Fact Sheet 797

# American Kestrel The Barnyard Friend

## Introduction

The American kestrel (*Falco sparverius*) is the smallest member of the falcon family found in North America. It is a common bird throughout suburban and rural areas. The male kestrel's contrasting slate blue and brown plumage often catches the eyes of people traveling by car. The female looks similar but lacks the blue coloration.

The kestrel has two unique characteristics that set it apart from other diurnal (daytime active) raptors—or birds of prey—such as hawks, eagles, and falcons. First, the kestrel nests primarily in tree cavities that have been excavated by woodpeckers. This differs from other diurnal raptors, who build open platformlike nests. Second, a kestrel hunts by hovering in the air, then diving down to catch its prey on the ground. Watching kestrels hunt, with or without binoculars, can be an interesting and enjoyable experience. Kestrels also provide farms and nonfarm areas with some natural help in managing a wide range of pests.

In addition to describing many aspects of the kestrel, including distribution, habitat preferences, and food habits, this fact sheet illustrates how to try to attract kestrels to your property.

# **Distribution and Habitat**

The kestrel is widely distributed throughout the United States. It can be found from

the Mexican border throughout most of the contiguous United States into Canada and most of Alaska. Kestrels are found in varied environments including grasslands, deserts, forested areas, and some coastal regions. Recent estimates suggest that the kestrel is the most numerous raptor in North America.

In Maryland, we often find kestrels around grasslands and fields that have some trees present. Kestrels in Maryland are becoming more and more common in suburban neighborhoods and along highway rights of way. The presence of trees, alive or dead, that contain adequate nesting cavities is an important component of the kestrel's habitat. Most Maryland farmyards provide suitable habitat for kestrels.

### Diet

The kestrel was formerly known as the sparrow hawk and for good reason. Its diet is varied, but sparrows and other small birds make up a fair percentage of its prey. The European starling, a non-native nuisance bird, also ranks high on the kestrel's menu. Kestrels also prey on deer mice and other small rodents where available.

In addition to eating birds and small mammals, kestrels also consume a large number of insects. They prefer large insects; research shows that grasshoppers, beetles, and cicadas are most favored. Kestrels' prey are considered pests on farms and in community gardens

alike. For this reason, attracting kestrels to your property may be one more positive step in an integrated approach to managing certain agricultural and garden pests.

**Note:** Domesticated animals are not a part of the kestrel's diet. Because it is not large enough, the kestrel does not prey on livestock or chickens and therefore poses no threat to them.

# Attracting Kestrels to Your Property

Since kestrels nest in cavities, it is possible to attract them to properly constructed nest boxes that simulate natural cavities. Proper placement of the nest box is important. Place nest boxes between 10 to 30 feet high on a pole or in a tree. Choose a site in an open area, rather than a heavily forested one. A forest/field edge setting is also a good location. It is important that you locate the nest box within easy reach by ladder for monitoring and cleaning.

Photograph by Hugh Simmons

Kestrel nest boxes are easy to make or may be purchased at various home and garden centers and bird enthusiast stores. Plans for building a kestrel nest box appear on page 3. When your kestrel box is ready to be mounted, don't forget to put 2 to 3 inches of wood shavings/chips in the bottom to simulate the bottom of a natural tree cavity.

Whether mounted on a pole or tree, the nest box requires the installation of a predator baffle. For an effective and easy baffling method tightly fasten a 2-foot wide piece of slick metal flashing around the pole or tree. Place the flashing between 4 to 6 feet off the ground to prevent a predator from climbing up the pole. Of course, if a metal pole is used, flashing is probably not necessary. It is important not to place the pole or nest box close to wires that allow raccoons, cats, or squirrels to gain access to the nest box.

Kestrels hunt from perches as well as while hovering. Therefore, a perch attached to the nest box pole or nearby will help attract them. They may also perch from wires located

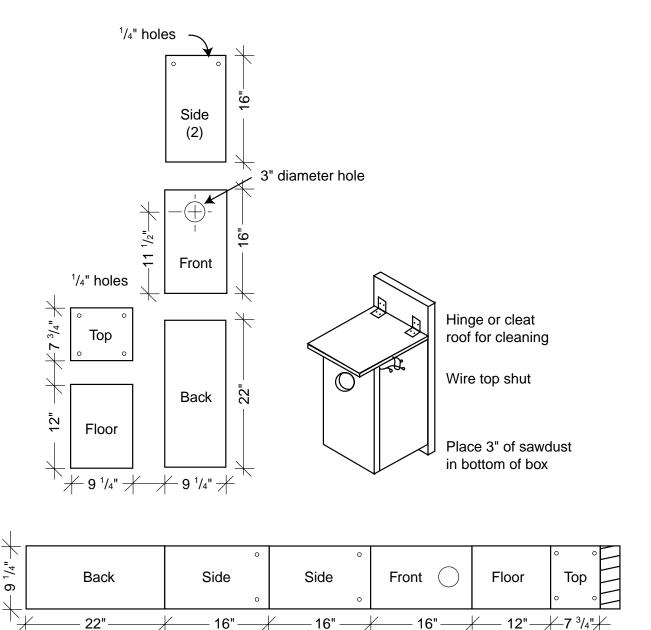
> near the nest box. Kestrels generally hunt from perches that are less than 100 feet high.

To preserve breeding territories, do not place kestrel boxes closer than 1/2 mile to one another. Nest boxes closer together than 1/2 mile may cause unnecessary fighting between males.

In Maryland, kestrels may begin looking for suitable nesting sites toward the end of winter into early spring. For this reason, it is important to have your kestrel box mounted by February.

# Monitoring and Maintaining Your Kestrel Nest Box

There are several reasons for monitoring and maintaining a nest box. First, exotic or non-native species such as starlings or house sparrows



may use the box if not discouraged from doing so. These two birds have been blamed for the loss of countless numbers of nest sites used by native cavity nesters such as kestrels, blue birds, and tree swallows. Second, monitoring the activity in a nest box can help determine if predators are gaining access to the box. Third, nest boxes need to be cleaned out after every nesting season. This is necessary for ridding the box of dirty nest materials, fecal matter, and nest parasites. Always wear a dust mask when cleaning out nest boxes, and use a two-percent bleach solution to kill any nest parasites.

The nest box should be carefully and quietly opened every week to 10 days to make sure starlings have not laid their eggs in the box. Even if kestrels are present in the box, it is okay to quietly inspect the box a few times during the nesting season. Starling eggs are normally greenish white to bluish white. Kestrel eggs are usually white, pinkish-white, or cinnamon-colored, and they are evenly covered with small spots of brown. Kestrels normally lay a clutch of five eggs. If you are unsure about which bird's eggs are in the box, take a few minutes and watch from a distance to see which species of bird is using the box. If the eggs belong to starlings,

remove the eggs and discard them. Also, remove any nest materials the starlings may have brought into the nest box.

# References

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# Reviewed by

David Martin
County Extension Director
University of Maryland Cooperative Extension

Shannon Potter
Extension Educator
University of Maryland Cooperative Extension

Fred Hayes OHV Program Coordinator Utah Division of Parks and Recreation

Elijah Goodwin Organismics and Evolutionary Biology University of Massachusetts

American Kestrel: The Barnyard Friend
Prepared by
M. Allan Daly
Extension Educator, Natural Resources
University of Maryland Cooperative Extension

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