Hello Friends!

How bout this weather?? Despite the horrible floods of Debby, I was energized by the concern and helping of neighbors. Suwannee County is a special place. Unfortunately, this special place floods and we aren’t through hurricane season yet. Did you know that September 12 is the day more hurricanes have hit land??

You can get lots of information from our office, whether it be how to detect mold, salvage furniture, identify whether a snake is poisonous, how to trim limbs (both before and after the storms), what important papers you need to have organized and ready at a moment’s notice, or how to protect your animals. If you haven’t already prepared a hurricane kit, and are looking to include food items, make sure they are healthy as well as shelf stable. Your body will need good nutrition during times of stress.

During difficult times, people manage their stress in different ways. One positive way is to volunteer to help others (our office is also home to many different volunteer opportunities and we would love to utilize your talents). Another way to manage stress is taking time for yourself. One great way is to take a walk. Setting aside thirty minutes a day not only helps our respiratory system, balance, circulatory system, strength, and flexibility, but also helps to reduce stress and depression.

There are a lot of good things in our lives. It is important to focus on the positive stuff rather than the negative events or people that we all encounter. Remember, obstacles can be overcome and problems can be solved. Sometimes it just takes a little help from our friends, so don’t be afraid to ask.
# Extension Calendar

## September 2012

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td><strong>Labor Day</strong>, Office Closed</td>
</tr>
<tr>
<td>5</td>
<td><strong>HCE Council</strong>, Extension Office</td>
</tr>
<tr>
<td>6</td>
<td><strong>Cool-Season Forage Field Day</strong>, SVAEC, for cattle and livestock producers, Call Elena Toro for more information</td>
</tr>
<tr>
<td>7</td>
<td><strong>Bill Heltemes Retirement</strong>, Straughn IFAS Extension Professional Development Center, Gainesville, 2-4pm</td>
</tr>
<tr>
<td>8</td>
<td><strong>Lowe’s Plant Clinic</strong>, Live Oak Store, 9am-1pm</td>
</tr>
<tr>
<td>10</td>
<td><strong>Pleasant Hill HCE Club</strong> meeting, contact Betty Bracewell at 386-362-1684 for more information</td>
</tr>
<tr>
<td>10</td>
<td><strong>4-H County Council</strong>, Extension Office, 6pm</td>
</tr>
<tr>
<td>11</td>
<td><strong>Florida Native Plant Society</strong>, Sparkleberry Chapter, 6:30pm, Hatch Park Community Center, Branford</td>
</tr>
<tr>
<td>12</td>
<td><strong>Happy Homemakes HCE Club meeting</strong>, Extension Office, call Irene Sapp at 386-658-1021 for further information.</td>
</tr>
<tr>
<td>13</td>
<td><strong>Shade Pepper Field Day</strong>, SVAEC, for cattle and livestock producers, Call Elena Toro for more information</td>
</tr>
<tr>
<td>13</td>
<td><strong>Master Gardener Alumni Meeting</strong>, 1pm, Extension Office</td>
</tr>
<tr>
<td>13</td>
<td><strong>Florida-Friendly Landscaping Series</strong>, “Flowering Vines and Hardy Hibiscus,” Extension Office, 6:00pm-7:30pm, contact Carolyn Saft at 386-362-2771</td>
</tr>
<tr>
<td>14</td>
<td><strong>4-H Lunch Fundraiser</strong>, Extension Office, BBQ sandwich, All proceeds benefit Danielle Herb-former Suwannee County 4-H member injured in an accident</td>
</tr>
<tr>
<td>14</td>
<td><strong>Take Charge of Your Diabetes</strong>—New series begins. Fridays at 9-11 am, Extension office. Pre-registration required. See the ad below</td>
</tr>
<tr>
<td>17</td>
<td><strong>ServSafe</strong>, Extension Office</td>
</tr>
<tr>
<td>18</td>
<td><strong>Final County Budget Hearing</strong></td>
</tr>
<tr>
<td>19</td>
<td><strong>Pecan Field Day</strong>, SVAEC, for cattle and livestock producers, Call Elena Toro for more information</td>
</tr>
<tr>
<td>21</td>
<td><strong>4-H Haybale Decorating Contest Entry Deadline</strong>, $20 per club, Deadline is 5pm</td>
</tr>
<tr>
<td>25</td>
<td><strong>Overall Advisory Committee</strong>, Extension Office, 7am</td>
</tr>
<tr>
<td>29</td>
<td>Micro-Irrigation Workshop, Alachua Extension</td>
</tr>
</tbody>
</table>

---

**Take Charge of Your Diabetes** (TCYD) is an educational program for persons with type 2 diabetes. There is a $75.00 fee per person with diabetes, which includes three health screenings, nine 2-hour educational sessions, two follow-up sessions, and a 60-minute individual nutrition consultation with a registered dietitian. Participants are encouraged to bring a support person to the educational sessions at no extra cost.  
...because you can **live a quality life** with fewer complications when you know and live the facts.  
**Starts September. 14th. Pre-registration required by 9/7.** Call 386-362-2771.
# Extension Calendar

## October 2012

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3</td>
<td><strong>Master Gardener State Conference</strong>, Clearwater, contact Carolyn Saft at 386-362-2771 for more information</td>
</tr>
<tr>
<td>1-4</td>
<td><strong>HCE State Conference</strong>, Altamonte Springs, “Angels of HCE”, $98 registration</td>
</tr>
<tr>
<td>8</td>
<td><strong>Pleasant Hill HCE Club</strong> meeting, contact Betty Bracewell at 386-362-1684 for more information</td>
</tr>
<tr>
<td>9</td>
<td><strong>Florida Native Plant Society</strong>, Sparkleberry Chapter, 6:30pm, Hatch Park Community Center, Branford</td>
</tr>
<tr>
<td>10</td>
<td><strong>Happy Homemakes HCE Club meeting</strong>, Extension Office, call Irene Sapp at 386-658-1021 for further information</td>
</tr>
<tr>
<td>11</td>
<td><strong>Master Gardener Alumni Meeting</strong>, 1pm, Extension Office</td>
</tr>
<tr>
<td>11</td>
<td><strong>Florida-Friendly Landscaping Series</strong>, “Cold-Hardy Citrus,” Extension Office, 6:00pm-7:30pm, contact Carolyn Saft at 386-362-2771</td>
</tr>
<tr>
<td>13</td>
<td><strong>Lowe’s Plant Clinic</strong>, Live Oak Store, 9am-1pm</td>
</tr>
<tr>
<td>16-18</td>
<td><strong>Shitake and Oyster Mushroom Display</strong>, Sunbelt Ag Expo, Moultrie, GA</td>
</tr>
<tr>
<td>21-26</td>
<td><strong>National Association Extension 4-H Agents meeting</strong>, Hilton in Walt Disney</td>
</tr>
<tr>
<td>21-26</td>
<td><strong>Farm Bureau State Meeting</strong>, Ponte Vedra</td>
</tr>
<tr>
<td>27</td>
<td><strong>Scarecrow Festival</strong></td>
</tr>
</tbody>
</table>

---

## Extension Office Wish List

Do you have any of the following items that you would like to donate to the Extension Office?

- 2 Large Cooking Kettles
- 1 Hot Plate
- 1 Shredder/Chipper
- 2 Saw Horses
- 1 Propane Burner
- 1 Propane Tank
- Burlap Bags

We need these items for some upcoming programs. If you do, please call 386-362-2771 and let us know. Thank you!
Go to Bed!

Katherine Allen
Family and Consumer Sciences Agent/CED

Did you know that lack of sleep can be linked to vehicle crashes, accidents at work and chronic diseases? So, why aren’t Americans getting enough sleep? Perhaps night shift work schedules or 24/7 access to technology, but what about insomnia or obstructive sleep apnea? An estimated 50-70 million adults have sleep or wakefulness disorders. Interestingly, snoring is a major indicator of obstructive sleep apnea.

Some signs you aren’t getting enough sleep:

- Unintentionally falling asleep during the day, or
- Falling asleep while driving.

The National Sleep Foundation suggests that healthy adults need seven to nine hours of sleep per day. School age children might require 10-11 hours of sleep. (This means you cannot rely on a 15 yr. old saying they get enough sleep when they are falling asleep at the dinner table!)

Reducing your sleep time by as little as two to four hours can have an impact. Two hours of sleep loss is roughly equivalent to the sedative effects of two to three beers. Interestingly, drowsy driving has one of the most devastating results of inadequate sleep because you may not get on the road after drinking, but will think nothing of driving when you are tired. There are over 1,550 fatalities and 40,000 nonfatal injuries annually in the U.S. as a result of sleep driving which reduces the driver’s vigilance, slows reaction time, and results in deficient processing times. The Exxon Valdez incident in which oil spilled into Prince William Sound is one devastating example of the effects of sleep deprivation where the third mate had slept only six hours in the previous 48 hours. Sleep deprivation was also an issue with the space shuttle Challenger. Critical management decisions were affected by excessive work hours in which managers slept only two hours the night before and were on duty at 1am, the sleepiest time of the day.

Your performance is affected when you are sleep deprived. There is a decrease in short term memory recall, there is a reduced learning of cognitive tasks, there is a worsened performance with prolonged task duration, and basically you have to work harder to compensate for all of the reductions in function.

Chronic sleep loss has a cumulative effect on mental and physical well-being, potentially exacerbating depression, obesity, diabetes, and other chronic conditions. So, it is important to consider how to get sufficient sleep as an easy way to treat chronic diseases. Talk to your doctor about a referral to a sleep specialist for evaluation to determine whether you have a specific chronic sleep disorder.

People who need to improve their sleep quality need to 1) keep a regular sleep schedule; 2) avoid stimulating activities (e.g., vigorous exercise) within two hours of bedtime; 3) avoid caffeine, nicotine, and alcohol in the evening; 4) avoid going to bed on a full or empty stomach; and 5) sleep in a dark, quiet, well-ventilated space with a comfortable temperature.

SolutionsForYourLife.org
Have you ever wondered what happens to your food as it goes through your digestive system? Understanding these processes can help you to make healthier choices.

Your gastro-intestinal (GI) or alimentary tract is one tube going from your mouth to your anus. The tube widens in some places (like the stomach) but narrows again and continues on to the end.

If you are healthy, you will digest food in 24 to 72 hours beginning in your MOUTH where all foods are broken down mechanically by the teeth and tongue. Chemical digestion of starches by your saliva also takes place here. When you swallow, food goes down your ESOPHAGUS, where no digestion occurs at all, to your STOMACH, where proteins are broken down chemically and all foods are ground into a liquid called chyme. Food normally remains in the stomach for three to four hours. From there, the food enters your SMALL INTESTINE a little at a time. In your small intestine, all foods are broken down chemically by substances from its own walls, the liver, gall bladder and pancreas. Towards the end of your small intestine, nutrients from your digested food are absorbed into your bloodstream to be used by your body’s cells. It takes three to six hours for this part of the journey. What is left is mostly insoluble fiber, waste, and water. These substances continue traveling through the part of the tube called the LARGE INTESTINE, also known as your COLON. Vitamin K is produced there. Also, water and some minerals are reabsorbed into the body. The rest is stored until a bowel movement occurs. It can take up to two days for food wastes to move through the colon. If this last process occurs too quickly and the water lacks time to be absorbed, diarrhea is the result. If the process lingers too long, you get constipated. Being physically active helps your body maintain a normal schedule.

Nutrients include the big three: carbohydrates used for instant energy; fats used to store energy and to help you absorb some vitamins; and proteins which build muscles, skin and organs. Vitamins and minerals help your body grow, develop, and maintain properly. Water is the most essential nutrient because you cannot live without it. It is a part of every cell in your body.

Notice that some parts of the GI tract digest specific nutrients. For this reason, it is important to eat a variety of foods including fruits and vegetables daily. Another reason for eating lots of different types of foods is because each food contains its own combination of vitamins and minerals. In order to get all of the nutrients you need to stay healthy, you need fruits, vegetables, whole grains and low-fat dairy products daily. CAUTION: Some foods contain no vitamins or minerals, only empty calories! AVOID OR REDUCE PORTIONS OF THESE FOODS! Check the label to figure out which foods to avoid.

Remember to eat a variety of foods and be physically active each day!
A team of Florida County Extension Agents recently received the 2012 Search for Excellence Award from the National Association of County Agricultural Agents in the area of Farm Health and Safety. This national award was based on the team’s work for helping farmers develop and implement food safety plans. The team of Extension agents recognized in 2012 included Robert Hochmuth, Linda Landrum, Elena Toro and Dan Fenneman. This same award’s national winners in 2011 were also County Agents from Florida Extension, Alicia Whidden and Crystal Snodgrass.

The recent increase in food safety requirements on farms has put added financial, time and personnel burdens on farmers. As increasing pressure from produce buyers on farmers emerged, small and mid-sized farmers in Florida were becoming very aware of the need to develop farm food safety plans. Most small farms do not have the financial capacity to hire personnel to develop and implement these plans and asked for help from Extension Agents. A total of 14 workshops to 185 producers and packers were offered in the last two years. Agents taught farmers how to develop their own food safety plan and implement practices on their farm. The Extension Agents were able to further develop the program by securing funding through a Specialty Crops Block Grant from Florida Department of Agriculture and Consumer Services.

Farmers valued the training and indicated they viewed food safety plans as very important and planned to implement a food safety program on their farm. The first two years of the trainings provided by county agents from other areas of the state identified the same needs, but felt unprepared to offer such training.

Educational Objectives
I. Develop a training program for small and mid-sized farmers to develop food safety plans and manual.

II. Implement an In-service training program for Extension agents and develop a statewide Extension Small Farms Food Safety Implementation Team.

Program Activities
Strategize a plan for program development. A series of funding opportunities were secured through the Florida Specialty Crops Block Grant program and the University of Florida, Office of Sustainability. Over the three year period (2009-2011), total grant funding secured for this overall effort was $77,000 which included the purchase of ten laptop computers.

Curriculum. Agents developed a written curriculum guide for farmers to follow when using a web-based tool. A notebook was compiled that included agent developed materials such as PowerPoint presentations, audit supporting documents and a pictorial self-audit exercise. Farmers received a food safety tool bag that contained worker training DVDs, hand washing signs and other resources to be used back on the farm.

Build Your Own Food Safety Manual Workshops. A total of 14 workshops were offered in Florida to 185 producers and packers. These workshops were offered using the Primus Labs web site, www.primuslabs.com. The development of a complete farm food safety manual is not an easy process regardless of which tool is used, but the Primus Labs site seemed to be the most complete at the time with a relatively user-friendly menu driven system. The county agent team co-taught workshops with every farmer or farm family members at a computer logged into the site. If a farmer requested to attend the training, but was not comfortable with the computer, an Extension staff person was provided as a “training buddy” for the training.

(Continued on page 6)
trainings included the exercise of working through a “self-audit” which helps provide the farmer insight into the guidelines followed by auditors.

**Extension Small Farms Food Safety Implementation Team.** A team of 19 Extension agents were trained in a formal two-day In-service training to learn how to use the Primus website, become familiar with all training materials developed for farmers, and establish a statewide team that could serve small farmers and help each other. These agents expanded the original 5 workshops of this program to a statewide presence and conducted a total of 9 workshops. One of these workshops was featured at the Florida Small Farms and Alternative Enterprises Conference in Kissimmee, FL with 50 farmer participants.

**Food Safety Farmer Field Days.** As an advanced form of training, on-farm field days, were conducted as a follow up with farmers. One field day targeted watermelon growers, a second field day was offered to mixed-vegetable and protected agriculture growers. During the second field day, a third party auditor and extension agents re-created an actual successful farm field audit that had previously taken place at the farm of one of the workshop participants.

**Affiliated Activities.** Due to recognition of this Extension program, agents involved were selected to host a delegation of food safety regulators from the Food and Drug Administration (FDA) and Florida Department of Agriculture and Consumer Services (FDACS) to visit local farms that were implementing food safety plans. In addition, these agents were selected to host one of three national listening sessions held in Florida being conducted by the Produce Safety Alliance to gain producer input for designing and delivering successful training and outreach programs in the area of food safety.

**Teaching Methods**
The primary method of teaching was face-to-face classroom instruction using the food safety web tool as a guide. Other methods included experiential learning via farm tours and follow-up farm visits to reinforce the concepts learned during the workshops and to help farmers to assess risks and to continue on-farm implementation of their plans.

**Results**
A total of 14 workshops were offered in Florida to 185 producers and packers. The county locations of the nine trainings were: Suwannee (4), Escambia/Santa Rosa (4), Sumter (2), Alachua, Washington, Osceola and Polk. All participants successfully built their food safety plan using the resources provided during the class. The educational material supplied to farmers was valued at $150 per farmer for a total value of $27,750.

A total of 19 Extension agents participated in the Agent In-Service training. As a result, 12 agents have offered trainings in their counties or region within the first year. This training helped agents gain the knowledge and confidence to deliver information in this emerging priority area.

Food safety updates have been offered to farmers during their annual meetings (i.e. watermelon growers meeting) to provide continuing education credits for those that need annual training as part of the on-farm food safety program.

By engaging in this effort, Extension agents have maintained a high level of relevance to their farm clientele in an ever changing regulatory environment.

**Impact Statement**
Overall, the evaluations showed the farmers valued the training, viewed food safety plans as very important and plan to implement a food safety program on their farm, even though most were not being required to develop one by their buyers or markets. Nearly half of the farmers indicated they plan to have a third party audit, customer or regulatory audit conducted. An estimated fee quoted by a private consultant for the cost of him developing a food safety manual and preparing the farm for an audit was $5,000 to $10,000. Even at the lower figure, these trainings provided a savings of at least $460,000 in fees to those 92 farms that planned to be audited.

The success and impact has been two-fold; more agents now have the expertise and skill to teach farm food safety reaching many more farmers and secondly, well over 150 farmers have developed plans. The program has garnered great respect and recognition statewide for Florida County Extension Agents from agricultural industry leaders.

**Evaluation**
Qualitative and quantitative data collection methods were used to document the impact of this initiative. A variety of assessments that included surveys, pre and post tests, follow-up phone calls and farm visits to assess implementation of practices have been conducted during the past three years. The primary method used was an on-line evaluation that was completed after each workshop. The results of the evaluation led to improvements in the workshops, including: addition of a pictorial review of real farm food safety issues, improved methods in reviewing the self-audit module, and the implementation of advanced trainings on farms.
The Production of Nature’s Most Nearly Perfect Food

Dr. Mary Sowerby
Regional Specialized Dairy Agent

Florida dairy producers take great pride caring for the cows which produce fresh and nutritious milk for Florida consumers.

Female dairy cattle are called heifers until they give birth to their first calf about two years of age. After calving, they are called either a first-calf heifer or 2-year-old cow.

A complex combination of hormones prepare a heifer’s udder to start producing colostrum (a cow’s first milk) at the time she calves. A cow’s colostrum is extra high in solids, especially immunoglobulins (also know as antibodies) which are extremely important to give a calf passive immunity.

Unlike humans, where a mother’s antibodies flow through the placenta and into her fetus before birth to give the baby passive immunity, there is no such fetal transmission in cattle. To compensate, a newborn calf’s intestine is designed to allow absorption of antibodies the first three days after birth (primarily in the first 24-hours). Without colostrum a calf’s immune system is severely compromised and its chances of a healthy survival to adulthood much lower than if the calf had received colostrum.

Colostrum is not sold for human consumption. Three to five days after giving birth a cow’s milk changes from colostrum with about 23% solids to “normal” milk which typically is about 13% solids.

Cows do not normally leak milk continually. The milk ejection reflex controls when milk is secreted from the cow’s udder. When a calf nuzzles a cow’s udder (or a milker washers her udder) a neural signal is sent to the cow’s brain which results in the release of the hormone oxytocin from the posterior pituitary gland.

Oxytocin receptors are located on myoepithelial (muscle) cells which surround the milk producing epithelial cells found in grapelike clusters of alveoli.

Imagine the alveolar epithelial cells forming a spherical layer like a small balloon. The epithelial cells produce the components of milk and excrete them into the alveolar lumen or center of the balloon. All around the outside of the epithelial cells is a layer of myoepithelial cells. Like a hand squishing the balloon and all the air gushing out, when oxytocin arrives in the udder from the pituitary gland the myoepithelial cells all contract pushing milk into the ductwork of the four mammary glands which make up a cow’s udder. Then as the calf nurses or a human milks the cow by hand or machine, the milk is “let down” out of the udder.

Dairy cows usually take 5 to 8 minutes to be machine milked twice or three times a day. They normally produce anywhere from 20 to 60 pounds of milk each milking for ten or more months before milking is ceased and the cow “dried off” for usually 45 to 60 days before the birth of her next calf. Then the whole miraculous cycle begins again.
Florida 4-H Camping

Brian Estevez-4-H and Youth Development Agent

Summertime was made for adventures! Although kids want to have fun, their parents still want them to get a little education. That is where Florida 4-H can help. Between swimming, canoeing, hiking, snorkeling, campfires, and recreational games, what more could any kids ask for in an adventure?

Florida 4-H has four campsites around the state to maximize camping adventures for youth. With Camp Cherry Lake just north of Madison (45 minutes away), Camp Timpoochee in Niceville (out in the panhandle), Camp Ocala (surrounded by the Ocala National Forest), and Camp Cloverleaf in Lake Placid (down south), 4-H camps have Florida covered. These centers provide a unique educational opportunity, emphasizing Florida’s ecosystems. They allow youth not only to learn, but to experience Florida’s environment first hand.

In 2011, 2,245 kids camped at Florida 4-H camps! The breakdown of Florida 4-H camp participation is similar to the breakdown of overall participation in 4-H, approximately 63% of the campers attended public schools, 10% private and 27% were home-schooled youth.

Camp is more than just a leisure activity for youth. Evaluations conducted by 4-H staff show that camp develops essential life skills in youth. In these studies, the specific life skills evaluated are teamwork, self-responsibility, learning by doing and social skills. Parents and youth should agree that 4-H camp is a valuable educational experience. Research shows that the 4-H camping program does benefit youth to learn to:

- Make new friends
- Develop new skills
- Become more independent and able to take care of themselves
- Learn about different subjects
- Develop closer friendships with people they already knew
- Improved their self-confidence

Research also shows that parents found 4-H camps to be beneficial in that their children:

- Take care of his/her own things
- Share work responsibilities
- Take initiative and is a self-starter
- Handle success and failures
- Have a good mental attitude
- Adapt to change better

So to recap, the purpose of 4-H camping is cooperative group living in a natural environment that focuses on developing life skills (social, mental, and physical development) in young people. Florida 4-H camping also emphasizes experiential learning, the 4-H motto of “learn by doing.” Types of educational programming include leadership development, environmental and aquatic sciences, shooting sports education, rocketry, healthy living activities, and much more.

This summer over 500 youth attended Suwannee County 4-H summer camps. To make sure that your kids get all of the benefits of 4-H camps, make sure that you sign them up at the end of the school year.

(Sources: Florida 4-H, Missouri 4-H, and Garst & Bruce, 2002)
Well..., we asked for rain and it came. Lots of it! For some people, it was more rain than what they were hoping for. Many of us still have standing water in places that normally have water. The standing water provides the perfect breeding spot for monstrous mosquitoes. I certainly have had my fair share of mosquito bites this summer. The mosquitoes have disrupted our evening activity of playing cornhole with their buzzing in our ears and piercing of any exposed skin. The first action to take to reduce mosquitoes is to get rid of any standing water. Check old garden pots, tires or other containers and dump them out. You can also get an insecticide that comes in pellets or tablets that will kill the mosquito larvae when placed in the standing water.

Experts tell us to wear long-sleeve shirts and pants, avoid going out after dusk, or spray ourselves with chemicals. These suggestions are effective, but not always practical. We have another suggestion, install a bat house. These furry fellows dine on buffets of mosquito and enjoy leafhoppers or beetles for dessert.

An insect-eating bat can consume from 500 to 1,000 insects per hour or well over 3,000 a night. A moderate size colony of 300 bats can eat one million insects per night. Most of our Florida bats are effective at controlling insect populations and can save you money that might have been spent on insect traps or chemicals, "No way" you say, "I don't want bats sucking my blood, giving me rabies or getting tangled in my hair." Take a deep breath, put your fears aside, and give these endangered critters a chance. First, there are no vampire bats that live in the United States, so your blood is safe from bats. Second, bat rabies account for only one human death per year in the U.S. On the other hand, dogs, "man's best friend" (I have three best friends), attack and kill more humans annually than die from bat rabies in a decade. Keep in mind that bicycles, playground equipment and pools are linked to more deaths than bats.

Rabies is almost always transmitted by a bite, though non-bite exposures can result from contact between infected saliva and open wounds or the mucous membranes of the eyes, mouth or nose. Careless handling is the primary source of rabies exposure in humans from bats. Tens of thousands of people have closely observed the emergence of 1.5 million Mexican free-tailed bats (Tadarida brasiliensis) in Austin, Texas each summer for 16 years without incident. What can you do to help prevent the rare transmission of rabies to humans?

Vaccinate dogs and cats, and teach children to leave bats alone, just as they are taught to leave bees and unfamiliar dogs alone. Bats rank as North America's most rapidly declining and endangered land mammals. The largest known cause of decline is exaggerated human fear and maltreatment.

We encourage bats to live in our neighborhoods, but as with any wild animals, precautions to exclude them from our living quarters should be taken. Most bats that enter homes are lost youngsters looking for a safe environment. Exclusion of bats can be achieved by sealing cracks or holes in walls, keeping tight fitted screens on open windows and avoiding loose fitting doors to the outside or attic.

O.K., now you're willing to install a bat house, but have no idea what one looks like. General guidelines for bat houses include a minimum height of two feet, a diameter of 14 inches or more, a landing area extending below the entrance at least three to six inches and one to four roosting chambers. Roost partitions should be spaced three-quarters to one inch apart. All partitions and the landing area should have a rough surface. Air vents are necessary in our warm climate. Wooden houses should not be made out of pressure treated lumber, but painted or stained instead. The color of the outside depends on high temperatures in July. Our best bet is to use light colors or white for the outside due to our high summer temperatures. However, the inside should be coated with two applications of black stain, not paint. (paint fills in the rough or grooved surfaces).

Site selection should be a place where there is a minimum of six hours of direct sunlight. Most nursery colonies choose roosts within one-quarter mile of water. Mounting of houses should be on poles or buildings; this offers the best protection from predators. The house should be 15 to 20 feet above the ground and away from any bright lights. Even though you have installed the perfect bat house, it may take a while for the bats to inhabit their new abode. Patience is a virtue when working with wildlife.

The University of Florida has one of the largest occupied bat houses in North America. Located next to Lake Alice, this house hosts about 20,000 bats that consumer 10 to 20 million insects each night. If you are visiting Gainesville, plan a trip at dusk to see the bats disperse; it is a very interesting sight to see.

To receive a publication on how to build a bat house, call the Suwannee County Extension office at 386/ 362-2771 or visit batconservation.org or www.batcon.org.
American Beautyberry

**American Beautyberry - Callicarpa americana**

The American Beautyberry is a frequent shrub in our North Florida flatwoods and hammocks, as it is throughout the rest of our state and the other southeastern states. It's large medium green leaves, with very short hairs and scalloped edges, are soft to touch and very aromatic. The small clusters of tiny pink flowers that appear in late spring to early summer extend all along the stems to the tips of branches. These flowers become purple berries by fall that will darken and remain on the plant into the winter months.

In the wild this plant is often a loose, irregularly branched, spreading shrub with sparse leaves that doesn't command a lot of attention. BUT, in cultivation and with some annual pruning, it becomes a multi-stemmed shrub with graceful arching branches densely covered with leaves. The new vigorous growth produces abundant flowering followed by the bright, shiny fruit which is it's most striking feature. Water regularly to establish new plants, then irrigation is not usually required if properly sited. It is very adaptable and can be planted as a specimen, in masses or in mixed borders for a naturalistic setting mixed with Sparkleberry, Dogwood, Pines and Muhly Grass. The fruits are dry and have little taste, however they are edible and have been used to make jelly.

**Common name:** American Beautyberry  
**Scientific name (Genus and species):** Callicarpa americana  
**Family:** Lamiaceae (Mint Family)  
**Native Range:** From south Florida, including the Keys, north to Virginia and west through Texas.  
**Description:** Woody shrub, deciduous, brown-gray flaky stems, arching growth habit. Moderately fast growing. More evergreen in southern region. All parts of the plant are aromatic.  
**Height/Spread:** 6' x 6'  
**Leaves:** Opposite simple leaves 6" long x 4" wide, medium green above, paler below, pubescent, oval shaped with a pointed tip and softly toothed edges, prominent veins.  
**Flowers:** Clusters of many tiny pink flowers in the leaf axils and stem tips, late spring to summer. Bright purple berries in autumn, persist into early winter.  
**Growing conditions:** Prefers rich, moist to slightly dry soil in part shade. Adapts to most soil conditions or from shade to full sun. May become leggy in too much shade.  
**Drought tolerance:** High drought tolerance when established.  
**Propagation:** Easily roots from cuttings or seed.  
**Wildlife attractor:** Flowers attract many native pollinators and butterflies, fruit for birds and small wildlife in winter when other fruits are scarce.  
**Other features:** Reseeds freely. Old branches can be cut almost to ground in winter to increase new branching from base and a denser plant in spring. Berries are edible, though not very tasty. Not typically browsed by deer.
Welcome!

Please help us welcome our newest Agent, Mr. Sean McCoy! Sean is a Regional Specialized Agent in Marketing and will be housed at the Suwannee Valley Agricultural Extension Center (former Research Center) at the corner of Highways 136 and 417.