1st Update on the Shenandoah Valley Raptor Study Area April 9, 2025

We are back doing kestrel research

Each year we try to catch kestrels who are spending the winter in our study area. This year we didn't have any bait (mice) until a friend brought us 4 mice in February. As you probably remember, February had a lot of stormy weather which prevented us from trapping most days. However, we managed to get out and trap two kestrels, both males. The first was caught on Valentine's Day. He had been banded as a nestling in one of our kestrel boxes in the north part of the study area and is now nearly 2 years old. He and a female kestrel were hanging around a nest box near where we caught him alongside the road. The other male kestrel we trapped was nearly 1 year old, also banded as a nestling within the study area.



March is the month when we visit all 90 kestrel nest boxes and make sure they have tops and bottoms and are going to last for another year. If not, we will replace the old box with a new one. March is also the month for ensuring there is adequate bedding inside boxes. Either we break up the old debris from previous nestings or we add shredded cypress mulch to each box for bedding. Each spring we typically find two unpleasant items in boxes, either a squirrel nest or the remains of banded kestrel nestlings who didn't fledge from the box. This year we found 3 squirrel nests and 2 dead kestrels. The kestrels were found in a box that had 6 nestlings, so they were probably chronically short of food. One of the unfledged kestrels consisted of a leg bone with a band encircling it, and the other was an entire body mummified in a strange pose. They appeared to be near fledging size when they died in the box. Either they starved to death, or they could have been strangled by a black rat snake. As we've documented previously, snakes sometimes try to swallow kestrel nestlings that are too large to swallow so the snakes release the nestlings in the box - dead and covered with saliva. Back in early April, when weather was warmer, we saw the first black rat snake of the season.



Students build kestrel nest boxes

Our long-time assistant, Tim Rocke, organized the high school shop class of Rappahannock County High School to build 27 new kestrel nest boxes last October. To thank them, we gave a PowerPoint presentation on our kestrel research at their school auditorium. We also took our redtail hawk and a live kestrel was provided by Robert Gettleman, a falconer friend (on stage talking to Jill). It was nice to see the young folks getting interested in raptor conservation.



Grants and relationships with other organizations

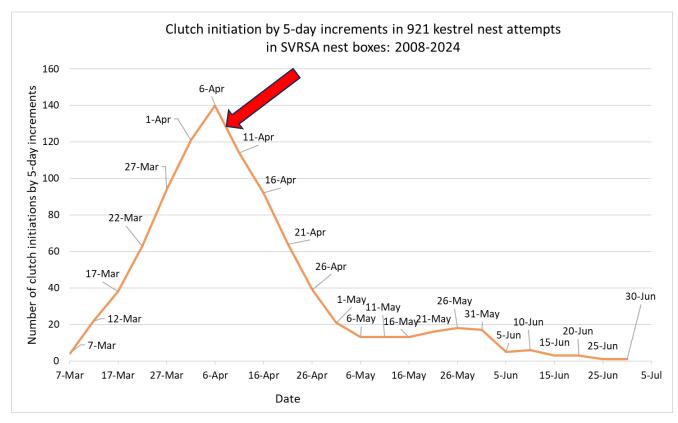
This past "off season" (August-March) we decided to apply for grant funds to pay for kestrel boxes, publishing costs, and other related expenses like banding pliers and gas. To our surprise, we got two grants for our kestrel research from both the national and our state falconry organization: North American Falconers' Association (NAFA) and Virginia Falconers' Association (VFA, a club that Lance helped establish about 42 years ago).

In addition, we were approached by Soldiers 2 Scientists, an organization run by Michael Cohn, to see if we could help his group to promote former military members doing conservation research. We co-applied for a grant from Hawk Watch International and got it! Michael constructed and delivered us 24 new boxes and he re-established the kestrel nest box program at the Manassas Battlefield National Park with the help of a falconer friend, Corine Hagan.



Current situation in the study area

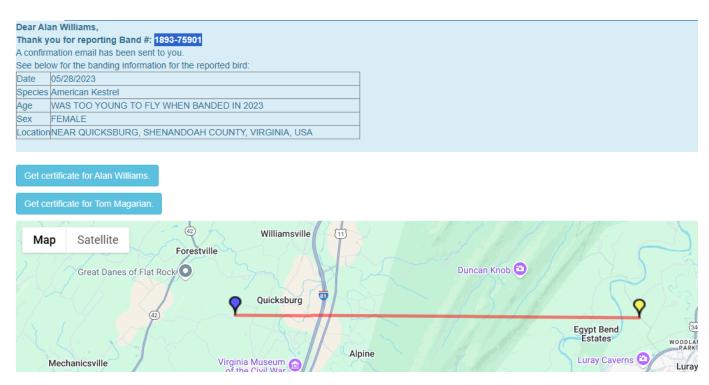
Recently we have begun checking nest boxes and catching adult kestrels inside. This current cold week is too chilly for us to bother the kestrels. Our nest box protocol says that we don't check nest boxes when temperatures are below 55 degrees (or after 5 pm) because we don't want to remove kestrels from their eggs, which could chill and possibly kill the embryos. Thus far, we have checked 43 nest boxes in April and found 17 boxes occupied by kestrels, 7 had starling nests, and 3 boxes had baby squirrels. The median date for kestrels to lay their first egg is April 6, so it is still early, and we expect our occupancy to keep going up.



Above is the graph of dates kestrels begin laying eggs in the study area over 17 years aggregated data. The large red arrow indicates the current date. There are probably multiple nests waiting for us to find them when the weather warms up, since the last time we checked any was on April 4th.

The most interesting part of catching adult kestrels in boxes this time of year is recapturing banded kestrels. So far, we have caught 10 females and 1 (unbanded) male on eggs. Eight of 10 females had bird bands. Four of those banded females had been previous banded by us as babies in our nest boxes. Two banded females had been captured and banded as breeding adults in 2023 or 2024, and both were still using their same boxes where first caught/banded. The last banded female kestrel wasn't banded by us, so it is called a "foreign" recapture. We suspected, then confirmed, that she had come from one of Alan William's kestrel nest boxes about 17 miles due east. She was banded by Alan nearly 2 years ago as a nestling. The very same day we caught Alan's banded kestrel, he had caught a banded 2 year old female from our box program. In

essence, we are swapping kestrels between the Shenandoah Valley and Page/Luray Valley kestrel nest box programs. Here is what the Bird Banding Lab report looks like. It shows the location of her natal nest box near Quicksburg (within the SVRSA) and the location where Alan recaptured her in his nest box near Luray.



After years of kestrelling with us, Tim Rocke became a bird bander. He installed 13 kestrel boxes in his local area which lies north and east of the SVRSA. He's also agreed to be the bander for any kestrels raised in the Manassas Battlefield boxes.

Vultures are nesting, but where?

We noticed several times last month a pair of Black vultures sitting on the chimney of an abandoned farmhouse. This was a clear sign that their nest was nearby. We asked for permission to go there, and we checked under a collapsed shed, inside the two-level barn, and on the first floor of the house – no vulture nests found. Jill was too scared to go upstairs to check the home's second story and attic, for fear it would collapse. It was built in 1900 (per the county website) and, you can see from the photos, is in very poor shape.



They put up an old gate to keep cattle off the porch, but Jill squeezed by.



We've found evidence of roosting barn owls in this silo, but they've never bred there to our knowledge. The collapsed shed would have been a good vulture nesting site, but they weren't there. Since the upper level windows are broken out of the house, we suspect that's where the nest is located. Oh well...

Bluebird boxes are active

It is also time to clean out our 60+ bluebird boxes in the study area. There are several species of native birds that have nested in them: Eastern Bluebirds, Tree Swallows, Chickadees, and House Wrens. Also the boxes have attracted House Sparrows, wasps, and mice. This White-footed Deer mouse has several babies, and they were too cute to evict. They should be gone by the time a bluebird needs it.



Other bluebird boxes have bluebird eggs already (early this year). Others are being defended by Tree Swallows and House Sparrows. Too early to tell if this will be a good year for bluebirds and their ilk.



Tim and Lance demonstrate their "Safety First" protocol using traffic cones.



We recently received this cool kestrel postcard (design by Scott Partridge) from a friend.

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."

If you are deeply interested in our work, go to our Research Gate page to read any of our published papers, photos and other items: <u>ResearchGate</u>

Feel free to forward to friends and let them know we will add them to our email list if they contact us: saltlick2003@gmail.com

Lance & Jill Morrow