

The Historic Status and Recovery of the Peregrine Falcon in Massachusetts

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Rusty wire and bits of rotting wood can still be found on a small shelf next to the cliff at Lighthouse Hill on the west side of Quabbin Reservoir's Prescott Peninsula, where Archie Hagar built a blind to observe and photograph a Peregrine Falcon aerie. His discovery of broken eggs at this site in 1947 (Hagar 1969) was the first hint that the decline of the Peregrine population in North America as a result of DDT had begun. Between Forbush (1927) and Hagar, a total of 15 Peregrine Falcon nest sites had been identified in Massachusetts, although the exact location of one site that appears on Forbush's map has never been determined. Throughout the eastern United States the historical population was about 275 nesting pairs (Hickey 1942). Once the decline began, it was rapid. The last chicks to be raised at Massachusetts aeries were at Mount Tom, Holyoke in 1950 and at Monument Mountain, Great Barrington, in 1957. By 1964 there were no remaining nesting pairs in the entire eastern United States (Berger et al. 1969).

With the eventual ban of DDT in the U.S. by the federal Environmental Protection Agency in 1972, restoration became a possibility. The Peregrine Fund was established at the Cornell University Laboratory of Ornithology by Dr. Tom Cade, with the intent of producing captive-born young for release into the wild. The first release of captive-born birds was in 1974. The following year three chicks were raised on an old fire tower set up at the Massachusetts Audubon Society's Drumlin Farm in Lincoln. This release was followed by a four-year effort on Mount Tom from 1976 through 1979, with a total of 16 birds (3, 3, 6, and 4, respectively) being raised and released. One of the falcons released at Mount Tom in 1977 was hit by an airplane in Westfield, and another was shot and killed the same year by a hunter near Brigantine, New Jersey, but none of the other young falcons that were released in Massachusetts in the 1970s were ever reported again.

In 1983 the state legislature established the Massachusetts Nongame Program, now known as the Natural Heritage and Endangered Species Program, with a voluntary state income tax checkoff as a partial funding mechanism. The first new project undertaken by this program was the reestablishment of Peregrine Falcons. Because of the history of Great Horned Owl predation of Peregrine Falcon chicks at low elevation release sites, the John McCormick Post Office and Court House Building in downtown Boston were chosen for the release of six falcons in 1984 and six more in 1985. This was followed by the release of five falcons on the Murray D. Lincoln Campus Center building on the University of Massachusetts campus in Amherst.

In Amherst all of the chicks fledged and dispersed successfully, but three were found dead (in Fairless Hills, Pennsylvania; Iselin, New Jersey; and Chajurana,

Venezuela), while a fourth was picked up injured in Hartford, Connecticut, treated, and released. In Boston only three of the six chicks successfully dispersed from the release site each year. Five were killed in accidents near the release site shortly after fledging, and one female that was found injured at Logan Airport was unreleasable. A seventh bird that had been named Dublin returned to the release site hobbling on one leg with a fractured pelvis. Two days later he was trapped on the post office roof and taken to the Tufts University Wildlife Clinic in North Grafton, where he stayed for ten days before being released back on the roof.

The next time Dublin was seen was ten minutes after the release of the six new falcon chicks the following year. Dublin appeared out of nowhere and started dive-bombing the new chicks on their first flights. This behavior was not unheard of: at some release sites returning falcons even killed newly released chicks. Fortunately, Dublin made a nuisance of himself but did not cause any serious harm. The next year (1986) Dublin reappeared in the company of a female his age that had been released in downtown Toronto, Ontario, 600 miles away. They stayed together all summer and prospected for nest sites but did not lay their first eggs until the following year (1987). Ironically, they chose an ornamental gutter on the seventeenth floor of the post office building as their nest site. By then the release box on the twenty-third floor, which would have been a wonderful nest site, had been removed because it was thought to be too low compared with the surrounding buildings to be a good nest location. The gutter was not a good site, and the pair required a lot of help to raise a fostered chick from a second nest attempt.

Dublin died in 1987, and the following year (1988) he was replaced by a male (now seventeen) that was originally released in Portland, Maine, in 1986. The Peregrine pair proceeded to occupy a newly installed nest box in the top of the Custom House Tower, a site which has now become a traditional Peregrine aerie. Since the site is built like a Barn Owl box, where the birds enter through a window and nest in a completely enclosed box within the building, it is completely protected from bad weather and may have the best record of productivity of all sites in the Northeast. When the box has been closed to allow for renovation of the Custom House Tower by the Marriott Corporation, or for other reasons of disturbance, the Peregrines moved back to the post office (three times). The pair is now represented by its second female, a twelve-year-old bird originally released from Borestone Mountain, Maine, in 1991.

The second founding pair in Massachusetts began in 1987 in Springfield with the arrival of a female that had been released in downtown Toronto a year after the Boston female. This bird was named Amelia in a contest of school children; the male, who joined her in 1988, was named Andy in honor of Andy House, the building employee who became the caretaker and guardian of the nest site. This pair nested in a tray provided on the twenty-first floor of Springfield's tallest building, Monarch Place, and became the stars of a dedicated public-access cable television channel known locally as the falcon channel. For most of the past fourteen nesting seasons (except 1997, 1998, 1999, and 2002 when they nested under the Memorial Bridge over the Connecticut River), the daily activities of this nest have been followed live

by thousands of viewers. The popularity that the birds gained by being available to so many observers led to the city's hockey team being named the Falcons in their honor. When Amelia died after striking a glass panel on the roof of a nearby parking garage, there was great fear that the nesting of falcons had come to an end in Springfield; her death, on February 15, 1995, was about six weeks before she should have begun egg laying. By the mid-1990s, however, there was a floating population of unpaired birds similar to what had existed before the decline from DDT, and six days later Andy was at the nest site with a new female (fledged from the Verrazano Narrows Bridge in New York City). On October 30, 1998, Andy was killed when he struck a power line and was replaced by an unbanded male.

It was seven years after the Springfield pair nested before the next pairs established themselves. In 1996 two new pairs were found: one on the Braga Bridge (I-195) at Battleship Cove in Fall River, and the other on the Christian Science Church Administration Building in Boston. In Fall River the nest was inside a hollow support beam, and the eggs were laid on the remains of an old Rock Pigeon nest. The identity of these birds is unclear: the female was probably a bird that had fledged from Deer Leap in the Green Mountains of Vermont, but for seven years the male's band could not be read. In 2003 the site had a new male whose bands have not yet been read. From 1998 through 2002 the Fall River pair nested in a secure nest box and did very well, but with the arrival of the new male in 2003 they moved back into the framework of the bridge.

The Christian Science Church female had fledged from The Precipice at Acadia National Park on Mount Desert Island, Maine. The male was a one-year-old unbanded bird in full juvenile plumage. Even with his young age, this new pair fledged a full clutch of four chicks in the first year and have done very well ever since.

In 1999 the Peregrine Falcon was determined to have recovered in the United States and was removed from the federal list of endangered species (64FR 46542). In the eastern United States the population had gone from no pairs nesting at the time of listing in 1970 (Endangered Species Conservation Act of 1969) to 193 nesting pairs (including the Great Lakes) in 1998. Indeed, the Peregrine Falcon has recovered dramatically. Although the Endangered Species Act of 1973 requires a post-delisting monitoring program, which for the Peregrine will continue through 2015, its protection and management is now carried out under the framework of the Migratory Bird Treaty Act. In 2003 the taking of up to ten percent of nestlings for falconry in participating western states (west of the 100th meridian) was allowed, and regulations to allow the capture of first-year migrants (passage birds) in both the East and West for falconry are being reviewed.

Since the federal delisting in 1999, the number of territorial pairs of Peregrine Falcons in Massachusetts has increased from four to ten, and similar increases have been seen throughout the Northeast. The locations of Massachusetts' newest pairs (with their first year of establishment) include the W.E.B. DuBois Library building at the University of Massachusetts, Amherst (2001); Farley Cliffs, Erving (2002—last occupied in 1951); Tobin Bridge, Boston (2002); Goliath Crane in the Quincy Ship

Yard, Quincy (2002); Ideal Box Company and New Balance Shoe building, Lawrence (2002); and Mount Sugarloaf, Deerfield (2003—last occupied in 1951). In 1969, when Joe Hagar wrote about the history of Peregrine Falcon nesting in Massachusetts, each site was coded so that the location would remain a secret. In more recent years, biologists working on the recovery of the Peregrine have come to believe that when climbers, hikers, and building and bridge managers know where these birds are nesting, they will actually be better protected.

Since 1987, when Dublin raised his first family in Boston, 123 chicks have fledged from Massachusetts nest sites. Although Peregrine Falcons never were, and probably never will be an abundant raptor in the East, they are returning to many of their historic cliff sites and are adapting well to the urban environment. It appears that they are back to stay. 📌

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Tom French is an Assistant Director of the Massachusetts Division of Fisheries and Wildlife, where he has directed the Natural Heritage and Endangered Species Program since it began in 1984. Tom has been very active in the restoration of the Peregrine Falcon and the Bald Eagle. Over the years, he has helped other state fish and wildlife agencies band Peregrine chicks on cliffs, buildings, and bridges in Connecticut, Rhode Island, and Vermont. Another recent article written by him on Massachusetts Peregrines appears in the new book *Return of the Peregrine, A North American Saga of Tenacity and Teamwork*, Tom J.Cade and William Burnham, editors, *The Peregrine Fund* (2003). He would like to thank the numerous volunteers, property owners, building and bridge managers, and biologists who have played a significant role in Peregrine Falcon restoration here in Massachusetts. This project has by necessity been a cooperative effort and has by fortune successfully accomplished its goal. Most of the credit, however, goes to the birds themselves that have been more resilient and adaptable than many of us would have expected.



PEREGRINE FALCON BY GEORGE C. WEST