



Where caring for your animals is our top priority

**Phone: 402-329-4805**  
**1-888-371-7474**  
**Fax: 402-329-6421**  
**Email: wcvet@ptcnet.net**

## Handling Heat Stress in Cattle by Dr. Sherri Merrill

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### Important Dates:

- July 4th - Independence Day
- July 14th or 15th - Cow Appreciation Day
- July 26th - Parents' Day
- August 25th - Kiss and Make Up Day
- August 26th - National Dog Day

The heat of July and August increase risk for heat stress in cattle. Cattle don't handle heat as well as humans so we need to anticipate heat stress and manage appropriately. Conditions most conducive to heat stress in cattle are prolonged high temperatures, with above average humidity, and below average winds. Cattle will be more affected when they have had little time to adapt to the heat load. Overnight temperatures remaining above 70 F also increase the risk for heat stress by preventing a cool-down period. Losses in feedlot cattle often occur when there are consecutive days with Temperature-Humidity Index values above 80 combined with nights with temperatures above 70 F. The

temperature humidity index, however, does not account for wind speed. For a heat stress forecast go to

<http://www.usmarc.usda.gov> and click on the heat stress link found on the left hand side bar.

#### What to look for:

Cattle coping with heat stress will seek shade, bunch together, spend more time standing, crowd the water tank and have an increased respiratory rate. Animals that are failing to cope will have labored, open mouth breathing, and excessive salivation. Near death animals will stagger or be unable to move,



leading to collapse, convulsions, coma and death.

Panting scores can be used to help determine when extra measures need to be taken to relieve heat stress in cattle. Panting scores are measured on a scale from 0 to 4.

- 0. Normal Animal. Chest movement is difficult to see.
- 1. Slight panting, closed mouth, no drool or foam. Easy to see chest movement.
- 2. Fast panting, drool or foam present. (2.5; same as 2 but

*(Continued on page 2)*

## Dental Care by Nicole Koehler

That's right! Pets need dental care too. 80% of dogs and 70% of cats show signs of oral disease by age 3! Here are some ways to help your pet:

- 1. Pets need daily brushings just like humans. With daily, routine brushings;

most pets eventually get used to it. Using children's brushes or brushes just for pets may help since they are smaller in size. Using a "toothpaste" can help keep your pet's teeth cleaner. You should never use regular toothpaste in pets, it can be harmful if swallowed. Children's toothpaste, beef-flavored baking

soda, or toothpaste made for pets is recommended. Make sure to brush every tooth!

- 2. Feeding hard foods helps reduce plaque build-up, but remember it can only remove so much. Daily brushings are still necessary to get into every crack and cranny

## Handling Heat Stress in Cattle cont'd

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occasional open mouth breathing is seen.)

3. Open mouth breathing, neck extended, head up. (3.5; tongue out slightly, excessive drooling)
4. Open mouth with tongue fully extended for prolonged periods and excessive drooling. Neck extended, head up. (4.5; head down, drooling may cease)

If greater than 10% of the cattle are at a panting score of 2 or above all handling and movement of affected cattle should be stopped. Cattle with a panting score of 3.5 or greater need to have some form of relief from the hot conditions. Under extreme conditions cattle need to be monitored closely. If you see these signs, assume the cattle have high heat loads, and minimize the stress immediately.

Animals with past health problems may be more affected by heat stress. These animals often will be the first and the most severely affected in the herd. Past bouts of respiratory disease with residual lung damage may make them unable to cope with temperatures that otherwise normal animals can handle. If an animal's health problems are on-going, administer treatment with extra care. Remember that the animal may be less able to compensate for high temperatures. This may be true even for cattle with otherwise easily treated problems, such as footrot.

Cattle in confinement generally have greater heat loads than cattle on pasture. This presumably is due to more air movement in the pasture, possibly shade, and less exposure to radiant heat associated with concrete or dark soil.

Heavier cattle (>1000lb.) are generally more susceptible to high heat loads than lighter cattle. Also pay close attention to newly received cattle that may already be stressed due to the shipping and receiving processes.

Dark hided cattle are generally more susceptible to heat stress than light hided cattle. It is best, however, to assume all

cattle are susceptible to heat stress regardless of hide color.

### What to do before an extreme heat event:

1. Ensure that there are not restrictions to air movement such as hay storage location or wind breaks.
2. Check stock tanks to ensure adequate water. Make sure to have adequate access for multiple animals to drink at one time. You will need at least 1.5 inches of water space per head. For example, 100 head would need 150 inches of water tank perimeter. (The perimeter of a round tank can be found by multiplying the diameter by 3.14.) Consider the use of additional water tanks. Check reserves, pumps and all parts of the watering system. Check the refill rate of the stock tanks; remember in the summer when many animals are drinking many tanks will be trying to fill at one time in addition to other potential needs for water on the same water supply line. During the summer water intake may exceed 9 gallons per head per day. The water system should be able to provide the days supply of water within a 4 to 8 hour period. Water intake decreases when water temperature exceeds 80 F. As a result, ensure that water pipes are not exposed to sun. Pipes should be at least 2 feet underground.
3. Consider adding shade at least over the sick pens, and possibly over other vulnerable animals.
4. Remove manure build up from around water tanks, feed bunks and under shade. Manure build up should not exceed 1 inch in depth.
5. Monitor the weather.

### What to do during an extreme heat event:

1. **DO NOT MOVE ANIMALS.** Body temperatures of cattle exposed to high daytime temperatures tends to peak in the early evening, declining in the night to reach a low point in the hours after sunrise, then slowly building throughout the day. If you must move or treat cattle for any reason, work with cattle in the early

morning. Avoid afternoon/evening work when body temperatures are already high. Avoid having cattle confined for more than 30 minutes. Tubes and alleyways have very little airflow.

If at all possible, avoid transporting cattle during periods of heat stress. If transportation can't be delayed, do it during the early morning hours to avoid any additional stress. Transportation of cattle during heat stress events is thought to be a contributor to dark cutters.

2. **Observe animals for signs of heat stress.**
3. **Consider wetting the animals or the ground.**

When wetting the animals use large droplets not a fine mist. Wet animals to the hide; the water should run off the animals. Wetting is efficient where there is wind and low relative humidity. Night sprinkling may be effective. Once sprinkling commences it will need to continue until the heat wave conditions abate. Be prepared to sprinkle for up to 5 days. If pens are wet, after rain for example, adding water will further increase humidity within the pen making the situation worse. Consider multiple sprinklers, a minimum of 3 per pen, at various locations within a pen. These sprinklers can be turned on and off in an attempt to reduce mud holes. Avoid locating sprinklers around water tanks, feed bunks, or shade. Use caution if fire trucks are used to wet cattle. If cattle are not used to this treatment they may run away from the water, which could make the situation worse.

If you need to process or treat cattle this summer, we would be happy to work them during the cool morning hours. Please ask for an early appointment. Have some fun this summer and avoid heat stress yourself.

## Dental Care

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3. A proper cat/dog food will ensure proper mineral balances to strengthen teeth and keep

gums healthy.

4. Chew toys also help reduce plaque build-up. Make sure to purchase proper-sized toys for your pet to reduce chance of swallowing things they shouldn't but also to make sure it's not too big that they can't chew it. Some recommended toys are nylon ropes,

dental chews, rawhide bones from a pet store, and hard rubber bones(hard enough they can't bit through).

5. Regular visits with your veterinarians can help detect early diagnosing of gum disease, retained baby teeth(baby teeth that don't fall out), broken or chipped teeth, large amounts of plaque build-up, or any missing teeth. For some pets, a good cleaning by your veterinarian may be recommended.

6. A dental cleaning by your veterinarian requires your pet to go under anesthesia. Your pet must be asleep during the procedure to ensure that no injuries from our tools will occur and to help ensure a thorough cleaning. First we use an ultrasonic cleaner to break up and

remove any built-up plaque. The ultrasonic cleaner uses small rapid vibrations to break-up plaque which is painless to the touch, but can be very loud and feel strange which is another reason to have your pet peacefully asleep during the procedure. Next we use a polishing machine with fluoride polishing paste to smooth down each tooth and strengthen the surfaces. Any loose, broken, or decaying teeth will be removed at this time.

7. Table scraps and sweets should never be fed to your pet anyway. The unbalanced diet will increase chance of weakened teeth due to mineral loss. The high amounts of sugar will only feed any cavities.

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## KENNEL TALK by Doreen Mausbach

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We love having your pets stay with us when they are not able to stay at home. Owners are allowed to bring their pets own food, medicine, blankets, and toys. Weekend pick-ups must be prepaid and the kennel attendant will call during the morning or afternoon dog walking session.

We do require all pets to be current on their vaccinations. If they are not current we will get them up to date when you bring them in.

### CANINE VACCINATION REQUIREMENTS:

- DHLPP > Distemper
- Rabies
- Kennel Cough
- Heartworm prevention is strongly recommended
- Flea & Tick program-(collars are not accepted)

### FELINE VACCINATION REQUIREMENTS:

- Feline Distemper
- Rabies
- Fleas & Tick program

### Why Distemper and kennel Cough ?

**Canine Distemper:** Is a highly contagious, systemic, viral disease. Main route of infection is via bodily secretions and excretions, especially respiratory secretions from infected dogs. Dogs in recovery may continue to shed the virus for several weeks after symptoms disappear, but no longer shed the virus once they are fully recovered. The first sign of distemper is eye discharge that may appear watery to pus-like, subsequently, dogs develop fever, nasal discharge, coughing, lethargy, reduced appetite, vomiting, and diarrhea. The fever will subside for several days before a second fever occurs which lasts more than one week. In later stages, the virus may attack the nervous system, bringing about seizures, twitching, or partial or complete paralysis. Occasionally, the virus may cause footpads to harden. Infection may be mild and unapparent or lead to severe disease manifest by most of the above signs. The course of the systemic disease may be as short as 10 days, but the onset of neurological signs can be delayed for several weeks or months. Distemper is often fatal, and is so serious and the signs so varied that any sick dog should be taken to a vet for an examination and diagnosis.

**Feline Distemper:** Feline Distemper, caused by a combination of

Rhinotracheitis virus, calici and chlamydia, is a life threatening disease and the virus is considered "ubiquitous," meaning it is present in virtually every place that is not regularly disinfected. It can last a year indoors at room temp., it survives freezing as well as treatment with common disinfectants as alcohol and iodine. A 10 minute Bleach (1 part bleach in 32 parts water) exposure will kill it. Those that become ill are usually less than one year old. Some cases may die suddenly with little or no warning. Acute cases show fever, depression, sneezing, coughing and anorexia after an incubation period of 2-7 days. Physical examination typically reveals depression, dehydration, and sometimes abdominal pain.

**Kennel Cough:** There are many different agents that can cause Kennel Cough. The most common are parainfluenza virus, Bordetella bronchiseptica, and Mycoplasma. Although any one of these organisms can cause symptoms of the disease, the majority of cases are the result of more than one organism. Kennel Cough is an acute or chronic inflammation of the trachea and bronchial airways due to the presence of pathogenic virus and bacteria in the air. Transmission is through direct inhalation of the virus and bacteria shed in the air by a coughing sick dog. It is highly contagious in dogs. Symptoms are a persistent cough that could lead to light tracheitis or a severe pneumonia.

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Willow Creek Veterinary  
Services, P.C.  
85420 549th Ave.  
P.O. Box 123  
Pierce, NE 68767

**Phone: 402-329-4805**  
**1-888-371-7474**  
**Fax: 402-329-6421**  
**Email: wcvet@ptcnet.net**

## Spay/Neuter Promotion

During the month of August, we will be offering our spay/neuter promotion. This is a service we provide to help alleviate the pet overpopulation and to prevent future health problems for your pet. The surgery price will be at a 5% discount and will include a free rabies vaccination. There may be additional charges if your pet is in heat or possibly pregnant. Please alert us if this is a possibility and we will discuss the options.

In addition, we will provide an identification microchip implant at a 50% savings. The price of the chip includes registering your pet with the national 'Home A gain' registry. In the event your pet gets lost, this service can aid you in a safe return of your pet.

Our surgeries are performed Monday thru Thursday, We like to have the patient arrive at the clinic between 7:30am and 8:00am. If this does not work with your schedule, you may bring your pet the evening before prior to 5:30pm. We will have a surgical release form to be filled out at that time. Pets being neutered should be able to go home later in the afternoon; the spay surgeries are dismissed the following day.

Some additional medical options that can be done at this time are updating vaccinations, heart worm testing, cleaning and treating of ears, dental procedures, and dewclaw removal. All charges will need to be paid for when your pet is released. We offer cash, check, or credit cards as a means of payment.

<http://www.willowcreekvet.com>

## Early Weaning Calves by Kris Nelsen

Whether you are in a drought area or you just want to, you can successfully wean your calves at 3 to 4 months of age.

As with everything there are advantages and disadvantages to early weaning.

Some advantages include

1. A non-lactating cow will need to consume less, which will increase how much long the pastures should last your herd.
2. Improve calf performance-during a drought year there is a lot of competition for adequate forage. And the calves are therefore competing for the good stuff with their Mama's.
3. Increase Conception Rate – This will happen because the cow doesn't have to worry about the baby she has at her side, maintaining herself and trying to rebreed at the same time. This also depends on how early you wean the calves and how

long a calving period that you want.

The disadvantages are:

1. Time to spend with the babies is a must; they are going to need a little more TLC than an older weaned calf. Greater attention to proper health, nutrition, and management is a must.
2. Increase cost – early weaned calves will need to eat high quality grains, hays, protein supplements or commercially produced feeds.

More to consider at early weaning or anytime weaning; is setting up a vaccination/ herd health program with either of the doctors at Willow Creek Veterinary Services. General recommendations include:

1. Castrate, dehorn, and brand either before turning out to grass or 10 to 14 days prior to weaning.

2. Administration of vaccinations before weaning will be less stressful when done 10 to 14 days a head of time.
3. Protecting against internal and external parasites will increase feed efficiency.
4. Consideration of implants. These will help improve feed efficiency and increase growth. \*\*\*DO NOT Implant heifers that are potential replacements.\*\*\*\*
5. Provide clean and good quality feed and water is beneficial as well.

If you are considering early weaning or may have questions about weaning in general please feel free to contact us at your convenience.