

# Bees, Wasps, and Fire Ants



## Hazard ID: Bees and Wasps

### Recognition and Environment

Bees are vegetarians, feeding only on pollen and nectar. Bees also tend to have hairy bodies, making them look fuzzy, whereas wasps have shiny, hairless bodies.



*Photo 1: Source [Pollinating Insect-Biology, Management, Systematics Research: Logan, UT](#)*

Wasps are mostly predators and scavengers, feeding on other insects, meat, compost, and sometimes your picnic. Yellow jacket wasps (*Vespula*) are often mistaken for bees. Indeed, some folks call them “meat bees”, but they are in fact social wasps related to hornets and only distantly related to bees.

Bees, wasps, and hornets are most abundant in the warmer months. Nests and hives may be found in trees, meter boxes, vaults, underneath manhole lids, rotting logs, electrical poles, under roof eaves, overhangs of sheds and awnings, or on equipment such as ladders.

### Working in Areas with Bees and Wasps

Stinging and biting insects usually attack when they are defending their territory. Be aware of your surroundings. Look for and avoid flowering plants when possible. If you are close to a nest, remain calm and quiet while moving away slowly.

### Worker Prevention Tips

- Avoid wearing brightly colored clothes or perfumes, lotions, or other scented products that may attract insects. Bees communicate by scent and tend to be very sensitive to odors.
- Be alert for insects when you are eating, drinking, or cooking; the scent of food attracts insects.
- Wear pants that seal at the ankle and shirts that seal at the wrist to prevent insects from getting inside your clothing.
- Do not swat or crush insects; when some insects are injured, they send chemical signals that incite other insects to attack.
- Keep work areas clean. Social wasps thrive in places where humans discard food.
- A shaded area is better than an open area to get away from the insects.
- If a bee comes inside your vehicle, stop the car slowly, and open all the windows.
- Shield your face with your arms if you are attacked by insects. Run until you reach shelter, or the insects leave.

## Hazard Correction

- Engineering Controls: Apply appropriate Integrated Pest Management practices at all facilities. Properly and frequently clear worksites of food, beverages, downed fruit, and garbage.
- Administrative Control: Include this hazard and preventative practice to applicable field task JHAs.
- Personal Protective Equipment (PPE) Controls: Wear proper PPE when stinging insects are known to be present (e.g., a hat with netting, an extra layer of clothing, or pants taped to boots and sleeves taped to gloves).

## First Aid

If a worker is stung by a bee, wasp, or hornet:

- Wash the site with soap and water.
- Remove the stinger using gauze wiped over the area or by scraping a fingernail or instrument over the area.
- Never squeeze the stinger or use tweezers. The venom sac may be attached, so squeezing could worsen the injury.
- Apply ice or a cold pack to reduce swelling.
- Do not scratch the sting as this may increase swelling, itching, and risk of infection.
- Apply over-the-counter insect bite treatment to relieve itch.
- Workers with a history of severe allergic reactions to insect bites or stings should consider carrying an epinephrine auto-injector (EpiPen), and should wear a medical identification bracelet or necklace stating their allergy.



Photo credits: Dmitry-Grigoriev/Unsplash;  
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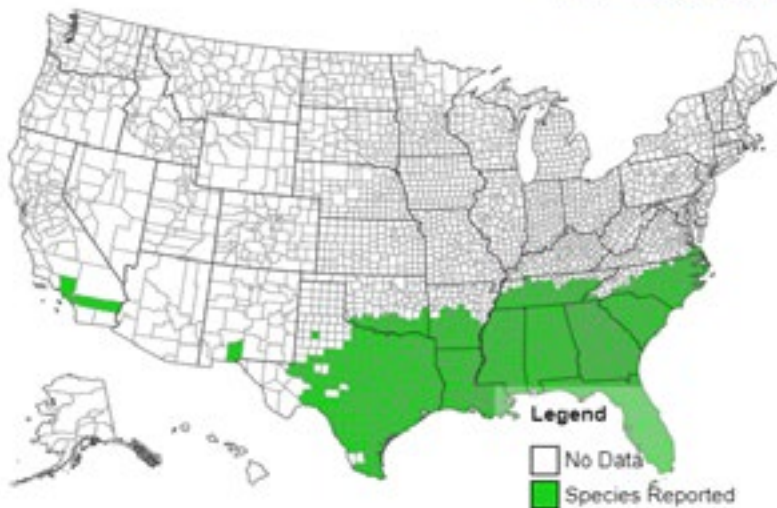
## Resources

- OSHA Fact Sheet [Insect Stings](#)
- Center for Disease Control (NIOSH) [Bees, Wasps, and Hornets](#)
- USDA Pollinating Insect-Biology, Management, Systematics [Research](#): Logan, UT

## Location of Fire Ants in the United States

fire ants (*Solenopsis* spp.)

EDDMapS  
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Map created : 5/9/2023

Photo 2: Source <https://ant-pests.extension.org/geographic-distribution-of-fire-ants/#:~:text=In%20the%20United%20States%2C%20imported,Kentucky%2C%20Missouri%2C%20and%20Maryland>



Photo 3: Source: <https://bit.ly/3A4Rvcj> Public Domain Image

### Hazard ID: Fire Ants

#### Recognition and Environment

- These dark reddish-brown ants are an invasive species. Ants are 1/8" to 1/4" long and reddish-brown or black in color.
- Fire ants will feed on the buds and fruits of numerous crop plants, especially corn, soybean, okra, and citrus. They can also girdle young trees. Fire ants frequently infest electrical equipment. They chew on insulation and can cause short circuits or interfere with switching mechanisms. Fire ants may also be found on trees or in water, so always look over the area before starting to work.
- Nests are hard, mound-shaped nests that can get quite large, posing risks to field workers and farm equipment.

#### Hazard Correction

- Engineering Control: Apply appropriate Integrated Pest Management practices.
- Administrative Control: Include this hazard and preventative practice to applicable field task JHAs.

#### Resources

- OSHA Fact Sheet [Fire Ants](#)
- [Managing Imported Fire Ants in Urban Areas](#), US Department of Agriculture
- Center for Disease Control (NIOSH) Fire Ants
- USDA Animal and Plant Health Inspection Service [Imported Fire Ants](#)

#### First Aid

- Fire ants are aggressive and will defensively attack anything that disturbs them. Fire ants can sting repeatedly.
- Rub off ants briskly, as they will attach to the skin with their jaws.
- Symptoms of a fire ant sting include burning, itching, and a white pustule that forms a day or two afterward. Often people note a circular pattern of pustules, which may be caused by one ant stinging several times.
- If the only symptoms are pain and the development of pustules, stings can be treated with over-the-counter products that relieve insect bites and stings.
- If a sting causes severe chest pain, nausea, severe sweating, loss of breath, serious swelling, or slurred speech, the person should be taken to an emergency medical facility immediately. These are symptoms of an allergic reaction or anaphylactic shock.
- Workers with a history of severe allergic reactions to insect bites or stings should consider carrying an epinephrine auto-injector (EpiPen) and should wear a medical identification bracelet or necklace stating their allergy.