

American Kestrel Nest Box Monitoring 2021 Season Summary

Beaver Creek Reserve Citizen Science Center

Training: No training was held this year as a result of the continuation of the Covid-19 pandemic.

Project Participants for this season: Permitted banders/previous AMKE Project experience – Judy Schwarzmeier, Karen Mittag, and Dave Kragness. Unpermitted intern – Tully Frain. Others who assisted or observed occasionally during the season included Jeanette Kelly, Megan Giefer, Cassidy Michels.

Locations active: There were 11 nest boxes that were monitored in Eau Claire and Chippewa Counties in 2021. Box number 12 in Eau Claire County was removed before the start of the season due pre-existing damaged and being unsuccessful for several years. Two new boxes 35 and 36 were installed along highway X and north highway k respectively. 7 boxes at Badger Mine in Jackson County were successful monitored and birds were banded as well.

Season dates: BCR nest boxes were prepped on March 8. The first monitoring run was May 14, 2021. The final date to check boxes was July 9, 2021.

The first adult Kestrel to be banded this season was captured on May 22, 2021.

The first juvenile banding occurred on June 09, 2021, and the last one was on June 22, 2021.

Public Programs: BCR and Badger Mining Corp. co-sponsored a Natural Resources Foundation of Wisconsin field trip for the public to learn about AMKEs and observe banding of juveniles, and see the results of sand mine reclamation. The trip filled, with 15 people attending. The trip seemed to be successful.

Statistics (see attachment):

- Some 18 boxes total were either fully or partially monitored during the 2021 season.
- Forty-three kestrels were banded, 16 in the BCR area and 27 on Badger Mining Corp. land.
- By sex, 25 females were banded, and 18 males were banded
- By age, 37 of the banded birds were juveniles (L= Local / Juveniles), while 2 were ASY and 4 were AHY.
- Total number of kestrels banded overall years starting in 2002 and ending in 2021 = 859.
- There were three recaptures of Kestrels that had been banded in a previous season and that had returned to nest boxes in the study areas. All three were caught in Eau Claire County.

Data submission: Banding data have been submitted to the Bird Banding Lab. Data on nesting has been submitted to the American Kestrel Partnership.

Recommendations/comments for the future:

- Kestrels continue to decline. This decline is puzzling to scientist. But shows importance of banding programs.
 - o Ely, T.E., et al. (2018). [Morphological changes in American Kestrels at continental migration sites](#). Global Ecology and Conservation 15: e00400.
- Additional bands may be needed about 130 remaining
- Consider adding additional box south of Highway K.
- Additional birds could have been banded at Badger Mine but management never reached out about additional banding.
- Both boxes 35 and 36 were unsuccessful despite being new and kestrels known to be in area
- Kestrel program continues to look for pickup truck donation to assist with program monitoring.
- Box 27 (St. Bridget's Road) have been inactive for 5 years. But did host tree swallows this year.
- Program obtained branding iron to make ownership of boxes known. Logo brand will be added by next season