Late Fall Pasture Management

Want to graze your pastures into the winter months? Please read the article below for some excellent advice on late fall pasture management.

Using Cool-Season Annuals to Extend the Grazing Season

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The vast majority of our pastures in Virginia are comprised of cool-season perennial grasses and legumes. Species such as Tall Fescue, Orchard grass, and Red and White Clovers dominate the grazing scene. While these species are quite well adapted to our region and if managed well will provide us with ample forage in normal years, there are occasions when you as a pasture manager may need to consider using an annual species to supplement or extend your grazing season. This year's drought has left us with a perfect example of such an occasion.

Many of our pastures have been terribly over-grazed this summer. The cool-season perennials in these over-grazed pastures will have a difficult time recovering from the combination of severe drought stress and over-grazing. Re-seeding may be necessary. Rather than risk a permanent re-seeding of all these pastures, another option is to utilize some cool-season annuals to give some additional grazing this winter, and to delay permanent re-seeding of these pastures until spring, when we will have a better idea of whether or not the drought has ended.

Available Cool-Season Annual Species

So, what specifically are we talking about when we talk about a cool-season annual, anyway? A cool-season annual is any species of plant that germinates from seed in the fall, grows vegetatively throughout the winter, and then goes to seed in the spring – early summer. Several of these species can be used for grazing. In the grass category, we have annual ryegrass and the cereals (wheat, rye, triticale). Prairiegrass (also known as Matua Bromegrass) is a short-lived perennial grass that often can be treated as an annual, however the seed is usually more expensive than the other species previously mentioned. Annual ryegrass is probably the best choice if you are looking for maximum forage quality. Cereal rye, wheat or triticale will produce a much higher yield than annual ryegrass, and usually have cheaper seed costs. Among the cereal grasses, rye is the preferred grazing species, however if wheat or triticale seed is readily available and cheaper than rye, these species would suffice. Wheat fields planted for grain can be grazed under careful management during the winter with little or no impact on grain yields. On the legume side, we have crimson and ball clover, as well as Austrian winter peas. We will focus mostly on the grasses, since that is what comprises the bulk of our pasture.

Site Selection

Site selection is important when deciding where to plant cool-season annuals for grazing. All of the cool-season grass species have a bunching growth habit, and will not form a sod. Therefore, sites with steep slopes and/or highly erodible soils should not be planted to these species. Avoid poorly drained sites that might hold excess water during the winter. These wet areas will not be conducive to good grass growth, and would not be suited to winter grazing. Cool-season annuals usually fit best into one of two field scenarios: as a rotation with warm –season grasses / cropland, or into an existing cool-season perennial pasture that is thin to the point that it needs to be re-seeded. Other considerations for a good site for winter grazing include easy access to a reliable winter watering source and the ability to graze rotationally.

Site Preparation and Seeding

After the site has been selected, some time should be taken to prepare the area for seeding. No-till seeding is highly recommended. Graze down very low the field to be seeded in order to remove any top-growth and thatch that could interfere with the new seedlings. Drag the pasture with a chain harrow or a similar implement to distribute manure piles. One situation to avoid is mowing down an over-grown pasture or hayfield with a mechanical mower, which leaves a thick layer of thatch material to plant through. Often this thatch layer will interfere with achieving good seed to soil contact when planting and will result in a poor stand. Fertilize the field with 20 pounds of nitrogen per acre, and with 30 – 50 pounds / acre each for phosphorous and potassium, or according to soil test recommendations.

Plant annual ryegrass at a rate of 20-30 pounds per acre between August 15 and October 31st. For cereal rye, plant 90 – 100 pounds per acre starting between October 1st and November 15th. Wheat and triticale should be seeded at a rate of 100-120 pounds per acre between October 1st and October 31st. For a better overall plant distribution, plant the field twice in a "cross-hatch" pattern, with the seeding rate set at half for each pass. For more information on no-till seeding of forage grasses and legumes, refer to VCE publication # 418-007, "No-till Seeding of Forage Grasses and Legumes", available online at www.ext.vt.edu or from your local extension office.

Grazing Management

Grazing management is very important when using cool-season annuals. Since these plants are annuals, they do not have the ability to store significant quantities of carbohydrates in the root system and stem bases for re-growth like perennial species do. Annuals are almost completely dependent on saved leaf area for re-growth after suffering damage from clipping or grazing. In order to maximize the yield potential from annuals, rotational grazing is a must.

Annual ryegrass should be allowed to reach a height of 10-12 inches before the first grazing period. Graze down to a height of 3-4 inches and rotate to the next paddock or grazing area. Stock the grazing area heavily to ensure even grazing. Turnout for subsequent grazing periods should occur when the ryegrass reaches a height of 8-12

inches and cease when grazed down to 2-6 inches, continuing this rotation until spring. As the plant begins to mature and send out a stem for a seedhead with warmer temperatures in March and April, turnout should be delayed until the ryegrass is in the boot stage, or when the seedhead is just about to emerge. Continue until perennial pastures are ready for turnout.

In the fall through winter, turnout into cereal rye and wheat should begin when the grass is 8 inches tall, and cease at 4 inches. As with ryegrass, heavy stocking rates are key to grazing to an even height. Starting around March 1st, cereal rye and wheat should be allowed to reach 16 inches before turnout and grazed only to 8 inches. Continue grazing until other pastures are ready. If a grain crop field is being grazed, then grazing should cease by March 1st. Cereals will not tolerate animals grazing to the crown of the plant, therefore very close management is necessary. You may find yourself moving animals every couple of days or possibly every day. Annual ryegrass is more tolerant of close and persistent grazing than the cereals, so it might be a better choice for the manager without the adequate time or skills to closely manage the grazing of a pasture. However, even this species has its limits.

Conclusion

Cool-season annuals provide an opportunity to add yield and flexibility to a grazing system. Through close and careful management, livestock owners can effectively extend their grazing seasons through the winter, and avoid excessive feeding costs. Sound and effective grazing management is key to any successful pasture-based system, particularly when using annual species. Contact your local extension office and your local soil and water conservation district for more information on establishing an effective grazing system on your farm.

(Editor's Note: Keith Dickinson, **former** Agricultural Extension Agent, for the Fauquier County Extension Office located at 24 Pelham Street, Suite 20, in Warrenton. For further information, please visit or call 540/341-7950, Monday - Friday, 8 AM - 4:30 PM)