



Great Plains Livestock Consulting, Inc.

500 S. 4th St.
P.O. Box 377
Eagle, NE 68347

The Great Plains News Feed



Great Plains Livestock Consulting, Inc.

Phone: (402) 781-9378

Fax: (402) 781-9379

www.GPLC-Inc.com

**May/June
2009**

The Latest across the Plains



Summer is Here!

Summer time has rolled around, and we are about to receive that long awaited warm weather! The school year is wrapping up, everyone is making those vacation plans, field work has just begun, and it's about time to start breeding those cows. We hope that everyone had a successful calving season, and we wish you all a safe and fun-filled summer!

Livestock Sources

Many of you are aware of the on-going changes to our website. We would like to invite you to check out our "Livestock Sources" link to help you find many livestock services that may benefit your operation or business. Many of the sources on this link include cattle buyers, seedstock producers, commercial feedlots, and livestock auction barns. You will find services located in several different states including Colorado, Idaho, Illinois, Indiana, Iowa, Kansas, Missouri, Nebraska, South Dakota, and Wisconsin. We believe that this link may also be a beneficial marketing tool for you to use in promoting your own products and services. So, if you would like to add your contact information to our "Livestock Sources" link, feel free to contact us and we would be happy to add you to our growing list of services.

New FREE Service

Great Plains Livestock Consulting, Inc. is proud to introduce its new feedlot monitoring program. This new service will be offered **FREE** until September 2010. As the old adage goes "you can't manage what you don't measure" and our staff has made a collaborative effort to design a program to help producers measure the performance of their feedlot cattle. For more information contact our office or your nutritionist.

Staff



Ki Fanning, Ph.D., PAS

Ruminant Nutritionist
Cell: (402) 890-5505
Ki.Fanning@GPLC-Inc.com

Jeremy Martin, Ph.D.

Ruminant Nutritionist
Cell: (402) 890-5507
Jeremy.Martin@GPLC-Inc.com

Dan Larson, Ph.D.

Ruminant Nutritionist
Cell: (402) 560-4052
Dan.Larson@GPLC-Inc.com

Bill Chapman, M.S., PAS

Dairy Nutritionist
Cell: (402) 416-3277
bill@cmpdairy.com

Stan Smith

Office Manager
Stan.Smith@GPLC-Inc.com

Brent Nelms

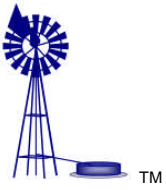
Office/Marketing
Brent.Nelms@GPLC-Inc.com

"Turning Science into Money"

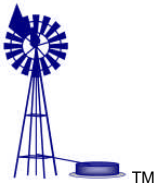
Calendar of Events



- **May 30** University of Missouri Extension 4-H and FFA Jackpot Show, Troy, MO
- **June 3-5** World Pork Expo, Des Moines, IA
- **June 10-11** Iowa Beef Center and the Iowa Cattlemen's Association, Summer Feedlot Conference, Ames, IA
- **June 10-13** K-State Animal Science Leadership Academy, Manhattan, KS
- **June 12-14** Indiana Sheep Expo, Richmond, IN
- **June 15-17** Colorado Cattlemen's Association Annual Convention, Grand Junction, CO
- **June 17-18** Nebraska Cattlemen Midyear Conference, West Point, NE
- **June 21-23** Oklahoma Cattlemen's Association Summer Ranch Tour



The Great Plains News Feed



Timely Reminders

Beef

- ✓ Semen check bulls for upcoming breeding season.
- ✓ Cows should be given pre-breeding vaccinations.
- ✓ Create a fly control plan to minimize pinkeye and maximize production.
- ✓ Worm cows.

Swine

- ✓ Check feeders/waterers for waste control.
- ✓ Check feed budgets to control overfeeding expensive diets.
- ✓ Consider using Paylean to maximize your profits.

of the subsequent cycle at which the heifer is bred. Diets with too great a protein concentration during the breeding season may lead to embryonic death and lower pregnancy rates. It is especially important to monitor protein levels in heifer development diets in order to meet requirements without exceeding needs.

Estrous synchronization is another essential component of heifer development. Often heifers are bred before the mature cows in order for them to calve earlier. Heifers that calve later in the season are less likely to rebreed or wean a heavy calf. Strategies such as estrous synchronization will allow you to get more heifers pregnant early. The most basic systems are a single shot or two shots of prostaglandin $F_{2\alpha}$; trade names Lutalyze™ or Prostagmate™. These systems work well for heifers that are cycling. However, if heifers are developed to less than 60% of mature weight at breeding, they may not be cycling. In order to have a successful breeding season, a progestin such as MGA or a CIDR may be necessary to stimulate cyclic activity. A system using MGA is one of the most popular programs for synchronizing heifers. The drawback of this system is the time required, approximately 33 days. However, you can expect 70-80 % of heifers synchronized with MGA to respond with excellent synchrony. Alternatively, heifers can be synchronized using a CIDR, which is a vaginal insert left in place for either 7 or 14 days. While this system is more expensive, it also produces an excellent synchrony of estrus.

Regardless of the system, appropriate nutrition is essential to produce a heifer that will stay in the herd and be productive. An estrus synchronization system designed with your development system in mind will further improve profitability and lifelong productivity of the heifer. Matching heifer development to available resources will maximize profitability.

cow's temperature for several hours after they are out of this environment, so keeping the cows cooler in the holding pen is a good place to begin. You want the sidewalls as open as you can get them to allow as much natural air in as possible. Fans should also be used. Place 36 inch fans no more than 8 feet apart in rows every 25 feet directed away from the parlor at a 30 degree downward angle. Sprinklers or soakers should be used in conjunction with the fans. Cow comfort is improved when you alternate fans and soaking cows with sprinklers.

Another great opportunity to cool cows is in the exit alley as cows leave the parlor. Cows should be showered individually from the top and sides. This will allow the cows to dissipate heat as they travel back to the pen, which will help increase feed intake.

The free stall barn is another place that cows can be cooled. Sprinklers can be placed over the feed alley to spray the cows as they eat. The sprinklers should be set on a timer. The duration that the sprinklers are on will vary depending on the nozzles used, however the goal is to get the cow wet to the skin and then the sprinklers should be shut off as the water starts to run off the cows. Fans should be placed over the freestalls to dry the cows off. They may also be placed over the feed line to dry off the cows as they are eating. By drying them off, body heat is removed with the water evaporation. The distance between the fans will vary by the diameter and output of the fans. Maximum cooling occurs when cows are wetted and dried off the maximum number of times possible in an hour. If cows are housed in an open lot situation, shade is the most important thing to keep the sun off the cows during the extremely hot times during the day. Shades should be placed 12 – 16 feet in the air to allow plenty of air flow.

You cannot talk about heat stress without mentioning water. Water is the most important nutrient for the dairy cow (Milk is at least 85% water). Water is also the main medium in the body to dissipate excessive body heat. Limited water space may affect milk production more than any other nutritional factor. There should be 2 -3 inches of water space per cow. A great place to add water space during hot weather is in the exit alleys as cows return from the parlor. Feeding times may also be adjusted to put fresh feed out when cows will eat. Check the feed, if it is hot, cows will not want to eat it.

In summary, hot weather does affect dairy cows negatively. However there are some management and facility adjustments that we can make to help the cows cope with the heat and minimize production and health losses. For more information please give us a call.

Heifer Development



by Dr. Dan Larson, Ruminant Nutritionist

The dollars associated with developing the heifer is one of the largest costs she will accrue in her lifetime. Many of us learned at some point that a heifer should reach 65% of her mature weight by the first breeding season. In many cases, we meet this target, often we exceed it, and increase development cost. It's not uncommon for heifers to be developed in conjunction with feeder cattle. While this system is quite convenient, it is not ideal for developing high quality replacements. Rather, a well designed nutrition and management program is essential for appropriate replacement development.

Providing inadequate nutrients to the developing heifer may reduce reproductive performance, but overfeeding will limit lifetime productivity. Heifers developed to greater than 65-70% of mature weight deposit fat in the udder, leading to reduced milk production. Fat heifers are also more prone to calving difficulty and may be more difficult to rebreed after their first calf. So, appropriate heifer development is crucial not only for the first breeding season, but for the heifer's productive lifespan as well. A series of research studies conducted in the last ten years have shown that developing heifers to 65% of mature weight is not optimal. In fact, these studies have found that 85-90% of heifers developed to as little as 55% of mature weight at breeding become pregnant. More importantly, these heifers were developed using quite inexpensive feed sources such as corn stalks and dormant winter grass. By moving heifer development out of the dry lot, in favor of standing forage, cost was reduced by \$45 per pregnant heifer.

Heifers developed in the dry lot today are often fed diets including corn processing by-products, which are excellent sources of energy and protein for the growing heifer calf. However, the protein level in by-products such as distiller's grain or corn gluten feed may exceed the requirements of the heifer if used as energy sources. Providing excessive levels of protein to the young heifer, especially around breeding is detrimental to reproduction. Providing excess protein prior to breeding has the potential to reduce fertility

Summer Heat and Keeping Cows Comfortable



by Bill Chapman, Dairy Nutritionist

Heat stress is both a health and an economic issue on dairy farms. From the health aspects, heat stress increases acidosis and foot problems. These problems are not fully experienced until the fall of the year when the heat has subsided. The economic aspects of heat stress are seen right away. Milk production decreases because cows do not want to eat as much as they do in cooler weather. The milk components (Fat and Protein) can also be compromised by heat stress. The combination of ambient temperature and humidity are used to determine the Temperature-Humidity Index (THI). The actual THI number determines how much heat stress the animal is under. If the THI is above 72, cows have a respiration rate above 80 breaths/minute, or the animal's rectal temperature exceeds 102.5 F, then you need to adjust facilities to help cool the cows.

The holding pen is one of the first places to address when it comes to cooling cows. In the holding pen you have hot cows bunched up in a small confined area. This will raise the



“Turning Science into Money”