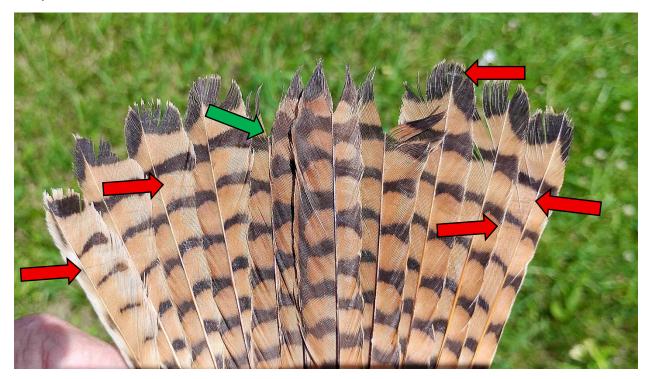
# Final Update on the Shenandoah Valley Raptor Study Area July 28, 2025

# Currently in the Study Area ...

The 2025 kestrel banding season is over, as of July 17<sup>th</sup>. We had one more occupied box to check a few days ago, and it had failed. It was a relatively new kestrel box installed in 2024 that, until recently, had never been used by a kestrel. This late nest attempt had 4 kestrel eggs laid by an adult female we captured while she was in the box incubating. She was not in the best condition and, given the late date of clutch initiation on June 2<sup>nd</sup>, this was probably her 2nd nest attempt this year.



Notice the tips of the 4 central tail feathers are gone (green arrow), and all the other tips are disheveled, and appear poorly groomed. There are many faint stress marks that extend across the width of the feather (red arrows point out a few of the many stress marks). Stress marks, also called "fault bars", are weak spots in feathers that are grown during brief periods of starvation. Where they occur in flight feathers is where a break is likely to occur, which is probably why the tips broke off. Broken flight feathers handicaps birds. But only until the next molt. The plumage of a bird can tell you a lot about the bird's age and physical condition.

Every so often you gotta stop to say "Awww" and snap a photo before doing any science. We went out to band another late clutch and caught the female inside feeding her chicks a well-plucked sparrow (sorry, she is lying on top of the food, so it is not visible in photo). The chicks are about 10 days old which is too young to determine gender, but they definitely have feet and legs large enough to allow banding.

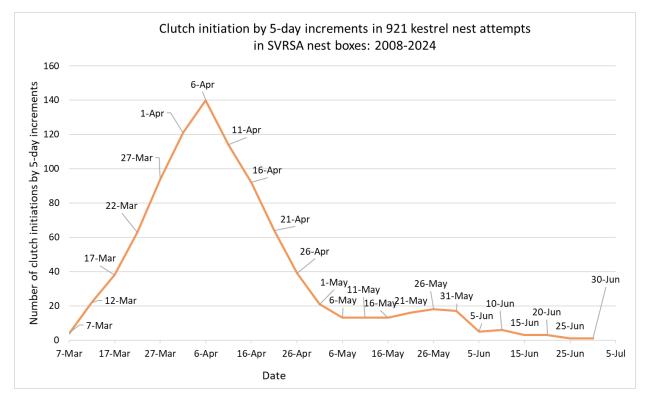


Here's the huge dragonfly that one of the chicks had in his talons when we opened the box. It was almost 90 degrees when we went out to band this clutch of late kestrel chicks. When Jill opened the box, some of the chicks were panting but they seemed healthy and well fed with that dragonfly and a young grasshopper in the box with them (kestrel MREs).



#### Summary of kestrel productivity in the SVRSA ~ 2025

Our 90 kestrel boxes produced the exact same number of chicks as last year = 260. The first chicks were banded the end of April and the last in mid-July. As expected, the bulk of nestlings (200 nestlings = 77% of total) were banded between mid-May through the first week of June. After that, it was just dribs and drabs.



The percentage of nest boxes that were occupied was about 90% and this year's failure rate was a bit higher than usual, around 26%. Our long-term average failure is 20% which means 80% of the nest attempts were successful. However, we had several late nest attempts that were surprisingly successful in producing chicks.

#### BARN OWL NEWS



Ben Spory sent us this photo quite a while back and we forgot to put it in an update. Better late than never to show this beautiful bird incubating eggs inside an abandoned silo.

This year wasn't good for barn owl nesting, as we had only 26% of the known nesting sites that had eggs. That resulted in us banding about half the usual number of barn owl chicks (banded 16 this year and our average is 30). Not sure why this season was poor, but the usual suspects are low prey numbers (almost strictly small rodents) and weather. One site that had 6 barn owl eggs we did not return to band chicks and, at another occupied site, we lost permission to check in future. The broods we banded were on the small side: 16 chicks in 4 nest sites. There were a couple of places that have nesting barn owls every year that were not active this year. One landowner reported his adult barn owl had been killed and eaten (probably by a great horned owl which is why barn owls don't nest near woodlots) and, in the other empty nest site we could find no reason – it was just vacant. Our neighbor has an old metal silo he invited us to check. Inside was the body of a barn owl and, at the top was perched a (live) barn owl, likely the mate of the dead one. If we could get the state game department to give us a permit, we would like to have any dead barn owls tested for toxins, pesticides, rodenticides or other lethal chemicals. Of course, there is the possibility it died of starvation, trauma, old age or diseases like West Nile virus.

A barn owl chick we banded last year flew 170 miles southwest and was recently killed by a motor vehicle near Fancy Gap, Carroll County Virginia. Someone noticed the bird band and reported it to BBL. Many thanks to him for that. Even though the barn owl died, the data he/she gave us is valuable. Over the years we have banded over 500 barn owls in Virginia but we've only had a few reported recoveries.

## SCREECH OWLS IN THE SVRSA



Here's yet another great photo we forgot to use earlier this season. It was sent to us in early spring, taken by the kind person who let us install a box on his property. Unfortunately, this nest

box was used by starlings for the second year in a row. Perhaps this screech owl was just checking it out or roosting inside during the daytime.

Another stat that didn't change from last year: we only had one successful screech owl box in the study area this year. Here's one of 4 grumpy-looking chicks on banding day. They all fledged.



## A New Kestrel Box Program in Page County~ Established 2025 by Tim Rocke

After several years of helping Jill and Lance, I became a permitted bird bander and installed 13 kestrel boxes in northern Page County. Driving around looking for prime habitat proved to be more onerous than I thought. An open field with good hunting and a safe landing place for the fledglings first flight is essential. I placed the boxes about 9 feet off the ground facing east to protect the birds from direct afternoon sun (heat). Although this year the rainstorms came from all directions, none of my east-facing boxes seemed to be excessively wet inside - as had been reported for other boxes in the area.



Tim releasing an adult female kestrel; photo taken by Liam McGranaghan.

In April, my first box near a Christmas tree farm and pasture had a pair of kestrels and 5 eggs, but the box with eggs was abandoned. I banded the female in her original box and someone else recaptured her 7 weeks later a few miles down the road where she renested in a different box. By June, another pair moved into my original box, and I was able to band the adult male and three fledgings; however, one egg was unhatched. Another box I banded 4 fledgings, but when I came back later to see if the box was occupied for a second time, I found 2 dead banded kestrels inside. Based on the length of their feathers, they had been nearly ready to leave the box when they died for unknown reasons. Another of my boxes had 5 kestrel eggs but, when I returned to

check I found that starlings occupied the box. Ugh. The more you band birds, the more you see how difficult it is for birds to survive. That's one reason why we do this to give them a helping hand by providing boxes. On the upside, it's such a thrill to pull up to a box and see a kestrel on a wire or flying overhead. And thinking... did I flush it out of the box or is the other one in there? Sneaking out of the truck and sticking the endoscope in the plugged hole is your only way to answer the question. Hopefully, you'll see the prize inside the box - the adult, eggs, or hatched birds. And in back of your head you hear Lance saying "Don't @#&\* it up!

In my study area, I banded 14 kestrel chicks and recaptured 2 banded birds: one was from a box across the mountain in Jill and Lance's Shenandoah Valley Study Area, and the other kestrel had been previously banded locally by Alan Williams. This season 7 of 13 boxes were occupied (54% occupancy) and 5 of the 7 occupied boxes ended with kestrels successfully fledging (71% succeeded). Starlings occupied all other boxes including the two that were previously occupied by kestrels. Of the 32 eggs laid, a mere 14 hatched, some were abandoned, others either infertile or not viable. There was a 58% hatch rate of the kestrels that actually raised a brood.

I also took on another initiative, installing 10 bluebird/tree swallow boxes on Luray's Greenway along Hawksbill Creek. Their website posted an article about this: <u>Greenway Welcomes This</u> <u>Year's Small Feathered Friends | Hawksbill Greenway</u>

At one point, all the Greenway boxes were occupied including one with a white breasted nuthatch. A total of 15 tree swallows were banded, along with 5 bluebirds. Unfortunately, I was away on vacation during peak banding time, so I missed banding birds in a few boxes. For a second clutch, most were occupied by house sparrows. Several friends accompanied me when I checked the boxes and we'll see if any birds (or friends) return next year.

### D. O. G. E.

Unfortunately, the current administration is drastically reducing funding for science programs and the Bird Banding Lab (BBL) is not exempt. BBL has been collecting data on birds for the past 105 years and this program (along with many other science programs) is threatened with obliteration, ostensibly to save money. Below is what the BBL director wrote in his latest MEMO TO ALL BANDERS June 2025:

"Banding is so much more than just connecting dots between where a bird was banded and where it's later found. It's about holding that bird in hand—aging it, sexing it, assessing its feathers, checking for molt, fat stores, and breeding condition. On the recovery side, we can reage it and learn even more— how it's behaving, its local movement or migration, how and where it may have died, and what that tells us about the health of both individuals and entire populations. Altogether, this gives us unique insights into both the "what" and the "why" - what are birds doing and why? What are the trends through time and why are we seeing changes? There's an image that sticks with me—one of a coal miner carrying a canary down into a mine. If the bird stopped singing, if it fell off its perch, the message was clear: the air wasn't safe. In many ways, birds are still warning us today—just on a much larger scale."

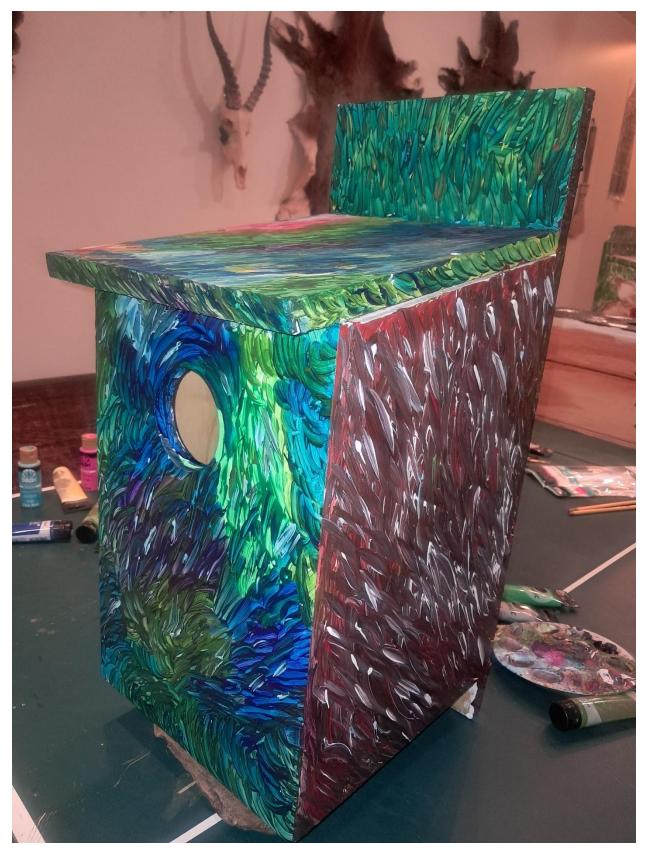
In a recent memo to all bird banders in North America, USGS wrote:

"If you discuss or share your banding projects to any public platform or social media, please indicate all banding, marking, and sampling is being conducted under a federally authorized Bird Banding Permit issued by the U.S. Geological Survey."

New REPORTBAND.GOV link If you host a website that encourages folks to report banded birds to the North American Bird Banding Database, please note we have updated the LONG URL link to make it more secure. New updated link: https://www.pwrc.usgs.gov/ BBL/Bander\_Portal/login/reportband.php

# **Painting Party**

That previous paragraph was too depressing to end our update so, here are photos of the kestrel nest boxes we painted recently at our 1<sup>st</sup> annual potluck and box painting party. Michael Cohn had given us nest boxes that he made from non pressure-treated plywood so we decided to paint them and coat with a satin clearcoat once they are dry. Below are photos of our efforts in no particular order. Once we mount the boxes outside, we will try to take better photos of them in all their glory.



Tim Rocke's kestrel box



Susan Rocke's box









Corine Hagan's box



Chad Coffman's box

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Lance & Jill Morrow