Hurricane Season ends November 30!
Not soon enough for me!

I do not know about you, but hurricane season is not my favorite time of the year. The anticipation of a potentially devastating storm is a nerve-wracking event. We begin hurricane season on June 1st with helpful public service announcements reminding us to get prepared and do not wait until the last minute. There are reminders about shelter sign-ups (pet-friendly and special needs), having enough food and water for at least 3 days, and developing an evacuation plan in case of an emergency. Even when you do plan well, you can often feel like you did not do enough---this is definitely, how I felt this year with hurricane Irma. After a long hiatus since the hurricane seasons of 2004 & 2005, I think I was just out of practice. I thought I was prepared; I had everything in order and ready for whatever came our way. What I was not prepared for was the unpredictability of this particular storm AND having to worry about offspring at two different universities that were no longer safe and sound in our CBS-built home in South Vero. I do not know which was worse---the slowdown of the actual storm (making it seem longer than usual) or the pictures my college-aged children sent of empty grocery shelves in Orlando and Tallahassee when they finally decided to worry about their 3-days of food and water a day before Irma was due to make landfall. AGGHH, did they not learn anything from me?!!

Due to the sophistication of storm-tracking technology, we often know well in advance when a storm system is developing, and usually within a week or two if Florida is going to be in the hurricane’s path. Although I would not have wished Irma on the west coast, I was relieved that our area avoided the brunt of the storm, with most of us back to work and with electricity in less than a week. I know that some neighborhoods flooded, resulting in homes being damaged, but for the most part, we should be extremely grateful—it could have been much worse. Let us not let our guard drop though, we are not out of the woods yet. Learn from Irma---be vigilant, plan, prepare, and be safe.

Christine

Be On the Lookup for Changes to Our Website
Keeping up with the increase in mobile device users browsing websites.

Change usually happens whether we want it to or not, and our extension office is no different. In order to meet the needs of clients wanting to access information via their mobile devices, the University of Florida is upgrading their webpages to be more browser-friendly on cell phones and tablets. December 1st, 2017 is the expected launch date for our conversion to a new webpage provider called Terminal 4 (T4). This is happening university-wide and at all of UF/IFAS extension offices and research centers. You can preview this new look by checking out the Indian River Research & Education Center’s (IRREC in Ft. Pierce) website at http://www.irrec.ifas.ufl.edu/. Try it out on your cell phone and see how you like it.
How Hurricanes Affect Agriculture and Higher Grocery Prices by Christine Kelly

Thank a farmer, every time you eat!

Many of our agriculture producers along the Treasure Coast did not fare so well with hurricane Irma and the additional week of steady rains right after. Pastures, needed for beef cattle production and horse enthusiasts, were under water for weeks. Flooded root systems begin to die off within a few days due to lack of oxygen and stressed pastures are more susceptible to pests and diseases, just at a time when they need to be preparing for winter dormancy. Citrus, already devastated in previous years by a variety of diseases (greening being the worse so far) saw 30-50% of their crop on the ground immediately after the storm passed. Most, if not all, of this fruit is unsalvageable due to fruit damage and food safety concerns and restrictions. Other fruits and vegetables were equally affected; vegetable crops that were already in the ground, like corn, lettuce, spinach, tomatoes and many others, were killed during the high winds, rain and flooding. Plant beds covered in plastic mulch were destroyed and have to be rebuilt and the plastic replaced. Greenhouses were tossed around like toys, completely demolishing them. All of this will lead to additional costs for the farmer that were not expected and losses are estimated in the billions. Farmers are a hearty and brave lot though, and many are confident that they will be back in business before too long. Most of the local farmers that I talked to were already back in the fields cleaning up, pumping water out of the fields and planning to replant. I am always impressed by their dedication and resiliency— their willingness to keep going, no matter what, to feed our country.

Unfortunately, hurricanes that affect agricultural areas are costly for the consumer as well—reflected in higher prices at the grocery store. You may have noticed that it took a few weeks for most supermarkets to become well stocked again and that your grocery bill might already be a slightly higher. This could increase as much as 10-15% over the next couple of months due to crop losses and the increase cost of replanting, labor and transportation. Experts predict that this hike will only be seen through Thanksgiving and that grocery prices should normalize after a few months as produce is readily available again and the supply chain fully recovers. For families on limited incomes, fluctuating food prices are hard to prepare for, and fresh fruits and vegetables are usually replaced with cheaper, and often less nutritious, alternatives. The good news is that once agriculture recovers, so should food prices and we should see normal, or near normal, prices return with just a 1% overall increase for 2017. Good news for most of us, since we usually eat at least three times a day! If you ever have the chance, do not forget to thank those farmers for going back to work and putting food on our tables.

Office Hours in Fellsmere for Agriculture Agent

Agriculture Extension Agent, Christine Kelly-Begazo, will now hold office hours in Fellsmere on the third Thursday of each month from 4:00pm-6:00pm. She will see clients in the City Complex behind the old Schoolhouse in room 9. Ms. Kelly-Begazo will be available to answer farming related questions, as well as questions regarding lawns and landscaping. This will be the first time that extension has held office hours in Fellsmere. Clients will be seen on a first-come, first-serve basis but you can make an appointment as well. Christine will also be scheduling morning and early afternoon farm site visits for the same days. For more information or to schedule an appointment or site visit, call (772) 226-4316 or email ckellybe@ufl.edu.
Tips for Mosquito Control after a Hurricane or Storm by Christine Kelly and Janet Bargar (Water Quality Agent, ret.)

Mosquitos are notorious for being able to breed in very little water, some even in less than a teaspoon! After a rain event that leaves standing water for more than a few days, you soon will find mosquito larvae wriggling close to the surface. Of the 167 different species of mosquitos that are in the U.S., over 80 of these are found in Florida. Male mosquitos do not bite and actually feed on nectar and plant fluids. Female mosquitos also feed on nectar and plant fluids but they need a blood meal that contain proteins and other nutrients for egg development. Females will lay multiple batches of eggs and usually need a new blood meal for each batch. A female lives 3-6 weeks and can lay thousands of eggs in her lifetime. Eggs are laid directly on the surface of water or in areas that one day will be immersed in water, and it takes approximately 12-15 days for larvae to molt and emerge as an adult mosquito. Mosquitos are not just a nuisance, but dangerous as well given the fact that they can carry diseases such as Chikungunya, Zika, dengue, malaria, West Nile Virus, Encephalitis and others. Although mosquitos will never be eliminated, there are things that can be done around the home to make it less hospitable for them. Most mosquito species only travel several hundred feet in their lifetime and so mosquitos in the backyard are usually bred within the neighborhood. The following methods include both physical methods and control products.

The first step is to make sure to not give the mosquitos a place to breed and lay eggs. Take a walk around your property and think like a mosquito. Look for areas that a female mosquito would find favorable for laying eggs, such as water that is in a dark, shady, quiet and well-protected area. Make that area as unfavorable as possible by the following steps:

- Clean debris from rain gutters. The debris allows water to collect in the gutters.
- Eliminate standing water on and around structures such as flat roofs and air conditioner units. Fix any leaky pipes or faucets and remove any source of dripping water.
- Get rid of water in potted plant dishes, garbage cans, old tires, gutters, ditches, wheelbarrows, and hollow trees.
- Change the water in birdbaths, pet bowls and wading pools every 2-3 days.
- Keep swimming pools and other water features circulating and chlorinated at all times.
- Clean up fallen vegetation as quickly as possible; keep lawns mowed regularly and weeds under control.
- Repair torn screens and/or use mosquito netting.

Control Products and Materials
Sometimes physical control methods may not be enough and additional methods need to be incorporated. There are products that can be used to control either larvae or adult mosquitos. Before using any of these products, read and follow label instructions exactly as stated because some chemicals are extremely harmful to aquatic wildlife.

Larvacides

- **B.t.i.** (*Bacillus thuringiensis var. israelensis*) is a bacterium that controls mosquito larvae (“wrigglers”) and is not a threat to humans, animals, and plants. B.t.i. is commercially available in many forms (granular, liquid, dunks and bits) and can be found at most garden centers. To be most effective, follow directions on the label of each product. Products will need to be reapplied as wrigglers reappear. This product is only effective against wrigglers (larvae) – it does not kill adults.
- Spinosad is a natural insecticide made by mixing two compounds produced by special soil bacterial microbes. It is toxic to a wide variety of pest insects but non-toxic to mammals.
- Mineral oil can be added to standing water because it forms a thin film on the surface of the water, which causes larvae and pupae to drown. This is a good control method for containers and plants, such as bromeliads, that collect water.
- Methoprene is an insect growth regulator and can be used in water containing fish. The product prevents larvae from becoming adults. Read the label instructions carefully before applying.
Winter Pasture Management by Christine Kelly

Protect your investment with proper management.

Pasture management is one of the most important concepts that a producer needs to understand in order to have good forage production and healthy animals. Cattle, horses, and other grazing livestock depend upon high quality forage to meet their nutritional needs for optimum growth and reproduction. In south central Florida there are two important timeframes—spring/summer and fall/winter. Correct pasture management during the fall is important to help animals during the winter months, and it also sets up the health of plants for spring re-growth. In September and October pastures grasses in our area are beginning to slow their growth down while storing carbohydrates in the roots, stolons and rhizomes for the winter months. During the fall, forage quality is reduced; plants are older and stemmer, resulting in reduced palatability and lower digestibility. Sub-tropical grasses, like Bahia and Bermuda, go through a dormancy period from November through mid-March when grass blades are not photosynthesizing as much and the plant is living off these stored carbohydrates. Even though the grass looks green, most animals are not receiving the adequate nutrition that they need for growth and/or reproduction. A fertilizer application, based upon the results of a soil sample, should be made in late August or early September in order to help the plant store nutrients and ready itself for the winter. Phosphorous should not be added except when soil and plant samples reflect this need. If nutrients are not available to the plant in the soil or via fertilization before the cooler months, animals will need supplemental nutrients, even if there is an abundant supply of stockpiled forage. Fertilizer should not be applied to warm season grasses during the cooler months from November through April due to: 1.) reduced plant growth, 2.) limited uptake of nutrients and 3.) increased risk of runoff during a water event (rain or irrigation).

Overgrazing in the fall and winter puts pressure on the semi-dormant plants and should be avoided at all costs. Stressing plants out will result in lower forage quality, poor animal growth and reduced weed control. It can also lead to poor stand recovery in the spring. It is important to review and evaluate the stocking rate of pastures during the fall and reduce grazing pressure to allow forage to recover. Reduce the amount of animals and/or reduce the amount of time that they spend in a particular pasture and increase supplemental feeding of hay and/or concentrated feeds. Careful consideration of these suggestions will ensure healthy spring re-growth of the pasture.

Overseeding warm-season perennial forages with cool-season grasses or legumes can supply nutritious feed during the winter months and extend the grazing season. This management system takes advantage of plants that grow well during cooler months and can be easily grazed by pastured animals, giving them the added nutrition that is now lacking in the warm perennial grasses. Adequate irrigation or rainfall must be supplied during the establishment phase in order for overseeding to be successful. Grasses that are commonly used in this system in south Florida are rye and ryegrass. Wheat, oats and triticale can also be used if the winter temperatures are cooler than normal. See the publication, 2017 Cool-Season Forage Variety Recommendations for Florida (http://edis.ifas.ufl.edu/aa266), for information about recommended cultivars, planting dates, seeding rates and grazing information.

Cool-season legumes can also be incorporated but have been less successful than the grasses in our area. Adding cool-season legumes to the small grain/annual ryegrass mixture will also add nitrogen (N) via biological fixation for spring growth. Common legumes for south Florida would be white and sweet clover; they are not readily available in local feed stores but can be easily found on-line.

Adulticides

- Malathion, temephos, and pyrethrins are chemicals commonly used to control mosquito larvae. Before using these chemicals, read the product’s label and hazard statements concerning fish and other aquatic wildlife to determine if these chemicals are right for your situation. Foggers may also be used to provide temporary relief from adult mosquitoes. Use them shortly before an outside activity.
- Sprays. Treat shrubs and the lower branches of trees where mosquitoes may rest. Use sprays registered for flying insects but will not harm plants.

Depending upon the chemical selected, it may be necessary for you to have a Private Applicator pesticide license. For more information about controlling mosquitoes, see the Florida Resident’s Guide to Mosquito Control at: http://edis.ifas.ufl.edu/pdffiles/IN/IN104500.pdf
Let the Fall Gardening Begin by Nickie Munroe

Cooler weather brings lots of gardening options!

While most people in other states are ending their outdoor gardening activities, Floridians are gearing up to begin theirs in earnest. Floridians are kissing the Dog Days of Summer “Goodbye,” and uncovering raised beds for vegetable crops. Start saving time, money, and effort by making a fall gardening plan. Knowing what to do in October, November, and December will make your fall gardening a breeze. We have several publications that can help you put together a plan to make your gardening experience in Florida more efficient and enjoyable. You can access them online or by going in to the Extension Office and speaking with a Master Gardener. Here are a few tips from the UF/IFAS Extension Central Florida Gardening Calendar ENH 1189 (http://edis.ifas.ufl.edu/pdffiles/EP/EP45000.pdf) to get you started in the right direction. Consolidated information for fall is in the following tables: for the general landscape and edibles.

### Fall General Landscape Options:

<table>
<thead>
<tr>
<th>Month</th>
<th>To Plant</th>
<th>To Do</th>
</tr>
</thead>
<tbody>
<tr>
<td>October</td>
<td>Annuals/ bedding plants: dianthus, petunia, and pansy can be planted to give a good start to fall color. Bulbs: place agapanthus, rain lily, and other bulbs in amended beds now for blooms next spring or summer. Trees/ shrubs: plant evergreen hollies.</td>
<td>Lawn: Use pre-emerge herbicide to get ahead of weeds when temperatures are 55°F–60°F for 4–5 days. Last round of slow- release fertilizer if necessary. ‘Weed and Feed’ products are not recommended. Ornamentals: Use a slow-release fertilizer on shrubs and trees that are not performing as desired.</td>
</tr>
<tr>
<td>November</td>
<td>Annuals/ bedding: add viola, snapdragon, cape daisy, and alyssum. Bulbs: add amaryllis, crinum, and daylily.</td>
<td>Lawn: monitor lawn for fungal diseases when top few inches of soil when temperatures drop between 65°F and 75°F. Perennials: divide and replant bulbs and overgrown perennials. Insects: manage scale insects with horticultural soap while they are less active.</td>
</tr>
<tr>
<td>December</td>
<td>Annuals/ bedding: masses of petunia. Bulbs: amaryllis can be forced to bloom indoors.</td>
<td>Annuals/ perennials/ bulbs/ bedding/ shrubs/trees: Prepare to protect your tender plants in case of a cold snap. Lawn: continue to monitor grass for disease and maintain as suggested. Trees/ shrubs: monitor for insects, add leaves and clippings to compost for next year’s gardening plan.</td>
</tr>
</tbody>
</table>

### Fall Edible Garden Options:

<table>
<thead>
<tr>
<th>Month</th>
<th>To Plant</th>
<th>To Do</th>
</tr>
</thead>
<tbody>
<tr>
<td>October</td>
<td>Herbs: plants or seed- cilantro, parsley, chives, garlic, and sage. Vegetables: to keep producing during the winter plant another round of broccoli, collards, kale, lettuce, and others.</td>
<td>Add strawberry beds up until 25th October. Carefully water avoiding leaves of plants to establish.</td>
</tr>
<tr>
<td>November</td>
<td>Herbs: add thyme by plant or seed. Refurbish spent cilantro, parsley, sage or other herb. Vegetables: Continue planting cool season crops. Add beets, carrots, peas (snow/ English), and potato (Irish).</td>
<td>Herbs and Vegetables: monitor for insects and diseases. Plan next season’s vegetable rotation.</td>
</tr>
<tr>
<td>December</td>
<td>Herbs: Include dill and fennel to your rotation. Add another rotation of parsley, cilantro, and other depleted herbs. Vegetables: Celery may be added to your bed. Add another rotation of suggested cool weather vegetables.</td>
<td>Herbs and Vegetables: monitor for insects and diseases.</td>
</tr>
</tbody>
</table>
General tips for gardeners:
1. Put the right plant in the right place and water to establish them properly after installation.
2. Remember to rotate your garden crops to avoid pest and disease issues.
3. Prune off dead blooms and seeds to encourage new flowers.
4. Manage and monitor irrigation to ensure it is working efficiently. Water established grass and plants only when needed.
5. Fertilize appropriately.
6. Mulch - maintain a three-inch layer.
7. Monitor for weeds, insects and diseases. Identify pests to treat them accurately and effectively.
8. Recycle your yard waste to create compost for amending plant beds.
9. Mow your lawn to the recommended height.

Day of Caring at Gifford Youth Achievement Center’s Learning Garden by Nickie Munroe

A commitment to the community and its youth.

On October 14th, 2017, the United Way held its largest one-day volunteer event in our community. United Way, Habitat for Humanity, and Indian River County Master Gardener volunteers served at the Gifford Youth Achievement Center’s (GYAC) Learning Garden. It was an honor for our garden to be selected by Habitat for Humanity as one of their service projects for this year. Over 15 volunteers assembled at 8:30 Saturday morning to help reclaim the garden from summer inactivity. Volunteers worked until 12 noon pulling weeds, installing plants, and spreading mulch into various beds. The garden is now ready for a new school year of learning and interesting activities for our young people.

The GYAC Learning Garden provides youth ages 6 to 13 with a connection to nature and various STEAM (science, technology, engineering, agriculture and math) activities. Young participants are offered various ways to interact with the natural world through gardening, small pond management, and other projects. Instruction follows the 4H Junior Master Gardener curriculum, and our young people are learning life and leadership skills that will help them become productive citizens in the future.

Indian River County Master Gardeners are dedicated to the fostering and facilitation of gardening activities in this underserved neighborhood. We actively solicit community engagement to maintain and expand our garden in the Gifford area. This garden is also a demonstration area showing the use of Florida-Friendly Landscaping techniques. Our pollinator area, herb boxes, and vegetable garden plots are maintained in a low maintenance and sustainable manner. Please stay tuned to this newsletter for all our upcoming events.
35th Florida Master Gardener Conference by Violet Krochmalny

The Florida Master Gardener Conference is held every two years and is a great learning opportunity to meet with MGs throughout the state, as well as attend in depth training workshops on a wide variety of topics. This year the conference was held at St. Johns County Convention Center near historic St. Augustine from October 15th through the 18th. Indian River County’s Environmental Horticulture Agent, Nickie Munroe, and IRC Master Gardener Volunteer president, Nancy Richards, attended. Keynote speakers included UF Plant Pathology Assistant Professor Matt Smith on Florida Mushrooms, Associate Professor & Insect Conservationist Jaret Daniels on Butterflies & Pollinators and UF/IFAS Cropping Systems Specialist Michael Mulvaney on GMOs.

Besides the break out learning sessions that included topics on aquaponics, ethnobotany, Florida snakes, growing microgreens and small fruit trees, pre-conference tours included the ethnobotanical history of Old St. Augustine as well as botanical gardens and regional agriculture. During the conference, attendees could test themselves with the popular plant identification and judging contest, network with new friends and meet with industry professionals invited to share their expertise.

The next conference will be in 2019 and we hope to have more of our Indian River Master Gardener Volunteers enjoy this exciting educational and inspirational opportunity.

Bee Buzz and Pollinator Points by Violet Krochmalny

Many Homeowners are interested in having a more pollinator friendly landscape. As well as strategies to encourage and attract diversity, there are also ways to minimize threats to pollinator health. Along with loss of habitat, the most significant risk of harm is improper use of pesticides. By utilizing an integrated approach to pest management (IPM), homeowners and landowners can greatly reduce the frequency, amount and toxicity of applied pesticides.

IPM principles include using the least toxic method of pest control, choosing pest-resistant plants, and encouraging the natural enemies of pests. When the use of chemicals are necessary, reduce the risk of exposure of harmful pesticides to people, animals, and the environment by the following methods of pesticide etiquette:

- Choose natural soap & oil products or selective chemicals such as insect growth regulators
- Spot treat instead of broadcast
- Avoid systemics, which may result in contaminated pollen
- Avoid mixed products or broad spectrum insecticides
- Avoid microencapsulated, dusts and wettable powder formulations, which can stick to pollinators and be brought back to their nests, instead choose liquid or granulated formulations
- Apply late in the day when most pollinators are inactive
- Avoid windy days, which cause off target drift

Always follow the instructions on the product label, the label is the law!

More information on IPM can be found on this University of Florida’s website:
http://livinggreen.ifas.ufl.edu/landscaping/

More information on reducing risk of pesticide toxicity can be found at:
http://edis.ifas.ufl.edu/pdffiles/IN/IN102700.pdf

What’s Blooming? For Pollinators in October

north
- Bush Aster
- Goldenrod
- Mexican Clover
- Primrose Willow
- Smart Weed
- Spanish Needle
- Spotted Mint
- Vine Aster
- Wild Mustard

central
- Brazilian Pepper
- Bush Aster
- Goldenrod
- Mexican Clover
- Primrose Willow
- Smart Weed
- Spanish Needle
- Spotted Mint
- Vine Aster

south
- Brazilian Pepper
- Melaleuca
- Mexican Clover
- Primrose Willow
- Smart Weed
- Spanish Needle
- Marliberry
- White Wine
- Shrubby False Buttonweed

UF/IFAS Extension
HoneyBee Lab
@UFhoneybeelab
#UFbugs
Selecting a 4-H Swine Project by Darren Cole

Important factors to consider

Picking out your market hog for the first time can be a challenging process. Even more so if you plan on competing with it in the show ring. Here are eight simple steps to selecting a great pig for your 4-H Hog Project:

1. **What is your goals for hog project?**
   - If you are going to be raising a market hog just for fun, then you do not need to get too technical with your selection. You can simply look for a pig that is in good health and that has no obvious defects. However, if you want to compete at the fair and you want to get the best possible price for your hog’s meat, then you will have to put some extra care into selecting your market hog.
   - Before you select a hog, you may want to see if you can get information about what the judges will be considering during the judging process. These considerations are often complex and cover several categories, such as structure, health, and attitude of the hog. Sometimes this information may not be readily available and each judge can have different selection criteria. Talking with more experienced exhibitors can help you understand what some judges are looking for in the prize hog.
2. **Observe the pig.**
   It is crucial to purchase a hog that is in good health; if a hog shows any signs of illness, or if you notice that more than 10% of the producer's other hogs show signs of illness, then avoid purchasing a hog from this producer.
   - Signs of illness may include coughing, sneezing, wheezing, discharge from the nose, scratching, and/or being underweight.

3. **Consider the pig's sex.**
   You will choose between a gilt and a barrow when you purchase a market hog. A gilt is a young female hog and a barrow is a young castrated male hog. Gilts may produce leaner meat than barrows, but barrows may gain weight faster than gilts.
   - Things to consider is the time you have and your goals before you choose your hog’s sex. For example, if you have a shorter timeframe, then you may want to choose a barrow since it will likely gain weight faster than a gilt.

4. **Purebred or crossbred?**
   The offspring of two purebred pigs of the same breed is considered a purebred pig, while the offspring of two pigs from different breeds is considered a crossbred pig. Purebred pigs may have some superior traits, such as leaner body mass and good bone structure. However, crossbred pigs are sometimes healthier than their purebred parents due to heterosis, which is when the combined genetics of two breeds produce a superior offspring.
   - Common breeds of pig include the Yorkshire, Hampshire, Berkshire, Chester White, Duroc, Landrace, Poland China, and Spotted Swine.
   - Choosing a healthy pig is your main priority, but you may also want to consider a pig's genetics if you will be competing with your pig.
   - Deciding between a crossbred pig and a purebred pig depends on your project goals. For example, if you plan to use a gilt (female pig) for breeding, then you might want to select a white breed pig, such as a Chester White. White breed gilts have better mothering abilities than other breeds, so look closely at your overall project goals.

5. **Ask other IRC 4-H members where they purchased their pigs.**
   Another good strategy for purchasing a quality market hog is to buy one from a producer that other 4-H members have purchased from. Ask older members of your 4-H club where they purchased their market hogs and how successful those hogs were.

6. **Examining the pig’s build.**
   Look at the pig from behind. Checking a pig from behind can help you to determine if it has good strong legs. The legs should be straight and sturdy looking. You should also look for a 45° angle or V-shape between the pig’s legs. If the pig’s legs are wider or narrower than this, it may not make a good project animal.

7. **Watch for structural defects.**
   If you are competing with your pig, then it is important to make sure that your pig does not have any obvious defects. If the pig has any obvious defects, then do not purchase it.

8. **Check the pig’s body frame.**
   By looking at a pig from the side, you can get an idea of what its body structure is like and how quickly it is growing. Look for a pig whose legs all seem to be positioned at the same angle and that walks with its head held up. This indicates that the pig has a good body structure and that it will make a good project. Avoid pigs that walk with their heads bent low or that have legs bending at different angles. All of the pig’s legs should bend at the same angle and should be about the same length. As you check the pig from the side, pay attention to the distance between the pig’s body and the ground. The pig’s legs should all be the same length and its weight should look like it is evenly distributed. If the pig’s front legs are obviously shorter than the back legs, then avoid purchasing this pig.

Picking out a market hog for the first time for 4-H can be a challenging process, I hope that these simple steps can be useful and ensure that you purchase a healthy market hog that will make a great 4-H project.
Fruit and Alternative Crops News

Will Hops be a New Alternative Crop for Indian River County?

Agriculture has been, and always will be, an important economic factor for our county. The agriculture sector in IRC contributes 17,000 jobs and over $1.04 BILLION in revenues. So keeping this sector viable and productive is essential to the area’s economic stability. But with citrus diseases causing losses in the millions of dollars and the occasional hurricane knocking off 30-50% of the crop it is time to research the possibility of another commodity that might be able to off-set the losses mentioned above. Other fruit trees have been considered—like peaches and olives, as well as sub-tropical fruits like lychees, longans and avocados, but at this point, nothing can match the economic strengths and benefits of citrus. A growing interest in hops might be the next big idea for agriculture along the Treasure Coast. Microbreweries have become the latest hobby craze and breweries have popped up in Vero Beach over the last few years with one that opened downtown just a few weeks ago. Hop cones are an important component in beer as they counterbalance the sweetness of barley, provide a rich aroma, add subtle flavors and help preserve the beer. Although hops grow better in northern climates, they seem to grow well in Florida but do need special considerations to accommodate for different environmental factors. Researchers with the University of Florida have been looking into hop production and early results have them cautiously optimistic for further research. Ed Skvarch, the commercial horticulture agent for St. Lucie County, had a 2-year experiment in conjunction with USDA-ARS on hops in Ft. Pierce that was very promising; their first crop of hops actually went into a beer made locally at Walking Tree Brewery. The researchers just received grant funding to replant their experiment again and Mr. Skvarch hopes to have more data in the next year with regard to growing hops in our area. With the addition of the new brewery, American Icon, I am sure the market is here for any intrepid hops grower.

A Special Visitor from Brazil by Christine Kelly

Growing citrus south of the Equator!

On July 20th, Dr. Kakkar and I met with Brazilian citrus grower and agropesticide representative, Mauricio Mantovani, to discuss local citrus production and to compare the different ways that each country is handling citrus diseases, especially Huanglongbing (HLB) or citrus greening. We toured citrus production with Dr. Bob Adair at the Florida Research Center for Agricultural Sustainability located in northwest Vero Beach. It was quite a linguistic jumble; I spoke Spanish to Mauricio, he spoke in Portuguese to his sister, who translated to English for Drs. Kakkar and Adair! Our Brazilian guest also visited Dr. Ferrarezi at UF/IFAS Indian River Research and Education Center in Ft. Pierce where he was able to tour a CUPS (citrus under protected system) research plot. This is where citrus trees are grown under huge netted structures to keep out the Asian citrus psyllid that carries the greening bacterium.

BTW—we now have the 2017-18 Florida Citrus Production Guide in our office, email ckellybe@ufl.edu to pick up a copy or have it mailed to you.

Winter Weather Predictions

To be a La Niña or not to be....

Farmers watch the weather constantly—daily, weekly, monthly and even annually in order to protect their crop and to make sure that it receives adequate water via rainfall or irrigation. Fall and winter crop production is dependent upon rainfall and the ability to irrigate if necessary. Planning for winter production usually begins in late summer as weather predictions are announced for the next couple of months and into the following year. According to the Farmers’ Almanac, the southeast is supposed to be wetter and cooler than normal, which would be great, if it is true. The possibility of a La Niña forming might be changing that prediction. Although each La Niña is different, it usually results in a warmer and drier fall and winter. In early October, the Climate Prediction Center estimated a 60% chance of a La Niña forming. This could be beneficial or not, depending on what kind of farmer you are.

La Niña years are great for vegetables; tomato and green pepper yields are generally higher and the drier weather decreases the number of bacterial and fungal diseases. Temperate fruits can also benefit from the lower pest and disease pressure but warmer temperatures could influence the accumulation of overall chill hours and reducing fruit production.

Overseeding a winter pasture with a cool-season grass or legume is dependent upon rainfall if irrigation is not available. Germination and establishment failure of the overseeded crop is generally due to insufficient soil moisture, and so a La Niña event with its drier conditions would not be conducive to utilizing this technique if irrigation does not exist. Weeds might also be more of a problem during this time because winter annual broadleaf weeds can thrive under the warm and dry conditions that a La Niña brings. So keep on top of weed control or it will be out of hand before you know it.

So, will our winter this year be cooler and wetter, or warmer and drier? Only time will tell—which really is a challenge for farmers trying to plan in order to optimize the growing season.
What’s Coming Up Next?

November

1st  GIBMP Training (Fertilizer License) for Green Professionals (https://gibmp11-1-17.eventbrite.com)
1st  Core Pesticide Training (https://www.eventbrite.com/e/general-certification-standards-training-testing-for-agricultural-pesticide-applicators-tickets-38847947256)
1st  IRC 4-H Leader Training (contact Darren Cole)
8th  Limited Commercial Landscape Maintenance Pesticide License Training & Test Taking Opportunity in Martin County Extension Office (Contact Yvette Goodiel at 772-288-5654)
10th  Extension office closed for Veteran’s Day
10th-12th IRCYLH Battle and Classic on the Beach Prospect Show for Youth Exhibitors (https://ircylh.com/events)
16th  Indian River Research and Education Center 70th Anniversary Celebration Event (call 772-468-3922 for more information)
18th  4-H Record Book Leaders Meeting (contact Darren Cole)
23rd-24th Extension office closed for Thanksgiving Holiday
30th  IRC Master Gardener Volunteer meeting (contact Nickie Munroe)

December

1st-3rd  4-H Leadership Adventure Weekend (http://florida4h.org/programsandevents /law/)
2nd  IRCYLH Swine Weigh-in (https://ircylh.com/)
16th  Ethics Workshop for Youth Exhibitors (http://www.floridastatefairag.com/ethics)
22nd  Extension office closed for Christmas Holiday
25th  Extension office closed for Christmas Holiday
28th  IRC Master Gardener Volunteer meeting (contact Nickie Munroe)

January

1st  Extension office closed for New Year’s Day

Cool Apps, Interesting Websites and New Factsheets

Agriculture Producers:
Hurricane Recovery Information for Agriculture http://indian.ifas.ufl.edu/Emergency-Disasters/IRC9-17_AG1_Hurricane_Recovery_for_Agriculture.pdf

Homeowners:
Florida Gardening Calendar gives gardeners a monthly guide for care and planting of landscapes and gardens, allows for selections between North, Central and South Florida http://solutionsforyourlife.ufl.edu/lawn_and_garden/calendar/
Florida-Friendly Landscaping APP Helps You Create Your Own Butterfly Garden https://ffl.ifas.ufl.edu/butterflies
After the Storm Landscape Tips http://indian.ifas.ufl.edu/Emergency-Disasters/IRC9-17EH1_After_the_Storm_Landscaping_Tips.pdf

Green Industry Professionals:
Florida Fertilizer Ordinances https://ffl.ifas.ufl.edu/fertilizer#
Indian River County Extension Agents and Staff

“Who Ya Gonna Call?”

The Indian River County Extension agents are here for you! Extension agents are your direct link to science-based research straight from the University of Florida. For more information on Extension, or topics ranging from chickens to chinch bugs, send them an email or give them a call. Walk-ins welcome as well!

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Garima Kakkar
Fruit and Alternative Crops Agent
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Vero Beach Office
M-F 9:00am-1:00-4:00pm
(772) 226-4324
Ircmg1@gmail.com
North County Library
Wednesdays 10:00am-12n

Directions to IRC Extension

From U.S. 1 (coming from the north)
Heading on U.S. 1 south, turn right (west) at the light at 26th Street, follow to 19th Ave. and turn right (north) at entrance of IRC Administration complex. Turn right (East) at stop sign in parking area and continue through the roundabout. Building B is on the left just past the roundabout.

From U.S. 1 (coming from the south)
Heading on U.S. 1 north, turn left (west) at the light at 26th Street. Follow to 19th Ave. and turn right (north) at entrance of IRC Administration complex, continue with first instructions to Bldg. B.

From Interstate 95
Take Exit #147 onto Route 60 eastbound (20th Street) to Vero Beach. In approximately 6 miles turn left (north) at the light at 27th Ave. Turn right (east) at the next stop sign at Aviation Blvd., follow to 19th Ave. and turn left (north) at the entrance of IRC Administration complex, continue with first instructions to Bldg. B.

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