



# UF/IFAS EXTENSION

## Bradford County

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**JUNE 2023**

### **Dear Bradford County Extension Clientele,**

Welcome to Summer! I am currently the Interim County Extension Director for UF/IFAS Bradford County Extension. I am not new to UF/IFAS Bradford County Extension, as I served as interim director here in 2019-2020. I currently serve as the UF/IFAS Alachua County Director and Livestock Agent and have served in that role for 22 years. Coming from a sixth-generation Florida agricultural family, my roots run deep in Florida Agriculture as well as Extension. My grandfather was a "County Agent" in the 1940's in Florida. Having grown up in 4-H I am a strong believer in Florida Extension, and our mission of bringing research-based information from the Land Grant college (University of Florida) out to our citizens.

You are fortunate to have 2 great extension agents in Bradford County. Luke Harlow serves as the Horticulture & Small Farms agent and Lizzie Whitehead as the Livestock & Natural Resource agent. Both are conducting great educational programs and answering questions. Please contact them.

Lizzie, Luke, and I are looking forward to conducting a Bradford County 4-H Discovery Day Camp, July 25 & 26. See more information in this newsletter or call the Bradford County Extension Office for more information.

I look forward to working with the citizens of Bradford County for the next several months. Please feel free to contact me Sanders1@ufl.edu.

Cynthia B. Sanders, Ph.D.  
UF/IFAS Interim Extension Bradford County

**"To teach all of those things that are necessary for fuller and richer family living on the farm, in the home, and in the community – that is Extension."**

*Anonymous*

Cindy Sanders, Ph.D.  
UF/IFAS Extension  
Bradford County  
Interim Extension Director  
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<https://sfyl.ifas.ufl.edu/bradford/>

# Pasture Management: Importance of Soil Sampling

Lizzie Whitehead  
ANR & Livestock Agent  
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We can't manage what we can't measure. With an accurate soil test, a strategy can be made to solve even the most difficult of problems in our pastures. When was the last time that you took an accurate soil sample in your fields? You typically need to test your soil at least once a year in late spring or early summer to help recognize what your Bahia grass or Bermuda grass needs. Different types and kinds of grasses have different nutrient requirements. Below I am going to share with you how to properly take a soil sample:

## Soil Sampling Step by Step

1. Get a bucket or an arrow-head shovel (or use a soil probe)- roughly divide the property into sample areas (Z form, randomization, etc.)

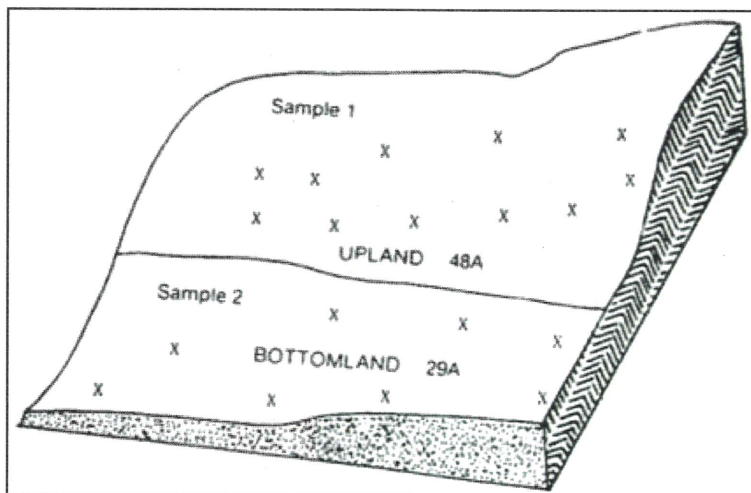


Figure 1: Take your sub-samples in different areas in your pasture. This is a great example of randomization in a pasture.



2. Your sample area should be pretty uniform, no major rise in elevation or ponds. Sample these different areas as their own sample.

3. Within the same sample area, you need to collect roughly 15-20 “cores” of soil by digging the shovel into the ground and pulling up a handful of the soil profile. (4-6 inches below the surface.)

4. Repeat this and put the 15-20 cores into the same bucket.

5. Mix the 15-20 cores together to get a rough estimate of all the soil in your sample area.

6. Put about a cup worth of soil from the bucket into a paper bag.

7. Label paper bag with your name, date, type of grass, and name of place or field you got it from.

8. Repeat the process if you are sending more than one sample (if your property is not uniform and you decide two or more separate samples is better than one.)

9. Bring your sample to the Bradford County Extension Office and a check made out to the University of Florida (\$10 per sample.)

10. You also want to fill out this form when you bring in the sample:

Bermuda Varieties: <https://edis.ifas.ufl.edu/pdffiles/SS/SS18600.pdf>

Bahia Varieties: <https://edis.ifas.ufl.edu/pdffiles/SS/SS59700.pdf>



Figure 2: Typical soil probe and a bucket that you can use to collect the “Core” samples.

If you have any questions, please do not hesitate to contact me. You should receive an email with your soil sample results from the UF Soils Lab within 7-14 business days. Once you receive your results, you can contact me to see what fertilizer application your soil needs.

**DON'T GUESS,  
SOIL TEST**



# Crop Corner

Luke Harlow  
Horticulture and Small Farms Agent  
harlow1231@ufl.edu



## What's eating my tomato plants?!

The tobacco hornworm, *Manduca sexta* (L.), is a common pest of tobacco, tomato, pepper, eggplant, and other plants. The larval stage (the actual worm) of this species resides on the host plant during the day and can cause significant defoliation of economically important crops.

The tobacco hornworm is often confused with the tomato hornworm, *Manduca quinquemaculata*, a related species that also feeds on the same plants. The best way for identifying which species you have is by comparing the markings on the body of larvae and on the abdomen of the adults. Tomato hornworm has V-shaped yellow-white markings on the body and the tobacco hornworm has white diagonal lines. The horn on both worms posterior differs as well with the horn of the tomato hornworm colored black, whereas the horn of the tobacco hornworm is reddish in color.

Left photo: Tobacco hornworm

Photo Credit: Lyle Buss, University of Florida



Right photo: Tomato hornworm

Photo Credit: Paul Choate, University of Florida



Both worms are voracious feeders and consume the leaves of solanaceous plants, often stripping entire leaves to the midrib, defoliating the plants. In smaller operations or in the home garden, hand picking and destroying the hornworms are effective in reducing the population. Regular scouting and looking for signs of feeding damage will be needed. The worms tend to blend in with the foliage and careful monitoring of defoliation or the presence of frass (insect droppings) may help in identifying hornworm presence. *Bacillus thuringiensis* (Bt), a biological insecticide, is a widely available organic option for control of caterpillars. Caterpillars must ingest the Bt for it to be effective. Learn some more at: <https://edis.ifas.ufl.edu/publication/IN1187>

## The blooming truth

### What's that white flower blooming on the roadsides?

What you might be seeing is *Sambucus nigra* other known as Elderberry, a fast growing deciduous shrub that grows well in sunny moisture areas. While we typically see this shrub on the roadways and in native areas, it can also be cultivated and used within the home landscape. The berries form in clusters of yellowish-white blooms which are followed by clusters of small, dark purple berries. They are an edible source for birds and other wildlife, but can also be used in pies, jellies, or fermented to make a wine. Learn a little more at: <https://edis.ifas.ufl.edu/publication/ST578>







## Summer Fun with 4-H

by Tamara Dinkins, 4-H Volunteer  
Dr. Cindy Sanders, Interim CED  
UF/IFAS Bradford County Extension

With summer break here, children are home and ready for a vacation from school. However, it might not be long before the excitement of being free from homework wears off and you hear the words, "I'm bored!" If that happens to you, we have an activity that will not only cure the boredom for a bit, but help your kids keep their brains active and learning.

"Learn by doing" is the 4-H motto and a great way for youth to have fun and learn at the same time. This process can be summarized with the words "Do, Reflect, Apply". By actively experiencing the world around them using hands-on activities under adult guidance, youth connect personally in a way that they remember. Next, through talking about what they did and answering questions, young people develop logic and verbal skills deepening their understanding of what they learned. Finally, adults can help them apply what they have done to other circumstances and situations.

An activity you can try with your kids that is perfect for summer is "Ice Cream in a Bag". The items you will need are things you probably already have at home: ice, salt, milk, sugar, vanilla (optional), zipper bags (gallon and quart size), and a kitchen towel. To make "Ice Cream in a Bag", pour a cup of milk into a sealable quart sized plastic bag. Add a tablespoon of sugar and a teaspoon of vanilla. (Alternatively, you can use flavored milk). Make sure the bag is properly sealed. Next, half fill a gallon size sealable bag with ice and add a good amount of salt. Put the milk bag into the ice bag and shake, keeping the milk in contact with the ice as much as possible. The ice in the bag will get VERY cold, so put a towel around the bag to protect your hands. Check the milk after 5 minutes. It should be a similar consistency to ice cream, if not keep shaking a little longer. Remove the small bag from the large bag and wipe off the condensation and any salt that may have accumulated on the bag. Open the bag, grab a spoon, and enjoy!

What is happening here? Water freezes at 32°F. Adding salt lowers the freezing point by a few degrees which means when it is added to the ice in the outer bag, the ice (which is at 32°F) is above its freezing point and will begin to melt. Melting needs energy which in this case comes from the milk and sugar mixture in the inner bag. Heat is absorbed from the milk mixture causing it to freeze and the ice to melt. This is why the ice will feel VERY cold. Ask your kids if they have ever heard of people in cold climates putting salt on the roads to melt the ice in the winter. We don't have this problem in Florida, but thinking about this expands their knowledge of the world around them. Another fun thing to do to take this new knowledge further is to work alongside your children to do an internet search for other experiments they can try with salt and ice.

Try this project with your kids this summer. It's a perfect hot weather activity to do outside and not only will your children learn some science principles, but you will get to help them eat the delicious results!

### UPCOMING DATES

**Thursday, June 15th** - Record Books, Performance Awards Applications, and Scholarship Applications Due

**Tuesday, June 27th @ 7pm** - 4-H Volunteer Meeting

**July 25th & 26th** - Discover 4-H Summer Day Camp

### THINGS TO KNOW

All 4-H clubs need a minimum of two approved and screened volunteers.

### 4-H PLEDGE

I pledge my **HEAD** to clearer thinking,  
my **HEART** to greater loyalty,  
my **HANDS** to larger service,  
and my **HEALTH** to better living,  
for my club, my community,  
my country, and my world.







# BRADFORD COUNTY DISCOVER 4-H

## SUMMER DAY CAMP

**JULY 25 & 26 8:30AM - 3:00 PM**

**Address**

2266 N. Temple Avenue  
Starke, Florida

**Contact Us**

904-966-6224  
bradford@ifas.ufl.edu

**Register  
now @**

**v2.4honline.com**



**SCAN ME**

**Ages and Cost:**

**Ages: 7-12  
\$20 + Eventbrite Fees**

**Activities**

**Animals, Plants,  
Sewing, Cooking, Art**



An Equal Opportunity Institution, UF/IFAS Extension, University of Florida, Institute of Food and Agricultural Sciences, Andra Johnson, Dean. Single copies of UF/IFAS Extension publications (excluding 4-H and youth publications) are available free to Florida residents from county UF/IFAS Extension offices.





**Entrepreneurship/  
Shark Tank  
Day Camp**

**June 27-29, 2023  
Union County Extension Office**

**Age 11 and up  
\$50**

**Only 7 spots left. RSVP today!**

Day 1 – Explore entrepreneur activities. Make soaps, jewelry, business cards, shirts, etc.  
Day 2 – Visit local businesses in Bradford and Union  
Day 3 - Create business plan and present “Shark Tank” style



Call Lizzie Whitehead @ (904) 966-6224 to register  
Sponsored by Bradford and Union County 4-H Programs







# BRADFORD-UNION COUNTY CATTLEMAN'S MEETING

**Attention all Bradford and Union County Cattleman!  
June 13th at 6:00 PM**

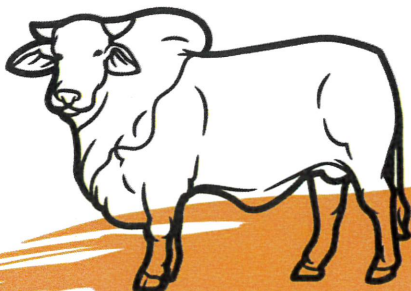
**Where: Union County Extension Office  
15120 SW 84th St, Lake Butler, FL 32054**



**Guest speaker:  
Haley Hayes, NRCS Grazing Specialist**

**Dinner will be served! Please RSVP to the Bradford County  
Extension Office at 904-966-6224 or email  
[liz.whitehead@ufl.edu](mailto:liz.whitehead@ufl.edu) by **June 9th!****

**We will discuss the Florida Cattleman's Convention,  
membership, field days, and more!**



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UNIVERSITY of FLORIDA