Hello, Neighbors! The weather has turned hot and dry, and we’re expecting to see high temperatures in the 90s for the next few days. When temperatures reach these levels, people, animals, and plants can experience heat related physical distress.

HEAT STRESS
People – Limit outdoor activities, especially during the hottest parts of the day, stay hydrated, and watch for signs of heat exhaustion. If cool-down actions are not taken, heat exhaustion can escalate into heat stroke, a life-threatening condition that requires medical care.

<table>
<thead>
<tr>
<th>Heat exhaustion warning signs</th>
<th>Actions to take</th>
<th>Heat stroke warning signs</th>
<th>Actions to take</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy sweating</td>
<td>Drink cool water. Seek shade or air conditioned environment. Rest. Cool off with a cool shower, bath or moist towels applied to the skin.</td>
<td>Body temperature over 103° Fahrenheit</td>
<td>Move to shade. Apply cool water from any available source – garden hose, shower, swimming pool, water bottle – to the person’s skin. Call 911 for medical assistance.</td>
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<tr>
<td>Paleness</td>
<td></td>
<td>Lack of sweating</td>
<td></td>
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<tr>
<td>Muscle cramps</td>
<td></td>
<td>Red, hot, dry skin</td>
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<tr>
<td>Tiredness</td>
<td></td>
<td>Strong, rapid pulse</td>
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<tr>
<td>Weakness</td>
<td></td>
<td>Throbbing headache</td>
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<tr>
<td>Dizziness</td>
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<td>Dizziness</td>
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<tr>
<td>Headache</td>
<td></td>
<td>Confusion</td>
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<tr>
<td>Nausea or vomiting</td>
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<td>Nausea</td>
<td></td>
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<tr>
<td>Fainting</td>
<td></td>
<td>Loss of consciousness</td>
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</table>

Animals – Pets and livestock begin to experience heat stress at temperatures above 85° Fahrenheit. Provide shade, ample fresh water, and cooling measures, such as fans or mist systems to reduce heat stress. Minimize exercise during the hottest hours of the day.
<table>
<thead>
<tr>
<th>Heat stress signs, cattle</th>
<th>Heat stress signs, horses</th>
<th>Heat stress signs, chickens</th>
<th>Heat stress signs, dogs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rapid breathing</td>
<td>Elevated respiration</td>
<td>Decreased feed intake</td>
<td>Excessive panting</td>
</tr>
<tr>
<td>Open mouth breathing</td>
<td>Elevated heart rate that does not slow at rest</td>
<td>Reduced egg size and poorer shell quality</td>
<td>Difficulty breathing</td>
</tr>
<tr>
<td>Restlessness</td>
<td>Lethargy</td>
<td>Reduced weight gain</td>
<td>Increased heart rate</td>
</tr>
<tr>
<td>Standing in groups</td>
<td>Profuse sweating</td>
<td>Reduced egg production</td>
<td>Drooling</td>
</tr>
<tr>
<td>Drooling or foaming</td>
<td>Lack of sweating</td>
<td>Panting</td>
<td>Depression</td>
</tr>
<tr>
<td>Protruding tongue</td>
<td>Body temperature above 103⁰ Fahrenheit</td>
<td>Excessive water consumption</td>
<td>Bloody vomiting or diarrhea</td>
</tr>
<tr>
<td>Labored breathing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head lowered or drooping</td>
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</table>

**Plants** – During hot, dry weather, plants transpire (release water from pore-like structures on leaves) more rapidly than normal. Plant roots draw moisture from the soil and move it to stems and leaves. When soil moisture is lacking, plants run out of water and wilt. High temperature also affect productivity in some plants. In tomatoes, for instance, flowers may drop off the plant, and the pollen may become sterile, delaying fruit production until daytime temperatures fall below 85⁰F.

**SUMMER PESTS**

**Japanese beetle** – This shiny, metallic beetle was introduced to the U.S. through New Jersey in 1916 and has been spreading – and damaging crops, lawns, and ornamental plants – ever since. Japanese beetles are pests in both the juvenile and adult stages of life. As larvae, they live in the soil and eat the roots of lawn grasses. Following their spring feasting, the white grubs pupate for a couple of weeks, then emerge in June as adult beetles.

The adults are generalists; they’ll eat the leaves from a wide range of plants. In my yard, they prefer my thornless blackberry plants. I find that the beetles are more sluggish in the evening, no doubt full and tired from all that eating. They are easily hand-picked from the leaves, and dropping them into a bucket of soapy water is an effective, non-chemical control method.

Shiny, copper and green Japanese beetles are a major summer pest. Adults eat plant leaves, and juveniles (grubs) eat turfgrass roots. The candy-striped leafhopper on the right feeds on plant leaves by sucking out sap, and it can infect plants with diseases. Photo by H. N. Kolich
If you notice a heavy infestation of Japanese beetles in your garden, you can treat lawn areas in August with milky spore bacteria (Bacillus papillae) to reduce the population of overwintering grubs. This natural bacteria is effective only against Japanese beetle grubs. A second application the following spring (late April to early May) will help knock back adult population even further. Chemical controls are also available.

**Aphids** – These small insects come in many forms and over 1,300 species. Many species are plant-specific, and their host preference is reflected in common names, such as green peach aphid, potato aphid, wooly apple aphid. They are often found on plant stems or the underside of leaves. They puncture the plant and suck out sap, causing plants to lose vigor. The sap passes quickly through their systems, and falls on to lower leaves of the plant. This sticky “honeydew” can cause further plant issues. It attracts ants, who appreciate honeydew so much, that they may tend or “farm” the aphids to keep them producing it. If ants don’t gather the honeydew, it turns into sooty mold, a black substance that coats leaf surfaces and prevents photosynthesis. Fortunately, several beneficial insects, such as lady beetles, readily eat aphids. Certain small wasps lay their eggs inside aphids, which provide food for the developing larvae. A strong blast of water from a garden hose will knock many aphids off plants. Spraying insecticidal soap on aphids is another low-impact control method.

![Aphid on plant](image-url)

This wooly aphid is one of over 1,300 species of aphids in North America. Aphids cause primary plant damage by puncturing plant tissues and sucking out sap. Aphid droppings, called “honeydew,” may attract ants who use the sticky substance as a food source. Accumulations of honeydew on leaf surfaces turn into a black, sooty mold that interferes with photosynthesis. Photo by H. N. Kolich.
FRESH AND LOCAL FOODS FOR JUNE – BLUEBERRIES!
Sweet, low-calorie, fiber-rich, and packed with vitamins and antioxidants, blueberries are one of the “super foods.” Antioxidants promote health and reduce the risks of developing chronic illnesses like cancer and heart disease. These micronutrients are most abundant in food with deep, natural color, like blueberries.

Fresh blueberries are wonderful by themselves, but they also liven up yogurt, oatmeal, and salads. Of course, they’re great for dessert, too. Here’s an original recipe from Family and Consumer Sciences Agent Barbara Worley.

Chilled Blueberry Cream Dessert Soup
4 cups fresh blueberries
1 cup white wine (fruity) or white grape juice
½ cup lemon juice
½ cup sugar
¼ teaspoon ground cinnamon
1 teaspoon fresh lemon zest
1 pint half-and-half
1 cup plain Greek yogurt
Lemon twists, for garnish

Bring first six ingredients to a boil in a saucepan over medium-high heat, stirring often. Remove from heat and cool slightly. Process blueberry mixture in a blender or food processor until smooth. Chill until ready to serve. Once cool, stir in half-and-half. Just before serving, top with yogurt and garnish with lemon twist, if desired.

PRESSURE CANNER TESTING
Summer brings fresh veggies and fruits, often in quantities just right for canning. Be food safety smart and bring your Presto pressure canner gauge or lid in for a free calibration test. Office hours are Monday-Friday, 8 a.m.-5 p.m., but on Wednesday mornings from 8-10, Barbara Worley and I will be at the Cumming Farmers Market, across from the Cumming Fairgrounds on Castleberry Road. Visit the Extension booth for pressure canner testing and lots more information on food safety, gardening, lawn care, weed control, soil and water testing . . .

WATER TESTING FOR HOME BUYERS AND SELLERS
Well water testing is now a requirement for home loan closing on homes that rely on a well for drinking water. To accommodate this need and streamline the process of sample submission, UGA laboratory services has developed a test package, W33B, that is specific for home loan closing. The package includes nitrate, nitrite, lead, and microbiology analyses.

MOSQUITO CONTROL
The two most important steps in mosquito control are: 1) Eliminate mosquito breeding grounds, and 2) Protect yourself with clothing that covers skin and apply a mosquito repellent containing DEET to exposed skin. Mosquitoes are vectors for heartworm disease, so protect your canine friends with worming agents prescribed by your veterinarian.
LEYLAND CYPRESS WOES
We’ve recently received several calls from homeowners about ailing Leyland cypress trees. In the landscape, these fast-growing trees have a relatively short lifespan, usually around 12-15 years. However, they are often planted too close together and in poor soil, conditions that cause stress. When drought stress becomes part of the equation, the trees are even more susceptible to diseases that cause stem cankers, dieback, needle browning, and root rots. Application of fungicides are generally ineffective and impractical, but certain cultural controls may help prolong the life of the trees.

THINGS TO LEARN AND DO

34th Annual UGA Trial Gardens Open House
When: Saturday, July 9, 2016 from 9 a.m. to noon.
Where: UGA campus, Athens, GA, across from Stegman Coliseum
More information

4-H Summer Day Camps
There’s still time to sign up for 4-H summer day camps for rising 5th-7th graders. Upcoming adventures include:
Animal Shelter Day, Wednesday, July 13 from 10:30 a.m. to 4:30 p.m., and
Atlanta History Center Day, Thursday, July 14 from 9 a.m. to 3 p.m.

Call Emily Addis or Jack Lowery at 770-887-2418 for more information.

Healthy Eating on a Budget
Join FACS agent Barbara Worley and learn several ways to make healthy eating more economical and fun. Monday, July 18, 7 p.m. at Hampton Park Library, 5345 Settingdown Road.

Basics of Food Preservation
This session will introduce participants to the basics of canning processes and take a peek at other food preservation methods. Wednesday, July 13, 7 p.m. at Cumming Library, 585 Dahlonega Street.

Cooking with Herbs
Learn how using fresh and dried herbs add pizzazz to meals and protect against chronic diseases. Friday, July 15, 2 p.m. at Sharon Forks Library, 2820 Old Atlanta Road.

Stay cool and safe, and as always, your Forsyth County Extension staff welcomes your questions! Our offices will be closed, however, on Monday, July 4th in celebration of Independence Day. If you can, catch the unique Forsyth County parade, where antique steam engines lead the parade from Forsyth Central High School to the Cumming Fairgrounds.

Heather