

Testing for Profit

The ISPCP assists breeders in identifying sires that produce progeny with the greatest value to the industry.

Story by

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As beef producers become more aware of the value differences among get-of-sire groups through the use of progeny and sire information, they are becoming more discriminating when evaluating potential herd sires. The goal of the first-ever Iowa Sire Profit Comparison Project (ISPCP) aims to assist breeders in identifying sires that have the greatest value to the industry.

"Just collecting carcass data isn't enough anymore," says Darrell Busby, Extension livestock specialist in southwest Iowa, in an Iowa Beef Center news release. "We have to be able to combine that carcass data with grid values, how the cattle perform in the feedlot and [how they] convert feed. In other words, we have to know which sires are the most profitable to the industry and expand their use. That is what this program is about."

Daryl Strohbahn, Iowa Beef Center (IBC) state beef specialist and co-coordinator of the ISPCP program, says that because there are several components to profitability, the entire system needs to be evaluated. "We know there are genetic differences between these cattle, and we're not getting at those yet. We're hoping that tests of this type may be able to shed a little light on that," he adds.

Setting up the project

About 500 cattle have been consigned to the program for the first year of what is intended to be a three-year project. Individual sire group entries consisting of five to 10 progeny from a single sire were accepted through Nov. 15. The sires had to be partially Iowa-owned, registered with their respective breed associations and backed by basic performance data to participate. The steers — born Feb. 1-May 15, 2002 — were delivered to one of eight

Tri-County Steer Carcass Futurity (TCSCF) cooperating feedlots in southwest Iowa on Dec. 4.

One of the goals of the ISPCP test is to increase producer awareness of factors that influence feedlot profitability.

"We realize the profit component begins prior to that," says Strohbahn, adding that calving ease and preweaning progeny performance, as well as how daughters might perform, are all factors in sire profitability. "We are not measuring that, but we recognize the importance of knowing that information."

When the calves arrived at the feedlot, individual weights were taken, hip heights measured, and body condition scores (BCS) assigned. Mike Lynch with the U.S. Department of Agriculture (USDA) Ag Marketing Service in Des Moines, Iowa, also evaluated each calf and assigned an individual frame score, muscle score and condition score based on U.S. feeder cattle grades.

He then assigned an individual price to each calf.

"The price was based on what feeder calves in southwest and western Iowa were selling for the week the calves were delivered into the feedlot," Strohbahn says. "That is how we established our initial price."

The calves will be weighed again at reimplant time. "We will then determine what we think are the two best harvest dates for each pen of cattle," Strohbahn says. "Those harvest dates will be 35 days apart."

How does the project work?

Strohbahn says that at harvest time the calves' individual weights

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Daryl Strohbahn of the Iowa Beef Center says there are several different components that affect how profitable calves will be in the feedlot. "We are starting to look at sires in relationship to all those components and how each sire contributes to profitability." [PHOTOS COURTESY OF IOWA STATE EXTENSION SERVICE]

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—Duane Warden



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will be collected, and full carcass data will be sent back. “We’ll get our ribeye area, fat cover, calculated yield grade, stamped yield grade, etc., and then the cattle will most likely be sold on the IBP real-time grid,” he adds.

After receiving the gross income of the calf, the numbers collected from the feedlot — feed conversion, implants, vaccines, general health costs, individual health treatments, trucking to the plant, insurance, miscellaneous expenses, etc. — will be computed.

“Based on what the cost is, we can back calculate what the breakeven purchase price would have been for that calf,” Busby says. “In the past we’ve seen as much as \$50 per hundredweight difference in what individual calves are worth. That is one of the pieces of information we think people are going to be very interested in.”

How will it be used?

Duane Warden, an Angus seedstock producer from Council Bluffs, Iowa, is participating in the project. He has been evaluating feed efficiency in his bulls for more than 20 years and has participated in the TCSCF since 1987 to get feedlot performance and carcass data on his steers.

“My aim has been to develop a breeding program using new technology and genetics to produce cattle that would make more money for the commercial producer, or for the feedlot,” he says.

Warden was involved in a tenderness evaluation project from 2000-2002, which was a forerunner of the ISPCP. During the tenderness evaluation, they were also running tests using the Cornell Value Discovery System (CVDS; see Editor’s Note at end of article), which ascribes a group-penned animal an individual feed conversion based on the animal’s weight, gain and carcass traits. “It goes through and splits out the feed for each animal, so you can get an estimate of what their feed conversion is,” Busby says.

“The more Daryl and I had a chance to look at that data and separate it by sires, the more we thought our producers would be interested in looking at the development of some type of a profit comparison between the sires,” Busby says.

“Commercial producers have to have calves they can put into the marketplace that feedlots can generate a profit from,” Strohbahn says. This project will assist producers in identifying which sires get the job done well.

Paul Ackley, a commercial producer from Bedford, Iowa, has been involved with the TCSCF since the mid-1980s. He says he likes the records he gets back on his animals. The records provide a roadmap for sire selection. He also sees a benefit in using it to market his cattle.

“If you are going to feed cattle, you need to feel like you have some market power,” Ackley says. “You can get a consistent profit through the feedlot, and you get some information on your genetics and your disposition scores.”

Immunity check

The ISPCP also includes a health component. Annette O'Connor, a veterinarian and assistant professor at the Iowa State University College of Veterinary Medicine, is conducting a research project comparing immunity levels of calves.

All of the calves were vaccinated and blood-tested on arrival into the feedlot. Then, 10-14 days after their arrival, they were blood-tested again. "We are testing how their immune systems responded to the vaccination we gave them on arrival," Busby says.

Ear samples were also taken to test for bovine viral diarrhea (BVD).

Ackley says the calves received a full complement of weaning shots for respiratory diseases. Two vaccinations were administered before the cattle were brought to the feedlot. To check titers, or level of antibodies in the blood, blood samples were taken before and after a third vaccination, which was given upon arrival at the feedlot.

"We're going to find out if that third shot boosted those titers," Ackley says. "After a year or two we should have an idea whether they need that third set in the respiratory series every time they go into the lot, or do they need to be weaned longer. I think we are still getting too many sick ones."

"This is an extremely important aspect of the test, because animal health and any losses we experience have become extremely important," Warden says.

"We hope to gather further information about genetic differences for health," says Strohbahn, stressing there are several different components that affect how profitable calves will be in the feedlot. "The growth on those calves impacts the amount of feed consumed, as well as how they convert. Feed cost is the No. 1 item when it comes to making a profit in the feedlot business. Finally, how the cattle do on the grid is highly important."

The Iowa Sire Profit Comparison Project puts all of the factors together,

Strohbahn says. "We are starting to look at sires in relationship to all of those components and how each sire contributes to profitability."



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Editor's Note: For more information on the Cornell Value Discovery System, logon to www.bifconference.com, then select Symposium Papers from the navigation bar on the left side of the screen. Open the link to Danny Fox's Thursday presentation.



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