

New Jersey Department of Environmental Protection Division of Fish and Wildlife

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New Jersey Bald Eagle Project, 2021

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Cover photo: An established bald eagle pair in Somerset County. Photo courtesy of Bald Eagle Project nest monitor Rose Joy.

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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. Two hundred and forty-seven nest sites were monitored during the nesting season, of which 222 were documented to be active (with eggs) and 25 were territorial or housekeeping pairs. Twenty-seven new eagle pairs were found this season, twelve in the south, three in central and twelve in the north. One hundred-seventy-seven nests (82%) of the 215 known-outcome nests produced 296 young, for a productivity rate of 1.37 young per active/known-outcome nest. Thirty-seven nests (17%) failed to produce young. The Delaware Bay region remained the state's eagle stronghold, with roughly half of all nests located in Cumberland and Salem counties and the bayside of Cape May County.

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

Introduction

Records documenting the abundance and distribution of eagle nests in New Jersey do not exist. In the 1930s-1950s, when local naturalists and birders began documenting bird activity, bald eagles had already been subject to persecution for decades because of their perceived predatory relationship to game and farm animals (US Fish & Wildlife Service at <https://www.fws.gov/midwest/eagle/history/>). One study supported by NJDFW in southern NJ indicated more than 20 pairs of nesting bald eagles in the Delaware Bay region of NJ in the 1950s (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, 82 pairs by 2010, and 150 pairs by 2015. 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 New Jersey's only remaining nest (located in Cumberland County's Bear Swamp) had failed at least six consecutive years, ENSP biologists removed the egg for artificial incubation at Patuxent Wildlife Research Center in Maryland, and after hatching, 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 a new, younger female took over 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 eagles 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 from Canada over an eight-year period (Niles et al. 1991). These eagles contributed to the increase in nesting pairs observed after 1990.

Bald eagles nesting 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 (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, identifying land for acquisition and management, and applying the state's land use regulations. ENSP has a history of investigating 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 have exhibited some reproductive impairment relative to other areas (Steidl et al. 1991, Clark et al. 1998), but more 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. The competition for space in the most densely populated state in the nation makes it clear that critical habitat needs to be identified and, where possible, protected, to support a recovered bald eagle population. 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. Landscape Project mapping identifies suitable habitat that is associated with nests, foraging areas, and documented communal roosts.

The population of wintering bald eagles has grown along with the nesting population, especially in the last ten years. The NJ Eagle Project discontinued Mid-winter eagle surveys, but has conducted surveys to document important roosting areas in winter and year-round.

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, 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 currently remains state-endangered for the breeding season and state-threatened for the non-breeding season, and state regulatory protection was unchanged by the federal action. The Division of Fish and Wildlife continues to monitor the population to provide data used in status assessments.

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 location data in the Biotics database and apply it to identify critical habitat using the Landscape Project mapping following mapping protocols;
- 5) provide information and guidance to landowners and 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. Nest monitors use the NestStory program to record data in the field or enter data after they return home. NestStory, developed and maintained by the Little Egg Foundation, compiles data in real time, enabling project supervisors to see current status of nests statewide.

ENSP staff and volunteers may investigate territorial eagles for possible nests. 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 nests. Nest monitors 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 sites, ENSP 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 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.

Winter and Roost Surveys

In recent years, we in New Jersey did not participate in the National Mid-Winter Eagle survey held in January. As eagle numbers have increased in NJ we found that the standardized count no longer covered all important eagle areas, and that volunteer efforts could be put to better use. Biologists asked eagle project volunteers to search for locations where eagles roost and otherwise concentrate in the winter months of January and February.

Results

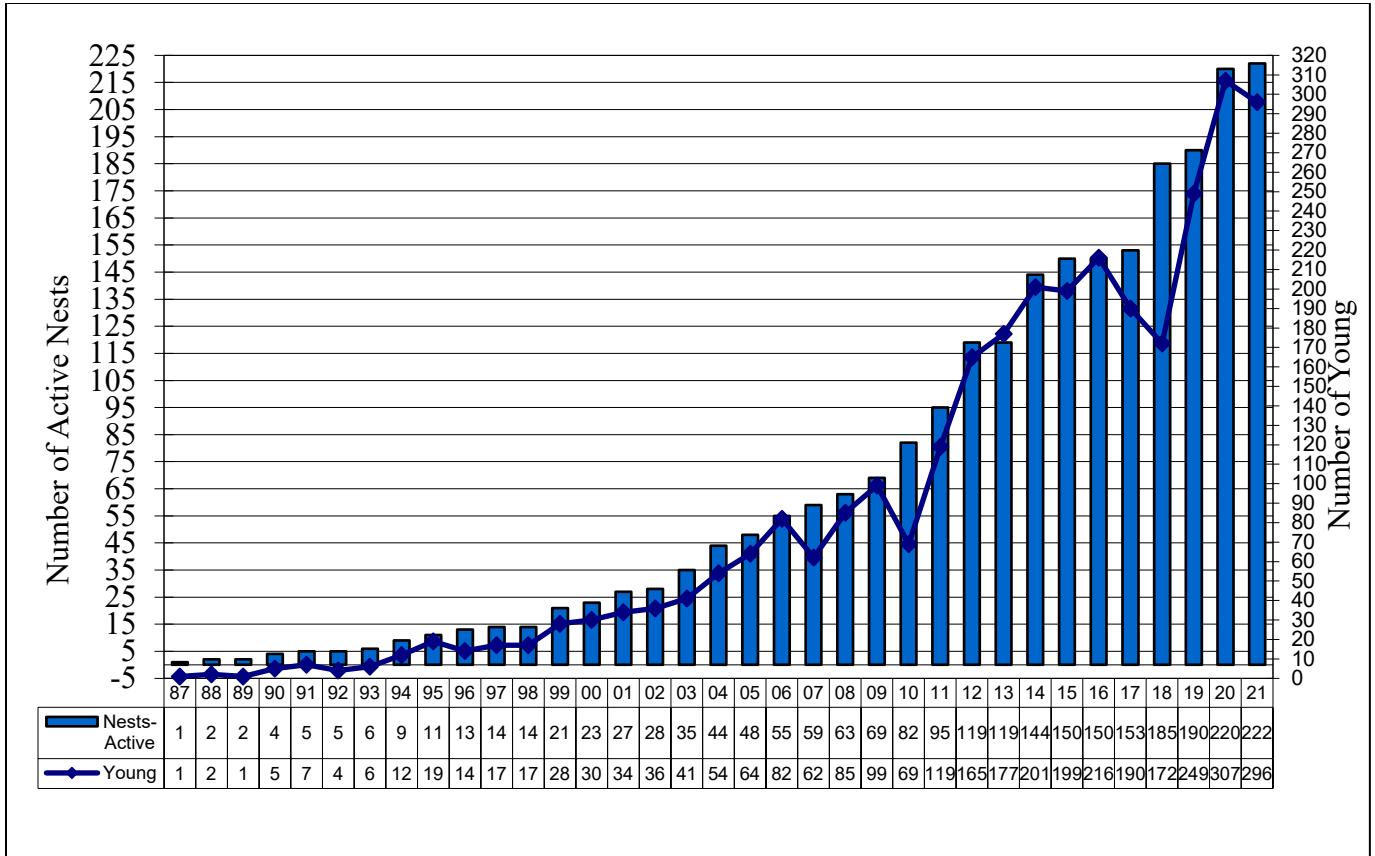
Nest Survey

The statewide population remained stable at 247 territorial pairs in 2021, a difference of one nest from last year. We documented 222 pairs that were known active (meaning they laid eggs), an increase of 4 nests from 2021 (Figure 1); 25 pairs maintained nest territories but did not lay eggs. Eighty-two percent of nests, 177, were known to be successful in producing 296 young. The productivity rate for 215 known-outcome nests was 1.37 young per active nest, which is above the range of 0.9 to 1.1 young per nest for population maintenance. Seventeen percent of nests (37) nests failed to fledge young. Nest monitors documented nest failures and brood loss that occurred: 316 chicks were reported as nestlings but only 296 were documented at fledging. The number of nestlings lost could be higher as monitors often cannot see the number of chicks in the first weeks after hatching.

Most nests were located in the southern portion of the state, particularly within 20 km of Delaware River and Bay (Figure 2). The majority of nests were located on private land, while the rest were on state, federal, county, and conservation-dedicated lands. Disturbance was an issue at many nests; posting and regular surveillance by staff and nest monitors remained essential to increase the chance of success.

All documented nests and significant dates of the nesting season are listed in Table 1. Excluded from the nest table were 67 previously documented nest sites that were unoccupied and where no new nest could be found, or search effort was lacking (Table 2).

Figure 1. Number of bald eagle nests and young fledged in New Jersey, 1985–2021. Blue bars=number of nests, and blue lines=number of young produced each year. In 2021, 222 pairs were active and 296 young were produced.



Key to nest map in Figure 2.

#	Nest name	#	Nest name	#	Nest name	#	Nest name	#	Nest name
1	Alloway Lake	51	Corbin City	101	Keansburg	151	Newport A	201	School House
2	Alloways Cr C	52	Cranbury Neck	102	Kearny	152	Newport B	202	Seabreeze B
3	Alloways Cr D	53	Crosswicks Creek	103	Kettle Creek	153	Newport D	203	Seabrook
4	Alloways Cr E	54	Culvers Gap	104	Kirkwood Lake	154	Newport E	204	SFE Tower
5	Alloways Cr F	55	Daretown	105	Labar	155	Oberlin	205	Shark River
6	Audubon	56	Davis Mill	106	Lake Como	156	Oceanville	206	Sheep Pen Creek
7	Ballanger West	57	Deepwater-2	107	Lake Hopatcong B	157	Old Bridge	207	Silver Lake
8	BassettsBr/Wallkill	58	Delanco	108	Lake Lenape	158	Oldmans Creek	208	South River-Atlantic
9	Bay Point Road A	59	Dennis Creek	109	Lake Mohawk	159	Oradell Res	209	Stanton Station
10	Bay Point Road B	60	Devil's Gut	110	Linden	160	Overpeck Creek	210	Stillwater
11	Bayberry Kindle	61	Dias Creek East	111	Lit. Swartswood	161	Palisades B	211	Stow Creek A (No)
12	Beaver Dam	62	Dingman's Ferry	112	Lockatong	162	Palmyra Cove	212	Stow Creek E
13	Beesley Pt	63	Dividing Creek A	113	Long Bridge	163	Parker's Creek	213	Stow Creek F
14	Berrys Creek	64	Dividing Creek B	114	Lower Patcong	164	Parsonage Run	214	Stow Creek G
15	Bidwell Creek	65	Duffield Run	115	Mad Horse Cr	165	Patcong Cr B	215	Sunset
16	Blairstown	66	Duke/Raritan Rvr	116	Mad Horse Is	166	Paterson	216	Supawna A
17	Blue Anchor	67	DuPont/Raccoon	117	Makepeace Lk	167	Pedricktown	217	Supawna B
18	Bogota	68	Eagle Point	118	Manasquan Res	168	Pemberton	218	Swedesboro-Birch Cr
19	Boonton	69	Eagle Point-2	119	Manasquan Rvr	169	Pennington	219	Sylvan Lake Twr
20	Branchburg	70	East Point	120	Mannington A	170	Penns Neck A	220	Three Bridges
21	Brielle	71	Edgewater Park	121	Mantua Creek A	171	Penns Neck B	221	Timber Creek
22	Bulls Island	72	Edison/Kin-Buc	122	Mantua Creek B	172	Pennsauken CC	222	Tocks Island
23	Burlington Island	73	Egg Island	123	Manville	173	Picatiny	223	Toll Bridge
24	Camden County	74	Elmer	124	Marshalltown	174	Pilesgrove	224	Trenton
25	Canoe Brook	75	Elsinboro	125	Mattison Res	175	Point View Res	225	TSG
26	Canton Drain	76	Fairgrounds	126	Matts Landing 2	176	Pointers-Auburn	226	Tuck ROW
27	Carasaljo	77	Ferry Rd	127	Medford	177	Pointers-AuburnB	227	Turkey Pt A
28	Carmel	78	Five Mile Run	128	Mercer Oaks	178	Port Norris	228	Turkey Pt B
29	Cedar Hill	79	Flat Top	129	Merchantville	179	Poxono Island	229	Turnersville
30	Cedar Lake	80	Foampak	130	Merrill Creek B	180	Princeton	230	Union Lake
31	Cedar Run	81	Fortescue A	131	Mickleton	181	Prospertown	231	Upper Greenwood
32	Cedar Swamp Cr	82	Fortescue C	132	Milford	182	Quinton	232	Upper Millstone
33	Cedarville CT	83	FR-Stouts Creek	133	Millhurst	183	Quinton B	233	Upper Oldmans
34	Centerton	84	Gibbstown	134	Mond's Island	184	Quinton C	234	Upper Ramapo
35	Chatsworth	85	Great Bay Blvd.	135	Money Island	185	Rainbow Lake	235	Wading River
36	Chatsworth-2	86	Great Swamp	136	Mount Hope Lk	186	Rancocas Cr A	236	Wanaque A
37	Clinton	87	Grossup Tower	137	MR-Burcham	187	Ravine Lake	237	Wanaque B
38	Cohansey CC A	88	Hackett	138	MR-Dorchester	188	Readington	238	Wantage
39	Cohansey Greenwich A	89	Hackettstown	139	MR-Millville No	189	Repauno	239	Waretown
40	Cohansey Greenwich B	90	Hacksite	140	MR-Peek Pres.	190	Riggins	240	Warfle
41	Cohansey Hopewell East	91	Hansey Creek	141	MR-Sandplant	191	River Barge Pk	241	Wawayanda
42	Cohansey Hopewell West	92	Harmony River	142	MR-Somes Drive	192	River Edge	242	Whiting
43	Cohansey Loatman	93	Hartshorne Woods	143	Mt Airy	193	Roadstown	243	Woodbury Creek
44	Cohansey MidMarsh A	94	Heislerville	144	Mullica River	194	Robbins Lane	244	Woodbury GC
45	Cohansey MidMarsh C	95	Higbee	145	Nantuxent Cr A	195	Round Valley	245	Woodcliff Lake
46	Cohansey MidMarsh D	96	Horicon Lake	146	Nantuxent Cr B	196	Sadie Lane	246	Wreck Pond
47	Cohansey MidMarsh E	97	Husted's Landing	147	Nantuxent Cr D	197	Salem N	247	Yards Creek
48	Cohansey Ragged Island	98	Hyper Humus	148	Navesink B	198	Salem River		
					Navesink				
49	Cohansey Sheppards	99	Jacobstown	149	River/Res.	199	Sayres Neck A		
50	Cohansey Tindalls Ldg	100	Johnson Park	150	New Hampton	200	Sayres Neck B		

Figure 2a. Map of active (black circle) and territorial (x) bald eagle nests in NJ in 2021.

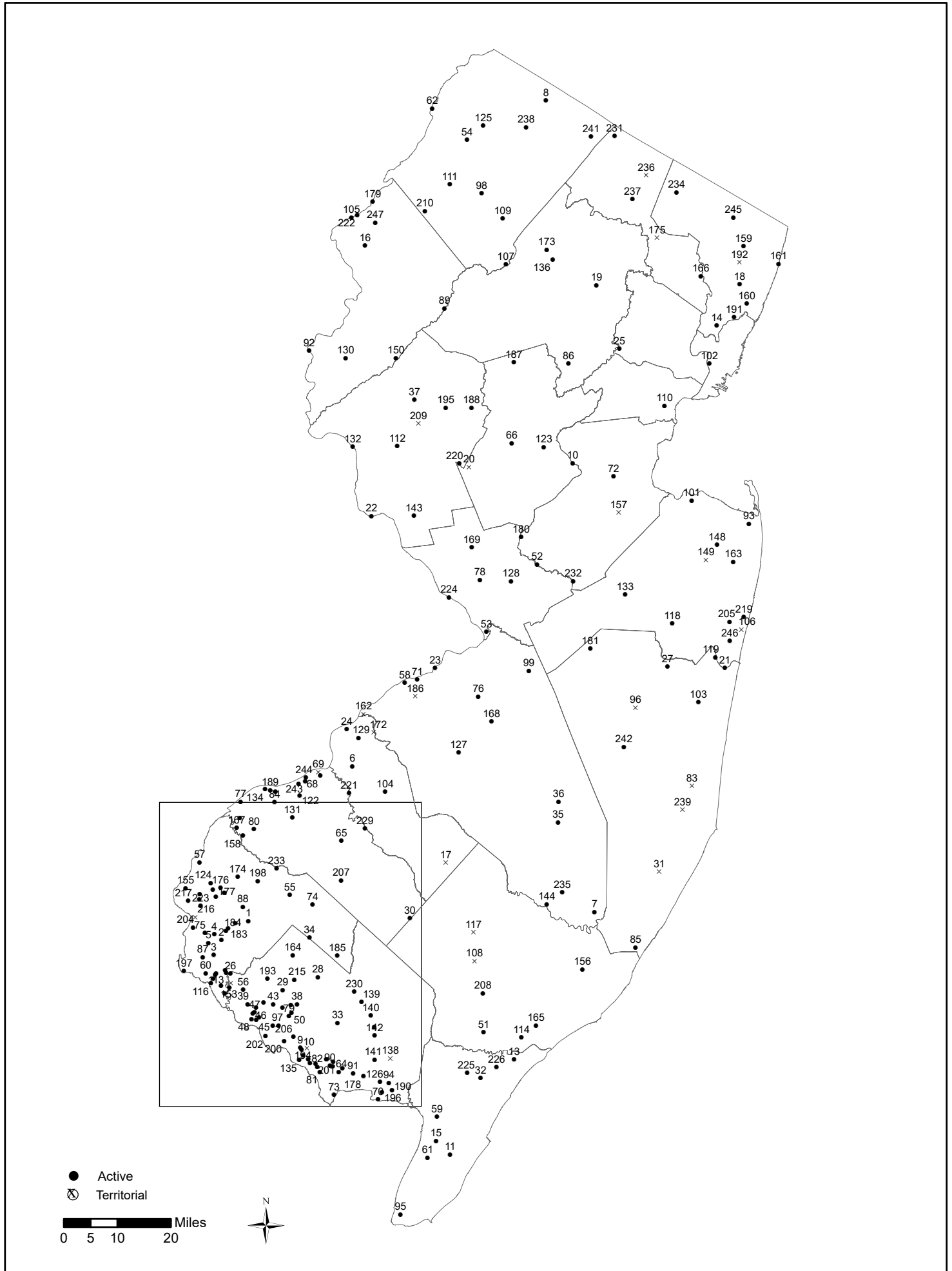


Figure 2b. Map of active (black circle) and territorial (x) bald eagle nests in NJ in 2021. Delaware Bay region view.

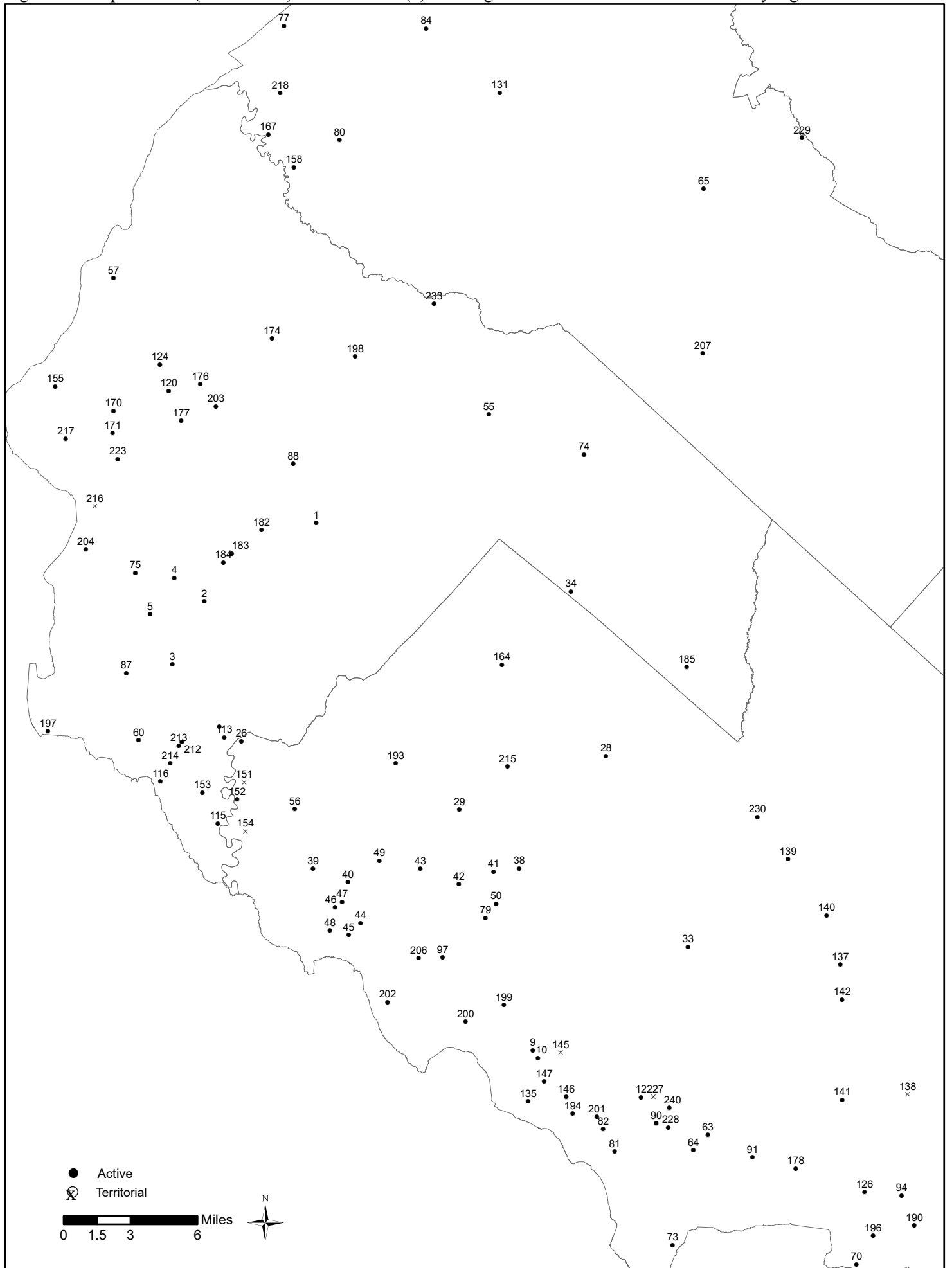


Table 1. Production and estimated dates for bald eagle nests in NJ, 2021. Some dates are unknown and left blank; others may be estimates or first-observed dates. T=Territorial.

NEST SITE	Incubation	Hatching	Banding	Fledging	No. Fledged	Failed date	Notes
Alloway Lake	3/9	4/17		7/2	1		
Alloways Creek C	2/6				0	4/3	
Alloways Creek D	2/12	4/7		6/11	2		
Alloways Creek E	1/27	3/4		5/23	1		
Alloways Creek F	1/20	2/26		5/23	2		
Audubon		~4/20		6/20	1		New pair
Ballanger Creek West	2/8	3/23		5/30	2		
Bassett's Bridge (Wallkill)	2/22				0	4/8	
Bayberry- Kindle	2/10	3/22		6/14	2		
Bay Point Road A	2/4	3/20		6/10	2		
Bay Point Road B	2/21	4/3		6/23	2		
Beaver Dam (osp)	2/4	3/20		6/2	1		
Beesleys Point	2/6	3/19		6/9	1		
Berrys Creek	3/2	4/7		6/24	2		New pair
Bidwell (East)	1/18	2/23		5/23	1		
Blairstown	2/14				0	3/20	New pair
Blue Anchor	T						
Bogota	3/1	4/5		6/30	2		
Boonton	1/30				0	2/28	
Branchburg	T						New pair
Brielle (Tr. Is.)	2/1	3/8		5/31	3		
Bulls Island	2/4	3/11		5/23	1		
Burlington Island	2/9				0	3/22	
Camden	3/8	4/12		6/28	1		New tree
Canoe Brook Reservoir	3/11	4/8		6/28	2		
Canton Drain	2/6	3/12		6/6	2		
Carasaljo	3/4	4/14		7/6	1		New pair: fledgling grounded 7/6, released at DC site 8/5/21
Carmel	1/17	2/25		6/2	1		
Cedar Hill (Cumberland)	1/19	3/4		5/30	2		
Cedar Lake (Gloucester)	1/22	2/24		5/19	1		
Cedar Run (Ocean)	T						New tree
Cedar Swamp Creek	2/20	3/25		6/16	3		
Cedarville Cell	1/9	2/21		5/22	1		New pair
Centerton	2/10	3/20		6/10	1		
Chatsworth				6/17	1		

Chatsworth B				6/23	1		New pair
Clinton	3/16	4/20		7/9	1		New pair
Cohansey (Greenwich A)	1/24	3/1		6/13	2		
Cohansey (Greenwich B)	2/6	3/13		6/27	2		
Cohansey (Hopewell East)	2/5	3/9		6/8	2		
Cohansey (Hopewell West)	2/5	3/9		5/25	1		
Cohansey (Loatman)	2/5	3/20		6/5	1		
Cohansey (Middle Marsh A)	2/6	3/12			0	<3/19	
Cohansey (Middle Marsh C)	3/7				0	4/7	
Cohansey (Middle Marsh D)	1/30	3/7		6/5	2		
Cohansey(Middle Marsh E)	2/26	4/1		6/26	2		
Cohansey (Ragged Island)	2/26	4/1		7/3	2		New tree
Cohansey (Sheppards Mill)	2/20	4/4		6/20	1		
Cohansey (Tindells Landing)	2/21	3/28		7/3	3		
Cohansey CC A	1/21	3/7		5/27	2		
Corbin City					0	3/10	
Cranbury Neck	2/19	3/26		6/10	1		
Crosswicks Creek	3/11	5/12		8/18	2		
Culvers Gap	3/12	4/21		7/11	2		
Daretown	1/22	2/26		5/17	1		
Davis Mill	1/31	3/11			0	4/20	Nest fell out of tree
Deepwater-2	1/29	3/10		6/1	3		
Delanco	3/3				0	4/5	
Dennis Creek	2/15	3/28		6/20	3		
Devil's Gut	2/5	3/12		5/23	2		
Dias Creek (East)	2/18	3/25			?		Unknown outcome
Dingman's Ferry	2/23	3/30		6/25	2		
Dividing Creek A	2/21	3/25		6/23	3		
Dividing Creek B	2/4				0	3/12	
Duffield Run	<3/17				?		Unknown outcome
Duke (Raritan River)	1/17	2/26		5/16	2		
Dupont/Raccoon Creek	2/20	3/29		6/23	2		
Eagle Point	3/27				0	4/23	
Eagle Point B	T						New pair
East Point	2/14	3/21		5/29	1		New nest location
Edgewater Park	2/24				0	4/5	
Edison tower (Kin-Buc)	3/15	4/24		6/27	2		
Egg Island	1/17	3/2	4/13	5/18	2		
Elmer	2/3	3/11		5/31	2		
Elsinboro	2/8				0	3/4	
Fairgrounds	3/6	4/10		6/26	1		

Far Hills/Ravine Lake	2/12	3/17		5/29	2		
Ferry Road	2/20	3/27		6/25	1		
Five Mile Run	2/23	3/30		6/13	1		
Flat Top	2/27	3/21		6/13	2		
Foampak	2/22	3/29		6/23	3		
Forked River	T						New nest location
Fortescue	2/21	3/25		6/23	2		
Fortescue C	1/9	2/21		5/12	1		
Gibbstown	1/14	2/28		6/2	2		
Great Bay Blvd.	1/27				0	2/1	Nest blew down
Great Swamp	1/27	3/4		5/23	1		
Grossup	2/5	3/12		5/30	1		
Hack Site	2/21	3/25		6/23	1		New pair
Hackett (Salem)	2/5	3/12		5/30	1		
Hackettstown	2/20	4/3		6/30	2		
Hansey Creek	2/2	3/9		5/25	2		
Harmony	<4/5	4/23		6/29	1		New pair
Hartshorne Woods Park	2/6	3/20		6/2	1		
Heislerville	2/16	3/25		6/17	1		New nest location
Higbee	2/23	4/8		6/25	1		
Horicon Lake	T						Nest fell in storm
Husted's Landing	1/30	3/7		6/5	2		
Hyper Humus	4/6	5/4		7/23	2		
Jacobstown	1/9	2/13		5/17	1		
Johnson Park	3/12				0	4/21	
Keansburg	3/9	4/15		7/3	1		New nest location
Kearny	2/26	3/28		6/25	2		
Kettle Creek	2/14	3/21		6/9	3		6/19 fledge found on ground: recovered at Tri-State; released 7/20
Kirkwood Lake	2/6	3/7		6/7	2		
Labar Island	2/5	3/12		5/31	1		New pair
Lake Como cell	T						
Lake Hopatcong B	3/5	4/19		7/5	2		
Lake Lenape	T						
Lake Mohawk		<5/18			2		
Linden	2/6	3/17		5/24	2		
Little Swartswood	2/14	3/18		6/3	1		
Lokatong Creek	3/2	4/13		6/29	2		New pair
Long Bridge	1/19	3/4		5/30	2		
Lower Patcong	2/3	3/14		6/10	3		
Mad Horse Creek	2/6	3/16			0	>3/16	
Mad Horse Island		<4/27					New pair; unknown outcome

Makepeace	T						
Manasquan Reservoir	2/3	3/13		6/6	2		
Manasquan River	2/13	3/20			0	4/19	
Mannington Meadows A	3/19	4/29			0	5/23	
Mantua Creek A	2/26	4/2		6/18	1		
Mantua Creek B	1/30	3/6		6/27	2		
Manville	2/25				0	4/12	
Marshalltown	2/12				0	3/20	
Mattison Reservoir	2/24	4/5		7/4	1		
Matts Landing 2	2/6	3/13		5/29	1		
Maurice River- Burcham	2/14				0	2/22	
Maurice River- Dorchester	T						New pair, found late in nesting season
Maurice River-Mauricetown		<3/29			0	5/9	
Maurice River- Millville North	2/21	3/9		6/26	1		
Maurice River- Peek Preserve	2/4	3/11		5/27	1		
Maurice River- Somes Drive	1/21	2/25		5/13	2		
Medford	2/15	4/12		7/5	2		
Mercer County GC	3/7	4/7		7/6	3		
Merchantville	3/9	4/13		6/29	3		New pair
Merrill Creek B	3/5	5/18		7/1	1		
Mickleton	2/21	4/2		6/12	2		
Milford	2/21	4/4		6/19	2		
Millhurst				6/19	2		New pair
Mond's Island	2/20	4/2		6/23	1		
Money Island	2/10	3/25		6/10	1		
Mount Hope Lake	3/5	4/9		7/16	2		
Mt Airy	2/4	3/12		6/6	3		
Mullica		<4/10			?		Unknown outcome
Nantuxent Creek A	T						
Nantuxent Creek B	2/4	3/20		6/2	1		
Nantuxent Creek D	2/26				0	3/20	
Navesink River	T						
Navesink B	2/15	3/22		5/28	1		
New Hampton	2/12	3/19		6/25	2		
Newport Meadows A	T						
Newport Meadows B	2/13	3/2		6/6	2		
Newport Meadows D	2/26			6/14	1		
Newport Meadows E	T						
Oberlin	2/21				?		Unknown outcome
Oceanville	3/6	4/10		7/19	3		
Old Bridge	T						
Oldmans Creek	2/8	3/22		6/14	1		

Oradell Reservoir	3/29	4/18			0	<4/18	New nest location
Overpeck Creek	2/12	3/23		6/7	1		
Palisades B	2/11	3/19		6/1	1		
Palmyra Cove	T						
Parkers Creek	2/17	4/12		6/12	1		
Parsonage Run	1/14	2/26		5/20	1		
Patcong Creek B	2/7				0	4/14	
Paterson	3/10	4/19		7/6	2		
Pedericktown	2/22	3/30		6/23	1		New pair
Pemberton	1/12	2/23		5/17	1		
Pennington	2/20	3/30		6/13	2		
Penns Neck A	1/27				0	3/4	
Penns Neck B (Lower)	3/4	4/23		7/6	1		
Pennsauken CC	T						Female in pair found dead 1/12/21
Picatinny/Lake Denmark				7/16	2		
Pilesgrove	1/24	3/4		5/30	2		
Pointers Auburn	2/12	3/19		5/23	1		
Pointers Auburn B	2/17	3/29		6/20	1		New pair
Point View Reservoir	T						New nest location
Port Norris	2/18	3/25		6/24	2		
Poxono Island	3/6	4/14		7/5	3		
Princeton	2/20	3/27		6/12	1		
Prosperstown	2/9	3/14		5/19	2		
Quinton	2/14	3/21		6/12	2		
Quinton B	2/4	3/16		6/2	1		
Quinton C	2/17	4/3			0	5/15	
Rainbow Lake	1/21	3/7			0	4/8	
Rancocas Creek	T						
Readington	3/5	4/5		6/27	2		New pair
Repauno	2/26	4/4		6/28	2		New pair
Riggins Ditch	1/23	2/27		6/12	1		New nest location
River's Edge	T						New pair
River Barge Park	3/4	4/13		7/6	2		
Roadstown	2/5	3/12			0	5/30	
Robbins Lane	2/10	3/20		6/18	2		
Round Valley	2/15	3/22		6/16	1		New nest location
Sadie Lane	1/14	2/28		5/8	2		
Salem Nuclear HTT					?		New pair; unknown outcome
Salem River	1/20	3/4		5/23	2		
Sayres Neck	1/24				0	3/9	
Sayres Neck B	2/10	3/20		6/10	1		
School House	1/21	2/26		5/22	1		

Seabrook	2/13	3/20		6/11	1		New nest location
Sea Breeze B	2/6				0	3/12	
SFE Tower	2/12	3/29		6/20	2		
Shark River		<3/14		7/1	1		New nest location
Sheep Pen Creek	2/6	3/13		6/19	2		
Silver Lake	2/4	3/5		6/11	2		
South River-Atlantic	2/23	4/1		7/1	1		
Stanton Station	T						
Stillwater	2/24				0	4/20	
Stow Creek A (North)	2/13	3/27		6/14	1		
Stow Creek E	1/19	3/12		6/6	2		
Stow Creek F	2/20	3/12		6/6	2		
Stow Creek G	2/20	4/15		6/14	2		
Sunset Lake	1/25	3/1		5/17	1		
Supawna Meadows A	T						
Supawna Meadows B	2/5	3/12		5/30	2		
Swedesboro-Birch Creek	1/21	3/2		5/28	2		
Sylvan Lake Tower	3/13	4/18		7/10	2		
Three Bridges	2/24	4/2	5/14	6/20	2		7/4 1 fledgling found on ground taken to Raptor Trust; released mid-August.
Timber Creek	2/14	3/21		6/6	2		
Tocks Island	3/3	4/7		7/5	2		New nest location
Toll Bridge	2/12	3/29		6/11	1		
Trenton	2/16	3/26		6/19	3		
TSG	2/6	3/21		6/6	1		
Tuckahoe C	3/4	4/2		6/14	1		New nest location
Turkey Point A	T						
Turkey Point B	1/15	2/21		5/7	1		New nest location
Turnersville	2/10	3/21		6/6	2		
Union Lake	1/30	3/6		5/22	1		
Upper Greenwood	3/4	4/8		7/1	2		New pair
Upper Millstone	2/4	3/13		6/10	1		
Upper Oldmans	3/4				0	4/12	
Upper Ramapo	2/28	4/4		6/20	2		New pair
Wading River A	1/6	2/10		4/28	2		
Wanaque A	T						New nest location
Wanaque B					3		
Wantage	2/28				0	4/4	
Waretown	T						
Warfle	2/21	3/25		6/23	2		
Wawayanda	3/8	4/8		6/30	3		New nest location
Whiting	2/23	3/31		6/29	2		

Woodbury Creek	3/20				0	?	
Woodbury Creek B	3/20				0	?	
Woodcliff Lake	2/24	3/30		6/13	1		
Wreck Creek Pond	2/13	3/6		5/30	2		New pair
Yards Creek	<3/28				?		Unknown outcome
Total Nests Monitored	247						
Total Nests Active	222						
Total Nests Active & Known Outcome	215						
Successful Nests	177						
Failed Nests	37						
Young Fledged	296						
Nests Active but Unknown Outcome	7						

Table 2. Previously documented eagle nests that were not used, or could not be documented, in 2021.

Allows Creek-B CE	Dias Creek West	Maurice River-Bluffs	Salem Chestnut
Bacons Neck	Egg Harbor	Maurice River- Bowkers	Seabreeze A
Ballanger Creek East	English Creek	Maurice River-Leesburg	Silver Lake Tower
BaysideA	Fenwick	Mason Point	Stathems Neck
Bayside B	Fishing Creek	Matt's Landing A	Shiloh Tower
Bayside C	Fort Dix	McClees Creek	South Dennis
Bear Swamp	Fortescue B	Memorial lake	Stonemeeting House
Belford	Fort Mott	Merrill Creek	Stow Creek B
Belleplain East	Galloway	Minisink Island	Stow Creek C
Birch Creek B	Goshen	Miry Run	Stow Creek D
Bridgeport	Hancock A	Montague Hollow	Stipson Island Area
Bridgeton	Hancock B	Nantuxent C	Tindall Island
Birch Pond (Passaic)	Harrisonville	National Park	Tindall Island B
Camden 2	Harris -Salem	Newport Meadows C	Tindall Island C
Canton Sheep Farm	Harvey Brook	Newton Reservoir	Tuckahoe A
Cedar Pond (Passaic)	Humphreys (Salem)	Oceanport	Tuckahoe B
Charlottesburg Res	JB-Lakehurst	Oyster Creek	Westmont
Cheesequake	Keasby's Creek	Palisades A	Westons Mill Pond
Cohansey (Hopewell Central)	Lake Hopatcong A	Parsippany	Wheaton Island
Cohansey CC B	Lake Musconetcong	Patcong Creek A	
Cohansey -Middle Marsh B	Lambertville Tower	Pennsville	
Cohansey -Teaburner	Lewisburg-Wantage	Pequest	
Cold Springs	Mad Horse WMA (tower)	Pigeon Swamp	
Deep Water 3A	Mannington Meadow C	Reaville	
Dennis Creek 2	Mannington Meadows B	Rio Grande	

2021 Season Highlights

Telemetry

Endangered and Nongame Species Program biologists, with the Conserve Wildlife Foundation, have attached satellite transmitters on several eagle fledglings over the past six years. These tagged eagles are helping to identify eagle habitat and overnight roost areas by their activity patterns. Depending on funding, we will continue to use satellite tags on NJ eagles to help us understand habitat use and eagle distribution. In 2021 we followed one eagle.

EagleTrax mapping shows the movements of all these eagles, and can be found on the Conserve Wildlife Foundation of NJ's [website](http://www.conservewildlifenj.org/protecting/eagle-trax/), <http://www.conservewildlifenj.org/protecting/eagle-trax/>

Duke

We have been following “Duke” on [NJ EagleTrax](#), since he fledged from the Duke Farms nest on June 15, 2019. He spent January in the Chesapeake Bay region, and in February-March he was ranging around northern MD and southern PA. On March 21, he made a big move up to NJ and was very close to his old nest. In April he ranged along the Susquehanna River in southern PA and the Chesapeake region in MD, but also made a quick trip north into PA and back to MD. Duke spent all of May, 2020, along the Susquehanna River near the Conowingo Dam. For the first week of June, 2020, he ventured to the Duke Farms area, then returned and spent the rest of the month along the Susquehanna River; remaining there July through October. In November, 2020, Duke returned to NJ and spent the next four months ranging around Somerset County, often close to his natal site. In March, 2021, he made a brief trip back to MD, then returned to central and northern NJ, but in April he returned to Conowingo Dam in MD just until May. He remained in central NJ May, 2021. He spent time in central/north Jersey and along the Delaware River. His satellite tag did not transmit data Sept 11-Dec 14 due to a battery failure, but the spotty data in mid-December showed his movements remained in the Somerset-Mercer (NJ) and Bucks (PA) county area. His movements can be followed on [NJ EagleTrax](#).

Notable Efforts

For a second year, ENSP ran a “soft release site” in Dividing Creek, where we provided supplemental food (fish and road-killed mammals) to support young eagles separated from their parents, giving them a safe area where other eagles would provide the social learning they needed. On June 19, a fledgling was found grounded with a leg fracture, most likely from the Kettle Creek nest. The bird was in rehab for enough time that his family had mostly dispersed from the nest site, so he was released at the Dividing Creek site on July 20. On August 4, a second juvenile was released at the site, after spending a month in rehab after fledging poorly from a Lakewood nest. At the release site, food was left daily for the first two weeks, then every 2-3 days, and trail cameras were used to document eagle use. Neither of the two released eagles were documented on trail cams in the following weeks. However, the cameras did identify two banded eagles (a 2020 fledgling who had been released in Dividing Creek, and a 2021 fledgling from a nest in Maryland); at least six young eagles and two adults were also photographed. The release site was monitored until the end of September.

The vast majority of eagle nests were monitored by an experienced corps of volunteers, now numbering over 130 people. Their efforts at regular nest observations provided the data for this report and the Division of Fish & Wildlife's database. The Conserve Wildlife Foundation of NJ worked to coordinate volunteers, maintain communications, and assist with the NestStory data collection system.

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 Batsto Lake, Oswego Lake, Indian Mills Lake, Williamstown, Evesham, Flemington/Raritan River, White Lake, Musconetcong River and middle Delaware River, all of which have year-round eagle activity. In addition, several inland reservoirs in the north hold promise for eagle nesting.

Resightings of Banded Eagles

Resightings of NJ green-banded eagles have increased over the years, as have eagles seen in NJ that were banded in other states. In Table 3, we list the eagles resighted in recent years in our state and, in some cases, surrounding states. These resightings, accumulated with the help of many photographers and birders, provide insight into eagle movements during the years between fledging and settling into a territory, as well as adult birds at a nest site.

The list of resightings in Table 3 is ordered by the bird's identifier, primarily the color band code. For some individuals, we have multiple resightings that are interesting in that they provide some history and a story of that bird's movements.

Table 3. Resightings of marked Bald Eagles in New Jersey and elsewhere, 2020-2021.

* Denotes a band that was resighted in previous years. Band code with a dash (-) has letter-number in line; code with a slash (/) has letter above the number.

Band #	Color Band (green unless noted)	Date Resighted	Reporter	Resight Location	Resight State	Band Origin	Band Date	Comments
0629-05440	A-85	10/29/21	C. Gesicki	Manasquan Res.	NJ	Galloway	5/22/01	F in Man Res pair
0629-45805	A-90	12/17/21	T. Ford	Milton	DE	Greenwich	5/10/02	Photographed on deer in ag field
0629-45810	A-95*	1/2/21	M. Pacheco	John Heinz NWR	PA	Mannington Meadows	5/1/02	
0629-45830	B-10	10/21/21	C. Gesicki	Lakewood	NJ	Tri-State Bird Rescue	7/14/21	M adult from Carasaljo pair, treated and released.
0629-46820	C/11*	5/4/21	L. Rapacki	Clinton	NJ	Princeton	5/17/06	M in Clinton pair
0679-01732	C/98*	1/27/21	D. Robertson	Salisbury	NY	Newton Reservoir	5/18/09	In nesting pair
0679-01745	D/10*	6/21/21	C. Alber	Wawayanda	NJ	Little Swartswood	5/5/10	M in Wawayanda
0679-01761	D/25*	12/5/20	R. Nicol	Lacey,	NJ	Manasquan River	4/20/11	Seen with D/49
0679-01766	D/29*	7/4/21	A. Panyi	Hammonton	NJ	Fort Dix	5/6/11	
	D/29*	12/19/21	D. Bittle	Hammonton	NJ	Fort Dix	5/6/11	
Missing	D/49*	12/5/20	R. Nicol	Lacey, Forked River	NJ	Manasquan River	4/20/12	Seen with D/25
0709-01582	D/92	4/19/21	B. Harrison	Whiting	NJ	Fort Dix	5/2/14	F in Whiting pair
0709-01583	D/93*	6/24/21	B. Allen	Fort Monmouth	NJ	Manasquan Res	5/2/14	M in Parker's Creek pair
0709-01589	D/99*	1/18/21		Allentown	NJ	Duke Farms	5/12/14	
0709-01617	E/27*	1/14/21	D. Denner	Bristol	PA	Prospertown	4/8/16	M in nesting pair
0709-01617	E/27*	10/31/21	K. Buynie	Burlington	NJ	Prospertown	4/8/16	M in nesting pair
0709-01621	E/31	2/6/21	R. Nicol	Forsythe NWR	NJ	Egg Island	4/21/16	
0709-06504	E/63	2/21/21	P. Ferry	Hackensack River	NJ	Galloway	5/1/18	
0709-06521	E/81	3/5/21	B. Wurst	Mercer eagle cam	NJ	Princeton	5/16/19	
0709-06522	E/82	12/5/20	R. Reynolds	Conowingo Dam	MD	Three Bridges	5/16/19	
0709-06523	E/83	12/17/21	D. Denner	Tulleytown, Bucks	PA	Three Bridges	5/16/19	
0709-06531	E/91	1/24/21	R. Nicol	Forsythe NWR	NJ	English Creek	5/2/20	
0709-06531	E/91	1/30/21	T. Rosa	Forsythe NWR	NJ	English Creek	5/2/20	
0709-06531	E/91	2/24/21	R. Basner	Forsythe NWR	NJ	English Creek	5/2/20	
0709-06539	E/99	5/1/21	C. Boswell	Waterford	NY	Sylvan Lake	7/30/20	Grounded after fledging, treated at Toms River Avian; released DC July 2020
0706-01697	none	4/2/21	M. Cassella	Wall Twp	NJ	Raptor Trust	5/19/16	Banded at Raptor Trust as a 3yr old (hatched 2013)
0706-01697	none	4/6/21	T. McKelvey	Shark River Inlet	NJ			Male in Lake Como pair

	L leg blue S/#2	3/20/21	F. DeBlasio	Culver Lake	NJ	NY		
	A/H (black)	11/20/21	P. Ferry	Edgewater	NJ	Easton, CT	5/13/2019	
0709-08255	R/7 (black)	11/8/21	P. Ferry	Edgewater	NJ	New Haven, CT	5/11/18	
0679-03668	S/3 (black)	3/23/21	D.Heatherington	Hunterdon	NJ	CT	5/16/16	F in Readington pair
	U/O (black)	2/10/21	L. Katz	Hackensack River	NJ	Easton, CT	5/11/09	
0679-01461	79/D (purple)	8/1/21	NJDFW	Dividing Creek	NJ	Patuxent River, MD	5/6/21	
0629-46272	P/11 (blue)	12/26/21		Bassetts Bridge	NJ	Sullivan Co, NY	3/5/05	Hatched 2002, banded as NY wintering bird.
	L leg green E?	2/27/21	R. Nicol	Forsythe NWR	NJ			3 rd year plumage
	R leg green	2/4/21	L. Katz	Hackensack River	NJ			2 nd year plumage
	R leg green	1/2/21	S. Matson	Allenton	NJ			
	R leg green?4	12/21/20	A. Statuto	Goshen	NY			
	R leg green	12/22/21	P. Brennan	Franklin Lakes	NJ			
	Orange(left)	11/7/21	L. Katz	Hackensack River	NJ			Hatch year

Photos of some resighted eagles:

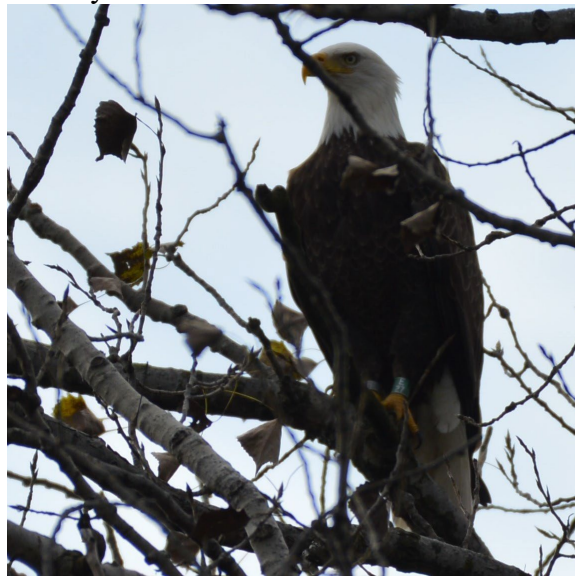
E/99 (origin 2020 Dividing Creek) observed in Waterford, NY in April 2021, by C. Boswell



D/29 (origin 2011 Fort Dix) seen in Hammonton in July 2021 by A. Panyi.



E/27 (origin 2016 Prospertown) seen in January and October 2021.



E/31 (origin 2016 Cumberland Co) seen at Forsythe by R. Nicol.



E/82 (origin Three Bridges in 2019) seen in Dec 2020 at Conowingo Dam. R. Reynolds.



S/3 (origin CT in 2016) observed March 2021 by D. Hetherington in Whitehouse.



Recoveries of Eagles in New Jersey

During this reporting period, 58 eagles were recovered, and of those, ten were [treated and released](#). The remaining birds were found dead, died while in care, or were euthanized for these reasons: electrocution (7), impacts with vehicles (6), impact with train (3) impact trauma (3), fell from nest (1); West Nile Virus (3); eagle-eagle combat (5); poisoning (2), lead toxicosis (2); and unknown circumstances (16) (Table 4). Electrocution is a significant risk for bald eagles everywhere, because power distribution relies on smaller poles where “hot” wires are often positioned less than six feet distant where an eagle’s wingspan can result in wire connections. ENSP works with electric suppliers (Atlantic Electric, PSE&G, and JCP&L) to retrofit poles and mark lines where they are high risk, and we use data on eagle nests, roosts, and foraging areas to identify priority sites for those corrections. Among the eagles that died from undetermined cause, disease (like West Nile Virus) and lead exposure could be involved in deteriorated condition.

Table 4. Bald eagles recovered injured or found dead in this project year.

Date Found	Location Found	Facility	Origin	Age-Sex	Details
9/5/20	Bordentown, Burlington	Mercer Co Wildlife		AD-F	Vehicle impact; euth due to injuries
12/5/20	Watkins Mill Road	Tri-State Bird Rescue		AD -F	Died due to old injuries
12/7/20	Cumberland Co. Landfill	Tri-State Bird Rescue		HY	Poisoning
12/8/20	Skillman, Somerset	NJDFW- Assunpink		AD	Undetermined
12/15/20	Route 55, Cumberland	NJDFW- Tuckahoe		AD	Vehicle impact
1/12/21	Pennsauken CG, Camden	Tri-State Bird Rescue	Oradell 2011	AD-F	Eagle combat; found dead under nest. Band 0679-01777
1/17/21	Hopewell, Cumberland	NJDFW-SRO		4yr-F	Found dead; vehicle impact
1/29/21	Millville, Cumberland	Tri-State Bird Rescue		AD	Vehicle impact; euth due to injuries
1/6/21	Cecil Co., Maryland		Man. Res 2007	AD	Eagle-eagle combat; band C/34
2/24/21	Riverline RR, Camden	Tri-State Bird Rescue		AD-M	Impact with train
2/26/21	Elsinboro, Salem	Tri-State Bird Rescue		AD-M	Found dead, electrocution
3/2/21	Monroeville, Gloucester	Tri-State Bird Rescue		4yr-U	Found dead; electrocution
3/6/21	Clinton, Hunterdon	NJDFW-NRO	Princeton, 2007	AD-F	Impact with train
3/7/21	Upper Deerfield, Cumb.	Tri-State Bird Rescue		AD-M	Impact with vehicle
3/14/21	Franklinville, Gloucester	Tri-State Bird Rescue		AD-F	Trauma; euth due to injuries
3/17/21	Little Egg Harbor, Ocean	NJDFW-Tuckahoe		AD-M	Found dead; electrocution. clutching rabbit
3/20/21	Vineland, Cumberland	Tri-State Bird Rescue		AD-F	Grounded; died 3/23 lead toxicosis
3/20/21	Hopewell, Cumberland	NJDFW		AD	Found dead near nest; band C/74
3/26/21	Pennsauken, Camden	Tri-State Bird Rescue		AD	Injured, badly fractured wing and possible WNV; euthanized.
3/20/21	Hopewell Twp, Cumb.	NJDFW-SRO	Greenwich 2009	AD-M	Impact trauma
4/2/21	Willow Creek Winery, Cape May	NJDFW-Tuckahoe		AD-F	Impact with vehicle
4/5/21	Round Valley Res., Hunterdon	NJDFW-NRO		AD-?	Carcass decomposed; undetermined
4/19/21	Springfield Twp., Burling.	Mercer Co Wildlife		3yr-F	Released 4/24/21
4/28/21	Dix WMA, Cumberland	Tri-State Bird Rescue		AD-M	Possible combat wounds; released 7/27, banded B-11

5/5/21	Phillipsburg, Warren	NJDFW-NRO		AD-M	Impact with train
5/13/21	Lakewood, Ocean	TRAC/Tri-State Bird Rescue		AD-M	Released 7/14, banded B-10
5/15/21	Goshen, Cape May	Tri-State Bird Rescue		AD-F	Euth 5/15 due to poor condition
5/30/21	Paulsboro, Gloucester	Carcass not recovered		AD	Found dead, electrocution
5/31/21	Charlottesville Res., Passaic	NJDFW-NRO		AD-F	Found dead, electrocution
6/1/21	Edison, Middlesex	Raptor Trust		4yr	Euth due to injuries; undetermined
6/18/21	Toms River, Ocean	TRAC/Tri-State Bird Rescue	Kettle Creek	HY-F	Grounded > fledging, released 7/20 at Dividing Creek banded H/07
7/4/21	Three Bridges, Hunterdon	Raptor Trust	Three Bridges	HY-M	Grounded > fledging, released 8/10 near nest site, banded H/05
7/6/21	Lakewood, Ocean	Toms River Avian	Carasaljo	HY-M	Grounded > fledging released 8/4; banded H/12
7/9/21	Sandy Hook, Monmouth	Carcass disposed		HY	Undetermined
7/13/21	Mannington, Salem	Tri-State; USFWS		3y	Poisoning; died after 24hr.
7/14/21	Paterson, Passaic	Raptor Trust		HY	Found dead under nest
7/15/21	Flemington, Hunterdon	Tri-State Bird Rescue		Sub-F	<i>Impact trauma</i>
7/22/21	Galloway, Atlantic	USFWS		HY	Found dead, electrocution
8/2/21	Cape May Co Landfill	NJDFW		4y-U	Grounded, euth due to poor condition
8/8/21	Port Elizabeth, Cumberland	Tri-State Bird Rescue		AD-M	Found injured on marsh; euth due to injury
8/17/21	Salem Co Landfill	Tri-State Bird Rescue		AD-F	Poisoning; released 8/19, banded B-12
8/17/21	Near Salem Landfill, Salem	Tri-State Bird Rescue		HY-	Poisoning; released 8/23 Mannington Meadows, banded H/13
8/17/21	Almond Rd, Salem	NJDFW-Tuckahoe		AD	Undetermined
8/19/21	Lawrence Harbor, Monmouth	Toms River Avian/ Tri-State Bird		HY	Grounded fledgling; euth 9/16 due to injuries suspected by fall from nest
8/21/21	Culver Lake, Sussex	NJDFW-NRO		HY	Found dead, electrocution
9/13/21	Pittsgrove, Salem				Euthanized; undetermined
9/14/21	Parkway, Cape May	Tri-State Bird Rescue		5-M	Released 9/23/21 TSBRR; banded B-14
9/18/21	West Orange, Essex	Raptor Trust		AD	Eagle combat; died in transport
9/28/21	Bevans WMA, Cumber.	Tri-State Bird Rescue		HY-U	Found under powerline; euth.
10/5/21	Hampton, Hunterdon	Raptor Trust		2y	Euth 10/10/21; West Nile Virus
10/7/21	Cedarville, Cumberland	NJDFW-SR0		AD	Found injured and died before capture
10/18/21	Dupont, Gloucester	Tri-State Bird Rescue		HY	Euthanized 10/19; West Nile Virus
10/24/21	Mirror Lake, Burlington	NJDFW-CRO		AD	Found dead; West Nile Virus
11/30/21	Belleplain, Cape May	NJDFW	Belleplain 2004	AD	Found dead, eagle combat. Band B/76
12/8/21	Columbia, Warren	Raptor Trust		AD	Died on arrival at TRT; lead toxicity, combat wounds.
12/9/21	Southampton, Burlington	Tri-State Bird Rescue		AD	Euthanized 12/9
12/11/21	Mullica Hill, Gloucester	Tri-State Bird Rescue		AD-M	Found injured: released 12/20/21
12/17/21	Gloucester City, Glouc.	Cedar Run		AD-F	Euth: 2/17/21; eagle to eagle combat

Our sincere thanks to everyone who pitched in to help rescue, transport, and treat eagles!

Those interested in helping, please look for the new Raptor Alliance group! Organization and training will be developed in 2022. Follow at www.NJRaptors.org.

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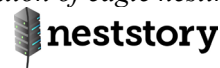
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"Duke" photographed in December 2021 in Somerset County, by B. McKee.