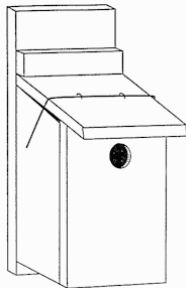




Being the Best Nest Box Landlord for Songbirds in the West

In the West, a wide variety of songbirds, woodpeckers, owls, and waterfowl depend on cavities (holes) in trees for nesting sites; in the absence of natural cavities, nest boxes can provide valuable alternatives.

Today, nest boxes are permanent fixtures in millions of backyards. Moreover, farms and ranches throughout the West use nest boxes to attract insect and rodent-eating birds to their lands. Nest boxes require regular maintenance and supervision. By following the guidelines below, you can be the best nest box landlord possible, and keep your nest box safe for songbirds in the west.



Design

1. Only use nest boxes with a top or side that opens so that nests can be safely monitored throughout the nest cycle.
2. To regulate temperatures in nest boxes, ensure that your nest box has 1/4 to 1/2 inch wide ventilation slots at the top (inadequate ventilation can cause death of nestlings).
3. To attract desirable occupants, use boxes with appropriately sized entrance holes (see reverse).
4. In areas with predator problems, attach Noel Predator Guards to nest box entrance holes to protect nesting birds (see reverse for web link).

Placement

1. To attract Western Bluebird and Tree Swallows, place nest box in open habitat; face box entrance north, west, or east if you live in a hot climate.
2. Keep all nest boxes at least 100 yards away from cattle feed stations, feed lots, and bird feeders to reduce House Sparrow competition and predation.
3. Keep cats indoors and do not feed predatory birds, such as crows and jays.
4. Be aware of competition between species for boxes, as this can reduce nesting success, particularly between Western Bluebird and Tree Swallow and between House Wren and Bewick's Wren. Boxes placed in pairs can alleviate competition between bluebirds and swallows. Consider removing at-risk boxes entirely if the problem continues.
5. Do not place boxes in areas where there will be disturbances, such as construction, brush clearing, or spraying of pesticides or other harmful substances.

Monitoring

1. Join a local and/or national nest box monitoring program, like Cornell Birdhouse Network (see reverse information).
2. Keep track of nesting activity by monitoring your boxes on a weekly basis throughout the breeding season (March - August).
3. Before opening to check box contents, tap box gently to alert adult birds inside. They will likely flush (leave the nest), allowing you to observe eggs and or chicks, but will return once you leave the area.
4. Be sure to protect box opening to prevent chicks from leaving their nest prematurely.
5. Open box slowly and quietly, and only enough so that you can see in to count eggs and/or chicks*, then close box securely before promptly leaving area.
6. Practice adaptive management of your nest boxes by using your monitoring data to make wise choices. For example, if predation occurs frequently at a box, move it or modify it with a Noel Predator Guard (see back for web link).

* Using a data form or notebook, document the date, time, and box contents (e.g. presence of new nest material, number of eggs and/or chicks) during each check.

Think Outside the Nest Box!

1. **Contribute your nest box data to the scientific community** through participation in a monitoring program. Contact your local Audubon Society or Resource Conservation District to find out if there is a local monitoring program in your area, or join a national program, like Cornell Birdhouse Network.
2. **Create and conserve natural habitat for birds** by leaving dead trees and limbs, protecting existing habitat, and restoring degraded areas with native plants.
3. **Get to know the birds on your land.** Keep a field notebook and attend local bird walks.

Important nesting information for cavity-nesting songbirds in the West ¹

Songbirds	Entrance hole dimension (inches)	# Eggs laid	Color of eggs	Incubation Period (# days until hatch)	Chick Period (# days chicks in box attended by adults)
Ash-throated Flycatcher	1/2	4-5	Creamy white, blotched with lavender and brown.	15	14-16
Bewick's Wren	1/4	5-7	White, flecked with brown and/or purple.	12-14	14
Black-capped Chickadee	1/4	6-8	White with fine, reddish-brown spots.	12-13	16
Chestnut-backed Chickadee	1/8	6-8	White or cream in color; sometimes unmarked, or speckled reddish brown and brown.	12-14 *	22-23 *
House Sparrow (<i>undesirable: invasive, non-native</i>)	≥ 1/4	4-6	Dull gray with brown spots.	10-13	14-17
House Wren	1/4	6-8	White (may be tinted pink or gray); heavily marked with lavender and/or brown spots.	13	12-18
Mountain Bluebird	9/16	5-6	Glossy, pale blue.	13	18-21
Mountain Chickadee	1/8	5-7	White with reddish dots	12-14	18-21
Oak Titmouse	1/4	6-8	White; unmarked or faintly marked with reddish brown.	14-16	16-21
Tree Swallow	3/8	4-6	White (may be pinkish).	13-16	20
Violet-green Swallow	3/8	4-6	White (may be pinkish).	13-14	16-24
Western Bluebird	9/16	4-6	Light blue.	13-14	17-18
White-breasted Nuthatch	3/8	5-8	White, pinkish-white, or cream-colored; heavily spotted with reddish brown, brown, or purplish-red.	12	14

¹ Information compiled from resources below

* Time periods may vary

Bird Resources & Other Useful Tools

- PRBO Conservation Science (<http://www.prbo.org/birdinfo>)
- North American Bluebird Society (<http://www.nabluebirdsociety.org>)
- Cornell Birdhouse Network (<http://birds.cornell.edu/birdhouse>)
- Noel Predator Guard design plan (<http://birds.cornell.edu/birdhouse/pdf/guardnoe.pdf>)
- The Birder's Handbook, by Ehrlick, P.R., and others.
- The Sibley Guide to Birds, by D.A. Sibley
- Oak Woodland Bird Conservation Plan (<http://www.prbo.org/calpif/plans.html> or call 415-868-0655)