway Township, Morris County. The bird was a male that had been hacked in New York City, imported from a nest in Wisconsin, and had been banded on June 25, 2002. A necropsy showed the bird died from acute impact.

On June 10, 2015, an eighteen year-old adult male collided with a dump truck near Upper Greenwood Lake, Passaic County. The bird had been banded (#0629-39869, A/24) on May 8, 1997, at Union Lake, Cumberland County. The bird was taken to the Raptor Trust where it underwent several surgeries and recovered over a period of a few months. On September 20, 2015, the eagle was released at the Split Rock Reservoir in Rockaway.

A dead eagle was reported on the side of the road on August 5, 2015, in Frankford Twp, Sussex County. The bird was believed to be one of three fledglings from the Culvers Lake nest. A necropsy showed acute trauma by impact, most likely a vehicle.

On August 12, 2015, an unbanded, juvenile eagle was found dead roadside in Hopewell Township, Cumberland County. The bird had been struck by a vehicle.

On August 30, 2015, an adult eagle was found dead in Franklinville, Gloucester County. The bird was a male banded on May 11, 2009 (0679-01723, C/89), at the Camp Edge nest.

An adult eagle was found injured in a yard in Upper Deerfield, Cumberland County, on September 19, 2015. The bird was transported to Tri-State Bird Rescue and Research where it recovered and was released on September 25, 2015.

An injured adult bald eagle was found in Pennsville, Salem County, on October 12, 2015. The bird was taken to Tri-State Bird Rescue and Research where it was euthanized due to extensive injuries. The injuries indicated the bird had been struck by a vehicle.

On October 29, 2015, a juvenile eagle was reported injured roadside near Fairton, Cumberland County. The bird was picked up by Cedar Run Wildlife Refuge and transferred to Mercer County Wildlife. Due to injuries sustained from possible electrocution the bird had to be euthanized.

On Sunday, November 1, 2015, an eagle was found dead on the shoulder of the NJ Turnpike in Cranbury, Middlesex Co. A necropsy indicated the bird died from impact, most likely with a vehicle.

On November 4, 2015, a dead adult eagle was found at the Edgeboro Landfill in East Brunswick, Middlesex County; unknown cause of death.

An eight year old male that had been banded (#0629-46850, C/42) at Round Valley Reservoir in 2007, was found dead on November 12, 2015 in Pottsville, Schuylkill County, PA. A PA Conservation Officer found the bird next to an electrical substation, and cause of death was electrocution.

An adult eagle was found dead roadside on November 22, 2015, in Barnegat Township, Ocean County. The female (#0679-01741, D/06) had been banded April 23, 2010 at the Manasquan River nest.

On November 27, 2015, five eagles were seen feeding on a deer carcass in Plumsted Township, Ocean County. Two of the eagles were nearly comatose, the other three flew away. The two eagles were transported to Mercer County Wildlife Center by NJ Division of Fish and Wildlife Conservation Officers. The eagles, an adult female and a subadult male, were suffering from the effects of drugs administered to euthanize an injured deer. Standard procedures to dispose of a euthanized carcass were not followed by the Animal Control Officer, leaving the eagles and potentially other scavengers vulnerable to the drugs. The eagles were further treated at Tri-State Bird Rescue and Research; they recovered and were released on November 30, 2015.

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We dedicate this year's project report to the memory of Len Soucy, who founded The Raptor Trust and dedicated his life to the rehabilitation of New Jersey raptors.



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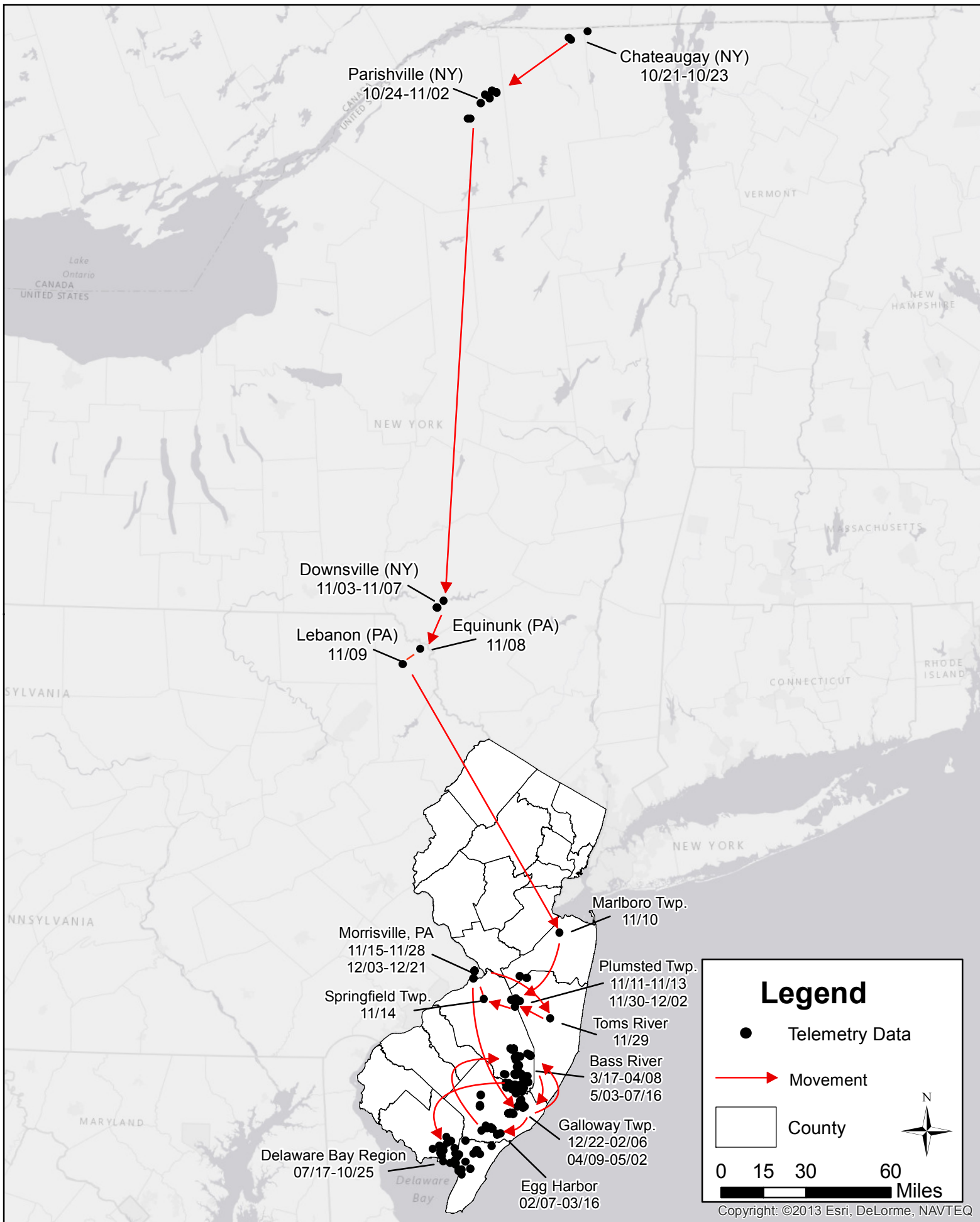
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Appendix 1. Map of the movements of Bald Eagle D/95, “Nacote,” tracked using satellite telemetry since fledging from Atlantic County in 2014.

Appendix 2. Map of the movements of Bald Eagle E/17, “Oran,” tracked using satellite telemetry since fledging from Cumberland County in 2015.

D/95 - Male, 2015 (10/21/2014 - 10/25/2015)



E/17 - Male, 2015 (07/22/2015 - 10/25/2015)

