



Edna Harrell continues to oversee the day-to-day operations at Harrell Hereford Ranch along with her son Bob Harrell Jr., who now manages the ranch, and his wife, Becky. Edna's granddaughter Lexie represents the third generation involved with the ranch.



PHOTOS BY BETH HARRELL MACKENZIE AND BECKY HARRELL



# Performance Focused

*Harrell Hereford Ranch was honored with the 2009 BIF Seedstock Producer of the Year award.*

*by Angie Stump Denton*

**E**nrolled in performance testing since its inception, Harrell Hereford Ranch has set a goal for more than 39 years to produce performance cattle that work under a variety of management systems and branded beef programs.

Harrell Hereford Ranch was honored with the 2009 Beef Improvement Federation (BIF) Seedstock Producer of the Year

award during the 2009 BIF Annual Meeting and Research Symposium May 2. Outstanding seedstock operations from the U.S. and Canada have been awarded this honor annually since 1972.

Harrell Hereford Ranch, located near Baker City, Ore., is a diversified family operation. It incorporates six ranches, 300 registered Hereford cows, 400 black baldie commercial cows,

an 800-head backgrounding feedlot and 45 Quarter Horse broodmares.

The ranch is managed by Bob Jr.; his wife, Becky; daughter, Lexie; and his mother, Edna, as well as sister and brother-in-law, Beth and Wannie Mackenzie, who are also partners in the Harrell-Mackenzie Quarter Horse operation.

The ranch consists of 8,000 acres of high-desert native range and 3,000 acres of irrigated tillable acres on which alfalfa and meadow hay, pasture, corn silage, earlage, and small grains are raised.

The Harrell family is involved in programs designed to improve Hereford genetics and grow market share for Hereford beef, while promoting sustainable management practices for their customers and their families.

“The Harrells have done a great job focusing on the needs of their customers — commercial producers,” says Jack Ward, AHA chief operating officer and director of breed improvement. “They have advanced with the times and have implemented tools for selection that have allowed their customers to be profitable.”

Bob says his family’s mission is to preserve sustainable agriculture now and for future generations. “With the birth of your first child, this begins to ‘hit home’ with what really defines sustainable agriculture,” he says. “We have done things over the years that have significantly affected our operation such as AI (artificial insemination), ultrasound, the use of EPDs (expected progeny differences), DNA technology and other technological advances. When you apply the term sustainability to these technologies, it brings new meaning to the word; for example, what are optimum EPDs for a sustainable future?”

“Maximizing some of these performance traits can swing the pendulum too far and cause your cattle to be out of sync with the environment or with what the industry really needs,” he adds.

Jack describes Harrell Herefords as a full-service operation. “The Harrells know the demands of

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their clients because they run a commercial herd along side their seedstock herd. Not only do they use performance tools to predict performance, but they also incorporate heterosis and see first hand its value to profitability.”

The Harrells started a commercial cow herd more than 20 years ago. “It has allowed us to see ‘first hand’ what the most economically important traits are,” Bob says. “We have experienced what it means for a cow to survive on her own, calve unassisted, bring in a live calf and rebreed every year, survive on marginal feed in tough winters and in drought-stricken summers.”

specific EPD parameters that meet Bob’s minimum and maximum standards for a broad range of economic traits. Bob prefers to use proven, high-accuracy sires with an above average Milk EPD and above average carcass EPDs, but the Harrells also test young bulls on a limited basis. They seek sires with a moderate to low birth weight and optimum yearling weights that will not yield an oversized mature cow.

When selecting and culling females, the Harrell family looks for cows that will meet Dams of Distinction program criteria – females that will be easy calvers with acceptable birth weights, will be problem-free, low-maintenance and will live a long productive life. They also consider udder scores, progeny’s average weaning ratio and calf weaning weight per cow body weight.

“We believe that our cow herd has long been our program’s strength,” Bob says. “Productive cows have always been the real warranty behind the bulls we sell.”

Harrells breed approximately 375 registered cows and heifers annually along with 400 commercial cows and heifers. The family has been using AI since starting the registered herd more than 40 years ago. Today about 70% of the calf crop is AI-sired.

The calving season is matched to the environment and the need to market yearling bulls at a desirable age and weight. The registered replacement heifers are synchronized and AI-bred to proven calving ease bulls. First-calf heifers are managed separately due to nutritional needs and are bred AI for approximately 30 days

### Efficient and functional

The foundation of the Harrell herd is Line 1 and Mark Donald genetics. The Harrell family’s focus is to develop a self-sufficient herd of efficient,

functional, low-cost producing females that are able to adapt to a wide variety of environments.

They strive to produce bulls that will sire progeny that will grade more than 70% Choice, produce 12- to 14-inch ribeyes and be a Yield Grade 2 or 3 in an efficient, short period of time. “We continue to breed and select for these optimum production standards that will balance all the economically important traits,” Bob says.

“Our sire selection philosophy is simple,” Bob explains. “We’re driven by the hard, cold economics of the commercial beef industry. Our business is raising rancher herd bulls, breeding predictable genetics that build cow herds and sire problem-free, efficient, performance cattle that produce greater carcass value.”

To be used in the Harrell program, bulls must be genetically balanced and fall within their



Harrell Hereford Ranch was named 2009 Seedstock Producers of the Year during the BIF conference. Bob Harrell Jr., his wife, Becky, and mother, Edna Harrell, are pictured receiving the award from BIF Outgoing President Tommy Brown (far left), Clanton, Ala., and *BEEF* magazine Senior Editor Burt Rutherford (far right).



Lexie helps with the baby calves.

The parameters that define the AHA’s Dams of Distinction program are critical to the Harrell family’s long-term goal of developing a self-sufficient herd of efficient, functional, low-cost producing cows that are able to adapt to a wide variety of environments. Because of this commitment, in 2008 Harrells had 18 females recognized as a Dam of Distinction (DOD), which ranked Harrells as No. 9 on the list of most DODs in the U.S.



before bulls are turned in. The cow herd is also AI-bred using no synchronization method.

The commercial cows are bred naturally. Black cows are bred to Hereford bulls and black-baldie cows are bred to black bulls. Bob reports the ranch has a 98% heat detection rate and has consistently achieved near 75% conception rates with an overall conception rate on both herds of 96%.

Each year two or three cows are selected for the Harrell embryo transfer (ET) program. "We can make great genetic progress by utilizing this tool to capitalize on the most outstanding females from the ranch," Bob says. "All ET cows must be proven performers, with multiple records that qualify them to be donors." The family uses its commercial cows as recipients.

#### Using available tools

Harrells participate in AHA's Whole Herd Total Performance Records (TPR™) program. They record calf birth weights, calving ease scores, mothering ability and udder scores, AI and natural breeding dates and sires, weaning weights, yearling weights and scrotal circumferences, % weaning weight per cow hundredweight (cwt.), each cow's average weaning and yearling ratios, pregnancy check results, and expected calving reports.

Because of their commitment to collecting data, the Harrells

**"Our sire selection philosophy is simple. We're driven by the hard, cold economics of the commercial beef industry."**



have been recognized as Gold TPR breeders since the program's inception in 2005. The family uses the Cattle Pro software program, which allows them to record data on all registered and commercial cattle. They can generate reports created to specifically meet their cattle selection criteria. Some of these reports consist of dollars returned per cow unit, weaning weights per sire group, and animals sold by buyer.

Bob says five tools that have helped him meet Harrell Hereford Ranch goals include:

- 1) **AI** — "We implemented the use of AI more than 30 years ago," Bob explains. "That decision had a profound effect on our genetics then, and it still does to this day. The use of proven sires can introduce genetic change in our herd faster and with increased predictability."
- 2) **EPDs** — "EPDs are like AI, they have been around for a while, but continue to improve

and play a significant role on a daily basis," Bob explains. "Our level of performance and predictability has increased dramatically since the inception of these management tools. In the future, we would like to see indexes developed that are custom tailored to fit our customers' needs within a specific production system and branded-beef programs. This would simplify the amount of numbers and information that is starting to overwhelm some of our customers."

- 3) **DNA markers** — "In recent years we have sent in over 1,000 DNA samples to begin building DNA profiles on every animal in the herd," Bob says. "We're using it to find both the positive strengths and weaknesses that might affect the Hereford breed's progress. We anticipate the future when DNA markers can be combined

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Harrells use Hereford bulls on black baldie cows in their commercial herd.



Today 70% of the Harrell calf crop is AI-sired. After the cows have the chance to be AI-bred for 30 days, herd bulls are turned in for clean-up.

with EPDs for specific traits that will increase the accuracy in young and unproven bulls.”

4) **Ultrasound** — “This has also become a big part of our operation,” Bob adds. “We currently scan all registered cattle and our commercial replacement heifers. We have been able to make significant progress in the area of carcass quality while not sacrificing anything in the maternal equation. Our customers have learned how to interpret the data to increase carcass premiums in several branded-beef programs.”

5) **Residual feed intake** — “While not currently using this latest technology, we are anticipating the day when this technology is standardized within the industry and/or breeds,” Bob says. “Some producers are starting to list RFI by itself without an associated output. This can lead to non-performers that will just “eat less.” This tool will be very useful when inputs are correlated to outputs based on a model that is accurate for breed, weight and biological type.”

### Marketing, service savvy

“They provide excellent customer service,” Ward says about the Harrell family. “They support their customers with educational meetings, social opportunities and an opportunity to market calves for a premium.”

The Harrells hosted their 30th annual production sale this spring.

Scheduled the first Monday in March each year, the Harrells offer registered Hereford bulls and heifers, and started 2-year-old Quarter Horse prospects.

“One of our most important short-term goals is helping customers survive the current economic downturn through increased education and knowledge using genetics, management practices and marketing alternatives such as retained ownership, as well as providing a customer-oriented marketing alliance and grid called Northwest Premium Genetic Partners (NPGP),” Bob says.

NPGP is a beef marketing alternative program with incentives paid to the customers of Thomas Angus Ranch and Harrell Hereford Ranch. This program provides participants with cash premiums and the genetic feedback required for making sound breeding decisions.

The two ranches host their sales on consecutive days, as most of their customers purchase Angus and Hereford genetics. The Thomas and Harrell families also team up with Purina, Pfizer Animal Health and other sponsors to offer cattlemen educational seminars as well as fun social activities. They also have vendors participate to display new products and encourage their customers and neighbors to attend.

Ten years ago, the Harrells became members of Country Natural Beef (CNB). CNB is an all-natural, beef marketing co-op consisting of more than 100 ranching families in the Western U.S. and Hawaii. This membership

allowed them to retain ownership of their cattle and helped them fully realize the value of feedlot performance and carcass quality.

“The expansion of our backgrounding lot allows our cattle to be performance tested for gain, conversions and implementation of least-cost rations,” Bob says. “This entire evolution of change allowed us as registered and commercial breeders to vertically integrate from the grassroots producer up. CNB has also been a tremendous proving ground for our Hereford genetics. Through our commercial cow herd and CNB feedlot to retail marketing, the concept of seeing the whole industry from conception to consumption has become the focus of our seedstock breeding goals.”

As members of NPGP and CNB, the Harrells are working to decrease fragmentation within the beef industry while developing a full circle of partnerships and relationships within all sectors.

Bob says that purebred producers must be critical and evaluate their programs and make necessary changes. Seedstock producers are in the people business, beginning with relationships, then partnerships and finally friendships.

“Our customers’ success makes us successful, and we differentiate ourselves by selling a program, an image and a reputation,” he says. “In challenging times, there are always opportunities to better position ourselves for the future. At Harrell Hereford Ranch, we are working hard for our customers to help take advantage of every genetic, breeding and marketing opportunity that will benefit them now and in the years to come.

“Producing superior seedstock allows for the survivability of our customers and family and will make certain that this generation and future generations in our community and at Harrell Hereford Ranch can enjoy the lifestyle we are fortunate enough to call our own.” **HW**