Cooler Weather Means Plants Need Less Water

Help your plants overwinter and avoid pests and diseases

“Spring forward and fall behind” is how I remember which way to set my clocks for Daylight Savings Time. And although I don’t need any extra help with “falling behind”, I do enjoy the extra hour, and it might be the one day throughout the year where I don’t feel rushed, in a hurry or that I have forgotten something. The great thing about this time of year, besides the fact that hurricane season is finally over, is that it brings in some cooler temperatures that I think we all are ready for after a very hot and humid summer. Not that these days stay around for long, but at least there is a freshness in the air and it almost seems like fall with red maples dropping their leaves and the distant whiff of smoke from burn piles or the occasional fire log. I could almost go for a cup of hot cocoa.

With cooler temperatures, it is important to realize that our sub-tropical lawn grasses are slowing their growth down and getting ready for winter. Even with mild winters, these grasses have a dormancy period where they are just maintaining themselves and not actively taking up water and nutrients. Considering this now is the time to help our plants by slowly limiting the amount of water they receive and not fertilizing until late spring. Many people still water their plants too much even in the fall and winter, which not only wastes water but also increases the chances of pests & diseases. Start by increasing the duration between irrigation events by a day or two every couple of weeks until your plants are being watered only once every 7-10 days during January and February. Take this time to do any maintenance on your irrigation system and check to make sure that your rain shut-off gauge is working appropriately. This will help prevent wasting water when it is raining and conserving it for when we need it the most. For more information about Florida-friendly landscaping and fall maintenance practices go to http://fyn.ifas.ufl.edu/. I think I will go put on a sweater and rake some leaves—or maybe not, it’s not that cool yet!

Christine

What Will Winter Look Like for Indian River County?

A warmer winter has been predicted for the Treasure Coast

According to the Farmer’s Almanac, our winter will be milder and drier than normal. This is great news for anyone wanting to have a fall-winter garden this year. The coldest temperatures will be early to mid-December and then early to mid-February. November is predicted to be 3-6°F warmer than normal with precipitation below average. NOAA (National Oceanic and Atmospheric Administration) recently released their predictions and they seem to agree with the almanac. It seems that we might be in store for an El Nino winter with pretty mild temperatures except for parts of December and February.

There might be some negative effects as well with an El Nino year that can bring severe weather such as increased tornadoes for Central and South Florida. Even with the prediction of lower rainfall, an El Nino effect on storms could increase the possibility of some flooding. The good thing about El Nino is that it has been linked to reductions in hurricane activity so that might be something to look forward to.

As we all know, weather in Florida can be very unpredictable and so it is better to be prepared by listening to weather reports and plan accordingly. Even if the days are cooler, Florida sunshine is still very intense and you should always use sunscreen, wear a hat and drink plenty of water.
**Agriculture News**

**Grow Something New In Your Garden This Year**

A fun and versatile plant to grow in your garden is the luffa gourd, which can be eaten and turned into a sponge! One fun thing about luffa is just the number of different ways you can spell it! Luffa, loofah, lufa, loofa—take your pick. The luffa (*Luffa* spp) is a member of the cucumber family and grows as a vine up to about 30’. Two species are grown in Florida, the angled luffa (*L. acutangula*) and the smooth-fruited luffa (*L. cylindrica*). Young and immature luffa gourds (4-8”) can be eaten raw like a cucumber or cooked and prepared like a pumpkin, squash or zucchini. Flower buds and flowers can be mixed in with salads or other dishes. Once the loofa get a little larger, they are very fibrous and bitter. Luffas need to be fully mature to be turned into a sponge and it is recommended that they be left on the vine until the skin turns to a tan or brown.

Loofah have a long growing season, 90-120 plus days depending upon the variety, and should be planted once the last danger of frost has passed. Seeds should be soaked overnight and need to be planted 3’ apart and in rows 6’ apart, in a well-drained location that receives full sun. Adding compost or aged manure to the soil will help plants grow and no additional fertilization is necessary. Loofas are vigorous climbers and need lots of room to grow so using a trellis is a good idea to keep them a little contained. Each plant will have between 7-10 loofa fruit that must be kept off the ground to avoid rots and fungal diseases.

Once matured, loofas can be peeled, de-seeded, cleaned and dried. Seeds can be kept for the following season or given away to friends and family. Luffa sponges are not only great bath scrubbers but can be used to clean dishes, pots & pans and many household surfaces. The extension office is currently giving away loofa plant seeds so if you would like to try this in your garden just contact us before spring and we will send you some for you to try in your own garden.

**Fall Pasture Management Helps Overwintering** by Christine Kelly-B.

*Availability of nutritive forages are important for animal health throughout the year*

Most of the acreage of improved pastures in Florida is bahiagrass and it is a warm-season grass. When day and nighttime temperature begins to drop (<65°F), warm-season grasses slow down growth and eventually stop, becoming dormant for a period of time during the winter. They can even brown and die back if the temperature reaches frost or freezing degrees. At this point, there is little to no nutritive value in the grass for any type of grazing situation. Since this situation can exist in our area from anywhere from a few weeks to 3 months, alternative forages can be planted in order for the animals to keep grazing. Annual ryegrass is usually the most common cool-season grass that is overseeded in south Florida with adequate rainfall or irrigation. It can make a very nice forage substitute during the winter months and helps take the pressure off the warm-season forage. The advantages for overseeding are a longer grazing season, higher stocking rate, improved land utilization and improved response to fertilization. Although it is predicted to be a warmer, drier winter, overseeding with a cool-season grass or legume might be a beneficial tool for your pasture management if you have access to irrigation to supplement low rainfall. Due to drought and the recent hurricanes, hay inventories are expected to be reduced this year and good quality hay might be in short supply come December and January. Hay that will be available is expected to cost more due to higher-than-normal demand. Since cattle need at least 2.5% of their body weight in dry matter per day, planning for winter supplementation is more important than ever.

For more information about winter pasture management go to “Overseeding Warm-Season Perennial Grasses with Cool-Season Forages” at [http://edis.ifas.ufl.edu/pdffiles/AG/AG17800.pdf](http://edis.ifas.ufl.edu/pdffiles/AG/AG17800.pdf) and to “2018 Cool-Season Forage Variety Recommendations for Florida” at [https://edis.ifas.ufl.edu/pdffiles/AA/AA26600.pdf](https://edis.ifas.ufl.edu/pdffiles/AA/AA26600.pdf). To get the most out of your pasture management plan, do not forget to have your soils tested every couple of years and it definitely should be done if you plan on overseeding an existing pasture. The extension office will test your soil pH free of charge; more detailed analysis can be obtained via the UF IFAS Extension Soil Testing Laboratory [http://soilslab.ifas.ufl.edu/ESTL%20Home.asp](http://soilslab.ifas.ufl.edu/ESTL%20Home.asp).

**Office Hours in Fellsmere for Agriculture Agent**

Agriculture Extension Agent, Christine Kelly-Begazo, holds office hours in Fellsmere on the third Thursday of each month from 4:00pm-6:00pm. She sees 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. Clients are 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 ckkellybe@ufl.edu.
‘CUPS’ Protects Citrus From Greening, Storms by Brad Buck, UF/IFAS Gainesville

A system designed to protect citrus trees from the deadly greening disease withstood the ravaging winds of Hurricane Irma last year. With reinforcements installed after the storm, they will likely withstand storms that are even more dangerous. Using Citrus Under Protective Screening, or “CUPS,” growers can keep the Asian citrus psyllid away from their trees, said Arnold Schumann, a professor of soil and water sciences at the UF Institute of Food and Agricultural Sciences. If an infected psyllid — a bug the size of a pin — bites citrus leaves, it infects trees with a bacterium that sickens them with greening, also known as Huanglongbing, or HLB.

During the four years of the CUPS experiment, UF/IFAS researchers have seen no psyllids or greening on the citrus grown in the screened-in environment, said Schumann, a faculty member at the UF/IFAS Citrus Research and Education Center (CREC) in Lake Alfred, Florida. When they built the indoor citrus growing system, UF/IFAS researchers – knowing they faced the potential of tropical storm-force winds — had anchors installed on the poles that keep the screens in place, Schumann said. Those worked fairly well during Irma, but there was room for improvement, he said.

“After Irma, we found widespread but not catastrophic damage, mainly due to high winds over a long time,” Schumann said. “The trees inside the CUPS were mostly unaffected, with almost no fruit drop occurring and no canopy damage. A few trees growing in pots were leaning over or fell over due to the wind.” “Many of the construction methods used for our CUPS had not been storm-tested before,” Schumann said. “This direct hit by a hurricane was a thorough performance test that exposed weaknesses and failures, which we could learn from and improve in future CUPS construction projects.” As a result, UF/IFAS researchers installed turnbuckles, which are threaded, swiveling devices that can be easily adjusted for tightening the cables.

Irma wreaked havoc on Florida’s citrus industry, knocking 50 to 90 percent of the state’s fruit to the ground in some areas, and causing an estimated $760 million in damage, according to the Florida Department of Agriculture and Consumer Services. Two central Florida commercial citrus producers are growing 80 acres of citrus using the CUPS system, following recommendations from UF/IFAS researchers. Another 120 acres of CUPS citrus production are under construction for planting in 2018, Schumann said. Those systems did not go unscathed, but suffered less tree and fruit damage than farmers growing their citrus outdoors, Schumann said.

UF/IFAS researchers work with the growers who adopt CUPS by sharing knowledge and experiences. “Some are using longer and wider ground anchors, deeper concrete anchors, more and stronger cables and redesigned sloping walls to reduce direct wind impacts,” he said. In addition to helping protect against storms and greening, UF/IFAS researchers are trying to make CUPS affordable to growers. The structure and mesh account for most of the $1 per square foot cost of the CUPS system at CREC, said Ariel Singerman, a UF/IFAS assistant professor of food and resource economics at the center. Using preliminary data available from the CUPS program, UF/IFAS researchers made projections for the remaining years of the investment and found that a price of $24.15 per box of fruit results in a grower breaking even. UF/IFAS researchers are working with growers to reduce the cost of screen house structures from $1 to 50 cents or less per square foot, Schumann said.

“We consider CUPS as medium-term solution for growing fresh fruit in HLB-endemic regions like Florida, where currently no other viable solutions exist,” Schumann said. Many factors play a large role in the effectiveness of CUPS, said Schumann. Those include optimizing fertigation – when growers inject fertilizers and other water-soluble products into an irrigation system. CUPS’ success also hinges on improved planting density to produce high, early yields and choosing varieties with the best consumer preference — for example, those that are seedless, easy peeling, and with the legendary “fresh from Florida” taste. “Meanwhile our research strives to optimize those factors affecting profitability that we can control,” Schumann said.
Cooler temperatures have arrived and it is time to install your fall garden. The usual vegetable crops like tomatoes, onions, cucumbers, and peppers will do well in our warmer Florida fall. Here are a few other suggestions for crops that should do well this time of year.

Cabbage is a great cool weather crop; install transplants September through December. Spacing should be 12-24 inches apart, and give your cabbage 90-110 days before harvesting. UF/IFAS recommended varieties include Rio Verde, Flat Dutch, Round Dutch, Red Acre, and Wakefield types.

Another winter crop you may like is carrots. These should be planted directly into the ground and they perform much better if they are planted in raised beds. Sow seeds shallow (1/2” deep) from October thru March and thin the seedlings to 1-3” apart as they start growing to avoid overcrowding. Carrots take 65-80 days until they are ready for harvest. Recommended varieties include Imperator, Nantes, Danvers, and Chantenay.

For a quicker harvest, plant radish seeded directly in the ground between September and March and they will be ready in 20 to 30 days. Planting radish between the carrots will utilize your garden space more efficiently. Radish can be harvested in about a month, which is just the time when the carrots will need more room. Recommended varieties include Cherry Belle, White Icicle, Sparkler, Champion, and Daikon.

Fall and winter are also the best times for green leafy vegetables. Lettuces of all kinds can be planted from September through March. Kale is also very popular now due to its nutritional benefits and can be grown here during the cooler season. Sow seeds very shallow, as they need light for germination and thin plants to 12-18”. Lettuce can also be interplanted with long season vegetables. Cooler months give the best heads of lettuce and mild flavored kale. Recommended varieties include:

- **Lettuce:**
  - Crisphead- Great Lakes
  - Butterhead- Ermosa, Bibb, Tom Thumb, and Buttercrunch
  - Loose-Leaf Simpson types- Salad Bowl, Red Sails, New Red Fire
  - Oak Leaf- Salab Bowl, Royal Oak
  - Romaine- Parris Island Cos and Outredgeous

- **Kale:** Vates, Dwarf Blue Curled, Tuscan, Winterbor, and Redbor

The list of cool-seasoned vegetables that can be grown in our area is very extensive but no matter what you choose to plant in your garden just make sure that your family will enjoy eating them. For more information about what to plant seasonally in your lawn or garden, see the Florida Gardening Calendar at [http://sfyl.ifas.ufl.edu/lawn-and-garden/florida-gardening-calendar/](http://sfyl.ifas.ufl.edu/lawn-and-garden/florida-gardening-calendar/).

If you would rather talk to a fellow gardener in person, trained Master Gardener volunteers can be contacted in many different ways—see the insert on the following page for days, times and locations. Another great resource is the Florida Vegetable Gardening Guide that can be located at [http://edis.ifas.ufl.edu/pdffiles/VH/VH02100.pdf](http://edis.ifas.ufl.edu/pdffiles/VH/VH02100.pdf).
What to do After the Fertilizer Ban is Lifted by Christine Kelly-B. & Josh Kutyna

As most of us know by now, Indian River County has enacted a landscaping fertilizer ban, which runs from June 1st - September 30th. With the ban being lifted for the next 8 months those of us that have lawns requiring fertilizer can now do so legally. Before dragging out those fertilizer bags there are some important guidelines to follow. Just because you can fertilize your lawn, it does not necessarily mean that you should. Each lawn is different and special care and attention needs to be taken in-order to create and maintain a healthy turf. There are several fertilization rules that remain in effect regardless of whether there is a ban or not, and abiding by them contributes greatly to the preservation and purity of our local water resources. For example, many people are not aware that you cannot apply fertilizer when a flood/ tropical storm/ hurricane watch or warning is in effect for ANY part of the county. Nor can you apply when rainfall is expected to exceed two inches within a 24-hour period. For a full run-down on the fertilizer ban in our area and its’ additional requirements and special exemptions, follow this link: http://ircstormwater.com/fertilizer.htm. Once you are caught up with our local ordinance, follow the simple guidelines below to get started:

**Do’s:**
- To determine what fertilization program is needed for your lawn, you should first start with a soil test. It is important to know the pH of your soil and what nutrients are already available to the plants. Consult the county extension office for help if unsure how to proceed with this step.
- Apply fertilizer ONLY on turfgrass that is actively growing, not when a lawn is dormant. In some parts of the state, turf growth is dormant for many months during the fall and winter when nighttime temperatures are consistently below 60°F. Fertilizer applied when grass is not growing wastes your time and money since it will not be beneficially used by the grass. Instead, it can leach through the soil or run off and possible pollute nearby water bodies. In our area, lawns generally should not be fertilized after October or before April.
- Purchase a fertilizer containing nutrients that are slow-release in nature. They have less potential to wind up in our waterways and lawns are less like to promote erratic growth surges when using them.
• Ready to apply? It is very important to understand the label on the fertilizer bag, the % of each nutrient contained in that bag and the form that it comes in. The three numbers on the front of a bag of fertilizer represent the percentage of Nitrogen-Phosphorus-Potassium (N-P-K) that is contained within that bag. A bag that reads 12-0-4 would contain 12% Nitrogen, 0% Phosphorus and 4% Potassium.

• Your fertilizer must contain at least 30% slow-release nitrogen, and you can apply up to 1 lb of nitrogen per 1,000 sq. ft. per application.

• Follow this link: https://ffl.ifas.ufl.edu/handbook/Fertilize_Appropriately.pdf and consult Table 1 to determine the nitrogen needs for your species of turfgrass. Next, use Table 2 for calculating the total amount of fertilizer you need to apply based on the slow-release nitrogen content of your bag.

Don’ts:

• Be careful not to spill fertilizer. DO NOT hose away spilled fertilizer, take a little extra time to sweep up the granules to avoid them going down a storm drain.

• Use a drop spreader as opposed to a rotary one. Drop spreaders distribute particles where you want them, while rotary spreaders could toss the fertilizer into undesired places.

• Avoid the use of 2-in-1 herbicide-fertilizers, such as ‘weed and feed’ products. Tree and shrub roots can extend into your lawns grass roots, and the herbicides can harm them leading to a quicker decline.

Above all else, preventing pollution is the most important part of applying any fertilizer to a property. Just the right amount can sustain a healthy lawn and allow for a denser root system that can filter impurities from leachate or runoff. On the other hand, too much fertilizer can stimulate uncontrolled growth that can be detrimental to the turf during the winter. Not to mention that the unutilized fertilizer can potentially seep past the root zone and into our groundwater or be taken up by stormwater runoff during a rain event. The best way to avoid pollution? To put it simply, be cautious. Know what your lawn needs and how to apply the proper amount while adhering to the rules associated with fertilizer applications. A little preemptive planning can go a long way for the health of our landscapes and our water. For more information and any questions, please contact your local county extension office. Every UF/IFAS Extension office contains a Florida Lawn Handbook, available to view for anyone that needs additional information.

Additional Resources:
St. Augustine grass for Florida Lawns https://edis.ifas.ufl.edu/pdffiles/LH/LH01000.pdf

Five Great Plants for Snowbirds by Nickie Munroe

The most common complaint received from our seasonal residents is that all the plants they purchase in the fall for the season never make it to the next year. Replacing plants is time consuming and costly. Here are a few plants that will make it through the spring/summer if they are established properly during the fall/winter season. Establishing a plant means getting it settled into its new environment where it can continue to thrive. Most Florida-Friendly selections will also add the bonus of being relatively low maintenance after establishment.

❖ Cordyline or Hawaiian Ti plant provide lovely color in shade/part-shade conditions.

❖ Pentas are lovely flowering perennial that flourishes in full sun conditions.

❖ Plumbago is a lovely mounding shrub that will give the most amazing pale blue flowers all year.

❖ Wild coffee is a lovely green shrub that does best in part-shade conditions.

❖ Firebush is a gorgeous shrub that will delight everyone with bright orange-red flowers throughout most of the year.

Be sure to monitor the health of your plant. Water it every day for the first week. Then reduce frequency according to the starting size. Your new plant should be sending out new roots within the first month. After the second or third month, check for progress by gently prodding the plant to find out if it has spread roots into the surrounding soil. Your plant is on the way to establishment. For more information on any of the plants mentioned in this segment, you can download The Florida Friendly Landscaping Guide to Plant Selection & Landscape Design at https://ffl.ifas.ufl.edu/pdf/FYN_Plant_Selection_Guide_2015.pdf. You can also visit the Indian River County Extension Office and talk with one of our trained Master Gardener volunteers. They will be happy to assist you with your plant selection and landscaping questions.
Homeowners interested in having a more pollinator-friendly landscape can optimize the chance of their yard successfully attracting new and returning pollinators. Diversity in planting, bloom succession, appropriate habitats and understanding how pollinators search for food and other resources are some of the strategies utilized by effective gardeners. Studies show (mostly with bees and hummingbirds) that insects and birds rely on visual cues to search out new resources and return to those already discovered. First, the shortest route between multiple plants is determined and then the foraging path is retraced in set routines. This “visual memory” can be disrupted if plants are relocated or removed. Studies show that this memorized route not only improves efficiency for busy bees and other pollinators, but also increases chances of cross-pollination for greater genetic diversity in crops and native vegetation.

Designing your garden for catching the eye of and then keeping pollinators in the area can be as easy as planting color blocks of the same plant to first attract and then having a succession of blooming periods to ensure consistent nectar and pollen. Bloom succession can be plotted out using the charts found in ENH 68 *Gardening with Perennials in Florida*: [http://edis.ifas.ufl.edu/mg035](http://edis.ifas.ufl.edu/mg035). Along with food sources, providing nesting sites, nesting materials and water sources results in a well-rounded habitat. Many native bees nest in the ground or in soft wood/stem cavities. They utilizes pollen and nectar for food, but many also need nesting sites and materials. Butterflies may briefly visit a yard that has a supply of nectar sources, but many also need nesting sites and materials. Butterflies may briefly visit a yard that has a supply of nectar sources, but many also need nesting sites and materials. 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Butterfly-attracting Florida pusley can be an irritating weed for homeowners but just think of the benefits for pollinators in the fall and winter!
Are You Interested in an IRC 4-H STEAM Club?

Do you or your children always ask “why?” A STEAM club might be for you.

That is what science is all about -- looking around at our universe and asking “why?”, then using tests or experiments and finding the information needed to answer those questions. Nurturing your natural curiosity isn’t just great fun, it is one of the best things you can do for your mind. In using science to search for answers to your questions, you are preparing yourself for an exciting future. IRC 4-H would like to engage youth in science, technology, engineering and math, what we know as (STEAM). This has traditionally meant a solid focus on agricultural science, electricity, mechanics, entrepreneurship, arts, and natural sciences. Today, 4-H has grown to include rocketry, robotics, bio-fuels, renewable energy, computer science, environmental sciences, and more. 4-H Science, Engineering and Technology provides hands-on learning experiences to encourage learning about the world around you in partnership with adults that care about your learning and are crazy about STEAM.

Our lives are completely immersed in science and technology. Cell phones, MP3 players, computers, cameras, digital video, internet, social networking, and the list goes on and on. Understanding how science, engineering, and technology impact our lives, solve problems and create new ones makes it easier to navigate our modern world. STEAM skills can make you a better consumer of science and technology and maybe you will become the next scientist or engineer whose work will make a big difference in people’s lives. In school, science classes need to cover a broad range of topics in a limited amount of time. 4-H STEAM allows more time to dig deeper into what interests you. You can spend as much time as you want and choose what you want to work on based upon your own interests, questions, and skills. Get expert support by working with adults who have made science and engineering their life's work.

4-H STEAM allows you to work on your questions, design your own tests, create your own models, build your understanding, and share your work with others. That's what science and engineering are, all about -- trying to understand the natural universe and develop solutions to the problems faced in our world today. Science is inquiry that uses a specific approaches and skills. However, all learning is an inquiry process so working with science helps develop your learning muscles.

For more information, contact Darren Cole at dc32@ufl.edu or (772) 226-4330.

4-H Members (and Leaders) in Action!

Back-to-School Day at LaPorte Farms

District Events with St. Lucie & Martin Counties

2018 Leader training
Creating a Unified 4-H Club by Darren Cole

All children need to feel a sense of belonging in 4-H Clubs

A simplified definition of a Unified Club is “a group that sticks together tightly or is united”. As a club leader, it is your role to create a safe and inclusive environment. A cohesive club comes together when everyone feels they can share their ideas openly, contribute toward common goals, and truly belong to the club as a contributing and valued member.

Club members need time to get to know each other and build from year to year. Ideas and activities to enhance club growth are:

- ‘Who Am I’ poster – Place name in middle of paper. For each category, use a different color. Category suggestions are Roles/Relationships (daughter/son), Strength Finders Strengths, Items Important to Me, Hobbies, States Visited, and Schools Attended.
- ‘You Belong’ game – Ask players to form groups as quickly as possible as different categories are called. Examples: group of people where at least one person has a red sock, same color of shoe, who shares your birth month.
- ‘Role Call’ activity – When a member’s name is called have them respond to specific questions--such as “since we last met... what has been the most exciting thing that has happened, what are you most thankful for, what is the biggest challenge you have overcome?”
- ‘Pearls of Culture’ – have youth think about what makes them unique, their family, culture, community, and world.

As an adult working with youth, it is important to be aware of the signs of bullying. A youth may not reach out to you until asked about the situation. Bullying is unwanted, aggressive behavior that involves a real or perceived power of imbalance. Actions could include making threats, spreading rumors, attacking someone physically or verbally, or excluding someone from a group on purpose. Bullying may occur in person or through web-based activities such as with Facebook, Instagram, Twitter, texting, etc. Warning signs a child may be bullied are unexplainable injuries, lost or destroyed items, frequent headaches, feeling sick, changes in eating habits, difficulty sleeping, declining grades, loss of interest in schoolwork, sudden loss of friends or avoidance of social situations, feelings of helplessness or decreased self-esteem.

It is also important to recognize signs of a child bullying others. Indicators are: get into physical or verbal fights, are increasingly aggressive, have unexplained extra money or new belongings, blame others for their problems, do not want to accept responsibilities for their actions, are overly competitive and worry about their reputation or popularity. These signs can indicate a problem and should be addressed with parents as soon as possible. 4-H teaches about tolerance, inclusivity and acceptance. Creating and maintaining a unified club will help children feel loved and accepted and bring out the best in everyone!

Cloverbud University by Darren Cole

Cloverbud members are the future of our clubs!

Cloverbud University is a new program in Indian River County that includes children who are five to seven years of age. The premise will be a once a month, 2-hour session that will provide a variety of educational and recreational experiences in a non-competitive environment. Indian River county extension professionals have been working to update curricula and other resources to offer to our Cloverbuds. Content will include, but is not limited to, the following areas of interest:

- Animal science (chickens, rabbits, lambs, farm animals)
- Communications and expressive arts (theater and textures)
- Environmental education (insects, weather, just outside the door)
- Family consumer science (space for me, create your corner, family celebrations around the world)
- Leadership and citizenship (counting coins)
- Plant science (watch it grow, flowers)
- Science and technology (bicycle, aerospace, color, bubbles, and robotics).

In you are interested in learning more about this program, or volunteering for it, contact Darren Cole for more information.
Hemp - Possible New Crop for Florida by Vanessa Campoverde, Miami-Dade Extension

Did you know that University of Florida /IFAS researchers (scientists) are working on a new crop for the Florida industry: it is called the Industrial Hemp Research Pilot Project! I found this information when I attended one of three educational workshops held around the state (Homestead, Apopka & Citra) by UF/IFAS faculty. I would like to share with you some of the facts I learned.

What is Industrial Hemp?

Industrial Hemp, also known as Cannabis sativa (scientific name) is a potential new crop in Florida than contains less than 0.3% of THC (the psychoactive chemical that at higher levels defines marijuana) per dry weight.

Is this Marijuana? No, Industrial hemp is not marijuana. They differ in the THC content and you can’t get high on hemp.

What are Some Applications of Industrial Hemp? Industrial Hemp can be used in many industry sectors:

- Technology and/or Production (grown for forage, fiber, and grain)
- Market and/or Processing (textiles, seed, plant extracts)

What is this New Research Pilot Program About?

The UF/IFAS Industrial Hemp Pilot Project objective is to evaluate hemp varieties, their management and its invasive risk for Florida over at least a 2-year period. Hemp Varieties: There are 31 certified varieties identified and this team will study aspects such as: germination, flowering height, biomass, yield, diseases among other topics. In addition, researchers will test planting date trials with the best cultivars. Hemp Management: Evaluation of field production, spacing and fertilizer trials. Invasive Risk: Evaluation in greenhouse (light, water, soil response) and field trials. Control measures to minimize escape and modeling invasive risk across Florida. So far, there are three (3) production sites, 7-10 acres at each site.

Are Industry Opportunities Available?

This pilot project is committed to developing broad collaboration, partnership and sponsorship with growers, industry and other universities. Questions? Contact the Project Coordinator of the UF/IFAS Industrial Hemp Research Team: Dr. Zack Brym: brymz@ufl.edu or 786.217.9238. For more information visit https://programs.ifas.ufl.edu/hemp/.
What is Coming Up Next?

November
12th Veteran’s Day- Extension Office closed
13th “Watering, Pest Management and Fertilizer” Master Gardeners’ Growing Series at the Sebastian Library
15th Agriculture Agent, Christine Kelly-Begazo, holding office hours in Fellsmere 4:00-6:00pm
17th Record Book Meeting for 4-H Leaders 9:00 – 11:00 am County Building B Room 501-B
22nd Thanksgiving- Extension Office closed
23rd Extension Office closed
27th “Lawn Management and Container Gardens” Master Gardeners’ Growing Series at the Sebastian Library
30th Grange Loan Applications Due for 4-H projects

December
5th Core pesticide training and test taking opportunity (Contact Christine Kelly-ckellybe@ufl.edu)
8th 4-H Record Book & Buyers Letters Meeting 9:00 – 11:00 am ( RSVP @ dc32@ufl.edu)
11th “Introduction to FFL and Right Plant, Right Place” Master Gardeners’ Growing Series at the Sebastian Library
14th “Lawn Management and Container Gardens” Master Gardeners’ Growing Series at the Brackett Library
15th Youth Fair Exhibitor Ethics Class
20th Agriculture Agent, Christine Kelly-Begazo, holding office hours in Fellsmere (4:00-6:00pm)
24th Christmas Eve- Extension Office closed
25th Christmas Day- Extension Office closed

* Master Gardeners’ Growing Series at the Brackett Library are from 12n-2:00pm and from 2:00-4:00pm at the Sebastian Library (North County). For more information about the Master Gardeners’ Growing Series email ircmg1@gmail.com or call the Master Gardener help desk at (772) 226-4324.

Cool Apps, Interesting Websites and New Factsheets

Agriculture Producers:
Agroclimate.org Florida’s farm families can develop strategies for producing food in advance of volatile weather patterns with tools provided by the Southeast Climate Consortium.
LandLeaseExchange.com is a new website that was developed for customers that are looking for land for recreational and farming purposes but without the long-term purchasing commitment. There is an area to list a property as well as for searching and it covers the entire U.S.

Homeowners:
Want to know what that bug splat on your windshield is? There is an app for that developed by a UF IFAS professor, Dr. Mark Hostetler and his son Jamm Hostetler. That Gunk on Your Car app is available in the iTunes store.
The Neighborhood Gardener is a monthly e-newsletter from the UF/IFAS Master Gardener and Florida-Friendly Landscaping programs http://gardenisolutions.ifas.ufl.edu/mastergardener/newsletter/
Florida Gardening Calendar gives gardeners a monthly guide for care and planting of landscapes and gardens, between North, Central and South Florida http://solutionsforyourlife.ufl.edu/lawn_and_garden/calendar/
Is Your Industry Professional Certified? Find out by going to http://aessearch.freshfromflorida.com/PersonSearch.asp and putting in their last and first name and you will be able to see what license they carry.

Green Industry Professionals:
Florida Fertilizer Ordinances https://ffl.ifas.ufl.edu/fertilizer# Florida-Friendly Landscaping Plant Guide https://ffl.ifas.ufl.edu/plants
Green Industries Best Management Practices (fertilizer license) https://gibmp.ifas.ufl.edu/
Pesticide Licensing http://sfyl.ifas.ufl.edu/hillsborough/professional-horticulture/licensing
Pesticide Applicator Licenses Information from FDACS: https://www.freshfromflorida.com/content/download/32304/790377/Pesticide_Certification_FAQs.pdf
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!

**Christine Kelly-Begazo**
County Extension Director
Agriculture Agent
Phone: (772) 226-4330 x 3
ckellybe@ufl.edu

**Darren Cole**
4-H/Youth Development Agent
Phone: (772) 226-4330 x 2
Dc32@ufl.edu

**Nicole “Nickie” Munroe**
Environmental Horticulture Agent
Master Gardener Coordinator
Phone: (772) 226-4330 x 4
lnmunroe@ufl.edu

**Amir Rezazadeh**
St. Lucie & Indian River County
Fruit & Field Crops Agent
Phone: (772) 462-1660

**Violet Krochmalny**
Office Manager
Phone: (772) 226-4330 x 5
violetk@ufl.edu

**Help Desk & Plant Clinic**
Vero Beach Office
M-F 9:00am-4:00pm
(772) 226-4324
 ircmg1@gmail.com
North County Library
Wednesdays 10:00am-12n

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**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 Atlantic 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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