Family. It is an amazing word that conjures up various thoughts: home, safety, togetherness, love, support…This issue of the Center Pivot includes articles on keeping your family protected through proper food handling techniques, on the importance of communication during mealtimes, how to save money for your family and how we can role model and support appropriate youth behaviors through community service. Also included in this issue is a celebration of family working together with our Farm Family of the Year. If you are a farm family or are looking to become a farm family, check out the article by our newest Agent on small farm financing.

We have included an opportunity to become involved in improving your family’s health through proper eating and increased physical activity called Healthy Kids. If you have a child 3-7 years old, contact us to see if you want to participate. Classes start soon, so don’t delay!

Happiness might be another word that is invoked when someone mentions home. Part of that happiness might include keeping annoyances like stink bugs or sandspurs from spoiling your fun. Many happy memories can be created by participating in shared activities. Landscaping or planting trees and annuals are something family members can do together. An added benefit is enjoying the result of their efforts. Check out the article on the Yaupon Holly tree to see if it is something you might want to plant.

As always, a family is important. Keep yours healthy (both fiscally and physically), safe and communicating. As a kid my mom would tell me after I had done something to displease her, “I don’t like what you did, but I will always love you.” And I knew it. Does your family?
In just a few days, America’s farmers and ranchers will have the opportunity to make a positive impact on their communities by taking part in the Census of Agriculture. Conducted every five years by USDA’s National Agricultural Statistics Service (NASS), the Census captures a complete count of all U.S. farms, ranches and those who operate them. America’s producers have a story to tell, and the Census gives them a voice to tell it with. NASS recently launched “Share My Story” on the Census website to ask farmers how the Census impacts their lives, operations and communities. A row crop and hog farmer from Indiana posted a story telling us the data is a tool to track, “how our herd numbers, acreage, technology use and practices…compare to other local farmers, farmers across the state of Indiana and farmers across the country.”

The Census also helps tell the whole story of U.S. agriculture. Without the information collected we wouldn’t know that 3 million farmers in the United States, only one percent of our total population, provide feed, fuel, and fiber to the other 99 percent. While that seems like a huge task, we know that farmers are stepping up to the challenge because the data tell us that U.S. agriculture is growing.

The last Census counted more than 2 million farms and ranches in the United States spanning more than 922 million acres. That’s nearly a 4 percent increase in the number of farms from the previous Census in 2002. Those farms produced more than 2 billion bushels of soybeans, 18 million bales of cotton, and $37 billion in egg and poultry sales. And, working on those farms were more than one million women farmers, a 19 percent increase from 2002.

As preparations continue for this year’s Census of Agriculture, we call on farmers and ranchers to share their stories, ask questions and talk to their fellow producers about this critical effort. Your answers to the Census help grow your farm future; shape farm programs; and boost services for you, your community and your industry.

Census forms were mailed out in late December, and responses are due by February 4th, 2013. Producers also have the option to complete their forms online. After all, the Census is your voice, your future and your responsibility. For more information about the Census, visit www.agcensus.usda.gov or call 1-888-4AG-STAT (1-888-424-7828).
<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>5</td>
<td><strong>Extension “Thank You” Luncheon</strong>, 12pm, Extension Office</td>
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<tr>
<td>6</td>
<td><strong>4-H Early Release Workshop</strong>, 2pm, Extension Office</td>
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<td>8</td>
<td><strong>Mushroom Workshop</strong>, 9am-5pm, Extension Office, for more information, contact Carolyn Saft, 386-362-2771</td>
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<td>11</td>
<td><strong>Healthy Kids Program</strong> begins. For more information, see page 11.</td>
</tr>
<tr>
<td>11</td>
<td><strong>4-H County Council</strong>, Extension Office, 6:30pm</td>
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<td>12</td>
<td><strong>Florida Native Plant Society</strong>, Sparkleberry Chapter, 6:30pm, Hatch Park Community Center, Branford</td>
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<td>14</td>
<td><strong>Master Gardener Workday</strong>, 9-11:30am, <strong>Alumni Meeting</strong>, 1:00pm, <strong>Fair Committee Meeting</strong>, 3:00pm, Extension Office</td>
</tr>
<tr>
<td>15</td>
<td><strong>Mushroom Workshop</strong>, 9am-5pm, Duval County Extension Office, 1010 N McDuff Avenue, Jacksonville, for more information, contact Carolyn Saft, 386-362-2771</td>
</tr>
<tr>
<td>15</td>
<td><strong>4-H County Event Registration Due</strong>, by 5pm</td>
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<tr>
<td>16</td>
<td><strong>Strawberry Jam Canning Class</strong>, 9am-3pm, $15, pre-registration required. Call Katherine 362-2771</td>
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<td>22</td>
<td><strong>4-H County Event Photo Entries Due</strong>, by 5pm</td>
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<tr>
<td>25</td>
<td><strong>Buy Green and Save</strong>, Homebuying class, 9am-12 noon, Free, Extension office</td>
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<tr>
<td>28</td>
<td><strong>Three Keys to Saving Money Workshop</strong>, 6-7pm, Suwannee River Regional Library, Free.</td>
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<tr>
<td>Date</td>
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<td>2</td>
<td>4-H County Events, 9am, Coliseum</td>
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<tr>
<td>6</td>
<td>4-H Early Release Workshop, 2pm, Extension Office</td>
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<tr>
<td>8</td>
<td>4-H Science Fair, <em><strong>Tentative Date</strong></em> Call Brian Estevez at 386-362-2771 for more information</td>
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<tr>
<td>8</td>
<td>National Restaurant Association’s ServSafe Food Manager Certification, class, exam &amp; book $165, must register 3 business days prior call toll-free 1-888-232-8723 or via web <a href="http://foodsafety.ifas.ufl.edu">http://foodsafety.ifas.ufl.edu</a> no walk-ins. Bring lunch and photo ID. Certification is good for 5 yrs.</td>
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<td>11</td>
<td>4-H County Council, Extension Office, 6:30pm</td>
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<td>14</td>
<td>Family and Consumer Sciences Advisory Committee Meeting, 12 noon-2pm, Extension office</td>
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<tr>
<td>14</td>
<td>4-H Day at the Capitol, Tallahassee, $15-$25, Call Brian Estevez at 386-362-2771 for more information</td>
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<tr>
<td>21</td>
<td>Growing Herbs Workshop, 6-7pm, Suwannee River Regional Library, Free.</td>
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<tr>
<td>25</td>
<td>Master Gardener Fair Set-up, 9am, Extension Office</td>
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<td>27</td>
<td>Master Gardeners, Plant Flowering Plants, 9am, Extension Office and fairgrounds</td>
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<tr>
<td>27</td>
<td>4-H Fair Entries, 8am-5pm, Fairgrounds</td>
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<td>27</td>
<td>4-H Fair Booth Entries, 8am-6pm</td>
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<tr>
<td>29- April 6</td>
<td>Suwannee County Fair</td>
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Approximately 15% of the foodborne disease outbreaks in the United States began in the home. According to the Center for Disease Control, the top three bacteria causing issues are *Campylobacter*, *Salmonella*, and Shiga toxin-producing *Escherichia coli* (you hear it referred to as E.coli, but note there are various strains).

One of the biggest causes of due to people eating undercooked vegetables (meaning the cook did heated to the proper internal serve pasteurized milk.) hygiene and cleaning practices in or the spread of bacteria from one diarrhea and vomiting is *Campylobacter*. It is chicken and meat, raw milk and salad not use a thermometer to ensure the food was temperature or in the case of the milk, did not *Campylobacter* is easily spread, so poor the kitchen can result in cross contamination, food or surface to another.

*Salmonella* is serious and can even result in death. You might have diarrhea or vomiting. Ultimately it can even lead to urinary tract infections!! Usually *Salmonella* is linked to eggs and chicken, however, it can be transmitted to produce, fruits, nuts, and chocolate through fecal matter. Fecal matter?! Yes! By not properly washing hands or cleaning and sanitizing surfaces (and cooking equipment/utensils) and then cooking food inadequately, we can see outbreaks of this potentially deadly bacteria. This is also why it is important to model and teach children to wash their hands after touching or petting animals (birds, turtles, cats, dogs, etc.).

The third, *E. coli*, causes grim symptoms such as severe cramping, bloody diarrhea and vomiting. *E. coli* is especially harmful to children. Typically we associate *E. coli* with undercooked ground beef products. However, *E. coli* is also found in the intestinal tracts of humans, so not washing or improperly washing hands can result in an oral-fecal route. It has also been found in unpasteurized milk products, leafy greens, and contaminated food or water products.

If you understand how the potential food borne illnesses put your family at risk, you can do a better job at preventing them in your home. First, store cooked food in the refrigerator (40 F. or below) or freezer (below 0 F.) and use these within three to five days. If there are expired dates on food in the refrigerator, throw them away. All food items in the refrigerator and freezer need to be covered or wrapped. When defrosting food, defrost in the refrigerator. If the item won’t thaw in time for your dinner, you can also defrost in the microwave or by using cold running water.

Another way you can prevent foodborne illness is by making sure you are using a food thermometer to ensure the food is done. Universities used to tell consumers if they eat meat (both beef and chicken) to make sure the juices ran clear. Burgers were to be eaten when the beef had turned brown. We have since, through research, found that ground beef will turn brown before it reaches the appropriate temperature.

One more way to keep your family safe is by making sure things that are touched by hands are clean...including the hands themselves!! This is especially important after touching raw meat. Cutting boards and counters need not only to be washed with warm soapy water, but they also need to be sanitized. Sanitization cannot happen before an item is cleaned. Using a dishwasher has been found to be effective in reducing the contamination on silverware and cutting boards.

Keeping your loved ones from contracting a foodborne disease is easy if you know how. Pass on the quick, simple steps to reduce risks in the home and keep your house from becoming Home Sweet Home to bacteria!
The Importance of Family Meals

Cathy Rogers
Family and Consumer Sciences & 4-H and Youth Development Agent

By Crystal Lim and Cathy Rogers

Most people have heard that it is important to eat meals together as a family, but many may not know why. Families that eat meals together three or more times a week are more likely to have children that eat more fruits and vegetables and are a healthier weight. They do better in school, have better communication skills, have better social and emotional functioning, and engage in less risky behaviors (e.g., substance abuse) in adolescence. The parent-child relationship also benefits. For some families, meals may be the only time parents and children spend together during the week days. Mealtimes provide parents with opportunities to support their children and teach them manners and listening skills.

Family mealtimes are also important for establishing healthy eating habits. They provide a time for parents to become more aware of their child’s current eating habits. During family meals parents can introduce children to new and healthy foods and model healthy eating behaviors they want to see in their children. Establishing healthy eating habits during early childhood helps to promote optimal child growth and wellness and can also set the stage for lifelong health.

Below are some tips for making family meals a part of your family’s routine.

Tips for Family Mealtimes:
- Don’t worry if you can’t eat together every day. Have family meals as often as possible – some family meals are better than none.
- Plan when your family will eat together and write it on your calendar.
- Eat family meals at the kitchen or dining room table.
- Limit distractions during family meals by turning off the television/computer and putting away phones until after the meal.
- Include children in preparing for and/or cleaning up after meals.
  - Plan a menu for the week as a family. Let your child pick something your family will eat during a meal.
  - Children (depending on their age) may be able to help by setting the table, gathering items that will be needed to prepare the meal, stirring or mixing foods, pouring drinks, and clearing the table.
  - Make sure family meals are positive by talking about fun and happy things and including your child in conversations (For example, ask children: “What made you laugh today?”). Be an active listener and be sure your child learns to listen as well.

REMEMBER - it is never too late to start having family meals!

For information about a Healthy Lifestyle Program for Preschoolers see page 14.
The Value and Cost of Buying Meat Directly From Producers

Elena Toro-Agriculture/Natural Resources Agent

Source: Beef and Pork Whole Animal Buying Guide, Iowa State University

Buying beef or pork in quantity allows you to choose not only what quality of animal you would like—how the animal is raised and fed, what breed—but also exactly how you want the meat cut and packaged. How thick do you want your steaks, for example? Do you want ground meat in one-pound packages, two-pound packages or made into patties?

What Does It Cost?

Most of the time, buying a whole animal or part of an animal will be cheaper than if you were to buy the same meat as individual retail cuts—there is an economy to buying in bulk. To estimate the cost of buying directly from a farmer, consider the following:

1. How much does the animal itself cost? Many producers estimate costs on the weight of the animal’s carcass before it is cut into packaged meats—called the “carcass weight” or “hanging weight.” Some producers charge based on the live weight of the animal. Be sure to ask the producer how you will be charged. Prices may vary widely depending on the animal.

2. How much is the processing? This cost depends on the types of cuts you request, the amount of further processing requested (such as bacon), and type of packaging. For example, it is less expensive to leave roasts whole than it is to process them into tenderized steaks, ground beef patties, or stir-fry beef. Also, it is generally less expensive to wrap your meat in freezer paper than it is to have it vacuum-packaged. However, vacuum pack minimizes the risk for freezer burn.

3. Do you need to invest in a freezer? As a general guide, 50 pounds of meat will fit in about 2.25 cu.ft. of cooler/freezer space. Meat from one-eighth of a typical beef will weigh roughly 50-60 pounds and meat from one-half of a typical hog will weigh roughly 60-70 pounds. The empty freezer compartment of a new, average-size, home refrigerator is about 4.8 cu.ft. Therefore, if you only get one-eighth of a beef or a half hog, you should be able to fit it in a mostly-empty home freezer. You may want to shop for a small stand-alone freezer to allow for more storage space and keep the meat colder for long-term storage. Stand-alone freezers can maintain temperatures between -5 and -10°F, whereas the temperature of a refrigerator freezer is usually kept near 0°F. Some meat processors will store meat for you in their walk-in freezers for a monthly fee of $5 to $10. The farmer or rancher and butcher who you contract with can help answer these questions and guide your purchase.

4. If needed, what does storage or delivery cost? If you are unable to pick up all of your meat at once, you may be charged for freezer storage.

Below are general figures based on typical cuts from a half beef and a half hog.

<table>
<thead>
<tr>
<th>Meat from a typical half beef (from a 1,000 - 1,200 lb. live animal) consists of approximately:</th>
<th>Meat from a typical half hog (from a 250 - 270 lb. live animal) consists of approximately:</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 T-bone steaks (3/4” thick)</td>
<td>12-14 lbs. pork chops</td>
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<tr>
<td>14 rib steaks (3/4”)</td>
<td>6-10 lbs. ground pork and/or ground sausage</td>
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<tr>
<td>8 sirloin steaks (3/4”)</td>
<td>2 packages of spare ribs (1.5 lbs.)</td>
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<tr>
<td>8 round steaks (3/4”)</td>
<td>1 ham (15-18 lbs.; can be cut smaller)</td>
</tr>
<tr>
<td>2 sirloin tip roasts (3 lbs.)</td>
<td>3 shoulder roasts (4 lbs.)</td>
</tr>
<tr>
<td>6 chuck roasts (4 lbs.)</td>
<td>8-10 lbs. bacon</td>
</tr>
<tr>
<td>4 arm roasts (3 lbs.)</td>
<td>2 smoked hocks (0.75 lbs.)</td>
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<tr>
<td>2 rump roasts (3 lbs.)</td>
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<tr>
<td>8 packages of stew beef (1 lb.)</td>
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<tr>
<td>4 packages of short ribs (1.5 lbs.)</td>
<td></td>
</tr>
<tr>
<td>4 packages of soup bones (1.5 lbs.)</td>
<td></td>
</tr>
<tr>
<td>80-100 lbs. ground beef</td>
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</table>

(Variety meats, if desired, such as heart, liver, tongue, and oxtail)

For more information read the Beef and Pork Whole Animal Buying Guide available at [https://store.extension.iastate.edu/ItemDetail.aspx?ProductID=13056](https://store.extension.iastate.edu/ItemDetail.aspx?ProductID=13056). You can either purchase a copy of the guide or download it for free. If you would like to buy from a farmer directly or are looking for a processing facility please do not hesitate to call me at 362-2771.
Ask Terry Reagan why he is a dairy producer and he will tell you it has been his family’s life-long business, which may not always be a big money maker, but it has always instilled positive family values. Family values are very important to Terry and his wife, Dianne, the 2012 recipients of North Florida Fair/Suwannee County Farm Family of the Year.

Terry Reagan is a native Floridian, born and raised in Pinellas County where his father started a dairy after returning from World War II duty. The Reagans moved to Bradenton in 1955, where they built one of the most progressive dairies at the time, milking 1,000 cows and farming approximately 1,200 acres.

Terry Reagan partnered with his brother-in-law, Carl Lowe, in 1989 and moved to Suwannee County to start a new dairy. Their farm, Suwannee Dairy, began with 200 cows and 120 acres of land. Today they milk nearly 700 cows and farm 480 acres in the McAlpin community. Attention to details related to milk production, farm economics, crop agronomics and the environment have kept their farming operation successful.

Suwannee Dairy has been recognized by Florida Farm Bureau and the Suwannee River Partnership with a CARES (County Alliance for Responsible Environmental Stewardship) Award for outstanding efforts to improve natural resource management.

Terry Reagan believes that involvement in business and community affairs may take time, but allows him to stay on top of new trends and opportunities which help both Suwannee Dairy and the dairy industry. Terry has been elected to the Board of Directors of both his milk cooperative, Southeast Milk, Inc. for about 15 years, and Select Sires, the largest cattle breeding cooperative in the United States, for three years.

In addition, Terry has served many years as a Supervisor of the Suwannee Conservation District and is a member of the Dairy Advisory Committee for the Florida Farm Bureau. Terry has also served as a member of both the Dairy and Overall Advisory Committees for the UF/Suwannee County Extension Service.

Terry Reagan has been married to his wife, Dianne, for over 27 years. They have five children, Cindy, Kristi, Jason, Jeffrey, and Scott, and eleven grandchildren. Dianne works as Clearing House Coordinator for Love, Inc., a non-profit organization that helps those in need.

As recipients of the North Florida Fair/ Suwannee County Farm Family of the Year Award, the Reagan family received a beautiful vase and tickets to the 2012 North Florida Fair in Tallahassee. They received the award at the Annual Suwannee County Farm Bureau Meeting held September 20 at the First Baptist Church in Live Oak.
"I pledge...my hands to larger service...for my club, my community, my country and my world."

For more than 85 years Community Service has been an important part of 4-H. Service to the community – through food drives, raking the yard of an elderly neighbor, adopt-a-highway programs, teens teaching younger youth, teens mentoring children or youth determining community needs and helping solve community problems – helps young people learn caring, leadership and citizenship. Another important part of 4-H has been hands-on, learning-by-doing, that we now call experiential learning. When you combine community service and experiential learning together appropriately, the result goes beyond a "feel good" experience: service activities tied closely to what youth are learning positively impact learning, and genuinely help the community.

Community Service Learning is a form of experiential learning in which youth apply the subject matter they are learning along with critical thinking skills to address genuine community needs. When youth are involved in selecting and planning such efforts, and have structured time to reflect, talk, and write about the actual service activity they are performing the youth learn more; they become more confident about what they have learned; they improve in problem-solving ability; their leadership and social abilities improve; they take more enjoyment in the overall learning experience; they retain the subject matter longer; and they are more likely to volunteer to serve the community in the future. Community Service Learning can be performed individually, or as a group of varying sizes.

State and National 4-H Leadership have gone on record as endorsing the following statement:

“Community Service Learning strengthens the skills and knowledge 4-H’ers are acquiring by actively combining their learning with service to help meet real community needs. Every 4-H participant is encouraged to take part in community service that fits his/her areas of learning, as an important feature of 4-H youth development.”

Community service learning is a perfect blend of organized community service and established learning goals. It is more than just volunteerism. The main difference between community service and community service learning in 4-H is that community service learning intentionally links service that meets community needs to specific learning objectives that positively develop 4-H youth.

Community service learning in 4-H also involves the important aspect of reflection.

Community service learning projects can be used with any 4-H project to teach a variety of skills to 4-H’ers. Ultimately the project should support the four-fold model of 4-H youth development – development of the head, heart, hands, and health. A recent nationwide study of 4-H youth found a notable trend that indicates that 4-H youth are 3.4 times more likely to actively contribute to their communities when compared with youth who do not participate in 4-H.

What youth gain from community service learning

By giving back to their communities, young people:

• Learn the value of helping others.
• Develop leadership, communication, organizational skills and a sense of empowerment.
• Learn how important the connection is between subject matter and life in the community.
• Learn how to cooperate with one another and work as a team with diverse groups of people including adults, peers and others with different backgrounds and experiences.
• Succeed in an area different from academics, athletics or popularity.
• Build self-esteem from the positive results of their service.
• Develop problem-solving and decision-making skills by applying their knowledge to real-world situations.
• Develop a sense of being responsible for their community and a sense that citizenship requires them to actively participate in their community.
• Receive recognition for their efforts and possibly college scholarships.
• Experience the world of work. (Continued on page 14)
Owning and operating a farm operation can be a very appealing endeavor for a variety of reasons. Small-scale farming is a lifestyle unto itself, either as a new career or as a distraction from an off-farm job. Small farms combine the management duties of a small business with the responsibilities of agriculture. While these can serve to be an obstacle at times, it can also be greatly rewarding when done successfully. The purpose of this series is to provide a resource for seasoned farmers and curious entrepreneurs alike, aiding in business management and highlighting market opportunities.

Whether looking for startup capital or managing yearly operating costs, understanding finances is a key to any successful enterprise. In particular, applying for and obtaining loans can be especially discouraging for small-scale farmers. However, understanding your business and your options can improve a farmer’s chances at obtaining a loan.

Agricultural enterprises can require very different amounts of capital, it is important to know how much is needed. Generally enterprises with the largest potential returns also require the most startup capital. For example, options such as forestry require very little initial investment while greenhouse hydroponics can be very expensive to start. Calculating an enterprise budget is crucial to determining both long-term and short-term financial needs. Small farmers may have significant off-farm income which can create uncertainty for lenders, it is important to have both personal and farm financial statements organized in these circumstances.

A variety of sources for loans are available to small farmers once the amount needed is determined. Lenders include: commercial banks, Farm Credit system, USDA’s Farm Service Agency, private investors or credit unions. Each of these institutions has individual advantages and disadvantages which make shopping around important to find the best fit for the enterprise. Also multiple types of loans are available through the institutions the most common are:

**Short-term or Operating Loans**- Used for annual expenses such as fertilizer, feed, repair services and labor. Generally these loans are repaid with a year or season.

**Intermediate-term loans**- Used for sizable purchases such as equipment, vehicles and property improvements. Generally these loans are repaid within 3 to 10 years and can be fixed or variable rate.

**Revolving lines of credit**- Tailored to specific borrowing circumstances, these lines of credit allow farmers to have liquidity for day-to-day expenditures. These loans do not have specific installment payments, but instead work similar to a credit card.

**Long-term loans**- Reserved for very large loans such as startup capital needs, purchasing additional acreage or the construction of a new building. Generally these loans are repaid within 10 to 30 years and can have a variety of installment options.

Determining the lender and loan that fits the enterprise the best is equally important to knowing the amount needed. In addition to loans, funding for small farms can come from other sources such as grants. Grants are available through USDA, Florida Department of Agriculture and Consumer Services and private groups. However, not all grants are available for individuals; many grants are reserved for co-ops, non-profits and research.
Stink Bugs Can Cause a “Real Stink” in Fruits and Vegetables

Bob Hochmuth-Multi County Extension Agent

When most people think of stink bugs, they usually think of a large green angular insect that stinks when it is crushed. But the world of stink bugs is much more complicated than that. Actually, there are two species that are large and green, the southern green stink bug and the green stink bug. All adult stink bugs are shield-shaped, but the green and southern green stink bugs are both bright green and are among the larger members of the stink bugs commonly found in North Florida. Members of the stink bug “family” are very diverse in color with species that are green, brown, dark brown, metallic, or multi-colored. Most stink bugs are pests in that they are plant/crop feeders. However, to make it more complicated, some stink bug species are predators on other insect pests and therefore those species are beneficial. Since most are pests, this article will focus on those pest species. When stink bug eggs are first laid, they are light colored barrel-shaped eggs later turning pink to gray before hatching. The eggs are laid in well organized lines and in patches about the size of your fingernail. Upon closer inspection, the eggs look amazingly like miniature barrels perfectly in line. The immature stages, the nymphs, of all species are smaller than adults, but similar in shape. Green stink bug nymphs are predominantly black when small, but as they mature, they become green with orange and black markings, but each species has distinct traits. Nymphs of the brown and southern green species are light green. Southern green stink bug nymphs, however, have two series of white spots along their backs.

Stink bugs (Pentatomidae) and leaf footed bugs (Coreidae) are important direct pests of many seed, fruit, vegetable and nut crops. Perhaps the most common of all members of these two groups is the leaf footed bug (Leptoglossus spp.), a brownish colored bug with large flat leaf-shaped hind legs. Stink bugs and leaf footed bugs have similar life cycles. The nymphs and adults feed on a variety of herbaceous weeds, grasses (bahiagrass) and many crops including corn, peach, plum pecan, peanut, soybean, green beans, pepper, eggplant and tomato. Four or five generations may occur in a single year. Stink bugs have piercing-sucking mouthparts. The mouth consists of a long beak-like structure called the rostrum. Salivary fluid is pumped down the salivary duct and liquefied food is pumped up the food canal. All plant parts are likely to be fed upon, but growing shoots and developing fruit are preferred. The damage on fruit from the punctures is hard brownish or black spots. These punctures affect the fruit’s edible qualities and decidedly lower its market value. Young fruit growth is misshapen and it often withers and drops from the plant. Stink bug feeding can also alter the taste of the fruit.

Stink bugs usually overwinter as adults, but may remain active all year when the weather remains mild. Stink bugs are very mobile with the adults moving from crop to crop as the season progresses. When crop and weed hosts mature and die in the fall, stink bugs move into pecan orchards or other woodlots looking for food and overwintering sites. Some stink bug species overwinter under the bark of trees. It is not uncommon for stink bugs to be found inside homes in the late fall as they try to find an overwintering location. Stink bugs are difficult to control with insecticides. Recently they have become more common pests of many crops because of the reduction in broad spectrum pesticides that used to be commonly used in many fields and gardens. Most new, targeted, and “softer” insecticides are not effective against stink bugs. There are very few effective insecticides available to homeowners and organic growers. Because stink bugs and leaf footed bugs have many hosts and are very mobile, they can become a problem at any time during the season. They can be removed by hand or with a butterfly net from small plantings in gardens. A trap called the yellow pyramid trap (top picture); invented by University of Florida professor, Dr. Russ Mizell, exploits the visual behavior of the bugs and can be constructed and used to suppress populations. There is also a pheromone attractant available, methyl (E, Z)-2,4-decadienoate, that will enhance the capture rate of stink bugs. Used in conjunction with the yellow pyramid stink bug trap, stink bugs can be suppressed in small plots in north Florida and south Georgia. For further information on these traps, read this document by Dr. Russ Mizell, http://nfrec.ifas.ufl.edu/MizellIRF/stink_bugs/stink_bugs.htm

Another cultural practice gaining popularity as a method to manage stink bugs is trap cropping. Stink bugs and leaf footed bugs will feed on many crops and weeds, but they prefer to feed on specific parts of plants in specific maturity stages, primarily seeds in the millet stage, and certain other succulent areas that are present on individual plants for only a limited time during the season. Use of trap crops is based on the assumption that stink bugs can be attracted away from the main cash crop into smaller areas where they can be more efficiently managed. Trap crops must continuously provide food plants in the preferred stage that are more attractive than the cash crop. Small plantings of species such as triticale, sunflower, sorghum, millet, buckwheat, soybean, field peas and okra, provide superior food plants for the bugs while also attracting their natural enemies. Once the stink bugs are attracted to the trap crop, we can better control them by spraying only the trap crop or hand collecting the stink bugs. Trials being conducted by UF/IFAS at Live Oak and Quincy are helping to identify varieties of trap crops that work the best. For instance, it appears the sunflower variety, ‘Giganteus’, may be an excellent sunflower variety to use as a trap crop for leaf footed bugs. More research is needed to further answer these questions. For more information on using trap crops, see this publication by Dr. Russ Mizell, http://nfrec.ifas.ufl.edu/MizellIRF/stink_bugs/bug_trap_crops.htm

So, don’t be surprised stink bugs are still around and actually becoming more of a problem, but rather admire the unique adaptations this group of insects can make to survive. Perhaps try the yellow pyramid traps or some trap crops to gain a little advantage on stink bugs and leaf footed bugs.

For more information on using trap crops, see this publication by Dr. Russ Mizell, http://nfrec.ifas.ufl.edu/MizellIRF/stink_bugs/bug_trap_crops.htm
Sandspurs are obnoxious weeds that are a real pain in the foot when stepped on.

When I bought my house in Chiefland, I had enormous patches of sandspurs. My “city” dogs were not familiar with sharp items in their paws and would stop and freeze like statues. They finally learned to pull them out with their teeth and avoid the sandspur patches. I have spent hours removing the sandspurs from my mower tines so that I would reduce the spread of them. I still have not figured out the purpose of sandspurs other than keeping us humble.

The sandspur or sandbur as it is sometimes called is an annual grass. Each year in mid to late summer, the seed burr is produced and then in the following spring the seed germinates and a new nuisance crop is born.

Control and/or eradication of this weed, once established is difficult and requires several steps and a balanced approach and may take a couple of years.

Layout your plan for 2013:

**Jan.-March**
- Collect and burn or discard burrs (seed) using a bag on your mower or even drag old towels or blankets through heavily infected areas.
- In late March, use a pre-emergence herbicide that is safe for the type of grass you have. Read the small print! Follow label directions – it’s the law! Remember pre-emergence herbicide kills the weed as it germinates so it must be applied BEFORE the next crop sprouts. Be careful of over application as it may harm your grass.

**April – June**
- Pull or hoe any sandspurs that sprouted.
- In mid-May, do a second treatment of pre-emergent herbicide.
- After three weeks – plant plugs or sprigs of grass to fill in sandy areas.

**July – Sept.**
- Continue monitoring for any sandspur that sprouted – remove as necessary. If large areas persist, spray the entire area with a non-specific herbicide like glyphosate or glufosimate to eradicate them.
- Realize that these herbicides will also kill any grass so the area will need to be replanted in 3-4 weeks.

**Oct. – Dec.**
- Remove any escaped seed by bagging with a mower or the pulled towel method.
- Repeat process in second year, if needed. One thing that will not work is applying lime or dolomite – it may even contribute to the decline of your grass by raising the pH too high.
- Good luck and please be patient which may be the hardest part of the process.
YAUPON HOLLY (*Ilex vomitoria*)

It's that time of year again when looking around outside at so many bare or brown plants gives us the opportunity to really see the landscape around us. There can be a lot of green in the upper story with so many of our trees being evergreen or tardily deciduous with the new leaves already spouting as the old leaves are falling. It's the understory that often needs some help. Those bare shrubs don't provide much food or cover for the birds that are around in the winter months. Adding a few evergreen shrubs, or even some grasses or wildflowers that are green in the winter, can improve conditions for the small wildlife and add some eye appeal to your yard.

*Ilex vomitoria*, commonly called Yaupon Holly, is an outstanding native plant for your yard and for the wildlife. It's small leathery, evergreen leaves are arranged alternately along irregular branches to create a rather dense appearance. In late winter to early spring it bears many tiny white flowers clustered all along the branches among the leaves. The flowers become small green berries in summer and by fall they begin to turn a brilliant red. The red berries are particularly attractive to Cardinals, Titmice, Chickadees, Warblers and other species of small birds.

From a landscape perspective, Yaupon Holly is a large multi-trunked, suckering shrub or small tree that can grow to 25' tall by 15' wide in ideal conditions. Typically, it will reach a height of 12' in 10 years. It grows best when provided some light shade in well-drained soil with some moisture, though it is highly drought tolerant after it has become established. It's twisted branches create a rangy appearance when young that fills in to become an attractive thick mass of leaves as it matures. It is easily pruned into any desirable size and shape and is frequently used for a hedge planting, a topiary, a single specimen or any ornamental shape. Pruning it into a tree form reveals the attractive light gray bark that contrasts well with the dark green leaves.

It is dioecious, meaning male and female flowers are borne on different plants and only the female plants will have the red berries. Planting a female and a male plant in close proximity will insure proper fruiting. Berries remain on the plant throughout the winter months if not eaten by the birds. It transplants easily and any suckers can be easily removed and relocated if you wish to maintain a single trunked small tree. Pest or disease problems are uncommon with Yaupon Holly. Deer do browse the foliage at times, but it is not considered their first choice.

Looking out the window in winter at a very green Yaupon Holly with a bright red Cardinal or two enjoying the red berries is this Florida native's idea of how winter should look!

**Common name:** Yaupon Holly  
**Scientific name (Genus and species):** *Ilex vomitoria*  
**Description:** Dense, upright, multi-trunked, evergreen shrub/small tree. Oval shaped with irregular branches.  
**Height/Spread:** 25' x 15', typically smaller in our area.  
**Leaves:** Glossy, dark green, oval to oblong 1", scalloped margins  
**Flowers:** Tiny white, clustered along branches. Spring. Male and female flowers produced on separate plants, female produces red berries.  
**Growing conditions:** Moist, well-drained soil in sun to part shade, very adaptable.  
**Drought tolerance:** High after establishment  
**Propagation:** Cuttings, seeds or suckers  
**Wildlife attractor:** Excellent! Provides food, cover and nesting sites for birds and other small wildlife.  
**Other features:** Yaupon is the only plant native to North America that contains caffeine and was used by Native Americans as tea like drink called “black drink” to induce vomiting. The wood was used for arrows.
Families of young children interested in learning more about building healthy lifestyle habits in their preschool-aged children may want to consider participating in the Healthy Lifestyle Program described below. The program will be offered to preschoolers and their families through the extension office starting in February 2013 and is currently enrolling families. Parents and children will participate in 12 group meetings with other families. Parents will learn and practice strategies to encourage their child to adopt healthier eating and activity habits. The importance of fitting in family meals will also be discussed. Children will play fun games and try new and healthy foods.

Families are eligible for the Healthy Kids Program if they have a child who is between 3 and 7 years of age, at the higher end of the growth curve, and lives with their parent or legal guardian in Suwannee County or surrounding areas. All group meetings will be held at the Suwannee County Cooperative Extension Office in Live Oak. Families will be compensated $10 at each meeting to help with transportation costs. Families who want to know more about the Healthy Kids Program or who are interested in participating are invited to call the Healthy Kids Office toll free at 1-866-673-9623.

Not only do young people gain by being involved in community service, the clubs and groups that they are in also experience benefits from planning and carrying out service projects.

**What clubs gain from community service learning**

Carrying out service activities can strengthen a club or group because it:

- Boosts member commitment and involvement by giving members meaningful activities.
- Can involve families and youth in a joint activity.
- Fulfills the "hands to larger service" part of the 4-H pledge.
- Builds unity among members, allowing them to function better as a team.
- Allows members to get to know one another better as they work together on a common goal.
- Helps youth become invested in their club and community.
- Shows the community how youth can be resources and how they can get things done.

In Suwannee County, 4-H youth have participated in 67 different community service learning projects in 2012, involving over 200 different youth. Since 2008, Suwannee County 4-H youth have participated in 191 community service learning projects involving over 950 youth. The North Florida Equestrian Team 4-H Club has applied for a grant in 2012 through Florida 4-H and the Chevron Cooperation to provide funds to upgrade the Horse Arena at the Suwannee County Fairgrounds. Suwannee County 4-H clubs have routinely received funds through this grant to do community service learning projects throughout the county.

A 2012 4-H club survey found that over 92% of Suwannee County 4-H’ers had been given the opportunity to do service projects for the community or other people. Since 2008, 83% of 4-H club members have participated in 4-H sponsored community service learning opportunities. The Suwannee County Sharp Shooters are working in conjunction with local citizens, community partners, and the City of Live Oak to replace the old wooden fence along the west side of the Live Oak cemetery near the Veteran’s Memorial. In December 2012 alone, Suwannee County 4-H’ers have: made fabric wreaths to give to Love, Inc.; given toys to those less fortunate with the Toys for Kids + program in Branford and the Santa Shop in Live Oak; donated leftover baked goods from the Holiday Bake-off to Love, Inc.; made Christmas cards for residents at Surrey Place; and made Christmas baskets and cheer packs for local shut-ins.

Community service learning is an important aspect of Suwannee County 4-H. If you have any opportunities for service for our 4-H youth, please contact the UF/IFAS Suwannee County Extension Office at 386-362-2771.

Families of young children interested in learning more about building healthy lifestyle habits in their preschool-aged children may want to consider participating in the Healthy Lifestyle Program described below. The program will be offered to preschoolers and their families through the extension office starting in 2013.

This spring, the Suwannee County Extension Office, in collaboration with researchers at the University of Florida, are inviting families to participate in a new program. Healthy Kids is a family-based healthy lifestyle program for young children and their parents who live in Suwannee County. The program is designed to help families make lasting changes to support a lifestyle with better nutrition and physical health. Given the many demands on children and families, helping children establish healthy eating and exercise patterns while they are young is more important than ever. The no cost, 4 month program will begin in February 2013 and is currently enrolling families. Parents and children will participate in 12 group meetings with other families. Parents will learn and practice strategies to encourage their child to adopt healthier eating and activity habits. The importance of fitting in family meals will also be discussed. Children will play fun games and try new and healthy foods.

Families are eligible for the Healthy Kids Program if they have a child who is between 3 and 7 years of age, at the higher end of the growth curve, and lives with their parent or legal guardian in Suwannee County or surrounding areas. All group meetings will be held at the Suwannee County Cooperative Extension Office in Live Oak. Families will be compensated $10 at each meeting to help with transportation costs. Families who want to know more about the Healthy Kids Program or who are interested in participating are invited to call the Healthy Kids Office toll free at 1-866-673-9623.
One hundred and fifty years ago, President Abraham Lincoln signed into law the Morrill Act, which created the land-grant university system, made higher education more accessible to more people, and promoted agricultural science and the mechanical arts. Later, the Hatch and Smith-Lever Acts further defined the core mission of these institutions: education, research, and outreach. Today, the land-grant system includes 107 institutions in all 50 states and several U.S. territories. In Florida, we have a University of Florida Extension office in all 67 counties.