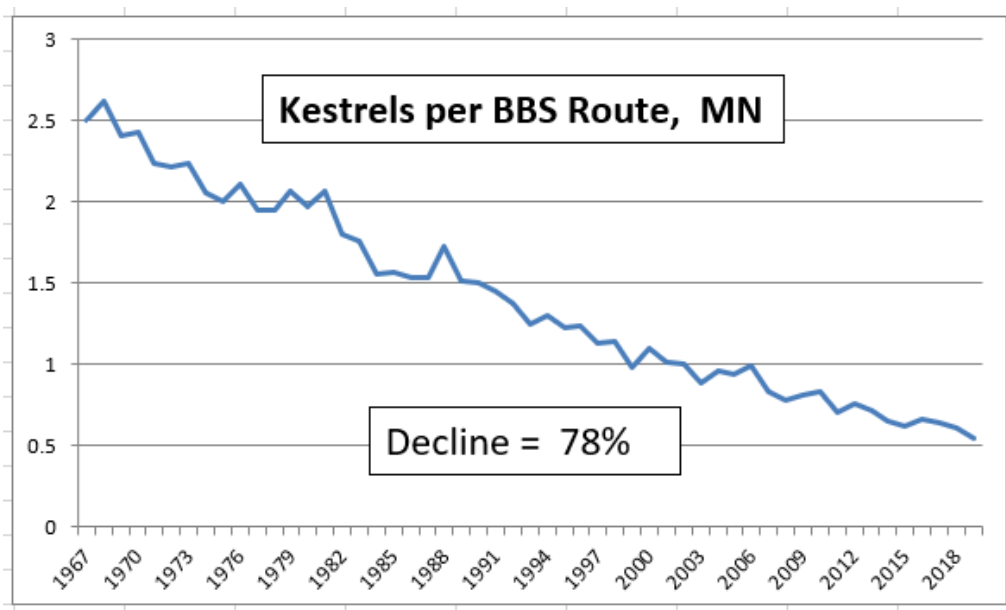


# American Kestrel Nest Box Project

## Of the Saint Paul Audubon Society's Conservation Committee

Members of the SPAS Conservation Committee began placing nest boxes for American Kestrels in 2012. American Kestrels have declined steadily in Minnesota, as shown by this chart of occurrences per Breeding Bird Survey route of the U. S. Fish and Wildlife Service in Minnesota from 1966 to 2019.



The Conservation Committee saw a nest box project as a way to help kestrels since they typically nest in tree cavities, which are in short supply. The species account of the American Kestrel in *Birds of North America Online* states: "Nest boxes, commonly employed for studies of wild kestrels, shown to be beneficial to those populations ...."

### Obtaining and installing nest boxes and poles

Since placing that first box in 2012, we have placed, moved, and removed boxes based on the results. As of the 2023 nesting season, we have eight boxes in place, in Ramsey and Washington counties. Our first boxes were made of long-lasting cedar, which has since become prohibitively expensive. We now have a supply of white pine boxes built to our specifications—based on the [American Kestrel Partnership](#)'s recommendations—and donated by an Eagle Scout.

We add a bed of two to three inches of aspen chips to the box. Without the chips, the female kestrel will lay eggs on the bare wood floor, and the eggs will probably not hatch because the kestrels cannot keep the eggs warm and together.

American Kestrels prefer a nesting territory of at least 50 acres of short vegetation with some trees, utility poles, wires, or other places to perch. Their main food during the nesting season is small mammals (voles, mice) and large insects.

To mount a box, we ask the host site to provide a pole that extends about 20 feet above ground. We attach the box with its entrance about 15 feet high, facing southeast. To deter predators from

climbing the pole, we wrap one or two pieces of 30" x 40" aluminum around the pole. These are used photographic plates, donated by GLS Companies, Bandana Square, St. Paul.

Experience at the Arden Hills Army Training Site has shown that kestrels will always choose a nest box on a free-standing pole rather than a box attached to a tree trunk.

### **Monitoring**

We recruit volunteers to monitor the nest boxes (from a distance). Monitors observe the boxes at least once a week during the nesting season to determine whether kestrels, or other species, appear to be nesting.

European Starlings and House Sparrows sometimes nest in kestrel boxes, but that is less likely if the box faces southeast. (Starlings prefer north-facing.) If we see these alien species (which are not protected) using a box, we will remove the nest and eggs. If a native species uses a box, we will not interfere.

### **Reporting**

The female kestrel lays an egg every other day until the full clutch—typically four or five eggs—is present. The female begins incubating after the next-to-last egg is laid. The female does most of the incubating, but the male also takes turns. The eggs hatch after about four weeks of incubation, and the young fledge (leave the box) about four weeks later.

If it appears that kestrels are incubating eggs, we inspect and photograph the contents of the box with a pole-mounted camera connected to a laptop computer. This does not require a ladder, and it causes minimal disturbance to the birds. If a full clutch is present, we return about a month later to photograph the chicks. We estimate the age of the chicks based on a guide provided by The American Kestrel Partnership. We report nesting results to the AKP. The AKP asks us to provide, as a minimum, one report when eggs are present and one when chicks are present. We also report negative results at the end of the season.

### **Fledging**

We try to have the monitor observe the box (from a distance) at about the expected time of fledging. In the days leading up to fledging, the young kestrels can often be seen looking out of the box. After fledging, the young remain in the area for about two weeks, sometimes perching on the box, while the parents continue to capture food for them.

### **Clean-up**

In the fall, we scrape the interior of each box and replace the aspen chips—even if the box was not occupied. (Who knows what critters might be lurking in those chips?). We also rub a bar of soap against the inner surface of the roof of the box, which makes it less likely that a wasp nest will adhere to the roof.

### **Volunteer?**

Let Saint Paul Audubon know if you would like to have the pleasure of monitoring one or more kestrel nest boxes.

