Dear Extension Families,

Summer is almost here! 4-H is gearing up for a really busy season. The 4-H Summer Adventures catalog will be arriving in youth mailboxes very soon - if they haven't arrived already. The deadline for registration for Summer Adventures will be June 8, so please sign-up early. Events with fewer than three registered will be canceled. We are all looking forward to a summer filled with fun and sun!

In addition to 4-H, agents will be offering other programs too! Please check your newsletter for upcoming events and activities. Extension will be promoting “buy local” all year. If you are not growing vegetables this summer, be sure to buy some from a local farmer! For a list of local farmers with produce to sell, call or come by the Extension Center.

Eve will once again be helping chaperone the trip to Costa Rica from June 12-25. She also helps translate. Eve is looking forward to the experience and believes it is a life changing event for teens. Youth from Graham County attending are: Amanda Day, Katie “Phoebe” Burchfield, Jess Haney, and Jade Cable.

Randy is busy getting ready for his raised bed program. Activities will be held at the Extension Center on Tallulah. Pam, Randy and Kristen Shuler are doing some raised beds with students attending summer camp at Robbinsville Elementary. We hope the children learn some basic agriculture skills and learn how to make healthy food choices.

As you can tell, we have lots planned for the next few weeks. We hope to see you at one of this summer’s Extension activities!

Happy Summer!

Teresa Garland
County Extension Director
Randy Collins
Extension Agent
Eve Rogers
Extension Agent
Agriculture
Family & Consumer Science

LOCAL FARMERS MARKETS
Come out and support your local farmers at these locations:
United Community Bank—Saturdays—Starting July 11 from 9:00-noon
Stecoah Valley Center—Wednesdays—Starting June 22—8 to 11 am
What do Roses Mean? How to Shop for Roses!

Red: I love you, Respect & Courage
White: Adoration, Reverence, Humility, Innocence & Purity
Yellow: Celebrate Life & Joy; (good for new Mom’s)
Coral or Orange: Enthusiasm & Desire
Pink: Grace & Gentility
Light Pink: Admiration
Medium Pink: You’re Lovely
Deep Pink: Thanks
All Pale Colors: Friendship

Combinations:
Red & Yellow: Congratulations
Yellow & Orange: Passion!
Pink & White: Enduring Love

JUNE TRIVIA

June is not only the month of the summer solstice; it also has many other designations in the USA.

June is Dairy Month (National); Drive Safe Month (National); Firework Safety Month (June - July 4th); Flag Month (National); Fresh Fruit and Vegetable Month (National); Iced Tea Month (National); People Skills Month (International); Rose Month (National); and Safety Month (National).

The birthstone for June is pearl and the flower is rose of course. That’s why June is also “Send a Rose” month. Which rose do you send? Well each color of rose has a different meaning, so be sure to look at the “How to Shop for Roses” article in this newsletter.

Recipe of the Month

Mediterranean Bean Salad

1 (15 oz) can garbanzo beans, drained & rinsed
1 tomato, seeded and diced
1/2 medium green bell pepper, diced
1 small red onion, chopped
1 small clove garlic, minced
2 Tbsp olive oil
1 lemon, juiced
1 Tbsp red wine vinegar (optional)
1 cucumber, diced (optional)
Feta cheese (optional)

In a bowl, toss together the garbanzo beans, tomato, green bell pepper, onion, garlic, olive oil, lemon juice and optional ingredients. Cover, and chill until serving.
HELP A DAIRY FARMER! DRINK MILK!

The USDA Food Guide Pyramid recommends 1 to 3 servings of Dairy each day or Vitamin D/Calcium Supplements. Building bone and keeping it strong takes calcium, vitamin D, and exercise.

Dairy products have traditionally been Americans’ main source of calcium and, through fortification, vitamin D. If you enjoy dairy foods, try to choose mainly no-fat or low-fat products. If you don’t like dairy products, taking a vitamin D and calcium supplement offers an easy and inexpensive way to meet your daily vitamin D and calcium needs. One single serving or cup of milk can come from actual milk, yogurt, cheese or even milk-based desserts. For milk, 1 cup of fluid milk or 1/2 cup fluid evaporated milk constitutes 1 cup or serving. For yogurt, 8 ounces or 1 cup constitutes one serving. For low fat cheeses, 2 cups of cottage cheese or half a cup of ricotta cheese constitutes one serving. For more cheese options, go with 2 ounces of processed cheese such as an American cheese slice, 1/3 cup of shredded cheese or 1 1/2 ozs. of hard cheese such as cheddar, mozzarella, Swiss and Parmesan.

Milk-based desserts or sugary milk products are to be eaten sparingly but include 1 cup of frozen yogurt or pudding or 1 1/2 cups of ice cream.

Sources:
Harvard School of Public Health
http://www.ehow.com/about_5087816_serving-dairy.html#ixzz1McquibvA
http://www.livestrong.com/article/246108-serving-size-of-dairy-foods/#ixzz1McrcrMSaQ

COUNTY ACTIVITY DAY

County Activity Day was held on May 15 at the Methodist Church. Several awards were presented to 4-H’ers.

Joey Muehlhausen, Lindsay Brittain, Ellie Brittain, Josh Jiang, and Rebekah Millsaps won gold for their 4-H presentations and earned 4-H gift certificates for summer.

Ellie and Lindsay Brittain entertained us with a performance of “Crocodile Rock”! Ellie also performed a solo on her trumpet. Both girls did a great job!

Project Record awards went to:

Ellie Brittain
Science and Technology
County Gold
District Silver

Josh Jiang
Science and Technology
County Gold

Rebekah Millsaps
Personal Development & Leadership
County Gold
District Gold

Cumulative Record Award winners were:

Jean-Luc Rivera
Citizenship & Community Service
County Gold
District Silver
State Participant

Amanda Day
Health & Safety
County Gold
District Gold
State Participants

Rebekah Millsaps receives an award for her project book on personal development and leadership. She is definitely a leader—way to go Rebekah!

Other annual 4-H Awards were presented as well. Latresa Phillips was named 4-H Adult Volunteer of the Year. Rebekah Millsaps was Youth Volunteer of the Year. Jean-Luc Rivera was named 4-H’er of the Year. Also winning awards and scholarships were: Lindsay, Ellie, Joey, Greg Burchfield, BJ Collins, Noah Hedrick, Chastelle Bridges, and Nikolas Millsaps.
They learned about portion size, food groups and the importance of 60 minutes of physical activity each day. Cloverbuds learned how to tell the difference between an insect and a bug. They learned that true insects must have 6 legs and 3 body parts to be an insect. Musketeers learned about the three R’s, Reduce, Reuse and Recycle. They were encouraged to get into the habit of thinking about things they can do to Reduce, Reuse and Recycle. The after schools had lessons on the environment. Randy helped me do a class with each 1st grade classes, they learned about the parts of a plant, they learned how everything we eat can be traced back to a plant, then they learned how to plant a tomato, care for it and get to take it home with them. Our Stitch and Stir Club met on the 24th, this was our last meeting for this school year. This club has focused on cooking this year, learning about foods from different countries, helping cook for the Hungry to Help fundraiser and safety tips when handling food. As you can see May was very busy, our office has been working hard to get our Summer Adventures program ready, be sure to watch for it in the mail and get registered for Summer Adventures. Hope to see you soon!
IMPORTANT DATES TO REMEMBER

4-H
June 12-24  Costa Rica Eco-Study Tour
June 13-15  3-Day Horse Clinic, Fletcher
June 13-15  NC Citizenship Focus
June 14  Horse Day Camp
June 16  Six Flags Trip
June 17  Wild West Day Camp
June 18  West District Fashion Day
June 21-22  Presentation Practice
June 23  West District Activity Day
June 24  Drive-in Movie
June 27  Business Etiquette Workshop
June 28  Santa’s Land Trip
June 29  County Council Trip
July 7  4-H Growing Up WILD Day Camp
July 8  Vermiculture & Composting
July 11-13  Electric Congress at WCU
July 12  Holiday Crafts
July 15  Planetarium Trip
July 17-21  4-H Congress at NCSU

AGRICULTURE
June 1  Raised Bed Workshop
June 7  Honeybee Workshop
June 16  Fresh Produce Safety Training
June 20  Pesticide Training, Andrews
August 15  Pesticide Training, Hayesville
September 12  Pesticide Training, Robbinsville

FAMILY & CONSUMER SCIENCES
June & July  SNAP-ED at Senior Centers
August 9  Canning Tomatoes
August 16  Drying and Freezing Foods
August 30  Freezer Jam

COMMUNITY DEVELOPMENT
July 1-2  Graham County Heritage Festival
June 22  Farmers Market at SVC
July 11  Farmers Market at UCB

If you are interested in any of these programs call 479-7979 for more information!

FREEZER JAM
August 30  5:00
Methodist Church
Learn how to turn your favorite fruit into a delicious preserve.
Cost: $5.00

CANNING TOMATOES
August 9  5:00
Methodist Church
Demonstration on pressure canning and water bath methods.
Cost: $5.00

DRYING AND FREEZING FOODS
August 16  5:00
Methodist Church
Learn basic drying and freezing techniques of preserving food.
Cost: $5.00

FRESH PRODUCE SAFETY TRAINING
June 16
Stecoah Valley Center
8:00 a.m.
This workshop is the first step in getting your Good Agricultural Practices (GAP) certification. So, if you plan on marketing produce to the public, this would be a good workshop for you. To register, or for more information, contact the Graham County Cooperative Extension Center at (828) 479-7979 by June 10th.
Registration fee: $15.00 (includes lunch)

Volume 3, Issue 6
The most commonly used liming material in North Carolina is finely ground dolomitic rock, but calcitic lime is also widely used. Additional liming materials include burnt lime, hydrated lime, pelleted lime, liquid lime, wood ash, and industrial slags. North Carolina has few good natural lime sources. Calcitic marl liming materials (soft marine shell deposits) are available in the coastal plain, but there are no dolomitic lime deposits in the east. Dolomitic lime is commonly obtained from the mountains of Virginia or Tennessee.

Most agricultural lime is sold in bulk as a damp powder because dry lime is very dusty and difficult to handle and spread. However, lime is occasionally excessively wet. Because lime is sold by the ton, you should be aware you may be purchasing a substantial amount of water. You should adjust lime rates accordingly.

Lime pellets are not large grains of solid limestone; they are formed from lime that has been finely ground. Pellets are less dusty and easier to spread, but they are more expensive than powdered lime. Pelleted lime comes into contact with fewer soil particles than finely ground lime. As a result, soil pH changes are slower with the pellets. Soil reaction will be enhanced if the soil can be tilled several days after the pellets have been mixed into the soil and become soft. Pelleted lime is convenient for landscape use, but is not an economical source for most field crops.

Lime is sometimes sold as a suspension, often called "liquid lime." It consists of fine lime particles mixed with water and a suspending clay. All the lime particles must be 100-mesh or finer. Up to 1,000 pounds of lime can be suspended in a ton of liquid product. The main advantages are ease of handling and precise application. Although it is a fluid, this material does not react any faster than dry lime of the same particle size. All of the lime in a suspension is fast acting, and a ton of product (1,000 pounds of fine lime particles plus clay and water) will raise the pH as fast as a ton of dry lime. However, due to particle size and enhanced initial reactivity, the effectiveness is short lived, compared to regular agricultural limestone, and liming will probably have to be repeated every year. Suspensions may also raise soil pH slightly above the target pH, and they are a considerably more expensive way to correct soil acidity.

Occasionally, industrial byproduct liming materials become available. If the neutralizing value is known and the material is ground finely enough to react in the soil, these can be economical substitutes. Often such materials contain other plant nutrients. Wood ash and steel mill slag are two examples of such products. These products must meet the legal standards above to be sold as liming materials in North Carolina. Even if they do not meet all of the standards, they can be sold as fertilizer and may still be capable of reducing soil acidity and supplying a variety of nutrients. If a product does not meet all the specifications of the lime law, the supplier is barred from making claims about liming effectiveness, and the purchaser must have the material tested. Each lot of such materials should be analyzed, as considerable variation in CCE and fineness may occur. As with conventional lime, the ENV needs to be known in order to determine the appropriate application rate.

### Adjusting Lime Rate Based on Effective Neutralizing Value

All lime rates recommended by the NCDA&CS laboratory are based on a standard agricultural lime with a CCE of 90 percent (0.9) and a fineness factor of 100 percent (1.0), so ENV=0.90. The actual materials available for application vary widely. Calculating the effective neutralizing value (ENV) of a liming material accounts for the two contributing effects (purity and fineness) that determine expected soil pH increase after application. (For all calculations, use decimals rather than percentage values.)
Have a laboratory screen the liming material with mesh sizes 8 and 60:

\[ \text{ENV} = \text{CCE} \times [(A \times 0.5) + (B \times 1)] \]

A = proportion of particles between 8- and 60-mesh size (assume 50 percent effective),

B = proportion of particles finer than 60-mesh size (assume 100 percent effective),

Example: A liming material with a CCE of 80 percent (0.80) was found to have 95 percent of particles finer than 8-mesh, and 50 percent finer than 60-mesh.

Using the equation above:

\[ A = 45\% \times (0.45) \text{ since } 95\% \text{ (finer than 8-mesh) minus } 50\% \text{ (finer than 60-mesh) equals } 45\% \text{ between the 8- and 60-mesh sizes).} \]

\[ B = 50\% \times (0.5) \]

\[ \text{ENV} = 0.80 \times [(0.45 \times 0.5) + (0.5 \times 1)] = 0.80 \times 0.725 = 0.58 \]

The actual rate of a liming material to be applied can then be calculated from the soil-test recommendation, assuming that standard agricultural lime has an effective neutralizing value of 90 percent (0.9). Compared to standard ag lime: \( 0.9 / 0.58 = 1.55 \); thus 1.55 tons of this material should be used for every 1 ton of lime recommended on the soil test. If this material had been evaluated using just CCE, the lime equivalence would have been calculated as: \( 0.9 / 0.8 = 1.12 \) tons product per ton standard agricultural lime.

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**SAFETY – JUNE IS NATIONAL SAFETY MONTH**

**Safety at Home**

Safety in the home is more important now than ever. Preventable injuries and deaths are on the rise in homes and communities across the United States. To really make an impact, people need to be aware of the hazards around them and change their behaviors.

Simple steps could make a huge difference.

- Don’t use your cell phone while driving. Encourage those around you to do the same.
- Get trained in [first aid, CPR and AED](http://www.nsc.org).
- Get a flu shot and make sure your family receives flu shots too.
- Fall proof your home. Don’t forget to engage your family.

Children could help:

- Conduct emergency evacuation drills.
- Identify safety hazards around your house, such as electrical cords that someone could trip over, rugs that slip, etc.
- Fall proof your home. Don’t forget to engage your family.

Safety on the Road

Driving is a privilege. A driver's license gives you a certain level of freedom, but it also gives you an enormous amount of responsibility. When behind the wheel this responsibility comes in many forms:

- Wearing safety belts
- Driving sober
- Focusing on the road
- Driving defensively

Studies reveal that drivers who use their cell phones have a significantly increased chance of getting into a car crash. Just a reminder - texting while driving is illegal in North Carolina.

Source: [http://www.nsc.org](http://www.nsc.org)

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Preventable injuries and deaths are on the rise in homes and communities in the United States
GARDENING TIPS THAT SAVE MONEY

* Share seeds and seedlings with friends and neighbors.
* Save kitchen scraps (coffee grinds, egg shells, vegetable cuttings) for compost.
* Let some plants go to seed, so you can collect and save seed, or let them seed themselves.
* Large, clear plastic containers that salad greens come in make good mini-greenhouses for starting plants both indoors and out. The "bottom" is the dome, and the lids become the base, catching runoff water.
* Get your neighbors to split a load of bark mulch, soil, gravel or compost. You also save on delivery charges.
* An inexpensive way to avoid overwatering: use a five-gallon bucket that can be purchased for as little as 50 cents. Drill a 1/8-inch hole in the side of the bucket near the bottom, fill it with water and let a gentle stream of water flow next to the plant that needs watering. You can also add fertilizer or other nutrients to the water in the bucket and have a controlled means of dispensing it.
* Use an old garbage can to make into a compost bin.
* Use clothes hangers for plant stakes.
* Use popsicle sticks and larger rocks to mark what’s growing.
* Use buckets, wastebaskets or milk cartons for planters but make sure to put holes in the bottom for drainage.
* Choose seeds that are easy to grow and produce abundantly. Spinach, leaf lettuce, summer squash and carrots are good choices for new gardeners.
* Learn to propagate plants using cuttings and pass along favorite plants to friends and family.
* Buy a bolt of polypropylene mesh, called deer fencing, from online distributors. It’s perfect for discouraging pets, deer and other animals and can be used for many seasons.
* Maintain equipment and learn how to sharpen and care for hand tools. They will last longer with proper care.
* Maintain a compost bin to amend your garden beds and reduce the need for fertilizers.
* Plant cover crops of legumes, such as crimson clover, in empty beds over the winter to build your soil.
* Plant intensively to make the best use of your available garden space. Rotate crops.
* Plant fall/winter crops to produce fresh food year round.
* Strips of plastic milk jugs make handy plant tags.
* Place soda bottles filled with dark liquid near heat-loving plants in early spring to absorb heat during the day and re-radiate it at night.
* Save branches pruned from lavender or rosemary plants in summer to make starts you can give away after they have grown roots.
* Save branches pruned from fruit trees to stake bean or pea plants.
* When light is limited, place a mirror behind plants for refracted light.
* Expand limited garden space by planting potatoes in five-gallon buckets.
* Thrifty and organic tool care: Use a drop of olive or vegetable oil to lubricate the joints of your metal cutting tools. Rub a little oil on the wooden handles of your tools. It will seal and protect them and prevent splinters.
* To avoid over-fertilizing seedlings and young plants, save the water left over from steaming or boiling vegetables, transfer it to a clean spray bottle and spritz it on leaves once a week for a light foliar feeding.

Source: http://extension.oregonstate.edu/ Judy Scott and Gail Langellotto

Expand limited garden space by planting potatoes in five-gallon buckets

Rotate Crops

State University A&T State University
COOPERATIVE EXTENSION
Empowering People • Providing Solutions
MOSQUITOES: IT'S TIME TO BECOME A BIG TIPPER

Rain and warmer weather are closely followed by increases in mosquito activity particularly with Asian tiger mosquito. Most people still think of swamps, ponds, etc. as the source of the mosquitoes that show up in their yards. However, in most residential areas the source is more likely to be all of those small and inconspicuous water sources that are prime mosquito breeding sites. So, before people start planning a chemical assault on their yards as the solution to their mosquito problems, they should start with the simpler and more long-term approach of eliminating “collectibles”. We don’t mean souvenirs; we’re talking about all of those objects that collect and retain rainwater.

- Bird baths - simply flush them out with a garden hose. The birds will also appreciate the fresh water. For horse owners with water troughs near stalls or out in pastures, one option is to use a product such as “Mosquito Dunks” which contain the ‘Bacillus thuringiensis israelensis’ and are labeled for use in animal watering containers. Although you can use them in water bowls for dogs, it is far simpler (and better for the animals) if you ‘tip and toss’ the water and replenish it with fresh water.

- Old cans, tires, etc. - empty them and get rid of them.

- Outdoor flower pots - empty the water from the trays underneath them. Your plants have plenty of water without the overflow. This also reduces fungus gnat problems.

- Remove built-up debris from your gutters. The water and decaying material attract mosquitoes.

- Tarps covering boats, your grill, etc. collect pockets of water that can remain for 1-2 weeks.

- The bed of that ‘57 Ford pickup that you’ve been restoring for the last 15 years can collect water particularly if the tailgate faces uphill in your yard.

- Kids’ pools - if they’re not being used by kids, they’re probably being used by the mosquitoes. Same thing applies to pools (inground or aboveground) that aren’t maintained (such as on properties in foreclosure).

- Drainage ditches - they’re meant to collect water temporarily. Keep them free of debris so that water flows out.

- Decorative fish ponds can be a source of mosquitoes if they contain a lot of vegetation which provides hiding places for the mosquito larvae. ‘Mosquito Dunks’ are an option here.

- Tree holes - When limbs fall off trees, the remaining hole in the trunk can collect water. Flush that out or put a small piece of a mosquito dunk into it.

Many people ask about treating shrubs in their yard. Mosquitoes may be resting there during the day but whether it "controls" a mosquito problem is debatable. Similarly, people that use outdoor foggers will definitely kill mosquitoes but depending on the time of day/evening that they use it, they may be missing the peak activity.

Two other issues about using outdoor foggers are important. First, safety is critical. Make sure you’re standing upwind from the direction the fog is being applied and wear appropriate protective equipment to prevent the fog from getting into your eyes and lungs or on your skin. Second, know where the fog is going. Some of your neighbors may not want chemicals drifting onto their property (particularly if they’re outside eating at the time!) Same thing applies to the automated misting systems that some people have installed on their homes.

One other point to remember - mosquitoes have no concept of property lines. Mosquito management takes a neighborhood effort to be truly effective.

We have information on the web at: http://insects.ncsu.edu/Urban/mosquito.htm