

MOUNTS

What you need

- Steel T-post, 6 1/2'
- PVC pipe, 4" width, 30" length
- EMT conduit, 3/4" width, 20" length
- Square edge styrene cap, 4" width
- Drill
- Hand saw or power saw

T-post preparation

- In the T-post, drill a 9/32" centered hole six inches from the top edge
- Burr the holes with a 1/2" drill bit

Post Extensions

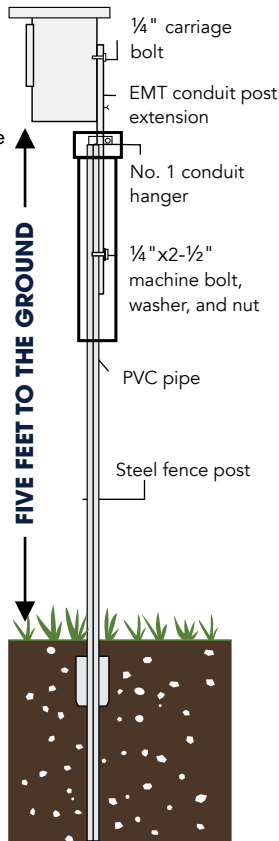
- Drill two 9/32" aligned holes at one inch and 15 inches from the end of a 20" piece of EMT conduit
- Burr the holes with a 1/2" drill bit

Predator Guard

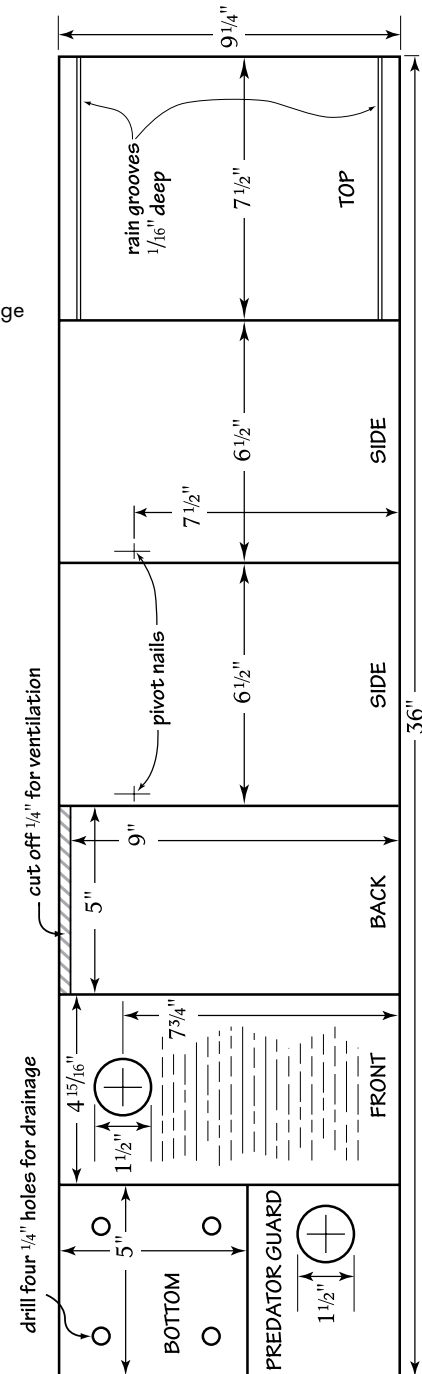
- Use a 1" flat wood boring bit (with side teeth) or a Forstner bit to drill a centered hole in the styrene cap
- Slide the cap onto the PVC pipe
- Drill two opposing 1/8" holes through the cap and PVC Pipe
- Fasten the cap and PVC pipe together with two #8x1/2" sheet metal screws

Mounting

- Drive the steel post well into the ground at the nest box site
- Attach the conduit pipe to the steel T-post with a 1/4"x2-1/2" machine bolt, washer, and nut
- Use a No. 1 conduit hanger or a hose clamp to support the PVC predator guard below the nest box on the conduit pipe. This allows the guard to swing freely, making it harder for predators to climb
- Drill a 9/32" hole six inches up from the external floor and centered in the back panel to mount the nest box to the conduit. Attach with 1/4" carriage bolt



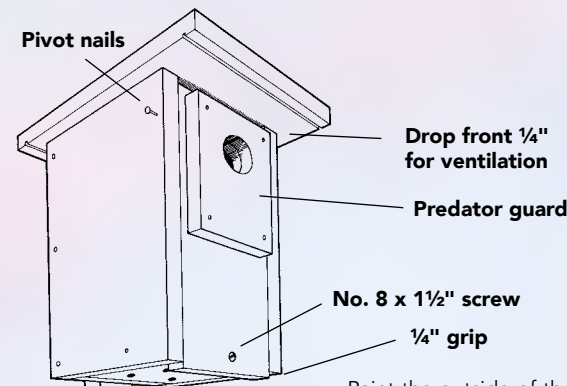
CUTS



The predator guard is simply an extra piece of wood around the entrance hole. The added thickness makes it difficult for hot sunlight, rain, and intruding beaks to reach the nest. A 1 1/2" entrance hole will keep starlings out.

It takes only 3 feet of 1" x 10" white pine to make a bluebird nest box. Because all cuts are straight, no special tools are needed. Stronger boxes are made by sawing boards so the wood grain is the same direction as the longest side of each piece. Use 1 1/2" galvanized box nails or deck screws.

HINTS



Paint the outside of the box any earth-tone color. Don't use white. Face the box opening to the southeast.

Roughen the inside surface of the front piece so young birds can cling to it for feeding and to exercise their wings before their first flight. A surface can be roughened by sawing slots 1/8" deep, punching shallow holes with a screwdriver, tacking on a strip of 1/4" hardware cloth or gutter screen, or gluing on small scraps of wood.

Have all boxes ready by **March 15** at the latest. Bluebirds nest as early as late March. As soon as a brood has left, clean out the old nest. This will improve chances of another nesting that same year and rid the box of parasites.

The Division of Wildlife's "**Hit the Trail for Bluebirds**" program is funded by the state's Wildlife Diversity Fund, which supports species of greatest conservation need. This fund make possible habitat restoration, wildlife research projects, educational materials, and efforts to conserve endangered and threatened species, ensuring that all of Ohio's wildlife, from the bluebird to the monarch butterfly, have the habitat, resources, and protection to succeed in Ohio's varied ecosystems.

You can contribute to the Wildlife Diversity Fund by purchasing a wildlife conservation license plate, buying a wildlife legacy stamp, or participating in the wildlife state income tax checkoff program. Learn more at wildohio.gov.

HIT THE TRAIL FOR BLUEBIRDS

HOW TO MAKE AND ENJOY YOUR OWN BLUEBIRD TRAIL



ON THE COVER:
Eastern Bluebird

PHOTO BY
Danita Delimont



Pub 5339
R0424



OHIO DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WILDLIFE
wildohio.gov



Eastern Bluebirds, male and female

What is a Bluebird?

The eastern bluebird is a sparrow-sized relative of the robin. A male bluebird has a sky-blue back and a reddish earth-colored chest. The female looks similar but is duller in color.

Bluebirds raise two or three families of three to six insect-devouring young each year, from March through August. The female builds a neat, cup-shaped nest of grass. She lays one sky-blue egg each day for three to six days and incubates them for two weeks. Both adults feed the young for two and a half weeks.

When the young leave the nest the male teaches them to hunt, while the female takes a rest or builds a new nest.

What is a Bluebird Trail?

A bluebird trail is five or more bluebird nest boxes mounted on fence posts or pipes. The boxes are spaced from 100 to 200 yards apart on farms, parks, cemeteries, golf courses or other areas with low or sparse vegetation. A "bluebirder" hits the trail every week or two to check the progress of the tenants.

Teachers and youth group leaders interested in participating in bluebird projects should contact the Division of Wildlife at **1-800-WILDLIFE** or **WILDOHIO.GOV**. For more information about bluebirding go to **ohiobluebirdsociety.org**



American Robin



Northern Cardinal



Eastern Bluebird



Black-capped Chickadee

Do Only Bluebirds Use the Boxes?

No. Other beneficial birds such as the house wren, tree swallow, Carolina or black-capped chickadee, white-breasted nuthatch, and tufted titmouse may take up residence on the trail. Boxes spaced 25 yards apart near ponds, lakes or rivers will attract mosquito-eating tree swallows. Fiercely competitive wrens may evict prior tenants by puncturing their eggs and building a stick nest on top of their furnishings. Brush-loving wrens can be discouraged by placing nest boxes at least 30 yards from dense vegetation.

Competition is common in nature. Legally and ethically, the insect-harvesting wrens must be permitted to nest. Evicted tenants will set up housekeeping elsewhere along the bluebird trail.

House sparrows destroy bluebird eggs and young. A bluebird trail that avoids buildings usually avoids house sparrows, too. However, if you're having trouble with house sparrows, you can legally remove them.

Do Bluebirds Have Enemies?

Yes. Raccoons, cats, opossums, gray foxes, and some snakes are climbing predators that love a snack of bluebird eggs or young.

A pipe mounting will stop the fox. Chassis grease liberally applied to the middle third of the pipe may stop the other climbers. Grease will discourage deer mice and black ants from homesteading.

When grease is not acceptable, sections of 7" galvanized stove pipe or 4" - 6" PVC pipe capped with lids or hardware cloth and hung below boxes act as baffles. Baffles 30" long will stop the longest rat snakes as well as all furry climbers.

Do Bluebirds Need Our Help?

Yes! Bluebirds were once more plentiful than they are now. Woodpeckers drilled holes into decaying trees and fence posts, creating natural cavities for bluebirds to nest in.

Bluebird populations flourished, but natural cavities are less abundant today because of the disappearance of fencerows. Many potential bluebird nesting cavities are now occupied by nonnative and invasive European starlings and house sparrows. Bluebird boxes are a much-needed housing project.

Boxes at eye-level can be inspected with a small light and mechanic's mirror. You can witness the bluebird's comeback from the beginning!



Tree Swallow

Tufted Titmouse

Black-capped Chickadee