Day 1: BIF Turns 40

As the Beef Improvement Federation celebrated the 40th anniversary of its formation, Ike Eller reflected on the organization's storied history.

Approximately 570 cattlemen and academia gathered in Fort Collins, Colo., June 6-9 for the 39th Beef Improvement Federation (BIF) Annual Research Symposium and Annual Meeting. The group returned to the state where the organization was founded to celebrate its 40th anniversary.

A.L. (Ike) Eller Jr. began Thursday's session, themed "Performance at a Crossroads" by taking a poll of the audience to determine the age demographics of the room. After the quick poll, Eller made the point that there were several attendees who were not born when BIF was organized 40 years ago.

To help celebrate its ruby anniversary, Eller reflected on the history of genetic evaluation, as well as BIF's formation and growth as an organization.

"Any look back at BIF's 40-year history has to be about three things — people, leadership and technology," Eller said.

When he was judging, cattle were evaluated by eyeball appraisal, Eller commented. Most of the scientific information is fairly recent.

"It was Frank Baker who formulated a plan to achieve some standardization and coordination of beef performance programs," Eller said, referring to a committee report of the U.S. Beef Cattle Records Committee subtitled *Recommended Procedures for Measurement of Traits of Economic Value in Beef Cattle.* "It was the first time that someone got the breeders from various breeds, Extension members and others together to put something together."

Performance Registry International (PRI), breed associations and state beef cattle improvement associations were all making efforts at performance evaluation. Concerns mounted about who would harness technology into a system for evaluating beef cattle improvement and profitability, Eller noted. The need for standard guidelines for performance evaluation grew.

Baker and Ferry Carpenter conferred to organize an industry-wide performance meeting. The International Conference of Cattle Performance Testing Associations took place in Denver, Colo., at the National Western Stock Show (NWSS) Jan. 14, 1967.

PHOTO BY MATHEW ELLIOT

►"Any look back at BIF's 40-year history has to be about three things — people, leadership and technology," said Ike Eller as he reflected on the organization's formation and growth.

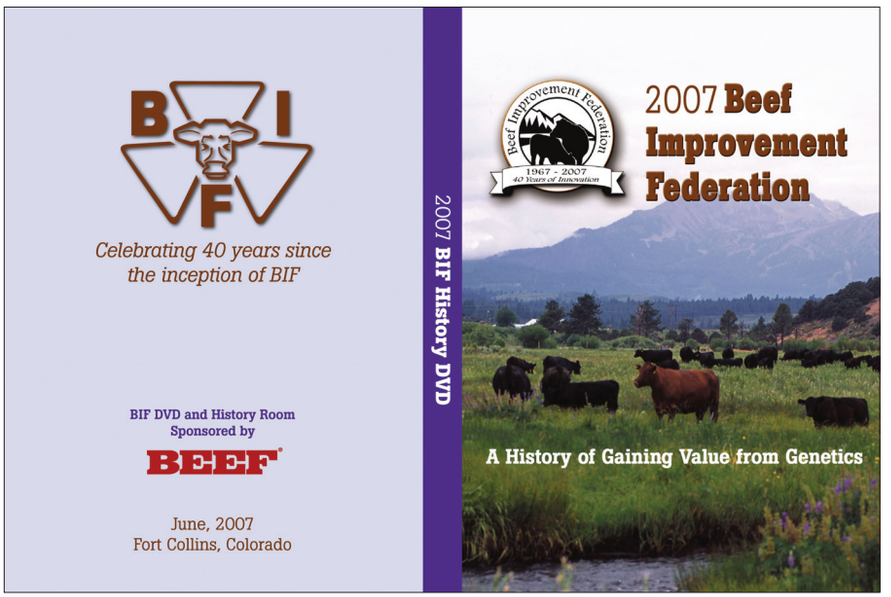
A volunteer committee was formed and met at the meeting. Committee members voted unanimously that it was necessary to correlate the present performance testing organization and agencies into a national organization.

The BIF organizational meeting was conducted in Denver Jan. 12, 1968. The fledgling organization was on its way. More details are spelled out in the proceedings paper accompanying Eller's presentation, available at *www.bifconference.com/bif2007/newsroom.html,* and in "A History of Gaining Value from Genetics," a special DVD created to commemorate BIF's 40th anniversary.

Eller said many young researchers "have earned their spurs" by contributing new information and becoming active in BIF. The synergism between researchers, breeders and their associations through BIF has been truly amazing, he added.

"Is all the work done?," Eller asked. "Surely not, but stay tuned and stay involved!"

Look for the audio and symposium paper that accompanied this presentation at



►The DVD "A History of Gaining Value from Genetics" features the history of the BIF organization.

www.bifconference.com. The DVDs are available for $10 each, including postage and handling, from Susan Willmon, American Gelbvieh Association, 10900 Dover St., Westminster, CO 80021.

— by Mathew Elliott

Audience Presents View

Technology new to the BIF meeting allowed immediate audience input.

An audience input system provided a way for all attendees at the BIF conference to share their backgrounds and opinions by voting on a keypad. As Colorado State University's Tom Field explained, the keypad wirelessly collected the information to a central database, where it computed a summary. The results were almost instantaneously shown on the screen for meeting participants to view.

Attendees were given 10 seconds to answer each question once it was read to the audience.

"You can vote as many times as you want," Field said, "but the last thing you put in before the 10 seconds is up is what is recorded. All you have to do is match the number with the corresponding answer on the screen."

The technology allowed audience members to input whether they were a seedstock or commercial producer, what the ideal weight for a mature cow should be, and how many BIF conferences they had attended, as well as answers to many other questions.

"This allows us the opportunity to show results as we go along," Field said.

As an example, when the audience was asked what their affiliation with the beef industry was, 31.1% responded they were seedstock producers; 9.8% commercial producers; 28.9% university, Extension or government; 15.6% affiliated industry; 9.2% students; and 5.4% other.

The keypads also kept track of what answers an individual had input in the past, allowing results to be broken down by certain audience characteristics. As an example, answers from commercial producers could be compared to the answers of seedstock breeders to see how they differed.

After some demographic questions early in the morning, Field came back later and asked questions dealing with "Defining the Ideal Beef Animal." Due to a lack of time, all answers were recorded but not shown at the time. A quick overview of the results was presented during Friday's morning meetings (see "Can We Build the Ideal Beef Animal?").

Speakers throughout the conference also posed questions to the audience. The complete dataset was to be analyzed and summarized for distribution following the BIF meeting. Results will be posted to *www.bifconference.com* as soon as they are available.

The American Angus Association sponsored the technology.

Look for the audio file for this presentation in the newsroom at *www.bifconference.com.* A summation of the results of the survey will be posted to the newsroom as soon as it is available.

— by Mathew Elliott

PHOTO BY MATHEW ELLIOT

►Colorado State University's Tom Field light-heartedly reminded producers the audience input device was not a remote control to take home with them, as he introduced the system.

Genetic Improvement: Who Benefits? Who Pays?

Speakers consider relevance of genetics research, education, Extension.

The need for transition looms large for the seedstock industry, said Kent Andersen, executive vice president of the North American Limousin Foundation. Speaking during the opening general session, Andersen said advancing technology and ever-expanding data collection call for an aggressive approach to genetic improvement through performance program services.

At stake, he said, are the futures of some 750,000 U.S. cow-calf producers and, ultimately, 300 million U.S. consumers.

Breed associations collectively invest $3 billion annually to further genetic improvement, Andersen said. However, six times more money is spent on data entry than is devoted to analyses that turn data into information useful to decision-making.

The seedstock industry is coming to a crossroads, he added, and must prioritize programs that will provide their customers with further improved tools for genetic selection.

Andersen said he foresees the transfer of computation of genetic evaluation programs from the public sector to the private sector. Improved genetic evaluation services also must include increased evaluation of hybrid seedstock so all animals may be fairly compared, regardless of breed composition.

Andersen cited the need for more investment in research, development and validation of DNA diagnostics for more genetic traits. Such selection tools currently exist for marbling and tenderness, but many producers remain uncomfortable with their application. Consequently, there is cause to shift from passive to assertive producer education in the practical use of existing and new tools, including customized decision support aids that address complex

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PHOTO BY MATHEW ELLIOT

►The Australians have calculated return on investment (ROI) for genetic improvement at 28-to-1, while the Canadians estimate the ROI for genetic improvement to be 3-to-1, Kent Andersen, excecutive vice president of the North American Limousin Foundation, said in Thursday's opening general session.

interactions between genetics and management.

According to Andersen, most producers would pay at least a little more money for seedstock that are thoroughly evaluated with advanced selection tools, but breed associations must decide whether they will step up and provide needed performance programs and services. The industry, he said, stands at the crossroads in need of leadership.

"The big question," Andersen stated, "is how do we position the BIF to better serve the industry for the next 40 years? What is our progressive vision for beef improvement?"

The PowerPoint and audio for this presentation are available in the newsroom.

— by Troy Smith

Critical Junctures

Are beef genetics research, education and Extension relevant? Two speakers — one scientist, one producer — presented their responses to attendees of the BIF annual meeting.

Advances in molecular biology mean the beef industry should aggressively embrace the emerging technology — and find ways to fund its research — to remain economically viable in the future. That was the message of Ronnie Green, national program leader of food animal production for the U.S. Department of Agriculture's (USDA's) Agricultural Research Service (ARS). Green said genome-enabled selection could help producers improve a number of important traits in the near future. Ultimately, this will enable them to make precise breeding decisions to improve bovine disease and stress resistance, adaptability and functionality.

"But if we don't invest in that infrastructure, we'll pay a significant price," Green said. "One of the questions we need to be asking is where are the scientists and educators going to come from who have a knowledge of the industry and its problems to address them. You can create a lot of molecular biologists, but not many of them know one end of a cow from the other."

Green said the beef industry is at a critical juncture, facing a multitude of challenges — everything from food safety to international trade to consolidation.

Consumers, too, are demanding a reduced "environmental footprint from livestock production," and increasing their

PHOTO BY SHAUNA ROSE HERMEL

►The industry needs a renaissance in beef cattle genetics research, Ronnie Green, USDA-ARS, said, questioning where future scientists and educators would be found.

PHOTO BY SHAUNA ROSE HERMEL

►Producers need to revisit the concept of producer networks to remain competitive, seedstock producer Brian McCulloh told attendees.

demand for nontraditional beef products, he said.

"We are seeing profound societal and industry shifts," he said. "There is a push to narrow the gene pool, but concerns about the loss of heterosis. There is a need for information to accelerate, and a strong desire to move from a breed world to a gene pool world.

"We need to be studying these trends and understand what's happening in other industries, particularly within the dairy industry," Green continued. "Could our industry eventually be shipped offshore? There are some who believe animal ag doesn't belong in the United States anymore, and they would just as soon choose that we no longer exist."

Producer perspective

To remain economically viable in the future, the industry should build interdependent relationships among themselves and government to find viable methods of remaining sustainable in the future, seedstock producer Brian McCulloh added.

"It's time that we do a better job of re-engaging in and working on interdependent relationships," the manager of Woodhill Farms, Viroqua, Wis., said. "You can still maintain your independence, but let's come back to the table so we can be reassured that our kids will continue.

"U.S. agriculture is the envy of the world because we have independent business producers who care about their livelihood,"

he added. "But it requires cooperation, and it takes working together."

Look for the PowerPoints and audio files for these presentations in the newsroom. A proceedings paper for Green's presentation is available on the "Symposium Papers" page.

— by Eric Grant

Are Customers the Focus?

Panel addresses question: Does the seedstock industry focus on the needs of commercial cow-calf producers?

"Successful purebred breeders have always focused on the needs of commercial producers, but the needs of commercial cattlemen have changed over time," said Ashland, Kan., seedstock breeder Mark Gardiner, leading off Wednesday morning's roundtable.

For years, Gardiner said, his customers sought maternal ability along with growth. Maternal ability remains important, but more recent concerns include moderating cow size, improving efficiency and increasing end-product value. Customers seek genetics that better enable the capture of added value through value-based marketing programs. They also expect more service after the sale, so Gardiner increasingly wears the hat of a customer-service representative.

Buyers expect bulls to be guaranteed and increasingly rely on seedstock suppliers for help in marketing cattle. By sponsoring feeder calf and replacement heifer sales, offering buy-back programs and fostering retained ownership arrangements with feedlots, many seedstock suppliers are helping their customers be more profitable, Gardiner explained.

According to seedstock producer Steve Radakovich, Earlham, Iowa, the seedstock industry has usually given the commercial industry what it wanted — often in excess. However, what producers want may not be what they really need.

"The one big injustice of the seedstock industry is evaluating and supplying over-managed, overfed, fossil-fuel-dependent bulls to cow-calf producers forced to survive on solar energy and low-cost production," Radakovich stated.

Commercial producer Mike Kasten, Millersville, Mo., said he believes seedstock suppliers have strived to produce high-quality genetics that fit varying environments and serve the wants of beef consumers. The latest challenge they face is helping their commercial customers adapt genetics to production systems that must change due to higher feed costs.

"The commercial cow-calf producer needs the truth," said Chip Ramsey of the Rex Ranch, Ashby, Neb. "We need accurate whole-herd reporting in the seedstock industry, accurate across-breed EPDs (expected progeny differences) and accurate estimates of heterosis benefits. We need these services for as low a cost as possible, which means less overhead costs.

"Those forward-thinking people in the seedstock industry that try to do the right thing and are willing to take the risk in the near term are usually rewarded with long-term success rather than a short-term opportunistic profit," he added.

The PowerPoint for Gardiner's presentation and the audio for the panel discussion are available in the newsroom at *www.bifconference.com.* Visit the "Symposium Papers" page for proceedings to these presentations.

— Troy Smith

PHOTO BY TROY SMITH

►In introducing the panel, moderator Ron Bolze of the Red Angus Association of America noted an opportunity is being missed by not having more commercial cattlemen in attendance.

PHOTO BY TROY SMITH

►Thursday afternoon, a panel of producers discussed how seedstock providers are addressing the needs of commercial cow-calf producers. Panelists included (from left) Steve Radakovich, Earlham, Iowa; Mike Kasten, Millersville, Mo.; Mark Gardiner, Ashland, Kan.; and Chip Ramsey, Ashby, Neb.

Day 2:

Challenging Conventional Wisdom

The Ideal Animal

Before cattle breeders can build the ideal beef animal, they must decide what "ideal" is. However, according to University of Kentucky (UK) animal scientist Darrh Bullock, settling on a definition is difficult because there is no consensus. That fact was clearly illustrated June 8 as Bullock summarized audience members' answers to questions related to animal type and production priorities during the 2007 Beef Improvement Federation (BIF) annual meeting.

Bullock's presentation kicked off the second full day, themed "Challenges to Conventional Wisdom," of the event's 39th annual meeting and research symposium.

Producers' opinions varied with regard to breed preference, optimum animal size and the importance of traits relative to the production environment. Bullock said response suggested a majority of producers agreed that nutrition was a limiting factor in their operations, and that their cows were too big. They generally agreed that input costs were too high to maintain acceptable reproductive performance.

"That tells me," Bullock stated, "that we're not doing a good job of fitting cows to the environment."

According to Bullock, identification of a production target also depends on what kind of beef product consumers will want in the future. Will they prefer high-quality or lean beef? Will consumers want all-natural or organically grown beef? It is likely, he said, that varying consumer preferences will create demand for all of the above.

"Can we build an ideal beef animal? Absolutely. We have the ability to build ideal animals that fit different production systems and serve different markets," Bullock offered.

PHOTO BY TROY SMITH

►UK animal scientist Darrh Bullock considered audience members' answers to questions about animal type and production priorities.

PHOTO BY TROY SMITH

►The feeder-cattle marketing system insufficiently values calves with superior genetic potential for quality grade, K-State's Dan Moser said during Friday's general session.

However, the concept of "ideal" will be regionally dependent, varying according to the environment. It will be management-dependent as producers use different selection criteria and management practices to meet their production goals. It will be market-dependent as product specifications influence those goals.

"And it will be technology-dependent," Bullock added, "with new technologies helping us manage the things we can't select for."

Look for the PowerPoint and audio file for this presentation in the newsroom at *www.bifconference.com.*

— by Troy Smith

Why Hasn't QG Improved?

Dan Moser provides a genetic improvement perspective.

Considering the perceived emphasis on genetic selection for carcass merit, why hasn't the U.S. beef industry seen a dramatic increase in the percentage of carcasses grading USDA Choice or better? It's a perplexing question.

Dan Moser, associate professor of animal sciences and industry at Kansas State University (K-State), advised breeders to consider four factors affecting the rate of genetic change and how those factors might be manipulated to hasten genetic improvement of beef quality.

Genetic variation. Moser noted how, except Angus, most breeds show a relatively flat genetic trend for marbling score for the last 20 years. Greater change would be

possible, he suggested, if these breeds would aggressively develop superior meat quality lines, enabling commercial producers to emphasize quality when selecting sires for crossbreeding systems.

Selection intensity. Moser cited reasons why producers differ in the emphasis placed upon selection for improved marbling. Producer opinions vary as to the true economic reward of increased marbling. And while grid marketing does reward sellers of high-marbling cattle, retained ownership is practiced by a relatively small proportion of cow-calf producers.

Additionally, Moser said, the feeder-cattle marketing system insufficiently values calves with superior genetic potential for quality grade.

"If market signals more clearly indicated significant increases in profit associated with higher marbling scores, more intense selection would likely occur," he said.

Accuracy of selection and generation interval. Moser sees great opportunity to enhance the rate of genetic improvement for marbling through technologies providing more accurate information on sires at an earlier age. He called ultrasound estimation of marbling score a great example, but lamented its too frequent misuse.

"One misuse of ultrasound information that limits genetic progress is the use of actual or adjusted scan data in selection and marketing, rather than EPDs," Moser stated. "Producers can make more-informed and correct selection decisions when carcass and ultrasound data are combined into a single set of EPDs, with the EPDs and accuracy values published for the carcass traits."

Moser called DNA tests another category of tools that aims to provide accurate information to aid selection early in an animal's lifetime. And while these tests have great potential for identifying certain genes associated with marbling, Moser advised producers to remember that marbling is influenced by a large number of genes.

Time. Finally, Moser urged producers to practice patience. Cattle breeding is a long-term proposition, so patience coupled with critical evaluation of technologies, old and new, should result in improved beef quality.

Look for the PowerPoint, audio file and proceedings for this presentation on *www.bifconference.com.*

— by Troy Smith

Quality Factors

Pete Anderson presents an environmental perspective on why the beef industry hasn't made more progress in adding quality grade.

Ensuring your cattle marble well — and reach desirable USDA Choice or Prime quality grades — is a commitment that begins when a calf is born and continues from the ranch to the feedyard.

"Marbling deposition is a lifetime event, not something that takes place during late stages of feeding," said Pete Anderson of VetLife Technical Services. The VetLife Benchmark Performance Program gathers performance, carcass and financial data on approximately 40% of all fed cattle.

Research shows that "marbling is different from subcutaneous fat. They are different tissues with different regulatory pathways, he said. "Marbling results from a different embryonic tissue layer than subcutaneous fat. At birth, cattle have nondifferentiated cells within their muscles that have at least three choices: turn into muscle cell nuclei, turn into fat cells, or do nothing."

PHOTO BY MATHEW ELLIOTT

►"Any nutritional insult — at any time in the life of an animal — will reduce marbling," said Pete Anderson of VetLife Technical Services.

"Any nutritional insult — at any time in the life of an animal — will reduce marbling. That's why it's critical for cattle producers to keep a close eye on health and vaccination programs and other factors," he said.

Stressors that cause reductions in marbling include drought, poor-milking cows or health.

"Cattle that go off feed expend more energy fighting the negative effects of the disease" rather than depositing fat, Anderson said. "It stands to reason that those cattle that suffer disease at any time in their lifetime could have an impaired ability to deposit marbling regardless of how fat they ultimately get."

Look for the PowerPoint, audio file and proceedings for this presentation on *www.bifconference.com.*

— by Eric Grant

What Do You Give Up?

Are there sacrifices in the chase for carcass merit?

Bob Weaber, assistant professor of beef cattle genetics at the University of Missouri (MU), tackled the question "Are There Sacrifices in the Chase for Carcass Merit?" during Friday's morning session. Weaber first looked at some of the motivators to improve carcass merit in beef cattle, the first among them being the value-based marketing systems that financially reward yield grade, quality grade, conformance and weight.

"Even in a wide Choice-Select spread, about two-thirds of the value difference from carcass to carcass in a grid-marketing system still comes from weight," he noted. "So we can't ignore that in either our production or selection strategies."

The top 10 challenges posed in the National Beef Quality audits (NBQAs) haven't changed significantly since the first audit, Weaber noted.

"We still face challenges with inappropriate carcass size and weight, inadequate tenderness, excessive external fat cover, and an inappropriate mix of USDA quality grade," he said, noting "some

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Challenging Conventional Wisdom CONTINUED FROM PAGE 331

challenges relative to the mix we provide our downstream partners — feeders and packers — in terms of end product quality and merit."

While breeders have applied some selection pressure for greater marbling, the mix of quality grades hasn't changed significantly, he pointed out. He walked producers through what pen average marbling scores were needed for a pen to be 50%, 60%, 70%, 80% and 90% Choice, then estimated the needed standard deviations of genetic improvement that it would require to reach the next level.

What are the tradeoffs?

Weaber used research he is currently working on with the American Simmental Association to look at the correlation between marbling and other selection criteria [traits for which there are expected progeny differences (EPDs)] and breeding objectives (traits for which there is an economic value in selection models). Correlations with various individual traits are displayed in a corresponding PowerPoint available in the newsroom at *www.bifconference.com*.

The projections indicated selecting for big changes in marbling would not, on the average, cause a lot of change in other selection criteria and breeding objectives, Weaber said.

"These predicted responses to selection for marbling are not equivalents to the traditional computation of correlated response to selection," he added. "They have not been scaled by either the accuracy of prediction, selection intensity or generation interval."

All-in-all, Weaber said, there seems to be little risk in selecting for increased marbling score relative to changes in other traits from the perspective of additive trait selection within a breed.

Table 1: Heterosis lost per generation

Generation	Breed A fraction	Breed B fraction	Individual heterosis
1	½	½	100%
2	¾	¼	50%
3	⅞	⅛	25%
4	15/16	1/16	12.5%
5	31/32	1/32	6.25%

Heterosis

The $64,000 question, Weaber said, is do the benefits of selection for carcass traits within breed (straightbreeding) outweigh the heterosis improvements of lowly heritable traits (especially maternal) garnered via crossbreeding?

"We've got to be careful and think about our total production system and, especially if we're commercial cow-calf producers, about where our revenue comes from," Weaber said. Producers have an obligation to pay attention to end product merit, but they also have an obligation to pay the bills.

"Our selection strategies should really focus on both additive and nonadditive, using EPDs and crossbreeding systems appropriately to achieve the genetic levels and genetic potentials that we want," Weaber said. "We can't overlook either one."

Crossbreeding systems that maximize heterosis in an F_1 terminal sire system are worth about $100 per cow per year above a straightbreeding program, he said, basing the numbers on literature values that are available.

"Those are big dollars and those are real dollars," he said. "If we're going to make tradeoffs in our selection systems away from a system that effectively uses heterosis, we need to know how many dollars we need to offset in terms of additive selection."

That noted, Weaber explained that heterosis can be lost pretty quickly once you move away from the F1 cross (cross of two pure breeds).

Look for the PowerPoint, audio file and proceedings for this presentation on *www.bifconference.com*.

— by Mathew Elliott & Shauna Rose Hermel

PHOTO BY MATHEW ELLIOTT

►Selection pressure for marbling within breed can be made with little effect on other traits, said MU's Bob Weaber. The tradeoff lies in giving up heterosis to capitalize on the quality grade attributes of a single breed in a straightbreeding system.

Using DNA Markers

Luke Lind, vice president of marketing for Five Rivers Cattle Feeding, advised cow-calf producers to consider the limitations of DNA markers when applying them to genetic selection to improve carcass quality grade.

Each of the currently available DNA tests include markers for a single gene associated with marbling, Lind said, but many other genes and environmental factors also influence expression of the trait. He called

PHOTO BY TROY SMITH

►At present, EPDs are more reliable tools on which to base selection decisions than DNA markers, said Luke Lind of Five Rivers Cattle Feeding, though he added that marker-assisted EPDs would be even better.

PHOTO BY MICKY WILSON

►For use in the feedlot, Lind called DNA tests based on two or three markers for tenderness and marbling "not good enough."

EPDs more reliable tools on which to base selection decisions.

Furthermore, Lind said he believes most producers better understand how to use EPDs effectively, but they have limited understanding of DNA test rankings.

"What does 'five stars' mean? I don't think many producers really know," he said. "If you coupled the two (selection tools) together, to make marker-assisted EPDs, that would be much better."

For use in the feedlot, Lind called DNA tests based on two or three markers for tenderness and marbling "not good enough." For successful application, tests need to be simple, comprehensive and cost-effective. For Five Rivers to seriously entertain any new practice, he said, there must be potential for a 3-to-1 return on cost.

Look for the PowerPoint and audio file for this presentation in the newsroom at *www.bifconference.com.*

— by Troy Smith

Whole-Genome Approach

A new technology, called the "Illumina iSelect Infinium Custom Beadchip," could potentially revolutionize the way cattle producers identify economically important genes and allow them a "whole genome" approach to determining the genetic merit of cattle without dependence on phenotypic measurements.

The beadchip, developed with help from researchers at the University of Missouri (MU), provides for "whole genome" investigations of the bovine genome. Expected to be commercially available this fall, the technology could accelerate the ability of researchers to cost-effectively unlock the genetic basis of dozens of traits, and allow the industry a greater breadth of understanding of the range of genes that affect specific traits, said Jerry Taylor, professor and Wurdack chair for animal genomics at MU.

PHOTO BY MATHEW ELLIOTT

►"If there are 59 genes in Angus that are responsible for the genetic differences in marbling and marbling scores, then we need to test for all 59 genes," MU's Jerry Taylor said.

"We've taken 5,000 DNA samples from bulls at Circle A Angus and 1,800 samples from AI bulls," Taylor said. "We've genotyped 4,000 animals and identified 422 markers. From this research, we've found evidence for 59 individual marbling genes. If there are 59 genes in Angus that are responsible for the genetic differences in marbling and marbling scores, then we need to test for all 59 genes. If we're going to do that, you need a test that encompasses the entire genome, not just parts of it."

"The test could also help producers accurately predict the EPDs for all traits — without having to take measurements or weights," he said. "It will also provide for parentage verification and traceability. There is an enormous range of applications."

Cost of the test is currently at $208 per sample, for research purposes. Taylor expects the costs to drop in the future to make it more economically feasible for producers and breed associations to use.

A potential downside of the technology is that each test is breed-specific. In other words, "the test we develop for Angus won't work for Salers," Taylor said. Each breed will have to make some investment to develop their own, breed-specific test in the future.

"If this proves to be effective, we will have to repeat the analysis for all breeds — and all the breeds that want to use it will have to pony up," he said.

Look for the PowerPoint and audio file for this presentation in the newsroom at *www.bifconference.com.*

— by Eric Grant

Peltons Win Top Seedstock Honor

The Beef Improvement Federation (BIF) honored Pelton Simmental/Red Angus with the 2007 Seedstock Producer of the Year Award June 7 during the organization's 39th annual meeting in Fort Collins, Colo. The ranch is owned by the Lynn and Gary Pelton families and managed by Lynn Pelton.

The family-owned and -operated seedstock business is located near Burdett, Kan. Gary and Donna Pelton and their sons, Jason, Aaron and Burke; and Lynn and Sue Pelton and their daughter, Shanna, and son, Dustin, began a partnership in 1976, which later was incorporated into a diversified farm and ranch operation.

The Pelton business consists of 4,300 acres of grass, 800 acres in the Conservation Reserve Program (CRP), 4,700 acres of cultivated land and 500 head of registered Red Angus, SimAngus and Simmental cows. About 200 cows calve in the fall; the remaining 300 calve in the spring. Aaron, Dustin and Dustin's wife, Kendra, have joined the business full-time.

The purebred operation began in 1972 with 12 bulls being sold to local cattlemen. During the 13th annual sale in March 2006, 150 Red Angus, SimAngus and Simmental bulls and 120 females were sold into 13 different states. Including private-treaty sales, a total of 180 bulls were sold in 2006.

With the use of an extensive embryo transfer (ET) program and proven, predictable genetics, a genetically strong cow herd has been developed by utilizing every available economic and performance measurement. A customer service program was developed and emphasized to provide "value-added marketing opportunities" for customers.

In the past three years, the commitment to helping market customers' calves through various avenues has been especially rewarding. Two alliances with which the Peltons are involved provide feedlot and carcass data on animals going through each program. In addition, a Pelton Program Sale, conducted the first Friday of November, has proven very successful for providing customers an opportunity to market replacement-quality females and

►Pelton Simmental/Red Angus receives the Seedstock Producer of the Year Award during BIF's Friday awards luncheon June 8.

performance steers. In 2006, more than 1,250 head were sold during the program sale.

Since Lynn's graduation from Kansas State University in 1975, the program has become very hands-on. Whether it be day-to-day care of the cow herd, sire selection and mating decisions, financial and breed association bookwork, or hosting tour stops and judging workouts — the family works together and utilizes the strengths of each person to better enhance the efficiency of the operation.

Other nominees for Seedstock Producer of the Year included:

5L Red Angus

5L Ranch is located in the Ruby Valley of southwest Montana near Sheridan. It is a family-owned and -operated Red Angus seedstock operation, consisting of Larry and Lisa Melhoff and their five children — Laramie, Larisa, Landon, Larinda and Logan.

The ranch consists of deeded and leased land, currently encompassing approximately 30,000 acres. The 5L cow herd consists of 1,250 cows and 340 yearling heifers. AI and ET are used extensively.

Bull calves are put on test in the ranch bull development center in September and sold in a spring production sale. Steer mates are backgrounded at the ranch, then sent to the Midwest to be finished and harvested. Resulting carcass data is utilized to analyze carcass merit of herd sires. Females and embryos are sold private treaty.

Ten years ago 5L began introducing black Angus bloodlines to expand the gene pool and design new Red Angus bloodlines and a black red-carrier line of Red Angus called Profit Plus. This Profit Plus program has allowed them to develop outcross genetics within the Red Angus breed.

Bridle Bit Simmentals

Bridle Bit Simmentals, a family operation, moved from northern Colorado to extreme southeast Colorado in 1986. Walsh, Colo., is home for Errol and Gayle Cook and sons Chad, Brent and Brad. The Cooks raise purebred and crossbred Simmental and Simmental × Red/Black Angus composites. The operation calves 100 females, beginning in February.

Bridle Bit has been breeding Simmentals since 1969. The operation used artificial insemination (AI) to introduce the Simmental breed and have had an extensive AI program since. Cleanup bulls have been used the last 15 years.

Bulls are sold by private treaty in the spring. Offspring not selected for replacement females or bull prospects are placed in their feedlot and sold on the rail

to U.S. Premium Beef (USPB). Retaining ownership and the carcass premiums the Cooks receive by selling on the rail have proved to be a financial benefit.

Bridle Bit Simmentals is a consignor to the Wild Wild West Simmental Sale conducted during the National Western Stock Show (NWSS) at the Adams County Fairgrounds in Brighton, Colo.

Echo Ridge Farm

The Echo Ridge registered Angus herd, initiated by C.W. Pratt as an FFA project in 1964, consists of 225 cows managed in fall and spring calving seasons. The farm sells approximately 75 bulls per year, primarily through the Virginia Beef Cattle Improvement Association (BCIA) Performance Bull Test Program, as well as through on-farm, private-treaty sales.

The foundation of the Echo Ridge herd was built in the 1970s through performance recording and participation in the Virginia bull test program. In the 1980s, Echo Ridge served as a cooperator herd for the Select Sires Young Sires Program, which was instrumental in establishing the base cow families to which their herd traces today. Its whole-herd AI program has been complemented by the utilization of superior natural-service sires.

The performance and acceptance of Echo Ridge bulls through the Virginia BCIA Bull Test Program have been notable. Echo Ridge has attained top-indexing and breeder group awards numerous times at both the Culpeper and Southwest Virginia test stations.

This recognition is topped only by the popularity of their genetics among commercial cattlemen who identify with the balanced-trait, practical approach Echo Ridge takes in designing its bulls.

Heartland Cattle Co.

Tom and Cora Lynch are the owners of Heartland Cattle Co., located near New Hampton, Iowa. The 175 cows in their seedstock herd are primarily Simmental with a few Angus and Charolais. The business started in 1976.

The first registered cattle were purchased to raise calves for 4-H projects. As the children became older and shared more responsibility, the registered herd grew. The family has expanded its business since their son, Kirk, joined the operation after graduating from Iowa State University in 2003.

The Lynches work closely with their customers, who are interested in age and source verification for feeder or fed-cattle premiums. They also started a buy-back program for calves produced by their bulls, through which they furnish carcass data to the calves' owners.

The marketing program for the 60-70 bulls the Lynches sell each year includes the Iowa Cattlemen's Association (ICA) bull test program, private-treaty sales and production sales. They are founding members of the Hawkeye Simmental Association.

The Lynches had their first female production sale in early November 2006. Their first bull sale was in April 2007.

Lindskov-Thiel Ranch

Lindskov-Thiel Ranch is located in western South Dakota 60 miles west of the Missouri River on the Standing Rock and Cheyenne River Sioux Indian reservations. Les and Marcia Lindskov, lifelong residents descending from ranch families in the area, began raising purebred Charolais cattle in 1979. Brent and Nancy Thiel joined the ranch in 1987 in an ownership role.

Currently, the Charolais herd contains 350 females. Added in 1997, the Angus herd numbers 175. Utilizing a 60-day spring-calving program, first-calf heifers begin calving the last half of February, and cows start calving around March 1. More than 80% of females are AIed each year, with conception rates typically greater than 75%. Pasture sires are turned out for 60 days.

The calves are weaned during the first week in October. After the culling process is complete, a group of replacement heifers is retained, and a group of heifer calves is marketed by private treaty. Those heifers are sold primarily sight unseen with a satisfaction guarantee, many going to repeat customers.

Bull calves are developed in hilly, 10- to 40-acre pastures to aid long-term reproductive traits and soundness. Bulls are marketed through the Lindskov-Thiel annual bull sale the third Saturday in April. 2007 marked the 26th annual sale. Eighty-five percent of the bulls are sold in a 100- to 150-mile radius of Isabel, S.D. The other 15% sell to regional commercial producers or purebred operations across the country.

Star Lake Cattle Ranch

Star Lake Cattle Ranch at Skiatook, Okla., has been in existence as a unit since 1978, starting in Millbrook, N.Y., and operating in Oklahoma since 1985. The ranch is owned by father and son Jim and Randy Blin and managed by Montie Soules.

Encompassing 3,400 acres of native prairie grass in northeastern Oklahoma, the ranch is home to 1,000 head of registered Hereford cattle, including 400-500 mother cows. The ranch uses ET, sonograms to sex pregnancies, and sexed semen on yearling heifers to increase the value of those pairs as

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Echo Ridge

Lindskov-Thiel Ranch

Peltons Win Top Seedstock Honor CONTINUED FROM PAGE 335

replacement prospects. This year will mark the 29th annual spring sale hosted by the operation. Star Lake also markets pairs, show prospects and 18-month-old Ranch Ready Bulls in an annual fall sale.

Star Lake has a strong youth market and has awarded more than $150,000 in cash, credits and prizes during the last 13 years in their junior futurity. Star Lake utilizes cattle shows as other businesses would use a trade show to display their genetics to the public.

TC Ranch

TC Ranch, owned by Vance and Connie Uden and their son, Dru, is a family-oriented purebred Angus operation that has been in continuous operation for 58 years, beginning in 1949. The ranch is located in the Republican Valley of south-central Nebraska, where their 700 registered Angus cows pasture on both sides of the valley.

The ranch consists of 8,000 acres of native grass and irrigated farmland, which is in corn, soybeans, alfalfa and hay. Keeping the needs of their customer in mind, the Uden's cow herd is managed under the same parameters as many commercial herds in the area. The cows are pastured in the native grass hills in the summer and grazed on cornstalks in the valley in the winter.

The herd has been on performance records since 1958 — first with the Nebraska Extension Service. Their records were then moved to the Angus Herd Improvement Records (AHIR®) program when it was initiated. These records have allowed them to identify many outstanding sires and to identify and perpetuate numerous outstanding cow families and individuals.

The Udens believe the end goal of the beef industry is the consuming public's acceptance of beef. Because of this philosophy, for the past 15 years they have fed out the bottom one-third of their bulls as steers to gain carcass data. This tells them how their steers perform in a feedlot situation. Because of their efforts they have had one or two sires among the top 10 for Angus progeny registrations for 15 years.

For the past 33 years, TC Ranch has hosted a yearling bull sale the fourth Wednesday in February and a female sale every third or fourth year in the fall. TC Ranch is known in the seedstock industry as "The Herd with a Program." Today the slogan means genetics, service, marketing and working with their customers.

Tinney Farms

Tinney Farms is located in Hanceville, Ala. The 300-cow operation is maintained on 2,000 acres owned by Howard Tinney and managed by Arlin Taylor. Tinney Farms is a premier producer of purebred Santa Gertrudis cattle and Star-5 commercial females.

The goal of Tinney Farms is to compete on the rail and in the pasture with any breed of cattle. To accomplish this goal, performance tools are utilized to produce the traits that the market demands.

Tinney Farms is actively collecting carcass data on all animals by retaining ownership at the King Ranch Feedyard at Kingsville, Texas, and participating in the Nolan Ryan Tender Aged Beef program, as well as utilizing carcass ultrasound. DNA testing of the entire herd through the Bovigen GeneSTAR® program is standard at Tinney Farms.

Howard Tinney is president of Santa Gertrudis International and has been instrumental in the development of the American Breeds Coalition and its vision.

Tomlinson Farms

Located in southern Illinois, Tomlinson Farms comprises 2,000 acres, with approximately 1,000 devoted to corn and soybean production and the remaining 1,000 for hay and pasture. The purebred Angus herd was started by George's uncle, T.L. Tomlinson, in 1946. The operation continues to maintain a purebred Angus herd, which now consists of 200 brood cows and 40 replacement heifers.

The Tomlinson breeding program focuses on performance improvement, particularly in association with AHIR. Working with the University of Illinois Extension since the farm's establishment, the Tomlinsons began private performance testing in the 1970s and still use this program today.

Presently, the Tomlinsons' senior herd sire is featured in a bull stud and is considered a curve bender for light-birth-weight and high-growth expected progeny differences (EPDs). Tomlinson Farms uses both AI and natural-service matings. Emphasis is placed on EPDs for light birth weight combined with growth and carcass desirability.

Tomlinson Farms makes 90% of its sales by private treaty. The farm annually merchandizes 75 yearling bulls and 40 bred heifers to Illinois, Missouri, Kentucky and Indiana customers. Along with a visual assessment of the sale animal, Tomlinson offers complete performance information, including birth, weaning, yearling and maternal milk EPDs to customers.

TC Ranch

Tomlinson Farms

BIF Honors Cream of the Crop

BIF awards continuing service, pioneer and ambassador award winners and recognizes Frank Baker Memorial Scholarship Award winners.

Three Honored as Pioneers

The Beef Improvement Federation (BIF) honored three cattlemen with its Pioneer Award June 7 during the organization's 39th annual meeting in Fort Collins, Colo. The award recognizes individuals who have made lasting contributions to the improvement of beef cattle and who have had a major role in the acceptance of performance reporting and documentation as the primary means to make genetic change in beef cattle populations.

David and Emma Danciger of Tybar Ranch have long had an interest in producing high-performing, environmentally adapted beef cattle. David graduated from Harvard with a degree in economics after serving with the Army Air Force in World War II. He began in 1950 with a ranch located south of Dallas, Texas. There he started breeding Angus cattle and eventually became a life member of the American Angus Association.

David was a scientist at heart, and he continually focused on improving his Angus herd. He attended schools on artificial insemination (AI), eventually setting up bull collection facilities and a laboratory on his Cedar Hill Ranch.

In 1980, David and Emma moved to Carbondale, Colo., bringing 50 young heifers with them from the Danciger Tybar Angus Ranch. The move to a different environment was like starting over again, learning to cope with cold weather, altitude and intensive land management.

►David and Emma Danciger of Tybar Ranch, Carbondale, Colo., were awarded the 2007 BIF Pioneer Award. Pictured are (from left) Joe Danciger; Emma Danciger; Mark Nieslanik, manager; and Mike Goscha, assistant manager

Early in that experience they learned of brisket disease, or high-altitude disease, something they never experienced in Texas. The challenge of breeding cattle adapted to high elevation led David to voluntarily put his bulls in a research program testing for brisket disease.

Since those original tests, Tybar has tested every animal for high-altitude disease at one year of age and continues to select animals adapted to the high-altitude environment. Working with Colorado State University (CSU), Tybar data was used to develop expected progeny differeces (EPDs) for pulmonary arterial pressure or PAP, which is an indicator of brisket disease susceptibility.

Tybar continues to work closely with CSU, producing EPDs, using those in their selection program, and supporting further research into this problem.

David's motto was "Life is a learning experience," and he continued to to act upon that motto until age 81. Since David's passing, Mark Nieslanik has continued to manage the ranch and pass on David's love of cattle and research.

Jim Gosey. For 34 years Jim Gosey was the Extension beef specialist and professor in the animal science department of the University of Nebraska–Lincoln (UNL). He continues his ties to UNL as professor emeritus and helps with the teaching herd.

Gosey received his bachelor's degree in animal science from Oklahoma State University in 1965, his master's degree from

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New Mexico State University in 1967 and his doctorate in beef cattle genetics from the University of Nebraska in 1976.

He joined the University of Nebraska in 1971 as beef cattle Extension specialist, working in the area of beef cattle breeding, beef crossbreeding, bull selection, cow-calf management, beef cow efficiency and beef cattle production systems. Gosey has taught beef cattle production/cow-calf management and beef cattle merchandising in addition to managing the University's teaching herds, which include Angus and composite populations.

Gosey has written numerous magazine articles and has given many invited presentations. He has numerous articles published in proceedings of various beef cattle symposia. Whether talking to beef producers or students, Gosey strives to simplify complex concepts into practical, applied recommendations.

Gosey has been a featured speaker at four BIF national meetings, nine Range Beef Cow Symposia, and four 4-State Beef Conferences, as well as numerous beef breed association programs. He organized the 2002 BIF annual meeting, which was in Omaha, Neb.

Like many, his impact went far beyond his research and education; he has had a positive influence on many cattlemen.

Rob Brown of R.A. Brown Ranch. During the course of his career in the livestock industry, Rob Brown of R.A. Brown Ranch, Throckmorton, Texas, has demonstrated vision, leadership and excellence. As an industry leader for more than 20 years, he has given freely of his time to the industry through numerous organizations. He served as a director to the National Cattlemen's Association, for which he served as a member of its Executive Committee, chairman of the Membership Committee and chairman of the Purebred Council. He was instrumental in creating the Young Cattlemen's Conference (YCC) leadership program.

Brown's work on the ranch established his reputation as a leading supplier of cattle genetics. R.A. Brown Ranch encompasses 58,000 acres in Texas and Colorado and has become known for its forward-thinking and trendsetting ways. Today, the ranch is recognized as a leader in innovative cattle breeding.

The ranch, which began as a Hereford and Angus operation in 1895, keeps meticulous records on more than 1,000 head of registered cattle in four breeds and 1,100 commercial cows. During the 1990s the ranch developed Hotlander, a heat-tolerant composite breed. R.A. Brown Ranch provides Angus, Red Angus, SimmAngus and Hotlander bulls and females to producers worldwide through their annual production sale each October.

►Donnell Brown (left) accepts the 2007 BIF Pioneer Award on behalf of his father, R.A. "Rob" Brown of R.A. Brown Ranch, Throckmorton, Texas. BIF President Chris Christensen presents the award.

Brown was a leader with the Livestock Industry Institute and the American Society of Range Management. He has been involved with the American Angus, Red Angus, Simmental and Senepol associations, Texas Cattle Feeders Association, and the World Simmental Federation. Brown was appointed by Governor George W. Bush and served as chair of the Texas Animal Health Commission for 10 years.

Today Rob and his wife, Peggy, are still involved with the daily operation of the ranch as they transition management to the fifth generation.

Northcutt, Huffhines Honored

BIF honored **Sally Northcutt** of the American Angus Association and **Craig Huffhines** of the American Hereford Association with its Continuing Service Award June 7 during the organization's 39th annual meeting in Fort Collins, Colo. The award recognizes individuals for their service to the organization and to the beef industry.

Northcutt is the genetic research director at the American Angus Association. She works with the Performance Programs Department in data analysis and the modeling and application of the National Cattle Evaluation (NCE). Northcutt also works with universities across the nation to coordinate the expansive research activities of the Association.

Under her supervision and guidance, the American Angus Association developed a suite of dollar value indexes ($Values). Since her arrival, the Association has transitioned genetic predictions to an in-house system, developed online genetic evaluation tools like the Angus Optimal Milk Module, and established expected progeny differences (EPDs) for calving ease direct (CED) and calving ease maternal (CEM).

Before her work at the American Angus Association, Northcutt was an Extension beef cattle breeding specialist for nine years at Oklahoma State University. She worked to direct the Oklahoma Beef Inc. (OBI) central bull test at Stillwater.

She is actively involved in industry organizations such as BIF, for which she has served in various leadership roles during the past 10 years. She has served diligently on the BIF board of directors and has helped with BIF activities, including guideline revisions, convention program planning, and general policy.

►Sally Northcutt receives the 2007 BIF Continuing Service Award from BIF President Chris Christensen.

Northcutt was a BIF regional secretary and the chairperson of the Producer Applications Committee. As a standing committee chair, her programming provided BIF convention attendees with cutting-edge information on such topics as EPD/selection criteria, animal identification (ID) systems, production system management, and genetic/environmental interactions. She strived to educate and challenge BIF members to become better-informed, top-notch managers.

She is an avid golfer and runner, and she recently completed her first marathon. A Kentucky native, Northcutt received her bachelor's and master's degrees from the University of Kentucky and her doctorate in beef cattle breeding and genetics from Iowa State University.

Huffhines has been the executive vice president and chief executive officer (CEO) of the American Hereford Association (AHA) since 1997. He initially joined the AHA staff in 1992 upon completing a master's degree in meat science from Colorado State University (CSU).

His early responsibilities included director of feedlot and carcass programs for AHA's *Certified Hereford Beef*® (CHB) program. He was named CHB director in 1995, launching a fully aligned, breed-specific, branded beef program into the retail and foodservice sectors.

Under Huffhines' guidance, CHB has become a true national brand. In addition, Huffhines' team has instituted a fully aligned traceability system that tracks cattle from the ranch through the processing phase.

A native Texan, Huffhines received his undergraduate degree in animal science from Texas A&M University prior to his master's training at CSU. He was project leader for the CSU Hereford study, which formed the basis for the CHB program. He has since served in several industry capacities, including president of the National Pedigreed Livestock Council from 2003 to 2006, chairman of the BIF Emerging Technology Committee from 2004 to 2007, and member of the National Cattlemen's Beef Association (NCBA) National Animal Identification working group.

Chairing the Emerging Technology Committee, Huffhines' leadership has been instrumental in the promising field of molecular genetics. The Emerging Technology Committee has assisted the U.S. Department of Agriculture (USDA) with the bovine genome project through the collection of DNA samples. In addition, Huffhines has helped organize and has led BIF efforts in molecular genetic information validation, use and database development. Under Craig's leadership the committee has begun to establish marker-assisted selection protocols.

He and his wife, Mary Joe, are the parents of three sons — Seth, Cole and Miles.

Denton Honored as Ambassador

BIF named Angie Denton recipient of its 2007 Ambassador Award June 8 during the organization's 39th annual meeting in Fort Collins, Colo. The honor is given to a member of the media each year to recognize an individual's efforts to help cattle producers understand cattle performance testing and genetic prediction tools.

Denton is editor of the *Hereford World,* where she works to inform producers and connect segments of the beef industry. She has been sharing information about beef cattle genetics and production since her early years in 4-H.

►Angie Denton receives the 2007 Ambassador Award during Friday's BIF awards luncheon June 8.

After graduating from Kansas State University with a bachelor's degree in agricultural journalism and a minor in animal sciences and industry, she began her professional career working as an assistant editor with Angus Productions Inc. (API), Saint Joseph, Mo., publisher of the *Angus Journal* and *Angus Beef Bulletin.* There she began writing news and

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feature stories, with emphasis toward on-farm interviews and photographs, as well as writing several regular monthly columns.

She transferred positions within the organization, becoming associate editor and then web marketing director. She helped launch API's Web Marketing Department and its online coverage of BIF's annual conference, available at *www.bifconference.com.*

Denton joined the *Hereford World* staff in March 2005 and currently serves as editor. She oversees the editorial content of the monthly publication, including writing and editing. She enjoys working with cattle producers and keeping them up to date on the latest news and information.

During the past several years, Denton has assisted BIF with news releases, photographs and articles.

Frank Baker Award Winners Announced

BIF honored **Yuri Regis Montanholi** and **Gabriela Márquez Betz** with the Frank Baker Memorial Scholarship Award. The essay competition for graduate students provides an opportunity to recognize outstanding student research and competitive writing in honor of the man widely recognized as BIF's founding father.

Montanholi, a graduate student at the University of Guelph in Ontario, Canada, wrote his essay on "Genetic Improvement in Beef Cattle for Feed Efficiency: Increasing our Understanding of Biological Basis."

"Feed efficiency measurements constitute one of the key approaches to study animal bioenergetics and metabolism, which represent undiscovered niches of potential traits for improved cattle breeding programs," Montanholi noted in his award-winning paper. His study looked at residual feed intake (RFI) as a potential indicator of feed efficiency. The advantage of using RFI is that it likely reflects variation due to basic metabolic processes rather than due to levels of production.

A new technology to 'scan' animal's tissues for potential biomarkers for feed efficiency is promising, but the costs associated with this would make it very expensive on a large scale.

Suggested topics like cellular studies, infrared thermography, and hormonal determinations might be examined as technologies that are more affordable, Montanholi said. He also suggested that more biological models be used to explore the variation that exists in feed efficiency.

Montanholi concluded his paper by stressing that "an era of more and more fine-tuned and comprehensive investigations in feed efficiency has emerged" and will definitely affect the beef business in the future.

Betz, a graduate student at CSU, wrote her essay on "Using the Rate of Genetic Change and the Population Structure of Cattle to Better Target Genetic Progress." One of Betz's main findings is that none of the components that affect the rate of genetic change — accuracy, intensity of selection, or genetic variation and interval are isolated from each other.

Betz notes that tradeoffs will occur in practical situations. For example, higher intensity can be achieved by using older and fewer animals, but that will have a negative effect on generation intervals. Accuracy can be achieved if we use fewer, proven individuals as parents, but this would result in a loss of genetic diversity.

Breeders must make choices that will affect the rate of genetic change in their herd. Not all breeders will have the same goals, but practical decisions must be made on the basis of genetic improvement, says Betz in the award-winning research paper.

Betz concludes by emphasizing the importance of studying pedigrees and understanding how genes affect genetic changes in breeds will improve genetics faster.

Frank Baker played a key leadership role in helping establish BIF in 1968, while he was chairman of the animal science department at the University of Nebraska, Lincoln.

A proceedings paper is available for each essay on the "Symposium Papers" page at *www.bifconference.com.*

— by Mathew Elliott

►Gabriela Márquez Betz (left), CSU, receives the BIF Frank Baker Memorial Scholarship Award from Ronnie Silcox, University of Georgia (UGA).

►Yuri Regis Montanholi (left), University of Guelph, receives the BIF Frank Baker Memorial Scholarship Award from Silcox.

Broseco Ranch Named Top Commercial Producer

The Beef Improvement Federation (BIF) honored Broseco Ranch with its Commercial Producer of the Year Award June 7 during the organization's 39th annual meeting in Fort Collins, Colo. Broseco Ranch is owned by Broventure Co. Inc. and managed by Tom Woodward.

►Tom Woodward accepts the 2007 BIF Commercial Producer of the Year Award for Broseco Ranch of Texas.

At 300 feet (ft.) of elevation, Broseco Ranch is sandwiched between the Sulphur River and White Oak Creek in northeast Texas. In 1961, Paul Pewitt sold his 45,000-acre spread to Broventure Co. During the past 46 years, Broventure Co. has operated a commercial cow-calf operation under the banner of Broseco Ranch. The bottomland hardwood timber and a pine farm have been sold, 11,000 acres were taken by the Corps of Engineers, and another 10,000 acres of upland have been sold, leaving 10,000 acres of upland improved pasture in the current operation.

The cow herd consists of 2,700 cows that are exposed for a 60-day, spring breeding season. Yearling replacement heifers are exposed for 45 days. Prior to turning out bulls, they synchronize and artificially inseminate (AI). A normal year will have a breeding herd consisting of 300-400 yearling heifers and 300-400 mature cows. At weaning time, all cows are pregnancy-tested, and all open cows are rebred for fall calving, sold or removed from the herd.

In 1981, the ranch infused Brahman genetics into its primarily English-cross cow herd. Then, in 1984, a three-breed rotational crossbreeding system was established to stabilize the Brahman influence and optimize heterosis. Currently, the genetics used include Red Angus and two composites (SimAngus and Hotlander). A 200-head Red Angus herd produces bulls for use on replacement heifers and "balance bulls" for mature cows. They balance the adaptation, maternal, growth and carcass traits to optimize performance at all phases of production.

Since 1988, Broseco has retained ownership on a majority of its production. Calves are individually weighed, preconditioned and electronically identified at weaning. The calves go to a wheat stocker program in the rolling plains of Texas and are then finished in the Southern Plains.

The operation is Quality Systems Assessment (QSA) qualified. Finished cattle are sold through a value-based grid-marketing system. Through the Ranchers Renaissance cooperative in partnership with Cargill Meat Solutions, the beef is marketed in the Ranchers Registry product line to several major food store chains.

Other nominees

- 4Z Farms is located in eastern Dickinson County in north-central Kansas. It has been operating as a family farm from this location for 30 years. Owners Dennis and Cheryl Zumbrunn have 100 black Angus and Angus-cross cows that they breed to black purebred Simmental bulls.
- CK Ranch is located in the Smoky Hills region of Saline and Ellsworth counties of central Kansas. CK Ranch was founded by J.J. Vanier, father of Jack and grandfather of John. The commercial herd consists of 600-950 Hereford and Red Angus cows, and 175-200 registered Hereford and Red Angus cows make up the seedstock herd.
- Barry and Larry Dowell of Stronghurst, Ill., operate a grain and commercial beef cattle operation consisting of 325 spring-calving cows, 80 fall-calving cows and 80 replacement heifers. The cow herd started with mostly Hereford cows. These were bred to Angus, Hereford and Limousin bulls in a three-breed rotation. Starting in the 1990s Angus bulls were used to obtain a more uniform cow herd.
- Owned by Lawlor Wakem and managed by Chris Christianson, Eagle Rock Ranch is situated 9,000 ft. above sea level. An average annual rainfall is 14 inches (in.). The herd is almost all purebred Angus. Currently they have 220 cows.
- Eatinger Cattle Co. consists of 1,400 beef cows on 16,000 acres in southwest Cherry County in north-central Nebraska. It was founded by Charles Henry Eatinger. The ranch is now operated by Wayne and Miles Eatinger and Dennis Drews. Wayne and Roxanne Eatinger's son, Miles, is the sixth generation to live and work on the ranch.
- The JHL ranch, owned and operated by Art and Merry Brownlee, is located in the Nebraska Sandhills. The JHL crossbreeding system uses moderate Angus and Braunvieh genetics. The operation consists of 1,400-1,600 cow-calf pairs utilizing intensive rotational grazing management.
- The Lacey family has been ranching in California since 1870. After settling in the Owens Valley, John William Lacey and his two sons expanded the operation to increase their carrying capacity to 1,000 head. John and his wife, Dee, and their children continue to run Lacey Livestock. The ranch began with Hereford and Shorthorn cattle. In 1960, Angus were introduced to replace the Shorthorns.
- Lerwick Brothers LLC is a third- and fourth-generation cattle operation. The herd was started in 1907 with a few milking Shorthorns. Hereford bulls and then Angus bulls were introduced. Grandsons and great-grandsons of homesteader August Lerwick operate cropping and cattle operations in southeast Wyoming and western Nebraska. Some have chosen straight black Angus and some Red Angus cattle.
- Ron and Shaunna Melancon established MG Farms in 1994 in southwest Mississippi. Currently, the ranch consists of 1,700 acres dedicated to the cow-calf operation and 1,800 acres of timberland. MG Farms currently consists of about 600 commercial cows and 200 replacement heifers based on high-performance Brangus, Angus and Hereford genetics.
- Stuart Land & Cattle consists of 16,000 acres in Russell, Tazewell and Washington counties of Virginia. It is on land deeded in 1774 by Patrick Henry to Henry Smith as a reward for building an Indian fort. Henry Smith was the great, great, great, great-grandfather of the present manager and part owner, Alexander (Zan) Stuart Jr. The breed composition of the herd is five-eighths Angus and three-eighths Simmental and Gelbvieh.