

ANGUS

BEEF BULLETIN®

"The Commercial Cattleman's Angus Connection"

Volume 34, Number 3 • March 2016



Brought to you by
ANGUS MEDIA
3201 Frederick Ave.; Saint Joseph, Mo. 64506



PHOTOS BY SHAUNA ROSE HERMEL

Grazing Management Improves Profitability

Jim Gerrish on improving cow-calf profitability.

by **TROY SMITH**, field editor

Jim Gerrish sees nothing wrong in keeping cows as a lifestyle choice, rather than as a business. If producers are not doing it just for fun, however, Gerrish says cow-calf enterprises should not have to be buoyed by income from other sources to remain afloat. If honest analysis shows an enterprise is not profitable, and Gerrish says many

"conventionally managed operations" are not, then a producer must choose to change.

Gerrish has definite ideas regarding what it takes to make a forage-based cow-calf enterprise profitable. His opinions stem from 22 years as a researcher at the University of Missouri (MU) Forage Systems Research Center (FSRC), near Linneus, Mo. Gerrish's studies focused on the interactions of

soil, plants and grazing animals, which are fundamental to the principles of management-intensive grazing (MiG). He was co-founder of the Missouri grazing workshops that became the model for grazing schools hosted in numerous states. Gerrish also practiced what he preached, grazing cattle and sheep on his own commercial operation in northern Missouri.

(Continued on page 2)

Features & News

Cattlemen's College® opens convention	17
Using technology to feed a growing population . .	17
Sustainability means the capacity to endure	20
What it will take to attain sustainability	20
Cattlemen should be good stewards of antibiotic use	22
Trace minerals during pregnancy are important . .	24
Produce high-health calves	26
Prevention must become more prevalent	28
Here's insight into finding, keeping employees . .	30
Tips for getting hired	30
Cattlemen briefed on issues in Washington, D.C.	34
New larvicide controls four fly species	37
Here are strategies to choose a herd sire	40
Manage high-risk calves	50
Young leaders visit Wooster, Ohio	60
Nebraskans use feedback to improve cow herd amid competing demands	62
Adding value, opportunity	64
Health, pounds and consumer demand drive cattle business	66
Experienced individuals share advice with others seeking a foothold in agriculture	68
BIF announces June program	70
Jerry Cassidy named director of member services	72

Column Links

• The Front Gate	6
• Association Link	8
• The Source	14
• Beef Talk	42
• Ridin' Herd	44
• Veterinary Link	48
• CAB Link	56
• Industry Link	74
• New Products	82
• Market Advisor	86
• Angus Sales Link	90
• Outside the Box	98
• Advertiser Index	102

Staff

• Angus Media	2
• American Angus Association	6
• Regional Managers	54
• Certified Angus Beef LLC	56

Services

• Angus Journal subscription form	45
• Angus Journal Virtual Library	67
• Angus Beef Bulletin EXTRA subscription form	69
• Readership survey	79
• National Junior Angus Association Membership application	87
• American Angus Association membership application	94

Grazing Management Improves Profitability *(from cover)*

In 2003, Gerrish moved to May, Idaho, and established American GrazingLands Services. He provides on-site consultation to ranchers and grass farmers seeking to improve their management of grazing lands for sustained environmental health and profitability, and continues to participate in grazing seminars hosted across the United States and Canada. Gerrish also custom manages seasonal grazing of cattle on pivot-irrigated land for central Idaho's Circle Pi Ranch.

Increase profitability

When consulting with clients or addressing a workshop audience, Gerrish emphasizes that managing production costs never goes out of style. That's where producers should start when seeking ways to improve profitability. Another way is to increase income by increasing the number of units produced for sale, by selling them at a higher price per unit or by adding enterprises to the operation. However, Gerrish insists that producers should first look for ways to reduce costs.

"Ideally, a producer keeps trying to do both — increase income and reduce costs," says Gerrish, warning that increasing production won't necessarily increase income unless production costs are under control. "For most producers there is opportunity to cut costs — and I'm not about just shaving a bit of cost here and there. I'm about amputation."

The targets are easy to see. Among Gerrish's clients, the three greatest costs typically have been winter feed, cow depreciation and labor. Historically, feed is the really big one and includes all costs associated with growing, harvesting and feeding hay. Citing a survey of cow-calf producers in Minnesota, Missouri and Mississippi, Gerrish says the results suggest that producers in each of those three states feed hay about 130 days each year, on average. Some producers feed hay for as many as 260 days out of the year. At the low end of the scale, some Minnesota producers fed hay to cows for only 30 days.

"So why do some producers feed so much hay? I submit that they feed hay to the extent that they can make it. It's what they do. It's tradition," says Gerrish.

The hay equation

Referring to costs of equipment, fuel, labor and fertilizer, Gerrish notes that during the last 40 years, these hay-making and feeding costs have increased at four to five times the rate that cattle value has. He notes how, in 1973, his father bought a top-of-the line hay baler



Jim Gerrish says a ton of hay with 60% digestibility returns nearly 800 pounds of organic matter to the land where it is fed.

for \$4,200. Today, a new baler's price is nearer \$40,000. That's a 950% increase, while calf prices have increased by 275%.

"It made sense to bale up and feed hay in 1973, based on input costs," admits Gerrish. "We're in a different economic climate now. Very often, what worked so well in our parents' and grandparents' operations no longer works."

Consequently, Gerrish urges producers to consider ways to reduce or even eliminate their dependence on hay.

For example, they might want to consider managing fewer cows and more yearlings in the summer, so that winter feed demand is reduced. They may want to seek opportunities to graze owned or rented crop-residue fields for winter grazing. If producers feel they must feed hay, Gerrish advises producers to consider alternatives

(Continued on page 4)



In Gerrish's experience, producers with relatively small operations, but a full line of haying equipment, often have true hay production costs that exceed \$200 per ton. Producers may be able to reduce feed costs by purchasing hay.

Founded March 1985

ANGUS

BEEF BULLETIN

"The Commercial Cattleman's Angus Connection"

Produced and published five times per year by Angus Productions Inc. in cooperation with the American Angus Association and Certified Angus Beef LLC.

3201 Frederick Ave. • Saint Joseph, MO 64506-2997
phone: 816-383-5200 • fax: 816-233-6575
office hours: (M-F) 8 a.m.-4:30 p.m. (Central time)
web site: www.angusbeefbulletin.com

Staff are listed by name, phone extension and email prefix. All direct phone numbers are "816-383-5..."; all email addresses are "...@angus.media"

General manager – Eric Grant, 118, egrant

Communications director – Crystal Albers, 134, calbers

Editorial Department

Editor – Shauna Rose Hermel, 270, shermel;
Senior associate editor – Kasey Brown, 277, kbrown;
Assistant editor – Shelby Mettlen, 276, smettlen;
Assistant editor – Linda Robbins, 245, lrobbins;
Artist – Mary Black

Field editors – Barb Baylor Anderson, 305 Valley View Dr., Edwardsville, IL 62025, 618-656-0870, anderagcom@sbcglobal.net; Kindra Gordon, 11734 Weisman Rd., Whitewood, SD 57793, 605-722-7699, office@gordonresources.com; Becky Mills, 185 Lovett Farms Rd., Cuthbert, GA 39840, 229-938-1698, beckymills81@yahoo.com; Paige Nelson, 4112 E. 550 N, Rigby, ID 83442, 208-317-3095, paigenelson7236@gmail.com; & Troy Smith, 44431 Sargent River Rd., Sargent, NE 68874, 308-527-3483; wordsmith@nctc.net

Publications and Production Department

Manager – LaVera Spire, 220, lspire

Advertising Department – Vice president of sales, Terry Cotton, 214, tcotton; Advertising coordinators – Doneta Brown, 232, dbrown; Karri Mildenerger, 289, kmildenerger; Production coordinator – Carol Beckett, 200, 226, cbeckett; Advertising artists – Mike Bush & Monica Ford; Advertising Proofreader coordinator – Jacque McGinness

Circulation & billing manager – LaVera Spire, 220, lspire

Special Services Department – Coordinator – Sharon Mayes, 221, smayes; Assistants – Vickie Whitsell & Julie Martinez; Artists – Susan Bomar & Leann Schleicher; Proofreader – Melinda Cordell

Web Services Department – Manager – Ethan Tierney
Coordinators – Doneta Brown, 232, dbrown; & Karri Mildenerger, 289, kmildenerger; Developers – Andy Blumer & Derek Richey

The Angus Report, I Am Angus, Communications & Public Relations – Crystal Albers, 134, calbers; Jena McRell, 193, jmcrell; Lea Ann Maudlin, 155, lmaudlin; Amber Wahlgren, 159, awahlgren; Donald Korthanke, 114, dkorthanke; Josh Comminellis, 113, jcomminellis

Creative Media – Becky Weishaar, 219, bweishaar

Photo Department – Photo services coordinator – Kathrin Gresham; Photo services assistant – Erin Sherwood

Network systems coordinator – Bruce Buntin

Angus Productions Inc. Board of Directors

Chairman – Charlie Boyd
Vice chairman – Allen Moczygamba
President – Eric Grant
Secretary/Treasurer – Richard E. Wilson
Directors – James Coffey; Jerry Connealy; Chuck Grove; John Grimes; James Henderson and Kevin Yon

To submit a change of address or to unsubscribe, please email your request to lspire@angus.media or call 816-383-5200. Please include the number above the address on the mailing label along with the name and address of the current subscription.

Grazing Management Improves Profitability *(from page 2)*

to owning haying equipment. It may be possible to reduce costs by leasing equipment or hiring a custom harvester.

Producers may be able to reduce feed costs by purchasing hay. In environments where forage is grown without irrigation, buying hay is often the less-expensive option. Gerrish says many producers find that hard to believe, but they usually are the same people who do not calculate their own true costs of production. They may discount their own labor and often fail to account for equipment depreciation. In Gerrish's experience, producers with relatively small operations, but a full line of haying equipment, often have true hay production costs that exceed \$200 per ton.

Gerrish calls it more important to quit making hay than to quit feeding it. Buying and feeding hay can provide a benefit that many producers do not consider. They tend to forget that 90% of what goes in the front end of a cow comes out the back end and is added to the soil.

"When you buy someone else's hay, you're also buying their fertility. In some parts of the U.S., hay sells for less than the soil nutrient value it contains. So as long as you feed it in a manner that allows good nutrient distribution, purchased hay can become an effective fertilization strategy," explains Gerrish.

Besides the nitrogen and other minerals contained in hay — perhaps \$80-\$85 worth in a ton of typical grass-clover hay — a significant quantity of organic matter is imported with purchased hay. Gerrish says a ton of hay with 60% digestibility returns nearly 800 pounds (lb.) of organic matter to the land where it is fed.

Gerrish's preference is to eliminate hay production altogether, purchase the minimum amount of hay necessary and let cattle harvest their own winter feed by grazing. Every day a cow can graze rather than eat harvested feed represents money saved. Gerrish says there often is a dollar-a-day difference between the cost of grazing a cow and the cost of feeding her hay. Plus, using land for pasture that otherwise would be in hay production may actually result in more efficient production plus cost savings that lead to improved profitability.

Managing grazing

Improved grazing practices also contribute to profitability, but Gerrish says grazing management is really about the management of solar energy, water and soil nutrients. He contends that much of the pasture and rangeland in the United States is yielding only one-third to one-half of its forage production potential. He advocates management-intensive grazing as a means of manipulating grazing animals, plants and soils to enhance the capture of solar energy and rejuvenate water and mineral cycles.

This, says Gerrish, can largely be accomplished by controlling the amount of time that grazing animals have access to any one grazing area. Utilizing a system of paddocks, customized to each ranch or grass farm, animals are moved from

paddock to paddock in a planned rotation. The objective is to allow for a short grazing period in each paddock, followed by a long period of rest. In Gerrish's opinion, the greatest failing of range and pasture management over the last century has been allowing livestock to remain too long in the same grazing area.

"Almost every negative aspect of failed pasture and range comes from the failure to manage time," Gerrish adds, emphasizing the importance of allowing sufficient time for grazingland to rest and recover. "Leaving plenty of postgrazing residue and moving livestock off pastures quickly will help develop the solar panel, a more effective water cycle and accelerated mineral cycling."

The long-term result is healthier soils and healthier, more resilient and diverse plant communities. Managed wisely, grazinglands then yield more total pounds of forage per acre. Gerrish says that translates to more animal grazing days, meaning the grazing season might be extended for an existing herd, or more animals could be grazed during a shorter defined season. Healthy grazinglands also support improved animal performance, so the combined result is production of more total pounds of beef per acre.

"More pounds per acre are produced at a lower cost per pound if the increase comes from management instead of expensive inputs," states Gerrish.

Application of fertilizer is a widely used practice for improving pastures, but Gerrish finds it harder and harder to advocate conventional fertilization programs. The cost of commercial fertilizer is just too high. He advises producers to look hard at alternatives, such as the aforementioned importation of nutrients through purchased hay. Then feed the hay where it will do the most good, resulting in incorporation of manure and any "wasted" hay into the soil. Pasture reseeding can be justified in

some situations, but probably only once in a producer's lifetime. If a reseeded pasture doesn't last, Gerrish believes its management should be scrutinized. To improve pasture and range, he favors applying a higher level of grazing management, which may require investment in permanent or temporary fence, and stock water-site development to allow for more frequent rotation of grazing animals.

"Frequent rotation is really all about building better soil and pasture," Gerrish emphasizes.

"So why do some producers feed so much hay? I submit that they feed hay to the extent that they can make it. It's what they do. It's tradition."

— *Jim Gerrish*

Manage cow size

If cow-calf producers are striving for improved profitability by better managing grazinglands to produce more pounds of beef per acre, Gerrish believes they must also consider the type of cattle they have. Biological type is more important than breed. Adaptability to the production environment is a must and, in Gerrish's

opinion, size does matter. He says the notion that as much or more beef can be produced with fewer larger cows cannot be supported by the bottom lines of grass farming and ranching operations.

"Do bigger cows really produce bigger calves at weaning? Sometimes, yes. However, evidence shows that when mature cow size is increased by 500 pounds, we can increase calf (adjusted 205-day) weaning weight by 102 pounds. This is not very efficient," states Gerrish. "As cow size gets bigger, it becomes increasingly difficult for her to wean 50% of her own body weight."

Gerrish says MU animal scientist Ron Morrow concluded in the mid-1990s, on the basis of 15 years of data collected at the FSRC, that inefficiency becomes increasingly apparent among cows with mature weights in excess of 1,200 lb. Gerrish also cites more recent modeling work by South Dakota State University's Eric Mousel showing that the efficiency of feed fed to production was greater with smaller cows.

"The South Dakota work not only looked at the weaning-weight ratios, but looked at the net return to a fixed land

resource for cows of various sizes," adds Gerrish. "The most profitable cows were those in the 1,000- to 1,100-pound range, and those in the 1,400- to 1,500-plus-pound range were least profitable."

Gerrish isn't saying that everyone would be better off managing 1,000-lb. cows, but he believes there is no advantage to cows weighing more than 1,200 lb. Bigger cows have higher maintenance requirements and must eat more than smaller cows. According to Gerrish, for every 100 lb. of additional body weight, a cow must consume 500 lb. of additional forage per year to meet her maintenance requirement. Particularly in a challenging environment with a restricted feed supply, the cost can be dear in more ways than one. Higher maintenance requirements may result in lower reproductive efficiency, as well as higher feed cost per cow.

Gerrish advises producers to consider that while big cows may produce larger calves, are they also likely to produce fewer calves? Are big cows apt to be culled from the herd sooner? Does higher average calf weaning weight offset higher resource requirements and loss of fertility? Do big cows allow the producer to make efficient use of grazingland?

Gerrish maintains that a good manager can run a greater number of smaller or truly moderate-size cows on any given resource and generate more pounds of beef per acre, compared to fewer large cows. He urges producers to consider the pounds of forage that are required to produce each pound of calf produced. He calls that a pretty important concept to cow-calf producers seeking to improve profitability.

A series of presentations by Jim Gerrish was part of the Amazing Grazing project educational meetings — a collaboration of the Kansas Farmers Union and the Kansas Graziers Association. Funding for this project was provided by the North Central Extension Risk Management Education Center and USDA National Institute of Food and Agriculture, under Award Number 2012-49200-20032.

Editor's Note: Troy Smith is a cattleman and freelance writer from Sargent, Neb. This story was written as part of a series on pasture management for the April 2016 Angus Journal. To subscribe, go to www.angusonline.org/Journal/JmSubscr.aspx.



According to Gerrish, for every 100 lb. of additional body weight, a cow must consume 500 lb. of additional forage per year to meet her maintenance requirement. The cost can be dear in more ways than one.