Fulton County Cooperative Extension Service
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The Back Forty News

FULTON COUNTY U OF A COOPERATIVE EXTENSION SERVICE NEWSLETTER

April 2013

FROM THE AGENT'S DESK...

It seems that spring is quickly upon us. Hopefully, everyone isn’t too far away from getting to take those hay forks off the tractor for awhile. By the time the mail gets this to you, chances are fescue is breaking dormancy, buttercups need spraying, and seed and fertilizers are on order if not already put in the ground. Cool season grasses and legumes can be sowed now, but fall plantings are usually preferred.

Soil sampling analysis and fertilizer application recommendations are in full force already here at the Fulton Co. Extension Office. It’s also the time of year when farm visits and my time out of the office is at its maximum, and I welcome it after the wintertime. So, please feel free to give me a call anytime, and if you ever want me to come out to take a look at your situation, I’m glad to do that too.
SPRING BRUCELLOSIS (BANGS) VACCINATIONS

Spring brucellosis vaccinations tentative dates will be April 18th and 19th. If we can do all that are scheduled, we'll do them all on Friday the 19th. If we get more than a day's worth of stops to make, we'll do part of them on Thursday, the 18th.

If you have heifers to be vaccinated, it is important that you let us know by Thursday, APRIL 11TH. Return the enclosed card to our office immediately or call us at 870-895-3301. Be sure to give good directions to your farm. Please don’t assume that Franky or I know exactly where your heifers will be

Vaccinations will be made by an Arkansas Livestock & Poultry Commission technician and are free of charge and available to any livestock producer regardless of race, color, national origin, religion, gender, age, disability, marital or veteran’s status, or any other legally protected status. Heifers must be 4 months old and not more than 12 months old to be eligible for vaccination.

We will use the same procedure as in the past and notify you by letter before you are scheduled for vaccinations. You will need handling facilities to confine and work the calves. If you do not have a head gate, the livestock technician will not vaccinate them. Also, you or a representative must be there at the time of vaccination or the technician will not vaccinate the heifers. If no one is there, we'll be moving along to the next stop.
Grass tetany, a disease that commonly occurs in Arkansas in the months of February, March and April, is due to an abnormally low level of magnesium in the cow’s body. This decrease in magnesium can be indirectly caused by heavy fertilization of pastures. When forages are fertilized heavily with potassium (potash), this can decrease the dietary absorption of magnesium in a cow’s gastrointestinal system. Young, rapidly growing forage usually has an increased content of potassium.

These two aspects (fertilization and rapidly growing forage) are the reason this disease is normally seen in late winter and early spring when these causes are abundant. This disease typically occurs in older lactating cows. It more commonly affects cows with either very poor body condition scores or cows that are over conditioned. Other factors that may play a role in the disease are weather – it is usually cloudy, misty and/or cold when this disease occurs – and stressors such as hauling, penning or heavy lactation. Clinical signs associated with this disease range from light changes in behavior to death. Early in the disease, cattle affected by grass tetany may show signs such as decreased appetite, decreased milk production, tendency to stay away from the herd, increased alertness and a stiff or unsteady gait. As the disease progresses, cattle may become recumbent and unable to get up. They will exhibit muscle tremors (spasms), protruding third eyelid, increased pulse and respiratory rates and eventually death if untreated.

**Treatment**

The most important part of treating this disease is to correct the magnesium imbalance. This can be accomplished by administering 500mL of an IV electrolyte solution (CMPK). This solution should be administered slowly, and heart and respiratory rate should be monitored closely. After treating with the IV solution, one can then administer one tube of CMPK gel orally or give another 500mL bottle of solution intraperitoneally to decrease the incidence of relapse. If clinical signs are mild, then Mg imbalances can be corrected by treating with approximately 150cc of a 20 percent Mg sulfate solution given subcutaneously in several injection sites.

**Prevention**

Prevention of grass tetany can be achieved by providing a salt-mineral supplement containing at least 10 percent Mg. Several mineral feeders should be used if stocking rates are higher for the herd. Mineral feeders should also be conveniently located in the pasture so cattle have adequate access to them. It is also important to review fertilization practices to keep this disease less prevalent. Fertilization should be based on recent soil samples taken from the farm.
BATESVILLE EXPERIMENT STATION 75th ANNIVERSARY FIELD DAY

The Livestock and Forestry Experiment Station near Batesville will be having its 75th anniversary field day on April 16th. The day starts with registration at 9:00 a.m. and will end at approximately 3:00 p.m. Lunch will be provided, and there’s no cost to attend. The agenda for the day is not completely finalized yet, but much of the day will be spent touring around the experiment station with speakers covering topics such as: Cow Herd Management, Forage Management, Using Commodity Feeds to Replace Hay, Weed Control, and Managing Legumes.

If you are interested in attending and wish to ride along with me, you’re more than welcome to. I’ve got room for 3 folks in my truck and these prized spots are on a first come first serve basis. Call me if you’re interested in going with me. There’s no need to pre-register otherwise.

CONVERTING OLD ‘KENTUCKY 31’ FESCUE FIELDS TO A NOVEL FESCUE VARIETY

Brad Runsick – Fulton County Extension Agent

Why Convert?
As many know, the problem with ‘Kentucky 31’ is that it hosts a fungus, known as an endophyte. This endophyte itself is not what is toxic. The endophyte produces a compound known as ergovaline, as well as a few others, but ergovaline is primarily the one creating problems in cattle. It is also this endophyte that makes ‘Kentucky 31’ so hardy. Essentially, for years, we’ve sacrificed cattle health and gains to be able to have a forage species that is tough and one that we don’t have to pay much attention to, relative to others.

If you’ve finally made the decision to reseed some old ‘Kentucky 31’ fields with a novel, non-toxic fescue cultivar, then you’ve made a good decision. However, it’s not an easy conversion. No doubt, the toxicity issue with ‘Kentucky 31’ causes a whole host of problems in cattle and reduces gains. Then again, you can’t beat the drought tolerance, survivability on low fertility soil, tolerance to overgrazing, and the overall stand persistence of ‘Kentucky 31’. You can treat it poorly and still have pasture. With these novel fescue varieties, you’ve got to be a better manager or you’ll have no novel fescue left within a few years.

Fescue/Endophyte Varieties and How to Decide Which One
When it comes to tall fescue varieties, we’ve really got 3 general types available to us: Endophyte infected (E+) such as ‘Kentucky 31’, novel endophyte (NE+), and those that have no endophyte present at all (E-). Now, these E-varieties might sound enticing, but they’re not the way to go for us in northern AR. Why? Because they don’t contain the endophyte, they lose the hardiness that we’re use to with ‘Kentucky 31’. The University of Arkansas doesn’t recommend any of the available E-varieties. So, that leaves us with the novels (NE+).

The novels DO still have an endophyte present, but it’s a type that produces very low amounts of ergovaline, the compound that is harmful in cattle. Also, because they contain the endophyte, the get some of the hardiness that ‘Kentucky 31’ has. However, it’s not as hardy. When it comes to selecting a novel variety, stick with what is research proven. Currently recommended NE+ fescue variety/endophytes on the market include MaxQ (2001, Pennington Seed, Madison, GA), Texoma MaxQ II (2011, Pennington Seed), BarOptima (2009, Barenbrug USA, Tangent, Oregon), Estancia with ArkShield (2011, Mountain View Seeds, Salem, Oregon), and DuraMax with Armor (2011
DLF International, Halsey, Oregon). Estancia and DuraMax both contain endophytes from the Arkansas fescue research program.

**The Process of Converting the Field: The Spray-Smother-Spray Method (S-M-S)**

Converting a pasture of ‘KY-31’ to a novel variety is an all or nothing endeavor. If you’re planning to disk it up a little, sow the novel seed, and sit back and wait for cattle to get out of the pond the next summer, you’re likely wasting your time and money.

First and foremost, you’ve got to eradicate all of the existing ‘KY-31’. The new, novel plants won’t convert to toxic fescue, but over time, a few remaining ‘KY-31’ will produce enough seed to eventually choke the novel variety plants out. And the thing is, you’ll never know it, unless you test the forage for the presence of ergovaline, which can be expensive. ‘Kentucky 31’ is a great seed producer, and it doesn’t take just a few surviving plants to produce enough seed to slowly re-infest your new novel field.

Adapted from Dr. John Jennings, Extension forage specialist, recent news article:

“The “spray-smother-spray” (S-M-S) method has been a reliable method for renovating toxic fescue pastures and can begin in the fall or spring. If starting in spring (late April to early May) when fescue is actively growing and before any new seed is produced, 1.) clip or graze to a height of 4-6” and 2.) apply a nonselective herbicide such as glyphosate (Roundup). After the fescue top growth dies down, 3.) no-till plant a summer annual forage, such as pearl millet or sorghum-sudan. The summer annual forage provides heavy shade and competition for any remaining fescue plants and can be harvested for hay or grazed. After the final 4.) harvest of the annual forage in late summer, 5.) follow up with a second herbicide application. 6.) The field can be planted with NE+ fescue or other cool-season grass in the fall. If starting in fall, apply a nonselective herbicide to the actively growing fescue during fall (September to early October) and no-till drill a small grain for winter/spring forage. Do not plant annual ryegrass because natural reseeding from ryegrass will cause severe competition when NE+ fescue is planted later. Follow the small grain with a second herbicide application in spring then no-till drill a summer annual. In fall, no-till drill NE+ fescue after the summer annual is harvested.

This method requires advance planning to adequately kill all the E+ fescue. Taking care to prevent seed production of the E+ fescue in the current and previous spring helps reduce the number of new seedlings of toxic fescue in the fall.”

So, it takes quite a bit of planning on your part. Of course, everyone needs pasture, but a fall planting is much more preferred for these novel varieties. It allows a much longer time for those plants to get well established before facing their first summer. Also, if you didn’t plan ahead last fall, then you’ve not done anything to curtail last fall’s ‘KY-31’ seed production. If that’s the case, I don’t recommend trying to plant the novel this spring. Do your planning this spring for a fall planting. If there’s ever been a good time to try to convert pastures, now is that time. The drought of the last two years has already severely weakened or killed a lot of ‘KY-31’, so the opportunity is there. However,
don’t fall into the trap that the drought has already done the killing for you. Chances are, even in the worst drought-stricken pastures, some ‘KY-31’ survived to produce seed, and those seedlings are out there right now. If so, they’ll grow up right alongside your newly planted novel fescue and will totally re-infest that field in a few years. If you’ve got any questions, feel free to give me a call at 870-895-3301 (office) or 870-750-0848 (cell).

**TAX IMPLICATIONS OF DROUGHT-RELATED LIVESTOCK SALES**

Nathan Kemper, University of Arkansas TAA Coordinator, Southern Regional Risk Management Center

The beef cattle industry in Arkansas was especially hard hit by the 2012 drought. Poor pasture conditions, increased cost of inputs, reduced revenues from low hay production, and lower cattle marketing weights all contributed to eroding farm income. A survey done in late summer gathered data from cow-calf farms in Arkansas. 545 responses were received from farmers in 58 counties. The results showed that the drought had a drastic impact on farmers’ cattle sales. Over 73% of farmers reported that they planned to sell calves as much as two and a half months earlier than normal. Compared to a typical year, farmers reported that:

- 49% had sold more mature cows
- 41% planned to sell more mature cows
- 41% had sold replacement heifers
- 30% were planning to sell more replacement heifers

**Arkansas Farmers May be Able to Postpone Payment of Income Tax**

Arkansas farmers who sold livestock in 2012 due to a weather-related condition may be able to postpone reporting the gain from these additional sales until the next tax year. These early sales may have been caused by shortage of water, poor grazing conditions, low feed production, or other consequences of weather-related conditions. There are two tax options available to farmers. Farmers must meet all of the following conditions to qualify:

1. Your principal trade or business is farming.
2. You use the cash method of accounting.
3. You can show that, under your usual business practices, you would not have sold or exchanged the additional animals this year except for the weather-related condition.
4. The weather-related condition caused an area to be designated as eligible for assistance by the federal government.

Tax Option 1 – Postpone reporting taxable gain on additional sales of any livestock for 1 year

Code Section 451(e) – The first option known as the deferred sales receipt method has the broadest class of animals that qualify. The income from livestock or poultry sold in excess of normal sales (whether raised or purchased) may be deferred for up to one year. To postpone a gain, farmers must attach a statement to their tax return for the year of sale. The statement must include the following information for each class of livestock for which a gain is being postponed:

1. A statement that you are postponing gain under Internal Revenue Code (IRC) section 451(e).
2. Evidence of the weather-related conditions that forced the early sale or exchange of the livestock and the date, if known, on which an area was designated as eligible for assistance by the federal government because of weather-related conditions.
3. A statement explaining the relationship of the area affected by the weather-related condition to your early sale or exchange of the livestock.
4. The number of animals sold in each of the 3 preceding years.
5. The number of animals you would have sold in the tax year had you followed your normal business practice in the absence of weather-related conditions.
6. The total number of animals sold and the number sold because of weather-related conditions during the tax year.
7. A computation, as described above, of the income to be postponed for each class of livestock.

Option 1 is the ONLY option for livestock held for sale (e.g., steers, feeder heifers). Not all income must be deferred to the following year. One advantage to farmers using Option 1 is that some income can be taken as income for the drought year and some can be deferred to the following year.

Example – Option 1: Farmer Smith normally sells 20 cows each year. Due to the 2012 drought, Smith had no pasture or hay to feed his cattle and he sold 50 cows rather than the normal 20. Smith sells the 50 cows at $650 per head. Since 20 cows are sold in a “normal” year, the amount of sales that can be deferred calculated as follows: 30 cows at $650/head = $19,500. The 20 cows sold at $650/head would be reported as income in 2012 for $13,000.
Tax Option 2 – Postpone and avoid paying taxes on the gain from the sale of breeding, draft, or dairy animals if they are replaced within a specified time frame

Code Section 1033(e) – The second option is the “involuntary conversion” option. Income from drought-related sales of draft, breeding, or dairy animals (no sporting animals) sold do not have to be recognized if the proceeds are used to purchase replacement livestock within two years from the end of the tax year in which the drought-related sales take place. The recovery period for federally declared disaster areas is extended to four years. The new livestock must be used for the same purpose as the livestock sold (breeding stock replaced with breeding stock). The taxpayer must show that weather caused the sale of more livestock than otherwise would have been sold in a typical year. Under option 2, the area does not have to be declared a federal disaster area. The requirements under option 2 are the following:

1) Evidence of existence of the weather conditions that forced the sale or exchange of the livestock.
2) A computation of the amount of gain realized on the sale or exchange.
3) The number and kind of livestock sold or exchanged.
4) The number of livestock of each kind that would have been sold or exchanged under the usual business practice if the weather condition had not occurred.

Farmers should carefully consider future intentions for rebuilding their herds when opting for the second option. When replacements are purchased, the date of purchase should be attached to the tax return along with the cost, number of animals and kind of animals.

Example – Option 2: Farmer Smith normally sells 20 cows from her beef herd each year. In 2012 due to the drought, Smith sold 70. This was 50 more than normal. Smith plans to purchase additional cows in 2013 to replace the extra 50 cows sold. The average price for all 70 head was $675/head. Only the 50 extra cows sold qualify for the deferment and because the cows were raised rather than purchased, they have a zero tax basis. The 50 head at $675 = $33,750 of deferred income. Farmer Smith can now invest the $33,750 in replacement cows in 2013 and have a zero tax basis in the new replacements. If Smith only invests $20,000 in replacement cows in 2013, then the difference ($33,750 – $20,000) of $13,750 must be reported as taxable income by amending her 2012 income tax return.

This report is for educational information only and is not a substitute for tax advice from your CPA. Farmers considering either Option 1 or Option 2 due to drought-related livestock sales in 2012 should refer to the IRS Farmer’s Tax Guide for 2012 returns (http://www.irs.gov/pub/irs-pdf/p225.pdf). Print this document and visit with your tax accountant about your options for deferring income from your drought-related livestock sales from the 2012 drought.
Table 1. Summary of Tax Options Related to Drought-Related Livestock Sales

<table>
<thead>
<tr>
<th>Option 1</th>
<th>Option 2</th>
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</thead>
<tbody>
<tr>
<td><strong>Deferred Sales Receipts</strong></td>
<td><strong>Involuntary Conversion</strong></td>
</tr>
<tr>
<td>Tax Code</td>
<td>Tax Code</td>
</tr>
<tr>
<td>Section 451(e)</td>
<td>Section 1033(e)</td>
</tr>
<tr>
<td>What livestock qualifies?</td>
<td>All livestock</td>
</tr>
<tr>
<td>Draft, breeding, or dairy livestock</td>
<td></td>
</tr>
<tr>
<td>Requirement of disaster area declaration?</td>
<td>Yes</td>
</tr>
<tr>
<td>No, but declaration increases replacement period to 4 years</td>
<td></td>
</tr>
<tr>
<td>Must livestock be in the affected area?</td>
<td>No</td>
</tr>
<tr>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Must livestock be sold in the affected area?</td>
<td>No</td>
</tr>
<tr>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Must weather have caused the sale?</td>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Provision applies to:</td>
<td>Provision applies to:</td>
</tr>
<tr>
<td>Sales in excess of normal practice</td>
<td>Sales in excess of normal practice</td>
</tr>
<tr>
<td>Provision allows:</td>
<td>Provision allows:</td>
</tr>
<tr>
<td>Postponing recognition of income by one year</td>
<td>Deferral of gain by carrying over basis to replacements</td>
</tr>
<tr>
<td>Is repurchase required?</td>
<td>Is repurchase required?</td>
</tr>
<tr>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>What is the basis in replacement livestock?</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Reduced by gain that is deferred</td>
<td></td>
</tr>
<tr>
<td>What is the period for replacing?</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Two years from the end of the taxable year of sale or 4 years if area is eligible for federal assistance</td>
<td></td>
</tr>
<tr>
<td>What is the time limit for making the Election?</td>
<td>Due date for return for year or sale of livestock held for resale and 4 years after the year of sale for draft, dairy, or breeding livestock</td>
</tr>
<tr>
<td>Two years from the end of the taxable year of sale</td>
<td></td>
</tr>
</tbody>
</table>

Source: Adapted from J.C. Hobbs “Tax Consequences of Weather Related Sale of Livestock”

Economic Impact of the 2012 Drought: [http://srme.uark.edu/beef/](http://srme.uark.edu/beef/)

OSU Fact Sheet: “Tax Consequences of Weather Related Sale of Livestock” ([http://osufacts.okstate.edu](http://osufacts.okstate.edu))


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