

# *Olsen Ranches progeny-test Hereford sires for more than a decade*

## **Proving young sires**

by: Alaina Mousel, Editor



*Olsen Ranches, located near Harrisburg, NE, have progeny tested 146 Hereford bulls and submitted performance data on a resulting 7,623 progeny.*

Photo by Alaina Mousel



*Art and Douglas Olsen, Olsen Ranches, Inc., located near Harrisburg, NE.*

Photo by Alaina Mousel

After the Super Bowl outcome has been decided, football fans turn their attention to the NFL Combine, where more than 300 athletes from across the country seek to prove themselves and continue their dream of playing professional football.

“The Combine brings all these players to Indianapolis and runs them through a battery of tests. It’s not necessarily to find future ProBowlers or Hall of Famers, but it attempts to project them out,” explains Craig Huffhines, American Hereford Association (AHA) executive vice president.

Similarly, AHA runs their own version of the NFL Combine – the National Reference Sire Program (NRSP) – to progeny-test unproven sires that will make an impact on the Hereford breed. In 2011 alone, 2,500 commercial cows were exposed to Hereford bulls for research purposes.

The value in progeny-testing unproven bulls is in the data. “To benchmark animals we need a history; a lot of progeny with tremendous accuracy to use as our reference point,” Huffhines explains. “So if we can get 20 calves out of a young bull and compare them to 20 calves from a highly-proven reference sire, it will drive that young sire’s accuracy higher.”

Art and Douglas Olsen of Olsen Ranches, Inc. near Harrisburg, NE, is one of a handful of cattle operations that made the decision to test unproven bulls in their herd through the NRSP.

“We love and enjoy genetics,” Douglas Olsen says plainly. “We strive to manage the resources the Lord gave us to manage and to improve the beef industry.”

The Olsens operate an 850-head commercial cow-calf herd comprised of Hereford and Red Angus genetics. Since their decision in 1999 to participate in the NRSP, the Olsens have tested more than 146 Hereford bulls,



*Young pairs on display at the Olsen Ranches headquarters.*

Photo by Alaina Mousel

submitting performance data on a resulting 7,623 progeny.

#### Selecting potential sires

To find test candidates, AHA continually combs through their performance and expected progeny difference (EPD) database for potential stand-out sires.

“It’s an on-going process trying to find the curve benders,” Huffhines says. Genetic evaluations are released in January and July each year. Young bulls’ EPDs can fluctuate after data is submitted on their first, second and even third calf crops. It’s not uncommon for AHA’s Web site that houses an online searchable EPD database to receive more than 1 million visits when January’s genetic evaluation data becomes

available. “That’s breeders looking up EPDs on their own cattle, researching herd bulls to use and young bulls to purchase.”

Once standout bulls are identified, AHA works with breeders to enroll bulls in the NRSP. The bull’s nominating party provides 70 units of semen on the bull and \$2,500 to cover labor and expenses associated with progeny testing. About 25 potential bulls make the NRSP short-list which cooperator herds then pick from. On average, Olsens select 15-16 NRSP bulls to use within their cowherd.

Douglas says their bull selection process begins with EPDs – highlighting both the good and the bad of each prospective sire. “A live calf is the most important thing we need on our ranch, so we focus on birthweight and calving ease,” Douglas says.

Other important criteria for Olsens are yearling weight, marbling, ribeye and cow families in the bull’s pedigree. Douglas says they’re not always looking for extremes in those areas, sometimes “just middle of the road.” “We want progeny growth without the cows getting bigger,” he explains.

Weaning weight is something Olsens pay little attention to. “We don’t brag about weaning weight because we sell finished steers,” Douglas explains. There’s also not much emphasis on phenotype. “We’d rather just have good genetics.”

Sixty-five cows from the Olsen herd are randomly selected to breed to each NRSP selection. At a 70 percent conception rate for mature cows, approximately 40 progeny are born to a young sire – half steers, half heifers. Birth, weaning and yearling information on these progeny, as well as feed efficiency data and actual carcass results, are collected and submitted to AHA. More recently, DNA samples on progeny have been added to the collection criteria.

“It’s a data-driven business,” Huffhines says. “People always want to analyze the data coming out of Olsens to see whose bull did what on test.”

#### Collecting genomic information

AHA has placed a high priority on collecting genomic information as part of the breed’s strategic plan, which Huffhines describes as the “driver of our business.”

“So far, scientists have not been able to identify gene markers that work to predict performance across breeds and in fact they may be unique to breeds,” Huffhines explains as to why AHA decided to invest in genomics research.

For every cooperator herd that progeny tests Hereford sires, DNA samples in the form of blood or hair are collected and stored. DNA samples will be incorporated into a genomics research project as part of the National Beef Cattle Evaluation Consortium USDA feed efficiency grant.

“At the minimum, we archive the DNA sample,” Huffhines says. “When funding is available, we will run a high-density genotype on those hair and blood samples.”

By collecting their own genomics data, Huffhines explains it will benefit the entire breed without proprietary restrictions. “The information will be AHA property and we're hopeful these tools will be useful, affordable, public information that we can incorporate into our genetic evaluation long-term,” he says.

#### Operating like scientists

Huffhines says AHA couldn't have a picked better partner than Olsens to work with in the NRSP. “They operate like scientists,” he says. “The data is clean and they operate in a real world commercial environment that give us a true picture of how various Hereford genetics perform.”

The Olsen cowherd begins their production cycle by wintering on cornstalks on both rented and owned ground. In April the herd grazes native rangeland that was ungrazed the previous year. “April is the hardest month to fill for grazing,” Douglas says.

The average age of their cowherd is 5.2 years old at calving. Young females calve near the ranch's headquarters; older cows calve out on grass. Winter annuals are planted for young stock to graze. Heifers start calving May 20; cows on May 25. When calves are born, they're weighed and tagged with the sire identified (Hereford or Red Angus). Bull calves are castrated at birth and the dam is udder scored.

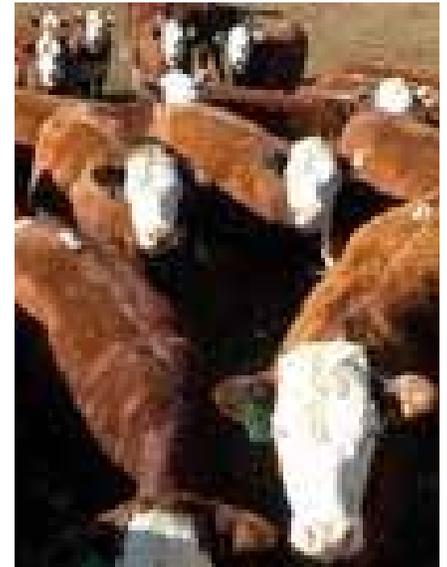
“The earliest calving cows are the earliest to breed back each year,” Douglas says of their breeding strategy. Females are synchronized for breeding by inserting a CIDR for 7 days, pulling calves from their mothers for 48-60 hours and artificial insemination (AI) breeding on detected estrus. There is no timed-AI work.

Culling decisions are made before AI work is done, not weaning time. Douglas explains, “If she's going to calve at 12, she has to have done a really good job and calve early. Anything over 10 years old is looked at pretty hard based on when they calve.”

Their heat detection rate is 97 percent, utilizing Kamar Heatmount Detectors to assist in detecting estrus. Mature cow conception rate is 70 percent, heifers is 75 percent, Douglas says. Cows get only one AI service and the group is run with a Red Angus bull for 10-14 days following AI work to clean up any missed in their first heat cycle. After 14 days, a Hereford bull is used for cleanup.

Calves are weaned in November and have an electronic identification (EID) device placed in their ear. “We do not write weights down alongside the chute,” Douglas explains. Calves will then graze on winter stalks during the winter and return to grass in April and May as they approach yearlings, returning to feeding corrals by June 1.

Two years ago, Olsen Ranches installed GrowSafe systems to collect feed efficiency data. Using the animal's EID tag as a trigger, GrowSafe electronically records when an animal came to eat, the duration of the visit and how



***The Olsens utilize Kamar Heatmount Detectors to assist in estrus detection. In a group of heifers like these, the Olsens will have a 75 percent artificial insemination (AI) conception rate.***

Photo by Alaina Mousel



***An animal's eye view of the GrowSafe system, which Olsen Ranches use to collect feed efficiency data.***

Photo by Alaina Mousel

much feed disappeared. The Olsens weigh cattle approximately eight times through a chute during a 70-day gain test to accurately record average daily gain.

In addition to collecting feed efficiency data, Douglas says GrowSafe technology alerts him to potential health problems by documenting when animals stop eating, a common indicator that an animal isn't feeling well. With GrowSafe technology the Olsens can diagnose and treat problems before visible signs are evident.

Their attention to detail, structured production system and environment all make Olsen Ranches an ideal place to progeny test bulls.

From birth to slaughter, Huffhines explains AHA's relationship with Olsen Ranches as having "layers of strategies."

"What we're doing here is a grassroots approach for discovery (of genomics) in our population," Huffhines says.

"The influence of Art and the Olsen family, their impact on the breed – it is immeasurable," he says. "They've added tremendous value to the Hereford breed."

***This story is featured in the 2012 Winter Cattle Journal, a publication of Tri-State Livestock News.***

Cover photo by Amanda Radke

