

# More About Bees and Avoiding Stings

## Social vs. Solitary – Two Kinds of Bees

Social bees live together as a unit. This includes honey bees which form a colony and divide the work of the hive into different jobs and bumble bees who live in small colonies but do not have individualized job descriptions. Think of solitary bees, mostly ground-nesting bees, as single moms with families at home to feed. Male bees will also visit flowers but only collect nectar as flight fuel. Foraging bees are solely focused on gathering food.

## The Stinging Truth

Unlike cartoons and Hollywood movies, bees are not flying around looking for people and pets to sting. You can safely get within inches of bees visiting flowers and not get stung. People get stung when they harass bees at their nests, step on or pinch them, or they become entangled in folds of clothing. Stay away from social bee nests (honey bees) which may be underground or in trees.

## Non-Allergic Reactions

In most cases, bee stings are annoying, but do not require treatment. Swelling or pain at the sting site are not the result of allergic reactions and will diminish with time. Remove any stinger that remains by scraping it away (a credit card works perfectly) or removing it with a tweezer. Apply an ice pack to reduce swelling. Wash the area with soap and water and apply hydrocortisone. Take an antihistamine to reduce swelling.

## Allergic Reactions

Some people may have an allergic reaction

(even some who do not know they are allergic to stings). A very small proportion of the adult population (3%) and children (about 0.5%) are allergic to bee stings and are at risk of possible systemic reactions including anaphylactic shock. If someone experiences nausea, wheezing, or difficulty breathing following a sting, or if they are stung multiple times, they should seek immediate medical care. This is rare, but is an early systemic symptom of anaphylactic shock.

You are more at risk of being struck by lightning (about 700 fatalities per year) than dying from a bee sting. For example, in the U.S. population, only 40 people out of 310 million people die from stings in a typical year. Many of these incidents are actually from wasp or ant stings rather than native bees or honey bees. Ground-nesting yellow jacket wasps (*Vespa* species) are defensive around their populous nests.

## What About “Killer Bees”?

African honey bees (*Apis mellifera scutellata*) were accidentally unleashed on the Americas and have mated with the existing honey bees to form Africanized honey bees, a very effective pollinator which has a more defensive nature than other honey bees. These bees are making their way northward and can currently be found in about 6 southern border states in the U.S. and in Mexico. It is a good idea to give these bees (almost indistinguishable from other honey bees based on their looks) a much wider berth – keep away from their nests, and if a nest is accidentally disturbed or you encounter a swarm, leave the area.

## Reduce that Risk – Safety Tips

**Nests:** Keep back from honey bee nests in the ground. Watch from a safe distance of 20 or 30 feet. Do not run over bee nests with a lawn mower. If you are barefoot, watch where you step. Do not ride horses near a known honey bee nest. Don't let children throw rocks at their nests.

**Actions:** Try not to wear dark clothing, strong perfume, or move quickly when passing by honey bee nests. These actions, along with carbon dioxide in exhaled breath, could stimulate the guard bees to sting.



Photo Steve Buchmann

## Help Bees and They will Help You

**Garden tips:** When we mulch pathways or landscape with large areas of concrete, we destroy the sunny flat bare ground areas that most nesting female bees need to raise their young. Leave bare patches for ground nesting bees. Provide bare ground, twigs, and dead limbs for nests and lots of flowers for nectar and pollen. Use few or no pesticides in a pollinator garden, or spray when bees aren't active. Try to use locally adapted native wildflowers or old-fashioned heirloom varieties, which produce more nectar and pollen than modern hybrids. Plant in enticing clumps of 5 or 6 plants of the same kind. In turn, you will be rewarded with bountiful healthy crops and lifestyle by being outdoors. If you are growing a vegetable garden, or have fruit trees, pollinating bees are your allies. They do the busy work, making thousands of trips moving pollen from flower to flower resulting in larger and tastier vegetables and fruits even in varieties that normally self-pollinate.

Photos Steve Buchmann



The North American Pollinator Protection Campaign (NAPPC) is a collaborative body of over 140 organizations that work for the protection of pollinators across Mexico, Canada and the United States. The NAPPC Garden Task Force produced this brochure for your use and information. Feedback is welcome. For more information and to learn about the fascinating lifestyles of native solitary bees and social bees like the bumble bees or the honey bees please contact [info@pollinator.org](mailto:info@pollinator.org) or 415-362-1137 or visit [www.pollinator.org](http://www.pollinator.org).