

## Pinpointing Efficiency as well as Quality

Early adoption and application of technology leads to a lifetime achievement in beef production.

Story & photos by Steve Suther

Angus genetics must compete to win on all fronts, says Duane Warden, Council Bluffs, Iowa. In the big picture, beef competes with other proteins for efficient and profitable production, as well as for its ability to please consumers. "Striking that balance is not an easy task, but we're getting there with technology and selection," he says.

Warden — some call him "Doc" because of his 35 years as an obstetrician — grew up in northern Missouri and had the champion steer at a Kansas City FFA show in 1939. The

call to medicine took him away from cattle until he bought a few Angus heifers in 1964 to keep at the Missouri farm. It didn't work well.

"I wanted to measure everything — birth, weaning and yearling weights," Warden recalls. "It was part of my inquisitive nature, being in medicine and always looking at new ideas, asking questions about things. My dad wasn't interested in any of that."

Warden tried to oversee management and pulled a balance-beam scale 125 miles (mi.) to the farm at weaning time. In fall 1967 his

plan for bull development was derailed when he discovered that a calf with a 700-pound (lb.) weaning weight had been made a steer. "That's when I decided to get some land up here and take a more active role. I bought a little farm up here (Council Bluffs) in '68, and from then on I did everything on my calves."

There was little to measure then except pounds, but there was competition. The Iowa Beef Improvement Association (IBIA) bull tests were the proving grounds. A Warden Angus bull came out on top in the bull test at Creston, Iowa, in 1972, catching the eye and winning bid of Curtiss Breeding Service, a leading bull stud. Warden followed that triumph with a top sire group at the Dunlap, Iowa, bull test in 1974. Then he started to use artificial insemination (AI) and to think about everything else his customers would need to succeed.

Some of the IBIA tests were starting feed efficiency evaluations. In Ohio, the Certified Angus Beef (CAB) Program had begun its mission. Warden's inquisitive nature was piqued. Could a bull grow fast and efficiently — and transmit that to offspring along with marbling? It took 20 more years to prove the possibilities.

"I got a Pinpointer feeder in 1982 and started my own bull test for efficiency," Warden says. He would add a second unit in 2000 to double the test capacity to 30 head annually. "There were a few other seedstock producers looking at feed efficiency at the time, but commercial producers didn't pay much attention." That would have to wait 20 years, too.

## Producing quality cattle

He began collecting carcass data in the late 1980s, again at the forefront of the movement. "It was frustrating, especially the time a test herd owner sold the calves to a guy who pulled out all of our ear tags. I still believe in carcass data, but I was glad to give ultrasound a try." As a doctor, he knew before it was used on cattle what that technology could do.

The market was not yet paying much of a premium for quality but, Warden says, "About the time we started with ultrasound, we began to include adequate marbling in the goal. You had to know marbling was important. If you went to a CAB steak house, you knew it was."

When he retired from medicine in 1990, Warden expanded the Angus herd and was free to pursue his longtime cattle goals. Ultrasound helped show the way, but many of the AI sires did not yet have expected progeny differences (EPDs) or ultrasound data for carcass traits, so there was some guesswork.

To track the results, starting in 1997, he has entered 50 to 100 steers annually in the local Tri-County Steer Carcass Futurity (TCSCF), an educational project that is feeding 8,000 steers this year. Results helped him find a flaw in sire selection. When the number of Select carcasses jumped up one year, most of them traced to one bull. "Unfortunately, we had used him for four years before we knew," Warden says.

The registered Angus herd of more than 300 cows involves three cooperating partners. Perry Beedle, Oakland, Iowa, keeps 25 head and improves them using AI, as does Keith Kinne, Eagleville, Mo., with 40 head. Doyle Richards, Tingley, Iowa, runs 190 of Warden's registered cows along with his own large commercial herd. There and at the operation's headquarters, Wardens Farm, only the highly proven, homegrown herd sires are used now. Calves from Beedle and Kinne continue to provide the outside genetics for comparison.

## **Predictability in genetics**

Warden's steers could go to any of eight TCSCF feedlots, but they have usually been fed at nearby Silver Creek Feeders Inc., a CAB partner feedlot run by Roger Chambers.

"We like the predictability of Doc's cattle," Chambers says. "Disposition's never a problem, and they do what they're supposed to do." The feed efficiency ratio for all 5,000 cattle Chambers feeds in a year varies from mostly 6.5 lb. to 6 lb. of feed per pound of gain, to a few "high 5s." Of

the Warden cattle, Chambers says, "Feed conversions are good, some of the most efficient ones we feed here."

That's not surprising if you consider the genetics. Acting on data from his Pinpointer tests, Warden had been able to include feed efficiency in his selection for 19 years. And when he started feeding steers in the TCSCF, he also began sending bulls to the Circle A Alliance test for profit ratios based on feed efficiency.

"I figured the bottom line is making money, and that's what they're trying to evaluate at Circle A," Warden says. "I always like to get my cattle in with other people's to see how they balance out, compare — good, bad or indifferent. I

give them half interest in a bull, and they do all the evaluation."

The first year (2000, results known in 2002), a Wardens Farm bull ranked fifth overall out of 21 in the Circle A test, Warden says. "And he did it with balance, ranging from third to 12th in the six factors they evaluate. This year we will have data on a son of that bull, which is the sire of the most feed efficient bull we have ever produced."

That would be 4 Point 8 of Ironwood, who graduated from Warden's test last year with the combination of 4.59 lb. average daily gain and a feed:gain ratio of 4.82:1. Perhaps no other bull has a pedigree so "stacked" for a single trait, without sacrificing balance. His sire and both grandsires were also first in the Warden feed efficiency test, and no ancestor in four generations has indexed lower than 110 in the test.

"This is what I've been doing," Warden says, with a satisfied grin. Continuous evaluation on several fronts indicates a CAB acceptance rate of 36% to 49% from 1997 through 2002, and above average tenderness scores in three years of the Iowa Beef Tenderness & Carcass Evaluation Project.

"Where another seedstock producer might worry that the results would be detrimental," Chambers says, "Duane is not afraid to find things out." Along the way, he also discovered leanness can coexist with quality. Nearly half of Warden's 2002-harvested steers made yield grades (YG) 1 and 2, Chambers says.

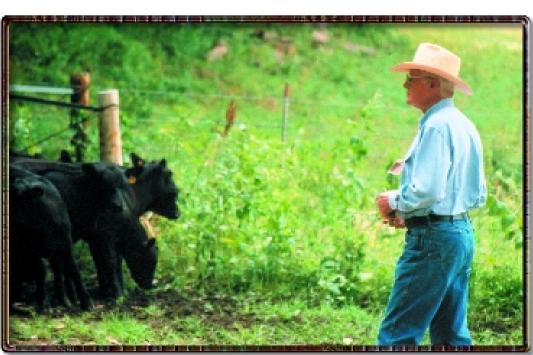
How will these genetics work in the broader industry? That is largely unknown, Warden admits. "I'm sure you dilute feed efficiency in commercial herds, but it is moderately heritable, and just a little improvement is going to help. The problem is, you can't measure it very easily, and there is no direct premium. Certainly most of the fellows who don't finish their calves don't care about feed efficiency."

The commercial cattle industry may finally be poised to take advantage of postweaning feed efficiency in an era of increasing information flow. Although few Warden customers have retained ownership, he hopes they will start to discover what they have by joining in the TCSCF.

"Commercial customers may be able to accomplish some great things with the combination of those sires and progeny data through retained ownership," Chambers says. Weight per day of age (WDA) figures can help producers track progeny and cull from the bottom of their cow herds, making significant progress possible in a few years without giving up carcass quality.

"The whole object of the cattle business is to produce a desirable product for the consumer, but the fellow who does this needs to make a living," Warden says. "To be able to make a living, he has to produce something that the consumer wants and will pay for. Either way you look at it, I've been trying to make that a little easier to do."





▶ Duane Warden believes in evaluating his cattle for many traits. This has allowed his program to produce a *Certified Angus Beef* ® acceptance rate of 36% to 49% from 1997 through 2002.