

Help Bring Back the Bluebirds

Of about 900 species of birds in North America, bluebirds are among 84 species that nest in holes in dead trees, commonly called “cavities.” All woodpeckers (about 20 species) have highly specialized anatomy for excavating their own cavities. But bluebirds and most other cavity nesters are unable to do so. They use natural cavities and spaces in structures, or they inherit cavities abandoned by woodpeckers.

The North American bluebird population (*Sialis* species) began to decline in the late twentieth century, mainly due to:

- the removal of dead and dying trees in urban areas
- loss of habitat from urban and agricultural development
- loss of nest sites to the aggressive non-native European Starling and House Sparrow.



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With the shortage of natural cavities, bluebirds will use human-made nest boxes. If you would like to get involved providing safe nesting sites for our local bluebirds, consider hanging and monitoring bluebird nest boxes. Despite the common misconception, touching a nest or opening a nest box will not cause the parents to desert the nest, however timing to prevent early fledging (leaving the nest) is essential.



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The female is brownish gray with chestnut across the breast and blue in the wings and tail.



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The male has blue upper parts, throat, wings and tail with rust-orange breast.

The Western bluebird is a thrush about 7” long with a small straight bill. Bluebirds are mainly insectivores, but eat shrub and tree berries when insects are not available:
https://www.allaboutbirds.org/guide/Western_Bluebird/.

How to Monitor a Nest Box

Monitoring involves checking nest boxes weekly during the nesting season. The purpose is to gather data and determine the age of the nestlings. **To prevent young from flying (fledging) from the nest prematurely, the box should not be opened after the nestlings are 12-14 days old.** At this stage of development, nestlings could leave the nest before they are able to fly, greatly reducing their chance of survival.

After hatching, the chicks will remain in the nest for 17-24 days.

They grow rapidly with both parents feeding the hatchlings insects.

The adults also remove white fecal sacs from the nest and drop them away from the cavity.

This may reduce the chance that predators can smell the chicks. To see photos of daily growth, nests and eggs: <http://www.nabluebirdsociety.org/PDF/NABSFactsheetMonitoring.pdf> and <https://www.nabluebirdsociety.org/PDF/EABL%20Nesting%20Growth%20Chart.pdf>. Local observations indicate that Eastern Bluebird chicks grow faster than our local Western Bluebird chicks.



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After the bluebird constructs her nest within the nest box, she will lay 1-6 light blue (sometimes white) eggs, one each day, and keep them warm (incubate) until they hatch in 12-14 days.

A box that is not monitored may do more harm than good.

Monitoring nest boxes alerts us to problems that bluebirds may be facing with competitors and predators. House Sparrows and European Starlings seize cavity nest sites, a primary reason for declines in bluebird populations. Starlings nest in many of the natural cavities but can be excluded from nest boxes by creating smaller entry holes that are $1\frac{1}{2}$ or $1\frac{1}{16}$ inches in diameter. House Sparrows are smaller, so they can enter bluebird nest boxes.

They kill bluebirds, destroy their eggs, and drive them from their nests. **At no time should either species be allowed to successfully nest in bluebird boxes**, as it will increase the invasive population and reduce the number of bluebirds. See the NABS factsheet on House Sparrow Control:

http://www.nabluebirdsociety.org/PDF/House%20Sparrow%20Control_2018.pdf.

It's illegal to remove native bird nests and eggs, but it is legal to remove House Sparrow nests because they are not natives. If House Sparrow eggs are found (gray-white egg, speckled with dark brown), move the box. House Sparrows are so persistent that they will keep returning, so it's better to try a new location for the box.



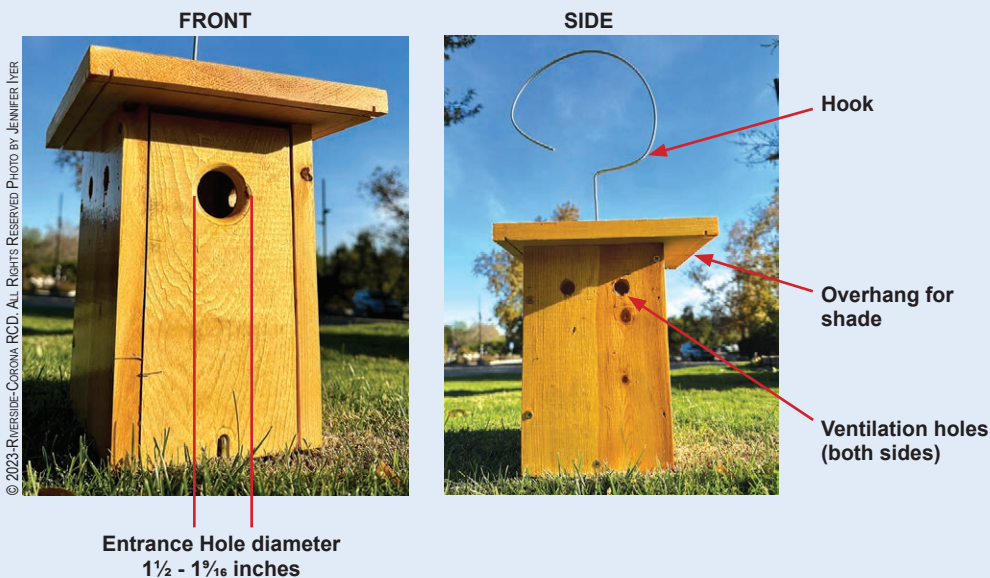
Male House Sparrow

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House Sparrow eggs

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FRONT

SIDE

Hook

Overhang for shade

Ventilation holes (both sides)

Entrance Hole diameter
 $1\frac{1}{2}$ - $1\frac{1}{16}$ inches

If native House Wrens take over a nest, allow them to fledge and then find a new location for the box. A breeding House Wren will destroy the eggs of other nesting birds in its territory, so avoid placing nest boxes where they are also nesting. They are not strictly cavity nesters and are highly versatile about where they will nest.

Other nest invasions may include paper wasp nests, beehives, ants, rodent nests, and predators like cats, raccoons, and snakes. The use of hanging boxes on hooks and careful box placement can reduce the threat of climbing predators. Find control information at <https://socialbluebirds.org/reducing-pests-and-predators/> and <http://www.nabluebirdsociety.org/PDF/NABSFactsheetPredatorControl.pdf>, and for ants at <https://nestwatch.org/connect/blog/what-should-you-do-about-ants-in-birds-nests/>.

Bluebird boxes need to be constructed for ease of opening, monitoring and cleaning. After each nesting effort has ended, either due to nest failure or successful fledging of the young, monitoring includes removing the used nest and cleaning the box as soon as all chicks have fledged.



House Wren

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House Wren nests are made of sticks and look very different compared to a Bluebird cup nest.

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A box in the wrong place may do more harm than good.

- Do not hang a box in a back yard or public place where outdoor cats are present.
- Do not hang a box in view of a bird feeder. Nearby feeders add stress to bird parents by drawing many birds and possibly predators.
- Place nest boxes above irrigated grassy areas, including lawns, golf courses, parks, and cemeteries where bluebirds can easily find and feed on spiders and insects, like grasshoppers, ground beetles, crickets, and caterpillars.
- Hang nest boxes with the hole facing away from prevailing winds and facing north or east to avoid direct afternoon sun on the opening. Shade is especially important in regions where summer temperatures become very high. The internal temperature of a box can become higher than the ambient temperature and be lethal to the birds.
- Position nest boxes far enough out on a sturdy tree branch to where predators may not reach them.
- Place boxes high enough to be safe from vandalism and hidden from view if possible.
- Remove any leaves or twigs that may touch the box to minimize the ability of ants to enter.
- Stay away from brushy and wooded areas: House Wren habitat.
- Avoid areas subject to pesticide and herbicide use during nesting season.
- Avoid areas where the House Sparrow is abundant, including barns, feedlots, and yards where people feed birdseed containing millet and cracked corn.
- Get permission before hanging a box on public or private property that is not your own. Put contact info on the box in case you need to be reached.



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Are you a candidate for nest box monitoring?

Please do not put up a bluebird nest box if you do not plan to monitor it!

Monitoring is a weekly responsibility from February through July, depending on the number of broods. Volunteers lower a few boxes each week to check for a nest, to count eggs/nestlings, and to keep records. If you would like to become involved in collecting and reporting data to aid in the study of bluebird populations, please contact RCRC at llc@rcrcd.org or your local bluebird club. Learn more about monitoring at: <https://www.nabluebirdsociety.org/PDF/NABS%20factsheet%20-%20Nestbox%20Recs.pdf> . To record data that includes number of eggs and birds fledged, see: <https://www.cbrp.org/record-and-report/> and <https://www.nestwatch.org/> .



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For monitoring and box cleaning we use a custom-made box "lifter" or pole-elevator that the nest box rests in. Find design specifications for the Purvis Lifter here: <https://www.nabluebirdsociety.org/PDF/Purvis%20Lifter%20for%20Hanging%20Nestboxes.pdf> .

Other Ways to Help

If you decide that volunteering to do weekly monitoring and data collection from spring to summer is not for you, you can still help in other ways:

- Photograph native cavity nesting birds and report sitings at iNaturalist.org. Other local cavity nesters that will use nestboxes include the Ash-throated Flycatcher, Tree and Violet-green Swallows, Bewick's and House Wrens, the White-breasted Nuthatch, the Oak Titmouse, the American Kestrel, Western Screech and Barn Owls: <https://socalbluebirds.org/photo-gallery/> .
- Create habitat in your yard by providing water and planting native plants, especially berry producing plants. Learn about creating habitat in *Backyard Birds of the Inland Empire*, available from the Riverside-Corona Resource Conservation District and libraries. To find what to plant, use: <https://gardenplanner.calscape.org/> .
- Eliminate the use of pesticides in your yard.
- Avoid pruning trees during nesting season, generally February through July. You may wish to retain dead trees (snags) as habitat for cavity nesters and other wildlife. See <https://cavityconservation.com/> or <https://treecareforbirds.com/> . Find tree care providers that are trained to be "Wildlife Aware" at the International Society of Arboriculture: <https://www.isa-arbor.com/> .



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Western Screech Owl



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Nest monitors can help by removing dangerous human-made materials such as plastic twine and frayed tarps that can entangle birds.

If you are interested in hanging and monitoring a nestbox at your home (in a safe location, with correct hole size), and if you will regularly check it to prevent the invasion of non-native birds and predators, you may wish to leave a box hanging year round for bird protection from cold and rain. Make sure to clean out old nests and waste after each brood has fledged. If hole sizes are enlarged, such as by a woodpecker, replace the front with a correct hole size.

See pictures of nests and other species that will use bluebird boxes at *Is Your Backyard Bluebird Nest Box a Tragedy in the Making?* at <https://cavityconservation.com/wp-content/uploads/2018/12/Is-your-bluebird-nest-box-a-tragedy-compressed.pdf> .

Resources

- Learn more about the Western Bluebird at the Cornell Lab of Ornithology's Bird Academy: https://www.allaboutbirds.org/guide/Western_Bluebird/
- California Bluebird Recovery Program: <https://www.cbrp.org/>
- *Sialis* website: <http://www.sialis.org>
- Southern California Bluebird Club: <https://socalbluebirds.org/>
- North American Bluebird Society: <https://www.nabluebirdsociety.org/>
- Merlin: a free app that can help you identify birds: <https://merlin.allaboutbirds.org/>

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