K-STATE Kansas State University
Beeftips
March 2002 Department of Animal Sciences and Industry

Upcoming Events

Keys to a Successful AI and Estrous Synchronization Program

March 6, Lucus
John Stannard
785-483-3157

March 7, Protection
Paul Rickabaugh
620-582-2411

March 8, El Dorado
David Kehler
316-321-9660.

Program will run from 10:30 a.m. to 3 p.m. Cost is $10, which includes noon meal and proceedings. Register in advance by calling contacts listed above.

www.oznet.ksu.edu/nwao/

Contributors

Dale Blasi
Stocker, Forages Nutrition & Mgt.
785-532-5427
dblasi@oznet.ksu.edu

Frank Brazle
Livestock Production
620-431-1530
fbrazle@oznet.ksu.edu

Joel DeRouchey
Livestock Production
785-532-2032
jderouch@oznet.ksu.edu

Ron Hale
Livestock Production
620-275-9164
rhale@oznet.ksu.edu

Sandy Johnson
Livestock Production
785-462-6281
skjohnso@oznet.ksu.edu

Gerry Kuhl
Feedlot Nutr. & Mgt.
785-532-1250
amurphy@oz.oznet.ksu.edu

Twig Marston
Cow-Calf Management
785-532-5428
tmarston@oznet.ksu.edu

Biosecurity Considerations for Cattlemen

Ron Hale, livestock specialist

Events of the past year have increased awareness of the need for biosecurity in animal production. Biosecurity has been described as a balancing act between risk and cost. It can be compared to insurance—there is not a single policy for all, potential risks need to be assessed, and there is a cost. Development of a biosecurity plan should consider the potential for a disease to be introduced, the costs associated with losses due to the disease, and the costs associated with developing and following procedures to prevent the disease.

While it is unlikely that cattle producers will ever be able to establish the level of security that swine and poultry producers can, there are some basic practices that will enable cattlemen to provide some protection for their animals. Indeed, many producers have developed a basic biosecurity plan when they establish procedures for storing, handling and administering vaccines, or train employees to recognize and treat diseases.

Disease can be introduced or spread in a number of ways other than animal-to-animal transmission. They can include, but are not limited to, trucks, equipment, wild animals, feed ingredients, manure, water, and humans. It is important to consider the potential of each of these and other means of transmission when considering a control program. Veterinarians, nutritionists and others can help with specific areas of expertise. This article focuses on visitors and traffic control and offers some suggestions for your consideration.

Post a sign at the entrance to inform visitors of the requirement to sign in upon arrival, regardless of their purpose. The visitors will include those who have had no previous animal contact; those who have recently been at another facility but had no

See BIOSECURITY, page 2

Management of Stocker Cattle for Grass

Frank Brazle, livestock specialist

Stocker cattle should be properly prepared for grazing native grass in April. Stocker health should be insured by administering a booster vaccination of IBR. Stocker calves should have been dewormed in the fall. They may need to be dewormed if they have been grazing forages in the spring months before April.

Cattle need to be implanted. Steers normally respond to the implant with a 12 to 14 percent gain. Heifers gain 9 to 10 percent. If the cattle were grazing high endophyte fescue pastures before going to native grass, Ralgro® is the implant of choice. Results have shown that Ralgro® has an effect on the problems caused by the endophyte fungus. Cattle may need to be deloused as well.

Cattle need to be sorted for weight, sex and color before they are turned out to grass. Different alliances prefer different cattle for different reasons. Muscled cattle need to be grouped together, as do high-

See GRASS, page 3

Management Tips for March

Twig Marston
Cow/Calf Specialist

Preventative Medicine & Health

✓ Separate lactating cows from pregnant cows.

✓ Maintain good sanitation practices around calving and newborn areas. Think clean and dry.

✓ Get colostrum into calves as soon as possible after calving (ideally within 4 hours of birth). Consider tube feeding colostrum to all calves that have experienced a difficult birth.

✓ Check calving females frequently. Assist whenever progress is not being made.

✓ Give first-calf heifers extra attention.

✓ Give cows with calves plenty of space. Tight quarters increases disease transmission.

✓ Treat calves with scours promptly. Be prepared to provide supplemental heat or fluids.

Nutrition

✓ Monitor body condition scores.

See TIPS, page 3

BIOSECURITY, from page 1

direct animal contact, such as electricians, salesmen, mechanics and some truck drivers; and those who have had direct contact with animals, such as veterinarians, nutritionists, artificial insemination technicians, livestock haulers, cattle buyers or neighbors. Each of these groups of visitors will need to have different requirements and restrictions placed on them.

International visitors may fit any one of these three descriptions but can still be of special concern. Be sure to ask them about previous visits to animal facilities – where they have been and their contact with animals, and how long ago. Consider extra restrictions, even refusing entry, if visitors have been outside North America during the previous seven days. Also, know when your employees visit foreign countries, and consider the need to restrict their access when they return.

Information collected at sign-in should include name, date and time, company, address, purpose of the visit, vehicle identification and license number. Consider recording recent visits to other operations. It is important that they talk to an employee who can verify this information and explain procedures relevant to the visit. It may be wise to have an employee accompany the visitor. Sign-in may not prevent disease introduction, but it could help track the source of an outbreak.

Consider defining areas for each type of visitor. These are areas necessary to the purpose of the visit. The goal is to restrict movement of people and vehicles that have been at other animal facilities to only those areas they need to access. For example, feed ingredient deliveries would be made using an established route to the feed mill or bins, keeping the truck as far away from the livestock as possible. Another example would be placing dead animals at a specific location. This eliminates the need for the rendering service to drive through or near cattle, or come close other vehicles or equipment.

Defining specific routes helps minimize traffic and may help employees identify unusual activity. Employees should always be alert for strange vehicles and unusual activities, and notify management immediately.

The highest level of concern will be with those visitors recently in contact with animals. Discourage animal contact by visitors, but if contact is necessary, ensure that their clothing is clean. Better yet, provide protective clothing and boots. This may not only prevent disease transmission to your cattle, but may prevent an unknown infection from spreading to others.

Visitors also may be limited to specific days and times with or without appointments. This helps employees detect unusual activities and reduce the added effort of monitoring visitors.

You must insist on the cooperation of truckers, vendors and others with whom you conduct business for the plan to be successful. Talk to them. Ask about their procedures to prevent disease transmission. Let them know you are concerned, that you have a biosecurity plan and will monitor their products and employees.

It is important to work with your veterinarian, nutritionist, university faculty, livestock organization, state and federal government officials and other qualified individuals or organizations to develop a biosecurity protocol. This protocol should address a variety of procedures to prevent the introduction of disease into an operation and reduce the movement of disease within the operation. The protocol needs to have high priority in the day-to-day functions and management decisions. A written protocol is needed to train employees and to be used as a reference.

Biosecurity is not a short-term concern. It must be consciously practiced every day by every individual. Set the example. Management and owners should be the first to follow biosecurity protocol. Employees will make the plan work if you educate them about the importance of the plan and reinforce it by your example.

Checklist for Young Bull Management

Twig Martson, cow/calf specialist

- Fitness is key to survival.Young bulls should be in moderate flesh (body condition score of 6 on a 1 to 9 scale) and well excercised. Once turned out young bulls quit thinking and test their endurance.
- Feed a balanced diet. Bulls should be moderately gaining weight before the breeding season. This will require a diet of more than 10% protein, .6% calcium and .3% phosphorus. Sixty ppm of zinc has been shown to enhance male fertility.
- Go easy the first season. Twenty to 25 females per bull is plenty of work for a first-timer.
- Bulls should be 13 months of age and weigh at least 1,100 pounds before mass mating.
- Keep the breeding season short, 45 to 60 days. This will reduce the risk of injury and extreme weight loss.
- Watch the bulls work. Just like in a boxing match, good managers stop a fight before serious injury occurs.
- After the first breeding season, rest the bulls and give them a diet that will allow them to regain the body weight and composure.

All Bulls

- A breeding soundness exam does not last a lifetime! Before turn out, all bulls should have a complete breeding soundness exam that includes assessment of concentration, motility and morphology of sperm.
- Check their feet. Hoof trimming can take up to 3 to 6 weeks for recovery. Bulls need to be physically sound and able to cover ground.
- Mature bulls should be in a body condition score of at least 5 at turn out.
- If cold weather persists, supply plenty of bedding. Frostbite is detrimental to sperm production and can permanently reduce fertility.
- Immunize bulls and control parasites. Consult your local veterinarian for a complete health program.
- If mature bulls are used in the same pasture with yearling bulls, expect the dominant bull to sire most of the calves.

GRASS, from page 1

grading cattle. Light-weight cattle need to be grouped and may be grazed longer than heavier weight cattle.The cattle should be stocked according to weight.

Native grass (Flint Hills) should be burned in April to improve gain. The short grass in western Kansas does not respond to burning in the same way. Normally, burning yields a 25- to 30-pound improvement in average daily gain (ADG) in the Flint Hills.

Research data from the 1980s showed an improvement in ADG when stocker cattle summer grazing the Flint Hills were fed a balanced mineral. Research data showed about a .15- to .20-pound increase in ADG when a feed additive, such as Gain-Pro®, Rumensin®, Bovatec®, or CTC, was fed with a mineral mixture.

Because the majority of fly problems develop in August and September, most ear tags do not work when placed in cattle's ears in April. A mist sprayer works well most of the time to reduce fly population. One hundred fifty horn flies or more per animal should reduce ADG, so a fly control program may be necessary.

Proper handling of cattle at the time of shipment is important to reduce shrink. Cattle standing in a pen will normally shrink about 1 percent per hour in hot weather. The amount of shrink that can occur because of problems in gathering may be high. Losses of up to 5 percent have been observed. A feed truck or an extra cowboy may be cheap compared to shrink losses from poor gathering techniques.

TIPS, from page 2

Moderate body condition at calving does not compromise subsequent reproduction.

✓ Balance cow rations to optimize cow production and feed resources.

✓ Use high-quality forages such as cereal grain pastures.

✓ If cow diets will be shifted from very low to high quality forages, implement a grass tetany prevention program by feeding a high magnesium mineral.

Reproduction

✓ Maintain your calving strategy plans. Prolonged calving extends the postpartum interval.

✓ When purchasing new bulls or ordering semen, use performance records judiciously.

✓ Supplement and feed cows to maintain or improve body condition at calving to enhance rebreeding performance. Body condition score (BCS) before calving determines how long the postpartum anestrus period (PPI) will last. Greater BCS equals shorter PPI.

COOPERATIVE EXTENSION SERVICE
U.S. DEPARTMENT OF AGRICULTURE
KANSAS STATE UNIVERSITY
MANHATTAN, KS 66506-3403

Kansas Feedlot Performance and Feed Cost Summary*

Gerry Kuhl, Feedlot Specialist, Kansas State University

December 2001 Closeout Information**

Sex/No.	Final Weight	Avg. Days on Feed	Avg. Daily Gain	Feed/Gain (Dry Basis)	% Death Loss	Avg. Cost of Gain/Cwt.	Projected Cost of Jan.-Placed Cattle
Steers/10,255	1,278	145 (139-152)	3.45 (3.23-3.67)	6.10 (5.72-6.40)	1.25	$49.52 (46.23-53.45)	$48.40 (46.00-50.00)
Heifers/18,233	1,168	142 (129-166)	3.29 (2.94-3.58)	6.32 (5.83-7.05)	.91	$50.92 (48.39-55.57)	$50.00 (48.00-52.00)

Current Feed Inventory Costs: Mid January	Avg. Prices	Range	No. Yards
Corn	$ 2.34/bu	$ 2.12-2.42	7
Ground Alfalfa Hay	$107.35/ton	$95.00-118.00	7

*Appreciation is expressed to these Kansas feedyards: Brookover Ranch Feed Yard, Decatur County Feed Yard, Fairleigh Feed Yard, Hy-Plains Feed Yard, Kearny County Feeders, Pawnee Valley Feeders, and Supreme Cattle Feeders.

**Closeout figures are the means of individual feed yard monthly averages and include feed, yardage, processing, medication, death loss and usually sold FOB the feedlot with a 4% pencil shrink. Interest charges normally are not included.

Cooperative Extension Service
K-State Research & Extension
244 Weber Hall
Manhattan, KS 66506

Dale Blasi, Extension Specialist