

Citrus from the Ridge to the Valley

CENTRAL FLORIDA CITRUS EXTENSION

December 2022



The year is coming to a close and we wanted to wish you and your families Happy Holidays and a Happy New Year. No doubt this year has been challenging and we are thankful to be part of this industry and work along side you.

Next Wednesday the 14th at the UF/IFAS CREC in Lake Alfred we have the Polk OJ Break/CUPS Field Day along with the New Varieties Fruit Display and Tasting. Information on both these events can be found inside the newsletter.

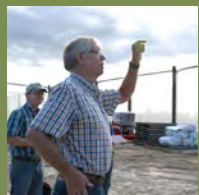
In this issue we have also included some important about:

- Freeze information
- Flower Bud Advisory
- CRAFT application deadline extension
- USDA Census of Agriculture
- and more!



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December 2022 OJ Break Field Day

UF | IFAS Extension
UNIVERSITY of FLORIDA

December 14, 2022
10:00 am to 12:00 pm



UF/IFAS Citrus Research & Education Center
BHG Citrus Hall
700 Experiment Station Rd
Lake Alfred, FL

- 10:00 am** Check-in, BHG Citrus Hall
- 10:05 am** Welcome and instructions
- 10:10 am** Citrus Under Protective Screen (CUPS) Update
- 10:35 am** Individual plant cover (IPC) as a tool for managing citrus pests
- 11:00 am** Leave for field tour
- 11:10 am** CUPS Field Trial - CREC
 - Observation of growth, yields and performance of CUPS grown trees
- 11:35 am** IPC Field Trial - CREC
 - Observation and discussion on the growth, durability and management of other citrus pests
- 12:00 pm** Lunch will be provided by Bo Griffin and The Tree Defender

Presentations by:

Dr. Arnold Schumann and Dr. Lauren Diepenbrock, UF/IFAS CREC

**Pre-registration is required by Friday December 9, 2022
using Eventbrite:**

<https://december2022citrusfieldday.eventbrite.com>

Or Contact Joy Spencer to register 863-519-1041

**CEUs will be available for Restricted Use Pesticide licenses in
Private, Ag Tree, Ag Row Crop, Demo & Research
CEUs have been requested for Certified Crop Advisors**

Citrus Fruit Displays and Tastings

BY AJIA PAOLILLO

Come out and taste varieties showcased by UF/IFAS, the USDA, and the New Varieties and Development Foundation. Researchers are interested in your opinion of how these new varieties taste and appear. As we know consumer acceptance and preference drive sales. The information you provide during these events is valuable in making decisions about releasing new varieties.



November 14, 2022, 1:00PM - 3:00 PM
UF/IFAS CREC CREC, Lake Alfred

January 17, 2023, 10:00 AM
UF/IFAS CREC CREC, Lake Alfred



CRAFT Cycle 4 - Deadline Extended! Still time to Submit Applications

BY AJIA PAOLILLO

Many growers participate in the Citrus Research and Field Trial program, otherwise known as CRAFT. This program was started in 2019 and is a collaborative effort with growers to plant new trees and implement various production and cultural practices in the field trials. Growers can still submit their applications online at www.craftfdn.org for Cycle 4. Due to impacts from Hurricane Ian and Nicole, the deadline has been extended. **The deadline for applying is 5:00pm on December 31, 2022.** Projects selected for Cycle 4 funding must be planted between October 1, 2022, and June 30, 2024. Please see the website www.craftfdn.org for the full list of rules and eligibility requirements.

The various project topics of interest for Cycle 4 include:

- Rootstock and scion combinations - Early and Mid-Season, OLL varieties, and new scions
- Biostimulants - Evaluate impact of PGRs and hormones on fruit drop
- Pest Management - Management of other pest including Diaprepes and snails
- Resets - Evaluate additional co-factors on mature trees within reset blocks
- Plant and soil nutrition - Practices to enhance plant and soil nutrition



****Hurricane Ian Damage**** If you have an existing project in Cycles 1, 2, or 3 and you sustained damage from Hurricane Ian, please report that damage to Tamara Wood, Program Manager as soon as possible. She stated at the Florida Citrus Mutual meeting, on October 12, 2022 that they will look into how to address lost trees due to the hurricane and will provide that information to growers once they receive it.

If you have additional questions regarding the program please contact Tamara Wood, Program Manager at tamara@craftfdn.org or Tina Buice, Assistant Program Manager at tina@craftfdn.org .

2022-23 Winter Weather Outlook

BY CHRIS OSWALT

The latest NOAA 2022 winter weather outlook for temperature and rainfall has us looking at an increased probability of likely above-normal temperatures (fig 1). The rainfall outlook (fig 2) has us looking at an equal chance of below normal rainfall. The El Niño Southern Oscillation (ENSO) forecast is for La Niña conditions (around 76% chance) for the winter of 2022-23 (December-February). There is a 57% chance that La Niña will transition into ENSO neutral conditions in February to April 2023.

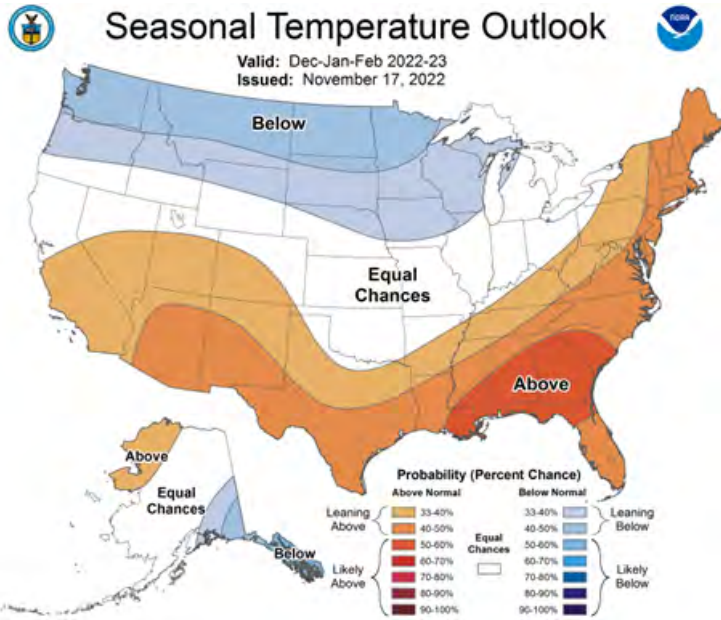


Figure 1. Winter 2022-23 temperature outlook

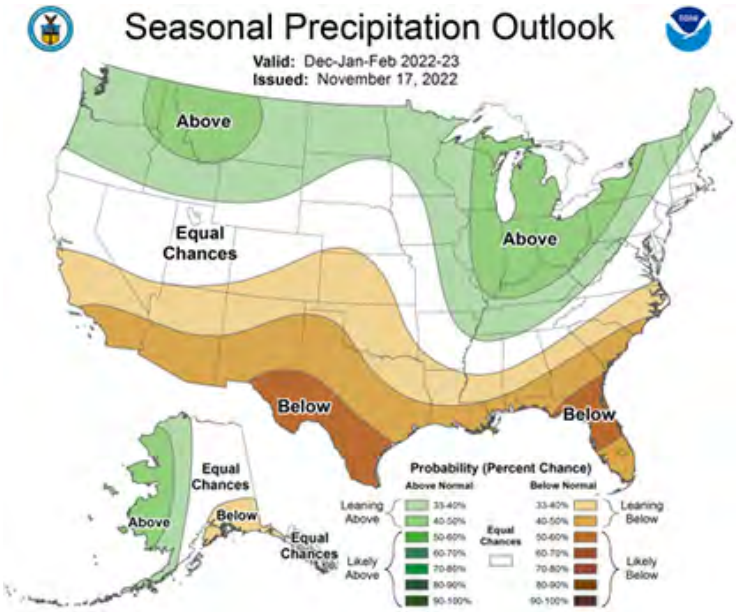


Figure 2. Winter 2022-23 precipitation outlook

U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period

Valid for December 1, 2022 - February 28, 2023
Released November 30, 2022

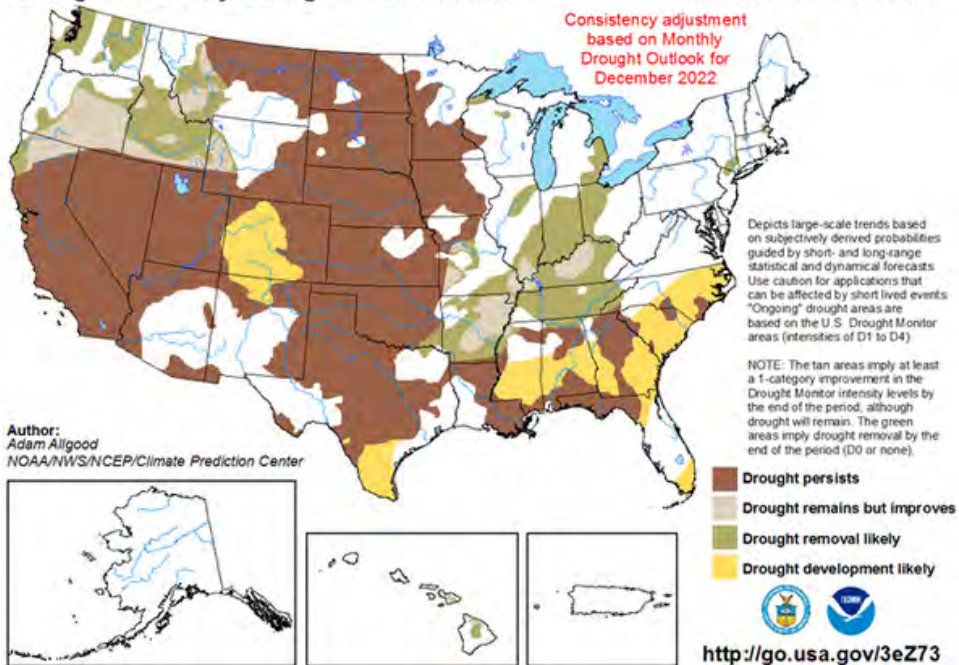


Figure 3. Winter 2022-23 drought outlook

Citrus Leaf Freezing Data

BY CHRIS OSWALT

This year, we are determining the acclimation of Florida citrus trees to cold weather by determining the citrus leaf freezing temperature. Certain environmental conditions will initiate this acclimation process. These environmental cues will cause physiological changes to occur within the plant that will depress the temperature at which plant damage will occur. Major environmental factors in Florida citrus are air temperature and water.

At 55 degrees F, citrus plant growth slows; as temperatures remain below 55 degrees F, citrus trees will continue to acquire acclimation (plant cold hardiness) to these cooler temperatures. This process is reversible during warm winter periods, and a loss of acclimation can occur. This loss of acclimation (de-acclimation) can happen rather quickly under field conditions compared to the process of acclimation. The greatest amount of citrus acclimation occurs during a consistently cool fall and winter. Once de-acclimation occurs, citrus trees will generally not re-acclimate to the same level before the onset of de-acclimation.



Irrigation and fall/winter rainfall can have a pronounced effect on citrus acclimation. However, visibly drought-stressed trees are more susceptible to freeze damage and HLB induced fruit drop. The key here would be to provide adequate water to the tree with irrigation and manage that irrigation to not cause growth during the winter (i.e., over-irrigating).

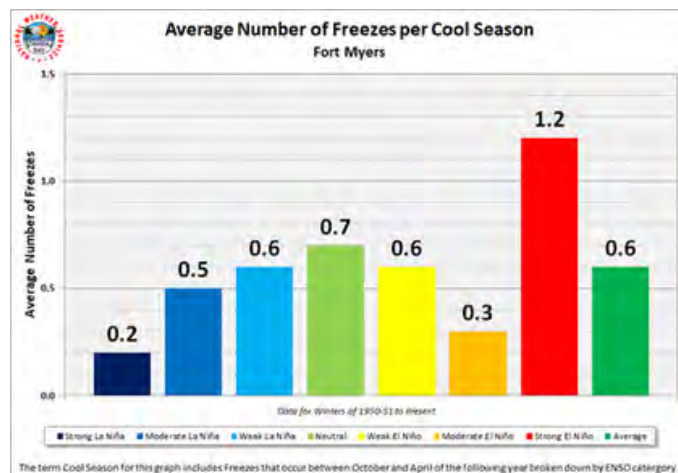
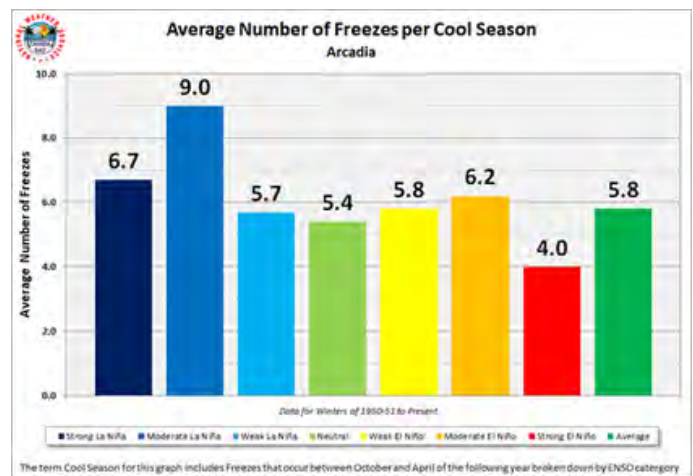
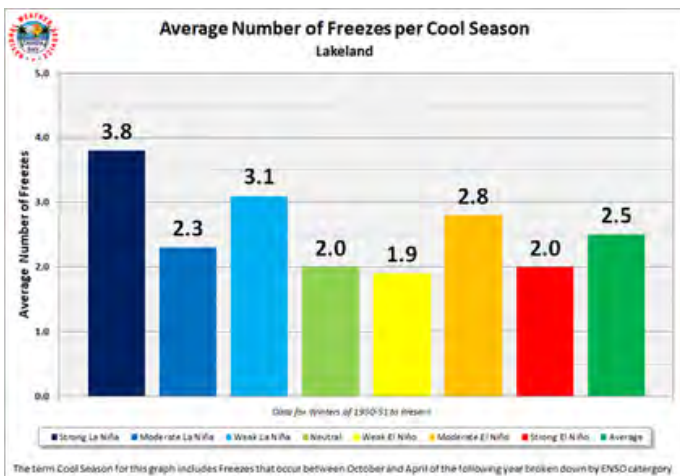
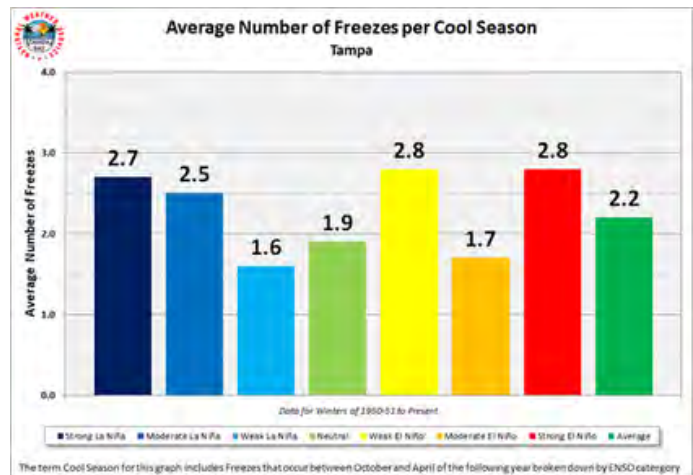
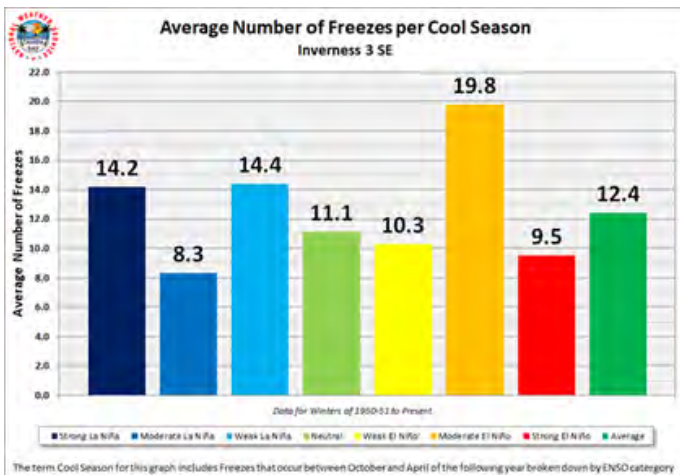
Cold hardiness in citrus is highly dependent on the vigor of the rootstock/scion combination, crop load, the susceptibility of plant tissue, tree water status, nutrition, and other cultural practices that affect tree vigor. These represent a combination of factors and interactions that are difficult to identify and quantify. Over the years, several methods to measure citrus cold hardiness have been developed. These techniques included freezing detached leaves, direct measurement of leaf cellular solute concentrations, and leaf cellular leakage.

This year we are posting the results of our citrus leaf freezing determinations on the Florida Automated Weather Network (FAWN) at the following: https://fawn.ifas.ufl.edu/tools/coldp/crit_temp_select_guide_citrus.php. This year we have again tested new rootstock and variety combinations to provide a better insight to growers in the acclimation process for these combinations. We have been running determinations on Hamlin on Swingle and Valencia on US 942, Valencia on Kuharske along with Sugar Belle on US 942.

Average Freezes Based on El Niño Conditions

BY CHRIS OSWALT

The graphs on this page come from the National Weather Service office in Tampa, Florida. These depict the number of freezes on average since 1950, based upon the El Niño status of the winter. Information presented previously indicates this winter is forecasted to be a La Niña winter. This is based on a -1.0 degrees C below average sea surface temperature in the El Niño 3.4 region. This translates to a value between weak and moderate La Niña. On the following graphs on this page, you notice that the number of freezes during a weak and moderate La Niña winter varies quite a bit based on location within the state. In north-central Florida, at Inverness, the average number of freezes for weak La Niña conditions is just over 14. In Ft. Myers that number is only 0.6, quite a variation. Historically, our most significant freezes have occurred in neutral - El Niño conditions, but it only takes one significant freeze event to cause substantial citrus crop or tree damage.





Flower Bud Induction Advisories Now Available

BY AJIA PAOLILLO

The 2022-2023 Flower Bud Induction Advisories have begun. This advisory report by Dr. Tripti Vashisth of the UF/IFAS Citrus Research and Education Center provides growers with information used to predict the timing of flowering for the season. This information is based on the Citrus Flowering Monitor (figure 1), which is a model that uses area FAWN stations, cultivar type, tree age, soil type, and the current date to give predictions of when flowering is expected to occur and how many bloom events to expect. The model shows the flower bud induction levels from October through April (figure 2) based on the information provided by the grower. Trees begin to accumulate induction hours at temperatures below 68 degrees F. Induction hours are accumulated as we get hours of cooler weather. During the late fall and early winter bud differentiation occurs, which means the citrus buds will sprout as either flowers or vegetative growth. Warm spells that occur intermittently during times in which we typically encounter cold weather, can induce bud initiation resulting in multiple bloom events. Therefore, it is important for growers throughout the fall and winter to track how many induction hours the trees have accumulated and monitor weather forecasts for potential warm periods. In the advisories, Dr. Vashisth provides a summary of current conditions and what this could mean for flowering events along with considerations for managing flowering in HLB infected trees. The advisories can be found at <https://crec.ifas.ufl.edu/research/citrus-production/flower-bud-induction/>. You can also run the Flowering Monitor using your specific information and the model can be found at <http://disc.ifas.ufl.edu/bloom/model.jsp>. The information provided by these two resources can be used by growers in making decisions about spray timing for psyllid control before flowering flush and management of Post-Bloom Fruit Drop to reduce inoculum, especially during prolonged bloom periods and wet weather.

Citrus Flowering Monitor

Weather station

Cultivar

Expected Yield

Tree age

Soil type

Date (mm/dd/yyyy)

Figure 1. Example of Citrus Flowering Model with site, fruit, and date specific information



Figure 2. Example of accumulated induction hours based on site, fruit, and date specific information

2022 Census of Agriculture

BY AJIA PAOLILLO

The USDA states that "The Census of Agriculture is a complete count of U.S. farms and ranches and the people who operate them. Even small plots of land - whether rural or urban - growing fruit, vegetables or some food animals count if \$1,000 or more of such products were raised and sold, or normally would have been sold, during the Census year. The Census of Agriculture, taken only once every five years, looks at land use and ownership, operator characteristics, production practices, income and expenditures. For America's farmers and ranchers, the Census of Agriculture is their voice, their future, and their opportunity."

The census is currently open for producers to submit their data, now through February 6, 2023 by visiting their website <https://portal.agcounts.usda.gov/portal/s/>. You should have received a survey code in the mail that you will need to enter to log into your specific survey that looks like the example below:



2022 CENSUS OF AGRICULTURE

THE AG CENSUS COUNTS

BECAUSE IT INFORMS DECISIONS ABOUT PROGRAMS THAT HELP FARMERS LIKE ME

RESPOND NOW
nass.usda.gov/AgCensus

YOUR VOICE. YOUR FUTURE. YOUR OPPORTUNITY.

USDA AGRICULTURE COUNTS

#AgCensus

Images Credit: USDA

Census of Agriculture Facts

- Taken every five years, it's a complete count of U.S. farms, ranches, and the people who operate them.
- The only source of uniform, comprehensive and impartial agriculture data for every county and state in the nation.
- A farm is defined as any place from which \$1,000 or more of agricultural products were produced and sold, or normally would have been sold, during the census year.

Why Respond?

- Combined responses show the value and importance of U.S. agriculture.
- Census data inform decisions about policy, farm and conservation programs, infrastructure and rural development, research, education, beginning farmer programs, and more.
- Response is required by federal law. The same law requires USDA to keep all personal information confidential.
- The Census of Agriculture is your opportunity to have a voice in the future of U.S. agriculture.

What's new in 2022?

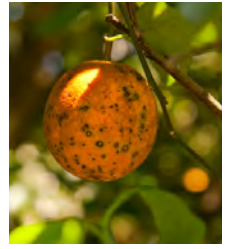
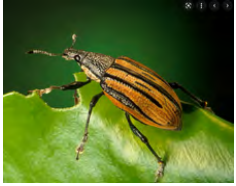
Partner Tools. Help spread the word about the upcoming census by using the Partner Tools on NASS' census webpage nass.usda.gov/AgCensus. Tools include the brochure (in several languages), videos, web banners and ads, flyers, presentations, FAQs, and more.

Online Response. Completing the census online is more convenient than ever. Launched in 2022, the new Respondent Portal is where producers can complete their surveys, track upcoming surveys, access data visualizations and reports of interest, link to other USDA agencies, and more. Online reporting is fast and secure; time-saving features include pre-filled information from previously completed NASS surveys, drop menus, automatic calculations and the skipping of questions that do not apply to your operation. Respond online through the portal at agcounts.usda.gov.

Revisions and Additions. Changes for 2022 include new questions about the use of precision agriculture, hemp production, hair sheep, and updates to internet access questions.

Image Credit: USDA, Talking Points Pocket Card

CITRUS PEST MANAGEMENT COURSE OFFERED IN SPRING



Citrus Pest Management, (PMA 5205, section 011C) will be offered for the Spring 2023 term at the University of Florida/IFAS Citrus Research and Education Center (CREC) in Lake Alfred and via distance education at the Department of Entomology and Nematology in Gainesville (section 0109). Additional distance education sites and sections will be established at UF-IFAS Research and Education Centers on request.

Citrus Pest Management is a graduate-level course (3.0 units) for students and citrus industry personnel working in the area of pest management. The course reviews the latest tactics and strategies available to manage diseases and arthropod, nematode and weed pests of citrus. Emphasis is given to techniques by which pest and disease organisms are monitored and how this information is used to effectively manage pests with the least risk to the environment.

The course is taught by experts in each area and is coordinated by Dr. Larry Duncan, University of Florida/IFAS, Professor of Nematology.

University credit (3.0) or audit credit. CEU's will be offered.

Course topics include:

- Identification and biology of citrus pests & diseases
- Pest and disease monitoring
- Ecological and economic principles as a basis for pest management
- Economic thresholds and management models
- Integrated pest management in citrus
- **AND - Citrus IPM in the era of citrus greening**

Dates/Time: Wednesdays Jan. 11 – May 3
3 - 6 p.m. (8-10 period).

Locations: UF/IFAS Citrus Research and Education Center
Ben Hill Griffin, Jr. Citrus Hall Teaching Laboratory
700 Experiment Station Road, Lake Alfred, Florida.

UF/IFAS Department of Entomology and Nematology
Bldg 970, Room 127, Natural Area Drive
Gainesville, Florida.

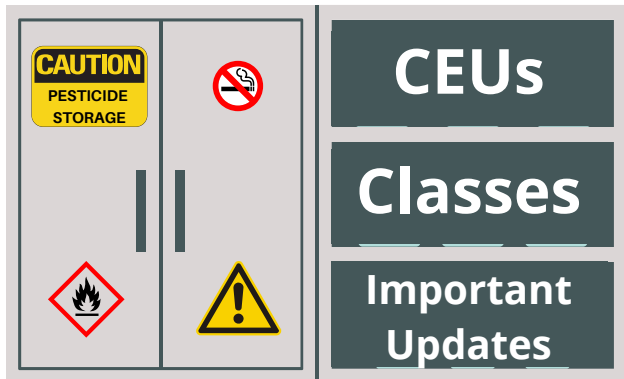
Additional sites will be established at UF-IFAS Research and Education Centers on request.

Textbook: None. Required readings will be provided by instructors.

Registration: Regular and non-degree registration is until 5:00 PM on Jan. 6 and students are strongly encouraged to register early. Regular students must complete the registration procedures outline at one.ufl.edu. The section number for students at the CREC, Lake Alfred site is 011C. Gainesville students will register for section ALAC, and other students must be registered by the Department of Entomology and Nematology. Non-degree students must complete a non-degree application for this course, <https://admissions.ufl.edu/apply/non-degree>. Elena Alyanaya ealyanaya@ufl.edu 352-273-3912, or Cam Jacques cjacques1@ufl.edu (352) 273-3913 will register you for the course.

Cost: \$503.44 per credit, and this is a three-credit course. State tuition waivers are accepted.

For additional information about the class contact Dr. Larry Duncan (863-956-8822; lwduncan@ufl.edu).



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- Ag Tree Crop - 8
- Aquatic - 16
- Orn & Turf - 12

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in addition to the required
CEUs in your category

- Natural Areas - 16
- Right of Way - 8
- Ag Row Crop - 8
- Demo & Res. - 4

CEU Reminder!

4 Core CEU's are always available online through
Citrus Industry magazine <https://citrusindustry.net/ceu>

Read the articles and take the quizzes
also

Most of our events, both in-person and online also offer CEUs

Have you visited the UF/IFAS Pesticide Information Office website?

<https://pested.ifas.ufl.edu/applicators/>

Here you can access:

- Online CEU modules
- Exam preparation
- Licensing information
- Label and SDS information
- Pesticide disposal resources
- Worker Protection Standard training

Scholarship and Job Opportunities



Do you know a future Ag leader?

\$1,500 scholarships available now through
January 12, 2023

Bayer Fund is excited to once again partner with National FFA to offer the opportunity to receive a \$1,500 Grow Ag Leaders scholarship, which could help them pursue more than 250 kinds of careers in ag. High school seniors through college juniors pursuing any ag-related field of study at a trade school, community college, or four-year college or university can apply now through **January 12, 2023**.

Program Details:

- Visit www.fund.bayer.us for more information and official rules
- Apply online at FFA.org/scholarships
- Applications accepted through January 12, 2023
- Receive endorsements from two farmers by January 19, 2023
- More than 350 scholarships are awarded to students across the country
- Winners announced in May 2023

Don't miss this opportunity to help an ag student you know pursue a higher learning!
Your support is critical to help grow our next generation of ag leaders!



POLK COUNTY FARM BUREAU

OPEN POSITION: PROGRAM COORDINATOR - FULL TIME

The Program Coordinator is responsible for the accounting, program of work coordination, membership services support, and administrative responsibilities as assigned by the Executive Director. This position also assists the board of directors and its committees as needed and works with Polk Farm Bureau Insurance agents and staff to support organization efficiency. Reports to the PCFB Executive Director and Board of Directors.

Interested applicants should send a cover letter and resume to carolem@pcfb.org.

Compensation: Beginning base salary of \$40,000 to \$45,000 depending on experience and skill levels.

Qualifications:

- Associates Degree and/or satisfactory equal experience.
- Proficient in QuickBooks and knowledge of general accounting.
- Proficient in Microsoft Word, Excel, and PowerPoint.
- Able to learn new software systems and apply same to performance of duties.
- Must be a self-starter, have good organizational skills and be able to multi-task.
- Excellent written and oral communications skills.
- Able to perform light to moderate lifting.
- Some evenings and weekends will be required for special events and meetings.
- A background check will be performed. Must have dependable transportation and good driving record.

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