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NEWS RELEASE

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Native Bees in the Landscape

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There are many important native pollinators within your home landscape. One you may not be familiar with is the mason bee. The mason bee is one of over 4000 species of native bees in the United States. Unlike the more well-known honeybee, mason bees are more efficient pollinators. They are active in pollinating plants even during cool and wet conditions. The honeybee is most active during dry conditions and when temperatures exceed 50 degrees. Plus, mason bees and other native pollinators will visit certain plants that honeybees don't forage. Other examples of native pollinators are the digger bee, leafcutter bee, squash bee, sweat bee, and of course the bumblebee. The mason bee differs from a honeybee in that it carries pollen on its back rather than on its hind legs. Mason bees are solitary, cavity-dwelling bees meaning they do not live in hives. All female mason bees are solitary queens. Each female performs all of the duties that an entire honeybee hive might undertake such as gathering pollen and nectar and laying eggs. She lays her eggs in reeds and natural holes they find in the landscape. The queen mason bee ensures that her eggs are protected by sealing the entrance hole with mud. Mason bees build their nests near one another; however, there is no sharing of nests. These bees do not forage for miles like honeybees; mason bees only travel about 300 feet from their nest to gather pollen and nectar.

Another native pollinator is the carpenter bee. If you have any type of wood around your home then you've probably noticed the carpenter bee searching for a place to make their nests. This becomes an issue when they choose your house or other wood structure on your property. Carpenter bees are solitary bees and are not aggressive. The males can't sting and the females may only sting if handled. They emerge in April and May with the males usually the first to appear. Males can be distinguished from females by a whitish spot on the front of their face.

However, folks find them intimidating because of their large size and loud buzzing. Carpenter bees usually won't cause serious damage but yearly infestations can weaken wood structures and make them unsightly. The galleries typically run six to seven inches but may exceed one foot. Occasionally, several bees use the same entrance hole, but they have individual galleries branching off of the main tunnel. If the same entrance hole is used for several years, tunnels may extend several feet in the wood. The female bee collects pollen which she mixes with nectar to form a ball that will serve as food for her offspring. She deposits an egg near this pollen ball and then seals off this section of tunnel with a partition made of chewed wood. She constructs additional cells in this manner until the tunnel is completely filled, usually with six to seven cells. These adult bees die in a matter of weeks. The eggs hatch in a few days and the offspring complete their development in about 5 to 7 weeks. The new generation of adult bees begin to emerge in later summer. Although the bees remain active, feeding on pollen in the general area, they do not construct new tunnels, but may be seen cleaning out old tunnels which they will use as overwintering sites when the weather turns cold. They are attracted to unpainted and weathered wood and prefer cypress or pine. Painted and pressure treated woods aren't as likely to become a host for the bees. The adults will overwinter in the wood inside the old nest tunnels. They emerge in spring to mate and make new tunnels to lay eggs. The longer the bees are allowed to colonize an area the more damage that will be done to the wood. Keep in mind that carpenter bees are a beneficial insect in that they are excellent at pollinating. However, if you must control them paint or stain any exposed wood to try and deter activity. If they are still an issue, spray an insecticide like carbaryl (Sevin) or bifenthrin (Talstar) into the holes and close them with putty. You may need to treat several times to get an infestation under control. Also, when using pesticides be sure to follow the manufacturers label in mixing and applying the product.

For more information on bees and other native pollinators please contact NC Cooperative Extension in Franklin County at 919-496-3344.

