# **Marten Recovery in Vermont**

## **Background**

According to one of Vermont's earliest natural historians, Zadoch Thompson, marten were once very plentiful in most parts of the state but by the 1850s were "confined to the most mountainous and woody portions" of the landscape. The widespread deforestation and unregulated harvest of furbearers characteristic of the 1800s took its toll on marten, and by the early 1900s the species was deemed extinct in the state.

Marten were legally classified as an endangered species in Vermont in 1972.



In recognition of the species' inherent ecological value, the Vermont Fish & Wildlife Department and the U.S. Forest Service attempted to restore a marten population in the state. Beginning in 1989, a total of 115 individual marten was live-trapped by local trappers in Maine and New York and released at several different sites in the Green Mountain National Forest.

With their intimate knowledge of marten and explicit familiarity with these remote regions of Maine and New York, these cooperating trappers applied their skills to ensure the safe capture of the animals necessary for completing the reintroduction. Without their considerable knowledge and expertise, the reintroduction attempt would have been impossible.

### **Initial Results**

Unfortunately, extensive post-release monitoring and follow-up surveys conducted throughout the 1990s indicated the reintroduction effort had failed. Although some of the released marten established home ranges within nearby suitable habitat, as was hoped, more were documented to have dispersed from the region altogether.



One released marten, for example, was road-killed in Candia, New Hampshire some 70 miles away, while another was similarly found dead on the road just outside of Hartford, Connecticut 100 miles from its release site.

The furthest extent a released marten was documented to have dispersed was one that was trapped in Rangeley, Maine during the marten trapping season in 1997, 150 miles from its release site.

#### The "Fisher" Factor

In addition to outright dispersal, competition with a growing fisher population throughout the 1990s was also believed to contribute to the restoration effort's apparent failure.

During the winter of 1994-1995, 12 remote cameras were installed throughout ideal marten habitat in the vicinity of the original release sites. Although marten were detected by two of these cameras, fisher were detected at 11.

Three years later, a similar study using 47 remote cameras detected no marten while fisher were documented at 37 of the sites confirming the belief that a viable population of marten had not become established in Vermont.

Fisher are one of the main competitors and predators of marten and lynx and are currently abundant in Vermont. Marten and lynx require deep fluffy snow to out compete fisher. Warmer winters favor fisher, making it more difficult for marten and lynx to recover in areas where fisher populations are high.

Trapping fisher can help to control fisher numbers and create a 'refuge' for marten, allowing the population to gain a foothold in areas that historically may have only supported marten and/or lynx, but due to warming winters are now populated by fisher.

## The Rest of the Story

Despite the presumed failure of the southern Vermont reintroduction effort, evidence collected in recent years now indicates the existence of two small, localized populations of marten in the state.

Beginning in 2001, the Vermont Fish & Wildlife Department started receiving citizen reports of marten sightings throughout Essex County in northeastern Vermont. In 2004, the first verifiable occurrence of marten was documented in Averill, Vermont.

As of 2014, a total of 60 occurrence records have accumulated resulting in the confirmation of at least 27 individuals. Most interesting is the fact that since 2010, seven of the confirmed marten occurrences have originated from southern Vermont in the immediate vicinity of the reintroduction release sites.

Is it possible the reintroduction efforts were not a failure after all, or that these animals are the product of natural recolonization?

Efforts are now underway to answer just that question as well as to gain a better understanding of the species' current distribution and abundance in the state. The Vermont Fish & Wildlife Department is actively engaged with a number of partners including the US Forest Service, the University of Vermont, Central Connecticut State University and Vermont trappers to develop appropriate and effective conservation measures for this iconic species in Vermont.

Read more about the life history and management of the marten.

