

WFA Role of Birds on Farms Course

Lesson 4 Remaining Audience Questions Answered

Cheryl: Have you noticed less mating pairs and babies this Spring?

Matt reply: In Napa yes our occupancy so far appears to be about 20% whereas it has been 30-50% in previous years. However, I learned from a colleague in the Central Valley of California that occupancy and brood sizes appear larger there than usual.

Rachel: Might a barn or structure of some add the the feeling of safety of a barn owl family?

Matt reply: Maybe, but nest boxes on poles are widely occupied throughout the world and owl families do just fine. Some predators might be able to access some nesting sites on some structures better than nest boxes on metal poles.

Kathleen: What size opening for the entrance...how big is the hole?

Matt reply: There are several hole sizes recommended, and they seem to all work. We don't at this point have evidence that the owls strongly prefer larger or smaller sizes. The minimum should be 3.75" by 4.5" (wider than tall). The max should be a 5.5" circle.

SMendoza: Any advice for someone that wants to place a box in an urban farm?

Matt reply: You should first confirm that there isn't widespread use of rodenticides in the area. Barn owls spend the majority of their time hunting close to the box (i.e., within 500 m) but will occasionally go up to 1.5 miles away. It might be hard to know much about that big of a radius, but urban places sometimes have areas with high rodenticide use (look for black boxes of rodenticide baits for rats outside restaurants, industrial places, near dumpsters, etc.). If there are a lot then I think you should refrain from putting up a box. If the area looks OK, then the same recommendations apply (wood box of large enough size, up at least 10 feet, facing N or E, with wood shavings, etc.)

Doug: Are you aware of research focused specifically on barred owls? We have numerous on and around our farm in the Adirondacks (NY).

Matt reply: there is a lot of research on barred owl ecology in general, but not much on their use of nest boxes. They will use them, though they aren't quite as easily attracted as the barn owls. Here is some info (thogh note I do not recommend pressure-treated plywood because of the chemicals):

<https://isfort.uqo.ca/wp-content/uploads/2020/11/Doyon-et-al.-2000.-Barred-owl-Strix-varia.pdf>

Marcie: What do you suggest to be used around buildings for rat and mouse control if don't use anticoagulants?

Matt reply: Owl boxes near or on the buildings can be good if the area is relatively free of rodenticides. Otherwise snap traps are best.

C. Klassen: Is Avian flu having an impact on raptors? Is there anything you can do to assist?

Matt reply: Avian flu seems to affect some birds more than others. Waterfowl are among those most impacted, but some raptors – especially carrion-eating vultures and eagles – also get hit. Here is some more info. If you live near a hotspot, you could consider taking down bird feeders for a while. <https://www.birdwatchingdaily.com/news/conservation/avian-flu-update-what-to-know-about-feeder-birds-eagles-owls-and-more/>

Agustin: Any nest boxes and perches for bald eagles?

Matt reply: Bald eagles don't nest in nest boxes (they build their own stick nests). Very sturdy and tall perches could conceivably be used if you live in a place that eagles frequent.

Billy: All the studies seem to have been done in California. To what extent do you think the results relate to the Midwest?

Matt reply: Great question. Some work in Idaho suggests these patterns apply there as well. In addition, researchers have found that barn owls readily occupy nest boxes and help control rodent pests in Israel, Malaysia, Kenya, Chile, and Europe. So with that widespread pattern, I suspect the same holds in the midwest too!

Breanna reply: In general, I think many findings of raptor perch studies will also hold true outside of the region where they were conducted. There was one recently published raptor perch study that took place in Indiana though. They showed that installing perches in row crops 200 meters from the field edge attracted more perch-hunting raptors to the fields, such as great horned owls and red-tailed hawks. Prior to installing the perches they only saw hover hunting species and other species that typically only hunt in flight, such as American Kestrels and Northern Harriers. <https://doi.org/10.1111/aab.12623>