



The Peregrine Falcon in New Jersey Report for 2003



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Project Objective: *To maintain, monitor and protect the Peregrine Falcon (Falco peregrinus anatum) population in New Jersey.*

Summary: More history in 2003: A young peregrine fledged from the New Jersey Palisades cliffs above the Hudson River for the first time in about 50 years! This was a gratifying result after last year's excitement then disappointment as a pair nested on the cliffs but had their eggs washed out by a torrential rainstorm. Even more exciting, a second pair also laid and incubated eggs this season, about 8 km away on the cliffs.

Across the state, the peregrine population totaled 19 pairs, remaining stable now for five years. In addition to the two natural nests, thirteen pairs nested on towers and buildings and four on bridges. Of the 13 pairs on towers and buildings, nine nested successfully, producing 26 young for a rate of 1.8 young/active nest. This is above the 1.7 average since 1986 when the population became stable. Five pairs occupied bridges spanning the NJ-PA border and three the NJ-NY border, of which New Jersey monitored two; two bridges entirely in New Jersey were active. Productivity on the bridges was 1.5 for three known-outcome nests in NJ.

Productivity was good in 2003, with the following nests producing four young each: Heislerville, Swan Bay, Ocean Gate, Jersey City, and Betsy Ross Bridge. Biologists banded 30 young at ten nests. We had assistance banding the nestlings in Jersey City from DEP Commissioner Brad Campbell and Animal Planet's Jeff Corwin.

Background: The decline of the peregrine falcon in the eastern U.S. has been 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 NJ Division of Fish and 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 its present level. In New Jersey, the recovery goal is *consistent, successful* nesting by eight to ten pairs. While there have been 8-10 pairs successful since 1999 (disregarding the variable bridges), we seek longer-term success and expansion into historic and well-protected nest sites to achieve full recovery. 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 highlight of the year was the successful nesting by a pair occupying natural cliffs that had been devoid of peregrines since about 1950. While last year's nesting attempt by one pair was a milestone, this year's nesting by two pairs on the cliffs, and the fledging of one chick, was yet another. Such a quick increase in nesting pairs on the natural cliff habitat bodes well for the future re-occupation of much historic habitat that remains. The "new" falcon that moved in at the Atlantic City Hilton last year as a four year-old and incubated her infertile eggs for five months, successfully raised two this year. The pair atop 101 Hudson Street in Jersey City fledged four young in their fourth year, and educated many who watched via website camera.

Productivity was above average at tower and building nest sites, with three sites (Forsythe-Barneget, Forsythe-Brigantine, and Sedge Islands) failing to produce. Heislerville, Swan Bay, Ocean Gate, and Jersey City fledged four each; Egg Island fledged three; Marmora, Hilton and Stone Harbor fledged two each; and Tuckahoe and Cliff-1 sites fledged one each.

On the Delaware River bridges, four young fledged at the Betsy Ross nest box, a site that consistently does well. Four also fledged from the Walt Whitman in PA. Two young fledged from the Commodore Barry Bridge. No young fledged from the Ben Franklin. At northern New Jersey bridges, the George Washington Bridge pair remained on the NY end of the bridge due to construction on the New Jersey tower. No young fledged from either the NJ Turnpike-Vince Lombardi site or the Newark Bay Bridge, discovered last year.

Recoveries: A peregrine banded as a nestling at Stone Harbor in 2002 was found dead, of probable electrocution, in June 2002 (but reported in 2003).

Conclusions: Peregrines experienced excellent nest success in 2003, their 24th year of nesting in New Jersey. Nest success held steady near 65%, and 19 active pairs fledged 33 young. We need to continue the investigation of contaminants in unhatched, salvaged eggs, as well as the close monitoring of nesting pairs to detect problems. Management of nesting pairs and nest sites is essential to maintain peregrines in New Jersey: bridge-nesting birds are especially vulnerable to nest-site problems, and many other pairs occupy human-constructed sites. With management and the cooperation of bridge and building personnel, these sites can contribute to population viability. The success of peregrines in historic, natural habitat made 2003 a landmark year for the peregrine's recovery in NJ.

Our Thanks To: Volunteers who protect and watch over peregrine falcons in New Jersey, including Linn Pierson, Pete McLain, McDuffy Barrow, Jorge Coppen, Sue and Mark Canale, Tim Jankowski, Larry Walton, Keith and Jackie Parker, Bob Kozinsky, Don and Karen Bonica at Toms River Avian Care, Hans Toft, Paula Cunningham, Bob Barth, Atlantic City Hilton staff (Mel Thompson, Pete Aiuto, Nancy Ross and others), Forsythe NWR staff and volunteers, Delaware River Port Authority staff, Palisades Interstate Park Commission and the Palisades Interstate Park Police, The Port Authority of NY/NJ, The Raptor Trust, AT&T staff, PSE&G staff, and all others who support wildlife conservation. The Jersey City WebCam (www.njfishandwildlife.com/peregrinecam) was funded by the Conserve Wildlife Foundation of NJ and Verizon, and maintained by the Division's Jeff Smith and Paul Tarlowe.

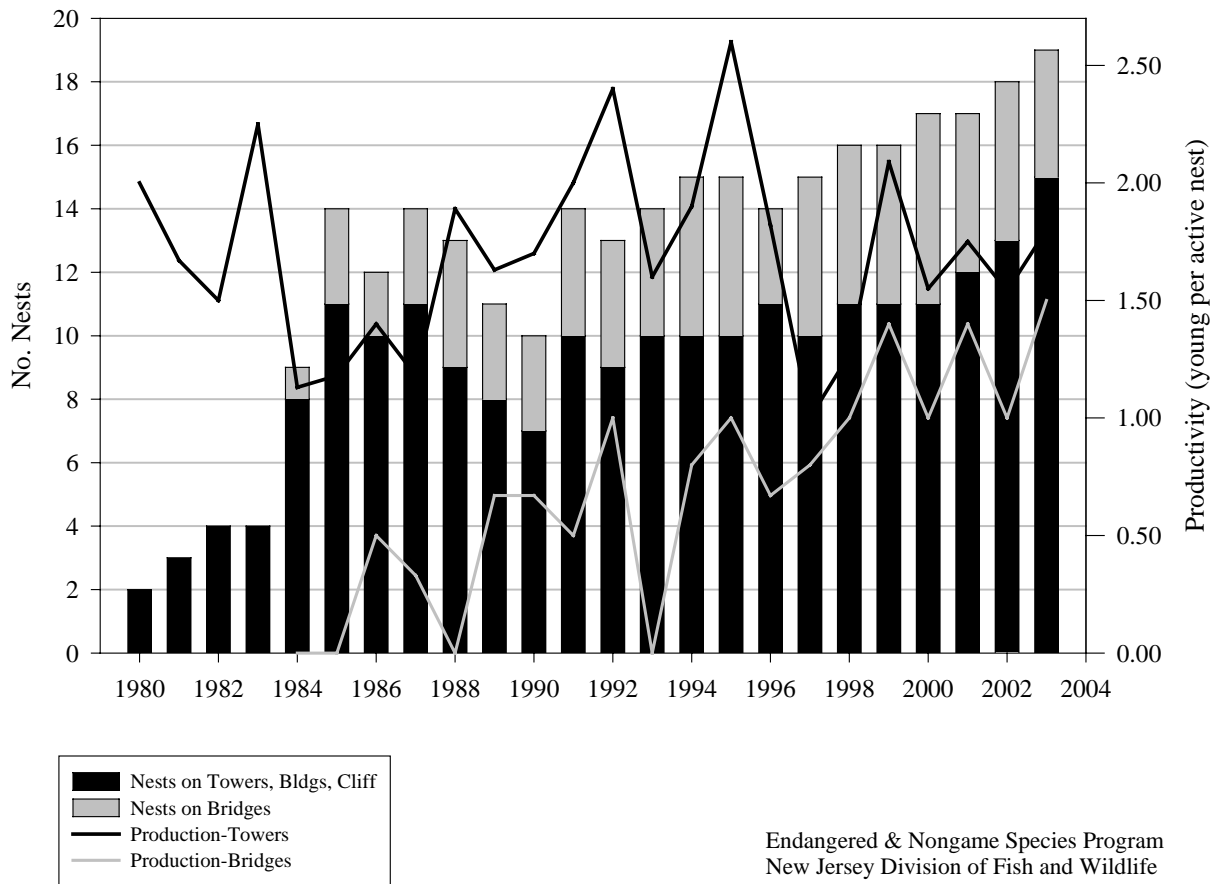


Figure 1. Nesting and productivity of peregrine falcons in New Jersey, with comparisons between towers/buildings/cliffs and bridges.