

# TEXAS A&M SMITH COUNTY AGRILIFE

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The official monthly newsletter of the  
Texas A&M AgriLife Extension Service of  
Smith County



## January Topics

- Grassbur Control in Pasture and Hay Meadows
- Leaf it Be
- Let's get Peachy
- Fruit and Nut Variety List
- Frost and Freezes
- Vegetable Planting Calendar
- Things to do in January
- Helpful Resources
- Upcoming Events

Clint Perkins



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# GRASSBUR CONTROL IN PASTURES AND HAY MEADOWS

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WRITTEN BY: CLINT PERKINS

I have been getting numerous questions about grassbur control in pastures and hay meadows this year. Grassburs like to grow in sandy soils with very little competition from our warm season forages. We were in a very severe drought this past summer. This caused thinning stands of our warm-season perennial grass pastures. Then when we did get some rain later in the growing season, we had an explosion in grassbur growth. They have a negative effect for animals that graze on them and the hay that is produced when they have seed heads present. The grassburs cause pain, discomfort and even infection to the animals that are grazing them. They also have a negative effect on hay quality and greatly reduce forage value. There are two approaches to control grassburs using herbicides. One is using pre-emergent herbicides. There are currently two pre-emergent herbicides labeled to control grassburs. One is Prowl® H2O and other formulations of pendimethalin can be applied as a pre-emergent control of grassbur on dormant bermudagrass at rates from 1.1 to 4.2 quarts per acre. The tighter the soil texture the more product is needed for proper pre-emergent control. Good results can be obtained from pendimethalin if it is properly incorporated by at least 0.5" to 0.75" of rainfall or irrigation within 7 days of application to be effective. The other pre-emergent herbicide just got a pasture label in Texas. It is called Rezilon® (active ingredient is Indaziflam). Use rates are 3-5 fluid ounce per acre. Rezilon® requires rainfall of 0.25-0.5 inches of rain or irrigation to be effective. Herbicides need to be evenly distributed across the field to ensure that there are no skips. The shorter the grass is, the better. If you have good herbicide to soil contact, the better the pre-emergent weed control is. There are no grazing restriction. There is a 40 day hay harvesting restriction when using Rezilon® when using rates above 3 oz/acre.

The second approach is to use a post emergent herbicide that is labeled for grassbur control in pastures and/or hay meadows. Currently, there are three options available for post emergent control. One product is Pastora® (nicosulfuron + metsulfuron) and it must be applied to small grassbur plants (1-1.5 inches tall) at rates of 1.0 to 1.5 oz per acre. It is only labeled for use on bermudagrass, so applying it on any other type of pasture or hayfield is illegal and could cause severe injury. There are no grazing or haying restrictions associated with the use of Pastora®.

Another post-emergence treatment is Glyphosate (active ingredient in Roundup®), which is labeled for use on bermudagrass hayfields immediately after the first hay cutting. This application also will control many annual grasses other than grassbur. Some stunting of perennial grasses will occur if broadcast application is made when plants are not dormant. Higher application rates may be used for hard-to-control weeds; however, higher rates will cause stand reduction in the forage species. It is important to treat as soon as possible after the first hay cutting for two reasons. First, there will be less crop injury since there will be less bermudagrass leaf area to take up the herbicide. Second, the product must contact the grassbur plants while they are small; this is less likely to happen if the bermudagrass has regrown and is covering the grassbur. A maximum of 2 quarts per acre per year can be applied with no grazing restrictions.



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# GRASSBUR CONTROL IN PASTURES AND HAY MEADOWS

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WRITTEN BY: CLINT PERKINS

The third post-emergence product should be used with caution. The active ingredient, imazapic, sold under the trade names such as Plateau® and Panoramic®, will stunt bermudagrass growth for a period of at least 30 days. Some varieties, such as Jiggs and World Feeder, are more prone to injury than others. It is labeled for use in most perennial grass species, including native range. It is an excellent herbicide, with both preemergent and post-emergent activity and is only recommended where controlling grassbur is more important than forage growth. It is relatively inexpensive and has a wide weed control spectrum. There are no grazing restrictions, but a seven-day haying restriction applies when using imazapic.

Usually, we recommend applying a pre-emergent herbicide from February 1-March 1 for grassbur control. This has been a warm winter so far. I am recommending applying a pre-emergent herbicide this year by February 1st-15th at the latest.

When applying a post-emergent herbicide, timing is critical. The younger the grassbur is, the better control you will have. Once grassburs are controlled, follow soil test results for lime and fertilizer applications. Remember, the best form of weed control is a thick dense growing forage. Always follow the herbicide label for rates, mixing instructions, timing of application and for which weeds it will control. Remember, the label is the law. Trade names of commercial products used in this news article are included only for better understanding and clarity. Reference to commercial products or trade names are made with the understanding that no discrimination is intended and no endorsement by Texas A&M AgriLife Extension Service and the Texas A&M University System is implied. Readers should realize that results from one experiment do not represent conclusive evidence that the same response would occur where conditions vary. If you have any questions, please contact Clint Perkins at the Smith County Extension Office at 903-590-2980.



# LEAF IT BE

*Written by: Greg Grant*

With falling foliage in full force, the age-old tradition of raking leaves beneath our trees comes to the forefront. However, there's been a major push of late by entomologist and author Dr. Doug Tallamy and others to avoid the practice and let them lie, especially under shade trees.

Tallamy has written several influential books, including "Bringing Nature Home: How You Can Sustain Wildlife with Native Plants" and "Nature's Best Hope: A New Approach to Conservation that Starts in Your Yard." I once heard him speak in Lufkin and hopefully one day we can bring him to Tyler to share his views on ecological landscaping.

Here are some reasons to consider not raking and discarding your leaves this fall.

**Biodiversity Boost:** Leaves on the ground create a microhabitat that supports a diverse array of organisms. In this leaf litter, insects find refuge, amphibians seek shelter, and beneficial microbes thrive. It's a bustling ecosystem that contributes to the overall biodiversity of the garden.

**Soil Enrichment:** As leaves break down, they become a natural source of organic matter, enriching the soil beneath your trees. This organic mulch improves soil structure, retains moisture, and enhances nutrient levels, providing a healthy foundation for your trees and surrounding plants. Think of them as free mulch and compost.

**Natural Fertilizer:** As they have for millions of years, decomposing leaves release essential minerals into the soil, acting as a slow-release fertilizer that nourishes your trees and promotes overall soil health and friability.

**Water Conservation:** A leafy layer on the ground acts as a protective shield, reducing water evaporation from the soil. This not only conserves moisture but also helps maintain a more stable soil temperature. As a result, your trees are better equipped to withstand both drought and excessive rainfall, both of which occur regularly here.

**Pollinator Paradise:** Many pollinators, including various species of bees and butterflies, overwinter in the leaf litter. The layer of leaves provides a protective cover, shielding them from harsh weather conditions. By leaving leaves in place, you're offering a refuge for these pollinators during the colder months.

**Erosion Prevention:** The fallen leaves act as a natural barrier, preventing soil erosion caused by wind and water. This protective layer stabilizes the soil structure, ensuring that your trees' root systems remain securely anchored in place.

**Time and Energy Savings:** Let's face it – raking leaves can be a time-consuming and energy-draining task. By embracing the natural process of leaf decay, you not only save yourself the effort but also contribute to a more sustainable and low-maintenance garden.

The seemingly simple act of leaving leaves beneath your trees can have far-reaching ecological benefits. By appreciating the ecological role of leaves and allowing them to remain beneath trees, you create a more sustainable and pollinator-friendly environment.



# LET'S GET PEACHY

**WRITTEN BY: ANTHONY BROWN**

There is nothing like a big bowl of hot peach cobbler with vanilla ice cream on top! Peach production here in East Texas is very well known. Although we have many orchards around, many people like to produce this fruit in their own yards. Maybe you have thought about producing your own peach trees this coming spring. You can purchase healthy beginner fruit trees from local nurseries about 2 to 4 feet tall. Peach trees should be planted between December and March when trees are dormant. Dig holes big and about 18-24 inches deep in well-drained sandy soils so the roots will not have any issues growing as the tree matures. Peach trees should not be planted in previously planted spots, because they will be more susceptible to any soilborne diseases that may be present in the area. There are several varieties that will be suitable for this area (medium chill region). Flavorcrest, Tex Royal, Texstar, Springold, Rio Grande are a few varieties that you can choose from.



Pruning (grooming) is the utmost factor in peach production of fruit, weak trees, diseases, and short tree life. Annual pruning stimulates new growth each spring and summer. It is better to prune peach trees when they are dormant, normally in the month of February and in some cases early March. Winter chilling and late frosts determine how successfully the tree will be bearing fruit during the production season. As of right now, we have had a pretty moderate winter, and in order for producers to have a successful growing season our days need to be a little more cooler. However, it is important to prune trees at the right time, because soon after the tree will bloom. Producers with limited number of peach trees can get away with pruning trees when the pink buds are present. The purpose of pruning is to remove nonproducing wood that is old gray-colored, and slow-growing. If trees are not pruned annually, fruit producing shoots will grow higher and higher making it difficult to harvest fruit. Keep fruit as close to arm length as possible. Peaches produce on last year growth. Leave 1 -year-old 18 - 24-inch red colored shoots. The branching structure you need to adopt is an open-center system. This will allow for air circulation, reduce disease pressure, and allow sunlight to accelerate the coloring of the fruit. Remove all hanger shoots, rootstock suckers and water sprouts within the bottom three feet of the tree. Also prune out shoots in the middle of the tree, making it easier to apply herbicides and increase air circulation. Leave the 18-24 - inch shoots but remove all old and gray wood. 40 percent of the tree should be removed each year, making for a healthy, long lasting, and fruitful tree each year.



# LET'S GET PEACHY

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**WRITTEN BY: ANTHONY BROWN**

To help maintain healthy trees, it is advised to take a standard soil sample therefore you will know your pH level and know the amount of fertilizer that is needed to help stimulate growth. In the first two years of production, fertilizer should be applied in the springtime if the pH is below a 7.8. Once your trees are fully developed (around year four) and depending on how many trees you have in an acre; apply about 50-60 lbs. per acre for healthy trees. For trees that are not as healthy and have poor color and lack luster growth will need less fertilizer. It is recommended that you plant trees where water will be always available. Thus, most orchards today utilize a drip irrigation system, and each tree can use up to 50 gallons of water per day. There are numerous of diseases and insects that are naturally occurring pests to peach trees. These pests include San Jose scale, greater and lesser peach tree borers, plum curculio, peach twig borer, and catfacing insects. Diseases include scab, brown rot, bacterial spot, post-oak root rot, and cotton root rot. To help combat these pests, visit your local Extension Agent and they will be able to recommend an insecticide or pesticide; be sure to always read and follow the label. Once peaches are ready for harvest when they are firm-ripe with a reddish blush blended with a yellow background. Wash off fruit, and keep refrigerated as long as possible until you or a consumer is ready to eat the peaches.







## FRUIT & NUT VARIETY LIST FOR SMITH COUNTY

Greg Grant, CEA - Horticulture

Clint Perkins, CEA – Agriculture/Natural Resources

### <sup>1</sup> PEACHES

(Select on chilling hours)

Harvester (800)  
Dixieland (750)  
Redskin (750)  
Frank (750)  
Loring (750)  
Ruston Red (850)  
Redglobe (850)  
Ouachita Gold (850)

### <sup>1</sup> PLUMS

Morris  
Methley  
Ozark Premier  
Bruce  
Allred  
A.U. Producer (Home use)  
A.U. Amber (Home use)  
A.U. Roadside (Home use)  
Santa Rosa

<sup>1</sup> If soil is deep sand, variety should be grafted onto Nemaguard or Nemared rootstock

### PERSIMMON \*\*

(A=Astringent)  
(NA=Non-Astringent)

Eureka (Best commercial variety)  
Fuyu (NA)  
Hachiya (A) (Can produce seedless fruit)  
Tamopan (A)       "  
Tane-nashi (A)       "  
Chocolate (NA)

### JUJUBES\*\*

Li  
Lang

### <sup>2</sup> PEAR \*\*

Ayers  
Orient  
Moonglow  
Kieffer  
LeConte  
Garber  
Warren  
Magness

### <sup>2</sup> RABBITEYE BLUEBERRIES \*\*

Delite  
Tifblue  
Climax  
Brightwell  
Briteblue  
Prince  
Premier  
Austin  
Alapaha  
Powderblue  
Ochlockonee  
Vernon  
Woodard

<sup>2</sup> Need more than one variety for pollination

### STRAWBERRIES (fall plant only)

(\*Best commercial varieties)  
\*Chandler  
\*Pajaro  
Festival (Texas Superstar selection)  
Cardinal (Home gardens)  
Sunrise (Home gardens)  
Allstar (Home gardens)  
Tioga (Home gardens)  
Fort Laramie (Home gardens)  
Sequoia (Home gardens)

### **BLACKBERRIES \*\***

Brazos  
Rosborough  
Arapaho (thornless/erect)  
Apache (thornless/erect)  
Chickasaw  
Kiowa  
Navaho (thornless/erect)  
Natchez (thornless)  
Ouachita (thornless)

### **RASPBERRIES**

Dormanred  
Baba (Trial Only)

### **MAYHAWS**

Super Spur  
Big Red (Rust resistant)  
Highway Super Berry  
Mason's Super Berry  
T.O. Super Berry  
Big Mama  
Harrison  
Angelina

### **BUNCH GRAPES\*\***

Valhalla  
Blanc du Bois  
Champanel  
Black Spanish  
Victoria Red  
Herbemont

### **POMEGRANATE \*\***

(not known for fruiting well here)  
Austin  
Flavorful  
Al-Sirin-Nar  
Cloud  
Russian 18  
Purple Heart  
Salavatski  
Spanish Sweet-Uvalde  
Surh Anor  
Sumbar

### **CITRUS\*\***

(Containers only - protect during winter)  
Satsuma (Owari, Mr. Mac, Miho,  
Okitsu, Seto, Brown's Select,  
Orange Frost, Arctic Frost)  
Kumquat  
Meyer Lemon

### **<sup>3</sup> MUSCADINE GRAPES \*\***

(\*Probably the best for fresh fruit market)

Regale	Hunt
*Summit	Sugargate
*Fry	Doreen
Cowart	Ison
Higgins	*Nesbit
Magnolia	Senoia
Jumbo	*Granny Val
Dixie	Sweet Jenny
Southland	*Scuppernong
*Triumph	Welder
Watergate	Noble

<sup>3</sup> Certain muscadines can be self-fertile or female only.  
Plant 1 self-fertile variety for every 6 female varieties.

### **PECANS**

^ = protandrous (pollen 1<sup>st</sup>);

+ = protogynous (nutlet 1<sup>st</sup>)

(must plant protandrous and protogynous for pollination to occur)

^ Desirable  
^ Apalachee  
^ Lipan  
^ Mandan  
^ Caddo  
^ Pawnee  
^ Oconee  
+ Kanza  
+ Lakota  
+ Elliott (Home orchard only)  
+ Forkert 49/62  
+ Prilop 78/57

### **BLACK WALNUTS \*\***

Thomas  
Ohio  
Myers (Thinnest shell)  
Ogden  
Stabler

### **FIGS \*\***

Texas Everbearing  
Brown Turkey  
Celeste  
Lemon

**\*\* Can be grown Organically**



## Frosts and Freezes

Gardening has plenty of challenges. Insects, diseases, drought, wind, excessive rainfall, soil problems, lack of pollination, too much sun, not enough sun, blazing heat, bitter cold...and the list goes on. But then if it was simple and easy, with guaranteed results, how much fun would that be? I don't mean to say that gardening is difficult and only the professionals can do it. In fact the basics of gardening are quite simple and easy. But there are plenty of challenges that keep things interesting.

Part of the enjoyment of gardening comes from the challenge. Like any great hobby it takes learning, time, skill, practice and just a little bit of good fortune to achieve the best results. One of my favorite things about gardening is that it is always new and at least partially unpredictable.

One of the great challenges we gardeners face each year, in fact twice a year, is the threat of frosts and freezes showing up to spoil the show. I say twice a year because we deal with the early frosts of fall that would cause our warm season gardens to face an untimely demise, and the late frosts of spring that make gamblers of anyone who ever set a tomato in the ground, and worriers of everyone with a peach tree in full bloom.

We could also add a third challenge, the cold of winter that would be the arbiter of what can and cannot be grown in your particular zone. And we all must try to cheat the zone map at least a little, right? Now the best way to beat winter is to have a greenhouse. But not everyone has one and then there are all those plants in the garden and landscape that can't be dug up and moved into a greenhouse. The purpose of this article is to provide some suggestions on ways to protect your plants from the threat of cold. However we should begin with a little technical information on frosts and freezes.

### The Science of Frosts and Freezes

We all know that freezes can kill plant tissues but do you know how? When the water inside a plant freezes it causes ice crystals to form that pierce the cell walls of the plant. When the temperature warms up, the cells leak out their fluids as they die and turn to mush. Freeze damage first shows up as dark, water-soaked tissues which then turn black to brown and dry up.



*Freeze Damage*

Frosts on the other hand appear on the surface of plant tissues as well as on most any other exposed surface. During the night these surfaces radiate heat to the sky. When their temperature drops to the freezing point the water vapor next to it freezes on the surface. It is somewhat similar to the process on a warm day when water condenses on your iced tea glass because the glass is colder than the air around it.

Someone may ask, "Can you have a frost without a freeze?" The answer is yes...and no. It is possible for frost to form when the air temperature is above freezing. Solid surfaces lose heat faster than air on a cold night. The metal and glass on your car are good examples of this. They radiate their heat away dropping in temperature faster than the air around them. As a result we see frost on a windshield when few other things around the landscape show frost.

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Plants also lose heat faster than the air. The surface of a leaf can drop a little below the temperature of the air around it on a cold night causing it to drop below freezing and frost to form on the surface. So you can have a frost without the temperature of the air dropping below freezing, but frost is a sign that the plant tissues have dropped below freezing. So when you see frost there has been a freeze at the point of the plant surface.

Anything that reflects the radiating heat back down will prevent or at least greatly reduce frost formation. In winter walk out on a frosty morning and notice that while there is frost on the lawn around your landscape, underneath the live oak tree or underneath a picnic table there is little if any frost. Clouds perform the same radiant heat-reflecting function. On a clear night temperatures drop fast. On a cloudy night much heat is reflected back to the ground slowing the drop and in many cases preventing a frost or freeze.

We use the terms frost and freeze to refer to different types of temperature-related events. Typically frost forms on a still night when the temperature drops to near or just below freezing. A freeze on the other hand refers to a more extended period below freezing and may or may not include wind.

Most of the time in the fall or spring season we gardeners are dealing with a marginal freeze where the temperature drops briefly to just below freezing at the end of the night and then moves back up above freezing soon after the sun rises. This is enough to destroy a fall or spring garden or fruit blooms and the hope of a spring crop.

We can do a lot to protect plants from such a freeze because the temperatures are usually not too low and the duration is brief. Hopefully there is also not much wind, thus making protective measures easier and more effective.

On the other hand when a hard freeze hits with a strong wind and lasts for a day or more there is usually little we can do to protect our gardens. The wind displaces any heat that might have helped protect the plants and speeds cooling of plant tissues. The extended time below freezing makes our simplest protective measures inadequate to the task.

Sometimes all we need to do is keep a plant alive through the cold. The first parts of most plants to freeze are tender new growth areas and the areas between leaf veins where the leaf is thinnest. A little injury to new growth is tolerable especially if the plant itself is saved. This would be true of a citrus tree or bougainvillea for example.

Keep in mind also that plants vary in their cold hardiness as they develop from seedlings to mature producing plants. Broccoli for example is quite hardy as a strong, growing plant but the flower buds, the part we eat, are much more sensitive to cold.

### **Plant Protection Techniques**

In much of the state our winters are brief with lots of moderate to cool temperatures interrupted by a few killing freezes. If we can take steps to help our plants through those cold snaps we can cheat the hardiness zone a bit in the landscape and keep a vegetable garden going all winter long.

There are a number of techniques we can use to help avoid freeze damage to our plants. Here are a few of the more common ones.

### **Watering**

There are two ways that water can help protect plants. First of all plants under drought stress can be more susceptible to cold damage. By watering plants several days or more before cold weather threatens you can relieve stress if they are suffering from drought. Water is also a great "heat sink." That is, it holds warmth and releases it slowly, more slowly than plant surfaces or air.

Watering your plants right before a freeze creates a source of warmth that will slowly lose its heat over the course of a long cold evening. This alone is not going to provide protection from a hard freeze but can be used with covers to make a small difference on a marginal night, and every little bit helps!

The second way water is used is by sprinkling plants on a cold night. The basic concept involves the physics of water. If you were to chart the drop in temperature of water you would see that it drops steadily to about 32 degrees and then levels



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off before dropping again after the water freezes. It takes a lot of energy to push water to change from liquid to solid. That is the key to using water to protect plants.

Water is sprinkled on the plants and then freezes causing a small amount of heat to be released as it changes from liquid to solid form. Then another drop lands and freezes releasing more heat. As long as there is a thin layer of liquid water on the surface, the interior of the ice will not drop below about 32 degrees.

So why don't we all just sprinkle plants and be done with all this worrying over freezes? Well the devil is in the details. If the freeze is not too severe or too long and if you can install sprinklers that put out a small amount of water constantly over time, it may be a feasible strategy.

Most folks end up using lawn sprinklers which put out too much water, so after a while the plants end up drowning in soggy soil while we create a major swampy mess in the landscape. Additionally if the freeze lasts very long we end up with an ice load that shatters our fruit trees like toothpicks and flattens the garden.

Most importantly when using water you must not stop sprinkling after the temperature rises above 32 degrees. You have to continue to sprinkle until almost all the ice is melted. Otherwise the process works in reverse. As the ice goes from solid to liquid water it absorbs heat causing supercooling. So you theoretically could have made it through the freeze but then lost plants in the morning after temperatures started rising.

All this said, protecting plants with sprinklers, while possible in some situations, is seldom a viable option.

### **Covering Plants**

Covering plants is the simplest, most practical way to protect against a frost or freeze. Gardeners head out with sheets, blankets, plastic, rowcovers and anything else that they can get their hands on to wrap up plants for a cold night.

Keep in mind however that a blanket doesn't keep a plant warm, at least not to any significant degree. Blankets keep us warm because our bodies produce heat that the blanket helps hold in. If you wrap up the branches of a small tree or shrub with a blanket you aren't doing it much good. These "landscape lollipops" as I call them are not effective. In fact they may keep some of the heat available to the plant away from it.

Here's what I mean. The main source of heat for a plant is the soil. On a cold night heat from the soil rises up around the plants. If you use a blanket to trap this heat within the plant's canopy you can make a very significant difference on a cold night.

When I talk about trapping heat I don't necessarily mean warm air, just air that is warmer than freezing. If you keep the temperature around plants from dropping below freezing you have accomplished your goal. Even cold soil is actually significantly warmer than freezing and thus a source of "heat" on a cold night.

To cover plants effectively, lay the cover over the plant and allow it to drape down to the soil on all sides. Then secure it with boards, bricks, rocks or soil to hold in the air. This is especially helpful in preventing a breeze from cooling things down faster. The next day, remove the covers to allow the sun to warm the soil surface a little and then replace the covers as the sun goes down.

I have used cardboard boxes and large round garbage cans to cover plants. Plastic sheeting or any material that radiates its heat out quickly will "burn" (actually freeze) plant tissues where it touches them. It also tends to not reflect the radiant heat back down as well. Plastic is good, however, in holding in the air on a windy night so if you cover the plastic with a blanket or sheet you can increase the amount of heat reflected back to the plant and soil.

Spunbound polyester rowcover fabric works quite well in holding heat. The lighter weight types are not as effective as the heavier types, which are generally sold as "frost blankets", but all types are helpful.

Some gardeners will sprinkle the fabrics with water to create a shell around the plants. Research in Florida has shown that sprinkler irrigation used in combination with row covers can extend frost protection to around 21° F. Keep in mind that this is not a one time squirt of water but a continuous light sprinkling as mentioned above. Since most gardeners aren't set up to do this correctly I don't recommend sprinkling the rowcover.

I have set up hoop tunnels with PVC pipe stuck into the ground to form a series of arched hoops down the row. You can also drive short sections of rebar into the soil and then slide the PVC onto them. Space the hoops about 4 feet apart and attach another piece of PVC down from the top of the hoops for added support. The hoop tunnel is useful for preventing a tarp or other heavy material from crushing plants.



*Rowcover over hoops*

### **Adding Heat**

If it is going to get too cold for a simple cover to protect your plants, adding a source of heat beneath the cover can make a big difference. Anything that provides some heat is going to be helpful, especially if you have a good cover that is secured to prevent wind from moving the warmer air out from beneath it.

Two common ways to add heat are by adding a mechanic's light or a string of Christmas lights beneath the cover. When I say Christmas lights I mean the big ones, not the little twinkling things as they don't put out much if any heat. Take caution to check for shorts in the wiring and prevent rain or other moisture from getting into the fixtures. Also don't allow a hot light bulb to come close to plant tissues or they can suffer damage.

Another way to add heat is to place containers of water beneath a cover. This is most helpful when the plant is very small such as a new tomato transplant. Milk jugs work well for this purpose. Make sure and place one or two jugs right up against a new transplant to provide maximum protection. The larger the container of water the more latent heat it can hold. Five gallon buckets are especially helpful if you can make sure the cover over the plant prevents air movement from outside wind and is effective in reflecting radiant heat back down.



*Milk jug for latent heat*

### **Soil and Mulch**

Some of our tender perennials may make it through a mild winter just fine but be lost in a colder than average winter season. Mulch is a great way to insulate around them and use the warmth of the soil to protect them. Placing a thick mulch of hay, composted bark or similar material over them provides a measure of protection to the crown of the plant. Take care to not totally smother them with a deep mulch.

Soil, too, is a good insulator. Citrus growers often will mound up a cone of soil around the base of the tree's trunk to protect this area of the lower trunk. If a killer freeze destroys the tree they will still have a strong root system and graft union from which a new tree can be regrown in less time and without the expense of replanting new trees.

If you have some citrus trees in the landscape consider adding this measure of protection when a hard freeze is forecast. Use a loose, lightweight soil such as a sand or sandy loam and pull it back away after the danger of frost is past to avoid encouraging rot of the lower trunk.

### **Protecting Container Plants**

Plants growing in containers are especially susceptible to cold weather. Not only are the tops exposed like any other plant, but being above ground the roots lack the insulation of the earth and will get much colder than roots of an in-ground plant. Roots



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are often less hardy than the top portions of the plant. Some species which are normally quite hardy can suffer root death when temperatures in the container drop to just 28 degrees.

The most obvious solution is to move container plants into a garage or other protected location. When this is not possible the next best option is to mass the containers close together on a protected side of the home or other structure. For added protection pile leaves over the containers and/or place a tarp or blanket over them.

We have plenty of challenges in gardening. With our mild climate we can take on the challenge of cold and turn what might be a dormant season into more of a gardening season.

This fall and winter take advantage of some of the ways you can protect plants and keep that garden going all winter long.

# Vegetable Garden Planting Guide

for the Tyler Area

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
ASPARAGUS (Crowns)												
BASIL *												
BEANS, BUSH & POLE												
BEETS												
BROCCOLI *												
BRUSSEL SPROUTS *												
CABBAGE *												
CANTALOUPE (Muskmelon)												
CARROTS												
CAULIFLOWER *												
CHARD, SWISS												
CILANTRO												
COLLARDS/KALE *												
CORN, SWEET												
CUCUMBER												
DILL												
EGGPLANT *												
GARLIC (Cloves)												
LETTUCE (leaf)												
MUSTARD												
OKRA												
ONION (sets)												
PARSLEY *												
PEAS, ENGLISH/SNOW												
PEAS, SOUTHERN												
PEPPERS *												
POTATO, IRISH (Tubers)												
POTATO, SWEET (slips)												
PUMPKIN												
RADISH												
ROSEMARY*												
SPINACH												
SQUASH, SUMMER												
SQUASH, WINTER												
TOMATOES *												
TURNIPS												
WATERMELON												

\* = TRANSPLANTS

Plant seed unless otherwise noted

By: Greg Grant, Smith County Extension Agent- August 2021



# Things to do in January

## Plant Care

Till beds for spring planting and mix in compost.

Cut back ornamental grasses.

Cut back frozen and frosted perennials and tropicals.

Prune peach and plum trees into open bowl shape so light and air can reach all branches.

Prune dead wood, lower limbs, suckers, and crossed limbs from shade trees, vitex, crape myrtles, and other ornamental trees. Do not apply pruning paint.

DO NOT top or heavily prune crape myrtles.

Plant fruit and bare root nut trees, roses, asparagus, onions, ornamental cabbages, pansies, and snapdragons this month.

Transplant dormant trees and shrubs.

Mulch and or cover tender plants to prevent freeze damage.

## Fertilize

Fertilize cool season annuals, vegetables, and winter flowering plants with a 3:1:2 lawn fertilizer such as 15-5-10, 18-6-12, 28-3-12, etc.

## Pests

Apply broadleaf weed killer to control non-grassy weeds during warm periods.

Spray dormant oil to control scale on peach, citrus, and other affected fruit trees.

Remove and destroy bagworm pouches.

## Odds and Ends

Have soil tested and amend as necessary.

Clean flowerpots with soapy water and soak in a 5% bleach solution.

Clean out bird feeders, houses, and baths and clean with 5% bleach.

Keep bird feeders stocked with black oil sunflower seed.

Sort chemicals and properly dispose of expired ones.

Order seeds from seed catalogs.

Make sure plants moved inside receive the brightest light possible to avoid leaf drop.



# Helpful Resources

## Horticulture

East Texas Gardening with Keith Hansen: [easttexasgardening.com](http://easttexasgardening.com)

Facebook Page: [facebook.com/easttexasgardening](https://facebook.com/easttexasgardening)

Greg Grant 's Blog: [arborgate.com/greg-ramblings](http://arborgate.com/greg-ramblings)

Facebook Page: [facebook.com/ggrantgardens](https://facebook.com/ggrantgardens)

Neil Sperry's Web Site: [neilsperry.com](http://neilsperry.com)

Facebook Page: [facebook.com/NeilSperryTexas](https://facebook.com/NeilSperryTexas)

Plant Answers: [plantanswers.com](http://plantanswers.com)

Texas Gardener Magazine: [texasgardener.com](http://texasgardener.com)

Facebook Page: [facebook.com/texasgardenermagazine](https://facebook.com/texasgardenermagazine)

## Agriculture

Ranch TV: <https://ranchtv.org>

Facebook Page: [facebook.com/ranchtv/](https://facebook.com/ranchtv/)

Texas A&M Wildlife and Fisheries Extension: <https://wfsc.tamu.edu>

Videos: <https://www.youtube.com/user/WFSCAgriLife>

Facebook Page: [facebook.com/wfscextension/](https://facebook.com/wfscextension/)

Texas A&M Natural Resources Institute: <https://nri.tamu.edu>

Facebook Page: [facebook.com/tamuNRI/](https://facebook.com/tamuNRI/)

Wild Pig Resources and Videos: <http://feralhogs.tamu.edu>

## University Based

Texas A&M Aggie Horticulture: [aggie-horticulture.tamu.edu](http://aggie-horticulture.tamu.edu)

Facebook Page: [facebook.com/aggiehorticulture](https://facebook.com/aggiehorticulture)

Integrated Pest Management: [ipm.tamu.edu](http://ipm.tamu.edu)

Insect Answers and Information: [citybugs.tamu.edu](http://citybugs.tamu.edu)

Disease Diagnostic Laboratory: [plantclinic.tamu.edu](http://plantclinic.tamu.edu)

Turf and Grass Care: [aggieturf.tamu.edu](http://aggieturf.tamu.edu)

Texas A&M Forestry Service: [tfsweb@tamu.edu](mailto:tfsweb@tamu.edu)

Soil Testing Information: [Soiltesting.tamu.edu](http://Soiltesting.tamu.edu)

## Gardens

SFA Garden in Nocogdoches: [sfagardens.sfasu.edu](http://sfagardens.sfasu.edu)

The Garden at Texas A&M: [gardens.tamu.edu](http://gardens.tamu.edu)



# EAST REGION AGRILIFE CONFERENCE & EXPO

**W.T. BROOKSHIRE CONFERENCE CENTER  
2000 WEST FRONT STREET  
TYLER, TEXAS 75702  
FRIDAY JANUARY 5, 2024**

## TDA/AG CEU

<b>7:30 AM - 8:30 AM</b>	<b>Registration and Visit Vendors</b>
<b>8:30 AM - 9:30 AM</b>	<b>IPM Strategies for Growing Warm Season Forages in East Texas</b> <i>Dr. Vanessa Corriher - Olson, Professor and Extension Forage Specialist</i>
<b>9:30 AM - 9:45 AM</b>	<b>Break and Visit Vendors</b>
<b>9:45 AM - 10:45 AM</b>	<b>Implementation of IPM Strategies in Conjunction with Pesticide Modes of Action -</b> <i>Dr. Mark Matocha, Associate Professor &amp; Extension Specialist</i>
<b>10:45 PM - 11:00 AM</b>	<b>Break and Visit Vendors</b>
<b>11:00 AM - 12:00 PM</b>	<b>Feral Hog Toxicants -</b> <i>Dr. John Tomecek, Associate Professor &amp; Extension Wildlife Specialist</i>
<b>12:00 PM - 1:00 PM</b>	<b>Lunch and Visit Vendors</b>
<b>1:00 PM - 2:00 PM</b>	<b>Toxic Plant I.D. &amp; Control in Pastures -</b> <i>Dr. Barron Rector, Associate Professor &amp; Extension Range Specialist</i>
<b>2:00 PM - 2:15 PM</b>	<b>Break and Visit Vendors</b>
<b>2:15 PM - 3:15 PM</b>	<b>Picolinic Acid Training -</b> <i>Rob Brooks, Range &amp; Pasture Specialist</i> <i>Envu &amp; Clint Perkins, CEA- AG/NR, Texas AgriLife Extension Service, Smith County</i>

### How to Register:

Go to the website or scan QR

[smith.agrilife.org/erace](http://smith.agrilife.org/erace)



Online registration is \$10.00 per person when you register by January 03, 2024 by 5:00 pm

On-site registration \$ 20.00 per person

Online registration will accept credit/debit card  
(If you need assistance registering online stop by your local County Extension Office)  
On-site will accept Cash/Check and Credit/Debit Card.

### 5 TDA CEU's

(Private/Commercial/Non- Commercial)

### 2 General

1 L&R

2 IPM

### Presented by:

Texas A&M AgriLife Extension  
Service from the following counties:  
Anderson, Cherokee, Gregg,  
Harrison, Henderson, Kaufman,  
Marion, Panola, Rains, Rusk, Smith,  
Upshur, Van Zandt and Wood



# EAST REGION AGRILIFE CONFERENCE & EXPO

**W.T. BROOKSHIRE CONFERENCE CENTER**  
**2000 WEST FRONT STREET**  
**TYLER, TEXAS 75702**  
**FRIDAY JANUARY 5, 2024**

## SPCS CEU

- |                            |  |
|----------------------------|--|
| <b>7:15 AM - 8:00 AM</b>   | <b>Registration and Visit Vendors</b>  |
| <b>8:00 AM - 9:00 AM</b>   | <b>Termite ID Control</b><br><i>Janet Hurley, Senior Extension Program Specialist - IPM<br/>Texas A&amp;M AgriLife Extension</i>                           |
| <b>9:00 AM - 9:15 AM</b>   | <b>Break and Visit Vendors</b>   |
| <b>9:15 AM - 10:15 AM</b>  | <b>Pest Identification &amp; Control</b><br><i>Bryant McDowell, Extension Program Specialist -<br/>Urban IPM Texas A&amp;M AgriLife Extension</i>          |
| <b>10:15 PM - 10:30 AM</b> | <b>Break and Visit Vendors</b>   |
| <b>10:30 AM - 11:30 AM</b> | <b>Protecting Pollinators: Read The Label First</b><br><i>Janet Hurley, Senior Extension Program Specialist -<br/>IPM Texas A&amp;M AgriLife Extension</i> |
| <b>11:30 AM - 12:30 PM</b> | <b>Lunch and Visit Vendors</b>   |
| <b>12:30 PM - 1:30 PM</b>  | <b>Laws and Regulations Updates -</b><br><i>Dr. Mark Marocha, Associate Professor &amp; Extension<br/>Specialist</i>                                       |
| <b>1:30 PM - 1:45 PM</b>   | <b>Break and Visit Vendors</b>   |
| <b>1:45 PM - 2:45 PM</b>   | <b>Weed ID and Control - Clint Perkins, CEA- AG/NR, Texas<br/>AgriLife Extension Service, Smith County</b>   |
| <b>2:45 PM - 3:45 PM</b>   | <b>Lawn and Ornamental - Greg Grant, CEA Horticulture,<br/>Texas AgriLife Extension Service, Smith County</b>  |

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### 6 SPCS (Pending Approval)

- 1 Termite**
- 1 Pest**
- 2 General**
- 1 Weed**
- 1 L & O**

**Presented by:**  
Texas A&M AgriLife Extension Service  
from the following counties: Anderson,  
Cherokee, Gregg, Harrison, Henderson,  
Kaufman, Marion, Panola, Rains, Rusk,  
Smith, Upshur, Van Zandt and Wood

# PRIVATE APPLICATOR TRAINING

**Friday, February 2, 2024**

**Cotton Belt Building**

**1517 West Front Street, Suite 116A**

**Tyler, TX 75702**

**8:30 am to 12:00 pm**

An opportunity to obtain the required training for Private Applicators. ***Training only, testing will not be offered during this training.*** The Texas Department of Agriculture no longer offers paper exams. ***Testing procedures will be explained during the training.***

Training is required for all Private Applicators. Study materials are available for purchase for \$50 including the Private Applicator General Manual, the Texas Department of Agriculture's Laws and Regulations Manual, and all the handouts/worksheets needed for this training. These materials can be purchased ahead of the class for review or the day of the training. A \$10 Registration fee will be charged for a total of \$60.00 for this training course. **Cash, Credit Card, or check** made payable to the Livestock and Forage Committee.

Contact:

**\*To register for Training and/or to purchase study materials call  
(903) 590-2980**

Anyone needing special assistance at an Extension program should contact the Texas A&M AgriLife Extension Office at (903) 590-2980 at least one week prior to the program or event.



# 2024 Library Lecture Series

Sponsored by the Smith County Master Gardeners Association

A series of five programs designed to educate the community in all things gardening. The lectures are held the third Friday of each month, January through May, beginning at noon in the Taylor Auditorium of the Tyler Public Library.



1/19

Growing the Longview Arboretum: The Good, The Bad & The Muddy  
Steve Chamblee, Executive Director, Longview Arboretum, brings a fast-paced behind-the scenes look at the development of the Arboretum from a pipe dream to a beautiful garden.

2/16

Things I Wish I Had Learned Sooner  
Baxter Williams, Master Rosarian, American Rose Society, gives a light-hearted look at both the right information about rose horticulture against the historical lore that has been passed down.

3/15

Texas Superstar  
Lynette Sewell, Master Gardener, will discuss the Texas Superstar program in which every effort is made to ensure that highlighted plants will perform well for Texas consumers.

4/19

Tried & True, New & Different, Plants to Try to Find and Use in Your Garden, Keith Hansen, former Extension Horticulture Agent in Smith County, will help us discover plants that may not be familiar to us, or , maybe they are.

5/17

Bloom Where you are Planted – Make Your Garden Fit Your Life  
David Gary, Master Gardener, gives an inspiring presentation that serious gardening is possible despite physical limitations.

TEXAS A&M  
AGRI LIFE  
EXTENSION

TEXAS  
MASTER GARDENER  
TEXAS A&M AGRILIFE EXTENSION  
Smith County

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.





# EAST TEXAS FRUIT, NUT, & VEGETABLE CONFERENCE

## FEBRUARY 09, 2024



8:00 am Registration

8:30 am Blueberries

Dr. David Creech, Professor Emeritus-  
Stephen F. Austin University, Director  
SFA Gardens

9:30 am Muscadines and Bunch Grapes

Michael Cook Viticulture Program Specialist  
11-North Texas, Texas A&M AgriLife Extension  
Service

10:30 am BREAK

10:45 am IPM on Tomatoes and Peppers (1 CEU)

Dr. Rafia Khan, Assistant Professor Extension  
Entomologist - Texas A&M AgriLife Extension  
Service

11:45 am LUNCH (Provided)

12:30 pm Pears

Dr. Andrew King, King's Nursery & Assistant  
Director SFA Gardens

1:30 pm BREAK

1:45 pm Blackberries

Dr. Tim Hartman, Assistant Professor  
& Extension Specialist - Fruit Crops,  
Texas A&M AgriLife Extension Service

3:00 pm Adjourn

Rose Garden Center  
420 Rose Park Dr  
Tyler, Texas 75702

How to Register: Website or  
Scan QR code below

<https://smith.agrilife.org/fnvc/>

TEXAS A&M  
AGRI LIFE  
EXTENSION



Online registration is \$25.00 per person  
Cut off for registration is  
February 07, 2024 by 5:00 pm

Online registration will accept  
credit/debt card

(5 % convenience fee when using  
credit/debit cards)

(If you need assistance registering  
online stop by your local County  
Extension Office)

"TEXAS A&M AGRILIFE EXTENSION SERVICE PROVIDES EQUAL OPPORTUNITIES IN ITS PROGRAM AND EMPLOYMENT TO ALL PERSONS REGARDLESS OF RACE, COLOR, SEX, RELIGION, NATIONAL ORIGIN, AGE, DISABILITY, GENETIC INFORMATION, VETERAN STATUS, SEXUAL ORIENTATION, GENDER IDENTITY, THE TEXAS A&M UNIVERSITY SYSTEM, U.S. DEPARTMENT OF AGRICULTURE, AND THE COUNTY COMMISSIONERS COURTS OF TEXAS COOPERATING."