

Noble County Oklahoma Cooperative Extension Service
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The Noble County Courthouse now requires mask to be worn inside the building as well as the Noble Co. Fairgrounds. Entrance into the Noble Co. Courthouse is only available through the west door. Temperature will be checked prior to entering the courthouse which must be less than 100.4° to enter. Appointments are encouraged and preferred. We continue to practice social/physical distancing, as we meet the needs of OSU University and Noble County OCES. Thank you for understanding.



**NOBLE COUNTY
EXTENSION**

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Noble County OSU Cooperative Extension Service

Agriculture News and Updates: MARCH 2021



**NOBLE COUNTY
EXTENSION**

Annual Grass Weeds in Bermuda Pastures and Hay Fields

Josh Bushong, Area Extension Agronomy Specialist

Bermuda can be very competitive if managed properly. Correcting soil pH and nutrient deficiencies accordingly to a soil test is a top priority. For bermuda, nitrogen management is always going to be of main focus but phosphorous and potassium can also be very beneficial. Other cultural weed suppression practices include proper stocking rate and prescribed burning. Leaving 2 to 3 inches is essential for good regrowth for both haying and grazing bermuda.

Prairie threeawn (aka wiregrass, ticklegrass, old-wild threeawn) is an annual warm season grass weed. It usually encroaches into bermuda in less productive soils and over-grazed pastures. Correcting soil phosphorous levels is as important if not more important than nitrogen. Fall prescribed burning has shown to be very effective as shown by some field trials conducted by Kansas State University. Burning in November was effective because the seeds were still attached to the stems and were more easily consumed by the fire.

Field trials conducted by OSU showed good efficacy on threeawn when a tank-mix of Pastora and low rate of glyphosate was applied. Pastora didn't add much to the control, but its label allows for the glyphosate to be legally applied when tank mixed. Glyphosate is no longer labeled to be applied by itself. Some bermuda injury will be expected but the stand should eventually recover with good growing conditions. These field trials also showed that if soil fertility wasn't corrected, threeawn repopulated very quickly.

Sandburs are another annual warm season grass and is often found in sandy acidic (low pH) soils. Correcting soil pH and applying adequate nitrogen will be the most beneficial to improve the stand of the bermuda. Pasture burning can reduce sandbur seed production if executed at the right time and intensity. Fall burns will likely be better, unless there is sufficient fuel for a hot spring burn. If the fire from the burn is not hot enough, it may actually stimulate germination which can be beneficial if followed by a herbicide program.

Use of a preemergence herbicide (applied before sandburs germinate) like pendimethalin (Prowl H2O) will help reduce half to two-thirds of the largest and early flush of sandburs. Pendimethalin can be applied when the bermuda is dormant and in season between hay cuttings.

Postemergence herbicide (applied after bermudagrass and sandburs are actively growing) options include glyphosate (Roundup Weathermax), imazepic (Plateau), or nicosulfuron metsulfuron (Pastura). Read and follow label directions for rates, application timings, surfactants to limit crop injury and to achieve satisfactory sandbур control.



growing) with and

Lack of control is usually due to herbicide application timing. Sandbур growth stage is critical for some products. For instance, after sandburs reach 1.5 inches tall control will be reduced with products like Pastora. If applied correctly, over 90 percent of the sandburs can be controlled with the postemergence herbicides. Keep in mind, sandburs will continue to emerge as the season progresses which may make it appear like the early herbicide application failed.

A multi-year strategy of combining cultural suppression practices and herbicides is necessary. For more information refer to OSU factsheet PSS-2596 Sandbур Control in Bermudagrass Pastures or visit your local OSU Extension office.

Extension Experience – Insights into Oklahoma Agriculture

The Northwest Area Extension Staff would like to announce the creation of our new podcast *Extension Experience*. The *Extension Experience* podcast is brought to you by Josh Bushong, Trent Milacek, and Dana Zook. Each week they provide perspective on Agriculture topics and offer insight from our experience working with Extension Educators and Producers across Oklahoma.

The *Extension Experience* podcast is available on Spotify, Google Podcasts, and Apple Podcast platforms. You can also access the episodes on spotlight, <http://spotlight.okstate.edu/experience/>.

We hope you consider listening to Extension Experience.

The 2021 Noble County Jr. Spring Livestock was a great success! The Noble County Fair Board and Noble County OSU Extension Staff are very appreciative and thankful for each buyer, donor, sponsor, superintendent, volunteer, and Noble County patrons in continuing the annual event.

Feeding Salt and Understanding Labels

Brian Freking

Cattle crave salt period similarly like I do on my french fries. When we think of salt understand in ration balancing programs it might be listed by its chemical name no matter its physical form as shown. Below is just an example for educational purposes of Sodium Chloride or plain white Salt product. No endorsement of products mentioned is intended, nor is criticism implied of products not mentioned.

Why feed salt? Salt should always be supplemented to beef cows. Salt is made up of Sodium and Chloride (NaCl) and these elements are used in several important reactions in the body.

Daily salt requirement for mature cattle is less than 1 oz/head/day. Voluntary salt intake often exceeds minimum needs. Generally speaking, a 1,300 to 1,400-pound cow requires 35 to 45 grams of salt per day. That means a herd of 100 cows should go through a 55 lb. bag of salt-mineral in about a week, as a rough guideline. Because labels can be confusing, converting g/kg of sodium to a percentage is 1g/kg = 0.1 percent. Salt in our ration balancing program is entered as 381 g/kg dry matter basis or 38.1% in our feed ingredients tables. The conversion for 1 mg/kg = 0.0001 percent or 1 part per million (ppm). Yellow salt blocks usually have sulfur included therefore the above table would have values for that parameter as well.

Mineral Elements on feed tags

Parameter	As Fed	Dry Basis	Unit	%
Calcium (Ca)	0	0	g/kg	0
Phosphorus (P)	0	0	g/kg	0
Magnesium (Mg)	0	0	g/kg	0
Sodium (Na)	380	381	g/kg	38.1
Chloride (Cl)	585	587	g/kg	58.7
Sulfur (S)	0	0	g/kg	0
Cobalt (Co)	0	0	mg/kg	0
Copper (Cu)	0	0	mg/kg	0
Iron (Fe)	0	0	mg/kg	0
Manganese (Mn)	0	0	mg/kg	0
Selenium (Se)	0	0	mg/kg	0
Zinc	8	8	mg/kg	.0008 or 8 ppm

Adapted source: <https://feedtables.com/content/sodium-chloride>

Too much Salt?

Salt toxicity is seldom seen in cattle because of their high tolerance for salt. The one-time lethal dose for mature cattle is 4 to 5 pounds salt. Salt toxicities are most likely to occur: 1) where cattle have been deprived of salt for extended periods of time and suddenly have readily available salt; 2) if cattle are forced to eat excessive salt with an inadequate water supply; or poor water sources with a total dissolved solids (TDS) above 5000 ppm. More information about limit feeding with salt can be found at <https://extension.okstate.edu/fact-sheets/limiting-feed-intake-with-salt.html> or contact your local County Extension educator.

Grass Tetany

Barry Whitworth, DVM/Area Food/Animal Quality and Health Specialist for Eastern Oklahoma

While I was in practice, the months of February and March were the most common time of the year to see grass tetany in cattle. A common scenario was a cool season forage heavily fertilized. The cattle were standing knee deep in dark green grass. Cows were either late bred or in early lactation. Following a cold wet night, a producer would find a dead or down cow in the pasture. If this sounds like something that you might encounter, a review of grass tetany may be helpful.

Grass tetany which is also known as hypomagnesemia, grass staggers, or wheat pasture poisoning is a serious and often fatal metabolic disease that occurs in cattle and less commonly in sheep and goats. The disease is caused by low blood and cerebral spinal fluid levels of magnesium. Magnesium is important because it is involved in hundreds of bodily functions. Without this mineral, cells are unable to produce energy, muscles constantly contract, and nerves cease to respond in a normal manner. Magnesium also plays a role in

electrolyte balances in the body. These are just a few of the body functions that are affected when magnesium falls below normal levels in the body.

The disease most commonly affects older cows in early lactation, but it may also occur in cattle of any age or sex. It is typically a late winter or early spring problem coinciding with the rapid growth of cool season grasses. It occurs most commonly when cattle are grazing lush immature grass such as cereal grains, fescue, or rye grass which are low in magnesium. Poor weather conditions may also play a role in cattle getting the disease if it interferes with food intake. Short periods of starvation may cause sudden drops in calcium and magnesium levels which results in the clinical signs of grass tetany.

Soils that are heavily fertilized with nitrogen, potassium, or chicken litter may also cause problems. When nitrogen and potassium levels are high in the rumen, magnesium is poorly absorbed. All of the above conditions mentioned may contribute to grass tetany but an emphasis should be placed on watching cows when they are early in lactation grazing lush green pastures during inclement weather.

Clinical signs of grass tetany vary depending on how early in the disease process cattle are noticed. Many producers do not know there is a problem until they find cattle dead with evidence of thrashing or a cow down. Early signs of the disease include incoordination, a hypersensitivity to touch or sound, frequently urination, and muscle tremors. As the disease progresses, the cattle will have convulsions followed by coma and death.

Diagnosis of the disease is usually based on response to treatment. However, blood or urine samples can be evaluated for magnesium levels. In suspicious dead animals, veterinarians can submit the eye for analysis.

Treatment of the disease requires Intravenous (IV) or subcutaneous (SQ) injections of magnesium or oral supplements of magnesium. Most veterinarians will administer a solution that contains calcium and magnesium since symptoms of grass tetany are similar to milk fever. Also, it is common to have low levels of both minerals with grass tetany. If cattle respond to the IV or SQ injections, veterinarians will recommend follow up treatments with an oral supplement. Producers need to remember that even with the best of care some cows will not respond to treatment.

Preventing grass tetany is much more rewarding than treatment. Since cattle do not store magnesium, they must have a daily source. In conditions that are susceptible to low magnesium levels such as lush green pastures, magnesium should be provided in the feed or a mineral supplement. Magnesium is not very palatable, so producer need to monitor intake. Since cows in early lactation are the most susceptible to the disease, it may be a better option to graze steers, heifers, dry cows, or cows with older calves on susceptible pasture. It is possible to reduce the danger of pastures susceptible to grass tetany by adding legumes, fertilizing based on a soil analysis, and top dressing the pasture with magnesium. As mentioned above, cattle tend to fall victim to the disease following inclement weather because they tend to be stressed and eat less, so providing shelter and feed and hay should aid in preventing the disease. Adding hay to the diet may help prevent the disease because mature forages tend to have higher concentrations of magnesium. These suggestions may not totally eliminate the potential of grass tetany but incorporating them should lower the risk.

Producers wishing to learn more about grass tetany may want to visit with their local veterinarian or contact their Oklahoma State University County Extension Ag Educator.

Updates to Livestock Risk Protection Insurance

Trent T. Milacek

Area Ag Econ Specialist, OCES/1-31-2021

USDA is constantly making changes to farm programs and Livestock Risk Protection insurance is no different. Following up on the update in November, the program has further meaningful changes that will help producers.

In case you missed the previous update, there have been major changes to the subsidy levels. They are broken down by subsidy and coverage level in the following way; 35% for 95-100%, 40% for 90-94.99%, 45% for 85-89.99%, 50% for 80-84.99% and 55% for 70-79.99%. This makes LRP a very competitive price protection strategy for feeder cattle.

Other changes to LRP is an increase in the insurable head per endorsement. The old limit was up to 1,000 head per endorsement with a total of 2,000 insurable head per year. The new limit is up to 6,000 head per endorsement and a total of 12,000 per year.

The length of the insurance coverage remains unchanged varying from 13, 17, 21, 26, 30, 34, 39, 43, 47, or 52 weeks. Insurance can be purchased on calves, steers or heifers, which fall in the weight classes of Weight 1 (under 600 pounds) or Weight 2 (600-900 pounds). These weight classes are also unchanged.

Further updates include allowing the marketing of livestock up to 60 days prior to the endorsement end date whereas the previous allowance was 30 days. Also, producers can cover unborn livestock enabling them to price protect animals before calving season.

Coverage levels vary between 70 percent and 100 percent of the expected ending value of the animals. The coverage options available vary each day so it is important for producers to check the RMA website <https://public.rma.usda.gov/livestockreports/main.aspx> daily to determine which coverage options are available. The ending values of the policy are based upon the weighted average prices reported in the CME Group Feeder Cattle Index. This index is used to settle the Feeder cattle contracts.

An indemnity payment is triggered if the actual ending value (as determined by the CME Feeder Cattle Reported Index) is lower than the coverage price on the chosen end date. This has nothing to do with what the producer receives for the animals in the cash market when he sells the cattle. Indemnity payments will only occur if the price declines below the coverage level on the end date. Also, the producer must own the cattle and have taken delivery of them in order to qualify for the insurance coverage.

For example, let's look at purchasing insurance coverage for a producer who wants to use LRP to put a floor on his 2021 wheat pasture steer crop. He normally sells in the middle of March and his steers weigh 500 pounds in November. His herd consists of 100 predominately Angus cross steers.

The insurance was purchased in November, so he needed 21 weeks of coverage. The option he selects includes feeder cattle steers for the 2021 crop year with an expected ending value of \$128.050 per cwt. He chooses a 99% coverage level with a coverage price of \$128.000 per cwt., with an end date of March 23rd. The premium will be \$7.746 per cwt. He expects the steers to gain 250 pounds over the course of this coverage. The premium is calculated by multiplying the final weight in cwt. by the premium cost per cwt. and the number of head covered. So 7.5 cwt. X \$7.746 X 100 hd. = \$5,809.50. RMA subsidizes 35 percent of the premium cost so the producer will be responsible to pay \$5,809.50 X .65 = \$3,776.10.

If on the end date of March 23rd, the CME Feeder Cattle Reported Index is below the coverage price of \$128.000 per cwt., an indemnity will be triggered. For example, if prices fall to \$120.00 cwt., the producer would be paid \$128.000 - \$120.00 = \$8.00. The producer's payment is 100 hd. X 7.5 cwt. X \$8.00 = \$6,000.00. This farmer received an indemnity payment of \$6,000.00 on 100 steers for the cost of \$37.76 per head. While there is no way to know what the actual ending price will be, this is an effective option to manage downside price risk.

Perils not covered include death, government seizure, and forced destruction. However, if you report missing/dead cattle to your insurance agent within 72 hours of the occurrence, the affected livestock will be included if an indemnity is triggered. Not giving notice of the loss will result in the affected livestock being excluded from the indemnity calculation and the premium will not be refunded.

Livestock Risk Protection can be purchased through a livestock insurance agent. If you would like further details on how to purchase Livestock Risk Protection Insurance, please visit [rma.usda.gov/Information-Tools/Agent-Locator-Page](https://www.rma.usda.gov/Information-Tools/Agent-Locator-Page) to find an agent and visit <https://www.rma.usda.gov/en/Fact-Sheets/National-Fact-Sheets/Livestock-Risk-Protection-Feeder-Cattle> to view the fact sheet.

OKLAHOMA UNWANTED PESTICIDE DISPOSAL PROGRAM

ODAFF has scheduled two Unwanted Pesticide Disposal dates in April. They will be at Purcell April 1st and Claremore April 27th. As in years past, this is for pesticides only and there is a 2,000-pound limit per participant. Amounts over the 2,000 pounds will be billed to the participant by ODAFF at the contract rate. More information can be found at the webpage [Unwanted Pesticide Disposal Program | Oklahoma State University \(okstate.edu\)](https://www.okstate.edu/unwanted-pesticide-disposal-program).

April 1 st	8:00 AM TO 1:00 PM	McClain County Fairgrounds, 1721 Hardcastle Blvd, Purcell OK
April 27 th	8:00 AM TO 1:00 PM	Claremore Expo Center, 400 Veterans Pkwy Claremore, OK

Weed ID

Brian Pugh, NE District Area Agronomy Specialist

This plant is a common grassy weed that begins to show up in early spring. It is a short-statured winter annual that is often recognized in February through March for the characteristic blue-green color and presence of fine hairs on leaf surfaces. As temperatures warm, leaves grow in a very erect manner creating a "turf" appearance in solid stands. The plant rarely exceeds 18" in height at maturity. Seed heads resemble awned wheat or barley and mature early in the spring. Maturity leads the entire plant to rapidly change to a light tan color. It is mostly

seen in low quality soils where competition from desirable species are reduced, overgrazed pastures, in areas where winter thatch is very short (hay meadows) or on the shoulders of roads and highways. It is often mistaken for and called "foxtail", although the foxtails are warm season grasses that do not exhibit their feathery seed heads until late summer. Based on archeological excavations in mound builder regions, it appears this plant was cultivated for its seed in the past. This species is considered poor forage for livestock and wildlife. Suppression is fairly simple in forage systems. As a reseeding annual, breaking the cycle of seed production for one year will greatly reduce viable seeds in the soil. It is difficult to mow this species into submission, but prescribed fire following early growth will help. Dormant season applications of glyphosate on Bermudagrass pastures or hay meadows at 1.5-2 pints/Acre is also very successful but may require multiple years to reclaim lost ground.



So what are we looking at?

Hordeum pusillum – Little Barley