

FEED LOT[®]

FEEDER INFORMATION HIGHLIGHTS

Volume XXVII Number 4

June 2019



\$5.00

**ROTO-MIX®**

You'll recognize us by our look.
You'll remember us for our quality!*

*Smooth sided 3 panel look is a registered trademark of FSI Fabrication, LLC.

Roto-Mix Commercial Feeder Boxes

Get feed delivery efficiency with Roto-Mix CFB Commercial Feeder Boxes. Capacities range up to 1235 cu ft. for Truck mounts and up to 1900 cu. ft. for Semi Trailers. All units have dual direction chain floors, side discharge for bunk delivery and hydraulic end gates that allows for rapid commodity unloading. Deliver pre-mixed feed to the bunk in a short amount of time or unload bulk commodities quickly.

**REBATES
up to \$2500.
Call for details!**

CFB capacities
up to 1900 cu. ft.



Fp2 EzSpred Spreader

The Fp2 EzSpred Spreader's modular shell design offers versatility in attachment selection and is designed for commercial operators running 6 to 7 days a week with minimal downtime.



www.rotomix.com

Call for more information! 620.225.1142

CFBFP2-R

**ROTO-MIX®**



Jill Dunkel
Editor
feedlot@st-tel.net



Annita Lorimor
General Manager
feedlot@st-tel.net



Amy Spillman
Digital/Circulation
Manager
circulation@feedlotmagazine.com



Greg Strong
Publisher
bigguy@st-tel.net



Robert A. Strong
Editor Emeritus

FEATURES

FEEDLOT FOCUS

- Minimizing Heat Stress in Feedlots** 14
Strategies to keep your cattle on course this summer

MANAGEMENT

- Multi-Species Grazing Utilizes Pasture** 8
Get more from forage with other livestock
- Don't Skip Weights on Silage Covers** 18
Protect your investment

PEST & PARASITE

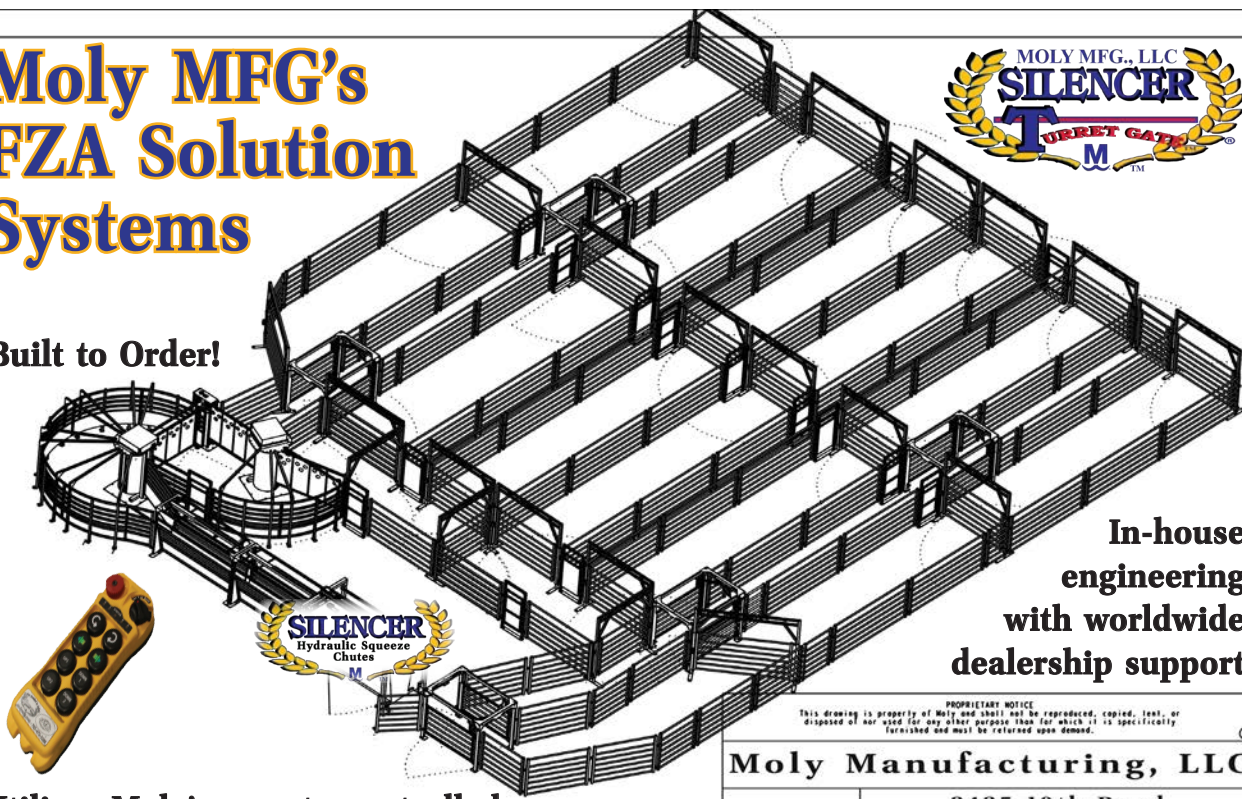
- The 411 on Ticks in Livestock** 6
Do you know your ticks?

For National Sales Contact: Bob Brunner, J.L. Farmakis, Inc., 24 East Ave., #1350, New Canaan, CT 06840 / Email: bob@jlfarmakis.com / Sales Office: 203-834-8832

- Be Alert for Anaplasmosis** 10
Know the signs and prevention strategies
- Horn Flies** 12
The Billion dollar pest
- Science, Weather Impact Deworming Decisions** 16
Could these factors change your plans?
- Do You Practice Risky Business?** 19
Beware of management that can promote resistance
- Old School Cool** 20
Traditional methods can be useful
- In the Long Run** 24
The role of dewormers on carcass grading

Moly MFG's FZA Solution Systems

Built to Order!



Utilizes Moly's remote-controlled
TurretGate for added safety and
increased flow of cattle

In-house
engineering
with worldwide
dealership support



Moly Manufacturing, LLC

2435 10th Road
Lorraine, Kansas 67459
facebook.com/MolyMFG
(785) 472-3388

PESKY ISSUE

When producers think of things that cost money in relation to productivity, often illness is first to mind. But losses caused by pests and parasites are mind boggling. Horn flies alone are estimated to cost the industry \$1 Billion each

year. The impact of parasites on the livestock industry has been explored for more than a century. In fact, one of the major challenges facing the U.S. Department of Agriculture in the mid- to late-1800s was the need to identify, understand, and develop effective controls against the parasites plaguing American livestock.

Advances in transportation and both domestic and international trade had driven explosive growth in the country's commercial livestock production. Farmers and ranchers needed to minimize parasite damage in order to make their products marketable, and they began to demand that their government be involved in finding a solution. In 1886, Congress established the Zoological Division in USDA's Bureau of Animal Industry, with a laboratory dedicated to studying animal parasites—how they spread and how they might be controlled.

Almost 140 years later, here we are continuing to fight. That's why Feed-Lot devotes an entire issue

of our magazine to pest and parasite control. The first article in this issue focuses on ticks. Before researching this article, I had no idea there were so many different types of ticks that affected cattle in different ways. Read the story on page 6 to learn more. One of the diseases spread by ticks is anaplasmosis. We've got a story on the symptoms, diagnosis and treatment of this costly and often deadly disease on page 10.

Did you know that deworming treatments can make a difference in marbling and ultimately grading on the rail? A recent study looked at that and the details are on page 12. In most parts of the country, it's been WET. And that can impact the parasite population since most like humid or moist conditions. An article on page 16 looks at how those factors need to be considered in your parasite control program.

Parasite resistance is a hot topic, and some common practices can actually be contributing to the problem. See if your operation is guilty of these risky behaviors listed on page 19. Despite new products and advancements fighting parasites, some "old school" treatments like dust bags and back rubbers are still effective. The article on page 20 details these methods of parasite control.

Horn flies, one of the most costly external parasites, can be a summer long battle. Page 24 has information on controlling these small flies with a big bite. If that's not enough, we also tackle summer issues like heat stress in the feedyard in this month's magazine. All the articles are short and to the point – perfect for break room reading. We hope you enjoy this issue and wish you best of luck avoiding summer pests.

FL

LBS

LIVESTOCK SCALES

1-800-536-8438




- ❖ **Platform Scales**
(10 sizes/self-contained)
- ❖ **Single Animal Weigh Cage**
(self-contained)
- ❖ **Single Animal Scales**
(under squeeze chutes)
- ❖ **Portable Calf Scales**
(3 designs for various weights)
- ❖ **Hay Processor Scales**



"We can customize a system to meet your needs."



Garden City, KS 67846
lbsscales@gcnet.com

NTEP Approved
Certified legal for trade in ALL STATES



CattlActive
100% Natural
Made in the USA
by Pro Earth Animal Health

Don't let lost days turn into lost dollars

Getting calves to eat and drink in the first 3 - 5 days is critical in their overall health and success. When calves quit eating and drinking, acidosis can develop, compromising an animal's digestive integrity. CattlActive can help restore optimal feed and water consumption while supporting a healthy gut and immune system.

Learn more about how **CattlActive**® can improve gains in your operation!

James Davison
210-218-2048
james@proearthanimalhealth.com



Ordering online?

Use code FLM11 to receive **10%** off your online or phone order!

www.proearthanimalhealth.com

MULTIMIN® 90

An injectable aqueous supplemental source
of zinc, manganese, selenium and copper

KEEP OUT OF REACH OF CHILDREN

CAUTION: FEDERAL LAW RESTRICTS THIS DRUG TO USE BY OR ON THE ORDER
OF A LICENSED VETERINARIAN.

ACTIVE SUBSTANCES PER ML:

Zinc 60 mg/ml
Manganese 10 mg/ml
Selenium 5 mg/ml
Copper 15 mg/ml

OTHER SUBSTANCES:

Chlorocresol 0.1% w/v (as preservative).

DOSAGE RECOMMENDATIONS:

CALVES: Up to 1 year 1 mL/per 100 lbs. bodyweight
CATTLE: From 1-2 years 1 mL/per 150 lbs. bodyweight
CATTLE: Over 2 years 1 mL/per 200 lbs. bodyweight

PRECAUTION:

Selenium and copper are toxic if administered in excess.

Always follow recommended label dose.

Do not overdose.

It is recommended that accurate body weight is determined
prior to treatment.

Do not use concurrently with other injectable selenium and
copper products.

Do not use concurrently with selenium or copper boluses.

Do not use in emaciated cattle with a BCS of 1 in dairy or 1-3 in beef.

Consult your veterinarian.

CAUTION:

Slight local reaction may occur for about 30 seconds after injection. A
slight swelling may be observed at injection site for a few days after
administration. Use standard aseptic procedures during administration of
injections to reduce the risk of injection site abscesses or lesions.

DIRECTIONS:

This product is only for use in cattle.

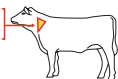
MULTIMIN® 90 is to be given subcutaneously (under the skin) ONLY.

It is recommended to administer the product in accordance with Beef
Quality Assurance (BQA) guidelines. Minimum distance between injection
sites for the MULTIMIN® 90 product and other injection sites should be
at least 4 inches.

Inject under the loose skin of the middle of the side of the neck. Max
volume per injection site is 7 ml.

Subcutaneous injection in
middle of side of neck.

Store Between 15°C and
30°C (59°F and 86°F).



SUPPLEMENTATION PROGRAM	
BULLS	3 times per year
BEEF COWS	4 weeks before breeding 4 weeks before calving
DAIRY COWS	4 weeks before calving 4 weeks before insemination at dry-off
CALVES	at birth at 3 months and/or weaning
HEIFERS	every 3 months - especially 4 weeks before breeding

(program gives planned dates that can be varied to suit management programs)

DOSAGE TABLE			
ANIMAL WEIGHT (lbs)	CALVES UP TO 1 YEAR 1 ml/100 lb BW	CATTLE 1 - 2 YEARS 1 ml/150 lb BW	CATTLE > 2 YEARS 1 ml/200 lb BW
50	0.5 ml	-	-
100	1 ml	-	-
150	1.5 ml	-	-
200	2 ml	-	-
300	3 ml	-	-
400	4 ml	-	-
500	5 ml	-	-
600	6 ml	-	-
700	7 ml	-	-
800	-	5.3 ml	-
900	-	6 ml	-
1000	-	6.6 ml	5 ml
1100	-	-	5.5 ml
1200	-	-	6 ml
1300	-	-	6.5 ml
1400	-	-	7 ml

Packaged in 100 mL & 500 mL size

NDC No. 49920-006-01 NDC No. 49920-006-05

TAKE TIME OBSERVE LABEL
DIRECTIONS



MANUFACTURED FOR:
MULTIMIN
NORTH AMERICA, INC.
Fort Collins, CO 80528



WITH MULTIMIN® 90, IT HAS DECREASED THE USE OF ANTIBIOTICS AND DECREASED THE NUMBER OF RE-TREATMENTS ON THE CALVES WE'VE SEEN

I'm Dr. David Sturgeon, a practicing veterinarian
in Cordell, Oklahoma, in the southwest part of
the state. For over 40 years I've been working
with high-stress co-mingled stocker calves from
local sale barns or south central Texas. In the
fall we also get calves out of New Mexico and
Colorado.

The first challenge we face when our high-risk
calves arrive is we don't know their nutritional
background or their trace mineral levels. So we
use **MULTIMIN® 90** to make sure each calf
has a proper dose to use immediately during the
starting period.

With **MULTIMIN® 90** we've seen a dramatic
decrease in our morbidity as well as our mortality
plus we've decreased our use of antibiotics and
the number of re-treatments on our calves.

In one of our yards our well water is
high in sulfates and they were inducing
polioencephalomalacia in our calves. We injected
them with **MULTIMIN® 90** and that solved
the problem created by our well water. When
these high-risk calves arrive, we note their
incoming weight on the back of their ear tags.
When they leave the yard we weigh them again
and check their performance and have found
after 45-60 days, the **MULTIMIN® 90** calves
leave the yard 8 to 12 pounds heavier.

Trace minerals are vital to every system in the
calf for growth, the development of the immune
system, health functions and reproduction. Over
the years I've tried every injectable that's come
along in addition to many oral chelated products
and various stress mineral tubs.

What I found is that **MULTIMIN® 90** is the
most consistent and uniform product out there.
I especially like to be able to control that every
calf gets his proper dose when they come into
our yard.

Dr. David Sturgeon

Washita Veterinary Clinic | Cordell, OK



RX REQUIRED



Sure Trace Mineral Supply by Timed Injection

WWW.MULTIMINUSA.COM

1.866.269.6467 | 1.970.372.2302



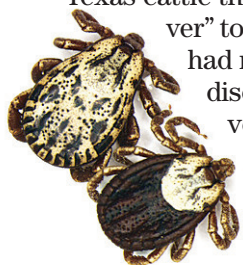
THE 411 ON TICKS IN LIVESTOCK PRODUCTION



Gulf Coast Ticks



In the mid-1800s, producers in northern states recognized the correlation between Texas cattle driven northward in the summer and massive death losses in northern cattle. The culprit – ticks on the Texas cattle that carried “Tick Fever” to northern cattle that had no resistance to the disease. Controlling fever ticks and the disease they carried was such an issue that government boards of animal health were created, like the Livestock Sanitary Commission which eventually became the Texas Animal Health Commission.



Rocky Mountain Wood Ticks

By the late 1890s, large dipping vats were used to treat cattle for ticks. In 1906, Congress appropriated \$82,500 to support tick eradication in southern states. And in 1911, an arsenic-based dip started to control the pest and subsequently control Tick Fever. Today, fever ticks are largely eradicated from the United States, however portions of southern Texas counties remain under permanent surveillance by the USDA-APHIS. Occasional outbreaks occur, such as one reported by Texas A&M in 2017, resulting in various quarantines outside of the permanent quarantine zone.

More than 150 years after the first correlation of ticks and disease, ticks continue to be a vector for disease in cattle, and account for significant production losses. There are a variety of differences in the species of ticks and their subsequent impacts on cattle production.

“There are several differences between ticks. A tick is not just a tick necessarily,” said James Little, DVM, Senior Veterinarian for Bayer

Animal Health. Some ticks cause more of a physical problem, while others transmit disease, he said.

One common tick is the Gulf Coast Tick. The Gulf Coast Tick (*Amblyomma maculatum*) infects the ear of cattle, often bunching up on the ear causing it to curl. Originally this tick was restricted to lands along the Gulf of Mexico and southern states, but now can be found as far north as Kansas and Oklahoma, according to the National Center for Veterinary Parasitology (NCVP). Although it can transmit a form of spotted fever to humans, it is not largely known as a disease vector for livestock.

Another tick that is bothersome for ears on livestock is the Spinose Ear Tick (*Otobius megnini*). The larvae and nymphs feed in the external ear canal of ruminants and horses, according to NCVP. These ticks are very irritating to the host animal.

“These ticks crawl around the ear canal. Their aggravation and irritation draw the attention of the animal rather than focusing on grazing,” Little said.

Both ticks can be controlled by an ear tag with a label to control ticks. “The insecticide is focused right where the ticks hone in, and it’s one of the most effective ways to treat for these ticks,” Little said.

Anaplasmosis is a very costly disease that is transmitted by ticks. Little said as many as 19 species of ticks are implicated in transmitting anaplasmosis. Although ticks are not the only vector of anaplasmosis, they are thought to be the most significant one. Rocky Mountain Wood Ticks, Pacific Coast Ticks and American Dog Ticks are some of the most recognized Dermacentor ticks known for spreading disease.

Unlike other ticks that focus on the ear of the animal, Dermacentor ticks prefer axillary regions of livestock, like the groin, flank or under the front leg. Little said it’s hard for an ear tag to make as big of an impact on Dermacentor ticks and recommends other insecticides like pour ons, sprays or products that cover the entire body.

Another species of tick has found its way to the United States, the Asian Longhorned tick (*H. longicornis*). According to the Centers for Disease Control (CDC), this species of tick has reduced production in dairy cattle in New Zealand and Australia by 25%. The pest has spread to the U.S. in the last year and has been found in Arkansas, Connecticut, Maryland, North Carolina, New York, Pennsylvania, Virginia and West Virginia. Unlike other ticks, a single female Asian longhorned tick can reproduce offspring—1,000 to 2,000 eggs at a time—without mating, the CDC said in a press release. That means a person or animal could house hundreds to thousands of ticks, the agency said.

“Tick season and fly season go hand-in-hand,” Little said. “The same products that control flies often times be used to control ticks.”

As with any insect control, Little points out it’s better to use more than one type of treatment. “It’s good to approach the problem from multiple angles,” he said. “This applies to insecticides, and also the environment.”

Knowing the habitat of ticks, Little said if producers remove the ideal habitat for the pests, they won’t survive well.

“Ticks like warm places. They like it to be humid. They don’t do well in dry places or direct sunlight.”

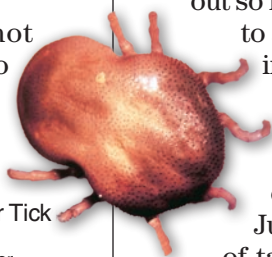
Wooded areas, or even a lone bush or tree can serve as a micro environment for ticks to survive. Clutter, like dead grass or litter also provide a location for ticks to get underneath and survive.

"In addition to treatments with insecticides, if a producer has availability to use pastures that don't have a tree line or wooded areas, that will help. Or producers can rotate cattle during the time ticks are most active." However, he admits sometimes that's hard to do, depending on the location.

Environmental management, like burning pastures, helps get rid of debris and clutter so ticks don't have a place to hide.

Although ticks have not demonstrated resistance to insecticides to the same degree flies have, Little said it's important to take care

Spinose Ear Tick



Photos courtesy of the National Center for Veterinary Parasitology.

of the insecticides we have, and that includes proper application of ear tags.

"Use the correct number of tags, which is typically two tags in an adult animal (one in each ear), or one in a calf. See the product label for specific recommendations," Little said. "Proper application means inserting the tag in the center of the ear between the ribs of cartilage. That leaves a little bit of the tag hanging down."

Little also said the tag should be placed in the front of the ear, not on the back side.

"At the end of the season, we encourage producers to take tags out so insects are not exposed to a sub-lethal dose of the insecticide" he said.

As with any fly control product, Little said rotation of the mode of action is important. Just changing the brand of tags doesn't necessarily

mean you are rotating the product, he explained.

"Insecticides are classed based on their mode of action, like pyrethroids and organophosphates. It's important to rotate between those. Sometimes people think rotating different brands, shapes or colors is rotation, but you need to make sure you're rotating to a different class of insecticide."

If utilizing another type of external pest control, Little again emphasizes proper application. "If it's a pour-on, apply as directed which is typically from the withers to the tail head – not just in one spot. Applying as they run by the gate is not ideal."

His last piece of advice – read the label.

"Often we don't take the time to read and follow instructions. The label is there to help get the most efficacy and safety out of the product. Proper dosing and proper application are key."

FL

LIVESTOCK PURCHASE? ROUND UP THE EXPERTS.

When you need to purchase livestock, we're here to help with **competitive rates, flexible terms, and service that's second to none.**

 **AMERICAN AGCREDIT**

Call 800.466.1146 today
or visit AgLoan.com

A part of the Farm Credit System. Equal Opportunity Lender.

Multi-Species Grazing Utilizes Pastures to the Fullest

When more than one kind of livestock graze a pasture, there can be several advantages; cattle, sheep and goats have different dietary preferences and grazing behaviors. Grazing more than one species can more fully utilize the plants available and produce more meat (and profit) from that unit. This complementary grazing behavior is also healthier for the land and forage, keeping various types of plants in better ecological balance.

Karen Launchbaugh, Professor of Rangeland Ecology, University of Idaho, says multi-species grazing

allows you to match the grazing animals to the forage. “The key is to have a mix of animals that help keep the plant community stable, since certain animals eat plants the others won’t. There are many examples, such as cattle and deer. It’s hard to maintain good deer habitat with just deer because grass will take over,” she explains. If you add cattle, they eat the grass, and the forbs and brush (the main content of deer diet) won’t be crowded out. Conversely, if there are no browsers (deer, sheep, goats), to keep the brush and forbs in check, they may take over and there is less

grass for cattle.

Over time you may see huge swings, back and forth, between brush and grass, unless you use a complementary grazing strategy to utilize all the plants. “Multi-species grazing is one way we can accomplish our goals, and one of the few sustainable ways available. If we don’t use different species of animals, we must use herbicides, mowing and other tactics,” says Launchbaugh.

“One advantage to bringing sheep into a cattle operation, apart from and beyond additional income, is that you are adding a sustainable vegetation management tool.” In some areas ranchers and land managers hire people with sheep or goats to target-graze in places where invasive weeds have taken over.



On rangelands with large patches of tall larkspur, sheep can prevent cattle losses, since this plant is far less poisonous to sheep. Sheep are sometimes herded through these areas ahead of the cattle, eating and trampling larkspur, and then there's not enough left to endanger cattle. "The sheep like it and it's not very toxic to them," says Launchbaugh. Since some plants are toxic to one species and not another, you can strategically utilize different grazing animals to safely graze certain pastures.

You can also reclaim brushy pastures with sheep or goats. Goats, especially, can utilize brush as the main part of their diet, reaching higher on the plant (even standing on their hind legs to browse higher branches) and stripping back invasive brushy plants.

Targeted grazing utilizes animals to control a specific type of vegetation, whereas multi-species grazing is typically a sustainable grazing practice with different animal species to match the available plants. "You are asking the animal to do something for you besides just produce meat and hide. By



using animals to accomplish vegetation management, it costs you something (in fencing, increased management, etc.), but it is more sustainable because it's a way to get some money back for doing this type of vegetation management," she says.

Multi-species grazing is an old idea. "When I was growing up, many farmers had cows and sheep—grazing sheep in barnyards to get rid of weeds that grow between the parked equipment. Some

people had goats for this purpose," says Launchbaugh.

"Now this old idea has come again, but for a new reason. Multi-species grazing is now used for sustainability and ecological health," she says. In arid regions with extensive fuel loads, goats can be a big advantage in fire control by reducing brush.

"Ranchers are able to use resources that can't be used with a single species. Some cattle cooperatives in Montana and North Dakota pay sheepherders to bring flocks in, to get rid of leafy spurge so they'll have more grass."

With multi-species grazing, the animals don't have to be in the same pasture at the same time. They can follow one another in a strategic rotation system, utilizing the various plants at the best time. In intensively-grazed areas, rotating different species can also reduce parasite load since internal parasites are host specific; cattle parasites don't generally mature in sheep and vice versa. The parasite cycle can be broken by alternating species. Worm larva (from one species) crawl onto forage plants to be eaten but can't mature and reproduce if eaten by a different animal, and will not be there on the grass when their host animals come back to that pasture. **FL**

INCREASING STOCKING RATE

"Early literature on multi-species grazing focused on it as a way to increase stocking rate—with a mix of animals that could utilize the whole resource," says Launchbaugh. The various animals complement one another in diet preferences. It's usually cattle and sheep, with goats used in steeper country. This enables cattlemen to have more useable forage for cattle, while producing additional products such as sheep/goat meat and/or wool/goat hair.

A variety of grazers is not only good for ecological sustainability, but also allows more production from your land. "From an economic standpoint, it gives more potential. It's similar to having 'portfolio diversification'—something more financially stable," she says. You don't have all your eggs in one basket.

"It's the same with having several species of livestock. Cattle markets may be up when sheep are down, and vice versa. You might make a little money on one species when the other is down," she explains.

In higher elevation pastures with steep slopes, sheep or goats may utilize rougher portions that cattle rarely graze, while cattle utilize the lower, flatter regions that are not as well liked by sheep or goats. There's more uniform use of the resource, and more total animals can graze in the pasture.

In some regions sheep can be grazed in winter on certain pastures where there's not enough water for cattle, since sheep can utilize snow more effectively.

BE ALERT FOR ANAPLASMOSIS



Gregg Hanzlicek, director of production animal field investigations, Kansas State University, provided a review of anaplasmosis for producers attending the 2019 KOMA (Kansas, Oklahoma, Missouri and Arkansas) beef conference. He said, “that anaplasmosis is confirmed in every district of Kansas, a periodic review of the disease, its clinical symptoms, treatment options and prevention is a warranted discussion.”

“Anaplasmosis is a bacterial infection and any time I talk to bovine producers, I always tell them, ‘If you hear a disease is caused by a bacteria, at least that gives you some idea that there might be a treatment.’ And for anaplasmosis, there is, indeed, a good treatment,” says Hanzlicek.

Hanzlicek told producers that the take-home messages for his presentation were:

1. All ages of cattle can become infected with anaplasmosis, and the earlier in life infection occurs, the better.
2. All treated and recovered cattle will remain life-long carriers of anaplasmosis. Treatment does not eliminate the carrier stage.
3. Producers should proactively take measures to prevent and manage the infection of cattle with anaplasmosis.

Identifying infection

Although cattle can become infected at any age, clinical symptoms typically present in animals older than two years of age.

“A typical indication [of anaplasmosis infection] is if you go out and check cows on a Saturday, and then go back on Wednesday to find one or more adult cows or bulls dead in the pasture—that’s a classical sign that you have anaplasmosis. There aren’t a lot of things that kill adult bovines,” Hanzlicek says.

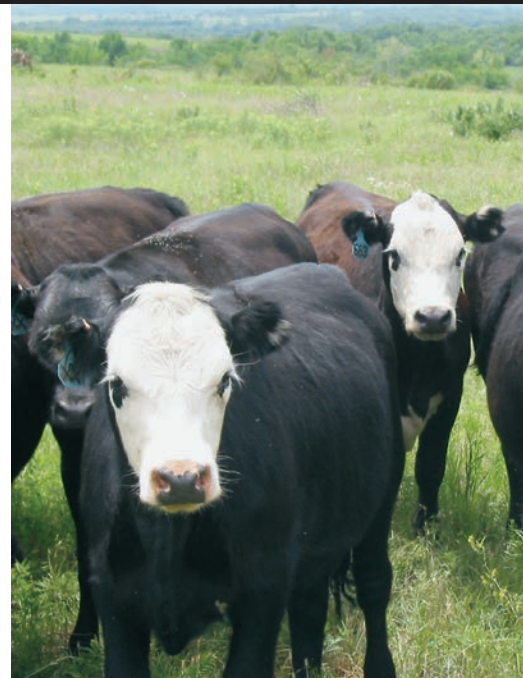
Anaplasmosis symptoms can also mimic bovine respiratory disease, causing open-mouth breathing in cattle, as the animal works to force more oxygen into its lungs. A lack of oxygen, however, is not the cause of the symptoms, but rather a shortage of red blood cells needed to move the oxygen to the tissues.

“An anaplasmosis infected animal will often exhibit aggressive behavior,” says Hanzlicek. “The aggression occurs because the brain is starved of oxygen.”

Other signs that cattle may be infected may be high numbers of abortions, especially in fall calving herds and icterus, or the yellowing of the whites of the eyes. Infected cattle will present with an enlarged spleen when posted; Hanzlicek recommends that all suspected cattle be posted if anaplasmosis is suspected so management measures can be taken to prevent additional deaths.

Preventing the spread of infection

Today, every state, except Hawaii, has had confirmed cases of anaplasmosis, however proactive



prevention and management can determine the extent of detriment the bacteria has on an operation.

A major contributor to the spread of anaplasmosis, the male American Dog Tick allows the bacteria that causes anaplasmosis to reproduce in all of its tissues—turning a meal of thousands of infected blood cells into billions of infected blood cells.

“Eventually the saliva glands will become infected so that when the tick is feeding the saliva will infect the non-infected animal,” Hanzlicek says. And while some may question the prevalence of infected ticks, Hanzlicek shares that in a 2018 study, of the first 520 ticks trapped and tested in eastern Kansas, 35% tested positive for anaplasmosis.

Other blood-feeding insects known to transmit anaplasmosis, horseflies, stable flies, and deerflies, are of less concern than the American Dog Tick because those insects do not allow the bacteria to replicate in their tissues.

Poor chute-side protocol has also been identified in the spread of anaplasmosis between infected and uninfected cattle.

“If you have a positive animal in the chute and there is a negative animal behind, you have a 60% probability that animal will become infected if the same needle



is used," Hanzlicek told producers. He is referring to a study where two percent of the blood cells of one animal were infected, followed by subcutaneous injections of 10 non-infected animals. A 60 day assessment of the fly and tick isolated animals found that six of the 10 cattle tested positive for anaplasmosis.

Anaplasmosis can also be transmitted to the calf through the placenta, with research showing approximately 11-15% of calves born to a positive cow will also test positive for the bacteria.

For anaplasmosis and all infectious diseases, Hanzlicek suggests that a producer consult their local veterinarian to assess the situation and aide in putting together a plan of action. He also cautions that the biggest losses typically occur when a negative herd becomes infected and advises that all animals coming into the herd be tested—animals can be tested for anaplasmosis at any age.

As with any disease, prevention remains the most effective mitigation of loss from anaplasmosis. Using a new needle between every injection, feeding chlortetracycline in 30 day rotations and controlling flies and ticks are all recommended in a proactive protocol for the control of anaplasmosis.

FL

Before you load that new bull . . .

There is something you deserve to know.



The Problem:

Cattle feeders are experiencing abnormally high death loss with many straightbred calves.

The Solution:

Responsible Crossbreeding
with **Simmental**

Highlight the health and genetic value of your Simmental influenced calves through the **IGS Feeder Profit Calculator™**.



Horn Flies: The Billion Dollar Pest

Horn flies are small in size, approximately 3/16" in length and are usually found on the backs, sides and poll area of cattle. During a warm summer afternoon they can be found on the belly region of cattle. Horn flies, both male and females flies, acquire more than 30 blood meals per day.

After mating the female fly will leave the animal to deposit eggs in fresh cattle manure. Eggs hatch within one week, and larvae feed and mature in the manure, pupating in the soil beneath the manure pat. Newly emerged horn flies can travel several miles searching for a host. The entire life cycle can be completed in 10 to 20 days depending upon the weather.

Economic losses

Economic losses associated with horn flies are estimated at more than \$1 billion dollars annually in the United States. Horn fly feeding causes irritation, blood loss, decreased grazing efficacy, reduced weight gains, and diminished milk production in mother cows. Additionally, horn flies have been implicated in the spread of summer mastitis.

Studies conducted in the U.S.

and Canada have shown that horn flies can cause weight gain loss in cattle, and calf weaning weights can be negatively impacted from 4–15 percent. Studies conducted in Nebraska have established calf weaning weights were 10-20 pounds higher when horn flies were controlled on mother cows. The economic injury level (EIL) for horn flies is 200 flies per animal. Yearling cattle can also be affected by the horn fly; other studies have shown yearling weights can be reduced by as much as 18 percent.

Control methods

There are many insecticide control methods available to manage horn fly numbers; backrubbers, dust bags, insecticidal ear tags and strips, pour-ons, oral larvicides, low pressure sprayers and mist blower sprayers.

Many of these methods require gathering cattle on a regular basis or replenish the various systems that dispense products. A less labor intensive approach is using an insect grown regulator (IGR) in feed or minerals for horn fly control.

When consumed, the insecticide passes through the animal's digestive system into the manure and prevents larval fly development.

For IGRs to be most effective, Central Life Sciences recommends a "30/30 approach."

1. Begin feeding the IGR approximately 30 days before the average daily daytime temperatures reach 65°F. This is when overwintering flies emerge.

2. Continue feeding the IGR through the fall, 30 days after the first frost has been recorded. This is to help reduce overwintering pupae, giving you a jump start on the next fly season.

3. Monitor fly populations, and supplement your efforts with a horn fly insecticide if needed. Producers who start later in the season may need to incorporate a knock down spray to kill adults that are already present. To effectively break the horn fly life cycle, a feed-through program with an IGR like Altosid IGR requires three to four weeks for significant reduction in adult horn flies.

Backrubbers and dust bags are an effective way to reduce horn fly numbers if cattle are forced to use them and they are refilled.

Animal sprays and pour-on products will provide 7-21 days of control and will need to be re-applied throughout the fly season. **FL**



Horn flies are commonly found on the bellies of cattle and can lead to mastitis in cows and heifers even before they calve.



The Fly Stops Here.



FLY CONTROL FOR FEEDLOT

Over 96% Effective at Ending the Fly Life Cycle at the Larval Stage*

House Flies | Stable Flies | Face Flies

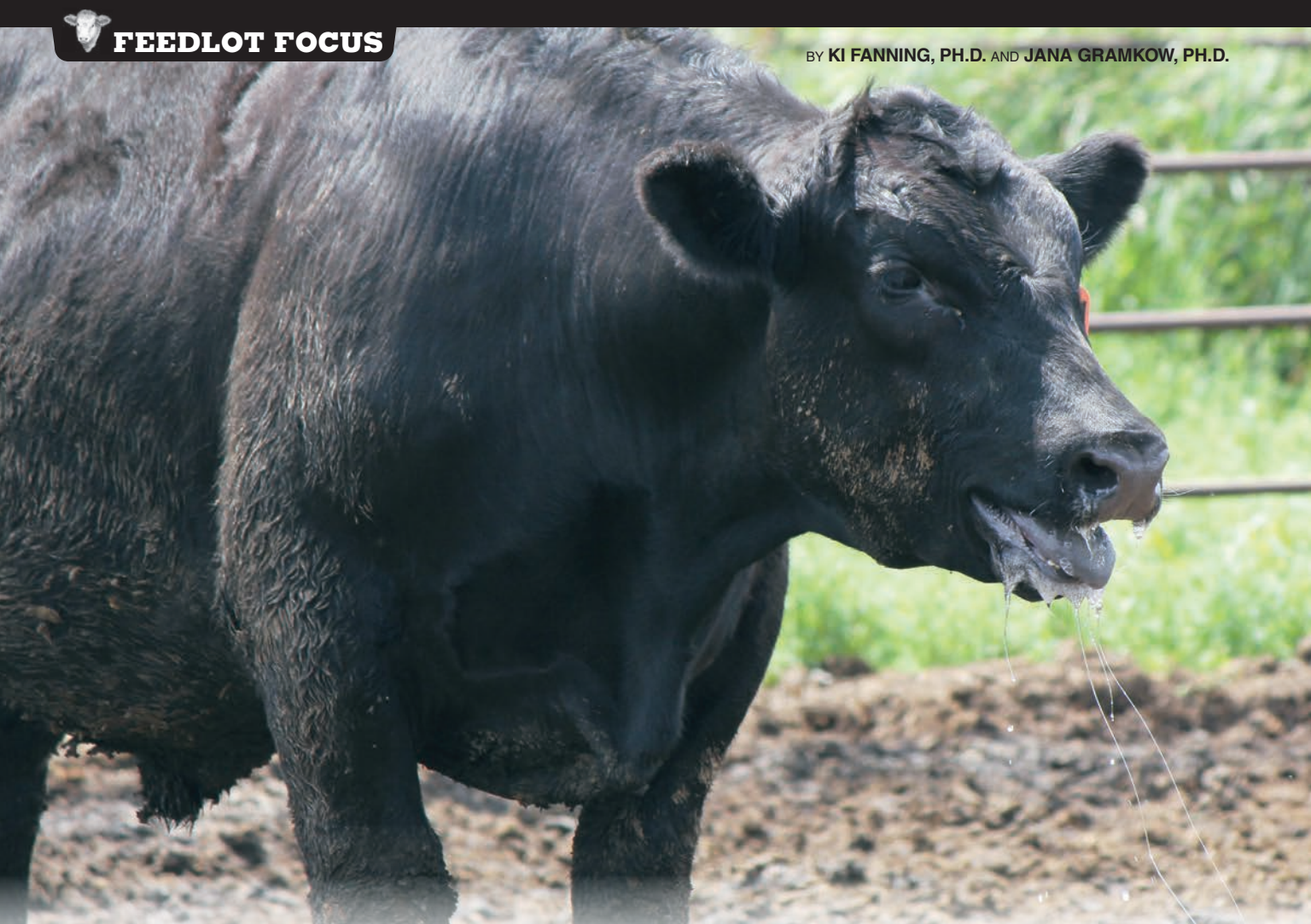


Kick flies to the curb today by contacting your nutrition provider.
Visit us at CentralFlyControl.com or give us a call at 1-800-347-8272.

 **CENTRAL** Life Sciences



* Data on File.
ClariFly Larvicide with design is a registered trademark of Wellmark International.
Central Life Sciences with design is a registered trademark of Central Garden & Pet Company. ©2018 Wellmark International.



MINIMIZING HEAT STRESS IN FEEDLOTS

With one of the coldest winters in years past us, it is hard to believe it is the time of year to think about heat stress. Cattle have an ideal temperature range, their thermo-neutral zone, where they have their lowest maintenance energy requirement. Research reported this range to be 23 to 77° F for cattle. Factors such as humidity, hair coat length, plane of nutrition and body condition can all have an impact on these temperature ranges. During summer months, high humidity will lower the temperature in which cattle will experience heat stress because it makes it more difficult for them to lose heat through panting and sweating.

There are many management practices that can reduce heat stress. The first one, and most critical, is water supply. Animals consume water and urinate to dissipate heat from the body; therefore, it is imperative that your waterers are cleaned weekly and that the recharge rate and water space is adequate to prevent dehydration and maximize water intake. In the summer, the water space should be at least 2 inches per head. The ration should contain salt to encourage water intake. If you are adding onto a lot, or building a new lot, be sure to size the waterers according to the 2-inch rule instead of the waterer manufacture

recommendation, which is usually only 1/2 inch.

Shades reduce cattle's exposure to solar radiation, as well as reduces ground temperature, but has little to no effect on ambient temperature. Research from 1966 reported that shades could reduce heat load of cattle by as much as 30%. A recent study by University of Nebraska researchers found that cattle provided shade had greater intakes (23.4 vs. 22.9 lbs/day) and average daily gains (4.02 vs. 3.90 lbs/day) compared to cattle with no shade. Additionally, panting scores were less for cattle in shaded pens, and pen surface temperatures were less than surface temperatures of

unshaded pens. When installing shades in your feedlot, the shaded area should be 15 to 20 ft² per animal. The framed structure should be tall enough to drive a loader underneath, keeping in mind that the taller the shade, the better the air flow. An 80% shade cloth seems to work the best, especially if it is running the length of the mound. Shades should be placed north and south so that the shaded ground is not in the same place all day, preventing the cattle from making a mud hole. It is important to remember that the efficacy of shades is highly dependent on location and the severity of heat in the summer.

Mounds 4 to 6 feet high in the lot provide good drainage, wind-breaks in the winter, and elevation into better air flow in the summer. Mounds should be run perpendicular to the prevailing wind and ideally run down the middle of the pen starting at the feed bunk and heading towards the back of the pen.

Sprinklers can also be added to the pens. They should put out drops that are large enough to wet the cattle to the hide. If droplets only coat the hair, it will act as an insulator and actually conserve body heat. Cattle cool by evaporative cooling so as the animal dries the water pulls heat from the body. Sprinklers should be started around 85° F and can run 15 minutes on and 5 minutes off or constantly, making sure that you are not putting out so much water that you are creating a mud hole. Creating a mud hole that covers part of the cattle's hide in mud acts as an insulator and is counter-productive.

Cattle handling elevates cattle's body temperature and should be avoided on hot days. If cattle must be handled during hot days, handling times should be scheduled for early mornings, prior to 10 a.m. If you are going to work cattle in the evening, you should wait at least 6 hours after sundown so that the cattle have adequate time to cool down.

Essential Oils can be added to the ration to help alleviate the effects of heat stress on the animal. Research has shown that some essential oils contain compounds, such as capsicum, that are natural vasodilators. Vasodilation of blood vessels improves blood and nutrient flow, as well as potentially helps the animal release body heat.

Fly Control strategies should be implemented during the spring time to help reduce fly populations during the summer. Flies are an additional stressor that can cause cattle to gather, which reduces air-flow. We recommend a combination of at least two fly control strategies from the time of the last hard freeze of spring to the first killing frost in the fall in your local area.

Evening feedings can be done as 100% of the daily allowance at 4:00 to 6:00 p.m., or 30% in the morning and 70% in the evening, or somewhere in between. This will move

the heat of fermentation created by the digestion of feed to the night resulting in cattle staying on feed longer when a heat wave occurs. Cattle do not eat much feed in the afternoon, so the feed ends up setting in the bunk, heating, and going out of condition. The cattle eat their biggest meal prior to the sun coming up in the summer, so if the bunks are slicked late at night then they do not have feed in front of them when they want to eat the biggest meal.

This year has been a challenge and there is no reason to believe that summer will be any different, so in order to maintain good performance through the summer months one or two preventative steps should be taken. If you have questions, please contact one of our consultants.

FL

For more information related to heat stress or feedlot nutrition, visit Great Plains Livestock Consulting at gplc-inc.com.



Got a fly problem?
Get the most cost effective fly management!

kunafin
"The Insectary"
PRODUCERS OF BENEFICIAL INSECTS

Ask the professionals!
Third Generation of Bug People

Blaine Junfin Beyer Junfin Clifton Castle Birgit Junfin Adele Junfin Frank Junfin

+1-830-757-1181 USA: 1-800-832-1113 www.kunafin.com



SCIENCE AND WEATHER

IMPACT DEWORMING DECISIONS



Internal parasite control in cattle requires timing, planning and persistence. Deworming must be done often enough to control pests and reduce the economic impact of infestation, yet not too often, lest cattle develop anthelmintic (dewormer) resistance.

There is no magic formula. Every ranch, every herd, and every season is different.

Jody Wade, Professional Services Veterinarian for Boehringer Ingelheim, says, "The biggest thing we're seeing right now is issues that are popping up maybe where the dewormers folks are using are not working like they should, and we think that could be some resistance issues. So the big push from most of the parasitologists from across the country is being more science-based in our deworming decisions – on how we're going to

deworm them, time of year that we're going to deworm them, and the products that we use - based on science."

Wade advocates the use of fecal egg counts (FEC) to confirm parasite problems before implementing a plan. Wade says checking just 10% of the herd will give a good snapshot of the problem.

Performing a fecal egg reduction test (FECRT) is helpful for producers and vets wanting to determine the efficacy of a specific product by testing before and after treatment.

"Some of the dewormers are better at certain parasites than others are, so being more specific toward the parasite with your choice of dewormer is a smart move," says Wade, "and can help reduce resistance by not over-using product. Producers get used to the things they're using and they assume that it's working. Unless we're actually

using a little bit of science to check, you never know."

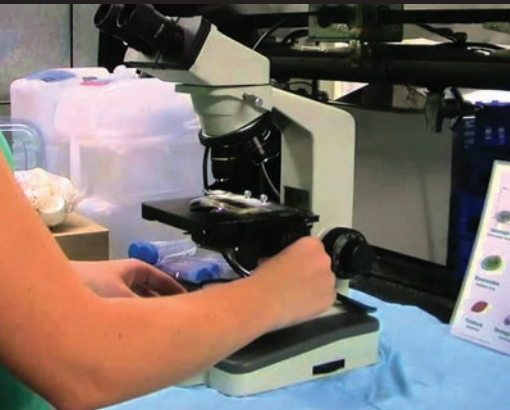
Across the industry, producers and veterinarians are taking measures to reduce the effects of anthelmintic (dewormer) resistance. Some advocate refugia, leaving enough non-resistant parasites behind to breed with the resistant ones, thus slowing the rate of genetic resistance. And use of two types of dewormer concurrently is recommended, increasing the possibility of killing more resistant parasites.

Timing matters

Wade says internal parasites may be a greater issue this year than some years due to wet winter and spring conditions across much of the South, creating a perfect breeding environment for the pests.

Jason Banta, Associate Professor and Extension Beef Cattle





Specialist at Texas A&M AgriLife Research & Extension Center at Overton, Texas, says he's not sure the weather conditions will make the problem worse, but it will affect timing. "The norm is a strategic treatment time of 28 days, generally late May into June and again in November-December," says Banta. "With the long, wet spring, that timetable will likely be delayed. You want the dewormer to kill the parasites in the cow, but you don't want to her to shed the eggs into a favorable environment. It needs

to be hot and dry so the eggs don't live as long."

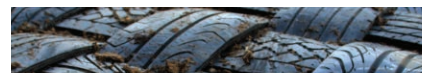
He says for the cow/calf operator, deworming treatment may be delayed 3-4 weeks, while the stocker is likely to treat all calves on arrival unless their history is known regardless of exact timing.

Banta advises checking the slaughter withdrawal date of your product if adjusting your timetable, and its flammability. Make sure branding is done before use of a flammable pour-on product.

And, of course, be sure to follow good management practices that reduce exposure to internal parasites, and remember internal parasite control is only one part of an overall animal health plan developed with a veterinarian.

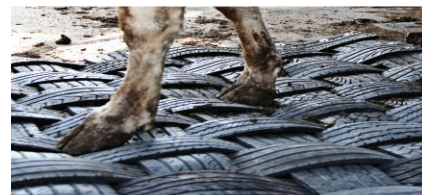
Studies have shown cattle entering the feedlot phase of production with high fecal egg counts are more likely to exhibit a low rate of gain and low back fat and marbling

scores, despite being treated upon arrival, suggesting internal parasites can have long term implications for cattle performance. **FL**



CATTLE MATS WITH **PROVEN PREVENTION**

Non-slip and durable cattle mats from Double D Mats make unforgiving surfaces comfortable for all your cattle.

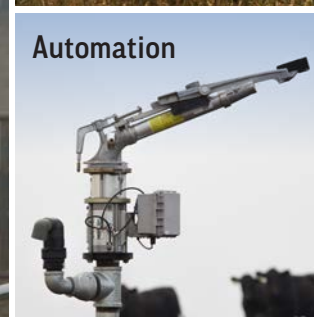
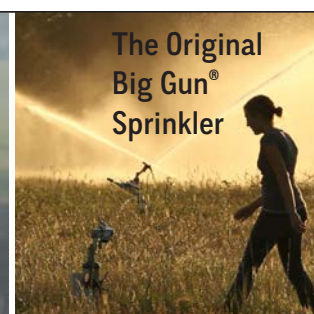


DOUBLE D®
FAMILY MAT SHOP, INC.
please contact us
p: 1.888.377.2879
w: DoubleDMats.com

NELSON

Mitigate Dust &
Cool the Herd with
Nelson Big Gun® Sprinklers,
Control Valves & TWIG®
Wireless Controls

nelsonirrigation.com / Tel: +1 509.525.7660





Don't Skip the Weight on Silage Covers

Recent regulations may change how some U.S. producers weigh down their silage covers. Yet, the benefits to properly covering silage bunkers or piles continue to provide returns.

"The additional time and expense to comply with new waste tire regulations may cause producers to question the need for covering piles at all," notes Renato Schmidt, Ph.D., Technical Services – Silage, Lallemand Animal Nutrition. "There is absolutely no question that effectively covering piles saves money by preserving important nutrients in the silage, reducing dry matter (DM) losses and maintaining the hygienic quality of the feed. The effort to cover and seal silage piles is a vital part of the silage management program."

Covering piles helps create the anaerobic environment required for the ensiling fermentation on the most critical portion in terms of porosity — the surface. As a result, the quality of the fermentation process is improved compared to uncovered piles. During storage, well-maintained plastic covers help

prevent oxygen ingress, which can cause spoilage.

For example, sealing and covering a 40-foot by 100-foot bunker returns approximately \$2,000 in improved silage DM recovery when filled with corn silage. Plus, feeding spoiled silage from an uncovered silo can reduce feed intake and digestibility and potentially lead to metabolic and reproductive issues in the herd.

A combination of high-quality plastic and adequate weighting helps prevent losses. Use plastic that is at least five millimeters thick and dual layer — black inner and white outer — to resist deterioration. Also consider using plastic film with an increased oxygen barrier, Dr. Schmidt advises.

Weighting the plastic down prevents air from seeping underneath the covering. Full-casing waste tires have been the standard for anchoring bunk silo covers for years, but they are heavy to move and bulky to store. Standing water in a full-casing tire can be a breeding ground for mosquitoes. With the increasing concern around West

Nile virus (WNV) — and the new state regulations prohibiting full tires — producers may be searching for new options, such as:

- Modifying tires by leaving tires on the rims, removing tire sidewalls, drilling holes in the tire sidewalls or cutting tires in half
- Covering tires with plastic to reduce standing water
- Treating tires with a mosquito larvicide, which requires a certified pesticide applicator
- Replacing tires with sidewall disks
- Using heavy equipment tire beads
- Finding alternatives to tires, such as gravel or sand bags

Dr. Schmidt advises producers to choose an option that maintain the integrity of the plastic. Tears or holes reduce the effectiveness of the covering and allow oxygen into the pile.

"Covering and sealing silage bunkers makes economic sense," Dr. Schmidt says. "There are options for producers looking for alternative ways to weigh down covers. Don't drop a best practice that pencils out in the long run." **FL**



Do You Practice Risky Business?

Are you living on the edge when it comes to parasite control? Are your risky behaviors setting you up for resistance problems down the road? Dr. Mark Alley, DVM, senior technical service veterinarian, Zoetis, offers a list of common practices that could result in resistance issues, ineffective use of products or unnecessary costs.

Estimated or Average Weights

Often we don't weigh animals and we dose for what the average is. Many producers don't have a set of scales, or if they do, they don't use them or check them regularly to make sure they are accurate. Dosing to the average means a percentage will be underdosed, which can lead to resistance in a worm population. Overdosed animals are costing more to treat than is necessary.

Timing

We deworm when it's convenient for people, not necessarily when

it's the best time to kill parasites. As a result, parasites might not be active on the pasture. We need to think through that process. It's best to have some level of susceptible parasites on the pasture so when the animal grazes, they are picking up susceptible parasites that will be killed by the dewormer. Deworming after spring green up and again in the fall will get the most out of your deworming program.

Reduced Dose for Fly Control

Topical dewormers are so convenient and easy, some producers use them for fly control at a reduced dose. It doesn't take much of a topical product to reduce flies, but as a result, internal parasites are exposed to the product at a reduced rate that can lead to resistance.

Deworm All Animals at the Same Time

Instead of treating all animals, treat those most susceptible to

internal parasites, especially calves and younger animals. Parasitologists agree that no dewormer provides 100% effectiveness against parasites. The idea of refugia (leaving some non-resistant parasites to dilute the resistant population) helps reduce resistance.

Dr. Alley says producers can't tell visually if there is a resistant parasite problem in the herd. Producers make the assumption that all parasite control products are 100% effective, but even with 50% kill of parasites, producers will see a clinical improvement in the animals. They need to work closely with their veterinarian to diagnose presence or absence of resistant parasites and establish a strategic deworming program that will simultaneously minimize production losses and maintain efficacy of our parasiticide products. **FL**



RAISING THEM IS YOUR JOB SELLING THEM IS OURS

Marketing cattle for over 30 years



SUPERIOR
Livestock Auction



WORK WITH A LOCAL REPRESENTATIVE



MARKET TO A NATIONWIDE BUYER BASE



GUARANTEED PAYMENT

Upcoming Auctions	AUCTION	LOCATION	CONSIGNMENT DEADLINE
DATE			
JUNE 12 & 13	CORN BELT CLASSIC	COUNCIL BLUFFS, IA	MAY 29
JUNE 20	TALLGRASS AUCTION	PAWHUSKA, OK	JUNE 17
JUNE 26 & 27	BIG SKY ROUNDUP	BILLINGS, MT	JUNE 14
JULY 8-12	WEEK IN THE ROCKIES	LOVELAND, CO	JUNE 15
JULY 29-AUGUST 2	VIDEO ROYALE	WINNEMUCCA, NV	JULY 13
AUGUST 19-23	BIG HORN CLASSIC	SHERIDAN, WY	AUGUST 3
SEPTEMBER 11 & 12	LABOR DAY	FORT WORTH, TX	AUGUST 26

WWW.SUPERIORLIVESTOCK.COM | 800-422-2117

Old School Cool

Traditional Methods Can be Useful Fly Control for Beef Cattle

The battle against flies is constant during warm weather, but there are several ways to reduce these pests. Though there are some new methods (pour-on products, insecticide ear tags, special fly traps, and a “gun” designed to shoot a ping-pong ball size “bullet” of insecticide onto a cow from a safe distance, just to name a few), some of the more traditional methods are still useful. The old style back rubbers, oilers and dust bags can help fill some gaps in a fly control program.

Roger Moon, PhD, Professor Emeritus, Entomology, University of Minnesota (St. Paul), says it’s important to know which flies you are trying to control, and utilize the most appropriate tactics. “The flies that bother cattle in pastures are mainly horn flies, face flies, and sometimes stable flies. Stable flies may be coming from a nearby

barnyard; they are generally not coming from the pastures unless there’s debris from old round bales or from hay/straw residue that was fed in winter, creating breeding sites for stable flies,” he says. By contrast, horn flies and face flies breed wherever there are fresh cattle dung pats.

Any cattle at pasture—cow/calf or stocker cattle—should be protected from high populations of flies. “Blindly treating with any topical insecticide (as might be applied via dust bags, back rubbers, etc.) will give some benefit by killing horn flies, but how long the product will be effective depends on historical use and how quickly the flies develop resistance,” says Moon.

“Historically we haven’t seen much horn fly resistance to dust bag products, but it may be simply due to modest amounts of use.

Most producers didn’t use dust bags as well or as consistently as they could have. It’s a tradeoff. The sporadic use may not have been as effective, but also there was less selection for resistant flies,” he explains.

“These things go hand in hand. The more heavily and effectively you kill the fly population, the faster you select for resistance.” If most of the flies are killed, the ones that survive are the ones that are resistant to the insecticide and live to reproduce—and you end up with a greater number of resistant flies.

Back rubbers and dust bags were the original topical applicators. They work best in forced-use situations where the cattle have to come in contact with the products. The applicators must be placed where cattle come to water or salt/mineral—in a location they have to



pass through. If a dust bag is placed in a narrow gate, forcing the cattle to come into contact with the insecticide, they will all be treated daily," says Moon. Some cattle voluntarily rub on an oiler/back rubber or dust bags, but many won't use them unless forced to walk under them.

"These systems give good horn fly control but only modest face fly control. No topical product works very well against face flies. The difference is that horn flies live on cattle, whereas face flies only come long enough to get a sip of tears/secretions from the eyes and then leave again. Very few of the adult face flies in a pasture are actually on the cattle, whereas almost all adult horn flies are on the cattle."

It's important to treat cows for flies, but not necessary to treat the calves. "Treat the cows, following dose recommendations on product labels (whether ear tags, pour-on products or dust bags), and if there are calves with the cows they'll get some protection. Calves will benefit just being near (and in contact with) an adult that's been treated. This is what we call the herd effect. Additionally, treated cows produce more milk, which benefits their calves," says Moon.

The oilers, back rubbers and

dust bags need to be maintained, refilled as needed. "Check them periodically. If it's a dust applicator, tap it with a stick and see if a little dust comes out. If it gets wet and caked, or empty, it won't work. Most of the dust bag designs I've seen have some type of waterproof covering, like an apron or tent on top, to keep the dust dry," he says.

Back rubbers utilize a carrier oil. "Some ranchers use diesel, and others use soybean oil or some type of vegetable-based oil. The insecticides are oil-soluble and carried onto the hair coat with the oil."

If the product is a pyrethroid (which are mainly permethrin) don't get it into a water source. "If you get it onto the cow it will stay on the cow, but you don't want any spilling into a stream, or where runoff might carry it into the water, since these products are toxic to fish. Just be in compliance with the label," says Moon.

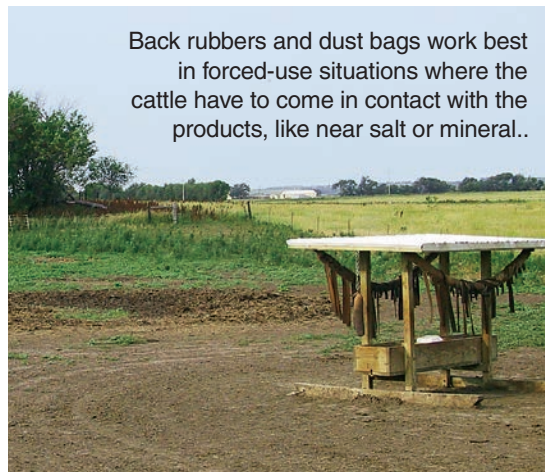
The traditional back-rubber applicators were in use more than 70 years ago. "Bill Rogoff, a USDA entomologist, invented the back rubber. He strung a piece of chain across an alleyway at proper height

for cattle, wrapped it in burlap and saturated it with oil, which wicked the oil and insecticide onto the cattle." Oil spreads through the hair coat and diffuses onto the whole animal, taking the insecticide with it.

Another type of applicator utilized bags of insecticide dust in a tent apparatus over a salt/mineral feeder. When cattle stuck their heads into the feeder the dust was applied over their head, neck and withers. As long as some of it gets onto the animal, it spreads through the hair coat when she slings her head around to knock flies off her sides and back or to other animals as they stand head to flank. In this way the cow also gets some of it onto her calf.

FL

Back rubbers and dust bags work best in forced-use situations where the cattle have to come in contact with the products, like near salt or mineral..



Specializing In:

- Turn-Key Feedyard Construction
- Hog Site Construction • Complete Dairy Construction • Sprinkler System
- CAD Design • GPS Survey
- Slipform Concrete Feedbunks
- Dirtwork of All Types • Laser-Equipped Machinery • All types of Fencing

Phone: 800-536-2634

maxjantzexcavating.com



**Max Jantz
Excavating, LLC**

26503 Eleven Road • Montezuma, KS 67867



Strategies for MANAGING MILLENNIALS

We have a local county Ag Club that meets monthly to discuss ag issues, markets, research, industry trends and a host of other topics of concern to the producers and ag professionals in the region. It's a great forum that provides a platform for education and discussion from some of the smartest people in their field of expertise in the Midwest. After one of the recent luncheons the director of the Club pulled me aside and said, "Don...What's up with these Millennials? I used to think that it was just typical generational issues, but now that I've been managing Millennials, I'm getting more and more frustrated with them—and I'm one of them!"

His complaints were fairly common. "They complain that I micro-manage them, and then the next day they complain that I don't tell them exactly what I want them to do, or that I don't give them enough direction!" "One day I make some concessions to help them meet a deadline, and a few days later they say I'm not flexible enough!" "I'm doing more for them than for any group of employees I've ever had, and they want me to do a lot more without even acknowledging what I did for them just a week ago!" "They don't want to put in any extra effort or take any initiative, and then they complain that they aren't 'moving up in the company' fast enough!"

He went on and on with similar challenges and I let him vent so that we could eventually talk about some strategies. Before sharing what has worked well with my clients, I explained my own transition from being someone who let their frustration get the best of them, to taking a more pragmatic approach and trying to solve this issue just like any other management dilemma.

We need to remember that each generation is a product of the society, culture, upbringing and experiences they were exposed to during their developmental years. The most impactful of those years being between the ages of 12 and 18. They didn't choose to live that life, it's the one they experienced, and we can't go back and change it. Keep in mind, we had the same unique experiences growing up and some of those may not have made us as perfect as we think we are.

All that considered, when we tackle the challenges that this generation, which now makes up the younger 50% of the entire workforce, we must avoid our tendency to look at them as a homogeneous generation with similar values. Keep in mind that the issues my friend is dealing with are common among young employees of any generation. They don't have enough work experience to understand what is expected of any job at any company.

Previous generations had jobs when they were in their early teens. This generation is later to join the full-time workforce and doesn't have the raw work experience

that you might have had at the same age. They need to be taught more of the basics at an age where you already had several years of experience.

Practical Steps

My clients have had great results by implementing these strategies:

- Provide very clear expectations for work performance using job descriptions, standard operating procedures and policies.
- If they aren't meeting those expectations, act quickly and help them make the necessary changes.
- Coach more than discipline.
- Provide clear definitions for your core values and work culture so that they know the specifics of acceptable and unacceptable behaviors, and coach to these values.
- Whenever you need to make adjustments to your processes, be sure to keep your standards the same. This may take some creativity and a greater understanding of human behavior, motivation and accountability.

If you want them to be more engaged in their work, engage with them more on a regular, personal and encouraging manner. You may find that you have more in common than you thought possible. **FL**

Don Tyler is founder of Tyler & Associates Management Coaching. For additional assistance in your employee management and family business challenges, Don can be reached at don@dontyler.com, www.dontyler.com or by calling 765-490-0353.



Beware of Foot Rot with Wet Pastures

Spring rains have filled the ponds and saturated the ground in many pastures. As the temperatures heat up, cattle will start to congregate around or in the ponds or other standing water. One of the challenges that cattle producers may face this summer is the occasional lame cow or yearling. "Foot rot" is a common cause of lameness in beef cattle on pastures. Foot rot is an infection that starts between the toes of the infected animal and usually is a result of the introduction of a bacteria through broken skin. The infection causes pain and the resulting lameness. The lameness can cause decreases in weight gain of young cattle, milk production decline of adult cows and lame bulls will be reluctant to breed.

Treatment of foot rot can be successful when the treatment is started early in the disease process. Most cases require the use of systemic antimicrobial therapy. Your local large animal veterinarian will advise you on recommended antibiotics and dosages for your situation. Severely infected animals that do not respond to initial treatments will need to be re-evaluated by the veterinarian and more involved treatments may be required to salvage the animal. There are other causes of lameness. Therefore a proper diagnosis is important

before treatment begins.

Preventative measures revolve around prevention of mechanical damage to the foot. Recently brush-hogged weeds or brush stubble will often be very sharp and cut the skin between the toes allowing the entrance of the infective bacteria. If possible, avoid forcing cattle to spend long periods of time standing in very wet lots or pastures. Utilizing a good mineral program that contains the micro minerals zinc, selenium, and copper will aid in disease prevention. A three year study in Kansas has shown that zinc methionine added to a free choice mineral supplement reduced the incidence of foot rot in steers grazing summer pasture .

Because cattle inflicted with foot rot are commonly treated with antibiotics, it is critical that producers follow their veterinarian's instructions and label directions precisely. Because these are individual treatment incidences, ranchers may tend to neglect to keep the proper records of the treatments. Record the date, the dosage, route of administration, the lot number of the antibiotic given and the person giving the treatment. Then observe the drug withdrawal times completely before marketing the animals that have been treated. **FL**



AUGUST 27 - 28 • AMARILLO, TX

**Gain insight to increase profitability
in your operation at this premier
cattle-feeding conference.**

Visit FeedingQualityForum.com
to register.

Register by **July 22** for access to
exclusive conference events
and price discounts.

FEEDING QUALITY FORUM MADE POSSIBLE BY:





In the Long Run

Study shows extended-release dewormer can lead to lower feedlot morbidity and improved carcass quality



'Tis the season to think about parasites robbing your beef cow herd. The weather is finally warmer, with bugs and other little things crawling all over. But what about those you can't see? Recent estimates put annual losses from internal parasites at \$200 per cow-calf pair, so it's no surprise many research studies say controlling them offers one of the best returns on investment in the business.

One of the most recent studies, from Iowa State University (ISU), looked at a wide range of economic effects from using an extended-release dewormer compared to a traditional product. It found the main difference was more marbling and higher percentage of premium Choice carcasses in progeny from herds treated with the extended-release product.

The ISU master's thesis of Claire Andresen set out to estimate the impact of a single injection in cow-calf herds of extended-release eprinomectin (LongRange®, 100-150 days) versus one of typical duration doramectin (Dectomax®, 14-28 days). It would measure economically relevant production variables in these dewormed beef cows and calves as well as subsequent feedlot health, performance and carcass traits of calves. The product that lasts five to six times longer costs four times as much, but would the extended-release product be worth the extra expense?

Andresen, now a Ph.D. student at Oklahoma State University, worked with 13 spring- and fall-calving herd

managers with nearly 1,800 cows across seven states. Animals were stratified within herds and assigned one of the two treatments. In some herds, cows and calves were both treated with products by assignment, while in others treating the cows meant calves received the benefit indirectly.

Reproductive end points, cow performance, body weight change, evidence of pink eye and fly burdens were compared, finding only

“Producers know deworming will improve weight gain; that’s fairly well established,” Loy said. “But I don’t think they always make the connection to the end product.”

a lower incidence of pinkeye in LongRange-treated cows, with no difference in calves between the two treatments.

In fact, Andresen said there were few differences in any production measures, perhaps due to overall lack of clinical parasitism at any time point in any herd as measured by fecal egg counts.

That left feedlot performance, where again any differences were slight.

“Eprinomectin-dosed calves tended to have lower incidence of morbidity,” the study reported. “However, there were no

differences in growth performance.” Andresen said that may stem from the lack of parasitic infection in the grazing phase.

Carcass traits were the one clear point of differentiation. Calves treated with eprinomectin during the pre-weaning phase had a greater marbling score by 20 points and a greater average quality grade.

Andresen and Dan Loy, director of the ISU Beef Center, conclude the study shows use of an extended-release product can be worth the investment if you aim for premium quality targets. Loy was a co-advisor on the project with former ISU ruminant nutritionist Patrick Gunn.

“Producers know deworming will improve weight gain; that’s fairly well established,” Loy said. “But I don’t think they always make the connection to the end product. That improvement in carcass value all the way through isn’t something most producers would necessarily be aware of. This study helps make that connection more apparent.”

Andresen said the findings are significant enough she’d recommend all quality-focused cattlemen consider their deworming protocol.

“Especially for producers who retain ownership and can get some bang for their buck post-weaning, they can target a niche market where they know they’re going to filter to a feeder and that feeder knows that they’re going to get a higher quality animal and eventually a higher grading carcass,” she said.





BQA Manual Available

An official manual for the Beef Quality Assurance program that is both detailed and extensive is now being distributed nationwide throughout the cattle industry. The manual and the BQA Program are both managed by the producer education team at the National Cattlemen's Beef Association, a contractor to the Beef Checkoff.

The 124-page manual addresses topics such as food safety, animal well-being, worker safety and environmental stewardship. It provides specific information to help producers approach management decisions in a way that acknowledges a responsibility to the animals, consumers, the environment and the larger beef industry.

The manual includes the most current set of key practices, guidelines and suggestions for providing thoughtful and responsible cattle

management. A helpful resource for cattle producers and others in the industry, it is the foundation for training and certification programs offered nationally and by many states.

Smith says this manual outlines a way of thinking for cattle producers – a guideline for approaching decisions with thoughtfulness and care. He says following the easy-to-understand manual will lead to both a stronger individual cattle operation and a more vibrant, respected and robust cattle industry.

The BQA Program is a cooperative effort between beef producers, veterinarians, nutritionists, extension staff and other professionals from veterinary medical associations and allied industries. Its goal is to assure consumers that all cattle shipped from a beef production unit are healthy, wholesome, and safe; their management has met FDA,

USDA and EPA standards; they meet quality requirements throughout the production system; and are produced using animal well-being, worker safety, and environmentally-sound production practices.

It has six objectives focused on production standards, data retention, hands-on training and education, technical assistance and maintaining a foundation of continuous improvement and responsible cattle management.

BQA encourages producers to use all reliable sources and information and take actions that will accomplish BQA program's goals and objectives. In addition, the BQA recommends the use of common sense, appropriate management skills and accepted scientific knowledge to deliver the highest levels of animal stewardship and the production of quality, healthy and safe products.

To view the new BQA manual or become BQA certified visit BQA.org. **FL**

www.FEEDLOTMAGAZINE.com

Looking for information?
Come to Feed•Lot Magazine first. Search back issues and articles. Visit feedlotmagazine.com

Quality Pays.

But what does it cost?

There's no doubt, cattle that earn the Certified Angus Beef® (CAB®) brand or Prime grade also earn premiums. In 2017 alone, packers in a biannual survey reported paying

cattle owners \$75 million in grid premiums specifically for CAB.

But some producers worry that premium comes at a greater cost. At the recent Cattle Raisers

Convention and Expo in Fort Worth, the vice president of production for CAB set their minds at ease.

Mark McCully cited an analysis of 136,000 steers fed at Five Rivers Cattle, comparing performance between high-grading (90% Choice and Prime with 45% CAB) and low-grading (60% Choice and Prime with 13% CAB) pens.

"These are yearling steers in their feedyard, analyzed to make sure we are comparing apples to apples," he told producers at the Texas and Southwestern Cattle Raisers Association event. "They took all their pens of high-grading cattle and compared them to their pens of low-grading cattle."

The highs were nearly 50 pounds heavier but had similar average daily gain, feed efficiency and cost of gain, debunking the idea that feedyard performance must be sacrificed to hit high quality levels.

McCully admitted sometimes efficiency can decline with higher grading pens, but it just doesn't have to.

"I think we could do a better job at times, managing these cattle to the right end point," he said, alluding to differing genetic abilities. "I think we overfeed some cattle. We probably give up some performance by not optimizing their grading potential."

He said the industry's next goal should be to get more of those cattle that can reach premium grades while simultaneously taking some of the waste fat off of them.

"We can do that," McCully said. "We can select cattle to have more marbling and less back fat. We've got the genetic prediction tools

ADVANTAGE ADVERTISING

PROVIDING RELIABLE FEEDING EQUIPMENT SOLUTIONS SINCE 1963

- New & Used Equipment
- Commercial Beef & Dairy
- Manure Spreaders
- Silage Facers
- Truck & Trailer Feed Mixers
- Digi-Star Scales
- Repair, Parts & Service for Most Major Brands

Big jobs require big equipment!
Ask about our rental program

www.BillsVolume.com

ROTO-MIX
Largest Roto-Mix Dealer in the U.S.

Bill's VOLUME
Sales & Service
We Sell the Best and Service the Rest.
Since 1963

Central City, NE: 800-658-4375 / Fax: 308-946-2672
Lexington, NE: 877-768-6649
Pierce, CO: 888-978-0019

Sales & Service to the Industry for More than 50 Years!

Stephenville, TX / Friona, TX / Dalhart, TX / Roswell, NM / Ulysses, KS

MIXER CENTER

254-965-3663
www.MixerCenter.com
sales@mixercenter.com

We Keep You Feeding 24/7

KUHN
Reel TMR Mixers

to be able to help us bend that curve a little bit. I think that's our challenge moving forward."

Likewise, cow-calf producers don't have to give up productivity for premiums.

"We've done a literature review of all of the data we could find that looks at the genetic correlation of marbling and any other traits significant to maternal function — scrotal circumference, age at puberty, age of first calving, etc.," McCully said. "And what we found was there was not one paper or study out there that showed if you increased marbling you'd decrease these maternal traits."

In fact the only correlation found was marbling to milk: as one increases, so does the other. That could be an issue in herds that already have over-producing cows, so milk level needs to match available nutrition.

Even so, McCully is encouraged. "I think this paints a really positive outlook for our ability to maintain and improve maternal function of our cows," he said, "and at the same time, improve the quality and eating satisfaction of our end product." **FL**

Studies show producers don't have to sacrifice production for quality and premiums.

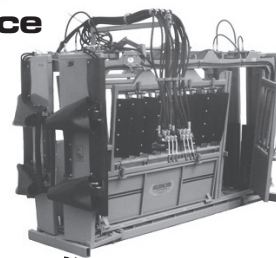


Sales & Service
SINCE 1983



ROTO-MIX

Commercial Series
920-18



Silencer Commercial
Pro Model

BJM Sales & Service

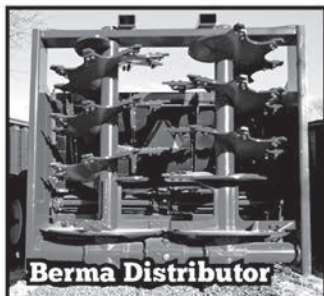
3925 US Highway 60 • Hereford, TX 79045-7291

(806) 364-7470 • www.bjmsales.com

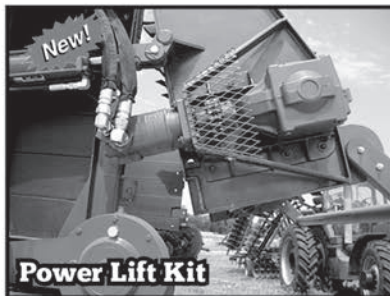


ADVANTAGE ADVERTISING

Spreading It Around Is *Better By Design.*



Berma Distributor



Power Lift Kit



Horizontal Distributor
designed by West Point Design

Pull Type or Truck Mount
16T to 34T

2074 S Hwy 275 West Point NE 68788

**CALL
TODAY!**



Like us on
Facebook

www.westpointimp.com

West Point Design



(402) 372-2408

Protect Your Livestock



Livestock
Fly Control



Mosquito &
Insect Control



Fence, Pasture &
Brush Weed Control



www.MISTSPRAYERS.com ♦ (877)-924-2474

PROCESSING, SORTING and SHIPPING LAYOUTS



By World Famous Dr. Grandin
Originator of Curved Ranch Corrals

CUSTOM DESIGN SERVICE AVAILABLE

Curved chute with raised walking platform for safe working of the flight zone.

Drawings for gates, hinges, latches, chutes, sorting pens and loading ramp plus cattle behavior information.

BOOK OF LAYOUTS \$55 Check/MO
For Large & Small Operations

INSTRUCTIONAL VIDEO on low
stress cattle handling.

DVD \$68 – DVD set includes additional
Spanish video and picture CD

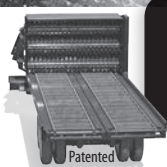
GRANDIN LIVESTOCK SYSTEMS

3504 North Shields / Fort Collins, CO 80524
970-229-0703 / www.grandin.com

Lower Feed Cost and Improve Body Condition Scores



Go to ezration.com
and see how other
ranchers use the
EZ Ration Processor.



ezration@ezration.com • Kim, CO 81049
www.ezration.com 800.242.9599

"I have run my EZ Ration Processor for two winters now. I continually find ways to use it to improve herd health and lower my feed and labor costs. With the EZ Ration I can blend different kinds of hay, straw, and corn silage to allow every cow to get a good balanced ration, or on snowy, cold days, use it to bed straw in the field and I can do this all from the comfort of the heated cab on my tractor. I have flaked hay a couple of times this winter and saw that the cows did not clean it up as well and were not as content as when I feed with the EZ Ration. The other big advantage to the EZ Ration is you will not find better customer service. RC and his staff have proven time and time again that their customer service is second to none. If you are a cow/calf operator and, like me, see the biggest expense in your operation is winter feed, you need to seriously consider the advantages of one of these machines."

- Brennon Jones



THE BATCH BOX GIVES YOU 1/3 MORE USE OF FEED TRUCKS WITH 1/3 LESS MAN HOURS

While the truck
is unloading the
loader is refilling
the Batch
Box.



STREAMLINE YOUR FEEDING WITH A BATCH BOX

402-564-1400

feedingsystems.biz

Feeding Systems, LLC

2500 E 23rd St. • Columbus NE 68601

Dirks Earthmoving

Precision Land Forming

- Livestock Pen Shaping
- Lagoon Construction
- Conservation Practices
- Laser Equipped Site Preparation

Call Richard Dirks Toll Free

1-877-872-3057

Cell: 620-872-1793

dirksearthmoving.com

www.FeedlotMagazine.com



**Your source for Feeder
Information Highlights**



The First Hydraulic Corral and still the Largest!

Starting
at \$11,500



Rawhide Processor

by John McDonald

3 Sizes
Available!

- Pull on highway at speed limit.
- Fits through any gate your pickup will.
- Stable on uneven terrain.
- Wheels on each panel and electric over hydraulic jack eliminates lifting—saves time.
- Frame gates for sorting.



- Transport wheels are permanent, no sliding off the axles and rolling out of the way.
- Permanent sheeted adjustable alley.

Rawhide Original Standard Size



Rawhide Portable Corral

900 NORTH WASHINGTON ST., ABILENE, KS 67410

785.263.3436

www.rawhideportablecorral.com

800-779-8099

Smith Co
SIDE-DUMP TRAILERS

30902 C-38 Le Mars, IA
www.sidedump.com

**We Haul
it ALL!**



**Leading the
industry in...**

**Stock Pile
&
Spread**

**Top Quality
&
Custom Designs**

**Payload Capacity
&
Stability**

**Customer Service
&
Customer Support**

Do you feel
like your
401(k)
is being
neglected?

Great
service
is our
priority!
Give us
a call
today.



RICHARDS
FINANCIAL SERVICES, INC.

411 S. Main St., Scott City, KS 67871
(620) 872-5949 Office
Craig@richards-financial.com

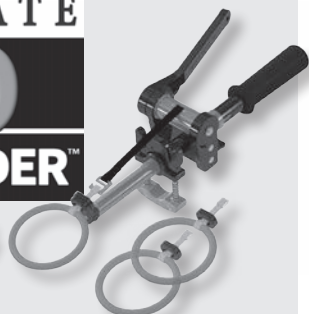
Investment Advisory Services offered through S&A Financial Services, Inc., A Registered Investment Advisor. Information presented is for educational purposes only and does not intend to make an offer or solicitation for the sale or purchase of any specific securities, investments, or investment strategies. Investments involve risk and unless otherwise stated, are not guaranteed. Be sure to first consult with a qualified financial adviser and/or tax professional before implementing any strategy discussed herein. Past performance is not indicative of future performance.

CALLICRATE

PRO
BANDER

800-858-5974

CallicrateBanders.com



Lightweight, no crimping required, **Callicrate PRO Bander** now comes with built-in cutter. Time-saving, convenient built-in cutter cuts the loop quickly and correctly with perfect results every time. No more reaching for the cutter and no more lost cutters!

SUMMIT
TRUCK GROUP

We Carry the Full Line of
Kuhn Knight Mixers
Mounted on International
or Kenworth Trucks.



KUHN
KNIGHT

SUMMIT TRUCK GROUP
4354 Canyon Drive / Amarillo, TX 79109
800-692-4430 806-355-9771
www.summittruckgroup.com



BRUTE CATTLE EQUIPMENT

"Cattle Friendly ~ Performance Driven"



- ♦ Crowding Tubs
- ♦ Wedged Alleys
- ♦ Loadouts
- ♦ Hydraulic Chutes
- ♦ Fencing & Gates

BRUTE STEALTH



Built Brute Tough!

www.dodgemfg.com
Toll Free: 402-693-2221

Greg Strong, *publisher*; Jill Dunkel, *editor*; Annita Lorimor, *general manager*; Amy Spillman, *digital/circulation manager*; Robert A. Strong, *editor emeritus*.

The editor assumes no responsibility for unsolicited manuscripts and photographs. Publisher reserves the right to reject advertising matter. Copyright 2019 by FEED•LOT Magazine. All rights reserved.

Audited by:



FEED•LOT is published under
ISSN 1083-5385

FEED•LOT (ISSN 1083-5385) is published eight times per year in February, March, April/May, June, August, September/October, November and December at no charge to qualified recipients, by FEED•LOT Magazine, Inc. 116 E. Long, Dighton, KS 67839. Periodicals postage paid at Dighton, KS 67839 and additional mailing offices. Non-qualifying subscription rates: \$55 per year within USA. \$80 per year for foreign, including Canada. Back issues \$10, including postage and handling. Please call FEED•LOT Magazine, Inc. for reprint and copy authorization, 620-397-2838. POSTMASTER: Send address changes to FEED•LOT Magazine, Inc. PO Box 850, Dighton, KS 67839.

Brand names appearing in this publication are for product identification purposes only. No endorsement is intended, nor is criticism implied of similar products not mentioned.

LAIRD MANUFACTURING

"We are the Exception not the Compromise."



Freestall Filler



Vertical Truckmount



Vertical Trailermount

**Worldwide Leader
in Cattle-Feeding
Equipment**



Delivery Box



Manure Spreader



**Full Line of
Stationary
← Mixers**

CONTACT US FOR THE DEALER NEAREST YOU

209-722-4145

**LAIRD MANUFACTURING, 531 S. HWY. 59, MERCED, CA 95341
SALES@LAIRDMFG.COM WWW.LAIRDMFG.COM**

SUPERIOR MIXING OF WET BYPRODUCT RATIONS



RC 200 SERIES REEL COMMERCIAL MIXERS

500 - 950 cu. ft. mixing capacities • Truck, trailer, and stationary models



KuhnNorthAmerica.com [f](#) [t](#) [i](#) [i](#)

The Helix Design: Open-center design eliminates obstructions & provides superior feed movement for faster, more consistent mixing.

Mix Bar: Ensures consistent feed movement and helps to "split" or "fold" feed as it rotates in the center of the chamber, decreasing mix time & eliminating dead spots.

↓ Improved Load Leveling ↓ Faster, More Even Unloading and Cleanout
↓ Superior Performance for Grain & Roughage Rations

Ask about other KUHN Knight mixers and spreaders!



U.S. Tractor & Harvest
Alamosa, CO

Western Implement
Grand Junction, CO
Montrose, CO

Kuhn Knight of Greeley
Greeley, CO

SEMCO
Lamar, CO

Mid-America Truck Equipment
Belleville, KS
Seward, NE

KanEquip
Ellsworth, KS
Garden City, KS
Herington, KS
Marysville, KS
Topeka, KS
Wamego, KS
Syracuse, NE

Midwest Mixer Service
Dodge City, KS
Scott City, KS

Prairieland Partners
Emporia, KS

R & R Equipment
Fort Scott, KS

Lott Implement
Minneapolis, KS

Sandhill Equipment
Bassett, NE

Grossenburg Implement
Bloomfield, NE
Hartington, NE
Wayne, NE

West Point Implement of
Columbus
Columbus, NE

Landmark Implement
Holdrege, NE

Kuhn Knight of Lexington
Lexington, NE

Steve's Truck & Equipment
Scottsbluff, NE

West Point Implement
West Point, NE

Tidenberg Welding & Repair
Clovis, NM

Summit Truck Group
Amarillo, TX

Mixer Center Dalhart
Dalhart, TX

Mixer Center Friona
Friona, TX

Visit your local KUHN Knight dealer today!