

nature's , notebool

A project of the USA-NPN

Nature's Notebook Phenophase Photo Guide

> Bombus spp. Bumble Bee



## Why Observe?

Bumblebees are important native pollinators for many wildflower and crop species. In northern latitudes, bumblebees usually overwinter as hibernating queens. Queens emerge in the spring and search for a nest site such as an abandoned mouse or bird nest or a bunch of dry grass. Once she finds a suitable nest site, the queen builds a waxy honey pot and fills it with honey. She also makes a ball of pollen (known as "bee bread") in which she lays eggs. The queen broods the eggs, which hatch after a few days. The larvae are fed pollen and eventually pupate and emerge as adults.

## **Tips for Identification**

Large, robust bees that typically have yellow and black coloration and their bodies are covered with hairs. Bumblebees can be confused with carpenter bees, but bumblebees will have fuzzy abdomens, while carpenter bees have smooth, shiny abdomens.

Be aware there is variation from individual to individual within a species, so your animal may not look exactly like the one pictured. If you are uncertain whether or not a phenophase is occurring, report a "?" for its status until it becomes clear what you are observing after subsequent visits.

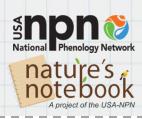


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This Phenophase Photo Guide has been vetted by the USA-NPN NCO. It is appropriate for use as a supplement to the Nature's Notebook phenophase definition sheet for this species.



## Nature's Notebook **Phenophase Photo Guide**

Bombus spp. **Bumble Bee** 





Dany Chapman via Flickr. CC BY 2.0 (cropped)

Adults

One or more adults are seen moving about or at rest.



Line Sabroe via Flickr. CC BY 2.0



## Male Adults

One or more adult males are seen moving about or at rest. For Bombus spp., males are much smaller than females in some species.



Marilyn Peddle via Flickr. CC BY 2.0

#### **Flower Visitation**

One or more individuals are seen visiting flowers or flying from flower to flower. If possible, record the name of the plant or describe it in the comments field.



Pete Beard via Flickr. CC BY 2.0 (cropped)

# Mating

A male and female are seen coupled in a mating position, usually with the male on top of the female. For Bombus spp., males are much smaller than females in some species, and mating can occur at rest (more typical) or in flight.



## **Nest Building**

One or more adults are seen building a nest or hive. For Bombus spp., one or more females build a nest of wax cells that, depending on the species, may be constructed above ground in thick grass or a wood cavity, or underground in a hole or abandoned burrow.



Devra via Flickr. CC BY 2.0 (cropped)

## Nest Provisioning

One or more adults are seen entering the nest with pollen. For *Bombus spp.*, pollen is carried on the hind legs in bright yellow, orange, or white pollen baskets.

Phenophases not pictured: Dead adults, Individuals in a trap