Dear Extension Friends,

We had a record turn out for the Spring Garden Festival this year—thanks to everyone who participated! We hope you found some treasures for your garden and learned a thing or two about plants and gardening while you were here. To those who purchased plants from the Jr. Master Gardeners—we thank you! Each 4-H member raised enough money to attend one 4-H Summer Day Camp! Until next time, if you have questions or need gardening information be sure to give us a call or stop by the office for free assistance.

Best Regards,

Alicia R. Lamborn
Horticulture Extension Agent
Baker County Extension Service

May 2012

Inside this issue:

- Gardening for Hummingbirds 2
- Monitoring Lawn Insect Pests: Caterpillars, Mole Crickets, and Chinch Bugs 3-4

Attracting Pollinators and Beneficial Insects Through Integrated Pest Management

Workshop: May 30th, 8:45am—2:30pm
Cost is $15—Covers snacks and materials
Pre-Register before May 23rd

- Scouting Activity: Participants will learn scouting techniques and collect insects to identify
- Insect Identification Activity: Participants will use microscopes, hand lenses and identification cards to identify beneficial and harmful insects.
- Birds, Bats & Pollinators Houses and Habitats Trolley Tour: Ride the trolley to see bird house placement, bat houses, pollinator houses, pheromone traps, sunflower/stinkbug trial, brush piles, native plantings and hedgerow plantings.
- Cover cropping, trap crops, plants with extra floral nectarines to attract pollinators.

To Register, contact: Sarah White, sewhite@ufl.edu or Karen Hancock, khancock@ufl.edu or call (386)362-1725
For Program Info: Contact Carolyn Saft, csaf318@ufl.edu (386)362-2771 or Jim Devalerio, jtd@ufl.edu (904) 966-6299.
Gardening For Hummingbirds

To be successful in keeping hummingbirds around your house, you must garden for them.

- **Provide red, orange, and pink flowers.**
  Hummingbirds are not born with an attraction to certain colors but because most nectar-bearing flowers available to hummingbirds are red, orange, or pink, they quickly come to favor those colors.

- **Choose plants that produce tubular flowers.**
  Tubular flowers are generally the best since they hold large amounts of nectar at their base. Other flowers may attract hummingbirds, but will not provide nectar due to the flower shape.

- **Select a variety of plants to provide nectar throughout the growing season.**
  Nesting hummingbirds will need nectar from March to September. Therefore, your garden should have numerous nectar plants available throughout this time. It is best to plant a variety of species and to arrange these flowers in several groupings. Nesting hummingbirds are very aggressive and territorial around their food source. Having more than one flower garden will allow several hummers to feed at the same time without conflict.

- **Supplement your plant nectar sources with artificial feeders.**
  Packages of instant nectar may be purchased, or you also can prepare your own solution with 1 part white, granulated, cane sugar to 4 parts water. Boil the sugar solution to help dissolve the sugar. Then allow it to cool before filling a feeder. This concentration is about the same as that in wildflower nectar. Using a sweeter solution, sugar substitutes or honey could be lethal to hummers. It also is not necessary to add red food coloring since the birds will be attracted to the red feeders. Several different feeder styles are available. The ones with perches are not necessary, but they do provide an unusual view of this bird without its wings beating rapidly. The upside-down jar-and-tube feeders have a tendency to leak. Most feeders come with bee guards. Although hummingbirds will feed right next to bees, clusters of these insects will keep them away. If ants are attracted, moisten the hanging wire with cooking oil.
  Space feeders at least 10 feet apart in a place out of direct sunlight and where they will not get diluted by rain.

- **Keep the hummingbirds healthy.**
  Sugar solutions must be kept fresh. Florida's hot weather can cause rapid bacterial growth in these feeders and birds that drink contaminated water could die. To avoid this, change the solution every 3-5 days. Clean the feeders with hot water and white vinegar. Do not use soap or chlorine bleach.

**Note:** Artificial feeders will attract hummingbirds, but should not be the sole source of food provided since they provide little nourishment. Nectar is much more than just water and sugar!

Source: Schaefer, J. and Huegel, C. *Hummingbirds of Florida.*
http://edis.ifas.ufl.edu/uw059

<table>
<thead>
<tr>
<th>Suggested Hummingbird Plants</th>
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<tr>
<td><strong>Red Buckeye</strong> (<em>Aesculus pavia</em>)</td>
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<td><strong>Bottlebrush</strong> (<em>Callistemon spp.</em>)</td>
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<td><strong>Coral Bean</strong> (<em>Erythrina herbacea</em>)</td>
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<td><strong>Red Star Hibiscus</strong> (<em>Hibiscus coccineus</em>)</td>
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<td><strong>Cross Vine</strong> (<em>Bignonia capreolata</em>)</td>
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<td><strong>Firespike</strong> (<em>Odontonema stricta</em>)</td>
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<td><strong>Shrimp Plant</strong> (<em>Justicia brandegeana</em>)</td>
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<td><strong>Cardinal Flower</strong> (<em>Lobelia cardinalis</em>)</td>
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<tr>
<td><strong>Butterfly Milkweed</strong> (<em>Asclepius tuberosa</em>)</td>
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Monitoring Lawn Insect Pests:
Caterpillars, Mole Crickets & Chinch Bugs

Caterpillars

Caterpillars that damage the lawn include Fall Armyworms, Cutworms, Grass Loopers, and Tropical Sod Webworms (pictured left to right below). All of these pests feed on the leaf blades by chewing and stripping the foliage, causing damage which may appear as circular spots of dead grass, small depressed spots, or scattered damage which is not confined to patches, turning a yellowish to brownish color. In some cases these caterpillars feed at night, which is why serious damage seems to occur “almost overnight”.

Monitoring: Part the grass in damaged areas and closely examine both the foliage and the soil surface. Look for chewed leaves, silken webs, green excrement, and caterpillars. Examine several suspected areas. A flashlight used at night may reveal the night-feeding caterpillars in the grass foliage. Soap flushes also help by drenching the caterpillars out of the ground.

Soap Flush Directions: Mix 1-2 TBSP liquid dishwashing soap with 1 gallon of water. Pour the mixture over a 3-4 square foot area near the damage and see what emerges within 5 minutes. If nothing emerges in the first area, examine at least 3 or 4 other places.

Mole Crickets

Three non-native species of mole crickets occur in Florida, including the tawny, southern, and shortwinged mole crickets. Adults are about 1 1/2 inch long, light brown, and have enlarged forelegs that they use to dig in soil. Nymphs look like adults, but their wings (wing pads) are not completely developed and they can't reproduce. Shortwinged mole cricket adults have short wings and cannot fly. In northern Florida, egg laying usually begins in March and peaks in May with most hatching during early June. Mole crickets damage turfgrass in several ways. Nymphs and adults feed on grass roots and blades at night after rain or irrigation, during warm weather. Their tunneling near the soil surface (pictured right) dislodges plants or causes them to dry out. Small mounds of soil are also pushed up by late summer. Tunneling and root-feeding reduce turfgrass density and create patches of bare soil.

Monitoring: Several methods are used to estimate mole cricket populations and assist in timing pesticide applications, if needed. First, look at the soil and count the number of tunnels that are visible. Tunneling is easier to see in low-cut grass, and may be hard to see in St. Augustinegrass. Tunnels are most visible in early morning, when the dew is on the grass and the soil is moist. To actually find the mole crickets, use the soap flush directions below.

Soap Flush Directions: Mix 2 TBSP of lemon liquid dishwashing soap with 2 gallon of water in a sprinkling can. Pour the mixture over a 3-4 square foot area near the damage and see what emerges within 3 minutes. Check several places in the lawn; if there are more than 2 to 4 mole crickets per square foot, control should be considered.

Continued on page 4….
Southern Chinch Bugs

The southern chinch bug is the most important insect pest of St. Augustinegrass in Florida, but may also feed on other turfgrasses and weeds. Adults are about 3/16 inch long and are black with white patches on the wings. The young (nymphs) range from 1/16 inch long to nearly adult size. Small nymphs are reddish-orange with a white band across the back, but older nymphs and adults have black bodies. Southern chinch bugs prefer open, sunny areas, possibly where temperatures are hotter or the thatch may be thicker. They live in the thatch and suck fluids from the crowns, stems and stolons with their needle-like mouthparts. Infested grass turns yellow, then a burnt-reddish color, and dies. Chinch bugs tend to feed in groups, so usually more than one chinch bug can be found in the bottom leaf sheath on a grass plant. Dead patches of grass will get larger as the insects spread to continue feeding. The speed of turf's death probably depends on chinch bug density and the turf’s overall health. Severe damage tends to occur from April through October in northern Florida.

Monitoring: Chinch bugs can be found by several methods. First, part the grass and thatch near yellowed areas and look at the soil surface and base of the turf. Pull individual plants out and peel back the bottom leaves to look for feeding insects. Examine several different areas if chinch bugs aren't immediately found. In heavy infestations, chinch bugs can be seen crawling over grass blades and sidewalks. Another option is to vacuum near a damaged area for about 2 minutes using a Dust Buster or hand-held vacuum cleaner. Remove the filter, dump the contents on the sidewalk, and look for nymphs and adults. Repeat in several damaged areas. Final option is the flotation method. Cut both ends out of a metal can, such as a 3 lb coffee can. Push or twist one end 2-3 inches into the soil on green or yellowing grass (not dead grass). Cut the grass runners around the bottom edge of the can with a knife, if necessary. Slowly fill with water and count the number of chinch bugs that float to the top within 5 minutes. Keep the water level above the base of the grass plants during the 5-minute period. If nothing emerges in the first area, examine 3 or 4 other areas.

Note: If you find caterpillars, mole crickets, chinch bugs or any other insect in your yard that you are concerned about, please bring them to the Baker County Extension Office for positive identification and management recommendations. We can help decide if control is needed and what strategy will work best.

Above: Southern chinch bug adult (lower) and nymph (upper).
Below: Southern chinch bug nymphs.