



Agriculture

CENTRAL KANSAS EXTENSION DISTRICT NEWS

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February 2025

Upcoming Events

February

12 Kansas Wheat Rx

17 Mpls. Extension office closed

20 Coffee Break Conversations, Mpls.— Library 10 A.M.

27 Coffee Break Conversations, Tescott, Lions Building 10 A.M.

March

6 Coffee Break Conversations, Assaria, City Hall 10 A.M.

7 Cattleman's Day

26-28 Mid America Farm Expo, Salina

Cold Stress Increases Energy Requirements

Written by Justin Waggoner, KSU Extension Beef Cattle Specialist, Garden City, KS



Cattle are most comfortable within the thermoneutral zone when temperatures are neither too warm nor cold. During the winter months cattle experience cold stress anytime the effective ambient temperature, which takes into account wind chill, humidity, etc., drops below the lower critical temperature. The lower critical temperature is influenced by both environmental and animal factors including hair coat and tissue insulation (body condition).

The table below lists the estimated lower critical temperatures of cattle in good body condition with different hair coats. In wet conditions, cattle can begin experiencing cold stress at 59°F, which would be a relatively mild winter day. However, if cattle have time to develop a sufficient winter coat, the estimated lower critical temperature under dry conditions is 18°F. Cold stress increases maintenance energy approximately 1% for each degree below the lower critical temperature, but does not impact protein, mineral, or vitamin requirements. Thus, maintenance energy requirements of cattle may increase by 15-20% on those exceptionally cold and windy days that commonly occur in January and February. Increased maintenance energy requirements essentially means that less energy is available for production (gain), which translates to lower ADG, increased Feed:Gain, and greater Days on Feed.

Estimated lower critical temperatures for beef cattle	
Coat Condition	Critical Temperature
Wet or summer coat	59°F
Dry fall coat	45°F
Dry winter coat	32°F
Dry heavy winter coat	18°F

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FREE FOR KAWG MEMBERS
\$110 FOR NON KAWG MEMBERS
(PRICE INCLUDES KAWG MEMBERSHIP AND FREE EVENT ATTENDANCE)

KANSAS WHEAT Rx

A combination of suggested management practices
for economical and sustainable production
of high-quality winter wheat in Kansas



FEBRUARY 12, 2025

8:30AM - 3PM

LUNCH AND FACILITY TOUR INCLUDED

SALINA

Great Plains Manufacturing
(1525 E. North St. - Salina, KS)

REGISTER: kswheat.com/wheatrx

Coffee Break Conversations



K-STATE
Research and Extension

Central Kansas
District

February 20, 2025

10:00 A.M. Minneapolis, KS - Library

Precision Agriculture Extension Specialist Dr. Deepak Joshi

Join the precision farm technology discussion with Deepak as he gets settled into his new role at K-State.

February 27, 2025

10:00 A.M. Tescott, KS – Lions Building

Spray Demonstration Table with Jay Wisbey

Hands-on demonstration covering the spraying factors to get the most out of your chemical application and be prepared for the upcoming season.

March 6, 2025

10:00 A.M. Assaria, KS - City Hall

KSRE North East Area Agronomist Dr. Tina Sullivan

Come visit with Tina as she explains her role within KSRE and covers some of the Agronomic concerns facing producers across NE Kansas.

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: Jay Wisbey (785) 309-5850
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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,



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