



## ASK THE EXPERT

# How to Help the Bumble Bee

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Bumble bees matter in more ways than you might imagine, and the fact they are in decline is problematic. “Nearly 90 percent of flowering plants require animal-mediated pollination, and bees are the most important animals in this regard,” says Richardson, coauthor of the new *Bumble Bees of North America: An Identification Guide* (Princeton University Press). “They pollinate many plants that underpin the ecosystems on which we depend. They are also important pollinators of agricultural crops.” In fact, many agricultural crops derive greater benefit from native bee pollination than from honey bees farmers rent for that purpose. Crops that are commonly pollinated by bumble bees include apples, blueberries, pumpkins, tomatoes and peppers. Here are some tips to keep the bees active.

## IDENTIFY

“Bumble bees occur naturally in the wild. Honey bees live mostly in hives managed by beekeepers and are usually tan with variable darker striping on the abdomen. They have hair all over their compound eyes, a trait that distinguishes them from nearly all other bees. Bumble bees are usually densely hairy, with color patterns that include yellow, black, red and white bands and spots. They vary greatly in size and are typically larger than honey bees. Bumble bees sometimes create an audible buzzing sound. Honey bees never do.”

## UNDERSTAND

“Population declines have been observed in many species of bumble bees around the world. Although we do not yet understand the causes well, they include the introduction of bee diseases to new areas with commercial movement of bumble and honey bees, loss of habitat, increased use of insecticides and other harmful chemicals, and climate change. This is worrying because of the importance of bumble bees to healthy ecosystems and their value to our food supply.”

## TAKE ACTION

“Limiting use of insecticides and other pesticides is probably the most significant thing individuals can do. People can support organic and integrated plant management systems, not only on farms but also on golf courses, along highways and in parks. Protecting undeveloped land can help conserve bees; in the Northeast this can include old fields and forest margins used as bee habitat. Planting flowers, especially native plants, also helps to grow and sustain bee populations.”

## AVOID STINGS

“Stinging is a last resort for bees. Understand that many ‘bee stings’ are in fact delivered by wasps, so the relative dangers of bees are sometimes exaggerated. Bees usually sting people only if they are near their nests or trying to catch them. You can actually get very close to a foraging bee and not be in any danger of being stung. Honey bees have a barbed sting that detaches from the bee’s body after stinging, meaning an individual bee can sting only once. Bumble bees can sting repeatedly, delivering venom each time.”