

The Bald Eagle is back

Dave Griffin

Along the Assabet, Sudbury and Concord Rivers it is increasingly common to look up and see an Osprey patrolling over the river or perched on a tree scanning the waters for that hint of dinner swimming just below the surface. In the past 10 years, with increasing frequency each year, the chance of spotting a Bald Eagle flying over our watershed is slowly becoming common as well. With their seven-foot wingspan they are easily the largest bird of prey in Massachusetts. This is thrilling to many of us—although I don't think the Osprey are sharing our joy.

In 2004 I had the privilege of photographing eagles in Alaska. Coming from a place where eagles are relatively scarce it was a surreal sight to find them perching in trees and on light poles. While it is unlikely that we will ever reproduce that particular scene here in Massachusetts, just 30 years ago it was impossible because there were no nesting eagles in Massachusetts.

Once common from Canada and Alaska to Florida and Baja Mexico, the American Bald Eagle (*Haliaeetus leucocephalus*) had become extinct in Massachusetts (“extirpated”) and indeed most of the northeast by the turn of the 20th century. This was due to what could be considered a declared war on these birds: a combination of massive habitat loss, hunting and, finally, polluted rivers. The last nest in Massachusetts, on Snake Pond in Sandwich, was abandoned in 1905. Our national symbol was pushed to the margins of the lower 48 where

their numbers further declined due to the widely used pesticide DDT, which caused the thinning of egg shells that cracked during the rigors of incubation at the nest site. As a “top predator” eagles, like osprey, are susceptible to toxins in the food chain as the seemingly benign low levels begin to multiply the further up the chain you go. While their preferred food is fish, they may also eat waterfowl. Federally listed as an Endangered Species in 1967, within the United States the Bald Eagle remained unthreatened only in Alaska.

Fast forward to 1982, with the historical decline of agriculture, forested areas had largely returned to the Northeast. Coupled with our rivers slowly being restored, islands of habitat for a wide variety of animals were created. A team at Massachusetts Department Fish & Wildlife (MassWildlife), inspired by the success of a program in New York, initiated a program to re-introduce eagles to Massachusetts. At the 2012 OARS Annual Meeting in May, Dr. Tom French, Assistant Director of MassWildlife and Director of the Natural Heritage and Endangered Species Program, held the audience spellbound with the story of the ambitious (and sometimes perilous) effort to bring back eagles to Massachusetts that has spanned three decades.

The team began by constructing a nesting platform on the shores of the Quabbin Reservoir. The program used a process called “hacking.” Essentially you start with young eaglets taken from a nest in an area where eagles are not threatened, relocate



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them to their new home, place them in cages that overlook their future new territory, feed them plenty of fish and deer carcasses until they are ready to fledge (all the time never exposing them to humans on a regular basis). You then let them go and see what happens.

With great fanfare two eaglets arrived in Massachusetts. They were taken from nests in the Upper Peninsula of Michigan, flown to Logan Airport, and then flown again to Quabbin. The 5-pound eaglets were taken from their crates, subjected to a bit of a media photo session, and then placed in their cages where, after settling down from all the commotion they began to nibble on the fish that was provided for them. (Wildlife biologists normally do not name the animals they work with, but given the historic nature of their arrival the pair were dubbed “Betsy” and “Ross.”) The MassWildlife team repeated this process, minus most of the fanfare, for seven years—and succeeded in releasing 41 eagles who now saw Quabbin as their home.

It should be noted that the effort that went into this program was immense, but it was also a labor of love for those involved. Raising eagles in a wild setting, in all manner of weather

over

year-round, is a difficult task. Each growing eaglet consumed several pounds of fish or meat per day, which had to be caught, prepared, and hauled up the hacking tower. At the program's peak, eight eagles were being cared for at one time. When it came time to release the eagles they were banded and outfitted with radio trackers and the team was tasked with following them and later identifying the banded birds from sightings.

It takes four to five years for an eagle to reach maturity and begin breeding. In 1987, five years after starting the program, the team noted the beginnings of an eagle nest site near the Quabbin Reservoir and in 1989 that site became an active nest with two chicks. Banding showed that the male was Ross (one of the original eaglets) and the female was from a 1985 release. The chicks were banded and over the next twenty years more than 375 eagle chicks would be banded by MassWildlife biologists.

From that point on the Bald Eagle population in Massachusetts has grown and eagle territories now span the Commonwealth. Removed from the Federal endangered species list in 2007, it is still listed on the Massachusetts list as Threatened. Nests first appeared along the Connecticut

High velocity courtship

“Courtship occurs in mid- to late winter and is a spectacular sight consisting of aerial loops, cartwheels, dives, and ending with the prospective mating pair locking their talons together and diving straight downward for hundreds of feet while spinning head over heels. . . . They mate for life [up to 30 years], but if one member of a pair dies or is killed, the other will actively court another mate.”

MESA Fact Sheet



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River, then in Middleborough, along the coast, Brookfield, and, closer to us, the Wachusett Reservoir in Boylston, and then the Merrimack River. In 2010 there were 32 active Bald Eagle nests in Massachusetts and during the 2011 annual Eagle Count, a record 104 Bald Eagles were wintering in the Bay State.



Bill Byrne (Mass Wildlife)

How many eagles can Massachusetts support in the 21st century? Nobody really knows, but the statistics indicate that we haven't yet reached a plateau. During his OARS talk Tom French noted that some eagle deaths are now occurring due to the competition between eagles for prime nesting sites. Eagles were long thought to be incapable of living near human influence, but like the osprey they are showing a remarkable tolerance. Indeed, there are eagle nests in people's backyards in West Newbury and Lunenburg.

Due to the 30 years of dedication and expertise of the MassWildlife team, coupled with cleaner and healthier waters and protected habitat, I look

forward to the day when we spot our first eagle nest somewhere along the Assabet, Sudbury and Concord Rivers. We hear there is one there. So keep an eye out for one of the more skilled masters of the skies—our nation's symbol since 1782.

We are deeply grateful to Dr. Tom French for sharing his story of the eagle restoration project at our Annual Meeting in May.

Lofty eagle nests

Bald Eagle nests are built of large sticks and lined with soft pine sprigs and grasses and can measure 12 feet high and 8.5 feet wide. The male eagle collects the materials and the female does most of the construction. She builds the nest 30-120 feet above the ground in tall hardwood or conifer trees, ideally placing it below the crown where it has some protection from the weather but still commands a good view. She lays one to two eggs in March or early April; eaglets take their first flights 15 weeks later.



Bill Byrne (Mass Wildlife)