

Fall 2013 Raptor Banding at Hitchcock Nature Center

Each fall for the past seven years we have been monitoring the raptor migration, in coordination with the Hitchcock HawkWatch, in the Loess Hills of western Iowa by banding and collecting age, gender, health, and subspecies data on individuals.

Diurnal Raptor Banding

What an unusual diurnal raptor banding season we had this fall! In past years, red-tails were more than 61% of the total birds banded in a season. This year they averaged only 49%. This was also the second lowest year for the total number of redtails captured in a season. This corresponds to the lowest count of red-tails at the HawkWatch for the past 10 years. The majority of red-tailed hawks banded have always been juveniles. In past seasons, the ratio of juveniles to adults banded ranged between 2 to 4.38 juveniles banded for every one adult. This season, we had the lowest ratio of 1.58 juveniles for every adult banded. During the history of the banding effort we have also been seeing a steady decline in both the ratio of juveniles to adults and the total number of red-tails banded. This is a long-term monitoring effort and more study is needed but the combined information of the banding effort and the low HawkWatch total this season suggest that our sampling of migratory red-tails did not have a successful breeding season this year. Conversely, the second and third most populace species in our sampling, sharp-shins and cooper's hawks, respectively, both had their best showing this year by a wide margin. They too had a very low juvenile to adult ratio but in their cases, the total number of juveniles captured was very similar to past years. The difference was that this year there was an inordinate number of adults of both species banded. This was due in large part to a stalled cold front in the Dakotas on October 7th to the 10th. In its wake, we banded 56 raptors, 33 of which were sharp-shins and cooper's hawks. Given that we banded a total of 173 raptors during the entire season, it made for a very exciting 4 days. The diversity of raptor species banded was about average this season. Singles of peregrine, merlin and broadwing hawk completed the season.

Saw-whet Owl Banding

Saw-whets can demonstrate characteristics of both an irruptive migratory species and a regular migrant. Both types were clearly demonstrated this season. One characteristic of an irruptive migrant is the number of individuals can vary widely between migration seasons. This fall at HNC we banded 26 saw-whets compared to a range between 72 and 36 during the past 4 years of effort. However, our banding effort was hampered this past season by unfavorable weather conditions and unfavorable moon cycles resulting in decreased hours of operation. To compensate, we compared the number of owls captured to the number of hours that went into the effort each season. We found that the ratio this year was very close to 2009 when 36 owls were banded. In most years, the large majority of saw-whets banded are juveniles. This fall, the ratio of juveniles to adults was virtually reversed. The majority of saw-whets banded were adults with

only five being juveniles. This suggests that reproductive success was very low this year which was underscored by similar results at most saw-whet banding efforts to the east of us. Our biggest excitement was learning that a saw-whet we banded in 2012 was captured this fall north of Sacramento California. In contrast, we recaptured a saw-whet that we first banded in 2010 at HNC. Sometimes they are loyal to migratory routes and sometimes they aren't.

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