

## UPDATE on the Shenandoah Valley Raptor Study Area

June 10, 2020

### Kestrels in the SVRSA to date

Kestrels are doing very well this year, producing 338 eggs, and hatching almost 90% of them so far this season. It might be due to the wonderful weather this spring and early summer – not too cold, not too rainy, and not too hot. To date, we have banded 238 nestling kestrels in 54 nest boxes. This works out to 4.4 nestlings per successful nest box; a rate that we have only seen during the 3 best years of our 13 year kestrel nest box program. Other folks have also reported kestrels are doing well in nest box programs in VA, NJ, PA and NY.

However, it is all downhill from here! Historically in our study area, later clutches are smaller and less successful than nests begun before mid-April. There are a few months yet to go, but by now we have banded the bulk of nestlings for 2020. We have just a few more boxes to band with around 22 possible nestlings. Unless we get a surge of second nest attempts... which we feel is unlikely due to this year's success of early nests.



The photo above is 5 female nestlings from a box with a stellar history of producing kestrels who survive their critical first year. They tore up Jill's hands during banding. We normally do not band at this age because the nestlings are too aggressive in their defense. Banding a week earlier would have yielded the same results with much less pain from talons and sharp beaks puncturing fingers. The worst comes from kestrels who are on their backs, freeing up both feet to seize the bander who is foolish enough to engage them in this position. We do not wear gloves to ensure we do not injure the nestlings inadvertently.

## Habitat destruction



The above photo is a sea of barley growing around our kestrel box in late May (box is on the 2<sup>nd</sup> pole from left). In previous years this was a hayfield which is much friendlier to kestrels.





When we returned 10 days later to band the young kestrels, we found this scene. The barley had been harvested and there were several machines standing by to complete the destruction of formerly good kestrel habitat. They were removing the trees along with the fences. Note the 2 large snag trees present in the upper photo – they have just been removed. We expect to see a giant field of corn here next.

We banded 2 female and 3 male kestrel nestlings in the box who were, not surprisingly, underweight. Kestrels can take some noisy machinery, but this is likely pushing their limits. Hopefully, the parents will continue to bring in food and the nestlings will survive and fledge from the box. This box has a wonderful 5 year history of producing young kestrels, so we are not happy because we have probably lost another kestrel producing habitat. It is in our protocol to visit nest boxes 6 weeks after banding nestlings to determine whether they fledged or died in the box. On average, 98% of banded nestlings make it out of the boxes. We'll keep you posted on how this boxful fares.

## Barn owls

Although we know of dozens of active barn owl nest sites, during the last few years we've banded only those owls nesting on the ground. We have gotten too old to climb up to our barn owl nest boxes that we, Liam, and Judy installed near the top of many abandoned silos! And the silos themselves are getting too old to safely climb (rust and dry rot take their toll). Our kestrel box route took us past a

silo that has consistently been used by nesting barn owls, so we decided to check it (since we were right there).



Jill climbing into an abandoned silo to band the barn owls who regularly nest on the leftover silage inside.



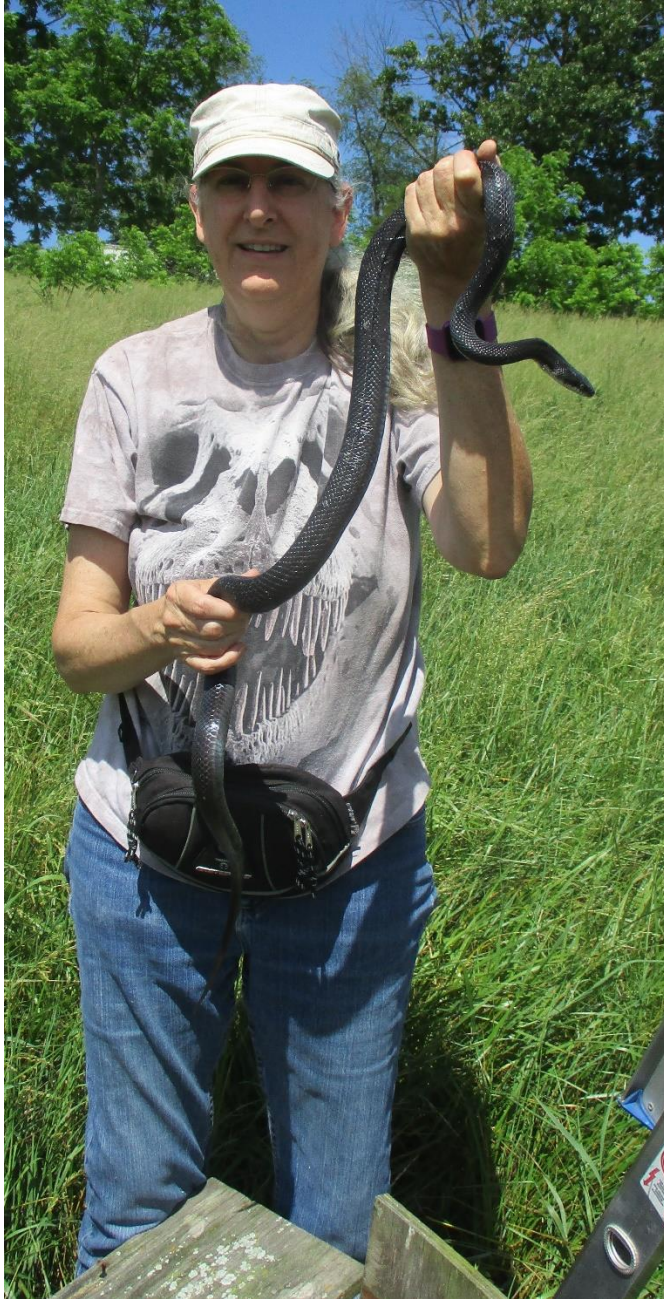


There were 5 healthy and feisty barn owls who are ready to receive bird bands. Young barn owls typically cluster together and hiss loudly to present a united and very scary front to any predator. It is deafening inside the silo but, after spending some time with them, the owls stop making noises - until you go to pick each of them up for banding (when shrieks resume). On the last day of May we banded 10 barn owls in 2 different broods on the bottoms of silos.

## Black snake in nest box

We were rechecking kestrel nest box # 59 which has a poor history of producing kestrels. Inside we found a completed starling nest but no eggs. Probably because the black rat snake inside the box had just eaten the starling eggs! We removed the box from the pole and then extracted the snake once we were on the ground. This box has been an enigma ever since we installed it 5 years ago. It has always been occupied by kestrels who lay 1-5 eggs, but they never succeeded in producing young who survive to banding age (2 - 3.5 weeks old). Perhaps this black snake is one of the reasons why kestrels fail ...





## Removal of nest boxes

As conditions change within the study area, we respond by removing or relocating our nest boxes. There are many possible reasons for this: changes in habitat (i.e. trees growing up, lessening chances a kestrel will use the box), changes in land use (i.e. the landowner decides to grow row crops instead of hay – like box discussed above), or poor kestrel occupancy/success (sometimes we do not



know what causes kestrels to fail consistently but it could be something like a black rat snake or squirrel harassment). Sometimes we remove a nest box because the landowner puts up an electric fence or a locked gate that we do not want to deal with. Our motto is that a box needs to be as accessible as possible. Years ago we installed nest boxes out in fields but recently learned that they were less successful than boxes right next to roads. Thus, we've slowly been removing boxes that are "time sinks". It takes a lot of time slogging through grassy fields with the ladder and screwdriver, etc. for each nest check. Plus, there is usually a cattle guard or fence to deal with as well.

In our old age we are trying to work smarter – not harder.



This young female kestrel is the perfect age for banding, around 18 days after hatching. She should fledge from the box when she is around 30 days old. Good luck baby!

Lance & Jill Morrow