In the last newsletter, you learned all about soil fertility. Now, what? One of the first questions I always ask, is what do you plan on accomplishing or what are your goals? Forage options have to be determined based off of your goals as the producer. One consideration should be the nutritional needs of the species and classes of livestock which are to be grazed or fed forage harvested from each field. For example, a dairy producer would want to plant high-quality forage crops in fields which are to provide feed for lactating animals. Lower-quality forage species might be suitable in areas which are to be used for dry cows. Thus, it is helpful to have some understanding of the forage quality of various species and to choose those which will best meet animal requirements.

Other needs should also be considered. For example, a horse producer might want to plant alfalfa in one field to provide high quality hay, and grow orchardgrass and white clover in another for pasture. In a holding lot where there will be a great deal of trampling, common bermudagrass or tall fescue might be the best choice.

Minimizing erosion is always important, but especially in deciding the location of annual pastures which will require frequent soil tillage. Soil survey information can be helpful in planning. Your Soil and Water Conservation District can be very helpful in determining a plan to prevent soil erosion to ensure water quality.

In conclusion, remember to think about your goals and the species you are raising when determining the forage needs for your pasture system. You will be more successful in the long run by making this decision early on, instead of fixing a problem later on down the road.
Understanding the Difference: Rye and Rye Grass
Source: NC Horse Blog

Cereal rye and rye grass are two different species (though closely related) of grass. They do have much in common. They are both annuals, meaning that they have to be replanted every year (preferably in the fall) and will germinate, grow and die in a few months. The plant does in fact completely die, not just goes dormant such as bermudagrass in the winter. This is what distinguishes an annual from a perennial. They are both considered cool season annuals that ideally need to be planted in the early fall. They both will provide grazing in the spring (and possibly earlier in the year depending on how mild a winter we have). The two types of grass are almost identical when they first emerge out of the ground, and will not really be distinguishable until they start to grow and get bigger. This is also why you have the confusion that sometimes arises when people use the two terms interchangeably. For all their similarities however, they are some big differences that separates the two species.

Cereal rye, which depending on where you reside in the world tends to be referred to as just rye, is actually a plant that is grown for grain as much as it is a forage. It is planted in the fall and can grow in colder weather than rye grass. It is not uncommon for cereal rye to be growing at full speed by the first of February in a mild winter. Rye will complete its growth cycle by forming a mature seed head by the end of April/first of May. This is when you can easily tell if you have cereal rye in your paddocks. If left to grow and mature, cereal rye will get very tall and "stemmy" and the palatability (as well as the nutrient content) of the forage will decrease to the point that grazing will stop completely.

Cereal rye is best managed by grazing the forage heavily before it gets over 5-6 inches tall. If your horses are not able to keep up with the growth of the rye, then mowing it is certainly an option. Mowing will almost be a necessity regardless of your management skill by the first of May to remove any rye residue, which will rob your emerging bermudagrass of critical sunlight in the late spring. This is also a point that not everybody understands about cereal rye in bermudagrass.

Regardless of how good a manager you are, rye will slow your bermudagrass growth in the spring and will cost you 2-4 weeks or growth out of your bermudagrass in the early growing season. Given the additional grazing time you get off of the rye however, most people view this as the lesser of two evils.

Rye grass is similar in a lot of aspects, but it does have some key differences. It too is planted in the fall, and is almost identical to cereal rye when very small. The differences between rye grass and cereal rye does not become apparent until the plant starts to get some size on it. Rye grass has a much thicker leaf and does not put its energy into forming a seed head. It grows much lower to the ground and appears to be “bunchier”. As the feed value (protein and energy) of any plant is in the leaf, it is for this reason that ryegrass is generally considered a much better forage for animals. The plant will keep good palatability much longer into its growth cycle than cereal rye will. If rye grass is such a better forage than why would people ever put cereal rye into their bermudagrass paddocks over rye grass?

The reason is that rye grass grows much later into the spring (and even into the early summer). The problems associated with the spring competition that was discussed in the cereal rye section above are multiplied by a factor of 5 with rye grass. Rye grass grows the greatest in April and May, which is at the exact time bermudagrass is struggling to break dormancy.

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With cereal rye being at the end of its natural life cycle, you can mow it or graze it heavily and reduce this competition to a manageable level during this critical time of the year. With rye grass, this competition reduction is not possible. The rapidly growing rye grass will cause severe damage to your bermudagrass stand during this time. This is why for all of its short comings, cereal rye is vastly preferred by agronomist over rye grass if used in an existing stand of bermudagrass.

There are also blends of rye and rye grass available on the market. The ratio of cereal rye to rye grass seeds will vary depending on the brand name.

### Forage Management Tips

**From Production and Utilization of Pastures and Forages in North Carolina.**

#### October

- Finish using summer grasses before grazing the cool-season ones.
- Plant cool-season legumes such as ladino clover and alfalfa into tall fescue sods by October 20 (Piedmont and Coastal Plains).
- Overseed warm-season grasses with winter annuals.
- Be wary of prussic acid poisoning in animals grazing sudan and sorghum-sudans after the first few frosts.
- Check alfalfa plantings made earlier this fall for proper nodule formation. If nodules have not developed on seedlings, an “emergency” application of inoculant can be successfully made in October, March, or April.
- Kill tall fescue or orchardgrass this month with herbicide on fields to be planted to alfalfa in the winter or switchgrass in April or May.
- Sample soils to be overseeded or planted next spring so the limestone can be applied early enough to react.

#### November

- To improve feeding efficiency, test forages before winter feeding begins.
- As winter feeding begins, separate the herd into lactating and dry cows so the best-quality pastures and hay can be fed to the cows with nursing calves.
- Do not graze fall-planted perennial pastures until growth reaches 6 to 8 inches.
- Winter annual pastures that were planted early (September) may be responsive to an additional application of nitrogen (30 to 50 pounds/acre).
- Weed control in fall plantings of alfalfa and other legumes should be completed between now and December or January depending on herbicide selection.

#### December

- Limit the grazing of winter pastures by feeding hay on pasture or restricting acres available to animals.
- Feed hay stored outside before using hay stored inside.
- Map a monthly forage demand for specific classes of livestock. Total annual needs can be estimated if you remember that each cow requires 25 to 30 pounds of hay equivalent per day.
- Weed control should be completed on seedling legumes, especially for certain herbicides.
- If you plan to seed switchgrass in April or May, buy your seed this month and store at room temperature or slightly higher to break seed dormancy.
Different Factors Can Affect Auction Prices for Beef Calves
Source: Beef Producer and Sam Houston State University

Studies show "black" still matters but not as much as a host of other factors.

Marketing studies continue to show cow-calf producers can significantly improve the value of their calves at auction by management strategies.

Britt Hicks, area extension livestock specialist in the Oklahoma panhandle reviewed several recent market studies and says a variety of things such as calf body condition, castration, horns, fill, health, group selling, genetic selection and modification of breeding objectives can have significant effect on sale price at auction.

Sam Houston State University researchers collected data from nine Texas livestock auctions on 1,420 lots with 7,073 head. All selling prices are given in dollars per hundredweight of live weight.

These researchers reported selling prices for steers at $132.34, heifers at $118.46, and bulls at $107.63 were significantly different from each other.

Studies show "black" still matters but not as much as a host of other factors. They said polled calves at $127.78 sold for a higher price than horned calves at $104.91.

British calves at $128.44 sold for the highest price, while calves that appeared to be predominantly American received the lowest price at $111.08.

Black calves at $122.51 sold for a higher price than red calves at $117.67 or yellow calves at $115.29. Calves advertised as preconditioned at $131.38 and healthy calves at $121.27 sold for the highest price. Calves that were sick sold for the lowest price at $86.14. Selling price of calves increased incrementally as lot size increased. Calves sold in groups of 20 or more had the highest selling price at $129.07 and calves sold as singles had the lowest selling price at $109.03.

University of Arkansas researchers collected data from 14 Arkansas auction barns in 2010 on 38,346 lots with 79,822 head. In one paper, the effect of management factors on selling prices was evaluated and in a second paper, the impact of genetic factors on selling prices was evaluated. All prices are reported as dollars per hundredweight of live weight. The results were similar.

Preparing Meat Goats for the Breeding Season
Source: Jean-Marie Luginbuhl, Extension Meat Goat Specialist

Breeding is a very important aspect of any meat goat operation. But, preparing the breeding does and buck(s) for the breeding season could have a large influence on the outcome and the profitability of the operation.

Here are some steps to consider when preparing for the breeding season:
⇒ Accessing Body Condition
⇒ Trimming Feet
⇒ Grouping of Animals
⇒ Deworming
⇒ Keeping Does Separate from Bucks until Breeding “The Buck Effect”
⇒ Vaccination

How Long Should the Breeding Season Last?

During the breeding season, does and bucks should be joined for 40 to 45 days, which is the length of time necessary for breeding does to complete two estrus cycles. A ratio of 20 to 30 does per buck is recommended for best breeding results.
Poultry owners should be aware of the possibility of losses to predators. Small flock owners tend to have more difficulty with predators than large flock owners, primarily due to differences in housing. Small flocks are sometimes housed in facilities not designed for poultry and may need repairs or adjustments to be safe.

Properly constructed houses can do much to discourage predators. Deep foundations, tight fitting windows and doors that are screened with poultry netting or hardware cloth, and/or curtains kept in good repair can prevent predator entry. Rats and mice, although not usually problems as predators, encourage the entry of other predatory animals. Therefore, a good rodent control program is a must for proper predator control.

If small flocks are allowed outside the house, fences are very important. Fences should not only keep the birds in, but also keep predators out. A mesh wire with openings smaller than one inch is recommended. Burying fencing with the lower 6-12 inches turned outward deters predators from digging under the fence.

The following key may aid in identifying a predator:

**Clues:**
1. Several birds killed
   - a. Birds mauled, not eaten
   - b. Birds killed by small bites on body- neatly piled
     - some heads eaten
   - c. Heads and crops eaten on several birds
2. One or two birds killed
   - a. Birds mauled, abdomen eaten
   - b. Deep marks on head and neck, some meat eaten
3. One bird gone- feathers remain
4. Chicks killed- abdomen eaten- lingering smell
5. Several birds gone- no clues

**Possible Predators:**
- Dogs
- Mink or Weasel
- Raccoon
- Opossum
- Owl
- Fox or Coyote
- Skunk
- Human

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**Youth Livestock Corner**

Livestock Judging and Skillathon Practice Schedule:

**September 26:** Orange County

**October 10:** Alamance County

**October 24:** Orange County

**November 7:** Alamance County

**November 21:** Orange County

*No Practice in December*

Practice will resume in January 2014!

*Please let me know if your child(ren) are attending practice at least one day prior!*

Practice lasts from 6:00 pm to 7:30 pm and rotates between the Alamance County Extension Center to the Orange County Extension Center.

This youth livestock opportunity is open to any youth ages 9 to 18 that have an interest in learning more about the production and management of the following livestock species: beef cattle, meat goats, swine, and sheep.

**Alamance County Center Address:**
209-C N. Graham-Hopedale Rd. Burlington, NC

**Orange County Center Address:** 306– E Revere Rd. Hillsborough, NC
UPCOMING EVENTS

North Carolina Grain Sorghum Field Tour
October 9, 2013
4:30 pm–7:00 pm *Meal Sponsored*
Fountain Farm, Upper Coastal Plain Research Station
Rocky Mount, NC
For more information contact Dr. Wes Everman at 919-515-0488 or Dr. Ron Heiniger at 252-217-9418

Small Ruminant Parasite Management/FAMACHA Training
October 22, 2013, 6:30-8:00 pm
Central Carolina Holstein Barn: 6706 Orange Grove Rd. Hillsborough, NC
Cost: $17.00 per person (FAMACHA Certification/Card + Materials)
Pre-Register by October 16th to Lauren Langley *Space is limited!*

Fall Horse Field Day
December 7, 2013, 9:00 am–3:00 pm
Flintlock Farm, 4530 Mann’s Chapel Road Chapel Hill, NC
Topics: Forages, Problem Solving, Facility Design, Barefoot Trimming, Body Condition Scoring, and more!
Cost: $5 per person or $10 per family
Please RSVP by December 5th by calling 910-542-8202 or emailing extension.programs@chathamnc.org

Piedmont Regional Beef Conference
February 27, 2014, 1:30 am–7:30 pm
Guilford County Extension Center
Greensboro, NC
Details: TBA

2013 Livestock Survey
Link to fill out survey online: http://harvest.cals.ncsu.edu/surveybuilder/form.cfm?testID=16802
Please contact Lauren Langley at 336-266-0702 if you need a hard-copy mailed to you.

Cattlemen’s Association Meetings

Alamance County
No meetings until September, then regular meetings on the 2nd Tuesday of the month from September-March:
♦ October 8– Forage Analysis
♦ November 12– Farmland Preservation
♦ December 10
Meetings begin at 6:30pm at Occasions in Burlington, unless otherwise announced.

Orange-Durham Counties
No meetings until October:
♦ October 7– Calving Difficulties
♦ December 2
Meeting begins at 6:30pm at Schley Grange in Hillsborough.

For more information regarding upcoming events and/or cattlemen’s association meetings, please contact Lauren Langley at lauren_langley@ncsu.edu or 336-266-0702.

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If you no longer wish to receive this newsletter or if you would rather receive an electronic copy via e-mail, please call the Extension office in your county to let us know.