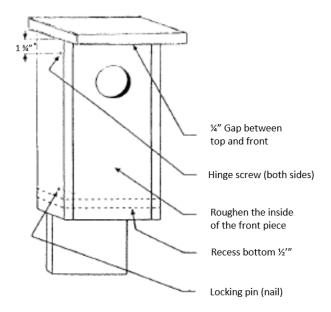
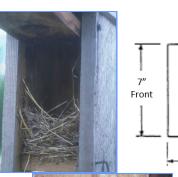


Plans for ¾" wood thickness





# General Guidelines

Construct house of **wood**; 3/4 inch up to two inches thick.

Place nest houses on their own posts in short-grass open areas with scattered trees 100 yds. apart.

Avoid brushy areas (wrens) and buildings (sparrows).

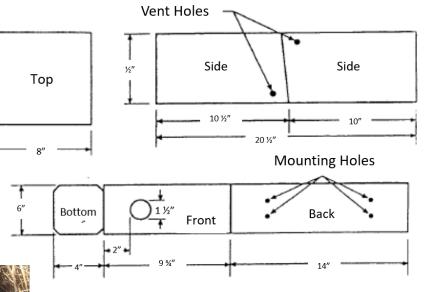
Mount nest boxes four to six feet above ground, and always use predator guards.

Orient boxes any way but north (east is best). Is there a perch in sight of the entrance?

Get **PERMISSION** from every landowner before placing boxes, even on roadsides. Don't use power poles or fence line posts.

Open, check, and clean boxes between broods and at the end of the nesting season. Plug entrance hole over winter to keep sparrows out.

Repair boxes in February, and place new boxes in mid-March to early April (keep sparrows out!).



**Additional Bluebird Resources** 

North American Bluebird Society

www.nabluebirdsociety.org

Cornell Lab of Ornithology All About Birds Profile

www.allaboutbirds.org/guide/Eastern\_Bluebird/ overview





IOWA DEPARTMENT OF NATURAL RESOURCES

Iowa Department of Natural Resources Wildlife Diversity Program 1436 255th St. Boone, IA 50036

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## **EASTERN BLUEBIRD**

The eastern bluebird is a colorful thrush of open forest edges. It whistles its gentle, musical "*chir-wi*" or soft "*tru-a-lly*" near open grassy parks, fields, roadsides and old orchards. We often see the male, with his blue back and rusty throat and breast, perched on a telephone line or fence post.

Only seven inches long, the bluebird is much smaller than its noisy blue and white woodland neighbor, the blue jay (12 inches) but larger than the all blue, shrubnesting indigo bunting (five inches). Also, bluebirds eat, behave and nest differently from our western lowa blue grosbeak (seven inches).

Bluebirds once used cavities in old oaks and elms scattered across the plains and along forest edges. Because they lack the tools of woodpeckers and squirrels, bluebirds are called secondary tenants; they wait for others to make (and then leave) suitable nest holes. Today, most of these old stubs are gone, cut for fuel, farm ground, or un-sightliness. Deprived of nesting sites and their short-grass hunting grounds, bluebirds need our help.

### How Can I Help?

**Habitat** is critical. Provide open grassy areas where bluebirds can hunt beetles, grasshoppers & butterflies. Leave dead trees standing, when possible, for wood-pecker (and later, bluebird) nest construction. Plant windbreaks and shelterbelts that reduce your heating and cooling bills, as well as provide habitat. Plant native fruiting shrubs to beautify your landscape **and** feed birds.

**Nest Boxes**, placed where feeding, and a lack of nesting, habitat is available, help immensely. Boxes are easily constructed, either from the lowa-specific plans on the back of this brochure or from books mentioned in the references.

Bluebirds will use almost any cavity with a floor that is 3"x3" to 6"x6". The hole opening should be 1 1/2" wide to exclude starlings. Be sure to extend the cavity **at least** 6 inches below the bottom of the entrance hole to decrease raccoon predation. Use screws to keep the box together longer. If you want to protect the box from weathering, use light (tan or gray) colored exterior stain or acrylic paint, but avoid wood preservatives like "penta" (-chlorophenol)-it may hurt the tender nest-lings' skin. Swinging doors, such as on our design, make cleaning easier.



# A Bluebird's Year

### FALL

An entire bluebird family usually flocks together until fall, treating us to sights of 6, or 10, or 20 bluebirds perched along a stretch of quiet roadside. Most bluebirds move south for the winter. Migrating bluebirds may travel as far as eastern Mexico, or stay as close as Missouri.

#### WINTER

Some bluebirds **do** spend the winter in Iowa. While most leave for southern states, up to a third stay. These lingerers depend on fleshy seeds during cold periods when no insects are available. Red cedar, Virginia creeper, sumacs, American bittersweet, hackberry and hawthorne are all native plants that provide winter food. Shelter from winter winds is vital, and windbreaks and insulated roosting boxes can help protect winter residents.

#### SPRING AND SUMMER

Bluebirds return in late February thru mid-April. Young birds often return to within a mile or two of the area where they hatched. Adult birds usually return to where they successfully raised a family last year.

The first males back pick out the best nesting areas, and a week of feverish inspection precedes pairing and site selection. Bluebirds are territorial and defend an area several hunted feet wide to ensure adequate supplies of insect food for their mate and offspring. Female bluebirds inspect many sites and may start several nests before finally settling on one.

#### SPRING AND SUMMER

In early-to-mid-April the female lays the first clutch, usually five pale blue eggs. About 3% of the bluebird eggs laid in Iowa nest boxes are white. The female bluebird alone incubates the eggs for about two weeks. The eggs hatch almost all at once, and the adults are then busy finding insect food for hungry mouths.

Young bluebirds grow fast, but they usually cannot fly on their own until about 17 - 20 days. (It is safest **not** to open the nest box after their twelfth day to prevent premature fledging and subsequent exposure or predation.)

Usually, as soon as the first brood is flying and feeding on its own, the parents construct another nest; by mid-June they begin another cycle of incubation, hatching and fledging. In "good" years of abundant insects and favorable weather, they may even bring off a third brood.

Bluebirds are as faithful to their mates as they are to their home territories and seldom pick a new mate, unless their first nest fails or their mate dies.



Male (left) and female (right) Eastern Bluebird

### A Bluebird's Enemies

**Raccoons:** They live in the same forest edge areas and can climb almost any post or tree that supports a bluebird nest. With dexterous paws, they can even undo latches! Raccoon attacks increase through the breeding season, affecting second and third nests most. Adding thickness to the entrance of bluebird houses as a "raccoon guard" does not always stop these intrepid predators, and it reduces ventilation of the nest box. Extra depth in the nest box should place nest contents beyond a raccoon's grasp. PVC pipe post-covers, stove pipe, disk blades or metal flashing "predator guards" may also deter raccoon predation, and their use is strongly encouraged. Snakes and mice can also be discouraged from occupying boxes by metal flashing.

**Cats** are also a serious and cunning predator of bluebirds. Nest boxes should be placed at least **100 yards** from buildings, to avoid both marauding cats and house sparrows.

**Starlings** and **house sparrows** are cavity nesting birds imported from Europe during the late 1800s. They are extremely adaptable and compete strongly with bluebirds and other cavity dwellers for available nest sites. Since these bird pests are more common near buildings, keep bluebird boxes at least 100 yards away from human structures. Some research indicates that light -colored cavities are less attractive to these intruders. While open top boxes are light, they are **NOT** recommended--they admit so much sunlight that nestlings are killed by the summer heat.

**House wrens** compete with bluebirds for nest sites. They will fill boxes with twigs, covering **over** bluebird nests. More importantly, wrens peck or throw out bluebird eggs in an effort to drive away the bluebirds. Place bluebird boxes **in the open**, facing **away** from brush to reduce this lethal competition.

**Blowflies** can be deadly parasites of young bluebirds. These fly larvae build up through the nesting season and attack later broods most heavily. Good nest box sanitation (fresh air, sunlight) between nestlings and at the end of the season are the best defenses. Lawrence Zeleny, noted bluebird expert, recommends **pyrethrin** as the safest insecticide to use in the nest box, and it can be placed beneath the nest. It may also repel wasps and ants.