

Pasture & Hay Field Day - June 11, 2010

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TEXAS AGRILIFE EXTENSION SERVICE

Parker County Forage News

A Field Day focusing on pasture and hay field management will be held Friday, June 11, 2010 near Aledo. The event starts at 10:00 a.m. with registration beginning at 9:30. This field day will provide you the opportunity to observe several result demonstration plots. These plots include the new herbicide Pastora, broadleaf weed control plots, fertilizer plots comparing liquid N and granular N, with soil test recommendation, aerated versus non-aerated plots, fenceline brush control management, and warm season annuals planted traditional vs. no-till. In addition we will demonstrate how to calibrate a herbicide spray rig. **2 CEU's will be offered to those with a pesticide**

applicator license. Lunch will be provided at no cost and we should conclude around 1:00 p.m. Sponsored by Dupont and Texas & Southwestern Cattle Raisers Association, this event will allow you to see more demonstrations conducted on one piece of property than we've ever had available. This day will be very informative and I hope you can attend.

Please pre-register by June 9th to assist us with the meal count by calling 817-598-6168. The location is 1500 Jenkins Road, Aledo, Texas. From I-20, take exit 420 to FM 1187. Go south 2.3 miles on 1187 to Aledo. Turn right on Underwood Road. Across from Underwood Materials, turn right on Jenkins Road. Go down Jenkins Road to the field day on your left.



Pesticide Collection Day in Weatherford - October 14, 2010

I am pleased to announce that a pesticide collection day will be conducted right here in Parker County. Bring your unwanted pesticides and other chemicals to a free collection event on October 14th for proper disposal. The event is open to all Texas residents who

apply pesticides or other agricultural chemicals and currently have banned or unwanted agricultural chemicals. Acceptable items include: pesticides, growth regulators, harvest aid chemicals, oil/filters/grease, anti-freeze, paint, fluorescent bulbs, etc.

Items not accepted include: tires, radioactive materials, explosives, propane/butane gas cylinders larger than 20 gallons, biomedical wastes and ammunition. Mark your calendars now and plan to take advantage of this great opportunity. The location will be publicized soon.

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Managing Warm-Season Improved Pastures

The quality and quantity of forage in pastures can vary greatly and are constantly changing throughout the year. The goal of forage management is to provide uniform, high quality forage to meet the nutritional needs of livestock. Proper management should result in sufficient quantities of forage throughout the year to maximize animal performance without the need for supplemental feeding. The type of livestock on pasture will determine the quality and quantity of forage needed. The quality of forage, in turn, determines animal performance. Non-lactating, mature, breeding animals require a different diet than lactating or young, growing animals. Timing the varied nutritional needs of animals to match forage production cycles can dramatically reduce supplemental feeding costs and improve overall animal performance. The principles are the same whether the forage is for beef cattle, horses, sheep or goats.

Perennial grasses are dormant in January and, if any standing forage is available, the quality is very poor. As temperatures warm and rainfall increases, grasses begin to grow. Succulent, immature growth is highly digestible and will be high in digestible energy and protein if properly fertilized. The quality and quantity of forage continue to increase until the beginning of summer when rainfall declines. The increased temperatures and reduced rainfall of summer slow or stop the production of new growth. With increased rainfall and cooler temperatures in September, grasses and winter annuals begin to grow and immature forage is again high in quality. After frost during wet winters, the quality rapidly deteriorates.

Plant Maturity

12-inch-tall coastal bermudagrass can be 58 percent digestible in the top third of the plant, 54 percent digestible in the middle third, and only 50 percent digestible in the bottom third. Coastal bermudagrass harvested at 6 weeks of age has only 50 percent of the crude

protein and 80 percent of the energy of hay harvested at 4 weeks of age. As plants mature, the leaf-to-stem ratio also changes. Young plants are primarily composed of leaves and have a high leaf-to-stem ratio. Older plants have more stems and a lower leaf-to-stem ratio. Leaves are more digestible than stems and leaves contain most of the nutrients. A high leaf content of a plant means greater forage quality, while a high number of stems translates to poorer quality.

Weed control

When an undesirable plant (weed) grows in a space, a desirable plant is eliminated. **Over-grazing is the most common cause of weed problems in pastures. At least a pound of grass can be grown for every pound of weeds controlled.** Table 1 illustrates the effectiveness of the combination of fertilization and weed control practices in improving forage yields. Because product labels change frequently, specific herbicides are not listed here.

- the variation of rainfall across the state;
- varying types of grazing systems;
- irrigation or the lack of irrigation;
- type of livestock being produced;
- different management objectives.

In general, the addition of fertilizer will improve forage quantity and quality. Table 1 shows that the fertilized plots consistently produced more forage during both dry and wet seasons than non-fertilized plots.

The way in which a producer utilizes forage determines if it is profitable to fertilize. Table 2 demonstrates the amount of nutrients removed from soil by different forage management alternatives.

One ton of grass hay will remove about 50 pounds of nitrogen, 15 pounds of phosphorus, 40 pounds of potassium, 5 pounds of sulfur and 3 pounds of magnesium from the soil. These nutrients, mined from soils, must be replaced by nutrients from commercial fertilizers or manures. Forage production will be reduced if nutrients are not replaced. In low fertility soils, desirable forages may slowly die and be replaced by weeds or brush.

Grazing management

The amount of plant material above the ground determines the depth and extent of the root system. In plants, the root system develops from excess energy produced by the leaves. The greater number of leaves on a plant translates to greater energy production and increased leaf and root growth. There is a priority system in plant development. Leaves are more important than roots. When a plant has a limited size and number of leaves, little energy is produced for growth.

Continued on page 3.

Treatment	Dry matter (lbs.) per acre	
	Dry season	Wet season
Early herbicide – fertilized	2142	8322
Early herbicide – unfertilized	1330	4988
Late herbicide – fertilized	881	7610
Late herbicide – unfertilized	477	4896
Shredding – fertilized	577	5088
Shredding – unfertilized	341	4787
Fertilizer only – no weed control	645	2587
Unfertilized and no weed control	377	1385

Evaluations conducted by David Bade, Extension Forage Specialist, The Texas A & M University System

Nutrient	Nutrients (lbs./acre)	
	Removed to produce 500 lbs. beef/acre	Removed to produce 6 tons of hay/acre
Nitrogen	18	300
Phosphorus	9	60
Potassium	1	240

Fertilization

Many factors impact the decision to fertilize pastures. They include:

Managing Warm-Season Pastures (Cont.)

A plant that has its leaves repeatedly cut off will begin to rob the root system of energy in order to regrow leaves to capture sunlight. As the root system is robbed of energy, the root system begins to shrink in size. A small root system cannot supply adequate water and nutrients needed by new leaves, so the leaves quit growing, then the roots

quit growing.

The plant has entered a deteriorating cycle. Faced with this situation, producers often “run out of pasture” from overstocking. This only aggravates the problem. Unpalatable weeds and brush begin to take the place of grasses, thus further restricting grass growth. Only a “rest” period where undesirable

weeds are controlled and no foliage is harvested will restore the grass plant. Newly established pastures should not be grazed the first year in order to allow the grass to properly establish itself.

This article was taken from Extension Publication L-5218.

Shortening Calving Seasons

Six cow herds with long calving seasons were converted to a short season. Average calving season was reduced from 273 days to 85 days. This resulted in 92% of cows calving in the desired season compared to 46% before the season was shortened. The average time taken to arrive at the shorter season was 3.8 years. One objection raised by some to shortening the calving season is that cows have

“Cost of production was reduced and income increased with a shorter calving season.”

fewer opportunities to breed and therefore fewer will calve over a year with a short season. However, in these herds the average of cows calving after the short

season had been attained was 89%, compared to 87% for the last year before the change was initiated. Averaged over the six herds, cost of production was reduced and income increased with a shorter calving season. (University of Arkansas; Beef Cattle Research Update, March 2010.) Texas A&M University Beef Cattle Browsing Newsletter- February 2010

Should We Return to “Greener” Production Systems?

It’s hard to read a weekly mass-circulation magazine or watch television without encountering some “expert” (or not) blasting “factory farming” of livestock and advocating, if not demanding, a return to simpler, cleaner, more ethical production systems. A recent research paper compared typical dairy systems from 1944, when management was largely pasture-based, and typical 2007

management.

Compared to the 1944 system, to produce the same amount of milk the modern system needed only 21% as many animals, 23% as much feedstuffs, 35% as much water, and 10% as much land. In addition, for the same amount of milk the modern system produced only 24% as much manure, 43% as much methane,

and 56% as much nitrous oxide and had a carbon footprint only 37% as large.

Comparison of grass-fed beef production and current management systems has yielded similar results.

(J. Animal Sci. 87:2160; Univ. of Georgia)

Texas A&M University Beef Cattle Browsing Newsletter- February 2010

2010 Texas A&M Beef Cattle Short Course—Aug. 2-4

The 56th Annual Texas A&M Beef Cattle Short Course, sponsored by the Texas AgriLife Extension Service, is scheduled August 2-4 at Texas A&M University in College Station. The long-term cattle market outlook and preparing for the next drought are just two of the many topics that will be discussed in the 21 different cattleman’s college sessions at the short course. The cattleman’s college portion of the three day short course provides participants with an opportunity to choose workshops based on their level of production experience and the needs of

their ranch. These concurrent workshops will feature information on ranch management, nutrition, reproduction, genetics, pastures, carcass evaluation, record keeping, brush busting, cattle handling and much more.

In addition to classroom instruction, participants can attend one of the popular demonstrations on the morning of Aug. 4. There will be demonstrations on chute-side calf working, cattle behavior, penning, selection, and brush busting. These provide an opportunity to see beef cattle

production practices put to use. The goal is to provide the most cutting-edge information needed by beef cattle producers.

An industry trade show will be held featuring more than 110 agricultural exhibits. Registration is \$140 per person and includes educational materials, a 600 page Beef Cattle Short Course proceedings, trade show, prime rib dinner, and other refreshments. Registration information and a tentative schedule can be found on the short course website at <http://beef.tamu.edu>.

Ranch Estate Planning

“Keep the ranch in the family”

Wednesday—August 4, 2010

1:00 p.m.—5:00 p.m. At the College Station Conference Center at 1300 George Bush Drive in College Station, Texas, 77840.

This seminar is offered to provide participants enough information on tax and estate planning matters to help them make difficult estate planning decisions. Dr. Wayne Hayenga will give a thorough analysis of relevant income and estate tax rules as they affect families and agricultural businesses.

The seminar is designed for each of a married couple in that it discusses estate administration and tax reporting requirements for the surviving spouse. It is useful for potential executors and trustees and is helpful to all who want to make their estate settlement less burdensome to their loved ones.

Topics to be discussed include:

- The Will. What should it say?
- A Living Trust. Do you want one? What are the benefits to your family and business?
- Estate Tax Deferral. Do you want to do this? Can you change your mind later?
- Gifts. Gifts are an alternative to leaving property in your estate. Can you afford to give property away while alive? What is the best kind of property to give away? What should you keep? A concern: Don't over-give! It can have serious tax consequences.
- Estate Taxes. How the new estate tax rules affect estate plans.
- Keeping the Ranch Operating Well. Maintaining control of the business in the proper hands is important for successful operations.
- Use of Corporations and Partnerships. A corporation or partnership can often give both income and estate tax benefits.
- Special Use Land Valuation. What are the new rules. If you do qualify, what will be the effect on your heirs.
- Deferred Estate Tax Payments.
- Life Insurance and Its Role in Estate Planning.
- New Tax Changes will be covered!

Dr. Wayne A. Hayenga is a Professor Emeritus and Extension Specialist with Texas AgriLife Extension. An agricultural economist and attorney, Dr. Hayenga works extensively with farmers, ranchers and family-owned firms in financial, business and estate tax planning.

For registration forms, contact the Parker County AgriLife Extension office.



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The Texas AgriLife Extension Service educates Texans in the areas of agriculture, environmental stewardship, youth and adult life skills, human capital and leadership, and community economic development. Extension offers the knowledge resources of the land-grant university system to educate Texans for self-improvement, individual action and community problem solving. The AgriLife Extension Service is a statewide educational agency and a member of the Texas A&M University System linked in a unique partnership with the nationwide Cooperative Extension System and Texas County Commissioners Courts.

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