With the way the weather has treated us this week, it is difficult not to think about the age old saying “one extreme followed by another”. We have had a very cold winter so far but the snow isn't all that bad. The recent precipitation has lifted our county wide burn ban meaning we were cold and dry for a period of time. If you have been feeding hay the past couple of days, I bet you were cold and wet or muddy. With the extreme’s here, there may be concern for bermudagrass injury. Wet soil helps to insulate the injury of cold weather but lack thereof could lead to spotty patches of summer forages when it begins to get warmer. With an open canopy and less competition gives opportunistic weeds a chance to flourish. See the enclosed article about winter injury for further details about scouting for winter injury. Give us a call if you begin to see injury in your forage stands. On another note, do not forget to substitute for high magnesium mineral to prevent grass tetany issues in the cowherd.

Pesticide Applicator Certification

The trainings are for those producers needing to recertify or producers needing to certify for the first time. A producer only needs to attend one of the sessions. The certification is valid for 5 years and allows the producer to purchase restricted use pesticides. Cost of the training is $10.

Preregistration for the training is not required. If you are unsure if you are due for re-certification, on your license it should state the date in which the license will expire. If you have misplaced your license and need to verify if it is still in effect, contact the Arkansas State Plant Board at (501) 225-1598.

Charleston Courthouse-Courtroom (3rd Floor)-February 18th at 6:30 p.m.

Johnson County Fairgrounds-Clarksville-February 20th at 6:30 p.m.

Ozark Extension Office-February 21st at 9 a.m.
River Valley Beef Cattle Conference
February 11th
County Fairgrounds-Morrilton, AR

Registration begins at 8:30 am

The River Valley Beef Cattle Conference will touch on issues such as: what is the most cost effective way to rebuild the cow herd? Should cattle producers buy breed cows, raise replacement heifers, buy breed heifers or buy cows with calves at their side? Bull prices have increased tremendously the last couple of years. How much can you pay for a bull? Due to the 2012 drought, weeds have taken over many pastures and hay meadows. What is the most cost effective way to control them? With calf prices as high as they are, the last thing you can afford is a sick calf. How can cattle producers keep calves healthy?

Topics:
Mr. Bryan Kutz, instructor – Animal Science – “Sire Selection.”
Mr. Nathan Kemper, economist – “How to Rebuild the Cowherd.”
Dr. Jeremy Powell, professor and veterinarian – Animal Science – “Calf health and Preconditioning.”
Dr. John Boyd, professor – Crop, Soil & Environmental Science, “Pasture Weed Control”.

Registration fee is $20.

Directions-Take exit 108 at Morrilton from I-40. Take a right for AR-9. Go south until you see the exit ramp for AR-64. Drive until you see Levi Dr. on the right and you will arrive at Conway County Fairgrounds.

Tri-County Forage Meeting
March 5th
Community Building at Paris

Registration begins at 8:30 am
Meal will be catered by Rivertowne BBQ

Topics:
Nutrient Recycling on the Farm -- Haylage Production
Snake Oils on the Farm -- Weed Control
Scouting for Freeze Injury to Bermudagrass Forage

John Jennings – Professor, Extension Forages

It has been some time since winter temperatures were cold enough to cause concern for injury to bermudagrass pastures and hay fields, but this winter’s weather is in that category. Cold injury to bermudagrass is hard to predict because soil moisture and snow cover interact with temperature to increase or reduce cold injury. In general, moist soil conditions during the cold temperature period reduces cold injury and dry soil conditions during extreme cold increases potential for cold injury. The water in moist soil tends to hold heat better than dry soil. Think of it this way – dry, cold conditions tend to freeze-dry plants and roots. The longer the cold, dry weather lasts the more potential for cold injury. Snow cover insulates the soil and protects plants from extreme temperature fluctuations. Conditions are very dry statewide and as of this writing, 50 counties are under burn bans. That along with the repeated cold temperatures plunges will likely cause cold injury to some bermudagrass fields.

Assessing cold injury can’t be done in the field until the bermudagrass begins breaking dormancy. Very cold-sensitive varieties may suffer complete winterkill whereas others may exhibit slower and later greenup than normal. This will increase weed pressure and reduce season-long yield. Low soil fertility increases cold injury potential especially low soil potassium levels. The relatively mild winters in the upper south over the past several years have allowed varieties of moderate freeze tolerance to escape injury that will occur with a cyclic return to more severe winter conditions. Fewer cold-tolerant seeded varieties are available than cold-tolerant sprigged varieties. Some of the best bermudagrass varieties grown along the Gulf Coast are prone to winterkill and winter injury in Arkansas.

Some cold sensitive varieties planted from seed include Arizona Common, Jackpot, and Giant. These are commonly included in seed blends to provide quicker cover and first year yield, but tend to winterkill over time leaving the more cold-tolerant variety of the blend. Giant bermudagrass is very cold sensitive and winter kills easily. Jackpot has shown poor cold-tolerance on several farms in north Arkansas. Common survives well in the southern half of Arkansas, but may likely show winter injury this spring across north Arkansas. The most common cold-tolerant seeded variety is Wrangler. It’s cold tolerance is on par with many of the cold-tolerant hybrids grown in north Arkansas. Other commonly grown seeded varieties with moderate cold-tolerance include Cheyenne, CD-90160, and KF-194. All three have lower cold tolerance than Wrangler, but have been grown successfully in north Arkansas. The two numbered varieties are used in many seed blends sold in recent years.

When grown in colder climatic areas, varieties with moderate to low winter hardiness can be expected to begin growth later in the spring and require time to re-develop the sod density they had prior to the winter injury. This delayed spring growth makes them susceptible to weed invasion that will negatively impact their ability to reform the sod cover. Cold sensitive varieties are at greatest risk the 1st winter after seeding. Thereafter, they tend to be less susceptible to winter injury, probably because of better developed root and rhizome systems. The winter hardy Wrangler will perform better than moderately winter hardy varieties in colder climatic areas but will not perform as well when winter injury is not a factor. Research in Haskell, Oklahoma in spring of 2001 following a cold winter showed much slower greenup of Cheyenne, CD-90160,
and KF-194 than for Wrangler.

The best rated sprigged bermudagrass varieties for cold-tolerance include Midland 99, Ozark, Tifton 44, and Greenfield. Newer varieties such as Vaughns #1 and World Feeder also have shown good cold tolerance. Each of those six varieties are grown in north Arkansas with little cold injury. Some sprigged varieties that are cold-sensitive include Coastal, Russell, Alicia, Jiggs, and Tifton 85. These varieties are grown only in south Arkansas. But the northern limit keeps creeping northward. Jiggs was included in trials at Booneville and commonly suffered severe winter injury. Tifton 85 is the highest yielding and highest quality variety grown in the deep south but has lower cold tolerance than Coastal. Forage specialists from Georgia, Texas, and Louisiana suggest it's northern limit is near Shreveport, LA, but it is being grown in southern Arkansas.

Any variety with moderate or low cold tolerance, as well as those growing under fertility or other stress, should be checked closely this spring for signs of injury. Some practices that can improve recovery include proper fertility, judicious weed control, and proper grazing or hay harvest. Soil tests should be taken now to determine soil fertility levels. Fertilizer recommendations are specific for hay or pasture so be sure to note the intended use when submitting soil samples. Bermudagrass has very poor tolerance for shade so weed control is critical for winter damaged stands. Aggressive winter annual weeds or even ryegrass can form a heavy canopy in spring that delays bermudagrass greenup. The effect is much more severe on winter damaged fields. Many species of winter annual weeds are easily controlled with recommended herbicides or with properly managed grazing. Scout fields early and often to determine the best course of remediation. For more information, contact your county Extension office.

Nitrogen from Snowfall: Is it Enough to Matter? - Brad Runsick, Fulton County Extension Agent

With the abundance of snowfall, the conversation among farmers is likely to turn to the additional N content provided by that snowfall. However, what is the actual value of that snowfall. No doubt, much of the value comes in the way of additional moisture that helps to saturate our soils throughout winter before heading into the spring growing season, but what about the nitrogen?

A couple things you have to know is: How much N is in the snowfall, and how much is plant available (nitrate and ammonium) or will be within a reasonable amount of time? Nitrogen content of snowfall is also dependent upon the amount of pollution in an area. Given the higher amounts of pollution of the eastern U.S., we tend to have a little more N in our precipitation than, say, the western U.S.

Truth is, our soils receive nitrogen from any precipitation. It does take snow precipitation longer to move downward through the soil profile, but it does not contain any more nitrogen per volume that rain. On the average, 10 inches of snow equates to about 1 inch of rain. Wetter snow will be more, and more powdery snow will be less. So, perhaps, it is possible that more of that nitrogen from snowfall stays in the root zone longer, but that doesn't mean that it's just saturated with nitrogen.

It's important to note that, on average, our soils will produce about 1 ton of grass on their own per year without any additional N fertilization, but in order to produce an additional ton of yield, another 40-60 lbs. of N needs to be added. Snowfall, or any precipitation for that matter, won't nearly touch that. At the very, very best, our annual precipitation might dump 6-7 lbs. of nitrogen per acre on our fields. A drop in the bucket, so to speak. A good winter snowfall event does not negate the need for springtime fertilizations, nor does it mean that producers should lower application rates.