

# Large Animal Newsletter

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### **What Are You Doing to Prepare for NAIS?**

Animal identification has been a real hot button in recent months. But the truth is; the idea of a government run animal identification system is nothing new. A form of the national animal identification system has been in place for almost 70 years as a means of managing and controlling brucellosis and tuberculosis.

Whether we like it or not, a national animal identification system will become a reality. According to the NAIS Strategic Plan, premises will have to be identified by January of 2008 and reporting of defined animal movements will be required by January of 2009.

It has pretty much been agreed that EIDs (electronic identification tags) will be used to facilitate this system. For those of you unfamiliar with EIDs, all they amount to is a little plastic button type tag. There is nothing magical about them. These tags contain a coil of small copper wire a small microchip called a transponder. These tags simply store the 15-digit number that was programmed into them.

When a reader is used to "read" these tags into a computer or palm pilot, the reader "energizes"

the tag and the tag "echoes" its number back to the reader. Most handheld readers need to be 5-8 inches away from the tag in order to read it.

The main management problem with these electronic tags is that they are small and only have their 15-digit number printed on them. Trying to read them in a pasture situation is impossible. So if you already identify your cattle with dangle tags, you will need to continue to do so for your record keeping purposes.

EIDs can make record keeping more accurate and easier at chute side when the cattle are being processed. You can use a computer or a palm pilot to gather information such as weights, preg check data, treatment records, etc. You can correlate the identification number on the animal's dangle tag to its corresponding EID. Then the next time you work cattle through the chute all you have to do is scan the EID with a reader and that animals information will be brought up on the computer or palm pilot, then all you have to do is enter the new information that you are collecting.

We have had producers asking if they should start using EIDs in their cattle. In theory, they will not be mandatory for another 3 1/2 years, but chances are the market will mandate the use of EIDs prior to that, for age and/or source verification. Right Now, unless you are selling your cattle to a source that will pay a premium for source verified cattle, or unless you plan on using EIDs to gather more individual information, like carcass data, to help improve your herd, then using EIDs is probably a waste of time and money.

There are, however, several things that you can do now to align yourself with USAIP.

## One of the things you need to do is to register your premise.

The main objective of USAIP is to be able to identify all animals as they enter commerce in order to monitor animal health and control disease. The ultimate goal is that the system will be able to trace all livestock through commerce with such accuracy that at any time and animal is found to harbor a Foreign Animal Disease, or some other malady that impacts the industry as a whole, that animal can be tracked to all locations of previous residence within 48 hours.

In order to make the system work, locations that animals are kept have to be identified. This includes places of birth; feeding facilities show facilities, veterinary clinics, packinghouses, and sale barns, among other places where cattle are gathered. Development of premise identification systems were left in the hands of individual states, territories and tribes due to the fact that circumstances differ throughout the nation. To date, 49 states, 5 tribes and 2 territories have premise identification systems in place with 89,138 premises already registered.

For the most part, it is recommended that you register your "headquarters" or the place where cattle get worked or other activity that affects animal health and tractability occurs.

Registering your premise is relatively easy. You can fill out a form from your state organization or in many states you can even register online or over the phone. Some of the information you will need is the legal description or GPS coordinates of the location you would like to register, your personal contact information such as your address and phone number, along with other questions regarding the nature of

your operation (i.e. are you a sale barn, feedlot, cowcalf, etc.).

For information or to register your premise the following contacts should serve you well.

Colorado Premise ID  
[www.livestocktrust.com](http://www.livestocktrust.com)  
800-223-1032  
Research Management Systems USA, Inc.  
2625 Redwing Road, Suite 320  
Fort Collins, Colorado 80526

Nebraska Premise ID  
[www.animalid.us](http://www.animalid.us)  
800-572-2437  
Nebraska Dept of Animal Agriculture Bureau of Animal Industry  
P.O. Box 94787  
Lincoln, NE 68509-4787

Kansas Premise ID  
[www.accesskansas.org](http://www.accesskansas.org)  
785-296-2326  
Kansas Animal Health Department  
George Teagarden Livestock Commissioner  
708 S. Jackson  
Topeka, KS 66603-3714

**Ask yourself what proof you could show buyers asking for age/source verification.** Buyers like McDonalds are already paying for source verification on some of the cattle they are buying and others are sure to follow. And as our export markets reopen, demand for age verification will increase.

Bull turnout dates, individual birth dates, and detailed movement records from conception to marketing would be the ultimate proof for source and age verification. In many operations tracking all this information may not be possible but there may be some creative alternatives. For example, in larger operations it may be very difficult to keep track of the birth date of every calf. But it would be possible to group the

calves by tagging calves born in the first 30 days with one color of ear tag, the next 30 days with a different color tag, etc. and keeping track of the corresponding dates on a calendar. This would probably work for age verification.

**Ask your buyers what type of identification/verification that they will need for this years calf crop.** While you're at it, ask them what they might need for next years calf crop and plan accordingly. If you are already capable of exceeding their requirements, it may be time to look for buyers who are willing to pay more for the information that you already have.

The brutal truth is that even though premiums for source and age verified cattle might exist in the near future, further in the future those premiums will disappear and there will be discounts for cattle that are not source/age verified.

**If you are already using EIDs, make sure they are ISO compliant.** ISO compliant just basically means that any reader can read your tags. It also means that your tags can be grand fathered into NAIS if necessary. In other words, if you are currently using EIDs that are not ISO compliant and NAIS comes into effect, you will have to replace the non-ISO compliant tags with ISO compliant tags, which equals time and money down the drain.

**Keep abreast of NAIS facts as they unfold.** It seems like we are inundated daily with news and commentary about national ID. It is very important to keep up with the latest requirements, deadlines and opportunities that exist.

Even in the wake of the BSE discovery in Texas, many of our lost export markets will be restored, and they will be demanding age verified, and source verified beef. The best way to be prepared is to be able to align yourself with the NAIS strategic plan prior to the deadlines that are set.

Kevin L. Cawthra, Animal Scientist, Twin Forks Clinic

## Water Requirements for Beef Cattle Under Summer Conditions

Recently, Southwest Nebraska and Northwest Kansas have been hit with hot windy weather. During this time of year it becomes increasingly important to provide a clean and adequate supply of water for all livestock.

Water constitutes about 98% of all molecules in the body. Water is needed for regulation of body temperature as well as growth, reproduction, lactation, digestion, metabolism, excretion, lubrication of joints, along with many other bodily functions.

Individual water requirements by animals are influenced by several factors including rate of gain, pregnancy, lactation, physical activity, salt and dry matter intake, type of diet, and environmental temperature. These factors affect the speed in which bodily moisture is lost. The ways bodily moisture are lost include: urine, feces, sweat, or evaporation from the lungs or skin.

Not all water that is consumed by the animal is consumed by drinking. Feeds like silages, green chop, and grass are usually high in moisture while grains and hays are low in moisture. Grasses tend to decrease in moisture as they mature, thus making it more important to keep tanks full.

Water requirements have been observed as follows for this time of year....

Cows w/calves	16.5-17.5 gal./day
Bulls	18-19 gal./day
Growing Cattle	6.5-15 gal./day
Finishing Cattle	9.5-23 gal./day
Dairy Cattle	10-30 gal./day
Horses	8-12 gal./day
Sheep/Goats	1-4 gal./day

As mentioned earlier in this discussion, water requirements are affected by many different factors so these numbers are recommended for use as a guide only.

There are several ways heat stress caused by lack of water can be avoided.

**Have ample water available.** There should be enough water storage available to provide the animals adequate water for 3 to 7 days if you are using a windmill or solar pump and 2 to 3 days if you are using a "hard wired" electric pump.

Calculating this figure is pretty easy, just take the number of head in the pasture times the number of gallon they drink per day times the number of days of storage necessary.

From this we can figure how big of a tank we need. The formula for calculating the storage capacity of a tank is..  $23.5 \times (\text{radius}^2) \times \text{depth}$  of the tank. But where most tanks are 2 foot in depth, here is a little cheat sheet for you to go by.

<b>Tank diameter (feet)</b>	<b>Capacity (gallons)</b>
8	752
9	952
10	1,175
12	1,692
15	2,644
20	4,700
30	10,575

**Keep waterers and water tanks clean.** Keep all storage tanks free of moss, dirt and anything that may have blown into to the tank. All animals perform better when they have access to clean water. There have been studies in Montana and Alberta, Canada that show a 5-30 percent weight advantage in calves and yearlings that had access to higher quality, clean water in tanks.

One way of controlling moss in tanks is by using copper sulfate. One pound of copper sulfate will treat 1,000 to 2,000 gallons of water. It is important to make sure that the copper sulfate dissolves completely, especially in metal bottomed tanks as it will cause them to rust quicker. One way to help this process along is by stirring the copper sulfate in a 5 gallon bucket of water about a day before you add it to the tank. One final note, **do not use copper sulfate in water that may be consumed by sheep.** Copper is toxic to sheep.

**Avoid working cattle if possible.** If you must work cattle during these hot days, work them early in the morning while it is still cool. This will keep the cattle from getting too hot, and give them a little time to recuperate before the weather heats up. Working cattle early is also easier on the crew working them.

**Make sure water delivery is sufficient and that the cattle are drinking the water.** Make sure that the equipment that you use to provide water is in good enough shape to provide adequate water to the animals at all times. Also make sure that the animals know where the water is located and are drinking from it. For instance, if you use automatic waterers, and you receive a group of calves that have never seen a waterer in their life, those cattle aren't going to know what those waterers are for, let alone drink from them. It may be a good idea to provide a tank with water in it until the cattle figure the waterers out.

Kevin L. Cawthra, Animal Scientist, Twin Forks Clinic

## Preg Check Early

By now, most bulls have been pulled from the herd for around 30 days. The breeding season is officially over for many producers. With the current condition of the pastures in this country, it makes sense to determine which females did not conceive this year and send them to town.

At Twin Forks Clinic, we have the ultrasound capabilities to preg check at 35 days or later. We have also just acquired a monacle for our ultrasound machine. This is an eyepiece that the veterinarian wears that makes it easier see the image in field conditions.

Preg checking with the use of ultrasound is more expensive, but it allows us to find the pregnancy earlier. Many producers preg check 35 days after they pulled the bulls. The veterinarian can then preg check by palpation and then ultrasound any questionable ones. This gives us the advantage of being able to preg check early, while still keeping costs down

## Replacements

Many producers turn the bull out with the replacement heifers about 2 weeks to 1 month prior to turning the bull out with the cows. While this helps make sure that the heifers get adequate attention during calving, it also provides an opportunity to preg check and market open heifers earlier.

## Twin Forks Clinic

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and Gdanitz  
P.O. Box 449 Hwys 61&34  
Benkelman, NE 69021

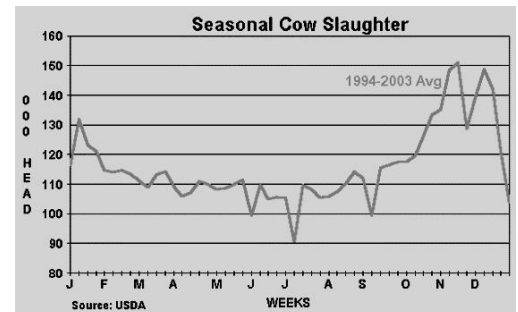
Due to BSE in recent months, cattle that are above 30 months of age at slaughter are marketed differently, thus returning less money than they would have if BSE were not a factor. The main reason for this is that it is believed that cattle, if infected, do not show signs of or transmit BSE until they are over 30 months of age. Long story short, the sooner we identify open heifers and get them finished for market, the better our chances of getting better price for them.

Another good reason for preg checking heifers early is that by doing this we are removing sub fertile females from the herd. Lifetime cow studies from Montana indicated that properly developed heifers that were exposed to fertile bulls, but did not become pregnant were often sub fertile compared to those heifers that did conceive. Further studies of those females that did not conceive in their first breeding season were followed throughout their lifetime; they averaged a 55% yearly calf crop. Despite the fact that reproduction is not a highly heritable trait, it makes sense to remove this genetic material from the herd so as not to proliferate females that are difficult to get bred.

The obvious reason to preg check and market the opens early is to reduce feeding costs. Aside from the initial cost of the female, feed cost is the highest expense producers have. Even though marketing opens now will not have an impact on your

overall grazing costs, it will have an impact on your fall and winter feed costs.

One final reason for preg checking early is the ability to market open cull cows before supplies hit their peak.



As you can see from the previous graph, seasonal cow slaughter supplies generally peaks in November, and December.

Conversely, utility cow prices normally start to decline towards the end of August and usually bottoms out in November or December. By selling cull cows earlier, you stand a better chance of getting a higher price/pound. Since marketing opens and cull cows usually makes up 15-25% of the income for the typical cow calf operation, it makes sense to try to market them at the right time.

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