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## Honey bees

*Use Integrated Pest Management (IPM) for successful pest management.*

### **Biology**

The domesticated honey bee, *Apis mellifera*, is a crucial pollinator for many agricultural crops including tree fruits and small fruits. In the home garden, honey bees help pollinate and ensure the productivity of our fruit trees, berry patches, and vegetable gardens. The honey bees we most often encounter in the garden are female workers, collecting pollen and nectar. These workers are usually about 1/2 inch long and covered with short fuzzy hair, with dull yellow and black bands across the abdomen. As they work, the bees may become dusted with pollen and also collect it on their hind legs. The workers return to their hive with the pollen and nectar, which provides food for the rest of the colony (the queen, drones or males, larvae, and other workers). The pollen and nectar is also turned into honey, which is stored in wax cells (honeycomb) and serves as food both for the overwintering bees and for humans. Working bees are typically not aggressive; however, stings may result from bees that are stepped on by bare feet, pinched in clothing, or otherwise treated roughly. The barbed stinger often remains behind, resulting in the death of the bee. Bee stings can be painful and are potentially dangerous to individuals who are allergic. Seek medical help immediately in cases of known bee sting allergy or if symptoms of allergic reaction occur following a sting (swelling of lips, tongue, or mouth, difficulty breathing, etc.). While they are a valuable insect ally, honey bees face several threats including attack by mites and other parasites, diseases, and a relatively little-understood problem called Colony Collapse Disorder (CCD). In addition to these problems, bees are very susceptible to poisoning by careless use of insecticides. For more information on bees and pesticides see <a target="blank"

href=https://pubs.wsu.edu/ItemDetail.aspx?ProductID=14994&SeriesCode=&CategoryID=149&Keyword=><u>PNW 591 How to Reduce Bee Poisoning</u></a>.

### **Management Options**

#### Non-Chemical Management

- ~ Bees trapped indoors will fly to windows trying to escape. Trap them in a glass or jar against the window and slide a card between the windowpane and jar opening to keep them securely in the jar until they can be released outdoors.
- ~ Do not apply insecticides on or near blooming plants where bees are foraging.
- ~ If insecticides must be applied, remove blooms from plants by mowing or other means, apply insecticides in the evening after bees have stopped foraging for the day, and try to choose products that are less toxic to bees.
- ~ Products containing carbaryl (Sevin) are extremely toxic to bees, especially when applied in a powder or dust form. Other insecticides to avoid include malathion, permethrin, and esfenvalerate.

*Select non-chemical management options as your first choice!*

#### Chemical Management

**IMPORTANT:** *Visit Home and Garden Fact Sheets for more information on using pesticides*

None recommended.

*Honey bees*

*Images*



~ Caption: *Honey bee*

~ Photo by: *Johnny N. Dell, Bugwood.org*