Brazos County Office

# Brazos County Agriculture News and Events

By Chadd Caperton
Brazos County Extension Agent- Ag and Natural Resources

**Spring Edition - 2025**

Greetings from the Texas A&M AgriLife Extension office!

Luke 9:62. NIV Jesus replied, "No one who puts a hand to the plow and looks back is fit for service in the kingdom of God."

"Leadership is unlocking people's potential to become better."
- Bill Bradley

## In this Edition

- **Weed of the Week – Buttercup**
- **Extension Entomologist Tackles Fire Ants Across the Globe**
- **Managing Forages with High Fertilizer Costs**
- **Bee Swarms- It's that time of year.**

## Upcoming Events

- **O.D. Butler Forage Field Day May 16th, 2025**
  - **NEW LOCATION!!!**

## See the detailed flyers below!

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https://brazos.agrilife.org/

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SAVE THE DATE
O.D. BUTLER
FORAGE FIELD DAY
MAY 16, 2025
THOMAS RANCH
10365 SUMMER LANE, ANDERSON, TX
RSVP LINK COMING SOON
FOR QUESTIONS CALL
979-823-0219
CEUs
VENDORS
EQUIPMENT
DEMOS
RANCH
TOUR
NEW
LOCATION
THOMAS RANCH-
TEXAS A&M AGRILIFE
RESEARCH
TEXAS A&M AGRILIFE RESEARCH
Thomas Ranch
Cattle Pens
THE MEMBERS OF TEXAS A&M AGRILIFE WILL PROVIDE EQUAL OPPORTUNITIES IN PROGRAMS AND ACTIVITIES, EDUCATION, AND EMPLOYMENT TO ALL PERSONS REGARDLESS OF RACE, COLOR, SEX, RELIGION, NATIONAL ORIGIN, AGE, DISABILITY, GENETIC INFORMATION, VETERAN STATUS, SEXUAL ORIENTATION, GENDER IDENTITY, OR ANY OTHER CLASSIFICATION PROTECTED BY FEDERAL, STATE, OR LOCAL LAW AND WILL STRIVE TO ACHIEVE FULL AND EQUAL EMPLOYMENT OPPORTUNITY THROUGHOUT TEXAS A&M AGRILIFE.
TEXAS A&M AGRILIFE EXTENSION

# Weed of the Week: Buttercup

***Posted on** November 15, 2024 **by** vanessa.corriher*

**Buttercup (*Ranunculus* species):** One of the many yellow flowering weeds that we fight in pastures and hay meadows. Buttercup is a winter annual that thrives in weak or thin pastures. There are several species of this winter annual. They differ mainly in leaf shape and growth, but all produce characteristic bright yellow blossoms. March to early April is the best time to kill buttercup. The goal is to spray buttercup before bloom.

*Buttercup Seedling*

*Buttercup growing in a ryegrass pasture in East Texas.*

Fertilizing and liming to soil test recommendations and efficient utilization of pastures or hay fields are the primary ways to decrease weed pressure.

**Select Herbicide Options:**

Weedmaster

2, 4-D Amine

GrazonNext HL

Grazon P+D

Duracor

Chaparral (for bermudagrass pastures, will destroy bahiagrass)

Pastora (for bermudagrass pastures, will destroy bahiagrass)

**REMEMBER: THE LABEL IS THE LAW!** Always read the pesticide label before using.

# AgriLife Extension entomologist crosses globe to help tackle fire ant problem

## International expert provides Australians with Texas-based eradication solutions

March 5, 2025 - by Paul Schattenberg

While Australia and Texas are on opposite sides of the globe, they share a few things in common, including a common pest – fire ants. They also share the benefits of expertise from a Texas A&M AgriLife Extension Service entomologist who wants to help get rid of them.

Robert Puckett, Ph.D., AgriLife Extension entomologist and associate professor in the Texas A&M College of Agriculture and Life Sciences Department of Entomology, answered a call to help the Aussies in their national effort to fight this unrelenting invader.

“Our department has been a leader in managing the red imported fire ant and other invasive ants that have caused considerable damage to Texans and their property,” said Phillip Kaufman, Ph.D., head of the Department of Entomology. “Our goal has always been to develop effective methods to eliminate these invasive species. Dr. Puckett is an integral part of these efforts and is known and respected internationally as an expert on fire ants.”

In addition to Puckett’s fire ant education and eradication efforts in Australia, he has been called upon by South Korea and Japan to share his expertise and experience.

Texas A&M AgriLife Extension Service entomologist Robert Puckett, Ph.D., holds a container of red imported fire ants. He traveled to Australia to provide expertise for the continent's fire ant eradication program. (Michael Miller/Texas A&M AgriLife)

## Puckett's fire ant education efforts in Australia

As a fire ant expert, Puckett was asked to testify via Zoom before an Australian Senate Inquiry related to ongoing efforts to eradicate fire ants from the Australian state of Queensland. After his testimony, he was invited on behalf of the Australian Environmental Pest Managers Association and the Invasive Species Council of Australia to visit Australia and spend two and a half weeks crisscrossing eastern Australia to share his knowledge of the pesky insect.

"The trip I took to Australia was longer and more extensive because the efforts focused on Australia's renewed efforts to completely eradicate fire ants," he said. "These are being concentrated on a large area of eastern Queensland and some of northern New South Wales."

Puckett kicked off his continental tour with the main plenary presentation "Red imported fire ants: An International Invader," at the 2024 Pesticon in Gold Coast.

He met with several state and federal members of the Australian Parliament as well as pest managers, insecticide manufacturers, conservation and biosecurity experts, landowners and agriculture industry representatives. He traveled to Sydney, Melbourne, Brisbane, Canberra, northern New South Wales and Toowoomba. Puckett also gave public presentations on fire ant biology and control.

Texas A&M AgriLife Extension Service entomologist Robert Puckett, Ph.D., toured infested sites with landowners and members of Australia's national Fire Ant Eradication Program to share insights on eradicating fire ants from the continent. (Robert Puckett/Texas A&M AgriLife)

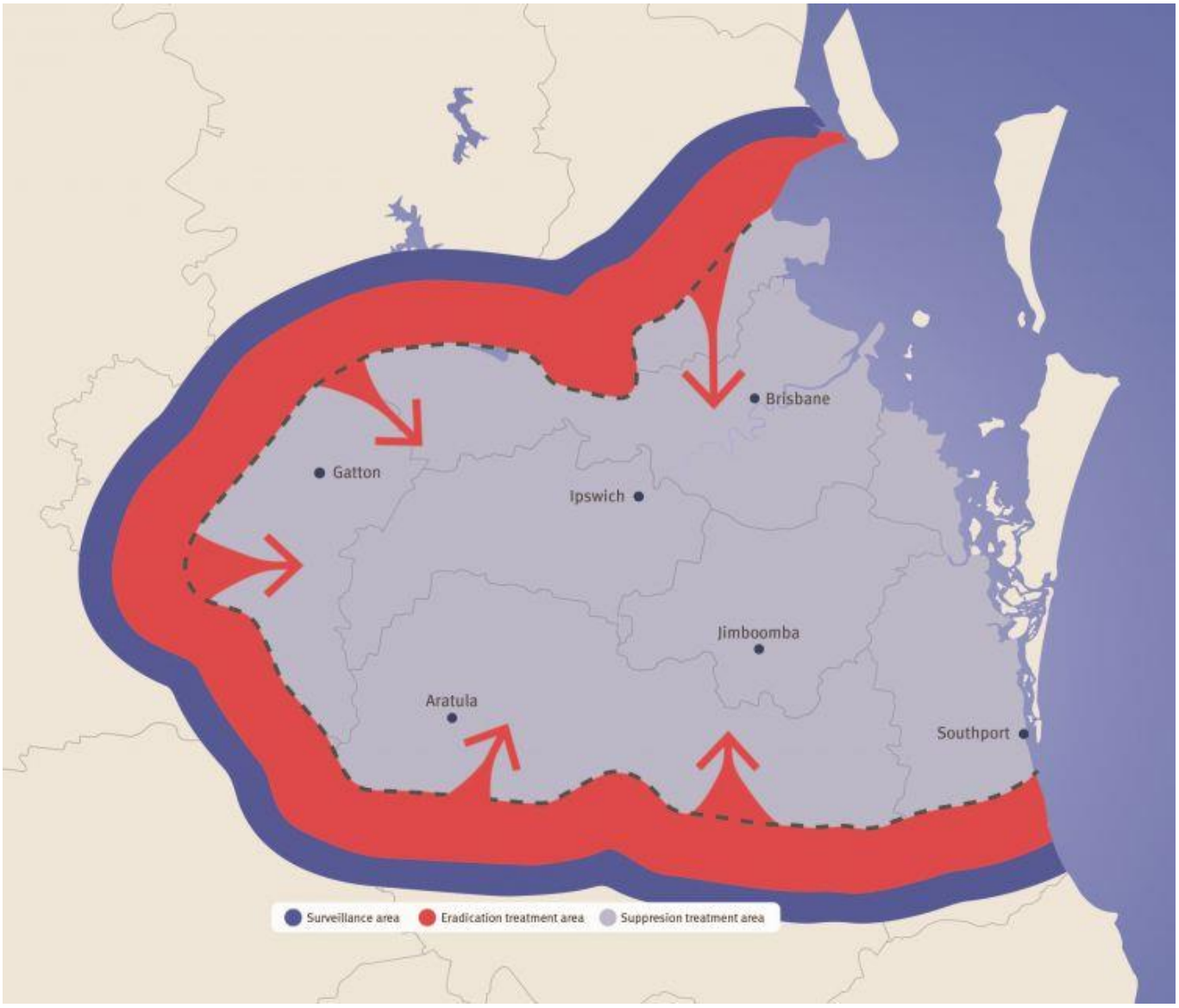
## The fire ant issues in Australia

“Fire ants in pastures are a source population for cities since they have swarming flights and can repopulate in urban areas,” he said. “In the U.S., we generally know how to remove fire ants in yards, playgrounds and parks, etc., but we do not typically treat large acreages of unmanaged habitat for fire ants. We’ve learned how to manage and co-exist with them. But this new eradication effort in Australia is huge, involving hundreds of people and covering a vast amount of acreage.”

Puckett said an area where he saw Australians could improve their fire ant management practices was the use of broadcast bait treatment.

“I noticed that many Australians with fire ant issues were focused only on treating visible fire ant mounds and were neglecting the young colonies that could not yet be seen,” he said. “I talked to them about incorporating ant bait broadcasting into their treatment plan to destroy young and inconspicuous colonies.”

## Driving fire ants out of Australia




The new national Fire Ant Eradication Program in Australia will be focused on hundreds of thousands of acres in eastern Australia, progressively controlling ant populations and moving toward the Coral Sea. (Fire Ant Eradication Program)

Puckett said Australians were especially attuned to environmental issues. Many were concerned with the use of insecticides, so he also had the opportunity to discuss the objective science behind fire ant treatments and the long-term benefits of promptly addressing the issue.

The Australian Red Imported Fire Ant Eradication Program selected their treatment strategy with these concerns in mind, Puckett said. The program includes the application of granular baits from aircraft across the outer boundaries of the fire ant infestation area. The plan is for the treatment band to move toward the interior of the fire ant infested area each year until they are eradicated.

Meanwhile, residents living in the interior of the infestation area, where fire ant densities are much greater, can request treatment by the eradication program with professional-grade insecticides. All of the products being used by the Australian eradication program have been used safely for decades to manage fire ants in the U.S.

"Here in Texas, we have been dealing with fire ants for decades and have learned a number of lessons related to best management practices and what types of treatments are most effective," he said.

## The new Australian fire ant eradication plan

Puckett said he was impressed with the breadth of the new fire ant eradication program in Australia, which will build sizeable surveillance and treatment zones for the pest and provide treatment multiple times per year.

Over the coming years, the plan is to aggressively treat fire ants in the designated area of the continent, moving the treatment zones ever closer to the coastline and toward full eradication.

The Australians plan to treat and check every property in the eradication area, whether fire ants are visible or not, as any omission or oversight may have a negative impact on nationwide eradication efforts. To ensure they locate and eliminate all fire ant nests, they will start from the outside of the infested area and move inwards, continuing to clear the ants until they are gone. "The Australians have a thoughtful, thorough and extensive plan in place for fire ant eradication on that continent, and I hope that in some way my expertise and work in Australia will be helpful toward making that effort succeed."

# Dealing with High Fertilizer Costs in Forages

***Posted on March 7, 2025 by vanessa.corriher***

Fertilizer is and has always been a significant production expense whether you are growing corn, cotton, or pasture forage. Fertilizer costs have increased tremendously over the last few decades. Commercial fertilizers are the most costly input in warm season grass forage production. Below are some important issues relative to fertilizer efficiency as well as alternatives for reducing fertilizer use and reducing production costs for forage production.

1. Soil Test: Adequate soil fertility is one key to successful forage and livestock production in Texas. Soil testing is still the best management tool to monitor soil fertility levels. Routine soil tests can help identify nutrient deficiencies and inadequate soil pH. Applying fertilizer without having taken a soil test amounts to guessing how much fertilizer is needed. Applying too much fertilizer is a waste of money; applying too little will result in less-than-optimum forage production. Based on soil test results, cost-effective fertilization programs can be developed to meet forage nutrient requirements and minimize production costs. (https://soiltesting.tamu.edu)

*Soil Sampling Tools*

2. Choosing the most adequate fertilizer source: Several fertilizer sources are commercially available to supply N, P, K, and micronutrients to forage crops. Ammonium nitrate, ammonium sulfate and urea are the major N sources used on pastures in Texas. Organic sources such as biosolids and animal manure also represent important sources of N that can be used in pastures. When choosing the right fertilizer source, it is important to consider important factors, such as price, fertilizer effectiveness, method and rate of application. Fertilizer blend and cost comparison spreadsheet
3. Timing and Rate of Fertilizer Application: Fertilizer should be applied when the forage is actively growing. For most warm-season grasses commonly used in Texas, growing season does not start until night temperatures reach 60F. For establishment of new plantings, fertilizer should not be applied until plants have emerged. Nitrogen and K

should be split-applied into multiple applications; after emergence and 30 to 50 days later. For hayfields, N and K should be applied after each cutting.

*Lime Spreading Truck*

4. Utilization of Forage Legumes: In association with Rhizobium bacteria, clovers and other legumes obtain N from the atmosphere. Specific strains of this type of bacteria live on the roots of particular legumes. The bacteria obtain N from air in the soil and "fix" it in a form usable by plants. Bacteria accumulate in small nodules on the legume roots but most of the N is in the form of protein in the leaves. The primary driving force in calculation of N fixation is legume yield. High yielding legumes fix more nitrogen. Cool season annual clovers can contribute with about 75-100 lbs N/acre for the subsequent grass crop. The majority of the legume-N is transferred to the soil by unused plant material and/or animal excreta. Grazing animals can return more than 80% of the consumed nutrients to the soil through the feces and urine. If the legume crop is harvested and removed from the pasture as hay or haylage, the contribution of legume-N to the subsequent crop is reduced. Cool-Season Forage Legume Management Guide

*Arrowleaf Clover*

5. Use Biosolids or Animal Manures: One important aspect to consider when using organic amendments is the N present in these sources is not readily available to plants and total N is often a poor indicator of N availability. When poultry litter is surface applied to pastures, an estimated 30% of the N is lost through volatilization, 60% is available to the plant the first year, and 10% is not available until after the first year. About 70 to 80% of the K and P in poultry litter is available to plants. As the organic compounds mineralize, N and other essential nutrients become available to the plants. Factors such as source, time

and rate of application and environmental conditions can impact the effectiveness of organic materials in providing N to pastures. Because improper application of organic amendments may lead to excessive soil P concentrations, it is important to monitor soil fertility after manure and/or biosolids application.

Vanessa Corriher-Olson

**Swarms of Bees…**

**By Chadd Caperton**

**Brazos County Extension Agent**

With spring comes lots of new plants, flowers, budding trees and Bees. Yes the Bees are out. It's the best time of year for bees and they are all out collecting nectar and pollen to bring back to the hive in order to make honey. They also use it to feed bee larvae to replenish the colony. The average life span of a bee is only a couple of weeks and it is spent pollinating the local flora aiding in the reproduction of thousands of plants, trees and shrubs.

But with the growth of the colony and abundance of nectar and pollen available some colonies outgrow the room they have available in the hive. This growth results in what we call "swarms". You may have noticed them turning up lately. They will continue to do so throughout the year.

Swarming is a natural and necessary event for colonies in which the existing Queen takes a third of the colony and takes off to find a new home suitable to start a new hive. When this happens, you will often see bees balled or clumped up just sitting in one spot for a period of time.

What most people don't realize is that in this instance the bees are generally pretty docile and non-aggressive if left undisturbed. The ball of bees is actually surrounding the queen to protect her until another home is found.

Once a suitable spot is found the ball of bees will take off and begin the process of drawing new comb, laying eggs for more bees and eventually making honey.

The site of swarms is a good sign meaning that there are healthy hives in the area which are crucial to the production of most plants.

Beekeepers love swarms and actually set out empty hives to attract and start new colonies for honey production. So if you see these swarms please do not try to eliminate them. There are always beekeepers who love to collect the balls of bees and try to establish new hives for honey production.

Using these swarms is a great inexpensive way to get into honey production and backyard beekeeping. There are many great beekeeping associations in just about every county in Texas who can help you learn to raise bees for honey production. But its just like everything else… Do your homework and research first before diving into the hobby. I must warn you, once you've tasted the honey from one of your own hives, you'll be hooked for life.

Texas A&M Agrilife Extension Service Offices usually keep contacts for local beekeepers who will be glad to come remove the swarms and or teach you how to become a beekeeper. So if you find one that you are unable to leave because it is a hindrance to you or others please call our office and we will do our best to help you. For more information on Bees or any other topic related, please contact your local Agrilife County Extension office.