## TRI-COUNTY LVESTOCK NEWSLETTER

## Serving residents of Anson, Stanly and Union County

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## Upcoming Events

Title: NC Forage and Grassland Council-Winter Conference Webinar Series
Description: Each month has a different topic. To register, go to
https://go.ncsu.edu/2022ncfgcwinterconference Dates: Dec. 14, Jan. 11, Feb. 15, Mar. 15

Title: Stanly County Cattlemen's Association Annual Meeting
Description: Contact Katelyn for more information Date: January 7th, 2022

Title: Stanly County Extension Meet and Greet Description: Come meet our new agents and Extension Director- light refreshments served Date: January 25, 2022

Title: Winter Annual Forage Field Day
Description: Join us this March to view our winter annual demonstration plot and learn how winter annuals can fit into your grazing program.
Date: TBD

For any meeting or program listed, persons with disabilities may request accommodations to participate by contacting the Extension Office where the meeting will be held by phone, email, or in person at least 7 days prior to the event.
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# Selecting the Right Bull 

by Rachel Owens

Selecting the right bull for your herd is an incredibly important decision. In fact, sires will account for about $90 \%$ of the genetics in a herd over time. Today we have tools like EPDs to help us make the best decisions, but with so many traits and numbers, it can become complicated quickly.


Make sure you are selecting a sire that is the best fit for your specific herd. Every producer will have different goals, markets, and environments. There is no one size fits all in this decision. It is important to define your goals and create priorities for specific traits. Then you will be able to decide which bulls line up with your priorities. A cow-calf operation that is retaining heifers may focus more on maternal characteristics, while someone marketing the beef at a farmers' market may select for more carcass characteristics.

Be careful you don't select for a single trait and ignore all others. Selecting for only calving ease can lead to calves that stay small at weaning and yearling weights, which means less money in your pocket on sale day. However, you cannot select for every single trait, especially since some traits are inherently opposite. Consider how traits interact when making decisions.

In the same vein, more is not always better. Selecting for the biggest or smallest number may not be the most economical option. For example, selecting for overly high milk production can lead to issues with mastitis. This is a good example of a trait that should be optimized, not just maximized. Every farm will have their own optimal values for each trait.

It's easy to get distracted by the physical appearance of a potential bull. And while structure is incredibly important in selection decisions, genetic information should not be ignored in favor of a "good-looking" animal. Be sure to go over a bull's EPDs and compare them to your priorities. Remember that EPDs are a comparison within a breed and cannot be read accurately across breeds without first converting the numbers.

Index EPDs are a very useful tool that combines multiple traits into a single number for easy comparison. For instance, the $\$ \mathrm{M}$ index stands for Maternal Weaned Calf Value. This is the expected value of future progeny due to genetics from conception to weaning. This index will be very helpful for cow-calf producers who are retaining replacement females. The $\$ B$ is the Beef index, which captures the post-weaning performance and carcass value. The $\$ C$ is the combination index, which combines both the $\$ M$ and the $\$ B$ traits into one number. These are just some examples of indexes available to cattle producers.

Understanding EPDs and how they can be used can make a huge difference when purchasing a bull for your herd, which will impact your bottom line. Take the time to develop your goals and do a little research before making an important decision.

## Frost Seeding

by Kinsey Everhart

A big part of pasture management is planning and planning for frost seeding is no exception. Even though the best time to do it is in late winter or early spring, now is the time to start getting a plan together. Frost seeding is a method of broadcasting seed on top of undisturbed ground and allowing a freezing and thawing action to work the seed into the soil to where they can germinate. This method is a good tool for farms who may not have a lot of equipment or are interesting in saving time and costs with a passive planting method. This method could be very useful during wet periods when heavy machinery would damage pastures.


Selecting a forage species that will be successful is the most important part. Not all species respond will to frost seeding. For example, it is typically less successful and generally not recommended to use this method for grass seeds, but red and white clover tend to do very well.

Introducing clover to an existing stand of grasses will not only increase biodiversity, but nitrogen-fixing legumes will reduce the amount of nitrogen needed and can improve stand quality. Biological nitrogen fixation is a unique process that allows legumes to obtain nitrogen from the air, making them valuable to a forage program. The nitrogen they produce can be used for their own growth, nearby grasses, and subsequent crops.

Even though frost seeding is a relatively low input method, basic seeding and management should be followed for a successful stand. As always, seed-to-soil contact is critical. In the fall, to reduce the residual vegetation, graze tightly the pastures that you plan to frost seed during the final graze. This will reduce thatch on the surface and expose more soil.

The best time to frost-seed red and white clover is February 1st-15th. Red clover should be seeded at a rate of 3 to 4 pounds each year or 6 to 8 pounds every other year. White clover can be seeded at 1 to 2 pounds and lasts much longer than red, annual reseeding isn't necessary once it becomes established.

Come spring, weed pressure will be a concern. You will need a weed management plan to allow seedlings to establish. Be sure to read herbicide labels and follow recommended waiting periods before seeding clovers.

Hold off grazing until the pasture is 8 inches tall. Graze it down to an average of 4 inches of stubble. Let it go back up to 8 inches before grazing again to a height of 4 inches. Repeat this process throughout the grazing season.

## Managing the Mud

by Katelyn Stegall

With usually heavy rainfall and mild weather, mud is an issue that all North Carolina livestock producers will face almost yearly on their operation. Mud can be dangerous to move equipment through for winter hay feeding and other maintenance reasons, and can decrease efficiency of the animals.
Standing in and moving through mud takes a toll on the animal in a variety of ways. It takes more energy for the animal to stand in and move through mud than it does hard ground, so
 energy is exhausted in that manner.
Because it is more difficult to move, it is more difficult for the animals to get
to food and water, inherently causing them to eat
and drink less. Using more energy and taking in less calories creates nutritional issues in the animals, even if they are subtle. A recent study revealed that cattle standing in $4-8$ inches of mud can result in a $8 \%$ to $15 \%$ decrease in feed intake, and a $14 \%$ decrease in daily gains. 1 In addition to nutritional issues, animals will also have a harder time regulating their body temperatures with mud caked coats, and are at a higher risk for foot rot issues. Other issues associated with mud include udder infections and increased sickness in young animals (calves, kids, lambs).

Areas where animals congregate and high traffic areas such as feed and water locations are the areas that will most commonly cause issues related to mud. Although it will take work and maintenance, there are ways to decrease the issues caused by mud in these places. Addition of loose gravel or sand in more high traffic areas will increase the carrying capacity of the soil and can help cut down on or slow mud accumulation. These methods do require maintenance, as buildup of organic matter such as manure and hay will need to be removed, or more gravel will need to be brought in to cover it. It is also advised to put a layer of geotextile fabric under the gravel or sand to separate it from the soil. Another, lower maintenance, option is to pour a concrete pad at these areas. This is a higher cost option upfront, but is the most efficient in the long run because it requires less maintenance.

Other ways to mitigate mud damage are to make less frequent trips to the pasture in the winter with heavy equipment if possible. Plan to feed in places with harder ground if possible, and try not to unroll hay bales in muddy conditions. If areas with harder ground are not available, create a sacrifice area in the pasture and restrict animals to this area during the muddy seasons to avoid damage to the whole pasture. Attention will need to be given to these sacrifice areas in dryer seasons to repair damage done during the wet season. Avoid overgrazing pastures year round to promote a healthy stand in the winter.Deep, healthy root systems are one of the best defences against mud in pastures.

The best way to mitigate mud issues is to plan ahead. Plan your feeding areas, and buy and install/spread materials such as geotextile fabric, gravel, or concrete early in the season before mud becomes an issue. Make a feeding plan ahead of time to cut down on trips through the pasture with heavy equipment, or at the very least have one designated area or "road" where you drive the equipment through the pasture. Lastly, plan maintenance or repairs to areas damaged by mud before mud even becomes a problem.

Mud can be a nuisance, but with proper planning and management, mud related issues can certainly be lessen for both the producer and the animals.

