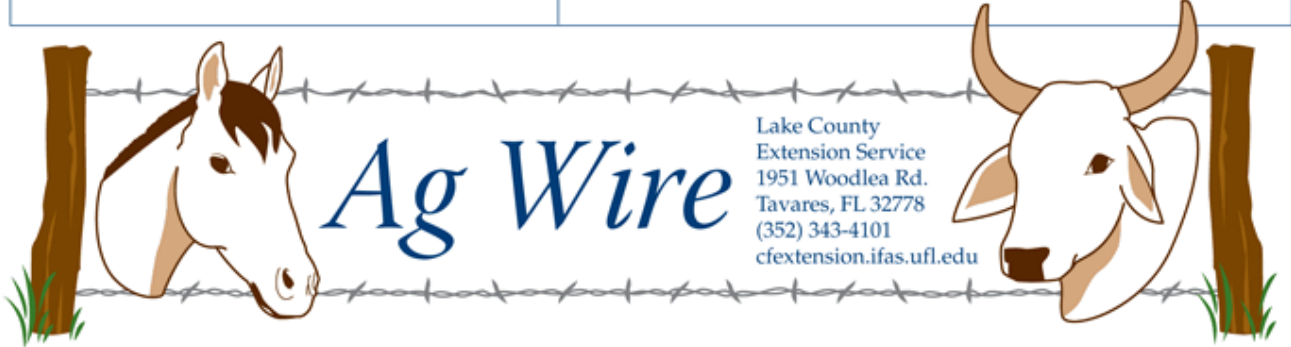




UNIVERSITY OF
FLORIDA

IFAS EXTENSION



Volume 3, Issue 2
2008 April May June

How to Reduce Fertilizer Costs

Even though fertilizer prices are incredibly high it is still the most economic way to get our livestock the protein they need to gain weight. In two years the cost of 20-5-10 has increased by about \$130 a ton. However we still must fertilize if we want our pastures to be productive. As the old saying goes you have to spend money to make money.

One way to reduce fertilizer costs is to do a soil sample. This will tell you exactly how many pounds of each nutrient you need. If you know exactly how many pounds of Phosphorus and Potassium you need you can get a fertilizer mixture that is specific to your soil needs. Therefore you will not be putting out any extra nutrients. At the same time you will be following Best Management Practices for fertilizing, which helps the environment. After you get your soil sample back it will explain how many pounds of each nutrient you need.

I will list a couple common mixtures that you can select from

Nitrogen – Phosphorus - Potassium

20-5-10

15-5-10

18-0-9

21-0-21

As you can see you can select a mixture that meets your soil needs. And also buy more concentrated mixtures so that you put fewer pounds per acre which decrease freight costs.

There are also fertilizers that just provide Nitrogen here is a few examples.

Ammonium Nitrate typically contains 33 to 34% Nitrogen therefore to meet to meet requirements for grazed pasture you need to apply 50 pounds of nitrogen which would be about 150 pounds per acre of ammonium nitrate.

Ammonium Nitrate is extremely soluble in water therefore it is fast acting. It does not produce as much acidity as other N fertilizers sources.

Sulfate of Ammonium contains between 20 to 21% Nitrogen and approximately 24% Sulfur. When applied to the soil it can significantly increase soil acidity. To meet the lowest requirement of grazed pasture 50 pounds of Nitrogen you would need to apply 250 pounds of Sulfate of Ammonium.

Comparing Ammonium Nitrate (AN) with Sulfate of Ammonium (SA) the SA is much cheaper; however you have to look at the other effects that SA may pose such as increased acidity to pastures.

Other sources of Nitrogen may be **Urea** which is a crystalline solid that contains 46% of N. Urea can be applied in a solid or liquid form and since the % of N is much higher it may be lower cost of transportation. Compared to SA and AN urea produces less acidity and typically does not affect soil pH significantly.

There are also **organic sources** such as animal manure and biosolids that can provide N to forage grasses. When applied correctly, these materials can be beneficial to pastures with no negative impacts on the environment. Some facts that you need to be aware of are that these sources of N are not readily available to plants. As the organic compounds mineralize, N and other essential nutrients become available. Therefore time and rate of application are critical factors. Also organic sources usually contain excessive amounts of phosphorus which exceed forage demands and can also contaminate water bodies. An advantage/disadvantage could also be that because these materials are lime stabilized they can increase soil pH. Bottom line is that these can be great sources of N however you need to watch pH and phosphorus levels and make sure that they are not getting to high.

In conclusion fertilizer prices are really high but here are your benefits for fertilizing:

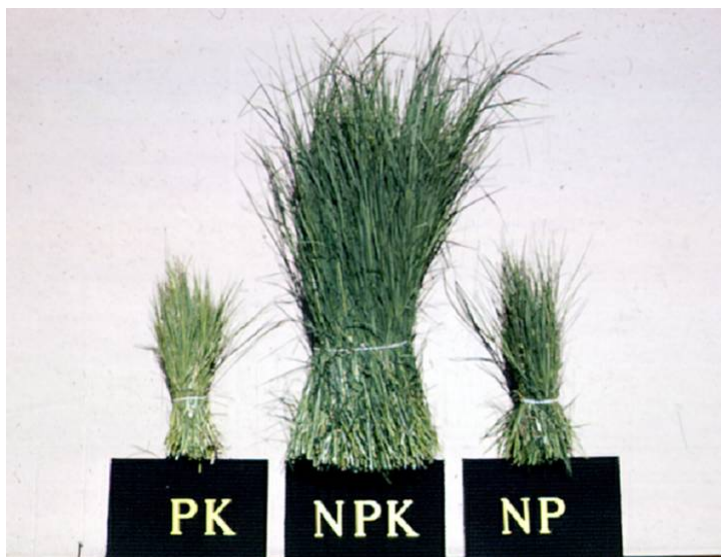
Increase in quantity and quality of forage

Feed less grain

Increase pregnancy rates

Heavier Calves

Improve overall soil conditions (fewer weeds)



You must have the proper amounts of all three elements (N-P-K) and proper pH for forage to produce.

57th Annual Florida Beef Cattle Short Course

“Positioning Cattle Producers to Access Markets, Choose bulls and Fine Tune Management”
Hilton University of Florida conference Center, Gainesville, Florida
April 30- May 2, 2008

Beef cattle producers continue to face challenges that affect the potential for profitability of their beef cattle enterprise. Increasing production costs coupled with unfavorable weather patterns continue to drive cattlemen to examine their bottom line. This years Short Course will address those issues that are facing the cattle producers. This event is a great educational event for cattlemen and also a time to meet with the allied industry members so you can learn about new technology that will help your operation become more efficient.

Managing Cattle Operations to Protect Lakes and Rivers

In the last couple of years I am sure you have heard that cattle are a major cause of deteriorating water quality in Florida and other cattle-producing states. The main concern was Phosphorus runoff was caused from manure and fertilizers applied to enhance forage production can pollute rivers and lakes. However very limited data was available to support this idea. Because of these concerns Soil scientist Gilbert Sigua and colleagues in the ARS Beef Cattle Research Unit in Brooksville, FL, monitored changes in soil nutrients from 1988 to 2002. Testing was done on 3 large cattle pastures with a total of 3,200 acres of permanent pastures with about 1,000 Cows, bulls and calves.

Overall, there was no buildup of soil phosphorus or other crop nutrients, despite the annual application of fertilizers and daily in-field loading of animal waste. Periodic soil analysis showed declining nutrient levels, especially of phosphorus.

To read more about this research check out the February 2008 issue of Agricultural Research magazine, available online at: <http://www.ars.usda.gov/is/AR/archive/feb08/cattle0208.htm>

Controlling Pasture Weeds

Summer is right around the corner and with that comes weeds that reduce forage yield and degrade forage quality. For the latest recommendations you can refer to Weed Management in Pasture and Range Land 2008 which can be found at <http://edis.ifas.ufl.edu/WG006>

Forefront applied at 2-2.6 pints per acre will provide excellent control of Tropical Soda Apple, horsenettle, and other members of the nightshade family. Also control pigweeds and other broadleaf weeds including dogfennel that are no taller than knee high. Do not apply greater than 2.6 pt/a/yr. Do not apply to desirable forage legumes or sever injury and stand loss will occur. Do not apply to limpgrass. Forefront will pass through animals and remain in the waste. Do not mulch sensitive crops with manure if animals have been grazing on Forefront-treated pastures. If your dogfennels are taller than knee high you can use a tank mix of Forefront and Pasture guard.

2 Recommended Tank mixes that are similar and have greater than 90% control on both TSA and dogfennel are:

2pt/Acre of Forefront + 3pt/Acre of 2.4D amine

2pt/Acre of Forefront + 1pt/Acre of Pasture Guard

Weed control should be done as early as possible so that you get the most growth out of your bahia grass however remember that drought negatively affects weed control. It is best to apply herbicide when weed growth is rapid and ground moisture is sufficient.

Diesel Fuel Saving Tips

Reduce the number of trips equipment is driven to and from fields.

Avoid unnecessary operations

Use proper ballast. Farm tractors are designed to be operated with additional weight or ballast when pulling heavy loads to prevent wheel slip. Insufficient ballast can cause excessive wheel slip and increased fuel consumption.

Shut off diesel engines rather than letting them idle for long periods. Fuel savings can be realized by not idling diesel engines for more than 10 minutes.

Check injectors. Dirty fuel injectors can cause inefficient combustion of fuel and some loss of power. If an injector is plugged you have loss power and efficiency.

Service air cleaners. Dirty air cleaners restrict the flow of air needed for the combustion process. The result is excess fuel in the fuel-air mixture, leading to increased fuel consumption with less available power.

Use Proper viscosity oil in the engine to maximize engine efficiency. Oils that are too thick decrease power and lubrication and increase fuel consumption.

Replace worn-out engine parts. Keeping any ground-engaging tools sharp makes a big difference when it comes to saving fuel and improving speed and field efficiency.

Look for special buying deals such as storing large quantities and combining orders with neighbors. For more information you can see the full article at:
<http://agbiopubs.sdstate.edu/articles/ExEx14095.pdf>

Calendar of Events

April

3rd-12th Lake County Fair check www.lakecofair.com for show dates

30- Florida Beef Cattle Short Course Hilton University of Florida Conference Center Gainesville, FL
Contact Pam Gross to register 352-392-1916

May

1st & 2nd - Florida Beef Cattle Short Course

June

17-19 Florida Cattlemen's Association Convention

24- CEU Training Day Lake County Extension Office

28- Lake County Cattlemen's Show Calf Sale

July

3-31 Thursday evenings at Extension Office Summer Equine Workshop

Hope you all have a great spring if you have any questions please call at 352-343-4101 or email at marthat@ufl.edu

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