

# Know Thy Bovine

Commercial Angus producers adopt individual-identification systems for practical herd management.

by Jerilyn Johnson

**S**teve Irsik envisions the day of \$100/head extra profit on his fed cattle. Jeff Ryan has his sights set on producing 100% Choice cattle, with 50% or better qualifying for the *Certified Angus Beef*<sup>®</sup> (CAB<sup>®</sup>) brand or other Angus branded beef programs.

Individual animal identification (ID) and new technologies are empowering these producers to set such lofty goals. The good news is the benefits of individual ID are real, and they're attainable for all producers.

"Individual ID management gets easier, and I become more comfortable with it every year," Irsik says. "To receive added benefits, I have to know what's going on in the herd and cull poor performers. Those animals left in the herd are then easier to sort."



PHOTOS COURTESY OF IRSIK FAMILY PARTNERSHIP

►To produce consistent-quality cattle for the U.S. Premium Beef (USPB) alliance, Irsik Family Partnership began using individual ID and recordkeeping for their 1,400-head Angus-based commercial cow herd.



►Thanks to individual identification (ID), producers such as Steve Irsik and Jeff Ryan are learning more every day about the kind of cattle they produce. They can monitor their cattle for nutritional needs, performance and disease control better. ID gives them the upper hand on source verification, beef quality assurance (BQA) and value-based marketing.

At Irsik Family Partnership, near Ingalls, Kan., Irsik and his ranch manager, Jim Reimer, have set a goal to earn a \$100/head premium above live market on their finished cattle. In 1999 they realized a \$45/head premium; in 2000 that increased to \$64/head. When Irsik uses individual ID, he can identify top performers and those that don't perform or meet their quality criteria.

Ryan, a farmer-feeder from Cresco, Iowa, knows exactly how each of his finished steers perform on the rail and can make better-informed breeding decisions for his 125 head of commercial Angus cows.

After identifying and analyzing his herd's genetics and potential, Ryan decided on a target market — Choice or better beef for the restaurant trade — and began making improvements. In 1996, 62% of Ryan's fed cattle graded Choice. Last year's calves were 96% Choice, with 45% qualifying for the CAB or Sterling Silver branded beef programs.

## Knowledge is power

ID systems can be simple to high-tech. Most purebred breeders use a system of tagging, tattooing and recording individual cow information in notebooks and computers. The U.S. beef industry is moving toward more speed and accuracy with electronic ear tags, bar-code tags and scanners.

"You have to acquire information and then learn from what is collected for an ID system to be worthwhile," Ryan says. "Data stored in a computer or written down in a pocket notebook is absolutely worthless if it

is never retrieved and applied to decision making."

Many credit the Texas A&M University Ranch-to-Rail program for the individual animal ID revolution. It revealed a wide disparity in profit or loss per animal. The findings highlighted that an unhealthy beef animal takes \$100 from your pocket and started the industry thinking about recording individual data and tracking feedlot and carcass performance.

Recently, consumer hunger for branded beef products has become a powerful driver. Branded beef programs and alliances today need to supply enough of the right kind of animals to meet quality specifications and orders from their customers.

To produce consistent-quality cattle for the U.S. Premium Beef (USPB) alliance, Irsik began using individual ID and recordkeeping for their 1,400-head Angus-based commercial cow herd. Each cow has a visual ID tag number kept in a record book and on computer. At this time, only steer calves headed for the Irsik & Doll Feedyard and USPB are given an electronic identification (EID) tag. Eventually, Irsik would like to use EID on all calves.

## Priorities

"Recording weaning weight, calving percentage and percent bred cows are givens. You have to do that," Irsik says. "But in today's beef business, we have to do all those things right, plus generate extra value and premiums. Individual ID is the right tool for the job."

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## Stand behind the product

Individual ID provides a new measure of accountability. In a consumer-focused production system, producers will have to accept the full responsibility of raising and marketing healthy, high-quality beef animals.

"We have a consuming public that has increased demands," says Gary Wilson, an Angus breeder at Green Valley Angus, New Concord, Ohio. "They want further assurance of quality and safety of food products. And, for the most part, they're willing to pay more for it. However, to reap the rewards of the quality-conscious consumer, producers will have to be accountable and take full responsibility for the role they play in assuring the quality and safety of the beef products their cattle produce.

"USDA's Animal and Plant Health Inspection Service (APHIS) and international trade partners are telling us we need to establish a mandatory ID system so we can trace all cattle. But just because you put an ear tag on an animal doesn't make it healthier or the beef safer," warns Wilson, who chairs the National Cattlemen's Beef Association (NCBA) Cattle Health & Well-Being Committee. "You need a protocol in place, such as the beef quality assurance (BQA) management steps, to guarantee that safe, wholesome beef product. We also need to support USDA in its effort to develop an animal disease surveillance system in this country. Disease surveillance and quality management systems will help us meet consumers' demands."

Individual ID and state programs, such as the Ohio Beef Network, Iowa Quality Beef (IQB), the Montana Beef Network and others, simply empower producers to practice total quality management (TQM), Wilson adds.

"Quality beef incorporates everything — from cow-calf production to feedlot performance to a harvested calf at 14 to 15 months of age," Steve Irsik, Irsik Family Partnership, Ingalls, Kan., says. "It's not just producing a high-choice or Certified Angus Beef® (CAB®) product. It's the right genetics. It's management, proper injection sites, health care and handling. Ultimately, it's taking full responsibility for your cattle and end product."

Thanks to individual ID, producers such as Irsik and Ryan are learning more every day about the kind of cattle they produce. They can monitor their cattle for nutritional needs, performance and disease control better. ID gives them the upper hand on source verification, beef quality assurance (BQA) and value-based marketing.

"Our goal as producers should be to first determine what it is we have," Ryan says. "That means gathering information on our product and reviewing it. Once we've done that, we can determine where we can merchandise that product for an optimum return.

"That means knowing what our end product needs to be from a quantitative and



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► "When you tell producers that you'll put a tag in the ear for ID purposes, most of them assume that at least 10% of them will fall out, just like they do with visual ID tags," Jeff Ryan, Cresco, Iowa, says, adding that loss rates for his herd have been less than 2%. "The difference is that EID tags don't need to be seen by the animals' owner. They can be placed closer to the base of the ear where they'll be less likely to fall off or be yanked off at the bunk or at the bale feeder."

qualitative standpoint to meet the demands of our market. If we aren't meeting those demands, we need to either change our product or find out if what we currently have would better fit a different market."

Ryan's dairy background and training prompted him to be performance- and records-oriented in his beef operation.

"With dairy cows, the producer gets a report card on individual performance and management at least twice a day," he says. "That makes the producer very aware of small changes in management and genetics and what they can do for performance. We simply couldn't see how a person could do without individual ID.

"When our beef operation began in 1969," he continues, "individual ID was there at the start. The purchase of a scale for animal weights in the early 1980s made the performance measurements and results that much more easy to observe and record." About five years ago, he turned to EID (see "Going electronic," page 81).

Ryan Farms Inc. is now a licensed Certified Angus Beef LLC (CAB) partner feedlot. Ryan is cooperating in the CAB DNA heritability study.

His cow herd also is used as a progeny-test herd for two artificial insemination (AI) companies. He randomly mates his cows to bulls from these companies and feeds the resulting calves to harvest. The carcass data gathered from those calves serves to help the AI companies and the breed organizations improve their databases for carcass information. Individual bulls' carcass expected progeny differences (EPDs) are built on data like that gathered from Ryan's calves.



When it comes to putting a value on data, Ryan believes the best question you can ask is, "Where would I be right now without the data I've gathered?" His answer is, "I'd probably be a rudderless ship adrift in the sea of other producers who don't know a great deal about the product they turn out each year. That makes the cost of data collection look pretty cheap."

The cost of an EID tag and data collection services averages \$6-\$8/head. Iowa Quality Beef (IQB) clients invest \$5/head.

"The beauty of the Iowa Quality Beef program is that it enables me to collect as little or as much information as I'd like," Ryan adds. "I can do the absolute basics, like group carcass data at harvest. Or I can be extremely detailed and record birth date, sire, dam, birth weight, hair color, temperament, weaning weights, feedlot performance, frame size, implant use, vaccinations — you name it."

### Technology challenges

With ID technology comes challenges. New, fast-changing technology may make your head spin, but industry adoption of standards is painfully slow.

"Before producers can make progress and have seamless information flow and source verification, the beef industry needs to decide on standards and how the data will be managed," says Dale Blasi, beef scientist at Kansas State University. "We're also in need of some hard-core data beyond preconditioned calf stage to discover the true value of individual ID — aside from relevant food safety issues."

There's a need for better computer sorting and analysis to help producers identify the most profitable and least profitable cattle.

"The main holdup at our feedyard is the ID system software," Irsik says. "There are too many pieces and none are compatible. We need software people to develop this and make it more user-friendly. The ID system — electronic or bar code — seems to be in a Model A stage."

When it's time to wean, weigh and EID-tag calves, Irsik would like to be able to unload that data to his database automatically. But his chuteside scanner software and herd database can't talk to each other. The software won't let him download it. He'd also like to record pelvic area measurement on heifers and do ultrasound measurement for ribeye and backfat on his cattle, but the software can't handle or

## Going electronic

Five years ago, a demonstration at the Iowa Cattlemen's Association (ICA) convention trade show piqued Jeff Ryan's interest in electronic identification (EID). "I saw the technology that was available and the potential for its use and knew that was the path I needed to follow," says the Cresco, Iowa, farmer-feeder. "I talked with company representatives at the show and did some more homework on my own before adopting the practice."

He began using EID tags on his 1999 crop of feedlot calves. Replacement females also have been tagged from the 1998 crop on. At this point, the remaining mature cows have not been EID tagged, but that may change in the future.

Ryan is now one of 274 participants in the Iowa Quality Beef (IQB) program. The ICA created the program to help producers raise more-uniform, higher-quality beef. It's designed to meet specific consumer demands using information, technology, genetics and new forms of business alliances. Because information is the core, IQB supports the use of an EID tag system.

It makes it possible to get carcass data collected on calves at a competitive price. Without the EID tags, Ryan would have to line up his own data collectors at the packing plant and get the information sent back. IQB offers a relatively simple, organized procedure to collect the data and to generate data reports back to clients that can be incorporated into their own database for analysis.

To use the EID system effectively, you need EID tags, a reader, a computer and a software program. The EID tag features a tiny computer chip embedded in copper wire within a button-shaped ear tag. A scanner that communicates with a computer reads the chip, which can contain the animal's ID number, owner and history. You can put EID tags on a calf anytime from birth to the day it gets on the truck to go to the packing plant.

Through an Iowa Department of Economic Development cost-share program, Ryan purchased an EID reader and a software program to gather information on his own. Yet another option allows him to buy the EID tags already activated. IQB sends a tag that already has been scanned and entered into its database. It comes with a bar-code label corresponding to each tag.

The producer enters the information about each animal when the tag is put on and records it on a sheet provided by IQB. The information sheet is sent back to the office, where the information will be transferred to the database. This program allows participants to use the technology without having to be adept at computers. That can be a major drawback for producers who aren't quite ready to make the step to EID use.

Ryan bought the Cow Sense herd management software program earlier this year. "The EID tags are easily incorporated into the Cow Sense program to enable me to see a cow's progeny product characteristics over time," he explains. "It's not so much about picking out individual details as it is about seeing trends within the herd or within different sire groups."

Starting out with a new software program can be tedious, Ryan admits. "I never had time last winter to enter all of my historical data. If you have several years' worth of records, it's usually easiest to start recording the oldest data first. Then, the need to re-enter data in later years is minimized."

When recording information on his cows and calves chuteside, Ryan uses a large card, about 7 inches (in.) wide by 20 in. long. It has small chips in it that will be read by the reader. Each card has an area about 2.5 in. deep for each chip. The user can designate each chip to a certain information item — such as hair color, sex, attitude, implant type or vaccine. By passing the reader over the chip on the card, the user can vary the treatment or record different information unique to each animal.

Calving data is recorded in a pocket-sized notebook, then transferred to both computer records and another permanent hard-copy book.

"I'm considering the use of a Palm Pilot, but I already have a cell phone and an insulin pump, so I'm running out of room to put all this high-tech equipment on my person," he jokes.

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transmit it to his main database.

Yet another challenge is producer acceptance. Ryan was part of a production sale with two local purebred breeders this past spring. His role in the sale was to provide bred commercial females from a herd with a history of carcass data and production information.

“Unfortunately, the data on my females meant very little to any of the buyers,” Ryan says. “What sold the best was still ‘type.’ There are still an alarming number of producers who sell on a non-merit-based system. Or maybe it’s the stage of the cattle cycle we’re in that didn’t boost the data premium.”

Still to be determined is whether individual ID can be applied and accepted



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by commercial beef operations. It can be a challenge for large ranches or producers with multiple enterprises on their farms and limited time to get calves identified and matched to cows. The theory, when written

on a piece of paper, is easy to grasp. But applying it to different beef cattle operations around the country is a tougher task.

