

How Doth the Little Busy Bee

By Susan Camp

Last Sunday I was writing about European and native bees, and thinking about spring and summer days to come, watching the bees fly among the flowers or drowse lazily on favored blossoms. Today it is snowing. If you are new to the area, welcome to Tidewater Virginia, where even the weather is an adventure.

In last week's column, I noted that over 4000 species of bees are native to North America, performing the invaluable service of pollinating flowers, vegetables, fruits, and trees. One blog writer cautions against the mindset of "attracting bees", noting that small populations will increase only with the provision of nesting habitat, a constant food source, and protection from pesticides.

Native bumblebees are seen in our gardens between March and November. They bear the enchanting formal name of *Bombus*, which reflects perfectly their bumbling, clumsy flight. They are delightful to watch and sometimes will drowse for hours on one blossom. Fourteen species of *Bombus* are found in Virginia, according to the Virginia Cooperative Extension (VCE) Publication "Native and Solitary Bees in Virginia." *Bombus impatiens*, the common eastern bumblebee, is abundant in our area. A large (3/4 to 1 1/2 inches long), hairy, yellow and black bee, it nests in old logs, sheds, rodent nests, and stone walls. Unlike many native bees, it will nest in a colony of up to 400 bees. Bumblebees are beneficial insects and good pollinators of blueberries, tomatoes, and red clover. Some favorite native plants of the bumblebee include common milkweed (*Asclepias syriaca*), skullcap (*Scutellaria integrifolia*), mountainmint (*Pycnanthemum tenuifolium*), and New York ironweed (*Vernonia noveboracensis*).

About one inch long and metallic blue-black with shiny purple or green highlights, Eastern carpenter bees (*Xylocarpa virginica*) often are considered pests because they cut nesting tunnels into wood siding and decks. Solitary female carpenter bees lay their eggs and store food in the tunnels. Carpenter bees are good pollinators of flowers and vegetables from March to October and collect nectar and pollen from many of the same plants as bumblebees. Tunnel entrances can be sprayed with insecticide and the holes sealed with wood putty if carpenter bees become a nuisance. Always follow the manufacturer's directions when using insecticide.

Andrenid bees (*Andrena* spp.), also called mining bees, are small, ground-nesting bees with dark bodies and hairy yellow shoulders. They do not form colonies, but do nest near each other. They rarely sting, but will swarm if their nesting areas are approached. Recommended native plants for food are hollies (*Ilex* spp.), *Viburnum* spp., and plants in the rose family. Andrenids are good pollinators of blueberry and strawberry crops and apple trees.

Orchard mason bees (*Osmia lignaria*), according to the VCE publication, are underused as pollinators. A single mason bee can pollinate up to 60,000 flowers in its lifetime! They are not

aggressive and rarely sting. Similar in size to honeybees, mason bees are dark metallic blue. Female mason bees do not excavate, but build their nests in reeds or other hollow cavities, which they seal with mud once the eggs are laid. Farmers and orchard owners often provide bee houses to attract these prolific pollinators. Kits and directions for building bee houses are available in the VCE publication online at pubs.ext.vt.edu and from the Audubon International fact sheet “Bee Conservation”.

“Native Bee Benefits”, a pamphlet produced by Bryn Mawr College and Rutgers University, contains a section on the nesting needs of various native bees. VCE Publication 3104-1541 “Gardening for Bees in Hampton Roads” includes native and exotic trees, shrubs, flowers, and herbs that will provide nectar and pollen for native bees, as well as for honeybees.

Native bees sometimes are nuisances because of their behaviors and nesting habits, but they are important members of our garden and farm ecosystems. We can encourage these excellent pollinators and their many related species by planting native plants and providing nesting habitat so that we can coexist together.