

# Fact Sheet

Fact Sheet 799



# The Eastern Bluebird

### **More Than Just a Pretty Bird**

#### Introduction

The Bluebird is one of the most beloved of all songbirds. The male's striking blue color is a welcome sight for many people who eagerly await the Bluebirds' return to their nesting grounds as one of the signs that spring has arrived. Their ready adoption of nesting boxes makes them a willing companion for partnering with humans, continuing a partnership that has existed since the first Native Americans found that Bluebirds would nest in a gourd. This striking bird was not always as common as it is now, with past populations dwindling due to competition with non-native species and a reduction in the nesting habitat of songbirds.

The Bluebird is a secondary cavity nester; it nests in the holes made by woodpeckers and other birds. The growth in populations of such non-native birds as the aggressive house sparrow has greatly compromised the ability of the native Bluebird population to compete for these nests. Fortunately, however, the Eastern Bluebird is making a comeback with the help of Bluebird enthusiasts and people seeking to help control insect pests naturally. The Eastern Bluebird can be found east of the Great Plains and Texas. These birds breed in all Eastern states, from Maine to Florida.

The benefits of having these birds in your neighborhood are far greater than the enjoyment that comes from watching them and hearing their

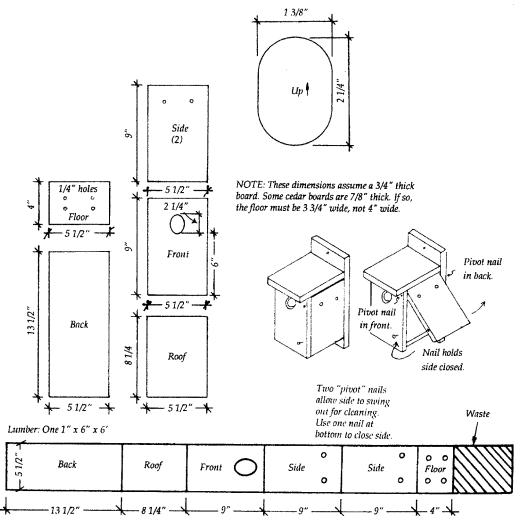
song; Bluebirds eat many of the insects that are common pests for gardeners and farmers. Their appetite for insects makes them an important part of an integrated management strategy for controlling different farm and garden insect pests.

#### Identification

The Bluebird is one of the most striking songbirds in the United States. The male has a bright, rich blue on his upper body and wings, with a red or orange throat and white on his belly. The female Bluebird is similar in size and markings, although she is not the same brilliant blue as the male. The female Bluebird has a paleblue back, and the color on her throat and chest is more subdued than the male's. Immature Bluebirds do not gain their namesake color until about a year into their life; until then, they have a brown back with a mottled brown and white chest, and the males have a slight tint of blue.

#### **Habitat**

Though the Eastern Bluebird resides throughout much of the eastern U.S., it has specific preferences for its habitat. The Bluebird requires open grassy areas and meadows with low ground cover. It prefers areas that have trees or poles for perching. The Bluebird prefers parklands, pastures, and areas such as orchards that allow it easy access to the insects and other



**Figure 1.** Eastern Bluebird nest box plans. Reprinted with permission from the Minnesota Department of Natural Resources.

foods that make up its diet. Many suburban parks, open lawns, and schoolyards can provide habitats that Bluebirds find suitable.

#### Diet

Many people attract Bluebirds solely for their beauty, but Bluebirds also provide excellent help in controlling insect pests. Throughout the breeding season, mating pairs can be seen bringing the nestlings crickets, grasshoppers, beetles, and moth larvae. These insects are often destructive to agricultural crops, orchards, and gardens, so the Bluebird's beauty is more than feather-deep. In winter, when insects are not readily available, the Bluebird will eat wild fruits and berries to augment its diet.

## Attracting Bluebirds to Your Property

Providing nesting habitat for Bluebirds is a great individual or family activity. First, it is important to determine if your property con-

tains the appropriate habitat as described in the habitat section above.

As mentioned above, Bluebirds are secondary cavity nesters. This means they typically use a cavity that was excavated by a woodpecker. They do not make their own nests outside of a cavity. Historically, Bluebirds nested in dead trees and then began to use wooden fence posts as nest sites. As land with dead trees has been cleared and many wooden fence posts have been replaced with metal posts, nesting habitat for Bluebirds has decreased. Fortunately, Bluebirds readily nest in properly built and placed nest boxes. These nest boxes have been designed to accurately mimic their natural nesting cavities. A set of nest box plans is provided in this fact sheet. It is important to note that other Bluebird nest box designs such as the Peterson Box work equally well.

The North American Bluebird Society recommends mounting nest boxes on a smooth round pipe at a height of 5 feet above the ground. Electrical conduit between <sup>3</sup>/<sub>4</sub> to 1 inch in diameter works well as a mount-

ing pole. A smooth metal pole is much more effective than a fence post or wooden pole in preventing predators such as cats, raccoons, and snakes from reaching the nest box. A 2-to 3-foot square of hardware cloth should be fastened on the pole below the box to further deter predators from reaching the box. Nest boxes of any type should not be mounted on a fence or tree because predators often walk fence lines and are able to climb trees.

A properly designed and constructed Bluebird nest box has an entrance hole  $1\frac{1}{2}$  inches in diameter. Bluebird nest boxes should never have a perch on the outside. The birds do not need them and they actually attract undesirable European starlings and house sparrows.

#### **Creating a Nesting Trail**

A Bluebird trail is a series of Bluebird nest boxes that have been placed along a predetermined route. When designing a Bluebird trail, it is important to make sure all the nest boxes will be placed in an area that meets their habitat requirements. Bluebird houses along a Bluebird trail need to be 100 yards apart because Bluebirds are territorial and do not like nesting any closer to one another than 100 yards. However, in places where Bluebirds and tree swallows coexist (all of Maryland), we recommend placing two Bluebird nest boxes about 15 to 20 feet apart, moving another 100 yards and placing two more boxes 15 to 20 feet apart, and so on. As mentioned before, blue birds will not normally nest closer than 100 yards apart, but a Bluebird will nest 15 to 20 feet away from a tree swallow. Both species are highly beneficial because they consume large numbers of insects and should therefore be welcomed to your nest boxes. (For more information regarding the tree swallow, see Fact Sheet 800, "Attracting the Beneficial Tree Swallow.") The only two species of birds that should be dissuaded from using your nest boxes are the European starling and the house sparrow.

#### Monitoring and Maintenance: Keys to Success

Before you decide to erect nest boxes for Bluebirds, it is important to realize that simply putting up the nest box is not the end of the process. During the nesting season, nest boxes should be monitored on a weekly basis for several reasons. First, boxes that are not monitored may do more harm to Bluebirds by allowing non-native house sparrows to inhabit the box.

#### The House Sparrow Problem

If a house sparrow is using the box, the nest (with or without eggs) MUST be removed from the box each time a house sparrow nest is found. House sparrows are an invasive species from Europe and have done significant damage to populations of native cavity-nesting birds like the Bluebird. They are a more aggressive species than the Bluebird and will chase off Bluebirds or kill them. There are no laws protecting house sparrows and they should be exterminated whenever possible. They may be legally shot or trapped at any time of the year. It is important to note that if you trap house sparrows, they should not be released somewhere else. They need to be euthanized. If house sparrows are allowed to live around your Bluebird nest boxes, there is a good chance you will find dead Bluebird babies or adults inside the box. House sparrows have a terrible reputation for killing other species of birds in order to use their nest sites. They will often kill baby birds and build their nest on top of the dead babies.

Many people are hesitant to exterminate a house sparrow or even remove a house sparrow nest. It normally only takes one experience of looking into a Bluebird box and finding dead Bluebird babies or even adults that have been killed by house sparrows to realize how necessary it is to control or exterminate house sparrows whenever they are seen near nest boxes. There are a variety of house sparrow traps available commercially.

A second reason nest boxes must be monitored regularly is because blowfly larvae may be present on the babies. These flies are parasites and if allowed to go unchecked, may greatly weaken or even kill baby Bluebirds. If blowflies are present in the nest box, pick the babies up and flick the blowflies off. Be sure to look under the baby birds' wings for scars or even the larvae. After removing the blowflies, discard the old infested nest. Use some dried lawn grass to make a new nest in the shape of the old one, then replace the young in the nest. The saying that adult birds will not care for young who have been handled by humans is not true; however, it is important to replace the young quickly to prevent them from getting cold as well as to allow the parents to return to feed them.

Finally, it is important to know approximately when the eggs hatched to determine the date they should fledge or leave the nest. This is helpful in the event some or all of the babies go missing well before the anticipated fledge date. If this occurs, you may have a problem with predators gaining access to the nest. The normal amount of time from hatching to fledging for a young Bluebird is 17 to 18 days.

#### When, How, and What to Monitor

Nest monitoring should begin around the end of April and last through the beginning of August. As mentioned earlier, nest boxes should be monitored once a week during the breeding season. Try to avoid monitoring during cold, rainy, damp, or windy days to prevent chilling the chicks or eggs.

The nest box should be opened carefully and quietly. Be careful not to let any eggs or chicks fall out of the nest. First, try to determine what kind of bird's nest is in the box. This may be done simply by observing the species of bird entering and exiting the box. Or, you may identify the nest by observing its specific characteristics—the different birds that may be found in your Bluebird nest box make different types of nests. The following section includes descriptions of four different bird nests and their eggs.

#### Bird Nest and Egg Descriptions

Bluebird—The Bluebird's nest is built with fine grasses or pine needles and is normally 1 to 4 inches tall. Bluebird eggs are normally between 4 to 6 in number and usually blue and sometimes white.

Tree Swallow—The tree swallow's nest is built with slightly coarser grasses than the Bluebird's. The nest cup is normally flatter than the Bluebird's and is often lined with feathers or even paper scraps. Tree swallows normally lay between 5 and 7 white eggs that are smaller than the Bluebird's eggs.

House Wren—The house wren's nest is easily identified because they will fill a nest box up with sticks. The nest cup will be toward the back of the box and may be lined with feathers or

fine plant material. The 6 to 8 eggs house wrens lay are tan with brown specks and rather small.

House Sparrow—House sparrow nests can be described as "junky." House sparrows normally build a tall nest out of long, tall grasses made into a tunnel. Often these nests contain different types of garbage such as paper, cellophane, and twine. House sparrows usually lay between 5 to 7 brown speckled eggs.

After the chicks have hatched, it is important to look under the nest for blowfly larvae. If blowfly larvae are found, follow the steps outlined above to rid the nest box of the larvae. While inspecting the chicks, be sure to put them in some sort of container that will keep them out of the sun, but will also keep them warm.

If you need to dispose of used nest material, it is important not to dispose of it near the nest box to prevent attracting predators.

At the end of the breeding season, all nests should be removed from the nest boxes. Spray the inside of the box with a 2 percent bleach solution to kill any parasites that may be left in the box.

Actively monitoring and maintaining your Bluebird nest boxes throughout the breeding season will likely pay off in a greater number of fledglings as well as healthier fledglings.

#### References

Berger, C., K. Kridler, and J. Griggs. 2001. *The Bluebird Monitor's Guide to Bluebirds and Other Small Cavity-Nesters*. New York: Harper Resource.

Gowaty, P.A. and J.H. Plissner. 1998. "Eastern Bluebird (*Sialia Sialis*)." In *The Birds of North America*, No. 381 (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, PA.

#### The Eastern Bluebird: More Than Just a Pretty Bird

by

M. Allan Daly
Extension Educator
Maryland Cooperative Extension

Kirk W. Myers Assistant Program Coordinator National Youth Science Foundation

Dave Martin
Extension Educator
Maryland Cooperative Extension
Baltimore County

Reviewers Shannon Potter Extension Educator Maryland Cooperative Extension Harford County

Darrin Magee Executive Director National Youth Science Foundation Seattle, Washington

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, University of Maryland, College Park, and local governments. Thomas A. Fretz, Director of Maryland Cooperative Extension, University of Maryland.

The University of Maryland is equal opportunity. The University's policies, programs, and activities are in conformance with pertinent Federal and State laws and regulations on nondiscrimination regarding race, color, religion, age, national origin, gender, and disability. Inquiries regarding compliance with Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Educational Amendments; Section 504 of the Rehabilitation Act of 1973; and the Americans With Disabilities Act of 1990; or related legal requirements should be directed to the Director of Personnel/Human Relations, Office of the Dean, College of Agriculture and Natural Resources, Symons Hall, College Park, MD 20742.



