

# **Installing and Monitoring American Kestrel Nest Boxes in Orchards by Megan Shave and Catherine Lindell, Michigan State University**

## **Important note:**

Kestrels in orchards eat voles and mice, so rodenticides should not be used in orchards when kestrels are present (April- Sept. in northern lower Michigan).

## **Box installation and location**

Boxes should be initially installed and cleaned during the non-nesting season (Oct.- March). Boxes should be installed away from wooded areas to reduce the risk of occupancy by European Starlings. Open habitat with sparse trees/shrubs is desirable.

Boxes mounted on their own poles/towers can be installed within the orchard itself, either at the end of a row or within a row in an open spot if there is a missing plant.

Boxes should be installed at least one-half mile apart to allow for kestrel territoriality.

## **Box characteristics**

Boxes should be installed 10 – 20 feet from the ground. The box entrance should face the southeast; kestrel nests are more successful in boxes facing this direction.

## **Box maintenance**

Kestrels do not build nests, so the bottom of nest boxes should be lined with wood shavings or animal bedding.

Boxes that were occupied during the summer should have the wood shavings replaced during the following fall/winter or early spring in preparation for the next breeding season.

If a European Starling occupies a box, it will add grass and other materials to the box and lay 5 – 7 pale blue eggs. An identified starling nest should be removed from the box, and new wood shavings should be added to the box if needed.

## **Box plans and monitoring efforts**

Information about installing nest boxes and plans for a simple kestrel nest box can be found here: <https://kestrel.peregrinefund.org/nest-monitoring>

Please consider contributing to the nationwide kestrel nest box monitoring effort by registering your boxes with the American Kestrel Partnership. You can get started here: <http://kestrel.peregrinefund.org/begin-obs>

Plans for the Spartan kestrel nest box and mounting tower (designed by Tom Comfort) can be found here: <http://www.nestboxbuilder.com/nestbox-article-spartan.html>

### **Nesting phases in the northern part of the lower Peninsula of Michigan**

The female kestrel lays 3 – 5 white or brownish speckled eggs in mid April to mid May and incubates for about 30 days. After hatching, the nestlings remain in the box for about 30 days before fledging.



**Kestrel fledgling sitting at box entrance**

### **Monitoring boxes**

Boxes can be checked once every 7 – 10 days during the breeding season.

Avoid checking the boxes during the last week of the kestrel nestling period to avoid premature fledging by the nestlings.

### **For information about perches which can also attract raptors**

<https://efotg.sc.egov.usda.gov/references/public/WY/RaptorPerches.pdf>

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