



Angus Advisor

► JULY herd management tips

Guide to abbreviations and acronyms

To make the “Angus Advisor” more concise and consistent, we have used the following abbreviations or expressions:

\$Values	dollar value indexes
ADG	average daily gain
AI	artificial insemination
AIMS	Angus Information Management Software
BCS	body condition score
BLV	bovine leukemia virus
BMP	best management practices
BQA	beef quality assurance
BRD	bovine respiratory disease
BRSV	bovine respiratory syncytial virus
brucellosis	Bang's disease
BSE	bovine spongiform encephalopathy
BVD	bovine viral diarrhea
Ca	calcium
CHAPS	Cow Herd Analysis and Performance System
CP	crude protein
cwt.	hundredweight
DM	dry matter
EPD	expected progeny difference
ET	embryo transfer
FMD	foot-and-mouth disease
GnRH	gonadotropin-releasing hormone
IBR	infectious bovine rhinotracheitis
ID	identification
IM	intramuscular
in.	inch
lb.	pound
LCT	lower critical temperature
lepto	leptospirosis
Mg	magnesium
MiG	management-intensive grazing
MLV	modified-live virus
N	nitrogen
P	phosphorus
PI	persistent infection
PI ₃	parainfluenza-3 virus
preg-check	pregnancy-check
Se	selenium
sq. ft.	square feet
SPA	Standardized Performance Analysis
TB	bovine tuberculosis
TDN	total digestible nutrients
THI	temperature-humidity index
trich	trichomoniasis
Zn	zinc

Midwest Region

by **Patrick Gunn**, Iowa State University, pgunn@iastate.edu

Parasite Control Part 2

Last month, I discussed the need for and best-management practices regarding internal parasite prevention and treatment. This month, in preparation for the bulk of fly season, I am going to turn my focus to external parasites.

Ectoparasites encompass a broad array of pests that may have a negative economic impact on the herd and often include flies, lice and ticks. As lice are typically less prevalent during the summer months, today's discussion will focus on impact and prevention of production losses associated with flies and ticks.

In total, it is estimated that production losses stemming from ectoparasites are in excess of \$2 billion annually, with nearly two-thirds of that loss attributed to flies. The most predominant losses (\$800 million) occur as a result of horn flies, which feed on the blood of cattle and calves and leave the host only to lay eggs in fresh manure. Studies have reported reduced weaning weights of 15-20 lb. in herds not controlled for horn flies.

While often viewed as less of a concern by many producers, stable flies, typically found on the legs of cattle, can also cause significant production losses. While about one-third of the production losses are to flies feeding on blood from the host, the bulk of body condition and milk production losses are the result of cattle congregating to combat flies as opposed to grazing. Because both horn and stable flies feed on the blood of their host, it is possible that blood-borne diseases such as anaplasmosis and, perhaps to a lesser extent, bovine leukosis could be transmitted when these flies are not controlled. Keeping these blood-borne diseases in mind, ticks should also be controlled.

In contrast to previously mentioned flies, face flies are not biting insects and thus do not typically feed on the blood of their host. Instead, these parasites primarily consume secretions such as tears, mucus and saliva through a suction motion. As such, pinkeye is typically the largest risk associated with face flies.

Although prevention of these parasites is routine in many operations, success is

varied, often due to timing and frequency of intervention. Most research would suggest that horn fly prevention is not necessary until cows have more than 200 flies per cow, while stable flies can start to cause significant production losses at five flies per leg. In most instances, these counts are not reached in the Midwest until mid-summer or later (perhaps later with the unseasonably cool May in many parts of the Midwest this year).

Fly tags are highly effective when used during the fly season. However, many fly tags have a payout of less than 45 days. Thus, if fly tags are applied at the initiation of the grazing season, they are often “wore-out” before peak fly season occurs.

Similarly, products such as pour-ons also have limitations to how long they are effective. If you typically do not handle cattle after they go to pasture, rubbers and dust bags may be the best means of fly and tick protection. However, be sure to read the label of all products used as many pour-ons do not kill ticks; rather, the product claims to aid in the control of these parasites.

Because flies lay eggs in fresh manure, one of the best ways to control flies is to prevent molting of larvae into adults. One method is to use insect growth regulators (IGR) that can be fed to cattle or incorporated into minerals. Because the life cycle of most flies is from 10-20 days, another way to control flies is to rotate pastures frequently, as well as drag previously grazed pastures soon after rotation to break up and dry out the larvae.

Ultimately, be sure to read labels and use products that control parasites specific to your operation. As always, to optimize your summer parasite-prevention program, consult with the team of experts you have assembled, including your beef extension specialist and herd health veterinarian.

Southern Great Plains

by **David Lalman**, Oklahoma State University, david.lalman@okstate.edu

Spring-calving herds

Breeding bulls should be removed from the cow herd after 60-90 days.

If you are in a region where May and June precipitation was abundant, you may need to consult your veterinarian regarding the potential value of deworming nursing calves during mid- to late summer.

Response to the anthelmintic generally increases in wet years, although response will vary substantially depending on other factors, such as grazing intensity and previous parasite management.

Fall-calving herds

Wean fall-born calves before the middle of July to allow cows time to regain body condition before calving again.

At weaning, vaccinate calves according to your veterinarian's recommendations, deworm calves, preg-check cows and heifers, weigh and estimate condition scores of cows, and weigh calves. Transfer records for your whole herd to the American Angus Association.

A small package of high-protein supplement, such as recommended in the Oklahoma Gold program, can facilitate around a 2-lb. ADG on weaned heifers and bull calves grazing abundant native pastures during July, August and September. A strategic deworming program and the inclusion of a feed additive such as Bovatec or Rumensin® are important features in this program.

General comments, recommendations

Be prepared to test harvested forage, whether purchased or raised, so that you can determine the true value and appropriate application in a winter feeding program. A list of forage-testing laboratories certified through the National Forage Testing Association is available at www.foragetesting.org.

Remove intensive early stocking cattle from native grass pastures by July 15.

Continue fly- and tick-control programs for all cattle. The incidence of pinkeye is particularly high during late summer. Fly control is one key management factor in minimizing the spread of this disease.

Harvest Sudan grass and Sudan hybrids for hay in the boot stage, which generally corresponds to 4 ft. to 6 ft. in height. A routine nitrate test on forage before harvesting may be advisable, particularly if soil moisture has been scarce prior to harvest.

Several herbicide treatment options are available to minimize spread of the invasive legume, sericea lespedeza. If you were not able to get it treated earlier in the year, a herbicide application prior to seed production (just prior to and during the flowering stage) during late summer can be very effective. Late-season prescribed burns are also a good method to suppress brush and keep sericea lespedeza from going to seed. Similarly, blackberry bushes can be effectively controlled during late summer with a herbicide treatment immediately following fruit production/drop.

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Western Region

by **Randy Perry**, California State University–Fresno, randyp@csufresno.edu

General management

Pasture irrigation and thistle control. If irrigated pastures are part of your forage resources, timely irrigation during hot summer months is critical in terms of affecting forage production. Mid-summer is also an excellent time to try to control thistle or other invasive weeds in pastures.

Pinkeye prevention. Mid-summer is the time of the year when problems with pinkeye can become quite prevalent and, thus, treatments can become time-consuming. The incidence of pinkeye can be reduced by clipping tall, mature grasses; and controlling flies with dust bags, pour-ons and/or fly tags. In addition, availability of shade helps to reduce the incidence of pinkeye. It is important to treat problems quickly and aggressively, thus reducing the spread of the disease by flies.

Antibiotics such as the long-acting oxytetracyclines are very effective in treating pinkeye. A more inexpensive treatment option, but one that is more difficult to administer, is to treat the infected eye with an injection of 2 to 3cc under the membrane that covers the upper portion of the eyeball with a mixture of 90% penicillin and 10% dexamethasone. Most people prefer to apply patches to infected eyes, and those can be made very easily from old, worn-out jeans. Leave the

bottom portion of the patch unglued so the eye can drain.

Fall-calving herds

Cows are on cruise control.

Reproductive management

Vaccinations. If any precalving vaccinations, such as a scour vaccine, are going to be used, now is the time to decide on the specific product and get products on hand.

Nutritional management

Mineral supplementation. Be sure that cows are receiving adequate levels of calcium, phosphorus and trace minerals that are deficient in your area. The period from calving through the end of the breeding period is the best time to take advantage of chelated mineral products.

Body condition. The target level of body condition at calving is a minimum BCS of 5.0 for mature cows and 6.0 for 2-year-old heifers on a scale of 1 to 9 (see more information online at www.cowbcs.info).

Protein and energy supplementation. Mid-summer is typically a time of the year when fall-calving cows will maintain themselves adequately with no need for either energy or protein supplementation as long as dry forage is available.

Heifer development. The developmental period from weaning until breeding time is critical in terms of influencing the future productivity of females. Females should be

developed to reach approximately 65% of their projected mature weight at the start of the breeding period.

Spring-calving herds

Focus on breeding season and suckling-calf health.

Reproductive management

Breeding season. Depending on desired calving dates, the AI breeding period should be concluded. Monitor return heats and cleanup bull performance for any problems that may arise.

Nutritional management

Mineral supplementation. Be sure that cows are receiving adequate levels of calcium, phosphorus and trace minerals that are deficient in your area. Consider chelated mineral products, especially prior to calving and through the end of the breeding season.

Energy balance. Energy balance has a major impact on fertility, and thus it is critical that cows are in a state of positive energy balance or gaining weight during the breeding season.

Health management

Treatment protocols. Treatment protocols and products should be on hand for scours and pneumonia in suckling calves. If cows are grazing irrigated pastures, they are usually fine in terms of being in a state of positive energy balance.

Mid-South Atlantic Region

by **Kevin Shaffer**, West Virginia University, Kevin.Shaffer@mail.wvu.edu

Over the next several months, I plan to discuss the many opportunities that exist within management and herd data analysis systems to improve within-herd evaluation and selection, with particular emphasis on hard-to-measure traits. The following is intended to be an introduction to that discussion.

The genetic landscape of beef production has changed significantly in recent years. New technologies have emerged to predict an animal's genetic potential, and new traits and selection indices have been developed to assist in identifying profitable genetics. With all these tools at a breeder's disposal, it can be tempting to overlook the finer points of a breeding program: fertility, soundness, fleshing ability, calving ease, survivability, adaptability and temperament.

Each of these traits is a contributing factor

to what is commonly described as longevity. They are the primary contributors to cow-calf profitability, particularly fertility, calving ease and survivability. As a whole, “longevity traits” are inherently more difficult to select for because they are difficult to measure and lowly heritable. As a result, they are often pushed aside in favor of more highly heritable traits where selection responses are easily measured.

Even though it is difficult to break the societal paradigm of immediate gratification in favor of long-term value and consistency, it is an absolute necessity for a breeder. Within a given environment, there are optimum levels of birth weight, mature size and milk production that lend themselves to production efficiency. It is the breeder’s task to identify and consistently replicate the cows that exhibit optimal levels of those traits and that excel for longevity traits.

A breeder can only accomplish this task by placing emphasis on measuring, analyzing and selecting for longevity traits and accepting that in some areas, a lack of visible change is indicative of progress. Furthermore, breeders must realize that genetic change is not always equivalent to genetic progress. Breeding cattle is a marathon, not a sprint. Treating it as a sprint will fundamentally limit a breeder’s ability to evaluate and select for longevity traits and true long-term profitability.

I like to view each bull and each cow as pieces of a puzzle that will never be complete. If you rush in selecting the next piece of the puzzle, it most likely won’t fit or you will have to modify it in some way to make it fit. You may even find that it was a piece from a completely different puzzle and have to throw it away completely. If you take your time and study the pieces correctly, each piece should lead you to selecting the next.

Spring-calving herds

Reproduction

- ▶ Monitor bull performance and health regularly. Remove bulls from cows to maintain a short exposure period — maximum of 45 days for heifers and 60 days for cows (from the date of AI).
- ▶ When removing bulls from breeding pastures, reintroduce groups simultaneously rather than across multiple days to minimize fighting and the potential for injury. If possible, group bulls according to age and provide ample area for bulls to segregate.

Herd health

- ▶ Monitor animal health and consult with your veterinarian regarding parasite control, fly control and pinkeye control/treatment programs.

- ▶ Prepare for calf weaning/preconditioning by ordering appropriate vaccines and necessary supplemental feeds. Weanling calf supplements should utilize fiber-based energy sources rather than starch.

Genetics

- ▶ Verify that calving records are complete and up-to-date. Identify calves that may require parentage verification so that DNA samples can be collected and submitted at a convenient time.
- ▶ If you did not tattoo calves at birth, assign permanent calf IDs so you are prepared to tattoo at weaning and have the appropriate information to submit weaning data once weights are collected.
- ▶ If you are enrolled in MaternalPlus®, organize and submit breeding records on yearling replacement heifers.
- ▶ To maximize weaning contemporary-group size, maintain cows in as large groups as forage availability and management will allow.

Fall-calving herds

General

- ▶ Prepare for weaning and finalize calf marketing and/or postweaning development plans.
- ▶ Develop a marketing plan for cull cows.

Herd health

- ▶ Administer preweaning and/or weaning vaccinations and parasite-control products according to herd health program.
- ▶ Monitor weaned calf health closely.

Genetics

- ▶ Collect weaning weights between 120 and 280 days of age. Submit data to the Association with appropriate management and contemporary-group codes.
- ▶ Collect cow weights and body condition scores within 45 days of weaning and submit data to the Association.
- ▶ Update female inventory and submit appropriate reason codes for cull cows and heifers.
- ▶ Utilize available data to begin to identify replacement females and bulls for further development. Ideally, most heifer calves should be retained through breeding to make informed replacement female selection decisions while lower-performing bulls should be castrated postweaning.
- ▶ Contact bull owners and/or semen companies to purchase necessary AI certificates to register calves postweaning.

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**2016 Beef Improvement Federation
Annual Convention**

**Manhattan, Kan.
June 14-16**

Attend on your own time.

The Beef Improvement Federation serves as a common ground for cattle ranchers, researchers and allied industry to advance beef production through improved genetic evaluation. If you missed the BIF events in Manhattan, find Angus Media coverage on the Newsroom and Awards pages of

www.BIFconference.com