



# 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 <sub>3</sub>	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](mailto: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 due 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 in mind these blood-borne diseases, 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 worn out before peak fly season occurs.

Similarly, products such as pour-ons have limitations to how long they are effective. If you typically do not handle cattle after they go to pasture, back 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 because many pour-ons do not kill ticks, rather the product claims are 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 such way is to use insect growth regulators (IGR) that can be fed or incorporated into minerals. Because the life cycle of most flies is 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](mailto: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](http://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

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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 an herbicide treatment immediately following fruit production/drop.

## Mid-South Atlantic Region

by **Kevin Shaffer**, West Virginia University,  
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Feed costs account for up to 70% of the total cost of production in the preharvest segments of the beef industry and represent the single greatest expense incurred on any operation. Furthermore, approximately 70% of feed energy consumed is utilized for maintenance, meaning that nearly 50% of the total cost of production is directly attributable to maintenance functions and not to growth and/or lactation. Simply put, even subtle improvements in feed efficiency and, in particular, maintenance feed efficiency should significantly reduce production costs and enhance profit potential.

For many years, feed conversion ratio, or

F:G, was the primary measure of feed efficiency utilized in the beef industry. Although easy to measure, selection for F:G only improved growth rate, largely failed to account for individual differences in intake, and resulted in larger mature sizes and ultimately a larger feed bill. Most significantly, F:G did not account for differences in maintenance requirements — the greatest portion of feed costs.

More recently, residual average daily gain (RADG) and residual feed intake (RFI) have vied to be the primary measure of feed efficiency utilized. RADG has been promoted as an advantageous measure of feed efficiency because it accounts for individual differences in feed intake, body size and growth rate; however, RADG is calculated in a manner that emphasizes differences in growth rate rather than feed intake. As a result, selection for RADG results in improved growth performance with little impact on feed intake. However, given that feed costs attributable to growth account for only 20% of production costs and maintenance feed costs account for 50% of production costs, it seems illogical that selection for RADG would result in significant feed savings for the cow-calf

producer, whose primary expense is cow maintenance.

In contrast to F:G and RADG, RFI compares an animal's actual feed intake to its expected feed intake, which is based upon body weight and rate of gain. By accounting for both body weight and rate of gain, RFI accounts for both maintenance and growth contributions to whole-body efficiency. Additionally, because RFI accounts for maintenance requirements using a standardized or average adjustment while adjusting for actual differences in growth, a large portion of the variation observed in RFI should be due to individual animal variation in maintenance requirements. Furthermore, adjustment for actual differences in growth performance alleviates potential relationships with growth traits and potentially undesirable indirect selection effects. The same cannot be said for RADG. In a recent analysis of a subset of sires reported in the most recent sire summary, moderate positive correlations 0.30-0.40 were observed between RADG and weaning weight (WW), yearling weight (YW), yearling height (YH), mature weight (MW), and mature height (MH) EPDs, indicating that selection for RADG would not only

increase both pre- and postweaning gain, but mature size, as well.

Because maintenance feed requirements are related to mature size, it again seems illogical that intake would stay unchanged as size increases as an indirect result of selection for RADG. This may be of little consequence to the feedlot sector, but it is extremely meaningful to cow-calf operators and their ability to appropriately manage input costs. Ultimately, RADG is a feedlot or terminal trait. Cow-calf producers should seek to improve feed efficiency and reduce maintenance feed requirements through selection of low-RFI animals with adequate levels of growth.

## Western Region

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### 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. Multimin® is an excellent injectable product if that is a preferred route of administration. Copper and selenium boluses are available and a very effective method of delivering those trace minerals over an extended period of time.

**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](http://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 health of suckling calves.

### 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. See the comments above on injectable and bolus mineral products.

**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. If cows are grazing irrigated pastures, they are usually fine in terms of being in a state of positive energy balance.

### Health management

**Treatment protocols.** Treatment protocols and products should be on hand for scours and pneumonia in suckling calves. It is best to have two treatment options for both conditions and be sure that those protocols have been communicated to the appropriate personnel.

