Marion County Extension Newsletter

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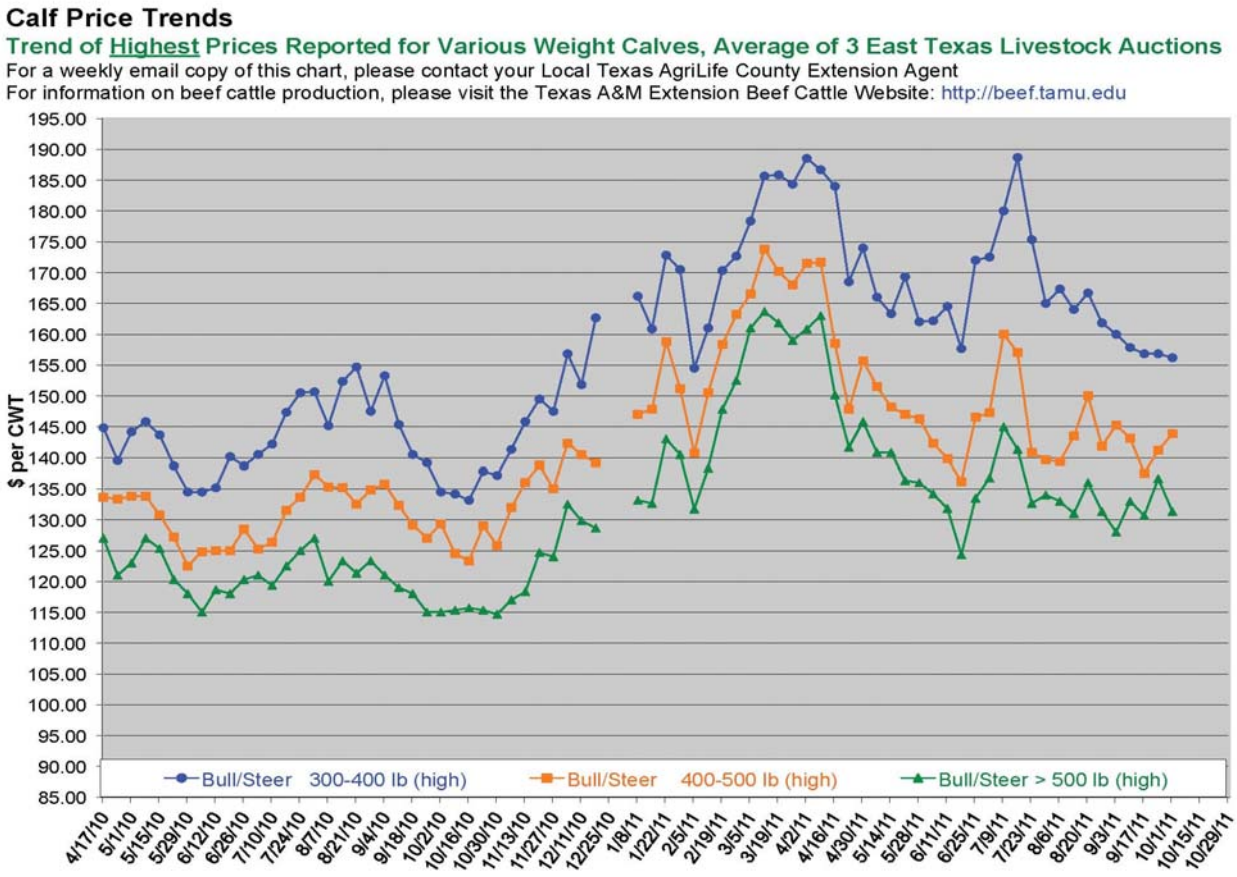
Marion County Fires

Dry temperatures and low humidity combined with the driest summer on record have made the perfect storm for fires. The winds from a disappointing tropical storm Lee gave the fires in Cass and Marion Counties the perfect environment to spread rapidly and impossible to control. An estimated 25, 000 acres burned in Marion County. Thanks to the local fire departments, many volunteers, Texas Forest Service and U.S. Forest Service the fires stopped before entering the city of Jefferson. The fires stretched from Avinger to Linden in a wall of fire. The air support was critical to stopping this tsunami of fire headed straight southwest. As I handed out publications on along HWY 59 I saw the tears of many and friends helping those that where losing there homes in the fire. I also helped rescue animals that were caught in the path of the fires and they too knew that this was a bad situation. Our animal issues team became a part of Cass County's team and set up a Livestock Supply Point after the first day to house the animals and provide food and sustain the animals as owners were seeking a safe place. Most of these animals were returned to owners once the threat of fire was gone or turned over to be adopted. At least 66 people lost their homes during the fires and FEMA was here to help with the humans aspects of the fires. There still is another dark side that the fires left behind that has not been answered, our Agriculture interests, many acres of the fires were timber producers who it seems were losers and all the fences that once stood to keep the animals in are still being found downed and in need of repair. Miles of fence that were bulldozed down, cut, or simply burned up in the fire. If you were effected I would recommend that you make a claim with the Farm Services Agency and Natural Resource Conservation Service in Linden 903-756-5491 X3. Call them first and as what they are needing you to bring to make a claim. There are no funds allocated to the recovery of the fire at this time, but if some do become available have your name on the list. Also recommended is visiting the www.forestrywebinars.net website and viewing the Timber Casualty Loss one hour video on how to claim a loss on your income tax. This website also has many other forestry webinars which you can view at your pleasure.

Beef Today

To sale or not to sale is the question a lot of beef producers are asking themselves and many have already answered by filling up the auction house. During a drought with no end in sight and feed cost that are uncommonly high, it looks like it will be a long winter. Hay prices are anywhere from $65 - $90 per roll and seemingly will go higher. If you plan to keep your cattle, a recommendation is to, reduce the numbers and extend the pasture life and allow the grass to have a chance to rebound with the fall rains if any. Overstocking during this time could really hurt your pocket book, cattle, grass, and compaction on the soil. Soil compaction is something we don't discuss enough about. Soil that is tightly compacted reduces the amount of rain that can penetrate the soil and when you get that half inch of rain it basically runs of into the pond where the sun evaporates it out. This fall think about aerating your pastures so the little rain you get with absorb in soil and provide some subsoil moisture for your grass to utilize. The key is to repair damage from the drought and walking of cattle. Allow your pastures to rest and grow roots back along with forage. Basically, when grass is grazed or cut it lowers leaf area such that the plants take nutrients from the roots to make more leaves this will shorten the roots, yet grazing and/or cutting is continued with no time to repair the leaf the plant and it becomes short as well as the roots. It is optimum to allow it to rest for a year, but in most cases this in not possible so by reducing the stocking rate will help tremendously and keep pastures healthy.



The Fall Armyworm - Pest of Pasture and Hayfields 2011

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Two species of armyworms attack forage and field crops in north Texas. The fall armyworm is most abundant during August through early November in north Texas and feeds primarily on Bermuda grass, wheat and rye grass, although it attacks many other crops. The true armyworm is common during April and May when it attacks wheat, rye grass, winter pastures, and seedling corn and sorghum. Both caterpillars can occur in very large numbers, can consume a crop almost overnight, and will move in large masses or Aarmies@ to adjacent fields in search of food. Armyworms attack many different kinds of plants and when food is scarce, they can feed on plants not normally attacked.

The fall armyworm apparently does not overwinter in north Texas. Moths fly north from south Texas each year to re-infest the area. Outbreaks often occur in late summer and fall and follow periods of rain which create favorable conditions for eggs and small larvae to survive. Irrigated fields are also highly attractive to moths for egg laying, especially during drought conditions.

Life Stages of the Fall Armyworm.

Eggs. Eggs are laid in masses of up to 50 eggs on the grass leaves and are difficult to find. Eggs are covered with the grey scales from the moth=s body, giving the mass a fuzzy appearance. Eggs hatch in 2-3 days.

Caterpillar. Fall armyworms are green, brown or black. A distinct white line between the eyes forms an inverted AY@ pattern on the face. There are four black spots aligned in a square on the top of the 8th segment near the back end of the caterpillar. Armyworms are very small at first, cause little plant damage and as a result infestations often go unnoticed. Larvae feed for 2-3 weeks and full grown larvae are about 1 to 1 2 inches long. Armyworms consume 80% of their total food intake during the last few days of development. Given their immense appetite, great numbers, and marching ability, armyworms can damage entire fields or pastures in a few days. Once the armyworm completes feeding, in tunnels into the soil about an inch and enters the pupal stage.

Pupa. The full grown armyworm tunnels into the soil and transforms to the pupae, an inactive, non-feeding stage. In 7-10 days, the moth emerges from the pupa and repeats the life cycle.

Moth. The fall armyworm moth has a wingspan of about 1 2 inches. The front pair of wings are dark gray with an irregular pattern of light and dark areas. Moths are active at night and common around lights at night. A single female can deposit up to 2000 eggs.

Development from egg to adult requires about 4 weeks during the summer and is longer during cool weather. There are several generations a year. Development ends with cold weather in November.

Management.

The key to managing fall armyworms is to detect infestations before they have caused economic damage. Fall armyworm larvae feed primarily during the night and during cloudy weather. During the day, look for armyworms under loose soil and fallen leaves on the ground. The presence of chewed leaves can indicate armyworms are present. Small larvae chew the green layer from the leaves and leave a clearing or Awindow pane@ effect and consume only a small amount of foliage. For this reason, infestations can go unnoticed unless the field is closely inspected.

Once larvae are greater than 3/4 inch, the quantity of leaves they eat increases dramatically. During the final 2-3 days of feeding, armyworms consume 80% of the total foliage consumed during their entire development. For this reason, extensive feeding damage can occur in a few days.

The density of armyworms sufficient to justify insecticide treatment will depend on the stage of crop growth and value of the crop. Seedling plants can tolerate fewer armyworms than established plants. Infestations of 2-3 armyworms per square foot may justify treatment.

Hot, dry weather and natural enemies limit armyworm populations. Insect parasites such as wasps and flies, ground beetles, and other predators help suppress armyworm numbers. Diseases such as insect viruses and fungi can also be important. However, these natural enemies can be overwhelmed when large numbers of migrating moths lay tens of thousands of eggs in a field.

Armyworms often infest fields of volunteer wheat and weedy grasses in ditches and around field margins. Destruction of volunteer wheat and weedy grasses can eliminate these sources of armyworms.

Labeled Insecticides for Armyworm Control in Pastures and Hayfields.

Always read and follow all label instructions on pesticide use and restrictions. Information below is provided for educational purposes only. **Read current label before use.**

Malathion 57% and Malathion ULV. Zero days to harvest or grazing**.**

Mustang Max (9.6% zeta-cypermethrin). The first pyrethroid insecticide labeled on pastures and hay fields. Applications may be made up to 0 days for forage and hay, 7 days for straw and seed screenings.

Tracer. Do not allow cattle to graze until spray has dried. Do not harvest hay or fodder for 3 days after treatment. There is no preharvest interval for forage. Treat when eggs hatch or when larvae are small. Use higher rates for larger larvae.

Sevin 4F, Sevin XLR, and Generic Formulations. When applied to pastures, there is a 14 day waiting period before grazing or harvesting.

Dimilin 2L. Wait one day until harvest. Label does not list a restriction on grazing. To be effective, Dimilin must be applied before larvae reach 2 inch or longer. Will not control larger larvae. Larvae must consume treated foliage. Provides residual control for up to 2-3 weeks, as long as forage is not removed from field. Dimilin acts as an insect growth regulator.

Intrepid 2F. Do not harvest hay within 7 days of application. There is no pre-harveest interval for forage. Begin applications when first signs of feeding damage appear. Use higher rates for heavier infestations. Intrepid is an insect growth regulator.

Lannate. Bermudagrass only. Do not apply within 7 days of feeding forage or allowing livestock to graze. Do not apply within 3 days of cutting for hay. Lannate is a highly toxic POISON and all label precautions must be carefully followed. A restricted use pesticide.

Karate, Warrior. (and other lambda cyhalothrin products) Pasture and rangeland grass, grass grown for

hay and silage and grass grown for seed. Pasture and rangeland grass may be used for used for grazing or cut for forage 0 days after application. Do not cut grass to be dried and harvested for hay until 7 days after the last application.

Baythroid XL. Pasture, rangeleand, grass grown for hay and seed. Labeled for control of small (1st and 2nd instar) fall armyworms. Zero days to grazing or harvesting hay.

Texas Department of Agriculture Private Applicators Training and Licencing

November 14, 2011 Kelly Park Community Center at 8 A.M. Fee is $60.00. Please stop by the Marion County Extension Office and pay and pickup your study materials up before the 14th. It is now mandatory that you purchase the Private Applicators Manual and Laws and Regulations before the class. For questions call 903-665-2421.

Animal Issues Committee Meeting

If you are interested in providing assistance during a disaster such as our fires recently and want to help in the planning or become informed about plans please contact the Marion County Extension Office at 903-665-2421. During the fires our Animal Issues committee set up a Livestock Supply Point in Linden that served 8 horses, 42 dogs and cats, 1 emu, 15 chickens. This committee was critical to getting supplies in the field and rescuing animals that got lose during the fires. It could be some other form of disaster in the future help us plan on November 17 at Kelly Park 10 AM.

My Trees Are Dying!

The trees this year were turning colors in July and August something that usually happens in October. I know I have serviced several question whether or not the tree is dead. This may help explain why this is happened and wether or not your trees are dead.

The leaves of many species of trees, like Southern red oak, have turned brown seemingly over the weekend. The leaves of many more are falling to the ground while still green. The question on everybody's mind is "Are my trees DEAD?"

It depends.

Drought and prolonged high temperatures have severely strained and will continue to strain trees all across the landscape. Water is KEY. Most (up to 90%) of the growth and vigor variation of a tree is related to water supply. But just because leaves are falling or turning brown, it doesn't mean that the tree is dead. Just like humans, excessive heat and inadequate water weakens tree and lessens their ability to resist other stresses (insects, disease). So whether or not a tree survives through the drought period depends heavily upon its resistance to drought and its resiliency to recover from stress. Resilience is directly linked to the initial health and vigor of the tree before the incident occurred. In other words, if a tree was healthy and vigorously growing before the drought, its defense mechanisms may provide adequate protection from drought and secondary stressors. If on the other hand the tree is in poor shape due to prolonged environmental stress (decade of predominantly hot/dry conditions), competition from other trees, plants and grasses, mechanical damage from human activity, then the tree may not have enough stored carbohydrates to recover or resist damages caused by drought, insects, and/or disease.

The browning and shedding of leaves that have occurred seemingly overnight are important adaptations and defense mechanisms to minimize drought damage by many tree species. Those that still have their leaves may have different adaptations to deal with water deficits such as increasing the waxy cuticle of the leave to lessen moisture loss. They are ALL under stress.

During a drought, water deficits in a tree are formed when transpiration (emitting of moisture and oxygen primarily through the leaves) exceeds the available water supply. This causes a number of responses. One of which is the premature senescence (aging) and shedding of leaves through true abscission or by withering and dying. With severe drought, leaves may not have time to senesce and may be shed while still green. This has been a common occurrence this year. Some species set the abscission layer but retain the leaves even after they have turned completely brown. Generally, heat stress injury to foliage and defoliation will be most apparent in the portions of the crown that are in full sun. Conversely, leaves at the very top-most portion of the crown may show the first signs of water deficits in large trees. In addition, with intense heat and drought as seen this year, many tree species like yellow poplar (tulip tree) will also experience a dieback in the twigs, stems and branches.

The good news is that if the tree's resiliency is adequate, new leaves will be produced (for some species) when/if water becomes available later in the growing season. These new leaves can be fully functioning until the usual senescence takes place in the fall. If, however, the species is poorly adapted or if in poor health before the drought event, chances are slight that it will recover quickly if at all. Keep in mind that trees respond slowly to stress. The last decade of hotter/dryer summers has caused an impact to a tree's ability to recover from this year's incident. For most species the injuries are cumulative and reduces the chances of survival. It is important to mention that trees

stressed and weakened this year will be potential targets of insects (such as pine engraver beetle) and disease (such as hypoxylon, armillaria, phomes), and symptoms of these secondary problems may show up for the next several years.

One thing to remember, during severe drought and extreme heat conditions, like the ones we are experiencing now, it is important that homeowners only water the trees. It is imperative that you not mulch, dig, or prune during these times, none will help a tree during this time of year, instead it will add to the stress. Pruning should only take place in the winter months, while mulching should happen in fall or early spring. Following proper maintenance guidelines is the best way to assure the health and vigor of your tree during these times of extreme stress.

Hotter and dryer summers are likely the norm for the near future. The long-term solution is to select the right tree for the site...drought resistant trees and shrubs in low-maintenance landscapes. Once established, these trees can better survive drought periods.

Drought or insufficient water: This is the most obvious cause of stress in trees. It is aggravated by summer heat. Large established trees can tolerate short periods of drought, but young or newly planted trees frequently show significant signs of stress. Recurring summer droughts can severely impact even old, long established trees.

Often folks will say, "My trees shouldn't look like this. I water them." Consider this example. A 7-year-old pecan tree in a well-drained soil needs (takes up) about 225 gallons of water a week in July and August to maintain its vigor and health. Just think of how much more a 70-year-old tree with a much greater root system might need! Water that is adequate for lawn grasses is not sufficient for actively growing trees. During periods of drought, occasionally supplement with deep watering at the drip line (the ends of the branches) of trees, not near the trunk.

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