

## Wildlife Recovery and Restoration

There is certainly a lot to be concerned about regarding wildlife populations, habitats, and the natural environment. Documented declines in worldwide numbers of many species of amphibians, birds, insects, mammals, and reptiles lends sobering evidence of an impending mass extinction crisis. Much of this is fueled by unprecedented demands for energy, rapidly evolving climate change, widespread drought and water shortages, the proliferation of exotic invasive plants, animals and diseases, pollution in its myriad forms, and an ever-multiplying human population with increased demands for resources.

While many of us are acutely aware of these concerns and challenges, it is also important to acknowledge and celebrate the progress that we have seen in the recovery of some species of wildlife. While many species struggle on the edge of extinction, several others have shown remarkable and encouraging signs of increases in their numbers and distribution.

We are fortunate in New England to be witnessing the return, re-establishment, and spread of several species of native wildlife. This is a process that started over the past century or more and is the result of comprehensive conservation efforts, as well as the resiliency and adaptability of wild creatures.

A major driver of the recovery of native wildlife in the Northeast was the regrowth and return of native forests. Acres of trees in southern New England in particular were cut down and replaced with widespread agricultural lands during colonial times. As farmlands were abandoned and forests slowly returned, so did many of the species that were dependent on that kind of habitat. In addition, the institution of effective game management laws, legislation that protected wetlands and waterways, comprehensive land preservation, and other conservation efforts have paved the way for the return of many species of native wildlife. In some cases, active transplanting initiated the re-establishment of some species. In other cases, wildlife took it upon themselves to re-enter and re-establish themselves among us, or, as is the case for some songbird species, expand their geographic ranges northward to southern New England.

### A Timeline

The recovery and conservation of wildlife, natural areas, and nature itself has been a long, gradual building process that had its beginnings in the post-colonial era. Current generations have built on the successes of those of the past, and, importantly, progress has been made on international, national, and local levels, with the latter – i.e., the local efforts of individuals, organizations, and communities – fueling the change. This has been the story in New England, and in Massachusetts in particular. Massachusetts is among the most developed and populated states in the country, and yet its extensive network of local and state-owned conservation lands forms the foundation for the recovery of wildlife populations.

This timeline traces some of the events that have built the successes that we see today. The dates are often estimates, and the word *circa* (meaning “approximately”) could be inserted in front of almost all of them. And of course not all significant events have been included. But throughout the list you will see some of the efforts of people to restore wildlife populations, as well as the adaptability and resilience of the animals themselves, as they explore new areas and establish themselves among our local communities.

Make no mistake, we currently face some of the most significant environmental problems and challenges that we have ever experienced, on local, regional, and global scales. These issues have shown us the critical importance of biological diversity, sustainability, and environmental stewardship to maintaining our own species. The efforts of our local communities toward that end can show us what can, and needs, to be accomplished for our planet, the natural communities that share the world with us, and ourselves.

Timeframe	Event
<b><i>~ The Colonial Period and Declines in Wildlife Populations ~</i></b>	
1600s-1700s	Beginnings of colonial settlement of the New England region.
1700s	Beavers extirpated from Massachusetts, likely before the Revolutionary War.
1800s	Continuation of forest cutting and agricultural expansion. Moose extirpated from Massachusetts.
1819-1820	Last wolf in Massachusetts killed in Athol (rumors of a kill in Sandwich in 1837).
1840-1860	Fishers extirpated from Massachusetts.
1858	Last mountain lion (eastern cougar) killed near Amherst, Massachusetts.
1860s-1880s	Black bears restricted to northern Berkshire Mountains.
Late 1800s	Common loons extirpated from Massachusetts; some of the last breeding records from 1884 (Ashburnham) and 1887 (Winchendon).
1898	White-tailed deer populations at all-time low; Commonwealth closes entire state to deer hunting for 5 years.
<b><i>~ Initial Recovery Period and Early Conservation Efforts ~</i></b>	
1901	First definitive observation of a Carolina wren nest in Massachusetts.
1928-1932	Beavers re-established in Massachusetts both by natural spread and then introduction.
1945	Common ravens documented in Massachusetts.
1950s	Coyotes appear in Massachusetts.
1954	First confirmed breeding pair of turkey vultures documented in Massachusetts.
1958	First nests of northern cardinals reported in Massachusetts.
1950s-60s	Bald eagles decline in Massachusetts due to toxic pesticides (last known breeding record in 1905 in Sandwich).

**~ Accelerated Recovery and Advanced Reforestation ~**

1960s	Fishers return to Massachusetts. White-tailed deer continue to increase.
1961	Cape Cod National Seashore established.
1970s	A seminal decade for environmental protection. Numerous important and far-reaching environmental laws passed in the U.S., including the Endangered Species Act of 1973, which provided protection for animals and their habitats.
1972-1973	37 wild turkeys released near Great Barrington, MA (J. Cardoza, MassWildlife).
1972	Massachusetts Wetlands Protection Act enacted.
1975	Common loons return to breed on Quabbin Reservoir in Massachusetts.
1977	First confirmed breeding records for red-bellied woodpeckers in Massachusetts.
1980s	Moose began appearing in Massachusetts in numbers.
1982	Bald eagle restoration begins in Quabbin Reservation; first two birds released named "Betsy" and "Ross".
1987	Mass. Wetlands Protection Act protects vernal pools as "wildlife habitat."

**~ Recent Developments Including Land Conservation ~**

2000s	<p>Moose now occupy most forested lands in central and western Massachusetts.</p> <p>Many female moose reproducing 1-2 calves in spring.</p> <p>Black bears spread throughout Massachusetts except for Cape Cod.</p> <p>The era of "Urban Wildlife" well underway, led by an expanding deer population.</p>
2000-2001	Massachusetts Natural Heritage & Endangered Species Section produces Biomap to aid in land conservation and protecting biodiversity.
2007	Eastern timber wolf (young male) killed in Shelburne, Massachusetts, likely traveled south from eastern Canada.
2009	Vernal pool habitat guidelines to increase certification for vital breeding habitat for certain amphibians.

2011	Mountain lion (young male) killed on roadway in Connecticut, came from South Dakota and likely passed through Massachusetts.
2012	Black bear (young male) swims the canal and makes it out to Cape Cod. It is successfully relocated back to central Massachusetts.
2015	Mass. EOEAs reports Massachusetts has more than 1 million acres as protected conservation or park land, and that the state has more non-profit land trusts per capita than anywhere else in the world.
2023	Mount Grace Land Conservation Trust reports conserving more than 20,000 acres in the local North Quabbin region.

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