

Across the County

Nitrate Toxicity

The potential for high nitrate concentrations occurs when crops such as corn, sorghum, cereal grains and some grasses are exposed to drought, hail, frost, cloudy weather, or soil fertility imbalance. When fed to livestock, nitrates interfere with the ability of the blood to carry oxygen.

Nitrate toxicity is a misnomer because nitrite (NO₂), not nitrate (NO₃), is poisonous to animals. After a plant is eaten, rumen bacteria rapidly reduce nitrates in the forage to nitrites. Normally, the nitrites are converted to ammonia and used by rumen microorganisms as a nitrogen source. However, if nitrite intake is faster than its breakdown to ammonia, nitrites will begin to accumulate in the rumen. Nitrite is rapidly absorbed into the blood system where it converts hemoglobin to methemoglobin. Red blood cells containing methemoglobin cannot transport oxygen and the animal dies from asphyxiation.

Symptoms of nitrate toxicity may appear within a few hours after eating or not for several days. Lower nitrate levels can cause abortion without any other noticeable symptoms. Acute toxicity usually is not apparent until methemoglobin approaches lethal concentrations. Symptoms include cyanosis (bluish color of mucus membranes), labored breathing, muscular tremors and eventual collapse. Coma and death usually follow within two to three hours. Postmortem confirmation of nitrate toxicity

is chocolate-colored blood; however, the color will change to dark red within a few hours after death.

Diagnosis and treatment of nitrate toxicity should be performed by a veterinarian.

Forage suspected to contain high nitrate levels should be tested by a laboratory before feeding.

Nearly all plants contain nitrate, but some species are more prone to accumulate nitrate than others. Crops such as forage and grain sorghums, sudangrass, sudan-sorghum hybrids and pearl millet are notorious nitrate accumulators. Weed species such as kochia, lambsquarters, sunflower, pigweed and Johnsongrass also are often high in nitrate. Under certain environmental and managerial conditions, corn and cereal grains like wheat and oats, and other plants can accumulate potentially toxic levels of nitrate. Under extreme stress, legumes like alfalfa and soybean also can accumulate nitrate.

Nitrate content generally is highest in young plant growth and decreases with maturity. Sorghums and sudangrasses, however, are exceptions because concentrations can remain high in mature plants. If plants are stressed at any stage of growth, they can accumulate nitrate. Highest nitrate levels occur in the lower one-third of the plant stalk and concentrations tend to be low in leaves because nitrate reductase enzyme levels are high there. Grain does not contain

appreciable amounts of nitrate.

Silages made from stressed forages should be analyzed after ensiling because the fermentation process usually converts about 50 percent of the nitrates to a nontoxic form. If forages are harvested as hay, nitrate concentrations remain virtually unchanged over time.

High nitrate forages may be grazed, but a dry roughage should be fed first to limit intake. Light to moderate stocking rates should be used because overgrazing forces cattle to eat the stems which contain the highest nitrate levels. Cattle should be removed from potentially susceptible forage for at least seven to 14 days after a drought-ending rain. Lush regrowth of heavily fertilized grasses can contain high nitrate levels and should not

By
Marty
Fear



County Extension Agent

be grazed.

Before feeding potentially troublesome plants such as sorghum and sudangrass, analyze the forage for nitrates. Environmental conditions in Kansas create high nitrate concentrations in some forage virtually every year. Consequently, nitrate analysis is necessary to determine if the feed is potentially toxic. High nitrate forages can be fed to animals if proper precautions are taken.

Please contact the Cheyenne County Extension office at 332-3171 or cfear@ksu.edu with questions or comments. Till next week - Marty

Idalia News

St. John Church news

Pastor Chuck is back and will be doing the Idalia news again.

Thursday Sept. 5 at 7 a.m. - Men's Bible study in the fellowship hall. All men are welcome.

Monday Sept. 9 at 3:30 p.m. Youth pack.

We are looking for volunteers to give the nursery a thorough cleaning. Please contact Tara Garton.

School news

Friday Sept. 6 volleyball and

football with Arickaree. Junior high volleyball and junior high football start at 3:30 p.m. Varsity football starts at 7:30 p.m.

Saturday Sept. 7 - Volleyball tourney in Bethune.

Crop Walk
Sunday Sept. 8 at 3 p.m. is the 7th annual Crop Walk.

By
Chuck
Wright



Great Tips

- To get rid of itch from mosquito bites, try applying soap on the area and you will experience instant relief.
- Ants, ants, ants everywhere ... Well, they are said to never cross a chalk line. So get your chalk out and draw a line on the floor or wherever ants tend to march. See for yourself.
- Use air-freshener to clean mirrors. It does a good job and better still, leaves a lovely smell to the shine.
- When you get a splinter, reach for the scotch tape before resorting to tweezers or a needle. Simply put the scotch tape over the splinter, then pull it off. Scotch tape removes most splinters painlessly and easily.
- Now look what you can do with Alka Seltzer.....Clean a toilet: Drop in two Alka Seltzer

tablets, wait twenty minutes, brush and flush. The citric acid and effervescent action clean vitreous China. Clean a vase: To remove a stain from the bottom of a glass vase or cruet, fill with water and drop in two Alka Seltzer tablets. Polish jewelry: Drop two Alka Seltzer tablets into a glass of water and immerse the jewelry for two minutes. Clean a thermos bottle: Fill the bottle with water, drop in four Alka Seltzer tablets, and let soak for an hour (or longer, if necessary). Unclog a drain: Clear the sink drain by dropping three Alka Seltzer tablets down the drain followed by a cup of white vinegar. Wait a few minutes, then run the hot water.

-Did You Know? -

- Johann Sebastian Bach was not just considered "the greatest genius of baroque music," he was also a father to 20 children, several of whom became musicians.
- In French universities, freshmen are sometimes called bec jaune, or yellow beak, for their similarity to fledgling birds.
- When a lapwing's nest is threatened, the bird will limp and pretend to be hurt to lure its enemies away.
- Experts on Elizabethan cuisine contend the "funeral baked meals" Hamlet makes so much of were meat-pies.
- Most experienced beekeepers handle bees and honeycombs with their bare hands. Gloves are clumsy and would soon become covered with sticky honey.
- The world's best fishing grounds lie along the edge of the Arctic, particularly off the coasts of Greenland and Iceland.
- The ancient Greeks named the Arctic region for a constellation that they called Arktos (the bear).
- James A. Garfield, 20th President of the United States, could write in two different languages at the same time.
- When a sea elephant gets angry, his nose fills with air, swells like a balloon and forms a snout up to 20-inches long.
- The gentoo penguin can swim at speeds up to 17 miles per hour.
- There are about 180,000,000 licensed drivers in the U.S. The U.S. is home to about 850 different species of trees.
- Three-time world welterweight champion Jack Britton competed in a record 37 title bouts.
- The characters most frequently portrayed on the screen is Sherlock Holmes, created by Sir Arthur Conan Doyle.



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4-H Section

To be inserted in October.

Features a collection of articles celebrating 4-H Week and the 4-H Clubs in Cheyenne County.



Public Notices

Nondiscrimination notice published

Published in The Saint Francis Herald, St. Francis, Kansas, and Bird City Times, Bird City, Kansas, Thursday, September 5, 2013. (36)

STATEMENT OF NONDISCRIMINATION

Prairie Land Electric Cooperative, Inc. is the recipient of Federal financial assistance from the Rural Utilities Service, an agency of the U.S. Department of Agriculture, and is subject to the provisions of Title VI of the Civil Rights Act of 1964, as amended, Section 504 of the Rehabilitation Act of 1973, as amended, the Age Discrimination Act of 1975, as amended, and the rules and regulations of the U.S. Department of Agriculture which provide that no person in the United States on the basis of race, color, national origin, age, or handicap shall be excluded from participation in, admission or access to, denied the benefits of, or otherwise be subjected to discrimination under any of this organization's programs or activities.

The person responsible for coordinating this organization's nondiscrimination compliance efforts is Allan Miller, General Manager. Any individual, or specific class of individuals, who feels that this organization has subjected them to discrimination may obtain further information about the statutes and regulations listed above from and/or file a written complaint with this organization; or the Secretary, U.S. Department of Agriculture, Washington, D.C. 20250; or the Administrator, Rural Utilities Service, Washington, D.C. 20250. Complaints must be filed within 180 days after the alleged discrimination. Confidentiality will be maintained to the fullest extent possible.

Creditors notified in Neitzel estate

Published in The Saint Francis Herald, St. Francis, Kansas, Thursday, August 29, September 5, September 12, 2013. (35, 36, 37)

NOTICE TO CREDITORS

Pursuant to K.S.A. 58a-818

TO ALL PERSONS CONCERNED:

You are hereby notified that on August 12, 2013, the decedent, Glenn O. Neitzel, died a resident of Kansas. The Successor Co-Trustees named in the Glenn O. Neitzel Trust established by the decedent on June 21, 1993, are as follows:

- Karen K. Sutter, with an address of 2726 K-18 Hwy., Junction City, Kansas, 66441;
- Todd Neitzel, with an address of 2195 Road I, St. Francis, Kansas, 67756

The terms of the trust provide that the debts of the decedent may be paid by the Successor Co-Trustees upon receipt of proper proof thereof.

All Creditors of the decedent are notified to present their claims against the Successor Co-Trustees within the later of four (4) months from the date of the first publication of this notice, or thirty (30) days after receipt of actual notice, as provided by law, and if their demands are not thus presented, they shall be forever barred against the trustee and the trust property.

Karen K. Sutter,
Successor Co-Trustee
Todd Neitzel,
Successor Co-Trustee

MICHAEL J. DAY #8523
KITE & DAY
112 W. Washington, PO Box 575
St. Francis, KS 67756
(785) 332-3323
kiteandday@cityofstfrancis.net
Attorney for the Glenn O. Neitzel Trust
UTA dated June 21, 1993

Deadlines !! Deadlines

We know how all of us hate deadlines — But in order for us to do our best and try to keep you happy, please note below The Saint Francis Herald and Bird City Times deadlines.

Articles and Ad are due Monday at 5 p.m. for that week's paper

The Saint Francis Herald
Bird City Times



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