



Bluebird Restoration Association of Wisconsin

Information Packet:
Attracting Eastern Bluebirds &
Other cavity nesters

6th
Edition

By Kent Hall & Patrick Ready (BRAW Editor)

Life cycle of the Eastern Bluebird (*Sialia sialis*) by Patrick Ready.



Pair select box and female builds the nest.



Within a week or two
3-5 eggs are usually
laid in the nest.



The male stands guard.



After 13-14 days of
incubation the
chicks hatch.



After 16-22 days old the chicks
are ready to fledge.



The chicks grow
quickly being fed by
both parents.

Bluebird Restoration Association of Wisconsin, Inc. (BRAW)

In 1986, it was estimated that the Eastern Bluebird population in its historic range had declined by 90% during the preceding 50 years. Loss of habitat, increased populations of predators such as house sparrows, European starlings and raccoons, and the loss of natural cavity nest sites contributed to the bluebirds decline.

In an effort to reverse this trend, private citizens and the Department of Natural Resources organized BRAW, an independent nonprofit organization of citizens. With the use of man-made nest boxes, bluebirders have been able to gradually increase bluebird numbers.

Since its founding, BRAW has encouraged its members to participate in a unique nest box monitoring program. This program, in which about 20% of BRAW's members participate, involves the once-a-week collection of simple, but extremely useful data about nest box activity.

BRAW asks its volunteers to report data on the BRAW Easy Summary Form. People from all over Wisconsin file the reports each year. Based on those data, BRAW reports to all of its members by means of its quarterly newsletter, *Wisconsin Bluebird*, the production of bluebird trails throughout Wisconsin.

You can Help

We have had great success over the years. This resulted from changes in the selection of box types (from deep boxes to small, shallower boxes) and from changes in box management methods. Today, most Wisconsin monitors have switched away from the use of closely spaced boxes to widely spaced boxes (at least 100 yards apart). There is more to be done. Bluebirds still need our help. There is room for a lot more bluebirds and you can make a difference. You can put up a couple boxes or several and monitor a bluebird trail. Whatever you decide will help bluebirds!

BRAW Provides Resources

BRAW coordinates its bluebird recovery program through workshops and meetings, press releases, web site, articles in publications, and its official



quarterly newsletter, the *Wisconsin Bluebird*. BRAW also has an annual membership meeting, located in different parts of Wisconsin.

The network of BRAW County Coordinators conduct local workshops each year, typically during the late winter and early spring. These resource people help individuals, clubs, and organizations to effectively erect and monitor nest boxes.

BRAW members provide BRAW's financial base, e.g. for the publication of the *Wisconsin Bluebird*, construction of nest boxes, research and education.

Bluebird Nest Box Design

The entrance hole should be accurately bored. Oval holes are recommended. Bore two 1-3/8" holes centered 7/8" apart. Do not drill holes in the bottom platform of the nest box as the holes will clog up with nesting material and will not allow drainage.

Vent the boxes, but block the vents until June 1 and then unblock them for circulation during warm weather. Do not put a perch below entrance hole. This only helps predator birds.

All nest boxes should permit interior access to allow for inspection (monitoring) of the box and for cleaning out when needed.

A generous roof overhang, especially over the entrance hole, helps to keep out rain and predators.

Do not use large or deep boxes. Inside floor area should be not larger than 4x4" and 3-1/2 to 5" from bottom of hole to floor. Painting boxes is unnecessary.

Bluebird Nest Box Placement

1. Using a standard 10 ft. section of 3/4" EMT conduit, cut off about 2-2½ ft. (hack saw) and discard
 2. Flatten tip of the 7 ½ ft. or 8 ft. section with hammer or sledge. This makes it easier to pound pole in the ground, and prevents it from turning.
 3. Attach box to pole using 3/4" conduit clamps fastened with screws.
 4. Do not mount box on a tree or wooden post.
 5. Place nest box away from woods or brushy area.
 6. There should be no shading from sunrise to noon.
 7. Put box 20-100' of a tree(s).
 8. Face entrance to E, or SE away from prevailing winds.
 9. Use a nail or screw on the back to prevent box from slipping down the pole.
- Bluebirds thrive in a short grass habitat. Mowed lawns, such as on residential, corporate, church cemeteries, or school grounds provide excellent habitat. Unsprayed, rural roadsides are fine. For bluebirds place boxes at least 100 yards apart. Close placement enhances production of Tree Swallows and wrens that sharply cut down on the production of bluebirds.

Bluebird Nest Box Management

Please check your nest boxes every 6-8 days during the nesting season, first of April to mid-August. Eliminate all House Sparrow nests and contents. House Sparrows kill nestlings and adults of cavity nesting songbirds. Federal law allows trapping and elimination of House Sparrows from boxes. Remove a nest box when it is no longer properly located, or when you cannot watch or maintain it. Abandoned boxes attract House Sparrows, a known bluebird predator.

Download Form 22 for your written record of what you see at each weekly visit to your nest boxes, and report your data using the BRAW EZ Summary Form, at the end of the nesting season. Mail it or email it. It's a satisfying conservation project for cavity nesting songbirds.

Forms can be found at www.braw.org

Nest Guide to Cavity Nesters

by Patrick Ready/BRAW

Eastern Bluebird

Fine or coarse grasses, pine needles, lined with fine grasses.



Tree Swallow

Similar to bluebirds, coarser grasses & straw, lined with feathers when eggs are laid.



Black-capped Chickadee

Moss, fine grass, lined with animal hair.



House Wren

Sticks and twigs jammed in tightly. Lined with a small amount of fine grass and hair. Often builds dummy nest with a few sticks but without lined cup.



House Sparrow

Grass, straw, feathers, paper, plastic, etc. and they usually swirl the grass upward to fill the box, then tunnel down in. Sometimes when a nest is first started it may be hard to tell what species is nesting. Wait a day or two to see how the nest develops. Feathers and wrappers early on with some grass pieces are definite signs of House Sparrows.



Above: Peterson box filled with straw, grass, and garbage indicates a House Sparrow nest.
Middle: Eggs-white or grey with brown specs.



Left: Beginning nest. Similar to bluebird and tree swallow but note chicken feathers and debris are signs of a House Sparrow nest.

Species Identification of Cavity Nesters

Male & female Eastern Bluebird.



Female & male Tree Swallow.



Fledgling Eastern Bluebird.



Black-capped Chickadee, coxoc similar.



House Wren, sexes similar.

Make a Predator Guard

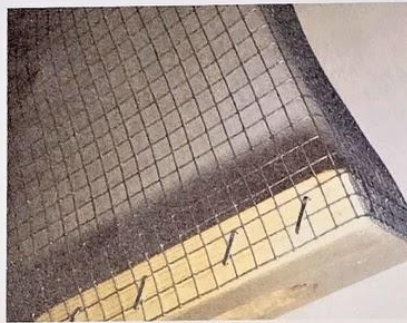
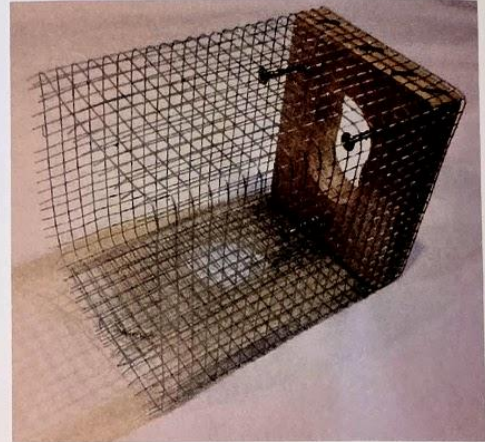
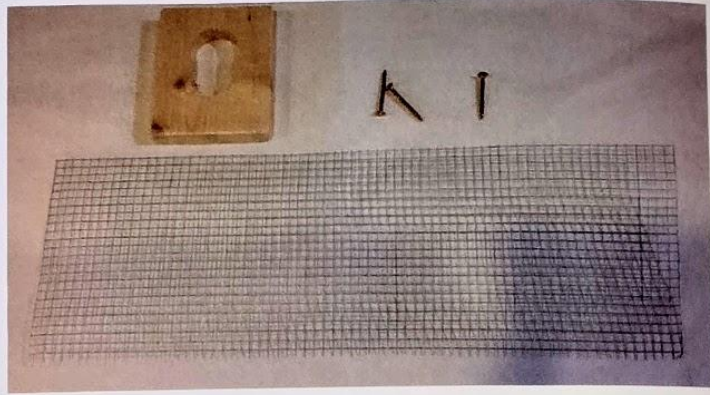
Materials:

- 1 x 4" pine or cedar board
- Hardware cloth cut to 16"x6"
- 3 Screws 1-1/2" long

Tools:

- Staple Gun
- Drill
- Hammer (to pound staples down firm)
- Cut the wood to 4-1/2" length
- Drill a 1-1/2" entrance hole or an oval hole in the piece.

Starting on the bottom wrap the hardware cloth around the wood piece stapling it several times as you go. Drill 3 holes for screws in the wood piece for easy fastening to the box.



The wood block is optional. You can attach the wire directly to the front of the box with several screws but the block of wood makes a sturdier guard.

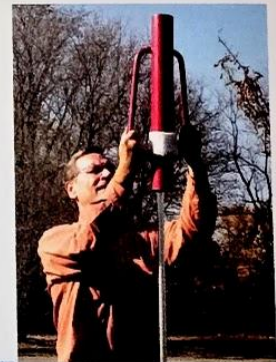
3/4" Conduit Mounting System

By Bob Tamm

1. Using a standard 10 ft. section of 3/4" EMT conduit (available at Menard's, Home Depot, etc.), cut off about 2 - 2 1/2 ft. (hack saw) and discard.
2. Flatten tip of the 7 1/2 ft. or 8 ft. section with hammer or sledge. This makes it easier to pound pole into ground, and prevents it from turning.
3. Loosely attach 3/4" EMT conduit 2-hole straps to back of box using 3/4" deck screws. (Note: 3/4" deck screws are hard to find. I get mine at Menard's.)
4. Using post pounder, pound long conduit section into ground, allowing about 6 to 6 1/2 ft. above ground.
5. Slip box with straps onto conduit and adjust box for height. Then tighten screws.

Use a nail or screw on the back to prevent box from slipping down the pole.

Note: If you would like to use the entire 10 ft. section, try this: Measure two sections to 6'-8" and cut. You will have two left over 3'-4" sections, which will make a third 6'-8" section if you use a coupler. If you drive these sections about 14 inches into the ground, you will still have enough conduit above ground to mount a box on the 5 ft. above ground conduit. You then have three mounts from two 10 ft. sections.



NABS style Bluebird Box

Cedar, 7/8" lumber preferred.

8" wide for top

6" wide for back, front, sides & bottom

All angle cuts are 10 degrees

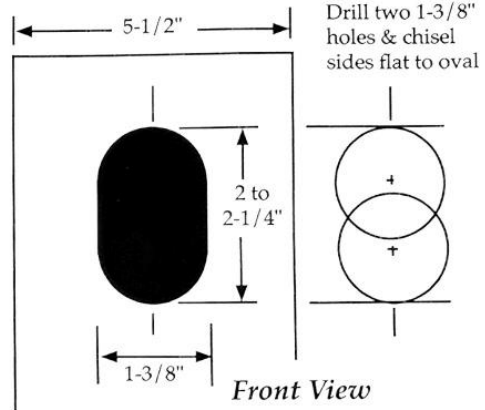
Roof is 7-1/2" wide x 10-1/2" long

Sides 9-7/8" long x 5" wide

Floor is 5" x 3-3/4"

Back & front 5-1/2" wide

Recommended Oval Hole Plan



More nest box plans can be found on our website: braw.org.

