

University of Kentucky College of Agriculture, Food and Environment *Cooperative Extension Service* 

> Cooperative Extension Service

Ohio County P O Box 66 Hartford KY 42347 270-298-7441 http://ohio.ca.uky.edu/

## Ohio County Farm & Home News

## "2023 CAIP" APPLICATION DEADLINE IS FRIDAY



Applications for the "2023 CAIP (cost-share)" is Friday. Applications must be turned into the Extension Office by **noon on Friday, May 5**<sup>th</sup>, **no exceptions.** 

Information about the different projects areas eligible for cost-share are available on the KDA website at: <u>https://www.kyagr.com/agpolicy/2023-Program-</u> <u>Guidelines-and-Applications.html</u> Scroll down to the guidelines for the "CAIP" program. When looking through this website, make sure you are looking at the "2023 Guidelines" and not the 2022 guidelines.

## BREEDING SOUNDNESS EXAMS CAN UNCOVER POTENTIAL PROBLEMS

Cold temperatures and wind can result in damage to bulls' ability to produce viable semen. Bull breeding soundness exams offer the opportunity to identify and remove bulls from the breeding herd that have a low probability of siring calves.

Since the No. 1 determinant of profit potential in a beef cow-calf

operation is birth of a live calf, turning out infertile bulls can have

tremendous impact on profitability. Breeding soundness exams can uncover potential problems with young bulls that were just purchased and older bulls that have already sired calf crops. However, less than 20% of producers in the United States perform breeding soundness exams on their bulls prior to spring turnout, according to a National Animal Health Monitoring Survey.

The breeding soundness exam performed by your veterinarian includes examination of the bulls' physical structure, reproductive organs and semen.

Structural problems with feet and legs or movement in general are a big issue because bulls are asked to cover a lot of ground and need to be free of physical problems to successfully breed cows. Young bulls will lose body condition during a breeding season, so they must enter the breeding season with adequate condition.

Vision is also an important part of the breeding season for bulls. Seeing the mounting behavior of cows in heat helps the bull identify who is ready to breed from across the pasture.

Evaluation of the reproductive organs is another important part of the breeding soundness examination. The penis, testicles, vesicular glands and other internal structures are evaluated. These organs need to be free

of injuries, infections or defects in order for a bull to successfully breed cows.

Scrotal circumference is heavily scrutinized in young bulls as it serves as an indicator of semen



production and fertility. As young bulls grow, the standards for adequate scrotal circumference also increase. For example, a bull that is less than 15 months old should have a circumference of at least 30 centimeters, whereas a bull greater than 24 months should have a scrotal circumference of at least 34 centimeters. Bulls with inadequate scrotal circumference should be discriminated against, as fertility and number of cows bred are a main concern.

A sample of semen is evaluated for motility, morphology and concentration. Motility is the movement of sperm. Ideally, a rapid swirling movement in the sample will be observed. If sperm are not moving in a synchronized manner, they may not be able to successfully navigate through the female reproductive tract to the site of fertilization. If a bull has less than 30% of sperm with proper motility, they are not recommended for breeding, whereas a bull with greater than 70% proper motility receives a very good rating for the motility portion of the exam.

Morphology is an evaluation of the structure of the sperm. Ideally, the sperm will have head and tails of proper shape. Examples of common defects include tapered heads, detached heads, folded tails and coiled tails. Sperm that have the incorrect structure will not result in successful fertilization, and a minimum of 70% of the sperm cells need correct morphology for a bull to pass a breeding soundness exam.

Just because a bull sired calves last year does not mean he can do it again this year. Injuries during the non-breeding months as well as effects of extreme cold weather and frostbite can render once-fertile bulls infertile.

The process of making sperm, spermatogenesis, takes 60 days, so frostbite or other injuries that occur in March may still be lingering in May. Perform breeding soundness exams close to the time of breeding to ensure recovery from winter injuries and enough time in advance of turnout to find new bulls if the exam finds fertility problems.

An important indicator of breeding season success is stocking rate, or how many cows a bull is required to breed in a breeding season. The nationwide average stocking rate is 25-30 cows per mature bull or 15 cows per yearling bull.

## WEST KY SUMMER FORAGE TOUR – MAY $25^{TH}$



The 2023 Western Kentucky Summer Forage Tour will be held in Caldwell County on May 25.

This year's tour features "Nurtured Lands Farm" located just outside of Princeton, KY. Kate and Justin Adams purchased their Princeton Kentucky farm in 2016. It had been ne glected for many years leading to low soil fertility and poor soil health. While neither Kate nor Justin grew up on a farm, they both enjoy hard work and have a passion for regenerative agriculture.

This tour will chronicle their "regenerative journey" and the successes and failures that they have had along the way. This farm tour will be an informal, walking tour of the 50-acre farm (35 in pasture). Justin and Kate will explain how they used strategic forages, animals, and grazing techniques to bring life back into the soil. They have experimented with many ways of diversifying the forages on the farm and have seen the biggest impacts through frost seeding of clovers and lespedeza. Since Nurtured Lands Farm does not use synthetic fertilizers, having the

clovers in the pasture is their main source of nitrogen. The tour will be a friendly discussion of shared practices.

Topics to be highlighted include, soil health and fertility, rotational grazing, integrating multiple livestock species, using a chemical free approach, watering systems for rotational grazing, the role of mentorship in a new farm, building soil fertility through bale grazing, building and maintaining strong nutrient cycles, direct to consumer marketing, and obtaining high quality stored forage.

Registration is \$10per person, at the door, starting at 3:00 p.m., with the tour starting at 4:00 p.m. Please pre-register, to aid in planning dinner, on-line at: <u>https://WestKyForageTourMay23.eventbrite.com</u> or contact Kate Adams at Kate@nurturedlands.com or 513-470-8171. Bring your lawn chair!!!



Day; U.K. Research Farm in Princeton