2022 Raptor Banding Report Frank Nicoletti, Banding Director

The fall 2022 season marks the 50th year of the raptor banding and counting at Hawk Ridge. This is my 12th season managing the banding operation. Hawk Ridge is one of the longest running banding operations in the world, and its continuing efforts to collect data is of utmost importance, especially with the changing climate and shifting of species and weather patterns. We continue to work with graduate students from UMD on various project which includes Isotope, diet, PFAS contaminants, subspecies of Red-tailed Hawk of migrating raptors, winter ecology of Northern Hawk Owls, and American Kestrel nestbox research. We along with other professional organizations and individuals continue to work towards understanding the migration and summer and wintering range of birds across North and Central America. In this part, we are starting to deploy varies types of tracking devices to better understand the migration paths along with summer and winter ecology.

From 2011 to 2014 we had the Hawk Ridge, Moose Valley, and Paine Farm banding stations running full time. This season we had both Hawk Ridge and Moose Valley running full time, while Paine Farm ran when we had extra volunteers. Moose Valley was operated by Maggie Brown. A big thanks goes out to David Alexander, Miranda Durbin, Allie Pesano, Halle Lambeau and Hannah Toutonghi for filling in some days in at the stations when needed. This season we had three banding trainees, Kara Beer, Hannah Landwerlen and Jadzia Rodriguez, which made the banding operation run more smoothly and provided a great opputunity for the trainees to learn all aspects of banding. Lesley Rolls was our season's owl bander and Maggie Brown returned from last season to run Moose Valley.

This season total of 2232 raptors banded was below our season's average of 3620 since 2011. We banded 16 species of raptors, 11 hawks and 5 owls. This total includes 70 previously banded birds. Among the 2232 total raptors, there were 1276 diurnal (hawks) and 957 nocturnal raptors (owls). The Hawk Ridge station for

hawk banding was in operation daily from August 15 to November 30. Moose Valley ran from August 29 to November 7, while Paine Farm ran from September 10 to November 6. We logged a total of 170 days, which is below our average of 201 station days since 2011. The average number of raptors banded per day was 13. A total of 1276 hawks were banded during the fall, with monthly total as follows: 60 in August, 886 in September, 312 in October, 18 in November.

Owl numbers were the second lowest with 956, only ahead of last years 954, and well below our average of 1345. However, weather again certainly played a role along with poor breeding success, especially for Northern Saw-whet Owls. Since 2011 we have followed a protocol using two caller units: one each for Northern Saw-whet (NSWO) and Long-eared owl (LEOW). In 2016, we started using a Boreal Owl (BOOW) and Eastern Screech Owl (EASO) call for about half the season, then the second half BOOW. We will continue this combination to see if we can detect movement of EASO. All callers run simultaneously during the night. As in previous years, the NSWO caller was placed in the west net lanes. The LEOW caller was placed in the station field while the BOOW caller was placed in the east net (pine grove) lanes.

We had a good number of NSOW recoveries (48 foreign and 13 returns), which we expected from the low number of young produced, and higher percentage of adults. NSWO remain our main source of recoveries. Of the 13 returns, 1 from 2017, 1 2018 9 from 2020, 2 from 2021.

Some of the noteworthy NSOW foreign recoveries from previous years came from 6 Wisconsin banding sites which includes Linwood Station, Falls Creek, Steven's Point, Emmons Bird Observatory, Woodland Dunes and Cedar Grove, Sandbluff, Illinois, 3 stations in southern half of Minnesota- Victori, Quarry Hill Nature Center and Marine on the St Croix. We also had other interesting recovery which included 3 from Whitefish Point, Michigan, one from March 23, 2021 and two from their summer banding, 2020 and 2021. It's always exciting when we get a nestling

recovery. We captured an owl banded as a nestling from Stoney Mountain, Manitoba by Jim Duncan who a long time owl researcher. We also had some from North Shore banding sites; French River, Wolf Ridge and Tofte. We were so happy to recover our resident Eastern Screech Owl for the 5th year in a row. They are considered very rare in St. Louis County, with only a handful of records ever in the county. We are still waiting on the remainder of the reports from the Bird Banding Lab.

I would also like to thank the numerous volunteers and HRBO staff who helped in many ways, including fall counters: Jess Cosentino, Sean McLaughlin and Gracie Sangmeister for communicating sightings to the station. Others who helped in various ways were Grace Glick, Ralph Larsen, Margie Menzies, Sarah Wood, Sara DePew. Thanks to Janelle Long, our Executive Director who helps with so many ways often not seen by many. Finally, I would especially like to thank my wife Kate for all she does and for her support.