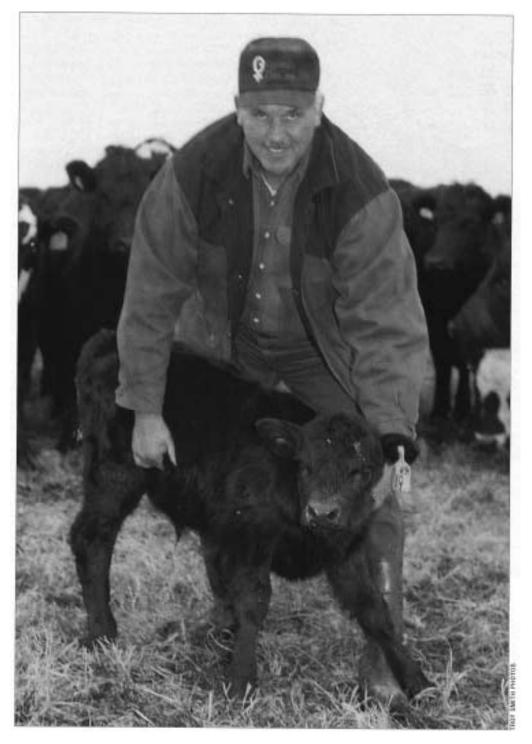


Kansas cattleman and BIF President Gary Johnson strives for efficiency and added value to make cows pay on an increasingly more expensive land base.

BY TROY SMITH



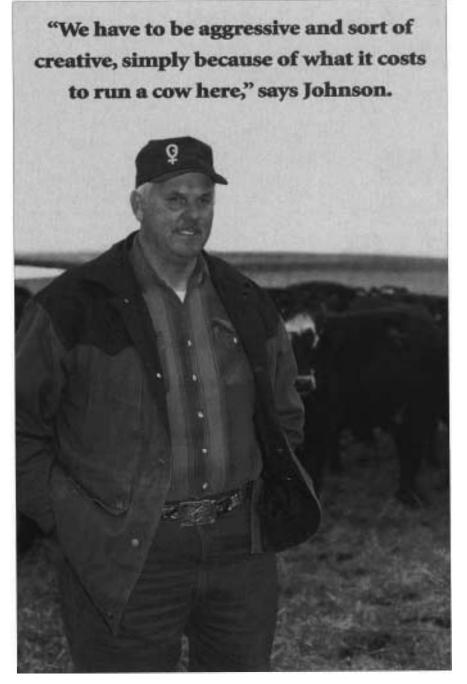
ary Johnson is concerned about the future of the cow-calf business in central Kansas. With headquarters near the littletown of Dwight, Johnson and his family ranch along the northern edge of theFlint Hills. Grasslands dominate the heart of the Hills, but here along the fringe is a mix of range and cropland. Many of Johnson's neighbors emphasize the cultivation of crops, like sorghum and wheat, while running cattle on the side. Johnson farms, too, but he is a cowman first. He's a cowman whose concern for the future fuels an aggressive approach to his business,

"We have to be aggressive and sort of creative, simply because of what it costs to run a cow here," says Johnson. "I figure it costs us about \$400 a year to keep a cow. In the last few years, calf prices sure wouldn't pay the bill. So the challenges are to seek greater efficiencies, but also to focus more on the product— finding ways to add value to what we have to sell."

Johnson believes he has accomplished both through herd improvement based on careful genetic selection. That started many years ago when he and his wife, Jody, bought Angus bulls to use on their small Hereford cow herd. Heavier weaning weights were an immediate result, but just as pleasing were the superior replacement heifers that went back into the herd. Angus remained the breed of choice for building a herd of fertile, easy-fleshing females of moderate frame.

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## Up to the CHALLENGE cont.



## GettingThere

It didn't happen fast, but Johnson credits the use of artificial insemination (AI) for hurrying the process considerably. Use of proven AI sires provided a strong genetic foundation.

"When EPDs (expected progeny differences) came along, they provided a

valuable tool for sire selection," Johnson adds. "They helped us identify sires with the performance and maternal traits we wanted to emphasize. And now we use EPDs to select for carcass traits, too."

To increase the predictability of his cattle, Johnson began stacking preferred bloodlines through the use of half and three-quarter brothers. More recently, application of embryo transplant technology has enabled Johnson to raise and use full brothers through AI and natural service.

"Using AI has helped make us better managers. To get heifers developed and ready to synchronize and AI, you have to pay attention to nutrition. Now I think we do a better job of meeting the nutritional needs for all of our cattle," says Johnson. "The heifers calve within a 45-day period and, since we AI part of our cows, we tightened the cows down to 60 days. The shorter calving season helps add uniformity to the calf crop, too."

Planned matings through AI mean approximately two-thirds of the calf crop will be sire-identified. By retaining ownership of the steers, Johnson knows how the cattle perform in the feedyard and how they hang on the rail. Individual carcass data is collected and used to influence genetic selection.

"The purpose for collecting that information is to find out if we are producing a product that suits the industry and the consumer," Johnson explains. "We've learned that the cattle feed well, and 90 percent or more will make the Choice grade. A side effect of carcass data collection was the discovery that we owned one of the Angus breed's top carcass bulls."

Johnson purchased Finks 5522-6148 as a weanling calf from Galen and Lori Fink, Manhattan, Kan. Performance information on his calves eventually ranked the bull in the top 10% of the breed for weaning weight and the top 5% for yearling weight. His fed calves' carcass data earned the bull a spot in the top 2% for marbling.

#### **Custom-built replacements**

Performance and carcass merit certainly represent value in a set of cattle, but maternal qualities are essential to the sustainability of a cow outfit. Consequently, Johnson has applied heavy selection pressure to the female side of the equation. The results take form as heifers that are sought after. So, beyond Johnson's own needs, he markets replacement-quality heifers, both privately and at auction. Continued demand for quality females also led Johnson to partner in a company that specializes in custom-built replacement females.

Co-owned with Galen and Lori Fink,

Genetics Plus serves both purebred and commercial clients by supplying bred heifers to meet buyers' specifications Clients indicate their preferences for mature weight, calving season dates and service sires. Genetics Plus then procures the heifers and has them professionally developed and bred according to the predetermined plan. Clients also may have the option of selling their heifers' calves to Genetics Plus. Even steers and nonreplacement heifer calves may be marketed through the company's cattle-feeder contacts.

### Adding value

But the Johnson operation's diversity extends beyond the marketing of finished steers and replacement heifer enterprises. To take advantage of as many marketing opportunities as possible, Johnson likes to have value-added animals for sale whenever there is demand.

"We've tried to grow as we went along and especially since our oldest son, Chad, and his wife joined the operation," explains Johnson. "He and I will calve out about 1,000 females this year, and we don't even have enough grass for that many. There usually are some people interested in buying pairs before grass time, so we'll fix them up with packages that suit their needs."

Johnson also backgrounds purchased cattle during the winter. He calls it "upgrading" because while the nearly 1,500 calves he buys each fall are of decent quality, they are out of condition. They might have been left on their mothers too long into the fall or otherwise mismanaged, leaving them thin and relatively inexpensive to buy. By sorting the cattle into pens of similar types, Johnson grows them into 800- to 900pound feeder cattle to be marketed in truck-load lots. Again, it's an added-value process.

The diversity of Johnson's resources make varied enterprises possible. Most of the 1,700 cultivated acres produce feed crops such as milo, sorghum silage and a variety of forages, including alfalfa, oat hay plus brome and native hay. Johnson constantly looks for ways to make every piece of ground more productive. Lots used in the winter aren't left to grow weeds in the summer. Instead they are seeded to Sudan grass and grazed by bulls after the bulls are pulled from breeding pastures.

# At the helm of beef improvement

Gary Johnson's quest for predictability and consistency through genetic selection, along with his innovative production and marketing practices

earned recognition as the Boef Improvement Federation's (BIF) Commercial Producer of the Year for 1988. Chosen as the organization's president last May, Johnson has strived to make BIF more producer-friendly.

"We're neally getting there. BIF has changed from what used to be primarily a group of university animal scientists to an organization that includes more beef cattle producers," says Johnson. "I hope that trend continues and more producers challenge thinking based on tradition and emotion. What you already know today is fine, but what we're learning today and tomorrow is more important. BiF offers some good opportunities for learning."

BIF's annual meeting and research symposium will be held June 30-July 3 in Calgary, Alberta, Canada. For an overview of meeting activities, see page 42.

#### Grass competition

Johnson's war on production costs gets complicated when considering the local grass situation, however. With up to 32 inches of annual precipitation, grass usually is plentiful and packed with plenty of punch. The mix of cool- and warm-season species offers an extended grazing season of six months, with seven acres required for a cow-calf pair.

But the Flint Hills have long been popular for grazing yearlings. During recent years, cattle feeders have been renting or buying grass and then double-stocking with yearlings for half of the traditional season. The cattle are pulled from pasture by the end of July and sent on into the feedyard.

It works well for them, admits Johnson. "Some phenomenal gains were reported last year — up to 300 pounds after just 90 days on grass. But the demand for pasture has driven rent up to \$30 per acre, and just about any parcel of grass would sell for at least \$500 an acre. That doesn't pencil out too good for a cowman."

But Gary Johnson runs a pencil pretty well. He is applying some simple pasture

rotation techniques that have increased carrying capacity by about 15%. He's hoping some grass landlords will look kindly upon more intensive rotational systems. Most remain skeptical but will allow double-stocking for a half season.

"We still need to make better use of our resources, and I'm going to try doublestocking some pairs for about 100 days, from May 1 to August1," says Johnson. "Then we'll go to a drylot until we get the calves eating some feed. The cows could be pulled out and put on wheat stubble seeded to Sudan grass. Then I think we could send the dry cows back to the same pasture again later to graze the mature growth.

"I'd also like to try something new with about 150 fall-calving cows to take advantage of the late cool-season grass during and after calving. That might involve a drylot period in the summer — maybe feeding some ammoniated wheat straw. It looks like it could work efficiently but some other producers tell me it can't work. The challenge is set, so I may have to try"

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