



SOUTH CAROLINA FAMILY AND COMMUNITY LEADERS

Affiliated with National Volunteer Outreach Network, Country Women's Council, U.S.A., Associated Country Women of the World and in partnership with Clemson University Cooperative Extension Service

SCFCL website: <http://www.scfcl.com>

Leader Training Guide

Attracting and Not Destroying Bees in Our Yard

Lesson Objective: Participants should be able to identify plants that will attract beneficial pollinators like bees. They should also understand what will destroy bees and how to prevent it.

Lessons Overview/Introduction: Pollinators are an important part of the plant lifecycle because they transfer pollen from plant to plant. Wind, water, insects, mammals, and birds can transfer pollen to aid with pollination. Proper pollination increases the amount and quality of fruits and vegetables produced. .



Lesson: With bee populations on the decline, it is important to preserve pollination processes that result in product yield in plants. Some plants, like blueberries and apple trees, are up to 90 percent dependent on honey bees for pollination. Honey bees make multiple trips to flowers of a particular plant species for proper pollination and fertilization. Honey bees provide pollination services, but in return collect nectar for processing into honey. Approximately 2 million flower visits result in a pound of honey. Honey bees fly 55,000 miles to collect just one pound of honey.

“Native bees are not social insects like the European honeybee; they forage for food as solitary insects. Instead of living in hives, they make nests in small holes in trees, shrubs and in the ground. Some will store pollen in these holes. Eggs will be placed on individual pollen grains. The hole is then sealed with mud. Pollen provides a source of protein for developing young bees. Native bees come in all shapes and sizes from the hefty yellow-faced bumble bee (*Bombus vosnesenskii*) to the tiny solitary bee (*Perdita minima*). There are 3,000-4,000 species of twig-nesting and

ground-nesting solitary bees in North America. They are very efficient pollinators and are usually docile with a mild sting or none at all. Native bees come in all shapes and sizes.” (HTG– 0216)

Attracting Bees

(Provide handout to participants before beginning this section)

To attract bees to your yard, provide them with the items they need to survive. Those items are:

- Blooming plants from early spring to late fall – Plant a variety of pollen rich flowers in lot of shapes, colors and sizes. Bright, showy flowers are like a magnet. Mix annuals and perennials from the list on your handout. Include native trees and shrubs because adult insects are drawn to specific plants for feeding their young.
- Plant flowers in groups instead of a single flower – Bees are attracted to groups of flowering plants more often than a single flower.
- Use native plants, if possible – Native bees are adapted to native plants.
- Use a variety of flower colors in your landscape – But group similar colors together.
- Provide a source of fresh water – A shallow dish works with sticks or stones placed for bees to land.

Insecticides can kill beneficial insects. Limit pesticide use and follow all label directions. Herbicides may eliminate important food sources for beneficial insects.

Many pesticides are not selective when it comes to beneficial insects and will kill them along with the pests. If you must use a pesticide, start with the least toxic ones and follow the label instructions to the letter.

Plant List:

- Native trees & shrubs: buckeye, chokecherry, pawpaw, beautyberry, yaupon holly, dwarf palmetto, tulip poplar, magnolia
- Perennials: milkweed, blazing star, mountain mint, goldenrod, Stoke’s aster, blue mist flower
- Annuals: dill, marigold, zinnia, aster, basil, black-eyed Susan, cosmos, sunflower, salvias. Salvia is an excellent annual to plant for bees.



Plant Lists

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Lesson Summary: Bees are beneficial in flowering landscapes and gardens, but are especially important in agricultural crop systems. . Help to nurture them and stop destroying them.

Suggested Activities:

Share plants with fellow members that attract bees.

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Lesson Review by:

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Addition Information:

- HGIC 1727 – Pollinator Gardening, Clemson Extension Home and Garden Information Center, <http://www.clemson.edu/extension/hgic/plants/other/landscaping/hgic1727.html>
- HGIC 1701 – Butterflies in the Garden, Clemson Extension Home and Garden Information Center, <http://www.clemson.edu/extension/hgic/plants/other/landscaping/hgic1701.html>

Sources/References:

- Lessons adapted from HGIC 0216. Be Friendly to Native Bees, Clemson Extension Home and Garden Information Center, https://www.clemson.edu/extension/hgic/hot_topics/2016/pdf/02%20Bee%20Friendly%20to%20Native%20Bees%20%20col.pdf
- NRCS. WWW.pollinator.org

Attracting Bees in your Yard



To attract bees to your yard, provide them with the items they need to survive. Those times are:

- Blooming plants from early spring to late fall
- Plant flowers in groups instead of a single flower
- Use native plants, if possible
- Use a variety of flower colors in your landscape
- Source of fresh water – A shallow dish or Nesting matter – piles of leaves and branches

Insecticides can kill beneficial insects. Limit their use and follow all label directions. Herbicides may eliminate their food source. Read labels.

Plant List:

- Native trees & shrubs: buckeye, chokecherry, pawpaw, beautyberry, yaupon holly, dwarf palmetto, tulip poplar, magnolia
- Perennials: milkweed, blazing star, mountain mint, goldenrod, Stoke's aster, blue mist flower
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Goldenrod flower



Black-eyed Susan



Cosmos



Sunflower