Getting Started with Bluebirds

THE BLUEBIRD AND “BLUEBIRDING”

Bluebirds (all three species) are found only in North America. They evolved to nest in natural cavities (e.g., old woodpecker holes). But since European colonization, large sections of forest and other natural rural landscapes have been cleared for housing and commercial developments, highways, and row crop agriculture. Wooden rail fences that provided nesting cavities have been replaced with metal posts. These changes greatly reduced the supply of natural cavities for bluebirds and other native cavity nesting species. Then, starting in the mid-1860s the impact of the natural cavity losses was compounded by the introduction of two European cavity nesting species into North America — the European Starling and the House Sparrow (not to be confused with native North American birds, such as the Song Sparrow, Tree Sparrow, etc.). Both European Starlings and House Sparrows are extremely aggressive competitors for nesting cavities.

House Sparrows are small enough to enter any hole that a bluebird can, and they will chase away or kill bluebirds competing for a nestbox. Starlings can be excluded from nestboxes by using the correct size entrance hole, but they will out-compete bluebirds for woodpecker holes and most other natural nesting cavities. In addition, massive flocks of European Starlings strip the landscapes of wild berries, the primary winter food of bluebirds.

As a result, of these developments, bluebirds were extirpated across much of the continent, but since the 1960s their populations have been successfully restored by human intervention and their future is still promising. The most important thing that humans can do to maintain bluebird populations is to provide secure nesting sites by setting out a well-designed nestboxes and then monitoring those boxes through the nesting season. A “bluebird trail” is a series of bluebird boxes placed along a prescribed route. In areas where nestboxes have been put up in suitable habitat, bluebird populations are increasing. We call these efforts “bluebirding” and it is a great hands-on environmental activity that people of all ages can enjoy. By following the instructions in this factsheet, chances are good that you will be able to attract and enjoy bluebirds.

THE BLUEBIRD NESTBOX

- A good bluebird nestbox should be well-ventilated, watertight as possible, and have drainage holes on the floor (to prevent prolonged dampness), and be easy to open for monitoring and cleaning.
- Solid, untreated wood (e.g., Red Cedar) is ideal and exterior-grade plywood (not chemically treated) works well also. The outsides of nestboxes can be stained or painted using exterior-grade latex paint. Using white or a light “earth tone” colors can help keep the box cooler.
- The nestbox should not have a perch under the entrance hole as that can attract House Sparrows and House Wrens.
- For Eastern and Western Bluebirds the floor area should ideally be 16 to 25 in² and areas of up to 30 in² are often used for Mountain Bluebirds.
- Nestboxes for Eastern and Western Bluebirds should have a round entrance hole measuring 1½" or 19/16" in diameter, or a 1¾" x 2¼" vertical oval hole, or a 1½" to 13/16" horizontal slot entrance. For Mountain Bluebirds use the larger 19/16" round opening or 13/16" slot entrance. In fact, to simplify the entrance size advice, a 19/16" round hole or a 13/16" horizontal slot entrance is probably ideal for all three bluebird species.
- Bluebird nestboxes are available from many commercial sources and some bluebird organizations. Be aware that
some commercial nestboxes are poorly designed or improperly constructed. Before purchasing a nestbox refer to the NABS factsheet, Nestbox Specifications (www.nabluebirdsociety.org/fact-sheets-plans/) as it provides detailed information on features to look for, or to avoid on a good bluebird nestbox. Plans for building a number of different nestboxes styles are also available there.

MOUNTING OR HANGING THE BLUEBIRD NESTBOX
Smooth round pipe is probably the best mounting system and ½" or 1" electrical conduit is ideal, durable and inexpensive. A post driver, from a hardware store, is an excellent tool for inserting metal posts into the ground.

- Periodically polishing (steel wool) or coating the pole with wax or grease will help to keep climbing predators away out of the box.
- Hardware cloth, or a wobbling stovepipe (Kingston) or a PVC baffle placed on the pole directly underneath the box helps prevent access by climbing predators, including snakes and raccoons (see examples at right). Refer to the NABS Fact Sheet entitled Predator Control for more details and plans (www.nabluebirdsociety.org/fact-sheets-plans/).
- Mounting bluebird boxes on a fence lines, tree trunks, or buildings renders them vulnerable to climbing predators and should not be used if snakes and raccoons are present.
- In areas where snake predation is not a problem some bluebirders hang nestboxes from tree limbs. An advantage of hanging nest boxes is their portability—they can be moved from tree to tree easily and benefit from the shade a tree’s canopy provides. Hanging nestboxes are frequently used for Western Bluebirds in California for example. NABS is developing a Fact Sheet on hanging nestboxes for bluebirds.
- The boxes are hung up in, or taken down from, the tree using a retriever which is basically an extendable pole with a hook on the end to grasp the nestbox’s hanging wire. Plans for building safe hanging boxes and the retrieving poles are also on the NABS website (www.nabluebirdsociety.org/fact-sheets-plans/).

SETTING UP A BLUEBIRD TRAIL
- Habitat is the key factor to consider when setting up a bluebird trail. Open country with scattered trees and low grass or other sparse ground cover is ideal especially if it includes fences utility lines or trees where bluebirds can perch to look for prey.
- Examples of good habitat for a bluebird trail are pasturelands, open park areas, mowed areas such as cemeteries, golf courses, utility rights-of-way, and vineyards.
- Try to avoid areas subject to heavy pesticide usage.
- Mount nestboxes at least 50–200 feet away from brushy and heavily wooded areas—this is House Wren habitat. The wrens are a native species, but they may destroy bluebird eggs and will compete with bluebirds for nestboxes.
- Avoid areas where the House Sparrow is abundant, such as barns and feedlots, or yards where people feed cheap birdseed containing millet and cracked corn (see the discussion on these birds below).
- For convenience, mount nestboxes so the entrance hole is approximately five feet (eye level) above the ground but not lower.
- Face the nestbox away from prevailing winds, and if possible, face it toward a tree or shrub that is within 100 feet of the box to provide a landing spot for the young bluebirds when they first leave
the box. This will keep them off the ground, away from predators.

- Nesting density for all three species of bluebirds is dependent on many factors. These factors include population density, habitat suitability, food supply, individual tolerance levels, visibility between boxes, the number of cavities available, and the level of competition from other species (especially Tree Swallows or, in the West, Violet-green Swallows). It is therefore difficult to predetermine the optimal spacing for any given area. The following distances are given as general guidelines only; contact your local bluebird affiliate organization ([http://www.nabluebirdsociety.org/affiliates/](http://www.nabluebirdsociety.org/affiliates/)) to find out what they recommend, and experiment by adjusting the distances between your own boxes. In many cases, bluebirds have been observed nesting closer than the distances typically recommended. However, it is better to start a bluebird trail with boxes placed too far apart than too close together. The following spacing between nestboxes are often cited:
  - Eastern Bluebirds — 100 yards minimum (125 to 150 yards apart may be better)
  - Mountain Bluebirds — 200 to 300 yards.
  - Western Bluebirds — 100 yards minimum (200-300 yards may be better)

- Nestboxes can be mounted in pairs in areas where Tree Swallows are abundant. When paired, boxes should be mounted 5 to 15 feet apart. This provides nesting sites for both species and helps to prevent competition between them. Different species of native birds usually do not mind nesting close to each other.

- Although bluebirds generally prefer rural areas, they will nest in any area with the appropriate habitat (see above).

**MONITORING A BLUEBIRD TRAIL**

Note: For more detailed information on this topic, refer to the NABS factsheet [Monitoring Bluebird Nestboxes](http://www.nabluebirdsociety.org/fact-sheets-plans/) (available online at www.nabluebirdsociety.org/fact-sheets-plans/).

Please do not put up a bluebird nestbox if you do not plan to monitor! Monitoring involves checking your nestboxes at least once a week during the nesting season.

After the nestlings are 12–13 days old the nestbox NABS recommends opening it only with caution with caution (if at all). At this stage of development nestlings could leave the box before they are able to fly, thus greatly reducing their chance of survival.

As noted above never allow House Sparrows to use your nestboxes. House Sparrows will kill adult and nestling bluebirds and/or destroy their eggs. Like European Starlings, they are not protected by federal law and maybe be disposed of as required. Act against House Sparrows the first moment that they appear to avoid finding destroyed nests and dead bluebirds. For more detailed information on this subject, see the NABS factsheet [House Sparrow Control](http://www.nabluebirdsociety.org/fact-sheets-plans/) Be aware that any native bird species that uses your nestbox (e.g., chickadees, titmice, nuthatches, Tree or Violet-green Swallows) should be welcomed -- these small cavity nesters need help, too. Furthermore, it is illegal to disturb an active nest of any native bird without a permit.

Bluebirds usually begin to nest in late March or early April, depending on weather conditions. In southern states, where bluebirds reside year-round, nesting may occur even earlier e.g., in late February. So, have your nestboxes in place by early spring when the bluebirds are looking for nesting sites. Boxes may also be put up later in the nesting season. In those northern areas where bluebirds are present year-round. Bluebirds may benefit from nestboxes left up all year as they can used them for roosting on cold nights. Shelter in a roost box may mean the difference as to whether wintering bluebirds survive or perish.
Bluebirds usually have two broods per season, but three or even four broods are possible, especially in warmer climates.

Learn to recognize a bluebird nest. It is a cup-shaped nest that is usually made entirely of woven grass or pine needles. Bluebirds usually lay 4 or 5 light blue eggs but may lay as many as 6 or 7. About 4–5% of bluebirds lay white eggs.

The typical incubation period for bluebird eggs is 12–14 days. A handy “rule of thumb” is that bluebird eggs will hatch approximately 17–18 days after the first egg is laid. All the eggs typically, but not always, hatch on the same day. After hatching the nestlings remain in the nestbox 17–21 days before they fledge.

Remove bluebird nests and those of other birds after the young have fledged. Brushing out the box and scraping off the guano is all that is necessary.

It is a great idea to keep records of the activity on your bluebird trail. Please report your trail information to organizations like the NestWatch program at the Cornell Laboratory of Ornithology (https://nestwatch.org/). Your data helps NestWatch compile estimates on the status of bluebird populations and distributions across North America. Most NABS Affiliate organizations (e.g., State or Province level organizations) also keep records of bluebird trail activity.

Don’t be discouraged if your nestboxes are not used right away. If bluebirds are not common in your area, it may take them a few seasons to find your new box or nestbox trail. Male bluebirds scout broad areas in search of nesting possibilities each spring. If your boxes are in place before the spring the bluebirds might find them. Bluebirds often return to the same area each year. Therefore, once you have bluebirds using your nestboxes there is an excellent chance that you’ll have them in the following years also. Scientific studies have proven that bluebirders and bluebird trails have been an extremely effective method of re-establishing the bluebird populations across North America. Always, monitor your nestboxes at least weekly to keep ahead of problems before or as they might develop.

Decades of experience has shown that bluebirds thrive on active management. Well-designed nestboxes and proper management will almost certainly be the key to having bluebirds around for future generations to enjoy.”

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