DIVISION OF AGRICULTURE
RESEARCH & EXTENSION
University of Arkansas System

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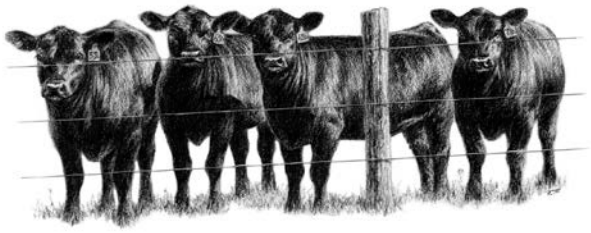
The Cattle Corner



Baxter County U of A Cooperative Extension Service Newsletter

November 2019

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From the County Agent's desk…

Fortunately, the fall hasn't panned out to be as dry as many feared it would be. Hopefully, lots of folks have taken advantage of stockpiling some fescue fields and/or planting winter annuals to carry through some winter grazing. More on that further in this newsletter. Don't forget that as temperatures drop, cow herd energy needs increase. Plan feed rations accordingly. Chances are, your hay alone doesn't meet their nutritional requirements. If you need it tested, give me a call. I'll be glad to come out and pull the sample. Also, most folks don't think of it, but October and November is an ideal time to get a quart of 2,4-D amine out on pastures. Many winter annual weeds and thistles will have gone ahead and germinated. They're very easy to control this time of year. Many farmers worry that it isn't warm enough. 2,4-D works just fine in the cold, albeit a little slower. In fact, I'd like to find a field with a thistle problem and do some fall spraying test plots in the next 3-4 weeks. If that's you, and you're willing to let me spray some strips, give me a call at 870-425-2335.

Selecting Winter Annuals for Winter Pasture

John Jennings, Extension Forages, Kenny Simon, Program Associate – Forages, and Jason Kelley, Extension Wheat and Feed Grains

For grazing by Dec. 1-15 (Too late for this year!)

Winter annuals intended for grazing in early December can be interseeded into warm-season grass sod or planted in crop fields from Sept. 15 to Oct. 1. The grass sod should be suppressed with a low rate of glyphosate herbicide or with moderate disking when planting this early to prevent competition with the small grain seedlings. Planting can be done with a no-till drill or by disking followed by broadcast of seed and dragging with a harrow. Apply 50 pounds per acre of nitrogen after the stand comes up to ensure growth. Apply phosphorous and potassium according to soil test. If no soil test is available, be sure to apply at least 50 pounds each of phosphorous and potassium. Apply 50 pounds more nitrogen in February for sustained growth into spring.

For grazing February to early March (Perfect timing for 2020 grazing)

Planting annuals after mid-October into November will allow good establishment, but forage production will be delayed until February or early March. Fertilizer application can be delayed until February since growth potential is limited during mid-winter.

Selecting an Annual Species to Plant

Species and variety selection are important. Lowest price makes some varieties appealing, but often the cheapest varieties are not the best forage producers. In fact, some of the cheaper varieties don't have sufficient cold tolerance for most of Arkansas conditions. A cheap variety becomes very expensive if it winterkills or produces very little forage growth. In a year like this, it can pay to plant known varieties to ensure forage production.

Ryegrass

For north Arkansas, cold tolerance is important. Refer to the Arkansas Plant Hardiness Zone map in Figure 1. The area north of Zone 6A, 6B, 7A and even the northern fringe of Zone 7B can be cold enough for winterkill of sensitive varieties.

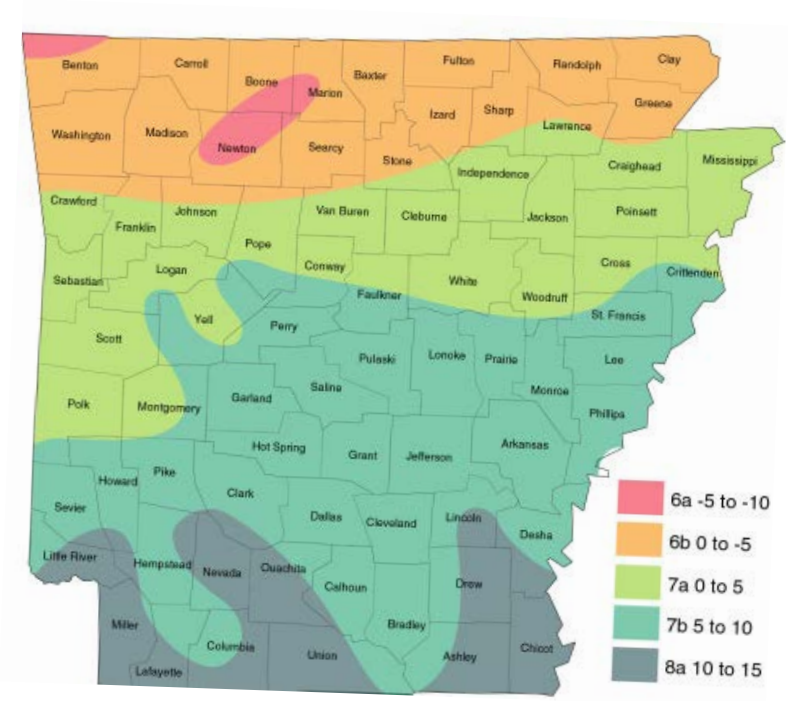

Figure 1. Arkansas Plant Hardiness Zone Map

Annual ryegrass varieties fall into two broad genetic categories - **Diploid** varieties and **Tetraploid** varieties. Diploid varieties tend to be more cold tolerant. Marshall ryegrass is an example of diploid ryegrass and is well known for its cold tolerance. Tetraploid varieties have broad leaves and good disease resistance, but usually are much less cold tolerant than Diploid varieties. In Arkansas, we seldom have the disease pressure from rust and gray leaf spot found along the Gulf Coast so the superior disease resistance of many Tetraploid varieties is not needed. In general terms, diploid varieties should be selected for northern Arkansas. Both Tetraploid and Diploid varieties can be used in southern Arkansas. Some variation in cold tolerance exists among types so not all Diploid varieties are cold tolerant and not all Tetraploid varieties have the same cold sensitivity. For example, **Gulf annual ryegrass is a diploid type and is not cold tolerant.** Gulf ryegrass and VNS (variety not stated) ryegrass are not recommended for these northern areas since winterkill has been reported in previous winters. Below is a non-inclusive list of annual ryegrass varieties of both Diploid and Tetraploid varieties that are being marketed.

Annual Ryegrass Varieties*			
Diploid Varieties	**Company**	**Tetraploid Varieties**	**Company**
Bruiser**	Ampac Seed	Angus I	DLF International
Marshall**	The Wax Co.	Attain	Smith Seed Services
Paserrel Plus**	Pennington Seed	Big Boss	Smith Seed Services
Surrey II	DLF International	Big Daddy	FFR/Sou. St.
Tam 90	Tex. Ag Exp Sta.	Chuckwagon	DLF International
Winter Hawk**	Oregro Seeds	Jumbo	Barenbrug USA
		Nelson	The Wax Co.
		Prine	East Texas Seed Co.
		Striker	Seed Research of OR
*Non-inclusive list of annual ryegrass varieties **Very good cold tolerance			

Ryegrass can be planted as early as late August. Typical planting times for planting on a tilled seedbed begin in early September through early November. The typical planting period for sod-seeding either by no-till or broadcast methods, begins in late September through early November. Early-planted ryegrass (September) can provide grazing in late fall. Late-planted ryegrass (November) will not provide significant grazing until late winter (March) except during warm winters such as 2011-12.

Seeding rate is 20-25 lbs/acre. The grass sod should be grazed or clipped to about 2" to improve seed/soil contact. If no-till planting, set the drill to plant seed about ½" deep. For broadcast seeding in sod, seed/soil contact will be improved by pulling a harrow, tire drag, or other device to slightly scarify the sod when broadcasting the seed. Many producers pull a drag behind the broadcast seeder in the same pass to speed up the planting process.

Wheat

Most wheat varieties are selected for grain production, but an increasing number of livestock producers plant wheat for grazing purposes. Few variety trials measure forage yield, but some general observations have noted that earlier maturing wheat varieties produce more vegetative growth in fall and late winter. The U of A wheat variety testing report provides information on relative maturity dates and mature heights of tested varieties. The link to the 2011 report is http://www.aragriculture.org/News/wheat_update/wheat_update_2011.pdf

Some wheat varieties that have been noted for better fall vegetative growth and good grazing potential include

- AGS 2000
- AGS 2060
- HBK 3266
- Syngenta/Coker 9553
- Syngenta Magnolia
- Syngenta Arcadia

The following wheat varieties are commonly grown for grain, but should be avoided for grazing because they produce very little fall growth:

- Ranger
- Roane
- Pat
- Pioneer 26R10
- Pioneer 26R20
- Pioneer 26R22
- Terral 8861
- Terral 8848
- Syngenta Beretta
- Syngenta Oakes
- Armor Ricochet
- Progeny 870
- Dixie McAlister

General seed price ranges are $16-$18 per 50 lb bag. Field-run and feed wheat are currently $9-12 per 50 lb bag, but the variety or forage potential are usually unknown. An extra $5 per bag would certainly be worth the cost to get a variety that would provide more grazing.

Triticale

Triticale is a cross of wheat and rye. It has a growth pattern and yield closer to rye than wheat and makes very good forage. Paul Beck has shown good results at SWREC in grazing trials with it. Monarch is a variety that is available this year. Based on work done by Johnny Gunsaulis and Wayne Coblentz in 2005-06, this forage has the potential to make a hay or baleage crop by late November to early December if planted in early September. Adequate rainfall will be required for establishment and growth. Any small grain that reaches the "jointing" stage of growth in fall will likely winter kill, therefore forage management should be planned to make use of early-planted varieties as hay, baleage, or as strip-grazed pasture to avoid loss of dry matter.

Rye

Rye provides more fall grazing and earlier spring grazing than wheat. It grows very rapidly in March so producers must be prepared to handle the fast growth either by grazing, as hay, or as baleage. Dr. Beck's work has shown that to manage spring rye growth, half the field can be managed for graze-out and the other half can be harvested as baleage to improve forage utilization and to reduce waste. Some typical rye varieties are:

- Wintergrazer 70
- Elbon

- Maton

Seeding rates for small grains (rye, wheat, and triticale) is 90-120 lbs/acre. For a longer spring grazing season, ryegrass can be added. Seeding rates for this mixture of 100 lbs of small grain and 20 lbs ryegrass have been

How much to plant

Unsure how much to plant?

“Research has shown that a good measure for determining planting acreage is one-tenth an acre pre cow per day of the week to be grazed through the winter,” Jennings said. “Or example, if cows will be limit grazed three days per week then plant three-tenths of an acre per cow.”

More grazing time requires more acreage.

“Dr. Paul Beck's work has shown that cows limit grazed on winter annuals two days per week and fed hay the remaining time perform quite well,” he said. In that study, the "grazing day" was an eight-hour day and not a 24-hour period. As forage growth increases during the early spring, cows can be allowed to graze more frequently.

“This is an effective way to match the increased nutrient requirements of spring calving cowherds and to supplement low quality hay,” Jennings said.

Our fact sheet titled “Using Cool Season Annual Grasses for Grazing Livestock “ can be found at: https://www.uaex.edu/publications/PDF/FSA-3064.pdf

It’s a great publication for helping decide what annual crop is best suited for your situation and how much to plant.

Testing Seed Germination on Winter Annuals

Commercial seed companies list seed lot information on the seed tag including seed purity, percent germination, and the date when tested. Seed germination percent can decline over time especially under less than ideal storage conditions. Sometimes producers may have seed that is held over from prior years or farm-grown seed may be available that does not have a germination test. How can you determine if old seed past the warranted date or untested seed will germinate?

It is simple to do your own germination test. Collect a representative sample of seed from the seed lot in question. Representative samples include all types of seed in the seed lot including small, discolored, brokens, etc. - not just the best looking seed in the lot. Moisten a paper towel and count out 50 or 100 seeds in a line across the centerline of the towel. Fold the towel over to hold the seed, roll it up, and place it in a sealable plastic bag. For large seeds like corn, add an extra teaspoon of water to the bag to make sure the seed can imbibe enough water – don’t overdo the amount of water. The idea is to keep the towel moist, but not flooded. Keep the bag at room-temperature for 3-5 days for most species, up to 7-10 days for bermudagrass or some native grasses. After this time, open the paper towel and count the number of sprouted seeds. For 100-seed samples, the number sprouted equals germination percent and for 50-seed samples, double the number of sprouted seeds to determine germination percent.

Using the test results:

If your germination test shows 80%+ germination percent, you can generally plant at standard recommended seeding rates to achieve a good forage stand. If the germination rate in less than 80%, increase the seeding rate to account for the lower seed viability. Increase the seeding rate by 25% if the germination rate is 60-79%, and double the seeding rate if the germination rate is 50-60%.

Fall Soil Testing

Remember, it's never too early to start thinking about soil testing for next spring. In fact, now is the best time to get it done. Keep in mind, that it can take as long as 3-4 weeks to get your results back, and if you were to need to lime, it can take 4-6 months for the lime to break down chemically and raise the pH of your soil. Better pH means better efficiency of your fertilizer dollars. Should you be planning on fertilizing in March-May, depending on your forage species, now is the time to be getting those into the office. Soil testing is a free service offered by the Cooperative Extension Service. If you need any tips on how to sample your soil, feel free to give us a call at 870-425-2335.

Private Applicator Training (PAT) for Restricted Use Pesticides

Local farmers, ranchers, and other agricultural producers who wish to renew an expiring pesticide license or receive a first-time private pesticide applicator license will have the opportunity to receive the required training. Some of the folks that are up for recertification will have gotten a letter from the State Plant Board notifying them that their certification is up. If you are receiving this letter, then according to our records and the Arkansas State Plant Board, your license is about to expire.

The training will be held in Salem on ***Tuesday, November 12th, 2019 at 6:00 p.m.*** at the Baxter County Fairgrounds. This training is **NOT** for certification of commercial (for-hire) pesticide applicators!

There is a $20 per person fee which *must* be paid at the door at the time of training. This fee is not related to the licensing fees charged by the State Plant Board. It is only for the training. The fee for the license is $10 for one (1) year or $45 for five (5) years. That amount you will pay in later to the State Plant Board, not the Baxter Co. Extension Office. Checks or exact cash preferred.

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