

**New Jersey Department of Environmental Protection
Fish & Wildlife**

Dave Golden, Assistant Commissioner

Jason Hearon, Assistant Director

Kathleen Clark, Chief

Endangered and Nongame Species Program

**Peregrine Falcon Research and
Management Program in New Jersey
2024**

Prepared by Melissa Roach and Kathleen Clark

Project Staff:

Kathleen Clark, Melissa Roach, Zac Bohm, and Dr. Erica Miller

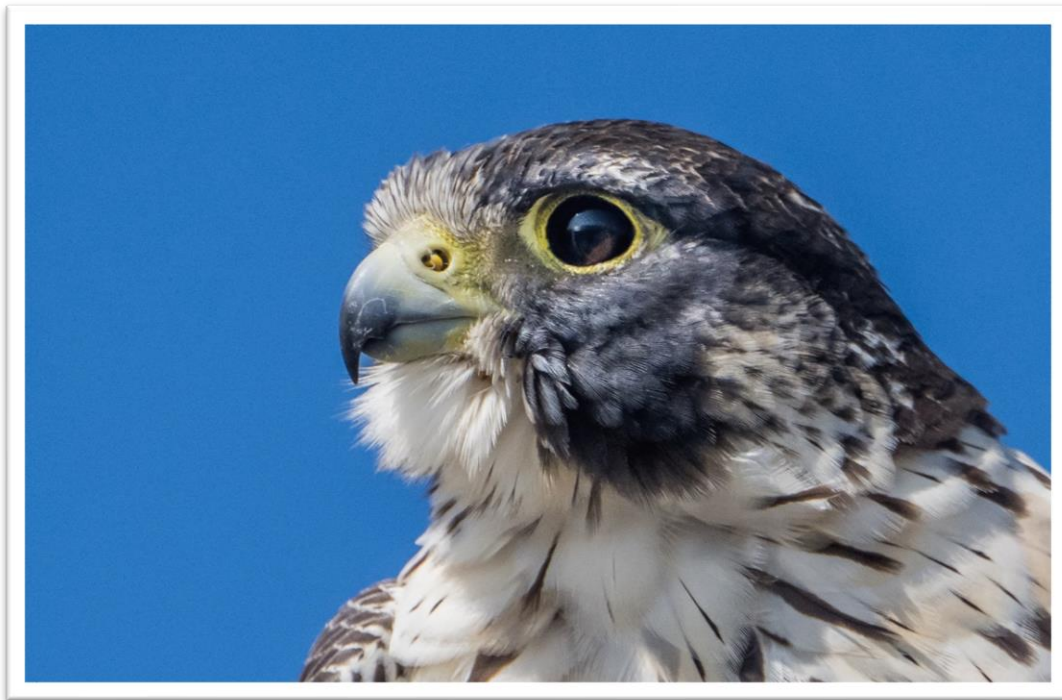


Photo by Rich Nicol



Program Objective: To enhance the population of the Peregrine Falcon (*Falco peregrinus anatum*), restoring them to a self-sustaining level throughout their range in New Jersey.

Summary of Results

The 2024 New Jersey Peregrine Falcon population dipped again this year with 37 pairs occupying sites and 32 known to lay eggs. Twenty of the 32 pairs (63%) were successful, producing 58 young, for a productivity rate of 1.81 (known) young per active nest (Table 1). A summary of data collected during the 2024 nesting season follows:

- The Delaware River region (Salem County and north) had 5 occupied sites, all of which were active (i.e., confirmed to have laid eggs), producing 12 young and a productivity rate of 2.40 young/nest. This region had the highest success rate at 80%. All nests were located on bridges.
- Urban nests consisted of 9 occupied sites with 7 active pairs, producing 14 fledglings and a productivity rate of 2.00 young/nest. These nests, located on buildings and bridges, had a success rate of 71%.
- The coastal region had 13 occupied sites with 12 active pairs that produced 1.83 young/nest. The coast had 12 of the state's 32 active nests (37%) and produced 41% of the young produced statewide, but historically the coastal nests have produced the majority of fledglings annually. Most coastal nests are on towers or buildings, but there was one bridge nest this year.
- Natural and quarry sites (all located in northern NJ) had 10 occupied sites with 8 active pairs that produced 10 fledglings for a productivity rate of 1.25 young/nest. Natural sites had the lowest rate at only 38% successful nests.

Adult turnover (the replacement of known individuals in nesting pairs) between 2023 and 2024 was high this year at 48% and especially so in the coastal region, where 24 of 42 individuals were missing (63%). Average turnover rate is between 15% and 20% in any year. There were three coastal nest sites that are normally active but went unoccupied.

We were able to band 30 of the 58 young produced with an aluminum federal band and a bicolor (black over green) band engraved with a field-readable alpha-numeric code.

The [webcam](#) on the roof of Union County courthouse provided excellent views, and [cameras](#) on two Delaware River bridges were also active.

ENSP biologists monitored peregrine sightings near beach-nesting bird colonies throughout the season, on the lookout for individual peregrines that resided for extended periods. The ENSP is committed to monitoring problem situations and devising corrective action to protect sensitive beach-nesting bird populations from predation.

Resightings

We used trail cams, cameras, and optics to read the leg bands on 52 nesting adults. There were 14 adults who were either unbanded or undetermined and thus unidentifiable to origin and age. The oldest individual was a male at 14 years of age. The median age of males and females was 5 and 8, respectively. The information that these identifications provide is valuable for relating peregrine origin and age to nest success, site fidelity, and turnover rate in the population.

In addition to resightings at NJ nest sites, we have reports of peregrines sighted here and elsewhere:

Table 1. Resightings of banded Peregrine Falcons reported in 2024.

Color Band	Date resighted	Reporter	Location	State	Band Origin	Band Date	Comments
BE/11	4/15/2024		Natural Site C-11	NJ	Alpine	5/23/2017	
BE/45	12/1/2023	M. Gorman	Great Bay Blvd, Tuckerton	NJ	Stone Harbor	6/9/2018	
"	2/23/2024	J. Verhagen	Forsythe - Barnegat Tower	NJ	Stone Harbor	6/9/2018	seen on nest camera
BH/04	2/1/2024	K. Clark	Tacony-Palmyra Bridge	NJ	Betsy Ross Bridge	5/17/2021	seen on nest camera. With BM/50
"	7/13/2024	K. Clark	Tacony-Palmyra Bridge	NJ	Betsy Ross Bridge	5/17/2021	seen on nest camera
BH/36	4/28/2024	D. Neugebauer	Wilmington	DE	Walt Whitman Bridge	5/24/2022	nesting at 11th and West Streets
BH/39	unk/2024	K. McGorry	Penn Warner Club	PA	Walt Whitman Bridge	5/24/2022	
BH/41	11/7/2023	D. Glogoza	Farnham Park, Camden	NJ	Tacony-Palmyra Bridge	5/27/2022	
"	11/15/2023	D. Glogoza	Farnham Park, Camden	NJ	Tacony-Palmyra Bridge	5/27/2022	
"	12/11/2023	D. Glogoza	Farnham Park, Camden	NJ	Tacony-Palmyra Bridge	5/27/2022	
"	2/29/2024	K. Clark	Tacony-Palmyra Bridge	NJ	Tacony-Palmyra Bridge	5/27/2022	seen on nest camera. BM/50 chased away.
"	5/25/2024	K. Clark	Tacony-Palmyra Bridge	NJ	Tacony-Palmyra Bridge	5/27/2022	seen on nest camera
BH/45	12/12/2024	D. Nickerson	Margate	NJ	Seaview	6/6/2022	vehicle strike, rehab at Mercer Wildlife
BH/65	12/10/2023	R. Nicol	Forsythe NWR	NJ	Atlantic City	5/25/2023	
"	12/15/2023	E. Norman Jr	Forsythe NWR	NJ	Atlantic City	5/25/2023	
BH/83	6/23/2023	M. Bahramy	Cliffside Park	NJ	Cliffside Park	6/14/2023	Winston Drive
"	9/28/2023	M. Yates	Assateague Island	VA	Cliffside Park	6/14/2023	Recaptured at a migration banding station
BH/85	1/23/2024	P. Jaime	Coral Gables	FL	Sedge Island	6/25/2023	
"	6/18/2024	T. Beaty	Holgate	NJ	Sedge Island	6/25/2023	on Holgate water tower
BH/96	7/1/2024	R. MacIntyre	Forsythe NWR	NJ	Atlantic City	5/20/2024	
"	8/6/2024	P. Mango	South Cape May Meadows	NJ	Atlantic City	5/20/2024	
"	10/14/2024	T. Klock	Ocean City	NJ	Atlantic City	5/20/2024	
"	11/10/2024	M. Peterson	Forsythe NWR	NJ	Atlantic City	5/20/2024	
"	12/12/2024	R. Nicol	Forsythe NWR	NJ	Atlantic City	5/20/2024	
BK/00	9/28/2024	R. Nicol	Forsythe NWR	NJ	Swan Bay	6/5/2024	
"	10/12/2024	R. Nicol	Great Bay Blvd, Tuckerton	NJ	Swan Bay	6/5/2024	
"	10/23/2024	R. Nicol	Forsythe NWR	NJ	Swan Bay	6/5/2024	
"	11/17/2024	R. Nicol	Forsythe NWR	NJ	Swan Bay	6/5/2024	
BM/27	2/29/2024	J. Joyce	Rittenhouse	PA	Newark	6/8/2019	with male 72/AM
BM/37	6/8/2024	P. Cole	Brielle	NJ	Atlantic City	5/15/2020	
BM/83	9/24/2023	S. Myers	Virginia Beach	VA	Atlantic City Sheraton	6/19/2021	Beach Garden Park

Color Band	Date resighted	Reporter	Location	State	Band Origin	Band Date	Comments
BN/12	8/12/2023	M. Gorman	Forsythe NWR	NJ	Ocean Gate	5/6/2023	
BN/18	3/25/2024	M. Farina	Long Beach	NY	Stone Harbor	5/21/2023	nesting with male 32/AM
BN/29	1/26/2024	K. Clark	Forsythe - Barnegat Tower	NJ	Swan Bay	6/1/2023	seen on nest camera 1/26, 2/1, and 2/3
BN/39	5/24/2024	M. Minutolo	Ocean City Welcome Center	NJ	Bonnet Island	6/7/2023	
BN/42	2/15/2024	L. Snipper	Fort de Soto	FL	Seaview	6/14/2023	
BN/51	9/27/2024	M. Yates	Assateague Island	MD	Atlantic City	5/20/2024	
BN/52	6/11/2024		Atlantic City	NJ	Atlantic City	5/20/2024	
BN/54	9/2/2024	R. Nicol	Forsythe NWR	NJ	Swan Bay	6/5/2024	
59/CE	3/31/2024	T. Chung	State Line Lookout	NJ	Staten Island, NY	5/21/2022	
"	4/26/2024	M. Faizan	Natural Site	NJ	Staten Island, NY	5/21/2022	
72/AM	2/29/2024	J. Joyce	Rittenhouse	PA	Paulsboro	5/26/2015	
73/BX	10/19/2024	K. Soehnlein	State Line Lookout	NJ	Yorktown Heights, NY	7/1/2021	

Mortalities

Since the 2023 report, we've learned of 11 peregrine mortalities. Causes of death vary or are unknown but include: combat trauma, vehicle and airplane strikes, electrocution, and HPAI.

Table 2. Mortalities of banded Peregrine Falcons reported in 2024.					
Date Found	Location Found	Age	Sex	Origin	Comments
5/9/2023	Manhattan, NY	10	F	Elizabeth	52/AN banded 5/22/2013. Found dead in nest box
6/29/2023	Seaview, NJ	HY	F	Seaview	BN/41 banded 6/14/2023. Found dead (electrocuted)
7/6/2023	Rt. 72 bridge, Stafford, NJ	HY	F	Bonnet Island	BN/37 banded 6/7/2023. Vehicle strike
1/26/2024	Surf City, NJ	16	F	Milford, CT	V/26 banded 5/15/2008 in CT. Died in rehab; likely PEFA combat
1/27/2024	Cape May, NJ	9	F	Somers Point	98/AN banded 5/28/2015. Found dead
2/xx/2024	Wading River, NY	13	F	Elizabeth	05/AN banded 5/25/2011. Found dead
2/6/2024	Stone Harbor, NJ	10	F	Hempstead, NY	07/BC banded 5/15/2014 in NY. Found dead. Likely trauma
4/16/2024	Ocean Gate, NJ	9	F	Num's Island, NY	39/BC found dead in nest. HPAI confirmed
6/4/2024	Bayside State Prison, NJ	9	F	Hempstead, NY	40/BC banded 5/18/2015 in NY. Found dead. Cause unknown
8/6/2024	McGuire Air Force Base, NJ	HY	M	Elizabeth	BH/93 banded 5/20/2024. Killed by airplane strike
8/22/2024	New York	HY	M	Englewood	BH/87 banded 5/13/2024. Found dead

Conclusions

The peregrine population in NJ suffered some losses in 2024 and saw a success rate of 63%, much lower than 2023's success rate of 83%. While the number of active nests was only slightly lower than the previous year, there was a significant decrease in the number of young fledged. The productivity rate in 2023 was 2.34 young/nest but just 1.81 in 2024. There was also unusually high adult turnover between 2023 and 2024, which is likely related to mortality caused by HPAI. Several nest sites were left unoccupied, and there were two cases of immature birds taking up territories, suggesting that the floating population of adults available to nest was lower than normal.

As in previous years, the coastal region had the most active nests with 12. However, the coastal area population had the highest turnover of nesting adults between 2023 and 2024, and three unoccupied nests that had a long history of occupation and success. Unlike previous years, coastal nests had the third-lowest success rate at 67%, with only 8 of 12 sites producing young. Coastal productivity rate was also lower, but that rate was confounded by active management by NJF&W. Staff reduced the clutch size at three nests that are near endangered bird colonies to reduce the threat of predation on those colonies. This was done under a USFWS permit and before seeing evidence of an impact from HPAI, and will be reevaluated going forward.

The inland Delaware River region had the highest success and productivity rates at 80% and 2.40 young/nest, respectively. All five active nests were on bridges, two of which have cameras to monitor progress. In total, these nests produced 12 young.

Urban nests saw a noticeable increase in success rate (71%) and productivity (2.00 young/nest) when compared to 2023.

As in previous years, natural cliff nests saw the lowest success and productivity rates at 38% and 1.25, respectively. These are nests that are not only difficult to monitor but also difficult to manage or improve site conditions.

While we saw a decrease in numbers this year, our data still support that proper management of nest sites on buildings and bridges is important to annual success statewide, and providing safe, undisturbed nesting sites continues to be key for a stable and productive population. The impact of HPAI on peregrines is cause for concern and will be a consideration for population monitoring, disease testing, and management decisions in 2025.

Staff and project volunteers continued to use our online data management system, *NestStory*[™]. NestStory enables us to track all nests through the nesting season and to track individually-marked birds resighted here and elsewhere. We documented banded birds wherever possible which enabled us to determine the increase in adult turnover. Banding and resighting data will be used to study the population demography and dispersal.

Our Thanks To: Volunteers who protect and watch over peregrine falcons in New Jersey, including Beth Balbierz, Dan Brill, Frank Budney, Bonnie Coe, Kelly Connolly, Anita Coogan, Dave Demsey, Muhammad Faizan, Keara Giannotti, Mike Girone, Len Greer, Herb Houghton, Kevin Keith, Betty Ann Kelly, Mary Kostus, Mary Lenahan, Jack McCormack, Barb & Rick McKee, Kristina Merola, Peter Monti, Kristen Nicholas, Rich Nicol, Donna & Heiki Poolake, Martin Rapp, Karen Rankin-Baransky, Steve Sachs, Vicki Schmidt, Frank Sencher, Chris Takacs, Alex Tongas, Don Torino, Matt Tribulski, Rick Weiman, Jim Wright; Delaware River Port Authority staff (Bill Nelson, Bill Stricker, Joe McAroy, Joe Riehs); Palisades Interstate Park Commission and the Palisades Interstate Parkway Police; Karen Inzillo, Patricia Bertsch and staff at Union County and the Union County Board of Commissioners;

the Burlington County Bridge Commission; Mercer County Park Commission; Palmyra Cove Nature Center; AC Atlantic Club; the Port Authority of NY/NJ; Barbara Deen at 101 Hudson Street; Dave Demsey and staff at PBF Energy; Tina Shutz and Bruce Hawkinson of NJDOT; Seaview Resort in Galloway; Atlantic City Water Authority; Atlantic City Golden Nugget; NJ Natural Lands Trust; NJ Dept of Corrections; Montclair State University; Johnson & Johnson, New Brunswick. We thank Northside Jim for telling the stories of coastal falcons at [https:// thereadings.org](https://thereadings.org). We also appreciate all those who photograph and report banded birds to www.reportband.gov !

Thanks to the professionals at The Raptor Trust, Tri-State Bird Rescue & Research, Mercer County Wildlife Center, Toms River Avian Care, and Barnegat Animal Clinic. Special thanks to Dr. Erica Miller for veterinary/toxicological expertise. And to our climbing crew: John Heilferty, John Gumbs, Mark Dickey, and Will Testa.

Conserve Wildlife Foundation of NJ supports the Peregrine Falcon Project.
Thanks to [Little Egg Foundation](#) for their **NestStory** program and database for data storage and analysis.

This project was funded by people who support the NJ Tax Check-Off for Wildlife, purchase Conserve Wildlife license plates, and donate to Conserve Wildlife Foundation of NJ.

Funds were also provided by U.S. Fish and Wildlife Service's *Wildlife and Sport Fish Restoration Program*.

This project is funded by people who donate to the NJ Tax Check-Off for Wildlife and buy Conserve Wildlife license plates, and by the U.S. Fish and Wildlife Service's Wildlife and Sportfish Restoration Program



Little Egg Foundation provides the support for NestStory, the nest tracking program that allows real-time compilation of eagle nest data in NJ.

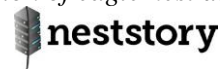


Table 3. Site-specific results of peregrine falcon nesting in New Jersey by region, 2024. Abbreviations: FL=Fledgling, NL=Nestling, F=Female, M=Male.

Site Name	Occupied	Active	Eggs	Young Hatched	Young Fledged	2024 Comments	Prod. Rate	Succ. %
Allenhurst	Y	Y	4	4	4	4 FLs seen near water tower; exact nest location unk		
Atlantic City - Water tower	Y	Y	4	4	4	banded 4 NLs		
Atlantic City - Sheraton	N	N						
Bayside Prison Water Tower	Y	Y	U	3	3	banded NLs; Adult F (40/BC) found dead on 6/4.		
Drag Island 1	Y	Y	4	1	1	clutch reduction; banded NL		
Forsythe - Barnegat Tower	Y	Y	0			new pair (1Y old F & 2Y old M); didn't breed, just courtship		
Forsythe - Seaview	Y	N	0			F (BD/40) seen on trail camera, no male ever joined her		
Golden Nugget	N	N	0			no activity at nest or on trail cam		
Hilton/The Grand Casino/Atl Club	N	N	0			construction; ledges cleared		
Marmora WMA	Y	Y	4	1	1	clutch reduction; banded NL		
Ocean City-Longport Bridge	U							
Ocean Gate	Y	Y	4	4	4	Adult F (39/BC) dead in nest 3/27 ; new pair after that: F (BD/40) from Seaview nest and M (26/AM) from Sedge nest;		
Route 35 Bridge-Belmar	U							
Route 72 /Bonnet Island	N	N						
Rumson-Oceanic Drive Bridge	U							
Sedge Island WMA	Y	Y	2	0	0	depredated by raccoon; M (26/AM) left & renested at OCGA		
Stone Harbor	Y	Y	3	1	0	clutch reduction; cam suggests NL died soon after hatch		
Swan Bay WMA	Y	Y	4	3	3	banded NLs		
Tuckahoe WMA	Y	Y	6	0	0	first clutch (4 eggs) failed after M (78/AM) disappearance ; second clutch (2 eggs) with new male (78/BM) also failed		
Rt 70 Manahawkin Bridge	Y	Y	U		2	unknown until Don B picked up 2 fledglings near the bridge		
Wildwood Crest-Grand Condo	U							
SUBTOTAL COASTAL	13	12		21	22	1.83	1.83	67%
Ben Franklin Br.	N							
Betsy Ross Bridge	Y	Y	3	3	3	construction infrastructure limited nest access this season		
Bordentown Rt 295	Y	Y	U	3	3	FL was rehabbed at Mercer (BN/55), then fostered at Elizabeth, then rehabbed again at Raptor Trust		
Burlington-Bristol Br.	Y	Y	4	1	0			
Salem Nuclear plant	U							
Tacony-Palmyra Br.	Y	Y	4	2	2	banded NLs		
Walt Whitman Bridge	Y	Y	4	4	4	NJ box=4 eggs, PA box=3 eggs; banded 4 NLs on NJ side		

Site Name	Occupied	Active	Eggs	Young Hatched	Young Fledged	2024 Comments	Prod. Rate	Succ. %
SUBTOTAL DELAWARE RIVER	5	5		13	12	2.40	2.40	80%
Natural Site C-1	Y	Y	3	0	0			
Natural Site C-2	Y	Y	U	3	3	BH/87 found dead 8/22/2024		
Natural Site C-3	N							
Natural Site C-4	Y	N	3	2	0			
Natural Site C-5	Y	Y	U	3	3	new female		
Natural Site C-9	Y	Y	U	0	0	failed during incubation		
Natural Site C-10	Y	Y	U	0	0	failed during incubation		
Natural Site C-11	Y							
Natural Site C-12	U							
Natural Site C-13	U							
Natural Site C-14	Y	Y	U	1	0	failed, hard to see nest (# NL unknown); suspect predation		
Natural Site C-15	Y	Y	4	4	4			
Natural Site C-16	Y	Y	5	0	0	failed during incubation, suspected predation		
SUBTOTAL NATURAL SITES	10	8		U	10	1.25	1.25	38%
Boonton Bridge	Y	Y	U	2	2			
Cliffside Park	Y	Y	4	4	4	nest not discovered until a FB post		
Elizabeth-Union Cty Courthouse	Y	Y	4	4	4	banded NLs; BH/93 reported dead to the BBL on 8/6/2024		
Route 80 Hackensack Bridge	Y	Y	U	1	1			
Newark downtown	Y	Y	U	3	3			
Newark Bay Br (NJTP or Conrail)	Y							
NJTP Br/Rahway	U							
Pulaski Skyway Bridge	Y	Y	U	U				
Rt 1 Br./Raritan-New Brunswick	N	N				Not occ 2024; pair obs on George St bridge, New Bruns.		
Route 3 Br./Hackensack (NJDOT)	Y	Y	U	2	0	failed during NL stage		
Rt 46 Br/Little Ferry-Ridgefield Pk								
Secaucus-Kearny NJTP Bridge								
Vince Lombardi – NJTP Bridge	Y	N				Piers cleaned in Jan. for construction. Pair obs, not nesting		
SUBTOTAL URBAN	9	7		U	14	2.00	2.00	71%
TOTALS	37	32			58		1.81	63%

Figure 1. Nesting pairs on towers/buildings, bridges, and cliffs, 1980-2024. Note these types are different from the geographical categories in Table 1.

