

# Atascosa Ag Newsletter

Courtesy of: Texas A&M AgriLife Extension Office Atascosa County

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Check out our website at [Atascosa.agrilife.org](http://Atascosa.agrilife.org)

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## LETS HELP WILDLIFE BEAT THE HEAT

As we enter summer and the high temperatures . Usually we have a high pressure dome over us with no rain and triple digit temperatures daily. All this can cause lots of stress on people as well as our wildlife. White-tailed does are nursing fast growing fawns, nesting and re-nesting by quail is coming to an end. This time of year is when we realize the amazing benefits of two things: shade and water.

Have you ever checked the temperature of bare dirt in the middle of the summer? What about under the shade of a big bull mesquite tree? The temperature difference will be astounding! When managing brush, it is important to recognize the value and importance of the different brush species when the sun is at its hottest.



Second water is necessary for life, and different wildlife species can acquire water in different ways. Insects and green vegetation provide the moisture that quail need for survival. Prickly pear can provide moisture for deer and other wildlife. Not only the availability of free access to water in ponds, lakes, creeks, or even water troughs can be very important for all wildlife. It is important that we evaluate your property this time of year and determine the availability of quality shade as well as access to water for all wildlife.

So lets ensure that there is water and shade for all wildlife this summer, to help them BEAT THE HEAT!!

## OAK WILT

Oak Wilt is known to be one of the most destructive tree diseases in the United States, this has been known to be present in our county. Oak wilt is an infectious Vascular disease caused by the fungus *Bretziella Fagacearum*. This fungus invades and disables the water conducting system in susceptible trees. This disease is spread in multiple ways. Over a distance with the help of certain beetles or locally through common or grafted roots. Nitidulid beetles are believed to be responsible for the long distance spread of Oak Wilt.

Nitidulid Beetles are small and attracted to the fungal mats due to the sweet smell, once they are there they get the fungus and when they feed on sap on healthy trees they spread the fungus thus infecting the healthy tree. It can also spread through common or grafted roots. It can spread through the root system at an average rate of about 75 feet per year.

One common way that this is diagnosed is through venial necrosis of the leaves. If the tree is infected it usually will die within two to four months, followed by the surrounding trees dropping their leaves not long after. So we may be asking ourself can we prevent this well here are some steps to follow to prevent Oak Wilt.

Avoid pruning or wounding oaks between February 1 and July 1. This is the time of year when oak wilt fungal mats are most likely to form and nitidulid beetles are active. The least hazardous periods for pruning are during the coldest days of mid winter or extended periods of hot weather in mid-to late summer.

Sterilize/Sanitize all pruning equipment between trees using denatured methyl alcohol (shellac thinner), isopropyl alcohol, or a general purpose household disinfectant such as Lysol, Listerine, Pine-Sol or related products. Using household bleach is NOT recommended as it can be corrosive to pruning tools as well as people.

Immediately paint all wounds on oaks to prevent contact with contaminated beetles. Wounds should be painted, regardless of the time of year they were made, with commercial tree wound dressing or latex paint. Wounds can be either man made or natural and include freshly – cut stumps and damaged surface roots.

Do not transport or buy unseasoned firewood. Fungal mats may form on unseasoned red oak firewood infected with oak wilt making it possible to spread oak wilt to uninfected areas. Seasoned firewood should not present a threat of spreading oak wilt. Also, burning infected wood cannot transmit oak wilt.



Promptly remove and either burn or bury all red oaks that are dying or have been recently killed by oak wilt. Generally this would be oak wilt-infected red oaks that die in the late summer or fall. This will prevent nitidulid beetles from spreading spores from fungal mats that may form on the trees in the fall or the following spring.

### **Red Oak Tree Group**

Pin Oak

Shumard Oak

Black Oak

Scarlet Oak

Southern Red Oak

Northern Red Oak

Live Oak

### **White Oak Tree Group**

Bur Oak

Chestnut Oak

Oregon White Oak

Mexican White Oak, Monterrey

Oak or Spanish Oak

Recognized by rounded lobes  
plus the lobe tips never have  
bristles like red oak.

## **OAK WILT CONT.**

### **Treatment**

There are ways that we can treat Oak Wilt one way is to stop the spread through the roots by breaking the root connections between live oaks or dense groups of red oaks. This is done through trenching at least 4 feet deep. The trench should be placed a minimum of 100 feet beyond any symptomatic tree. It is best to treat the Oak Wilt early before the area becomes too large. Untreated trees immediately outside of the treat area should be monitored closely for several years.

The second method is with a fungicide treatment (Alamo) can be used as a preventative to reduce oak wilt symptoms in live oaks when applied before infection. It is possible to get some success if applied as a therapeutic injection during the earliest stages of infection. The success of the injection depends on the health condition of the candidate tree, application rate, and injection technique. Injections should be done only by trained applicators.

If you have oak wilt or have concerns about the disease. Feel free to reach out to our office, or visit the [texasoakwilt.org](http://texasoakwilt.org) website to get more information on treatment, the disease and much more.

## **7 Ways to Help Your Texas Garden Survive Triple Digit Heat**

One thing is for certain: Texas weather is as unpredictable as a startled armadillo. Snow one month, rain the next, and triple-digit heat the month after that. When the temperature suddenly jumps over 100 degrees with little notice, keeping your garden happy, healthy, and productive can be a big challenge. If you're new to Texas or worried about your garden during an unexpected heat spell, here are 7 ways to help your garden survive and thrive.

### **1. Increase Watering Frequency**

A general rule is to water your garden one inch of water per week whether this comes from rain or watering. Once the temperatures reach 100 degrees, however, certain plants such as vegetables, bedding annuals, and plants in containers will require daily watering. When in doubt, it's better to water than not water when temperatures are consistently in the triple-digits.

### **2. Water deeply in the morning**

This prevents loss of water through evaporation. Encourages deeper root systems. This also helps to decrease the chance of fungal disease, that could come from watering close to sundown or after dark.

### **3. Consider Shade Cloth**

For plants that are sensitive to heat or wilting faster than other plants shade cloth is an effective solution. It allows certain percentage of sunlight through to the plants. That could reduce the ambient temperatures by as much as 15°

### **4. Reduce fertilizer**

A consistent application of balanced, organic fertilizer is key to strong production from your garden, but fertilizer can place unnecessary stress on plants when temperatures are very high. Under stressful conditions, plants need to allocate as many resources as possible towards survival. Fertilizer tells the plant to put on new growth tying up valuable resources in the process.



## **7 Ways to Help Your Texas Garden Survive Triple Digit Heat CONT.**

### **5. Add another layer of mulch**

Mulch is fantastic because it can conserve moisture, cools the soil, prevents disease, suppresses weeds, reduces pest pressure, and adds nutrient rich humus to the soil as it breaks down. To maximize weed suppression and soil moisture retention, mulch should be applied to a depth of at least three inches. The recommended hardwood mulch because it is long-lasting but still lets the soil breathe.

### **6. Move containers to shadier locations.**

### **7. Check for plants that are still wilted after sundown.**

Some plants will naturally wilt a bit in the middle of the day but perk up after sundown. Sweet potato vine and summer squash are two good examples. The cause of concern however is if the plants wilt during the day but doesn't perk back up after sundown. If they aren't perking up give them a long soak.

#### Heat Tolerant Vegetable Plants

- Sweet Potatoes
- Okra
- Bell Peppers
- Hot Peppers
- Eggplant
- Cucumber
- Corn
- Squash/Zucchini
- Southern Peas

#### Cool Weather Crops that are Heat Tolerant

- Broccoli
- Kohlrabi
- Chinese Cabbage
- Brussels Sprouts
- Carrots
- Radishes

#### Cool Weather Crops that don't tolerate Hot Weather

- Kale
- Swiss Chard
- Cauliflower
- Lettuce and other salad greens
- Spinach
- Peas

## **MANAGING HEAT STRESS IN COW-CALF OPERATIONS**

Heat stress is something that we should begin to be worried about not only in our wildlife but our cattle as well with that being said heat stress is caused by a combination of environmental factors including temperature, relative humidity, solar radiation, air movement and precipitation. During this time of year, we should be assessing the heat stress that our cattle are under. This is more of a worry in our feedlot cattle because they don't have the ability to seek shade, water, and air movement as easily as cattle on pasture. In addition, the heat from dirt or concrete surface increases. At temperatures above 80°F cattle can endure physiologic stress trying to deal with their heat load. Although they are not at risk of dying, they do have an increased maintenance requirement to cope with the heat.

As we begin to compare other animals to cattle, we can find that cattle can not dissipate their heat load very effectively. Since cattle don't sweat, they rely on respiration to cool themselves. A factor on top of climatic conditions is the fermentation process within the rumen. This generates additional heat that cattle need to dissipate. The heat production from feed in cattle takes place 4-6 hours after feeding. Due to cattle not being able to dissipate heat effectively they will accumulate a heat load during the day and dissipate heat at night when it cools down. Any time the Temperature- humidity Index (THI) is above 80°F cattle will be under what is known as Heat Stress. Hot weather following rain can increase the THI dramatically. This is just as important overnight when the temperatures are about 70°F cattle will have a increased risk of Heat Stress. During extreme temperatures with insufficient cooling at night cattle will accumulate heat that they cannot disperse. With that a THI alone may not predict cattle Heat Stress because it does not account for accumulated heat load. Another fail for THI is that it does not account for solar radiation and wind speed which can affect the heat load of our cattle. When increased heat stress cattle should be observed closely to identify if additional strategies need to be implemented. Initially feed intake will drop off and cattle will become restless. As heat stress increases cattle will begin to slobber and respiration rate will increase. Eventually cattle will begin to group together and begin open mouth breathing with a labored effort.

### **Actions that we can use to Minimize Heat Stress**

In the summer months, cattle should be worked only early in the morning. Working and handling cattle will elevate their body temperature and cattle should not wait in processing areas longer than 30 minutes when it is hot. Do not work cattle in the evening, even if it has cooled off, it is not recommended. Cattle's core temperature peaks 2 hours after peak environmental temperature. Not only that it takes 6 hours for cattle to dissipate their heat load.

Provide ample amounts of cool water. Water requirements of cattle increase during heat stress. Cattle lose water from increased respiration and perspiration. Additionally, the consumption of water is the quickest way for cattle to reduce their core body temperature. A rule of thumb is that cattle need three inches of linear water space per head during the summer. This should be taken care of by providing extra water tanks before the extreme heat events happen. Ideally water sources should not be exposed directly to the sun.

Shade is critical, especially for black cattle. To be effective there needs to be 20 to 40 square feet of shade per animal. If using a mechanically shaded structure, at east-west orientation will permit the ground under the shade will remain cooler.

Increasing the air flow can help cattle cope with extreme heat events. Wind speed has been shown to be associated with ability of cattle to regulate their heat load. Although we cannot control the wind we can ensure that there are no restrictions to the air movement such as hay storage, tall vegetation or wind breaks.

Lastly controlling flies, bites from flies can cause cattle to bunch up which decreases cooling. Minimizing breeding areas for flies and applying insecticides to decrease fly populations prior to heat stress is a valuable management practice.

The USDA-ARS and NOAA forecasts heat stress that cattlemen can use to make management decisions at <https://www.ars.usda.gov/plains-area/clay-center-ne/marc/docs/heat-stress/main/>

## **UPCOMING EVENTS & EDUCATIONAL OPPORTUNITIES**

### **Texas A&M Beef Cattle Short Course**

The 68th Annual Texas A&M Beef Cattle Short Course has been scheduled for August 1-3 on the Texas A&M University Campus. Hosted by the Texas A&M AgriLife Extension Service and the College of Agriculture and Life Sciences' Department of Animal Science. From the Texas Aggie Prime Rib Dinner to the Cattleman's College and the national and internationally recognized three-day event annually attracts over 2,000 participants.

"High input prices and ranchers' response to them will be a major theme of this years conference," said Jason Cleere, Ph.D., conference coordinator and AgriLife Extension beef cattle Specialist in the Department of Animal Science. Both in-person and online attendance is being offered. Cost is \$240 for in-person and \$160 for online if registered by July 27. A \$40 late registration fee will be charged after that date. To register go to [tx.ag/BCSC22Reg](https://tx.ag/BCSC22Reg) or call 979-845-6931 for more information.

### **Brush Country Beef 706**

The Texas Beef Council and the Texas A&M AgriLife Extension have teamed up to present the Brush Country Beef 706 Program. This is a three part series of hands on sessions, focusing on beef quality management and marketing opportunities, is available for all beef cattle producers, to help maximize profits and have a better understanding of the production process after their cattle enter the feed yard.

This program is being put together by the Atascosa, Live Oak, Wilson, Karnes, Bee, McMullen, Bexar, and San Patricio County Extension Programs. The **First Session** will take place **September 15, 2022 at 6:00pm** at the Live Oak Livestock Market Auction, 3795 U.S. 281 Three Rivers, TX beginning at 6pm with dinner. **Session two** will take place **February 4, 2023 at 9:00 am** at Texana Feeders Ltd. 3493 FM 539 Floresville, TX. Lastly **session three** will be held as a 1.5 day program on **May 2-3, 2023** at Texas A&M University Rosenthal Meat Science Center beginning at 9 am on Day 1 and 7:30 am on Day 2 ending at 1pm.

To reed more about each session and the Brush Country Beef 706 Program See attached Flyer if you would like to register call the **Live Oak County Extension Office at 361-449-1703**

## **SAVE THE DATE**

**As we get into August, September and October be on the look out for some upcoming programs!! Mark your Calendar and save these dates.**

Strawberry Workshop (releasee of 2022 Strawberry Trial Data) — **August 10, 2022**

South Texas Annual Peanut Growers Tour — **September 22, 2022**

Multi-County Water Screening — **October 12-13, 2022**

Fall Wildlife Workshop — **October 15, 2022**



## TEXAS A&M AGRILIFE EXTENSION COVID-19 UPDATE AND RESOURCES

**W**hile more and more face to face events open up we are still upholding our commitment to helping Texans better their lives. Here at the Extension office we deal with three of some of the most important things in your life: Your Food, Your Health, and Your Children. For a complete list of available resources check out <https://agrilifeextension.tamu.edu/coronavirus/>

**Food:** Our local farmers and food producers are working hard to ensure a safe wholesome food product from their fields to your table. For our beef producers here in the county <https://beeffax.tamu.edu> is a great resource for cattle market updates.

**Health:** AS we adjust to our new normal our FCH Agent Dru Benavides has some awesome resources on our Facebook page to help stay active, manage stress, adhering to guidelines on social distancing, and how to safely shop at the grocery store. When out shopping for essential items it is important to remember the following tips:

1. If possible go by yourself, the less people out minimizes the chance of exposure and spread
2. Only touch products you will buy
3. Sanitize cart and cart handles before shopping
4. Keep your distance from others, CDC Guidelines say 6 feet apart at all times.
5. Go with a paper grocery list, be prepared so you minimize the amount of time at the store, and throw away your list when you're done shopping
6. After you get home thoroughly wash produce and disinfect items such as boxes and cans with sanitizing wipes, or make your own sanitizing solution with 1/3 of a cup of bleach to a gallon of water
7. Sanitize commonly touched items such as, door knobs, light switches, refrigerator door handle, faucets, car keys, and counter tops. Wash your hands with soap and water for 20 seconds after using cleaning products.

**Children:** As home becomes school and school becomes home, 4-H has some amazing educational resources to help facilitate school lessons with agriculture, learn about 4-H projects, and some at home projects to help the community. Join District 12 4-H with 12 at 12. A Facebook Live event every Tuesday and Thursday at noon. There will be quizzes, project exploration, and interaction with other 4-H'ers. Also Check out the Texas 4-H Facebook Page for daily activities and videos! Contact Ashlie Stayton at the extension office for even more 4-H resources.

