

Agriculture CENTRAL KANSAS EXTENSION DISTRICT NEWS

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December 2022

Upcoming Events

December

- 14 Farm & Ranch Transition Conference
- 24-31 Office Closed for Holiday

January

1 Office Closed

- 3 Winter Cow Calf Nutrition Program
- 13 Corn School
- 18 Women in Ag
- 19 Mankato Calving School
- 25 Women in Ag



Extension Office Closed for Holiday!!

Central Kansas District Office will be closed for the holidays from

> December 24th through January 1st. We hope you all have a safe and healthy holiday. See you in 2023!

Podcast Pick of the Month

Author: Beef Cattle Institute at KSU

Topic: Vitamin A, Leasing vs. Bull Buying, and Implants



Check out this months Podcast Pick of the Month. Listen to Dr. Phillip Lancaster and Dr. Bob Larson discuss Vitamin A, Leasing vs. Bull Buying, and Implants. All you have to do is pull up your camera on your smart phone, point it towards the QR code, and click the link.

2023 Junior Producer Days

Information & registration: https://www.asi.k-state.edu/extension/youthprograms/events/ks-jrproducer//

Location: Weber Arena, KSU Campus

Swine Producer Day

Meat Goat Producer Day

Date: Saturday, March 11th



Date: Saturday, March 19th



Kansas State University Agricultural Experiment Station and Cooperative Extension Service



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Vitamin A: A major player in stillborn and weak calf syndromes

By Gregg Hanzlicek, DVM, Veterinary Diagnostic Lab



Vitamin A deficiency can present with many different clinical signs, but the most common signs are weak or stillborn calves. In this article, we will discuss some possible reasons why this may occur in our spring-calving beef herds.

Deficiency timing:

Fresh, green forages contain very high levels of Vitamin A (as carotenes). It is rare for Vitamin A deficiency to occur during a normal pasture season. We do occasionally observe deficiencies in the pasture season during drought conditions. As the grasses become dormant (have turned from green to brown color), the Vitamin A content will decrease and the pasture may not provide the appropriate amount of required dietary vitamin.

Vitamin A deficiency is primarily a winter issue. Cows on greengrass pastures will store Vitamin A in their livers. During late fall

and winter, when Vitamin A intake is not sufficient, they can use this storage supply to meet metabolic demands. Unfortunately, the storage supply only lasts between 2 and 4 months.

Harvested forages that are still green in color will also contain some Vitamin A, but at very low levels. This vitamin is the least stable of all vitamins and its stability is negatively affected by elevated temperatures, light, presence of oxygen, and humidity. Therefore, during the harvesting, curing, and storing process a large amount of Vitamin A is lost as shown in the table below.

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Feed source	Vitamin A equivalent (IU/lb dry matter)			
Green grass pasture	18,000			
Orchard grass hay	1,400			
Alfalfa hay	1,300			
Maynard, 1979				

Supplementation:

Most herds will supplement Vitamin A through a trace-mineral/vitamin pack supplement. Unfortunately, we do commonly see Vitamin A deficiency in supplemented herds. What might explain this? Some mineral packs do not contain the appropriate amount of Vitamin A. Normal free-choice mineral/vitamin supplement consumption is 2-4 ounces per head per day. To meet the needs of a 1,400-cow consuming 2 ounces of mineral, 300,000 IU of Vitamin A per pound of supplement would be required. If consuming 3 ounces of mineral, this concentration would need be 200,000 IU/lb. A large percentage of these supplements contain less than 150,000 IU/lb.

Another consideration is supplement intake amounts variation between cows. Some research suggests up to 14% of cows do not consume any dry mineral supplement at all, and the variability between animals that do is very large. Lastly, it doesn't matter what level of Vitamin A is contained in the supplement if it isn't consistently available for consumption. Cows can't eat what is not available!

As mentioned above, Vitamin A is very unstable and affected by many environmental factors. Mixing Vitamin A with trace minerals (particularly inorganic forms) increases the level of instability. When not mixed with a trace mineral, about 1% of the pure Vitamin A product potency is lost per month. After mixing, the losses can approach 9% per month. A trace mineral/ vitamin product purchased today may contain 50% less Vitamin A when fed six months later.

One common question about supplementation concerns administering an injectable Vitamin A product. In some cases, supplementing with this method does make sense. For example, a herd that is presently experiencing a deficiency can administer the injectable to those dams that have not calved which will have immediate effects. Another example would be when a herd has not been adequately supplemented and has been fed harvested forages for an extended period. The negative aspect of injectable Vitamin A is the short period of effectiveness. Vitamin A tissue levels are increased for about 1-2 months after administration; therefore, administration timing is critical. To help unborn and neonatal calves, administering to cows as close to expected calving would be appropriate. Excessive Vitamin A can be toxic; therefore, using your veterinarian's advice on product and dosage is very important.

Summary:

- Fresh, green forages contain large amounts of Vitamin A; therefore, supplementation levels during a normal pasture season are minimal.
- Once pastures have become dormant or when feeding harvested forages, Vitamin A supplementation levels need to be increased to the appropriate level.
- Considerations to normal supplement consumption amounts of most vitamin/trace mineral products, it is important that these products contain the appropriate level of Vitamin A.
- It is important that supplementation products be available to the cows at all times to optimize consumption levels.
- Minimize the storage of Vitamin A containing products to only a few months given the instability of this vitamin.
- Injectable Vitamin A can be beneficial in some cases, but appropriate dosage and timing is critical.

CKD Winter Cow-Calf Nutrition Program January 5th | 5:30 pm

Sanders Shop – intersection of Oxbow Rd. & N 210th Rd. Wells. KS

Program Topics:

Vitamin A considerations for beef cows: important even under non-drought conditions-Dr. Gregg Hanzlicek, KSU

Supplemental feeding strategies leading up to calving – Dr. Jason Warner, KSU

Proper vaccine handling & storage – Justine Henderson, CKD Extension



RSVP by Jan 3th

Meal provided. To reserve your spot, please visit: https://www.centralkansas.kstate.edu/livestock/programs/index.html

Other ways to register: Call Justine at 785-392-2147 or scan QR code with your phone



Central Kansas District

Kansas State University is committed to making its services, activities and programs accessible to all participants. If you have special requirements due to a physical, vision, or hearing disability, contact Justine Henderson at 785-392-2147. Kansas State University Agricultural Experiment Station and Cooperative Extension Service K-State Research and Extension is an equal opportunity provider and employer.





Registration Open for 2023 Kansas Corn Schools

Kansas Corn and K-State Research and Extension will host the popular Kansas Corn School series in January and February 2023. Four in-person sessions will be held across the state and one online session will be hosted for those who can't attend a corn school in their region. These winter learning sessions are designed specifically for Kansas corn farmers and will feature a variety of topics tailored to each school's location. Participants will hear the latest research and production information, get updates on corn issues and network over lunch. K-State Research and Extension staff are working to ensure CCA and Commercial Pesticide Applicator credits are available.

In-person corn schools will begin with registration at 8:30 a.m., a program starting at 9:00 a.m. and concluding after lunch. The schools are free to attend and are sponsored by Pioneer, Farm Credit Associations of Kansas, and local sponsors. Attendees are asked to register in advance online at kscorn.com/cornschool or by calling the Kansas Corn office at 785-410-5009. More information including agendas, locations and meeting times can be found at kscorn.com.

<u>Salina Corn School Information</u> Jan. 13, 2023 Great Plains Mfg. Inc., 1525 E North St., Salina, KS 67401 9AM-1:30 PM Local Sponsors: The Andersons & Ag Risk Soluțions

The Power of Negotiation Communication Land Leasing Strategies for Midwestern Ag Women



A 4-PART WORKSHOP FOR LANDOWNERS AND TENANTS

2023: Jan. 18 | Jan. 25 | Feb. 1 | Feb. 8 5:30-8:30 p.m. CT

College Center Conference Room, K-State Salina

2310 Centennial Road, Salina \$50 | REGISTER BY JAN. 13, 2023 AT www.AgManager.info/events



K-State Research and Extension is committed to providing equal opportunity for participation in all programs, services and activities. Accommodations for persons with disabilities may be requested by contacting the event contact, Robin Reid, two weeks prior to the start of the event, Jan. 18th, at robinreid@ksu.edu or 785-532-0964. Requests received after this date will be honored when it is feasible to do so.







This material is based upon work supported by USDA NIFA under award Number 2021-70027-34694

National Institute of Food and Agriculture



In anticipation of calving season, Kansas State University Animal Sciences and Industry and K-State Research and Extension are planning a series of calving schools in January.

The program will outline overall calving management that includes stages of the normal calving process as well as tips to handle difficult calving situations. A.J. Tarpoff, K-State extension beef veterinarian, explains the goals of the event are to increase knowledge, practical skills, and to increase the number of live calves born if they need assistance.

The schools will also share tips on when and how to intervene to assist the cow or heifer. Presenters will also demonstrate proper use of calving equipment on a life-size cow and calf model.

A note from Justine:

For any Ottawa or Saline county producers who would like to attend the calving school in Mankato, I will be taking a van up to the program. There will be room for 10 people. First come first serve. We will be leaving the Minneapolis office (307 N Concord) at 4:30pm.

If you would like to ride along, please call the Minneapolis extension office at 785-392-2147 and let me know if you would like to join.

No cost to the program if you RSVP by January 12th. If you RSVP after that day, cost will be \$10 at the door.

K-STATE Research and Extension

Central Kansas District

Central Kansas Extension District *Minneapolis Office* 307 N. Concord, Suite 190 Minneapolis, KS 67467-2129

Address Service Requested

The enclosed material is for your information. If we can be of further assistance, feel free to call or drop by the Extension Office.

Sincerely,

Jay Wisbey District Extension Agent Crop Production jwisbey@ksu.edu

Salina Office

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