

Inside This Issue:

- ▶ Keeping It Cool With Extension
- ▶ Calendar Updates
- ▶ Trees Keeping It Cool—It's Made In The Shade!
- ▶ 4-H Is Keeping It Cool For Summer 2018
- ▶ Hydrate Or Die? What To Do If You Hate Drinking Water.
- ▶ Keeping It Cool: Shade for Livestock
- ▶ Keeping It Cool On The Highway



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SOLUTIONS

Newsletter of the Alamance County Cooperative Extension Service

Keeping It Cool With Extension

Keeping it cool can be quite a challenge this time of year. High temperatures can be tough on people who work outside as well as on our plants. People who work outside know they need to take frequent breaks when the weather is hot and drink a lot of water. Shade is also beneficial if you can find it. Plants tend to reduce their growth processes when the weather is hot, but cannot really water themselves. It is up



to us to water our plants. I have more information on plants and watering in my main article.

When I think about keeping it cool, it also brings to mind the staff at Alamance County Cooperative Extension. Cool as in calm and composed, which is helpful when something does not go quite the way it was expected. Everyone works as a team to pull it all together. Cool!

I am planning orchard tours at the Buster Sykes Demonstration Farm for the third Saturday in July, August and September. This is your chance to see how the orchard is growing and ask any questions you might have about small fruit and tree fruit care

Mark S. Danieley

Calendar Updates

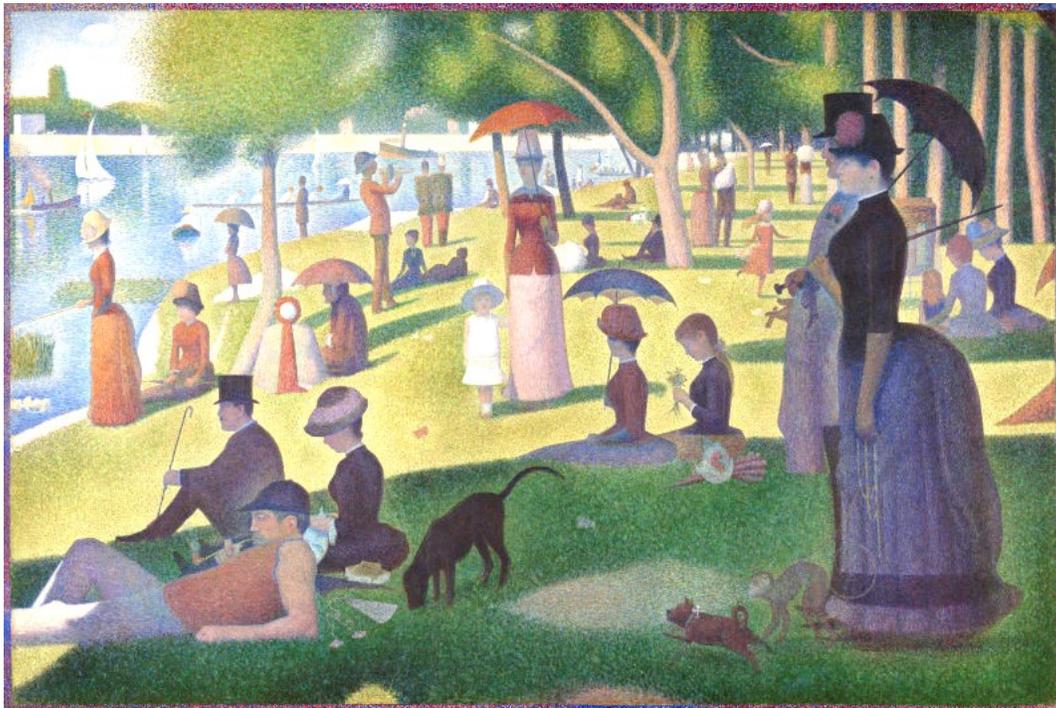
Mon., Jul 09 6:30	Food Preservation Crash Course, Mebane Library
Tues., Jul. 10 5:00	Food demo and nutrition class, North Park Farmers Market
Thurs., Jul. 12 10:00	THINK GREEN THURSDAY - Home Landscaping
Sat., Jul. 21 9:00	Orchard tour, Buster Sykes Demonstration Farm and Forest
Thurs., Jul. 26 10:00	THINK GREEN THURSDAY - Preserving Your Bounty
Fri., Aug. 03 3:00	Food Preservation Crash Course, Graham Library
Thurs., Aug. 09 10:00	THINK GREEN THURSDAY - Fall Lawn Care
Thurs., Aug. 09 5:30	Pasture Management Series Part II, Burlington, NC
Sat., Aug. 18 9:00	Orchard tour, Buster Sykes Demonstration Farm and Forest
Thurs., Aug. 23 10:00	THINK GREEN THURSDAY - Terrarium workshop - FEE*
Thurs., Aug. 30	Pastured Poultry Workshop, Mebane, NC
Thurs., Sep. 06 10:00	THINK GREEN THURSDAY - The Ferns and Their Frond Spike
Thurs., Sep. 06	Pasture Weed Class, Burlington, NC
Sat., Sep. 15 9:00	Orchard tour, Buster Sykes Demonstration Farm and Forest
Wed., Sep. 19	Master Gardener Plant Sale
Thurs., Sep. 27 10:00	THINK GREEN THURSDAY - So You Want To Start A Community Garden?

For more information and to register
 Call 336.570.6740 or visit <http://alamance.ces.ncsu.edu>

Trees Keeping It Cool—It's Made In The Shade

by: Mark Danieleley, Horticulture Agent

I do not know what the weather will be like in July and August, but June has been hot. Whenever I am working outside, I always try to find a shady spot under some trees to rest. The trees help keep it cool two ways. The first is by shading the ground surface and people from the direct sunlight. Studies have shown that soil exposed to direct sunlight was 18 degrees warmer than soil under shade. The effect can be even greater when comparing the temperature of a grass surface in the shade to a nearby asphalt parking lot in full sun. That has been reported to be more than a 30-degree difference. No surprise to anyone who has had to walk a long distance through an asphalt parking lot on a sunny July afternoon.



The second method trees use to keep it cool is by evaporating water from their leaves. Trees transpire water from their leaves as part of their normal metabolic processes. When a molecule of water evaporates from the leaf surface, it cools the leaf. This water evaporation also takes heat out of the air. You do not notice this so much when you are under a single tree, but the water evaporation from a large grouping of shade trees can affect the temperature of their surroundings. That is why a forest seems much cooler than an open field. A single mature shade tree may transpire as much as 100 gallons of water on a hot day. Multiply that by hundreds of trees in a forest and the cooling effect can be substantial. Of course, the amount of water in the soil available to trees is limited, especially this time of year. When the soil gets dry, the demand for transpiration water on a hot day may exceed the root's ability to absorb water. When that happens, the leaves may wilt in the afternoon and recover at night when the roots have a chance to catch up to the water demand. If the dry conditions continue, the wilting can be permanent and lead to leaf damage and possibly plant death. Wilting is easy to see on some shrubs like the big leaf hydrangea. Wilting is not as easy to see on a mature oak, but even though the trees have been around for years and are well established, they can experience water stress. The water stress not only affects tree growth, but can also make the tree more susceptible to insect and disease problems. In fact, the best defense against many tree diseases is to reduce plant stress by watering when conditions are dry. Watering trees can be expensive, but think about what might happen if you do not water your trees. Trees that die in your landscape can negatively affect your property value by reducing the curb appeal. There is also the cost of removing and replacing the dead tree. Don't forget how long it will be until the new tree gets big enough to make any shade. When considering watering a tree, you need to know that the roots of the tree extend as far as the branches spread and in most cases much further. It is best to use a sprinkler to cover a big area efficiently. The goal is to apply enough water to wet the soil 6-8 inches deep. This does not need to happen frequently for a mature tree, perhaps every two to three weeks depending on the weather. While watering a mature tree does take some time, the benefits of a healthy tree definitely outweigh the cost.

4-H Is Keeping It Cool for Summer 2018!

Taylor Jones, 4-H Agent

We are staying cool and hydrated this summer in Alamance County 4-H. Our Summer Sizzle programming has officially begun and we are already having an absolute blast. This week we rode horses, kayaked down the Haw River, and even met with our state legislators in Raleigh! We have lots more coming all summer until August 20th! Our Summer Sizzle program is one of our biggest opportuni-



ties for youth ages 5 to 18 during the months of June through August.

Any and all youth are encouraged to join us for fun and educational events all summer long. We also have overnight trips such as NC 4-H Congress, Electric Congress, and our favorite, overnight residential camp at Betsy Jeff Penn 4-H Center! While we will be running all over Alamance County and beyond, we also still have our 4-H club meetings happening every month. We have a 4-H club for every youth! From fishing, to camping, horses, and more! Alamance County 4-H is also excited to have our annual 4-H End of Summer celebration and open house on Tuesday, August 14th at 6:00pm.

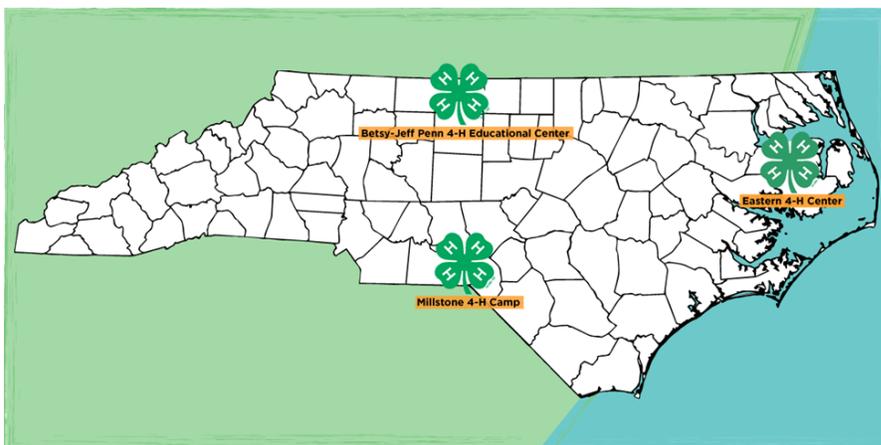


Benefits of 4-H Summer Camp for Children

The benefits of a young person spending time away from home at a fun and educational 4-H camp are endless. The Huffington Post claims there are 5 things youth learn that better prepare them for adulthood. They include learning teamwork, resilience, decision-making skills, trying new things, and growing up with important

life skills. You can read more about their perspective at https://www.huffingtonpost.com/todd-kestin/how-summer-camp-helps-your-child-prepare-for-adulthood_b_5401420.html.

Children who attend 4-H summer camp will learn those things and more. They will learn life skills that will be the foundation for many other characteristics that they will gain as they grow into adulthood. We enjoy watching youth learn so many things and make memories that will last them a lifetime. For more information about attending 4-H Summer Camp, visit our NCSU camping website at <https://nc4h.ces.ncsu.edu/camps-centers/> or contact Taylor Jones, 4-H Youth Development Extension Agent at 336-570-6740.



Summer Sizzle Classes and Opportunities

Check out our Summer Sizzle 2018 Website, <https://sites.google.com/ncsu.edu/alamancecounty4-hsummersizzle/home> to learn how you can get your child(ren) involved in our awesome summer 4-H program!

Alamance County 4-H



Hydrate or Die? What to do if you hate drinking water

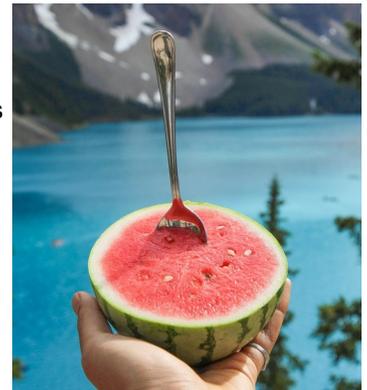
By Eleanor Frederick, FCS Agent

Summer easily wins as my favorite season. I look forward to the long days and the bright sunshine. I find that dull headaches come with summer as well, if I'm not careful. The culprit? Dehydration. Staying hydrated is a constant battle in the warm weather months. Through sweating, we lose large volumes of water that must be replenished. If we don't fill back up, it's not good news. Headaches are one sign of mild dehydration. Others include dizziness, fatigue, and irritability. Next time you're feeling low, try drinking some water. If you absolutely hate plain old water, here are some alternatives:



Flavor your water. If you hate the taste of plain water, adding some flavor might help. Infused water is easy to make using your favorite fruit(s). For the most flavor, add fruit to a container of water and let sit overnight in the fridge. Need inspiration? Try orange and pineapple, strawberry and lime, or lemon and raspberry. When the water has been sufficiently infused, eat the fruit left behind. No fresh fruit on hand? Add a dash of fruit juice to your water. You'll get just enough flavor while keeping added sugars to a minimum.

Drink something else. Water is a major component of any liquid you consume, so try drinking something else. Tea, milk, sparkling water, some juices, and even coffee can be effective ways to hydrate. An important factor to consider when choosing other beverages is sugar content. Drinks with high amounts of sugar do more harm than good. When picking something to drink, check the nutrition facts label for the recommended serving size and amount of sugar in each serving.



Eat foods with a high water content. Stock up on fruits and veggies that are mostly water and you'll be set to win the hydration game. Fruits like watermelon are perfect for a hot day. Veggies like celery make great snacks to have on hand. In addition to water, fruits and vegetables provide us with nutrients our bodies need. Other foods with a high water content: strawberries, cantaloupe, oranges, peaches, cucumbers, zucchini, lettuce, and more.

Watermelon Lime Ice

Ingredients:

4 cups seedless watermelon
Juice of 1 lime (zest optional)

Directions:

Puree watermelon chunks and lime juice in a food processor or blender. Add zest from the lime if desired. Pour into ice trays or popsicle molds and freeze. Remove from freezer and enjoy on a hot day!

Pressure Canner Testing Available!

If you have a dial gauge pressure canner, it should be tested for accuracy before each canning season. Testing takes 5 minutes and all you need is your canner lid.

Call 336-570-6740 to make an appointment.

Summer FCS events

July 9 Food Preservation Crash Course.
Mebane Library, 6:30 - 7:30 pm

July 10 Food demo and nutrition class.
North Park Farmers Market, 5:00 - 6:00 pm

July 17 More in My Basket class for SNAP recipients.
North Park Farmers Market, 4:30 - 5:45 pm

July 26 Think Green Thursday: Preserving Your Bounty.
Extension office, 10:00 - 11:30 am

August 3 Food Preservation Crash Course.
Graham Library, 3:00 - 4:00 pm

August 6 - 10 Alamance 4-H Healthy Living Camp.
Extension office, 9:00 am - 4:00 pm each day.
Ages 8 - 18. Cost: \$75

Keeping It Cool: Shade For Livestock

By: Lauren Langley, Livestock Extension Agent



Adequate shade is crucial for animal comfort and performance during the hot months of the year. Heat stress from lack of shade and clean, cool water can lead to weight loss, reproductive issues, poor milk production, disease susceptibility, behavior changes, and ultimately death. Shade is usually not a problem when animals are located near a barn or shelter but what about when they are out grazing? Make sure that each grazing area has shade (either natural or man-made) before animals go out to graze. If you are doing more intensive grazing, consider portable shade that you can move along with the animals. Different times of the day can also make a difference on shade in a pasture if trees are located along the edges of the field. Do not turn animals out if shade is not available during the day. Consider an evening or night turnout in those situations.

Here are a few additional tips for keeping animals cool in the summer:

- ⇒ Provide clean, cool water. An animal's water requirement can double when temperatures are high.
- ⇒ Avoid overworking animals. Best time of the day to work animals is first thing in the morning before 10:00 am. This would include giving vaccinations, moving animals, transporting, riding, etc.
- ⇒ Avoid confinement. Animals out on pasture generally have more space to spread out and the grass does not attract heat as much as dark, bare soil or concrete. *If using confinement such as a dry lot, make sure there is adequate space, shade, water, and ventilation (fans).*
- ⇒ Limit transportation to the late evening, overnight, or in the early morning. Transporting during the middle of the day increases the chance of heat stress.

In conclusion, when planning livestock, equine, and poultry facilities and pastures consider shade and water as the two most important things needed. Reducing heat stress can make for a more comfortable and better performing animal.

Upcoming Livestock Events:

August 9th: Pasture Management Series Part II- Burlington, NC

August 30th: Pastured Poultry Workshop- Mebane, NC

September 6th: Pasture Weed Class- Burlington, NC

Keeping It Cool On the Highway

By: Dwayne Dabbs, Field Crops Agent.

Summer is in full swing and the kids are out of school, and you are on the road now all the time! Well farmers are out on the road too; they are planting, spraying, harvesting, and the list goes on. Please make sure that you drive with caution as you go on your way.



Most equipment and tractors are going to be wide enough to take up a full lane on a two-lane highway, and some are a lot wider than that. Most equipment only has the capability of going around 25 miles an



hour up the highway, and depending on what the tractor has behind it, it may have to go slower than that. So please take care when you are meeting or following farming equipment on the roadway. Some of the equipment that can be hooked behind a tractor can be very wide, tall, and span over the center lane of the road, especially if that road has many mailboxes on it. From the farmer's point of view, he/she may not be able to see vehicles behind the equipment, so you have to be patient, when the farmer gets to a place on the road where they can move over they will, and let you by. The farmer wants you to make it to your destination safely, just as they do, so slow down and enjoy the scenery.

Pond Weeds

By: Dwayne Dabbs, Field Crops Agent.

If you have a pond with a weed problem, I am sure that it is showing itself now. I have had plenty of samples that were brought into the office with various weeds to be identified. If you have a problem with weeds on your pond, please get a sample in a jar or container that has a tight fitting lid, and bring it by the office so that I can identify it. Once we figure out what it is, we can talk about what will be the best and most economical way to get rid of it. As always if you have questions, please feel free to give me a call or send me an email.

