



Rusty patched bumble bee on wild bergamot flower

Photo by: Jill Utrup, USFWS

## WHY HELP BUMBLE BEES?

### Because bumble bees help us!

Bumble bees pollinate a variety of different flowers, fruits and veggies that we rely on, such as tomatoes, peppers, and blueberries

## WHAT CAN WE LEARN?

- Preferred nesting habitat
- Food preferences
- Number of workers, males, queens
- Mating behavior
- What are threats to nests
- Genetic diversity of individuals

# Bumble bee nests

*What to do when you find a bumble bee nest*



Inside American bumble bee (*Bombus pensylvanicus*) nest.

Photo by: Elaine Evans, University of Minnesota-Extension

If you are lucky, you may come across a bumble bee nest while gardening, mowing, hiking, birdwatching, or while engaged in other outdoor activities during the spring or summer. Most people never see bumble bee nests as they are usually hidden, but if you see continued bumble bee activity around a hole or small opening, you may have found a nest. Information from nests you find could help us better protect bumble bees, ensuring they will be around in the future to pollinate our fruits and flowers.

## I think I found a nest—what do I do?

- Observe the bees from a safe distance (the queen and female workers can sting if cornered, but the males cannot)
- Confirm that it is a bumble bee nest by submitting clear photos of the bees to a community/citizen science project, such as Bumble Bee Watch, iNaturalist, or other local projects. If it is a yellow jacket or wasp nest, stay far from the entrance—these are also annual nests but much larger than bumble bee nests and these wasps are more aggressive
- Do not disturb the soils or other features if possible (by the time you find the nest, it may be almost finished)
- Do not try to move or relocate the nest, but let it run its course, if possible
- Learn as much about the bees as you can and share what you learn with community/citizen science projects

Bumble bees have annual nests (lasting only one season). Bumble bee species differ in their emergence time, length of season, and in nesting site preference. Nests may be found underground or above-ground, in building walls or foundations, in compost, in rock piles, in hollow logs or large roots, near bunchgrasses, in flower pots, in piles of leaves or branches.

*There are many unanswered questions about bumble bee nesting. Your observations can help all of us better understand and protect bumble bees, especially imperiled bumble bees, such as the federally endangered rusty patched bumble bee.*

Rusty patched bumble bee on purple coneflower.

*Photo by: Tam Smith, USFWS*



## Nest Timeline

- In the spring, a nest is established by a single large bumble bee queen
- Once she finds a nesting spot, the queen lays eggs and collects nectar and pollen
- Then, her first set of eggs hatch and become female worker bees that begin foraging
- Over next 2–3 months, the colony increases in size, up to several hundred or a thousand female worker bees
- If you have found a nest, lots of bees will be observed coming and going from the entrance
- Later in the season, the queen starts laying eggs that become males and a small number that become new queens
- These new queens mate and at the end of the season they are the only ones to survive to the next year
- The new queens dig into loose soil, leaf or branch piles and remain dormant until the following spring, when the cycle starts again!



Above ground entrance to bumble bee nest.  
*Photo by: Elaine Evans, University of Minnesota-Extension*

## Moving Nests

It is not recommended to relocate nests. If you are able, let the nest run its course. If you have to move a nest due to safety or other concerns, it is recommended that you first try to determine what species it may be and then reach out to local bumble bee experts for advice.

## Want to learn more?

For more information:

<https://www.fws.gov/midwest/endangered/insects/rpbb/>

This document was developed in cooperation by the Rusty patched bumble bee Outreach Team, which consists of a group of partners interested in bumble bee conservation, particularly for rusty patched bumble bees.