2011 Beef Improvement Federation Annual Research Symposium & Annual Meeting

BIF Honors Its Best

he Beef Improvement Federation (BIF) honored several individuals for their dedication to beef improvement during its annual meeting and research symposium in Bozeman, Mont., June 1-4. The honorees were recognized during the course of two awards luncheons on campus at Montana State University.

Three pioneers recognized

BIF honored three individuals with the Pioneer Award: Michael "Mike" Tess, Michael MacNeil and Jerry Lipsey. The award recognizes individuals who have made lasting contributions to the improvement of beef cattle, honoring those who have had a major role in acceptance of performance reporting and documentation as the primary means to make genetic change.

► **Mike Tess** grew up on a poultry ranch in California. After obtaining a bachelor's degree in animal science at Cal Poly, San Luis Obispo, Calif., he and his wife, Kathy, moved to Montana to start a beef cattle ranch. His stint as a cattle rancher stoked an interest in animal genetics. That curiosity brought him to Montana State University (MSU), where he earned a master's degree and then a doctorate in animal breeding under Gordon Dickerson from the University of Nebraska.

Upon completion of graduate school in 1981, Tess accepted a professorship at North Carolina State University (NCSU). In 1988, he came back to MSU as a professor of animal breeding. While at MSU, he taught



► From left, 2010-2011 BIF President Ben Eggers presents the Pioneer Award to Mike Tess, Packhorse Services LLC, Bozeman, Mont.

Compiled by Shauna Rose Hermel

several classes, performed research and served as department head at various times. He retired as emeritus professor in 2009.

After retiring, Tess started a private consultancy business dubbed Packhorse Services LLC. He consults for the Bair Ranch Foundation and the American Simmental Association (ASA), and serves as executive director of the Ultrasound Guidelines Council (UGC). Tess continues to teach MSU's calving class on a voluntary basis.

His long and productive career has benefited students, fellow beef cattle scientists, beef producers, BIF and the entire beef industry. Tess has benefited humanity with his tireless contribution of time and financial generosity to those less fortunate.

▶ Michael MacNeil grew up in Ithaca, N.Y., where his father coached the Cornell basketball team. He received bachelor's, master's and doctoral degrees from Cornell, Montana State and South Dakota State universities, respectively.

In 1982, MacNeil began his career as a scientist and statistician at the U.S. Department of Agriculture (USDA) U.S. Meat Animal Research Center (USMARC) in Clay Center, Neb. In 1989, he accepted a position at the USDA Fort Keogh Livestock and Range Research Laboratory at Miles City, Mont., where he continues to work as a research geneticist.

MacNeil has developed a highly respected research program at Fort Keogh. Leveraging his lifelong focus on integrating genetics and economics, he coordinates the Fort Keogh



► Eggers presents the Pioneer Award to Michael MacNeil, research geneticist with USDA-ARS.

research efforts seeking to develop strategies and technologies for reducing beef cattle production costs. This research program is long-term and multidisciplinary, involving genetics, physiology, nutrition and microbial metagenomics. His personal research focuses on modeling production systems, estimation of genetic parameters, mapping quantitative trait loci, and developing breeding objectives and selection indexes.

MacNeil has a well-established track record of zeroing in on an industry need and delivering a solution. During the last decade, his selection index work has seen considerable uptake in the seedstock industry and holds the potential to be a transformative technology. He has also assisted breed associations in the development of new expected progeny differences (EPDs) and the integration of DNA information into their genetic evaluation systems.

► Jerry Lipsey was raised on a small cattle and grain farm in Charlotte, Mich. He obtained his bachelor's and master's degrees from Michigan State University and a doctorate in meat science from Kansas State University (K-State).

He started his career in 1978 as the director of junior activities for the American Angus Association. In 1982, he began what would be a 15-year tenure as a University of Missouri (MU) meat science professor. Then, in 1996, he accepted the position of executive vice president at the ASA, a position he currently holds.

An award-winning teacher and advisor



► Eggers presents the Pioneer Award to Jerry Lipsey, ASA.

while at MU, his educational efforts stretch well beyond the classroom to all facets of the industry. A small army could be fielded with the "students" he has positively influenced. Many beef industry leaders credit Lipsey's teaching and mentorship as key to their success.

As executive vice president, Lipsey has provided visionary and effective leadership to the ASA at a critical time in the organization's life. Immediately upon his hiring, he leveraged his meat science background to implement ASA's Carcass Merit Program.

As one of the industry's most skillful communicators, he has worked tirelessly to open lines of communication between researchers, educators, seedstock and commercial producers, feeders and packers. His leadership is credited with positioning ASA at the top tier of seedstock organizations.

Lipsey has had a significant effect on the beef industry, as a highly respected animal scientist and college professor, diligent and skilled breed association executive and innovator.

Five recognized for Continuing Service

BIF honored five individuals with the Continuing Service Award: Tommy Brown, Mark Enns, Joe Paschal, Marty Ropp and Bob Weaber. The award recognizes those who have made a significant contribution to the industry.

► Tommy Brown has spent his professional career with the goal of educating cattlemen as to the importance of performance traits in cattle selection. Brown, who retired after a 32-year career as a county agent and regional animal scientist, is credited with being the innovator who moved the Alabama cattle industry to a higher plane



through the use of performance records and new marketing schemes.

Under his leadership, feeder-calf sales were developed to market Alabama calves in truckload groups, and special heifer sales featuring genetically superior females were established. Brown also established a bred heifer sale that continues to provide opportunities for both buyers and sellers to capitalize on the need for good cattle.

Brown has received numerous awards during his career, including the Richard Deese Award, which is given by the Alabama Beef Cattle Improvement Association (BCIA) for outstanding service and dedication to the Alabama BCIA and its performance principles.

He has served two terms on the BIF board of directors and was elected president in 2008. He has been on the BIF program many times as a speaker or as a moderator at the annual convention. Brown has served as an advisor for the National Beef Cattle Education Consortium (NBCEC). He served two terms as an ASA trustee, for which he chaired the Beef Improvement Committee.

Brown owns Meadow Lane Farms, a source of black Simmental genetics. He also serves as genetic and marketing manager at Sunshine Farms, which, under his leadership, has developed a reputation for producing outstanding cattle within a system where selection decisions are data-driven.

Brown is a graduate of Auburn University, where he received his bachelor's and master's degrees.

► Mark Enns was born and raised near Enid, Okla. He gained valuable production experience working on his family's wheat and cattle farm. In 1987, he received dual degrees in biology and natural science from Tabor College, Hillsboro, Kan. Following a stint in private industry, he began work on a master's degree in animal breeding and genetics at CSU, where he also obtained his doctorate.

During his graduate studies he worked as a research associate for the CSU Beef Cattle Improvement Center near Encampment, Wyo. There he developed breeding plans and supervised data collection and database management for the 450-head purebred Angus herd.

Following completion of his doctoral studies, Enns served as a visiting research scientist for Landcorp Farming Ltd. in New Zealand. There he developed genetic evaluation systems and breeding programs for the company's deer, sheep, goat and beef enterprises.

Enns joined the animal sciences faculty at the University of Arizona in 1995 as an assistant professor. In 2001, he returned to CSU's Department of Animal Sciences as assistant professor, where his appointment CONTINUED ON PAGE 140 Seedstock Producer of the Year

Mushrush Ranches LLC of Strong City, Kan., was named the 2011 Seedstock Producer of the Year. Partners in the family ranch include Robert and Oma Lou Mushrush, Joe and Connie Mushrush, and Daniel and Christine Mushrush.

Mushrush Red Angus is a familyowned and managed operation located in the heart of the Kansas Flint Hills in Chase County. The operation utilizes about 8,000 acres of native tallgrass prairie.

The main enterprise consists of 500 registered Red Angus cows split evenly between spring- and fall-calving herds. The family sells about 150 bulls each year in a spring production sale and through private-treaty sales throughout the year. The target customers are commercial cattle producers.

The Mushrushes have a bred-heifer program for which they source 400-500 heifers from their customers to develop, breed and sell each year. Heifers not meeting requirements of the breeding program, bulls not meeting criteria to be seedstock, and Mushrush-sired steers purchased from customers are fed to finish in a 1,000-head feedlot on the ranch or managed through the stocker phase on grass pasture and then put on feed. Fed cattle are sold on a value-based grid to U.S. Premium Beef (USPB), with full carcass data collected.

The ranch was nominated for the honor by the Kansas Livestock Association.

Also recognized as regional nominees for Seedstock Producer of the Year were:

- ► Bar T Bar Ranch, Winslow, Ariz.
- ► GV Limousin, Garnett, Kan.
- ► Jungels Shorthorn Farms, Kathryn, N.D.
- McDonald Farms, Blacksburg, Va.
- Monogram Farms, Terry, Miss.
- ► Panther Creek Angus, Bowen, Ill.
- Ridgefield Farm, Brasstown, N.C.
- Schuler Red Angus, Bridgeport, Neb.
- Sunshine Farms, Clanton, Ala.



► Eggers presents the Continuing Service Award to Mark Enns, CSU.

► Tommy Brown, Clanton,

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includes research, teaching and outreach components. He was promoted to associate professor in 2007.

From 2003 to 2008, Enns supervised the activities of the CSU Center for Genetic Evaluation of Livestock, which provides genetic evaluation system development and services to a number of U.S. and international clients. He teaches graduate and undergraduate courses at CSU and has been a member of a multistate faculty team that has developed a popular breeding and genetics online curriculum for graduate students. Enns represents CSU on the Scientific Council of the NBCEC, where he's provided leadership for a number of years.

His research program focuses on methods to genetically evaluate and select animals that fit their production environment both biologically and economically. These efforts include development of new methods for evaluating and improving cow and heifer fertility, cow maintenance requirements, time to finish in the feedlot; and development of methods to better use economic information in selection decisions for increased profitability of beef production. Most notably, Enns was the project coordinator for the NBCEC Genetics of Feedlot Cattle Health project and is coprincipal investigator on a recently funded \$9 million project to investigate the genetic basis of bovine respiratory disease (BRD).

Enns has been an active leader in BIF and a proponent of the BIF mission. He is an advocate of practical, modern beef cattle genetic selection systems. His contribution to BIF includes service as the western regional secretary and chairman of the Cow Herd Efficiency Committee since 2003. Enns was a leader and member of Colorado Host committee for the BIF symposium in Fort



► Eggers presents the 2011 Continuing Service Award to Marty Ropp, Allied Genetic Resources.

Collins, Colo., in 2007. He has distinguished himself through sustained service to BIF and its mission.

► **Joe Paschal** is professor and extension livestock specialist at the AgriLife Research and Extension Center at Corpus Christi, Texas.

A native of Corpus Christi, Paschal earned bachelor's and master's degrees in animal science and a doctorate in animal breeding and genetics at Texas A&M University (TAMU). He is a member of the animal breeding and genetics section of the animal science department and is on the graduate faculty at TAMU, and an adjunct professor of animal science at TAMU-Kingsville.

After receiving his bachelor's degree, Paschal served as director of breed improvement and foreign marketing for the American-International Charolais Association (AICA). Upon completion of his doctoral degree in 1986, he served as a lecturer and undergraduate counselor in the TAMU Department of Animal Science.

Paschal began his extension career as a livestock specialist at the Fort Stockton, Texas, District Extension Headquarters. In 1988 he moved to Corpus Christi to assume his current position, where his primary interests have been in applied beef cattle breeding and genetics, production systems, and beef cattle growth and development.

One of his primary efforts for several years was as founder and director of the Texas A&M Ranch-to-Rail South program. As an outgrowth of that program, he established the South Texas Carcass Data Service.

Paschal has been involved in several carcass merit/feedout programs, including those for the American Brahman Breeders Association, Santa Gertrudis Breeders International, Beefmaster Breeders United,



► Eggers presents the Continuing Service Award to Joe Paschal, Texas A&M.

and the American Simmental-Simbrah Association. He has provided guidance to the Jim Wells County BCIA Bull Gain Test and the Rio Grande Valley Association Bull Gain and Replacement Heifer Development Program.

Paschal has been involved with BIF for more than 30 years, starting with his position with the AICA. He was part of the host committee for the 1991 BIF symposium, coordinated the 2001 symposium, and will assist in coordinating another meeting in Texas in the near future. In 1995, Paschal became the BIF liaison for the Texas A&M Beef Cattle Extension Group.

► Marty Ropp grew up on a swine operation near Bloomington, in central Illinois. From early on, he possessed a penchant and aptitude for livestock judging — an ability he has nurtured and honed over his lifetime and still utilizes to this day.

In 1987, Ropp graduated from Kansas State University (K-State), where he was an accomplished member of the livestock judging team. While earning a master's degree in animal science from the University of Missouri (MU), Ropp served as the coach of the university's livestock judging team. He continues to judge livestock shows throughout the country and has volunteered countless hours in educating youth about showing and judging livestock.

Upon receiving his master's, Ropp took a position as a regional livestock specialist in Missouri, and later as an extension swine specialist in Michigan.

In 1998, he began work at the ASA as its director of commercial programs. Immediately upon his hiring, Ropp initiated and developed ASA's young sire testing program along with Jerry Lipsey. He has since nurtured the program into the industry's largest structured sire test, with hundreds of sires of several breeds being tested through the years.

Ropp wore many hats while at ASA. In addition to his initial responsibilities as director of commercial programs, he was later tapped to direct ASA's field services. He worked diligently to build bridges between all segments of the industry: cow-calf, feedlot, packers and seedstock producers. An accomplished speaker with a keen sense of humor, he is in great demand at field days, educational programs and seminars throughout the country.

Recently, Ropp left the ASA to start Allied Genetic Resources (AGR). The business,



► Jay Carlson (center), *BEEF* magazine, receives the Ambassador Award from Eggers (left) and BIF Executive Director Joe Cassady.

owned and supported by a group of committed seedstock producers, is designed to promote their customers' profitability. AGR owners are located in 15 states — from California to Alabama and Montana to Texas. Currently, they market more than 4,000 bulls per year. Ropp's strong belief that the future of seedstock production will become more focused on customer service and increased profitability and less about the tradition of selling bulls forms AGR's core philosophy.

► Robert Weaber grew up on his family's cattle and sheep ranch in southern Colorado. After graduating from high school, he attended CSU, where he received his bachelor's degree in animal science in 1993. He then continued on in CSU's Beef Industry Leadership master's program, graduating in 1995. During a portion of this time, he served as a legislative affairs intern in Washington, D.C., covering Congressional hearings on agriculture, appropriations, food safety and trade.

Subsequent to that he served as director of education and research for the American Gelbvieh Association and then as the interim director of performance programs for the American Simmental Association.

In 2000, Weaber entered a doctoral program at Cornell University, graduating in 2004. Since then, he has been an assistant professor and state extension specialist in beef genetics at MU. He has accepted and will begin a position with K-State this fall.

Weaber has given more than 52 invited presentations at international, national, regional and state meetings and conferences. He has served on the BIF board of directors in many different roles since 2000; he has been the Central Region secretary since 2006, and he served as the leading organizer for the 2010 BIF annual meeting.

Ambassador honored

BIF recognized Jay Carlson of *BEEF* magazine with the 2011 Ambassador Award. This award is given annually to a member of the media for his or her efforts in spreading news of BIF and its principles to a larger audience.

As regional sales manager for *BEEF*, Carlson has been instrumental in working to promote awareness among producers of BIF and what it stands for. Carlson has long been a top promoter of livestock publishing in North America. He was awarded the Ed Bible Distinguished Service Award in 2006 by the Livestock Publications Council (LPC), on whose board of directors he currently serves.

Carlson grew up on a small farm near Lockport, Ill., where he was active in 4-H, FFA and sports. He obtained a bachelor's degree in agriculture from MU in 1976. While there, he served as regional president for Block & Bridle and participated on the MU livestock judging team. Carlson was named a Distinguished Alumni of MU's Animal Science Department in 2010.

He is a lifelong participant in livestock showmanship activities, an involvement that continues today and an interest he fostered in the lives of his two daughters, Grace and Claire. He currently serves as a livestock committee member for the American Royal Livestock Show, as well as superintendent for the Junior College Livestock Judging Contest at the Royal.

Carlson was instrumental in making BEEF the official publication of BIF and in helping get the publication involved as the first major sponsor of BIF many years ago. Carlson helped pave the way for additional sponsors to get involved. He helped promote the BIF mission through editorial

Commercial Producer of the Year

Quinn Cattle Co., Chadron, Neb., was named the 2011 BIF Commercial Producer of the Year. Owners Reuben and Connee Ouinn started the operation as a commercial cow-calf operation in 1974 with the purchase of 50 Simmental x Angus crossbred heifers. The ranch is located primarily on leased land on the Pine Ridge Indian Reservation in South Dakota as well as in Dawes County in northwestern Nebraska. Currently, Angus x Simmental cows are bred to Angus, Simmental and Angus x Simmental composite bulls to calve in the spring. The goal is to produce a cow with high output on relatively low inputs in a challenging environment compromised by high selenium and sulfate levels in the water and grass.

Depending heavily on expected progeny differences (EPDs) for selecting sires with calving ease and moderate milk, yet above-average growth traits, the Quinns require a cow that produces excellent replacements as well as highperforming feeder cattle. Calves are retained through the feedlot phase and typically sold on a carcass-merit basis. Feedlot performance and detailed carcass data have been collected on the calf crop for more than 15 years.

Thirty percent of the mature cows and all of the replacement heifers and second-calf heifers are synchronized and bred by artificial insemination (Al). Individual cow records and ranch production are documented for continual management improvement. Measured areas include reproductive performance, weaning percentage per cow exposed, and annual cow cost by line item. A network of experts, in various industry disciplines, are regularly consulted to achieve the Quinns' goals of profitability and production criteria.

The ranch was nominated for the honor by the Nebraska Cattlemen.

Also recognized as regional nominees for Commercial Producer of the Year were:

- Bambarger Cattle Farm, Northport, Ala.
- ► Durheim Ranch, Ellendale, N.D.
- E. Roen Ranches, Knights Ferry, Calif.
- Larson Angus Ranch, Sharon Springs, Kan.
- ► Leavitt Lake Ranches, Vina, Calif.
- Silver Spur Ranch, Encampment, Wyo.

in *BEEF* magazine, provided BIF with free advertising in a national beef publication and gave BIF free press by recognizing the seedstock and commercial producers of the year.



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Students honored

Each year BIF honors students with the Baker Scholarship Award, a \$1,000 travel scholarship given in memory of Frank H. Baker. Applicants were asked to write an essay, and all submitted essays were judged by a panel of animal science faculty.

The late Frank H. Baker played a key



► From left, Cassady presents Frank Baker Memorial Scholarship awards to Megan Rolf, University of Missouri; and Brian Brigham, Colorado State University. Also pictured is Robert Williams, AICA.

leadership role in helping establish BIF in 1968. In his honor, each year since 1994 two deserving graduate students have been recognized with the Frank Baker Memorial Scholarship Award.

This year's recipients of the Frank Baker scholarship are Megan Rolf of MU and Brian Brigham of CSU. Rolf's essay was entitled "Genomic Selection: Delivering on the Promise" and delved into the topic of incorporating genomic information into genetic selection tools. Brigham's essay, entitled "Selection Tools for Optimal Genetic and Economic Improvement," discussed the daunting task of using today's host of EPDs in genetic selection and the opportunity to simplify selection through the use of selection indices and decision support models.

Both essays are available in the conference proceedings and are posted to the awards page at *www.BIFconference.com*.

Hair-Coat Shedding in Angus Cattle

At the 2011 BIF symposium, Joe Cassady provided an update on the hair-coat shedding study being funded in large part by the Angus Foundation.

by Katie Gazda, editorial intern

oe Cassady, associate professor of animal science at North Carolina State University (NCSU), kicked off the Live Animal, Carcass and End Point Committee's technical breakout June 2 with a summary of the hair-shedding study currently under way at NCSU in cooperation with Trent Smith and Jane Parish at Mississippi State University (MSU).

"Certainly there are differences in hair-coat type. There are shorthaired cattle. There are long-haired cattle," he began. "Whether an animal is a short-haired animal or a long-haired animal, they are still going to take on a winter coat, and they are still going to shed that winter coat in the spring. However, there is variation in how quickly those animals shed that winter hair coat, and that is the focus of the research that we are doing."

The study, funded largely in part by the Angus Foundation, consists of the ranking of hair coats of Angus dams on a scale of 1 to 5. A score of "1" indicates a slick, summer coat. A "5" indicates a full winter coat (see proceedings and PowerPoint presentation available



at *www.BIFconference.com* for a full description of the scoring system and pictures representing the various coat scores). This spring, Cassady and his team ranked nearly 7,000 cattle in Missouri, Texas, Virginia, North Carolina, South Carolina, Mississippi, Iowa, Tennessee, Alabama and Kentucky.

"Our objective in the initial experiment was to assess the amount of variation in the ability to shed the hair coat in Angus cattle and to determine the relationship between hair-coat shedding, pounds of calf weaned and body condition score," Cassady explained. "So, we're looking at the ability of the cow to shed her hair coat and then looking at the pounds of calf that she weaned."

Far-reaching effects

Hair shedding, or the lack thereof, can play a large role in heat stress. Heat stress can cause reduced conception rates, milk production, feed intakes and weight gain and can ultimately lead to death in cattle. When cattle are in hot environments, there are a number of factors that can reduce evaporative cooling, including humidity, wind speed, respiration rate and sweat gland activity.

Thus far, Cassady and his team have discovered that the later in the year a cow sheds her coat, the lower the adjusted 205-day weight of her calf. Cassady concluded that by selecting for hair-shedding traits in the Southeast, producers could increase calf weights.

"About the end of May is when folks in the Southeast would want to put shedding scores on their cattle," he said. "We would expect there to be a response to selection because it's a moderately heritable

The Wallace Scholarship Fund was established in 2008 by Select Sires, BIF, the Ohio Cattlemen's Association and fund contributors to honor the life of Roy Wallace and his contributions to beef cattle improvement by offering student scholarships. This year's winner of the Roy A. Wallace Scholarship Undergraduate Award was Cassandra Kniebel of K-State. Jessica Bussard, University of Kentucky, received the graduate award.

For more information about the award winners, visit the Awards page at www.BIFconference.com, Angus Productions Inc.'s event coverage site made possible through the cooperation of BIF and sponsorship of BioZyme Inc., through its significant gift to the Angus Foundation. Aj



► Above: From left, BIF Executive Director Joe Cassady presents Roy A. Wallace Scholarship awards to Cassandra Kniebel, undergraduate, Kansas State University; and Jessica Bussard, graduate, University of Kentucky. Also pictured is Aaron Arnett of Select Sires.



Hair-coat score 1

► Hair-coat score 3

weeks earlier than they should because of heat stress," Cassady said.

calves." Despite months of research, there is no scientific answer at this

trait and we would expect cows that slick off sooner to wean heavier

point as to why hair shedding correlates with calf weight.

"Why does this happen? The only honest answer to that is, 'I don't know,'" Cassady admitted. "We can speculate a lot. We can go through a lot of scenarios, but the honest answer from a scientific standpoint is 'I don't know.""

Diet, temperature, environment and genotype are also elements that may affect hair-coat shedding, Additionally, beyond weaning weight, there are additional traits that the research team believes may also correlate.

"We wouldn't be surprised to see an association between longevity and hair-coat shedding. Certainly it affects reproduction and gestation length. I know folks who are telling me that their cows are calving two

"Our objective in the initial experiment was to assess the amount of variation in the ability to shed the hair coat in Angus cattle and to determine the relationship between hair-coat shedding, pounds of calf weaned and body condition score."

- Joe Cassady

"And what about puberty? We haven't done any work in heifers. All the cows we've looked at have produced a calf. But what happens in the developing heifer? We don't know."

As of early June, the goal of the team was to return to all of the same operations in 2012 to re-score the same cattle. By the September 2012 American Angus Association Board of Directors meeting, the team hopes to have its report on hair-coat shedding complete.

To listen to this presentation and to view the PowerPoint and the proceedings paper that accompanied it, visit the Newsroom at www.BIFconference.com.

BIF's 43rd Annual Research Symposium and Annual Meeting was hosted June 1-4 on campus at Montana State University, Bozeman, Mont. Aj