



Welcoming Wildlife: Places to Raise Young


Garden for Wildlife[™]
by National Wildlife Federation
CELEBRATING 50 YEARS



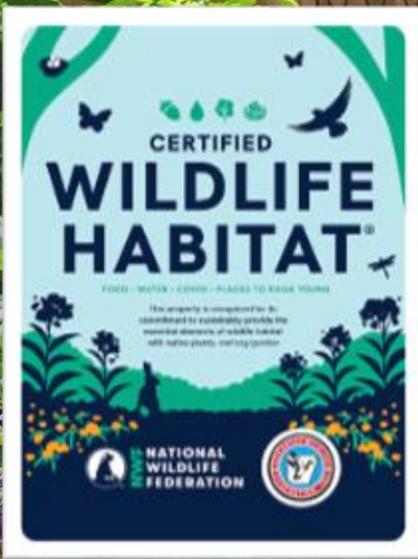
Sim Barrow

Director of Community Conservation

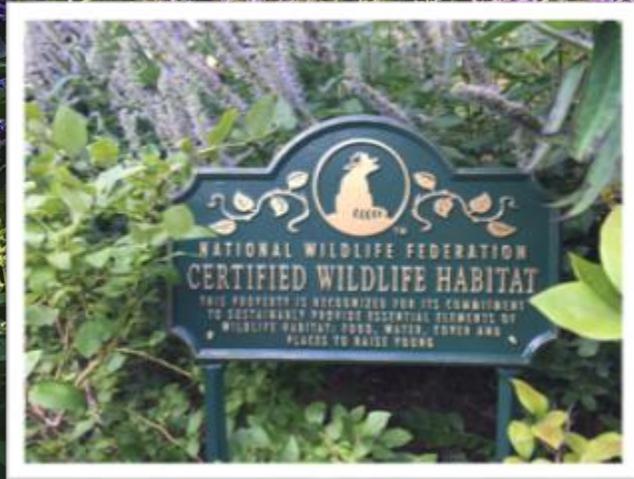
Arkansas Wildlife Federation



"Hey there – Sim here to say that these slides were originally presented to a live audience, but we wanted to make them available as an online resource. I've added comments to each slide as needed to make them more accessible for viewing online."



“This presentation is part of a four-part series about how to participate in National Wildlife Federation’s Certified Wildlife Habitat Program, which provides a framework for creating a wildlife-friendly landscaping in residential and community spaces.”



**CERTIFIED WILDLIFE
HABITAT®**

NWF.ORG/GARDEN



“All of these places are eligible for Wildlife Habitat Certification! Not only does certification benefit wildlife, but it also raises awareness about wildlife-friendly landscaping while improving quality of life for yourself and your neighbors.”

- Home
- Workplace
- Farm
- School
- University
- Apartment Rooftop
- Park
- Place of Worship



“Whether you’re just starting out or have been on your wildlife habitat journey for a while, these are a few helpful reminders to avoid feeling overwhelmed or discouraged. Expect incremental progress and don’t expect perfection!”

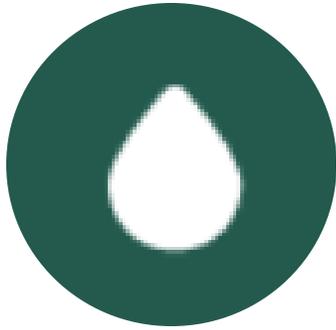
Keep in mind:

- **It’s a journey, not a destination!**
- **It isn’t all-or-nothing**
- **Progress over perfection**

All wildlife need four things to survive



Food



Water



Cover



Places to Raise
Young



Places to Raise Young

Places to Raise Young

What do young wildlife need to grow and thrive?



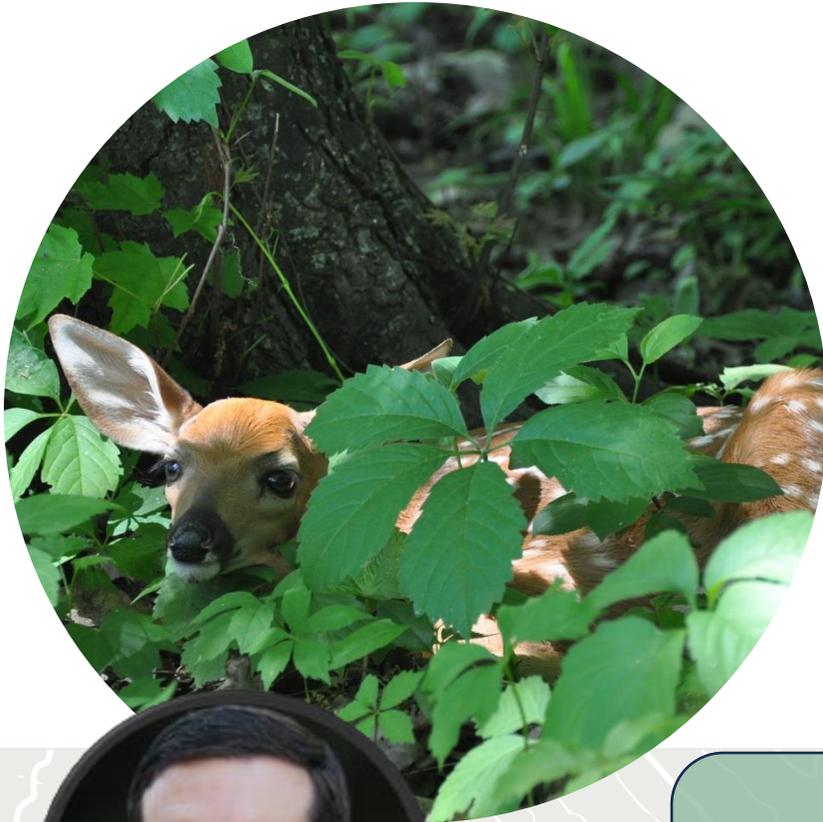
“As with all living things, young wildlife need food, water and shelter; except they are generally unable to meet those needs themselves.”

Plants are the Foundation of Good Habitat



“It’s no surprise that native plants naturally support juvenile wildlife, either as a source of food or as cover/shelter.”

Plants Provide Places to Raise Young



“Some wildlife need plants to hide from potential predators, while others need them for nesting material.”



“Bird boxes are an excellent way to provide nesting habitat for certain songbirds like bluebirds, wrens, and other cavity nesters, but there are a few important considerations for how to incorporate them into your backyard habitat.”



Places to Raise Young

Cavity Nesters will use nesting boxes

Nest Box Placement Considerations



Target
Species



Natural
Habitat



Box
Height



Hole
Size



“Consider each of these factors when selecting your nest box. First, determine which bird species you want to support, then determine which nest box design best suits their needs. Lastly, select a site similar to their natural habitat.”



Beyond Nest Boxes

Providing diverse young-rearing habitat

Supporting the Life Cycle

Songbirds



“Young songbirds need support throughout their growth and development. For example, fledglings that have left the nest (but cannot yet fly) need access to cover in order to avoid predators.”

Supporting the Life Cycle

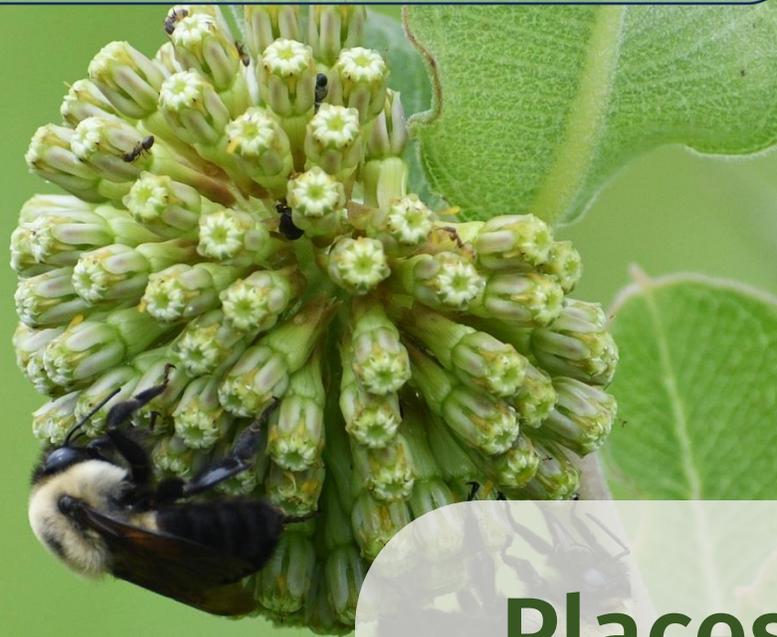
Butterflies & Moths



“Plant host plants for caterpillars and nectar sources for adult butterflies.”



“The following slides were shared with me by Leslie Cooper, pollinator coordinator with Quail Forever. You can find out more about their work to support pollinators at www.arkansasmonarchs.org.”



Places to Raise Young

Supporting native bees

Photos by Leslie Cooper, Quail Forever

NWF.ORG/GARDEN

Native Bees

Approximately 4,000 species of native bees in N. America

Native bees have special habitat requirements:

1. Foraging Habitat
2. Nesting Habitat
3. Overwintering Habitat





Generalists vs Specialists

European Honeybees (*Apis mellifera*)

- Important pollinators to agriculture
- Managed pollinators
- Can also forage on native plants
- Plight of the pollinators



“European honeybees are a generalist species, meaning that they can pollinate a wide range of flowers.”

Solitary vs Social Bees

- More than 90% are solitary bees
 - Each female constructs and provisions her own nest without any help from other members of her species
 - Less aggressive than honeybees typically because they don't have a hive to defend
- Bumblebees are the best-known native social bees
 - 200+ species of sweat bees that sometimes nest socially

The Xerces Society Guide: Attracting Native Pollinators (Mader et al. 2011)



“On the other hand, many of our native bees are specialist species, meaning they only pollinate specific kinds of wildflowers. In turn, those wildflowers are often only pollinated by a narrow range of pollinators.”

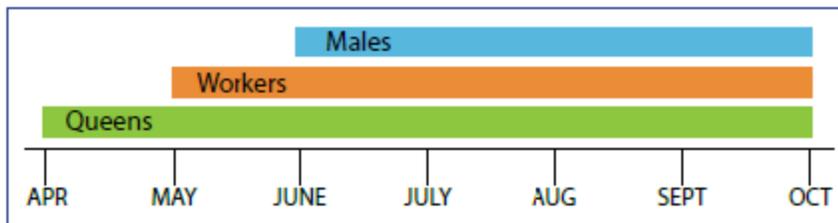


Bumble Bees

- 47 *Bombus* species in N. America
- Annual colonies
- Cavity-nesters
 - Tree cavity
 - Tussock of grass
 - Abandoned rodent nest
- Sonication or Buzz-Pollination



THE FLIGHT SEASONS OF A BUMBLE BEE



Bumble bee colonies produce workers, males, and queens at different times of year.

Ground-Nesting Bees

- About 70% of N. America's native bees (roughly 2,800 species) are solitary ground-nesters
- Dig in bare or sparsely vegetated soil, depending on species:
 - Varies from flat ground to vertical banks
 - Nest configurations range from a single short tunnel, to complex, branching tunnel systems



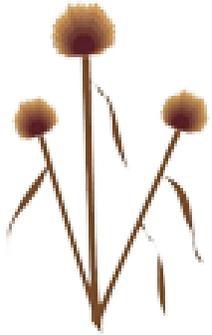
Wood- and Tunnel-Nesting Bees

- About 30% of N. America's native bees (around 1,200 species) are tunnel-nesters
- Many tunnel-nesting species use:
 - Abandoned beetle burrows in standing dead trees or limbs
 - Some chew out pith of dead, dry stems and twigs from such plants as elderberry and blackberry



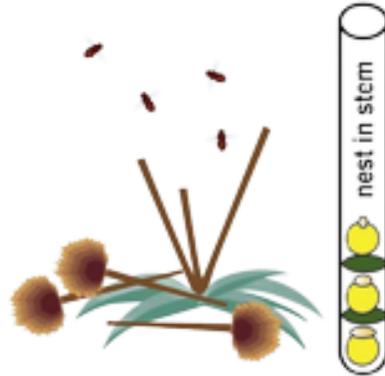
How to Create Habitat for Stem-nesting Bees

Winter



Leave dead flower stalks in-tact over the winter.

Spring



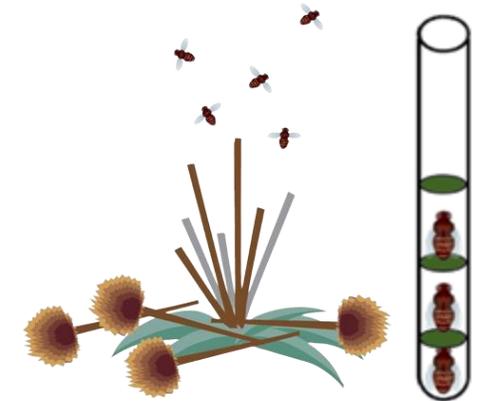
Cut back dead flower stalks, leaving 8-24 inches. Eggs are laid on pollen balls.

Summer



Larvae develop in the cut stems during the growing season, and hibernate until next Spring.

Next Spring



Cut back dead stalks. Adult bees emerge to create nests in newly-cut dead stems.

Graphic: Colleen Satyshur, Elaine Evans, Heather Holm, Sarah Foltz-Jordan



"Bee hotels like these provide excellent nesting habitat for solitary bees and other insects."



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[NWF.ORG/GARDEN](https://www.nwf.org/garden)

Bee Hotel Considerations

- Use all-natural materials
- Provide tunnels with a variety of length and diameter
- Place in a rain-sheltered area in partial sun
- Annual Maintenance
 - Remove used materials annually to reduce pathogens & pests
 - Replace with new materials in early Spring





Wild About Nature? Get Your Yard CERTIFIED

“Ready to add your yard to the growing number of wildlife-friendly gardens in Arkansas? Visit www.nwf.org/certify to get started!”



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**Thank you!
Questions?**