



## *Stinging Insects: Bumble Bees*

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Bumble bee queen foraging for nectar  
James Castner, UF/IFAS, Document ENY-215  
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**Common name:** Bumble bees

**Scientific name:** *Bombus spp.*

**Also known as:** humble bees

**Size:** 3/8 to 3/4 inch long

**Commonly confused with:** carpenter bees

### **Distinguishing marks:**

- large and robust
- very hairy, generally black and yellow, but often with white or orange bands

**Distribution:** throughout North America

**Habitat:** woods, open fields

**Life cycle:** Bumble bees are social insects with annual nests. A mated queen emerges from hibernation in early spring and starts a colony on her own. Nests are often found in old rodent burrows, compost piles, woodpiles, discarded sofas or cavities underneath sidewalks. Small workers develop first and collect nectar and pollen for subsequent generations of developing brood. Unlike wasps and hornets, which feed on insects, bumble bees consume only nectar and pollen. They do not produce large amounts of honey, only enough to feed the developing young. At its peak, a bumble bee nest may contain 300-500 individuals. Towards the end of summer, males and new queens develop. After mating, the new queens burrow into the ground where they spend the winter in hibernation. The workers, males and old queen perish in the fall.

**Damage:** generally none, minimal structural damage if they nest in a wall cavity; normally docile and only sting if provoked

**Benefits:** Bumble bees pollinate a wide variety of crop and ornamental plants, and many gardeners place nesting boxes in their garden to encourage bumble bees to nest. Active bumble bee colonies are commercially available.



Bumble bee foraging on a flower  
Clemson University - USDA Cooperative  
Extension Slide Series, [www.insectimages.org](http://www.insectimages.org)



Bumble bee foraging for pollen – note large amount  
of pollen collected on hind legs Jerry A. Payne, USDA  
ARS, [www.insectimages.org](http://www.insectimages.org)

**Management:** If the bumble bees do not pose a threat, let them be; they will die out in late summer and will not use the same nest the following year. If control is necessary, it is best to contact a professional. If you elect to destroy the nest yourself, wait until night and apply an approved insecticidal dust to the nest entrance. Be sure to dress appropriately. Wear eye protection, a long-sleeved shirt, trousers and boots, and secure your sleeves and pant legs. Establish an unobstructed escape route and be ready to move quickly away if any of the bees fly towards you. If you require illumination, use a flashlight covered with red cellophane for a light - bees cannot see red. Bumble bees that get in the house can easily be coaxed out an opened window or controlled with an approved aerosol insecticide.

**Sting:** Bumble bees are normally docile and will only sting if provoked or if their nest is in danger. Unlike honey bees, bumble bees have a smooth stinger and can sting repeatedly. If you are stung, cooling the area with ice may be soothing.

**Remember!** Insect stings can elicit a life-threatening, allergic reaction in some individuals. Check with your physician to determine what symptoms require a visit to the emergency room. Never attempt any control measure if you have a known allergy to insect stings.



Bumble bee foraging for nectar Peter Wirtz,  
Personal Web Site, [www.insectimages.org](http://www.insectimages.org)

**Further sources:** Goulson, D. 2003. *Bumblebees: Their Behaviour and Ecology*. Oxford University Press, 240 pages.

Kearns, C.A. and J.D. Thomson. 2001. *The Natural History of Bumblebees: A Sourcebook of Investigations*. University of Colorado Press, 120 pages.

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