

Woodland Secondary Cavity Nesters

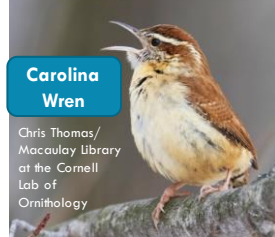
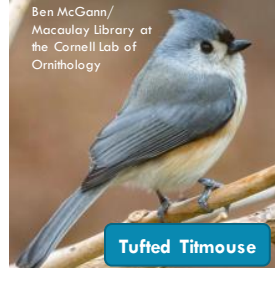
Ohio Bluebird Society
Conference 2024



Marne Titchenell
Extension Program Director – Wildlife
School of Environment & Natural Resources



Woodland Secondary Cavity Nesters



Name the Nest



Bet Zimmerman, www.sialis.org



Nest Material: moss, woody debris (bark chips, fine fibers), lined w/ fur
Eggs: 5-8; white with red-brown speckles



Chickadee-dee-dee



Black-capped Chickadee

Carolina Chickadee



Time of Nesting:
April – June

**Time to Fledging
(after last egg laid):**
4-5 weeks



Chickadees



Black-capped Chickadee

Scott Martin/Macaulay Library at the Cornell Lab of Ornithology



Larger, longer tail, larger head.
Bib less defined, white on nap of neck.
More white on wings and tail.

Carolina Chickadee

Alberto Lopez Torres/Macaulay Library at the Cornell Lab of Ornithology

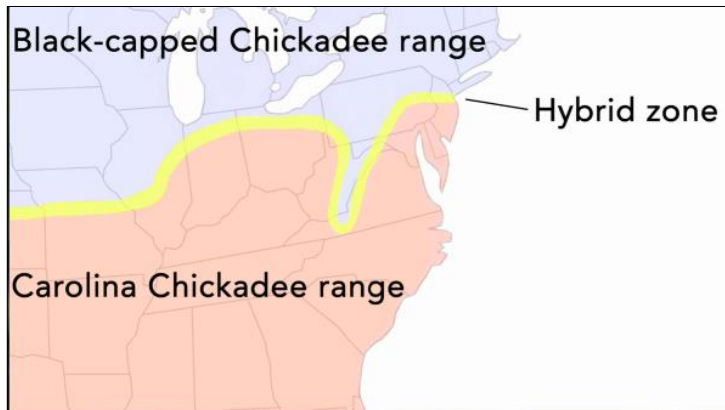


Smaller, shorter tail, smaller head.
Lower bib line defined, gray nap of neck.
Less white on wings & cinnamon below.

Chickadees

Black-capped Chickadee

Carolina Chickadee



Habitat: Chickadees



- Uses variety of forest types
- Eats insects and plant material
- May excavate own cavities in soft wood



Montique Maynard/Macaulay Library
at the Cornell Lab of Ornithology

Nest Box Use: Chickadees

*Place boxes under tree cover,
along edges of woodlands near
open areas or bird feeders.*

- Secretive and sensitive to disturbance
- Place nest box near cover
- Wait to monitor



Marie Chappell/Macaulay Library at
the Cornell Lab of Ornithology

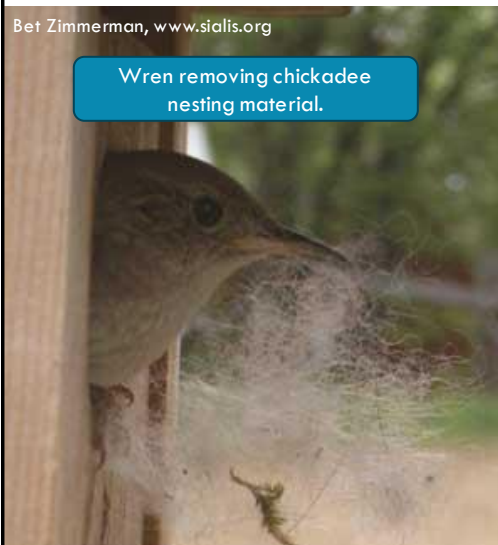
Nest Box Use: Chickadees



Nest Box Use: Chickadees

Bet Zimmerman, www.sialis.org

Wren removing chickadee nesting material.



- Chickadees are poor competitors
 - ▣ ~60' into woods
- Consider house wren guard for boxes placed along wooded edges
 - ▣ See sialis.org for timing
- Woodchips at the bottom of box (Cooper and Bronter 2008).

Nest Box Specifications: Chickadees

- NABS style boxes, wren houses, PVC style (Gilbertson) boxes
 - ▣ Will use hanging boxes
- Mount 5-15' off ground
 - ▣ Higher mounting preference – 8-14' off ground?
- 1 & 1/8" - 1 1/4" entrance hole
 - ▣ Hole facing away from winds
- 30-50' spacing between boxes

Disclaimer on Nest Box Info:

Information on nest box sizes and specification from:

- Sialis website by Bet Zimmerman Smith - www.sialis.org
- Cornell Lab of Ornithology's Nest Watch - www.nestwatch.org
 - ▣ All About Birdhouses – 'Learn' tab
- Other published literature
- u.osu.edu/wildside – 'Nest boxes for Cavity Nesters'

Name the Nest



Bet Zimmerman, www.sialis.org



© René Corado / WFWZ

Nest Material: leaves, moss, grass, bark strips, line w/fur/hair
Eggs: 3-9; white with red-brown, brown, or lilac speckles



Bet Zimmerman, www.sialis.org



Tufted Titmouse



Time of Nesting:
April – June/July
Time to Fledging (after last egg laid): 4-5 weeks



Where do birds get the fur that is in their nests?



Place dog or rabbit fur in suet feeder near nest boxes.

Habitat: Tufted Titmouse

- Uses variety of forest types
- Eats insects and plant material
- Rarely excavate cavities

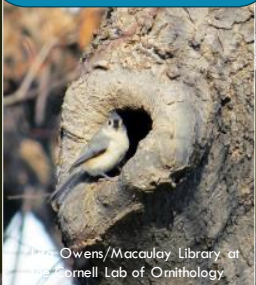


Photo: Owens/Macaulay Library at Cornell Lab of Ornithology



Nest Box Use: Tufted Titmouse

Place boxes under tree canopy near large, deciduous tree (mast producers) or bird feeders.

- Secretive but more competitive for nesting sites
- May still have issues with house sparrows and wrens
- Consider wren guard



Nest Box Specifications: Tufted Titmouse



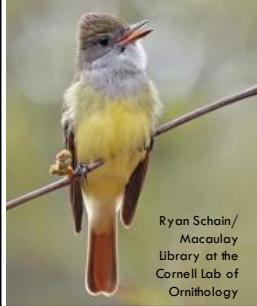
Bet Zimmerman, www.sialis.org

- Not particularly picky about natural tree cavities
 - May use a variety of box styles (NABS, Chalet, Peterson), including hanging boxes
- Mount higher than 5'
 - 6-15', at least 8'?
- 1 1/4" - 1 1/2" entrance hole
- 30-40' spacing between boxes
- Monitoring advice – titmice sensitive, wait until 1 week after egg laying

Name the Nest

Nest Material: small twigs, leaves, bark, moss, grass, fur, feathers, paper, cloth, snake skin

Eggs: 4-8; creamy white – pinkish buff, with brown, purple, or lavender speckles



Ryan Schain/
Macauley
Library at the
Cornell Lab of
Ornithology



Keith Kridler, www.sialis.org

Great Crested Flycatcher



Time of Nesting:
May – July

**Time to Fledging
(after last egg laid):**
26-30 days



Habitat: Great Crested Flycatcher



Jonathan Pierce/Macaulay Library at the Cornell Lab of Ornithology

- Mature forest with clearings; riparian areas, edges
- Aerial insectivores
- Nest higher in canopy, in existing cavities

Nest Box Use: Great Crested Flycatcher



Place in open area near woodlands or forest edge with clear flight path to entrance.

- Entrance holes larger (1.75") and may attract sparrows and starlings
- Consider hanging box ~ 12' from ground

Betsy Marie, www.sialis.org

Nest Box Use: Great Crested Flycatcher

- Bluebird style boxes largely acceptable, including boxes hung from trees
 - 3-4' wire, mounted 12' above ground
- May prefer larger, deeper box width (8x7 and 9-16" deep)
- At least 1 3/4" entrance hole
 - To discourage starlings:
 - Hanging boxes and/or
 - Use 1&9/16" hole or oval entrance (1.375"x2.25")
- Monitoring advice – a ladder and mechanics mirror
- 1 box/6 acres



Betsy Marie, www.sialis.org



Name the Nest



Bet Zimmerman, www.sialis.org

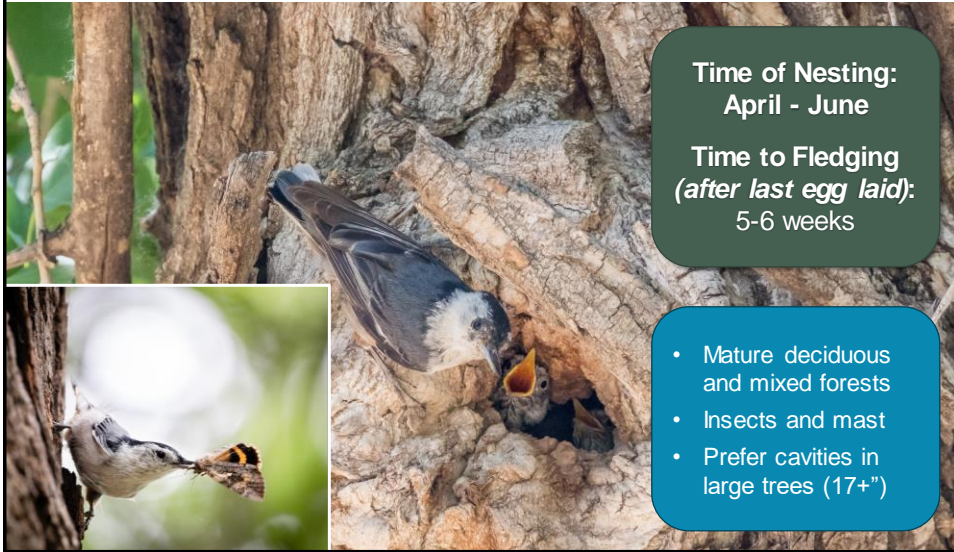


Bet Zimmerman, www.sialis.org

Nest Material: bark (larger pieces), fur, grass, finished with soft cup of softer materials

Eggs: 5-9; white to cream with brown spots and mottling

White-breasted Nuthatch



Time of Nesting:
April - June

Time to Fledging
(after last egg laid):
5-6 weeks

- Mature deciduous and mixed forests
- Insects and mast
- Prefer cavities in large trees (17+')

Nest Box Use: White-breasted Nuthatch

Place boxes on trees or poles near winter hangouts/where cavities in large trees are lacking.

- Mount 5-20 feet high
- 1 ¼" entrance hole
- Place 1-4" wood shavings in bottom of box



Nest Box Use: White-breasted Nuthatch



Bet Zimmerman, www.sialis.org



- Little is known about nest box use
- Place boxes close to winter feeding territory
 - ▣ Under tree canopy or within 15-30' of woodland edge
- Mount 5-15' high
- 1 1/4" – 1 1/2" entrance hole
 - ▣ May be attracted to larger holes
- Place 1-4" wood shavings in box

“Bringing the Snag into the Urban Forest”

More info:
go.osu.edu/urbansnag

rist, Oregon

A note on woodland management...

- Bird are looking for naturally occurring cavities in dead or dying trees
 - ▣ Consider managing for dead wood in your woods
 - ▣ go.osu.edu/deadwood



A single tree in a natural forest serves thousands of other organisms, even once it has been dead for decades.

Woodland Management Help:

- ODNR, State Foresters - forestry.ohiodnr.gov
 - ▣ Assist with long-term goals for private woodlands
- Consulting Foresters - osafdirectory.com
- Natural Resources Conservation Service (NRCS)
- Soil & Water Conservation District Office (SWCD)/wildlife specialists
- ODNR, Division of Wildlife private lands biologists
 - ▣ wildohio.gov
- Learn more at woodlandstewards.osu.edu

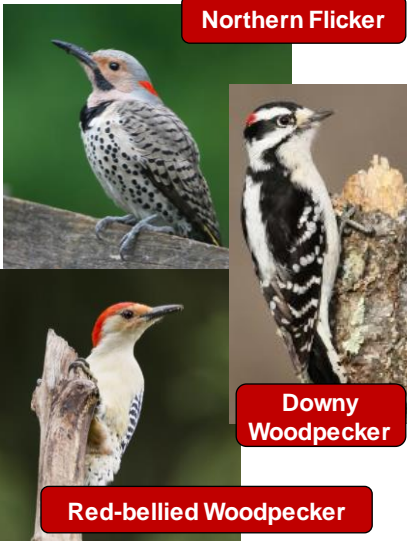
Carolina Wren



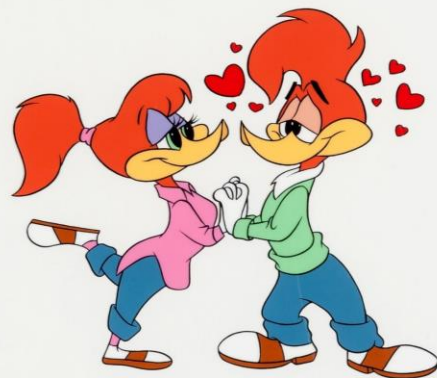
- ❑ Prefer to nest in brushy areas, open cavities, or...odd places.
 - ❑ Peterson, hanging wren house, PVC box, and wood duck nest box!
 - ❑ Wide entrance hole – 2.5”x5.5” – nest box plan at nestwatch.org.
- ❑ Young sensitive to monitoring – do not monitor after day 7



Woodpeckers – Primary Cavity Nesters



Nest excavation creates and strengthens the pair bond.

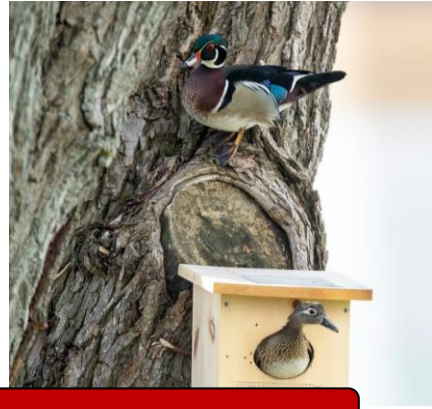


A few more secondary cavity nesters...

Screech Owl



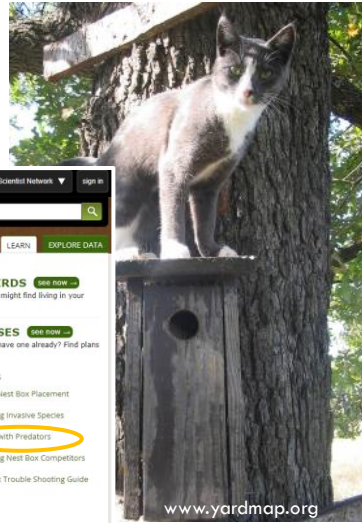
Wood ducks



Nest box plans and specification at u.osu.edu/wildside

Keeping Your Nest Boxes Safe

- ❑ Don't let your back yard or trail become an ecological trap:
 - ❑ Wise placement of boxes



The Cornell Lab of Ornithology

NestWatch
Where Birds Come to Life

HOME ABOUT YOUR DATA CONNECT LEARN EXPLORE DATA

HOW TO NESTWATCH
These articles will get you started on your way towards being a NestWatcher!

- Code of Conduct
- Understanding NestWatch Data
- Nest Monitoring Manual
- Data Entry Tutorial Videos
- Nest Monitoring Protocol
- Nest Check Data Sheet
- Nest Check Data Sheet (Spanish)
- How to Find Nests
- Identifying Nests and Eggs
- Frequently Asked Questions

BIRD & NEST INFORMATION
Information about birds and their nesting habits!

- Nesting Cycle
- Landscaping for Nesting Birds
- Clutch Size & Phenology for Common Species
- Brown-headed Cowbirds
- Myths About Nesting Birds
- Words About Birds

INTERACTIVE COMMON NESTING BIRDS [Go now...](#)
Find a nest? Want to know who you might find living in your area? Find out here!

ALL ABOUT BIRDHOUSES [Go now...](#)
Do you want to build a nest box or have one already? Find plans and helpful tips!

FEATURES

- Right Bird, Right House
- Features of a Good Birdhouse
- Installing a Nest Box Camera

ARTICLES

- Tips on Nest Box Placement
- Managing Invasive Species
- Dealing with Predators
- Managing Nest Box Competitors
- Nest Box Trouble Shooting Guide

Keeping Your Nest Boxes Safe

- Don't let your back yard or trail become an ecological trap:
 - Wise placement of boxes
 - Provide natural food sources
 - Manage/remove invasive species

Planting for Butterflies and Moths

Use this diagram to plant a small 6'x10' garden plot to support butterflies and moths in your Ohio garden, landscape, or nearby park.

The plants in this design are caterpillar host plants, nectar sources for adults, or both. The plant list offers a first and second plant option for each number, with the quantity of plants recommended in parentheses. The first plant option is pictured in the design. Feel free to use either plant, or mix and match depending on availability and preference. Can't find a specific outdoor or don't want to plant outdoors? No problem. Use what's available locally or plant the "straight species" instead. For a larger space, include more plants, grouping the same species together. Starting with just a few plants is a fine option as well. The full design is presented here, but even a few plants will provide habitat for butterflies and moths.

1 square = 1 foot

Native plants for hummingbirds and songbirds - COMING SOON!
u.osu.edu/plantbynumbers

Alternative to Non-native, Invasive Plants from Ohio Invasive Plant Council



Asian Bush Honeysuckles: Amur, Morrow, and Tatarian (*Lonicera maackii*, *Lonicera morrowii*, and *Lonicera tatarica*)

- Form dense populations in the understory of woods
- Leaf out early and hold leaves late in the fall
- Seeds from red berries are dispersed by birds and deer

Recommended Alternatives:

- * bottlebrush buckeye (*Aesculus parviflora*)*-US
- * black chokeberry (*Aronia melanocarpa*)-OH
- * summersweet clethra (*Clethra alnifolia* & CVs)-US
- * common winterberry (*Ilex verticillata* & CVs)*-OH

www.oipc.info/plants-to-replace.html

The Ohio Woodland Stewards Program

woodlandstewards.osu.edu

The screenshot shows the website for the Ohio Woodland Stewards Program, part of The Ohio State University Extension. The navigation menu includes Home, Classes, Workshops, Publications, Center, Newsletter, News, Links, About, Mobile Apps, Uppass, and OSU Extension. A blue circle highlights the 'Publications' link, with a blue arrow pointing to a callout box.

Invasive Species

- Beech Leaf Disease Pest Alert
- Controlling Non-Native Invasive Plants in Ohio Forests: Ailanthus
- Controlling Non-Native Invasive Plants in Ohio Forests: Bush Honeysuckle
- Controlling Non-Native Invasive Plants in Ohio Forests: Privet
- Controlling Non-Native Invasive Plants in Ohio's Forests-Autumn Olive and Russian Olive
- Controlling Non-Native Invasive Plants in Ohio's Forests: Garlic Mustard
- Controlling Non-Native Invasive Plants in Ohio's Forests: Japanese Siltgrass
- Thousand Canker Disease

Woodland Stewards offers a variety of educational programs across the state for woodland owners and those interested in learning more about the forests of Ohio. Some classes are designed to help a woodland owner form a solid foundation for their future woodland education (Name That Tree) while others build on the basics to provide more in depth coverage of specific topics (Improving Your Forest) or deal with new and/or emerging topics such as Emerald Ash Borer and Asian Longhorned Beetle.

Keeping Your Nest Boxes Safe

- Don't let your back yard or trail become an ecological trap:
 - Wise placement of boxes
 - Provide natural food sources
 - Manage/remove invasive species
 - Reduce or eliminate insecticides
 - Keep cats indoors



A note on types of boxes...

- **Birds are tough.** *They are likely less fussy than we are.*
- Offer a variety of boxes
- In good locations
- With responsible monitoring
- And proper maintenance.



Resources

Special thanks to Bet Zimmerman Smith, Keith Kridler, Betsy Marie, Tim Bischoff, and the Macaulay Library at the Cornell Lab of Ornithology for pictures and information.

- Sialis website - www.sialis.org
- Cornell Lab of Ornithology:
 - All About Birds – www.allaboutbirds.org
 - Nest Watch – www.nestwatch.org

Thank You!



Marne Titchenell

Extension Program

Director - Wildlife

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614-292-0402

Resources:

u.osu.edu/wildslide