



## Northern Saw-whet Owl Banding Project 2014 Season Summary

This fall, NBNC completed its second season banding Northern Saw-whet Owls in Shelburne and Montpelier, VT. With last year's banding considered a 'pilot' year, the effort was significantly vamped up this year, especially at the Montpelier site. Between the two sites, a total of 107 Northern Saw-whet Owls were captured between September 25 and November 4 during a combined total of 138 hours of operation.



This hatch-year female was banded on 10/24/14 in Shelburne, VT.

The weather this season presented some challenges to both banding stations, as rain, wind, and south winds prevailed for much of the beginning of our banding period. Nonetheless, the banding stations were open for 14 nights in Montpelier and 12 in Shelburne. The stations typically opened 30 minutes after sunset and stayed open until 11pm or later each night, although the stations closed early due to inclement weather conditions a few times. We ultimately would like to grow the banding program to cover 20-25 nights per season, but recruitment and training of additional banders will likely be required to meet this goal.

Our totals of 60 owls captured in Montpelier and 47 in Shelburne far surpassed last year's total of 56 between the two sites. Not included in these totals are five recaptures of individuals that had been banded at the stations during previous nights. Additionally, one captured owl, previously unbanded, was found dead in a net at the Shelburne site following an attempted predation by a Barred Owl. As expected based on our use of an audio lure, the majority (83%) of owls captured were females, with 7% males and 10% unknown. There was no significant difference in the gender ratio of owls between sites. With the increase in effort this year, an increase in captures was expected, but other evidence suggests that this was a much more productive year for owls than 2013.

A higher proportion of hatch year birds is typical in years of high productivity, when more young owls are fledged. Banding stations often see greater numbers of owls in these boom years. Both stations recorded higher proportions of hatch year birds in 2014, with rates of 65% in Montpelier (a 27% increase) and 85% in Shelburne (a 73% increase) (figure 1). Interestingly, these ratios differed significantly between sites for the second year, suggesting that the Northern Saw-whet Owl

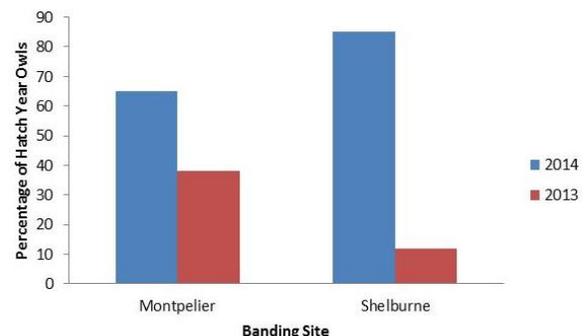


Figure 1. Ratios of hatch year owls captured at the Montpelier and Shelburne banding sites, by year.



populations may differ between the two sites.

In addition to the differences between the ages of birds in Montpelier vs. Shelburne, we noticed some other distinctions between our two study sites. During the nights where both stations were operated simultaneously, the capture rates in Montpelier were higher on five out of six occasions (figure 2). Overall, our Montpelier site averaged 0.88 owls per net hour, while our Shelburne site averaged 0.67 owls per net hour. In other words, we averaged 4 owls captured for every 9 net checks in Montpelier, while Shelburne averaged only 3. These differences could have many potential causes, including differences between the habitat and vegetation at the two sites or differences between the owl populations themselves.

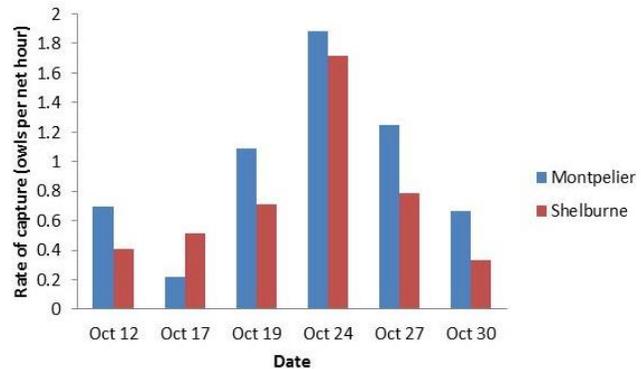


Figure 2. Capture rates of owls at the Shelburne vs. Montpelier banding stations on nights where both stations were operating.

After having three foreign recaptures (birds captured at our stations that had previously been banded elsewhere) during our pilot year in 2013, we only received one foreign recapture this season. An owl captured on 10/31/14 at our Montpelier site was found with a band showing significant weathering and wear, an indication that it had been banded during a previous season. The band information was submitted to the national Bird Banding Lab (BBL), but no data about the banding date/location has been provided from the BBL as of the publication of this report.

Three owls that had been banded at our sites in 2013 were recovered elsewhere in 2014. These types of recaptures are known as foreign recoveries. An owl banded in Montpelier on 10/29/13 was reported as having been hit by a car on 4/1/14 somewhere in New Hampshire. It is unknown whether that owl survived. An owl banded in Shelburne on 10/28/13 was recaptured in Montreal, QC on 10/22/14 at the McGill Bird Observatory. An owl banded in Shelburne (the very first bird captured at that station) on 10/8/13 was recaptured in Ellenville, NY on 10/28/14. This year brought our total number of foreign recaptures to four and our foreign recoveries to three (figure 3).

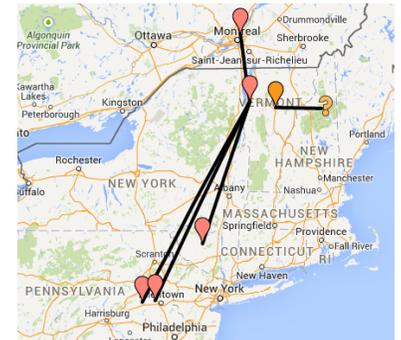


Figure 3. Map showing recaptures and recoveries from other banding stations from 2013 and 2014. The 'question mark' does not represent the exact recovery location, which we only know to be in NH. One additional foreign recapture is not included due to incomplete data from BBL.

Public outreach has continued to be an important goal of NBNC's owl banding initiative and over 300 people visited the owl banding stations this year. Among the visitors to the banding station were homeschoolers, children, birders, biologists, university students, and owl lovers from near and far. We also launched our adopt-an-owl program this year, raising nearly \$1,000 to support owl banding at NBNC. We thank all who visited the stations this year and contributed to this new and growing project. We also thank and acknowledge the Oakland Foundation for their support.