

The Peregrine Falcon in New Jersey

Report for 2001

Endangered and Nongame Species Program - Project Objective: To maintain, monitor and protect the Peregrine Falcon (Falco peregrinus anatum) population in New Jersey.

Summary: The New Jersey peregrine population continued to hold steady with seventeen pairs active: twelve nested on towers and buildings and five on bridges. Of 12 pairs on towers and buildings, eight nested successfully, producing 21 young for a rate of 1.75. This is right on the 1.7 average since 1986 when the population became stable. Four pairs occupied bridges spanning the NJ-PA border and three the NJ-NY border, of which New Jersey monitored five; three bridges entirely in New Jersey were not all active. Bridge sites were inconsistent and difficult to track, and access to three bridges was limited. Productivity on the major bridges was 1.20 for three known-outcome nests.

A new coastal site was discovered in an abandoned boat in salt marsh, the first such nesting in the state. Two sites fledged full four-chick clutches, and overall productivity was good. Four nests failed: the adult breeding falcon was found dead at Forsythe-Barnegat, while three others failed for unknown reasons. *Trichomoniasis* again caused the early death of one nestling at the Atlantic City casino, a recurring problem at that site. Biologists banded 22 young, including one that fledged prematurely off a bridge and was recovered and fostered on the coast. While the peregrine falcon was delisted by the USFWS in August, 1999, its state status in New Jersey remains "endangered."

Background: The decline of the peregrine falcon in the eastern U.S. was linked to persistent organochlorine pesticide contamination. The eastern population plunged from an estimated 350 active sites in the 1930's and 1940's to no active breeding birds in 1964 or 1975. Recovery efforts began in 1975 after DDT was banned in the U.S. The Division of Fish & Wildlife and the Peregrine Fund first hacked falcons in 1975 at Sedge Islands Wildlife Management Area in Barnegat Bay. Hacking continued at several sites until pairs established territories. Wild nesting began at Forsythe National Wildlife Refuge in 1980, and expanded slowly until 1993, when the population reached about its present level. In New Jersey, the recovery goal is *consistent, successful* nesting by eight to ten pairs. With variable, generally poor, nesting on bridges, and recent erratic success at coastal towers, that goal has not been met. Further, we continue to study the effects – and threats – of persistent organochlorine contaminants on the peregrine population. Management focuses on monitoring nests, banding young, and improving conditions at nest sites in order to enhance productivity.

Highlights: The pair at the Atlantic City Hilton nested for the 14th year with the same female; sadly, the female, age 16½, was found injured and died in October. A new pair was discovered nesting in an abandoned boat on salt marsh in Cape May County. Last year's new nest atop 101 Hudson Street in Jersey City fledged three young and educated many who watched via website camera.

At tower and building nest sites just two (Ocean Gate and Marmora) fledged a full clutch of four young. Jersey City, Swan Bay WMA and Heislerville each fledged three, the Hilton fledged two, and Sedge Island one. Forsythe (Barnegat and Brigantine), Egg Island WMA and Tuckahoe WMA all failed.

On the Delaware River bridges, four young fledged at the Betsy Ross nest box but two died on or near the roadway. Three young fledged from the Walt Whitman, but two were found near the river shore, recovered and fostered at Sedge Island. Two young fledged from the PA side of the NJ-PA Turnpike Bridge. At northern New Jersey bridges, one fledged at the George Washington Bridge, while the pair seemed to have left the Turnpike/Secaucus bridge. Production was unknown at the Turnpike/Lombardi bridge, which is inaccessible.

Recoveries: We recovered the Atlantic City Hilton female, band #617-22674, in Atlantic City in October. She died despite the efforts of the Raptor Trust staff. She had originally fledged from Sedge Island, Barnegat Bay, in 1985, the same year she claimed the casino ledge. She was by far our oldest known-age falcon. In a disturbing event, a duck hunter shot a peregrine in Cumberland County in October; he was ordered to pay restitution to the ENSP as well as a fine. The funds will support peregrine management.

Conclusions: Peregrines experienced good nest success in 2001, their 22nd year of nesting in New Jersey. Nest success held steady at just under 70%, and 17 active pairs fledged 27 young. We need to continue the investigation of contaminants in unhatched, salvaged eggs. We believe that close monitoring of nesting pairs and behavior is essential to observe the subtle signs of contaminant problems. In addition, management of nesting pairs and nest sites is essential to maintain peregrines in New Jersey, since bridge-nesting birds are especially vulnerable to nest-site problems. With management and the cooperation of bridge personnel, these sites can help support the population.

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Prepared by Kathleen Clark, Principal Zoologist

Figure 1. Nesting and productivity of Peregrine Falcons in New Jersey, with comparisons between towers/buildings and bridges.

