

RANGE BEEF COW

Symposium

XXV

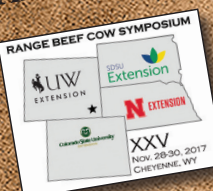
50 YEARS, 25 SYMPOSIUMS ...

NOVEMBER 28-30, 2017

Little America Hotel & Resort - Cheyenne, WY



Presented by ...
ANIMAL SCIENCE & EXTENSION DEPARTMENTS OF
University of Wyoming
University of Nebraska - Lincoln
South Dakota State University
Colorado State University

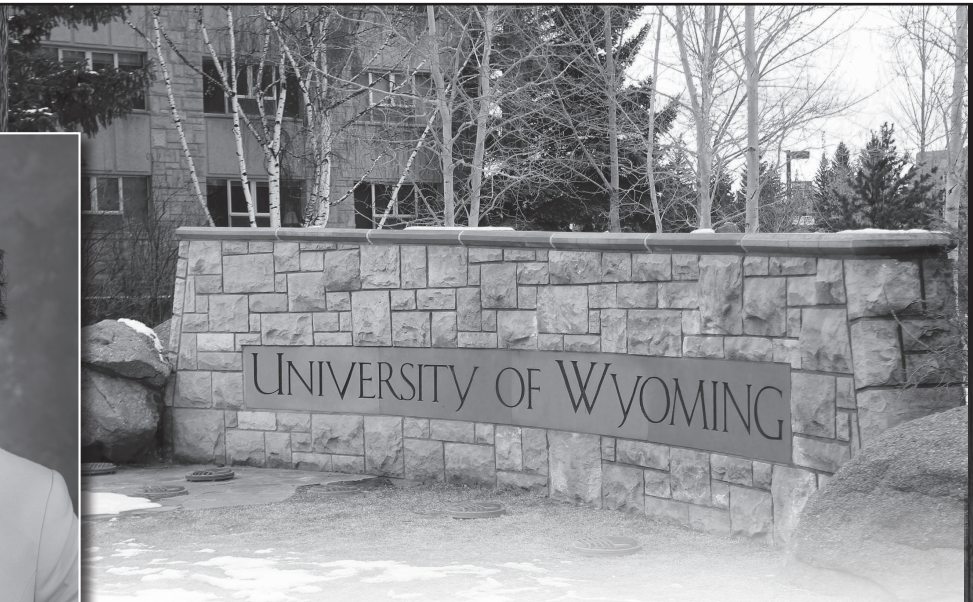


XXV
NOV. 28-30, 2017
CHEYENNE, WY





Laurie Nichols



A Presidential Welcome



Laurie S. Nichols
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November 28, 2017

Welcome to Wyoming!

As the President of this state's land-grant and flagship university, I'm excited for "The Cowboy State" to host the 2017 Range Beef Cow Symposium, one of the premier production beef cattle symposiums in the country. As a farm girl who grew up highly involved with our registered Hereford cow/calf operation, I fully appreciate the importance of research on beef production, and engagement with the cattle industry. Thank you for the work you do to promote a vibrant agricultural economy.

Rooted in the traditions of the West, the University of Wyoming was founded in 1886 and is a nationally recognized land-grant research institution with expert faculty, top-ranked academics and world-class facilities. We are proud to be part of this event, which brings together the best animal science researchers and extension specialists in the West from the University of Wyoming, Colorado State University, the University of Nebraska-Lincoln, and South Dakota State University, and with beef producers, industry representatives, and government officials.

Over the next three days, hundreds of participants and more than 25 speakers will contribute their knowledge and expertise to a rich dialogue about wide-ranging issues affecting beef production in Western states such as nutrition, marketing, health, reproduction, consumer demand, and current affairs. I hope that through the daily sessions and evening "bull pens," you'll be inspired to engage with colleagues, to share and learn, and explore opportunities to advance an industry that is vital to the economies and way of life in our great states.

Wherever you call home, we hope you enjoy your visit to Cheyenne. Wishing each of you a successful symposium!

Sincerely,

Laurie S. Nichols
President
University of Wyoming

Symposium



25 Years of the Range Beef Cow Symposium...

Building A Better Beef Industry

Dr. Ivan Rush & Dr. Doug Hixon

Editor's Note: To usher in the landmark 25th edition of the Range Beef Cow Symposium we turned to two gentlemen who, for much of their academic careers, served as the symposium's shepherds; two men who could capture in a few paragraphs some of the history behind the event and the important role it has played for decades in building a better beef industry. Drs. Ivan Rush and Doug Hixon, Professors Emeriti of the University of Nebraska and the University of Wyoming respectively, served for years as Range Beef Cow Symposium organizing committee members.

The 2017 Range Beef Cow Symposium (RBCS) marks the 25th edition of this four-state educational event that has developed a reputation for its high quality, research-based information and for its relevance to

range beef cattle producers. This biennial event has stood the test of time for nearly 50 years! The first symposium was held December 15-17, 1969 at the Chadron State College Campus in Chadron, NE. Beef Cattle and Livestock Extension Specialists from Colorado State University, the University of Nebraska, South Dakota State University and the University of Wyoming believed it would be good to pool their resources and have one major meeting for producers of range beef cattle. Drs. Jim Oxley, Bob Hatch, Joe Minyard and Carroll Schoonover represented their



Dr. Ivan Rush, Professor Emeritus, University of Nebraska

respective universities to plan the initial program. After considerable discussion and planning, the first symposium drew more than 300 attendees. A Proceeding was published containing manuscripts

of the various presentations and sold for \$3.00. Over the years, these Proceedings have become an excellent informational resource. The Planning Committee was not sure how well Bull Pen sessions in the evening would be received, but found them to be a highlight for many producers and has been a popular component of every program since. In fact, much of the format of that initial symposium is still present today. One benefit of the RBCS that is sometimes overlooked is the opportunity for producers to meet other producers outside of their immediate region and exchange ideas. The two-and-a-half day format enhances those opportunities compared to a more traditional extension meeting. In 1987, an addition was made when commercial industries were invited to participate in the RBCS in a trade show format. This has provided a valuable contribution to the symposium and has helped keep registration fees affordable.



Dr. Doug Hixon, Professor Emeritus, University of Wyoming

Initially, it was decided to administer the symposium every other year with the site rotating among the four cooperating states. This would allow attendees from each state to have one year in the cycle when the event would be closer to them. However, the popularity and importance of the symposium grew to where producers often found attendance to be mandatory, no matter where the RBCS was held.

One of the highlights of that initial symposium and also one of the most controversial topics, was a presentation by Dr. Del Dearborn of the University of Nebraska on breed differences. At the time,

importation of continental breeds was starting to occur and he presented information illustrating how some of those breeds might have faster growth rates than the more common British breeds. This resulted in a very lively Bull Pen discussion with comments ranging from, “It’s a trend that won’t last,” to “Where can I find some of these cattle?” Some breeders of British breeds were quite upset that the topic was even being presented.

“The symposium has developed a reputation for exposing producers to innovative and cutting-edge technology as well as emerging issues.”

The symposium has developed a reputation for exposing producers to innovative and cutting-edge technology and emerging issues. One of the first presentations on electronic identification was presented by a representative from a California firm in 1977. In the late 70’s, some cattle producers were starting to develop concerns about animal welfare and the animal rights movement. The Planning Committee therefore decided to invite Dr. Michael Fox, a veterinarian from England and an advocate for these causes, to speak at the RBCS in Rapid City, SD in 1981. This created a lot of anxiety among producers and many vented considerable anger. However, everyone left that symposia knowing this was a real issue that would have to be dealt with in the future.

One could go on citing examples of innovative topics discussed by leading scientists and producers who often thought outside of the box. As one peruses the topics of the 25 Proceedings over the past 50 years, one may get the idea that the more things change, the more they stay the same. Presentations still share information on basic management, addressing problems related to nutrition, reproduction, genetics, animal health, range management and marketing. Certainly, instant communications and the development of electronic technology have added a degree of sophistication to the application to production systems that would not have been envisioned when the RBCS was first held in 1969. The impact of management decisions on the integrated production system is now more often measured in dollars rather than simply impact on weaning weight, gain or efficiency. The impact of management decisions on consumer acceptability of the final product has also increased in importance.

Symposium attendance has ranged from just over 100 to over 1000, with weather often being a factor. The Planning Committee has always had the mind-set that innovative topics and cutting-edge technology should be addressed by the resource people with the most expertise and most relevant information to the problem being addressed. Often times that expertise was found in the four cooperating states. However, if that wasn’t the case, like any good producer they have tried to balance the cost and solve the problem by identifying the most appropriate speaker to cover the topic. That attitude is

| <i>25 Symposiums</i> |
|-------------------------|
| 1969 - Chadron, NE |
| 1971 - Cheyenne, WY |
| 1973 - Rapid City, SD |
| 1975 - Denver, CO |
| 1977 - Chadron, NE |
| 1979 - Cheyenne, WY |
| 1981 - Rapid City, SD |
| 1983 - Sterling, CO |
| 1985 - Chadron, NE |
| 1987 - Cheyenne, WY |
| 1989 - Rapid City, SD |
| 1991 - Fort Collins, CO |
| 1993 - Cheyenne, WY |
| 1995 - Gering, NE |
| 1997 - Rapid City, SD |
| 1999 - Greeley, CO |
| 2001 - Casper, WY |
| 2003 - Mitchell, NE |
| 2005 - Rapid City, SD |
| 2007 - Fort Collins, CO |
| 2009 - Casper, WY |
| 2011 - Mitchell, NE |
| 2013 - Rapid City, SD |
| 2015 - Loveland, CO |
| 2017 - Cheyenne, WY |

what has helped allow the RBCS to flourish for almost 50 years. Whether we are talking about cows, beef cattle production systems or our personal lives, there is nothing much more important than longevity!

Enjoy the 25th edition of the RBCS. DH/IR

Rich Heritage, Lasting Legacy, “Forever West”

From the Proceedings editor...

During the post-Civil War period, an era of cattle kings was born on the Great Plains. The post-war opening of the public domain provided cheap land and open range for grazing. The extension of the railroads into the high plains, along with a growing appetite for beef in the “new west” and the construction of great stockyards that were easily accessible by rail all helped catapult the state of Wyoming into its historic role as a hub for range beef cattle production. Historians say Cheyenne - now the capitol of Wyoming - became a trade center for the cattle industry almost overnight. The great cattle drives that Hollywood made famous came northward and westward over the Bozeman, Oregon and Texas Trails in herds of thousands. The cattle and the cowboys with them faced every challenge imaginable: flood-swollen rivers, drought, Indian attacks, extreme heat, snow and frigid temperatures, rustlers, and murderous raids by Jayhawkers. Some cowboys stayed when their drives ended and - on sheer grass and guts - built cattle ranches of their own. From the ranks of those cowboy pioneers who stayed behind came some of Wyoming’s most notable and historic figures including industrialists, capitalists, senators, representatives, scientists, philanthropists and physicians. One of those cowboys, John B. Kendrick, came to Wyoming with a Texas herd, married a cattleman’s daughter and eventually became a United States Senator and governor of Wyoming. Such is the stuff of Wyoming’s legendary cattle industry.



Breakin’ Through

In 1857, Justin Smith Morrill, a Vermont Representative, introduced a land grant bill in Congress. The bill allowed states to receive federal grants to establish higher educational institutions for agriculture, science, military science and engineering as a response to the growing American populace, settlement of the West, and the need among America’s rural citizens for higher education in areas like practical, applied agriculture. From this origin, the University of Wyoming was founded in March 1886, four years before the Wyoming territory was admitted to the Union as the 44th state. In September 1887, the University of Wyoming opened its doors to 42 students and five faculty members and, as befits the land grant university in “The Equality State,” both students and faculty included women from the first day. On May 16, 2016, Dr. Laurie Nichols, a cattleman’s daughter, became the 26th president of the University of Wyoming and the first woman to hold the post.

Wyoming epitomizes the definition of cattle country and the state is a natural host for the Range Beef Cow Symposium, as is the historic city of Cheyenne, which rose to national and international acclaim for its role in cattle trading and transportation during the 19th century. The legacy lives on. Today, cattle production is Wyoming’s largest agricultural commodity with 78% of the state’s total agricultural receipts attributed to beef cattle and calves. This year marks 25 editions of the biennial Range Beef Cow Symposium. That’s a remarkable milestone for any industry event. We’ve tried to celebrate that in part with the production of this RBCS Proceedings Guide, where you’ll find that we’ve woven into the pages a bit of the event’s history and an expression of Wyoming pride in playing host this year. Enjoy your stay in Wyoming, “Forever West.” LZ

Leesa Zalesky is a freelance writer, author, editor and owner of Hell Bent Communications Group in Laramie, WY.

Cover Photo by Dr. Steve Paisley, A View of Laramie Peak

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2017 Range Beef Cow Symposium

Schedule of Events

Tuesday, November 28

7:30 - 8:45 Registration

Morning Session Ramrod, Dr. Mike Day, Animal Science Dept. Head, UWYO

- 8:45 - 9:00 Welcome and Introductions, Dr. Mike Day
9:00 - 9:30 International Trade Update, Greg Hanes, USMEF
9:30 - 10:00 Livestock and Feed Grain Market Outlook, Jim Robb, LMIC
10:00 - 10:30 Break - Visit Trade Show Vendors
10:30 - 11:00 Drought Management, Justin Derner, Supervisor & Rangeland Specialist, ARS, Cheyenne, WY
11:00 - 11:30 Range Mineral Nutrition, Dr. Mary Drewnoski, Assistant Professor, Beef Systems Specialist, UNL
11:30 - 12:00 Using Technology To Increase Quality & Profitability, Troy Hadrick, SD producer
12:00 - 1:30 Lunch, Visit Trade Show Vendors

Afternoon Session Ramrod, Dr. Joe Cassady, Animal Science Dept. Head, SDSU

- 1:30 - 2:30 Genetic Selection vs. Visual Evaluation, Dr. Matt Spangler, Beef Genetics Specialist UNL; Dr. Bob Weaver, Extension Genetics Specialist, K-State University Animal Science Dept.
2:30 - 3:30 Quality Audit Overview, Deb VenOverbeke, OSU
3:30 - 4:00 Break, Visit Trade Show Vendors
4:00 - 4:30 Meat Cutting Demonstration, Culinary Kitchen staff, Beef Innovations Group
4:30 - 5:00 Management Decisions During Drought, Craig Bieber, SD & Shannon Sims, WY
5:00 - 6:00 Evening Reception
6:00 - 7:00 The Concepts of Meat Packaging, Dr. Warrie Means, Meat Science Dept., UWYO
7:30 - 9:00 Bull Pen Sessions



2017 Range Beef Cow Symposium Schedule Continued

The biennial Range Beef Cow Symposium is hosted by the Extension and Animal Science Departments of the University of Wyoming, University of Nebraska-Lincoln, South Dakota State University and Colorado State University. The 2019 symposium will be hosted by the University of Nebraska.

A very special thanks to all of the event volunteers, presenters, deans of the colleges of agriculture and animal science department heads at the organizing universities for their support.

We also extend our gratitude to the media, corporate sponsors, trade show exhibitors and attendees.

Wednesday, November 29

7:15 - 8:00 Breakfast, sponsored by Zinpro and Leachman of Colorado

8:00 - 9:00 Registration

Morning Session Ramrod, Dr. Clint Krehbiel, Animal Science Dept. Head, UNL

9:00 - 9:30 Generation Transition Estate Planning, Pam Olsen

9:30 - 10:00 Emerging Issues for the Beef Industry, Allison Cooke, Executive Dir. Gov't Affairs, NCBA

10:00 - 10:30 What's Your Beef; Time To Tell Our Story, Rob Eirich, Nebraska BQA

10:30 - 11:00 Break, Visit Trade Show Vendors

Herd Health Ramrod, Dr. Clint Krehbiel, Animal Science Dept. Head, UNL

11:00 - 11:30 Influence of Modified Live Vaccines on Reproduction, George Perry, SDSU

11:30 - 12:00 Bovine TB, Dr. Jim Logan, Wyoming Livestock Board

12:00 - 1:30 Lunch

Afternoon Session Ramrod, CSU

1:30 - 2:00 Managing Risk in the Beef Industry, Cattle-Fax

2:00 - 2:30 Farm Loan Opportunities, Scott Miller & Becky Gerlach, FSA

2:30 - 3:00 Key Drivers For Cowherd Profitability, Clay Mathis, King Ranch Institute

3:00 - 3:30 Break, Visit Trade Show Vendors

3:30 - 4:15 Weather Outlook, Brian Bledsoe, Meteorologist

4:15 - 5:00 Consumer Demand Panel, Cindy Goertz, Wyoming Pure & John Lundeen, Beef Innovations

5:00 - 6:00 Evening Reception

6:00 - 7:00 Dinner, "History of the Range Beef Cow Symposium,"
Dr. Ivan Rush & Dr. Doug Hixon

7:00 - 9:00 Bull Pen Sessions

Schedule Continued Next Page

2017 Range Beef Cow Symposium Schedule Continued

Thursday, November 30
Cattle Handling Workshop, Laramie County Community College Teaching Arena
Ramrod, Dr. Jack Whittier, UNL

8:00 - 9:00 Registration

Workshop Note: During each session, choose 1 of the topics offered as follows:

Frame Scoring: Dr. Julie Walker, State Extension Beef Specialist, SDSU; Dr. Ken Olson, State Extension Beef Specialist, SDSU

Body Condition Scoring & Carcass Ultrasound; Dr. Karla Jenkins, Extension Beef Specialist, UNL; Dr. Steve Paisley, Extension Beef Specialist, UWYO

Discussion, AI and Repro Techniques: Dr. Scott Lake, Livestock Specialist, UWYO

Rangeland Monitoring: Dr. Ryan Rhodes, Extension Beef Specialist, CSU;
Paul Meiman, Rangeland Specialist, CSU

9:00 - 9:45 Session 1

10:00 - 10:45 Session 2

11:00 - 11:45 Session 3

12:00 Noon Adjourn



THE RANGE BEEF COW SYMPOSIUM XXV

November 28, 29 and 30, 2017
Little America Hotel and Resort,
Cheyenne WY

The University of Wyoming is pleased to host the 25th Range Beef Cow Symposium. The first RBCS was held in 1969 in Chadron, Nebraska, and it continues to be sponsored and organized by the Cooperative Extension Service and Animal Science Departments from the University of Wyoming, Colorado State University, South Dakota State University, and the University of Nebraska. The Range Beef Cow Symposium has developed a reputation as an excellent opportunity to hear production-based information for cow calf producers, while also providing an excellent opportunity to interact with corporate personnel, university specialists and beef industry leaders.

The evening Bull Pen sessions, where we invite the day's speakers to answer questions and participate in discussion, are often considered the most valuable part of the Range Beef Cow Symposium program. Be sure to schedule the time to participate in the evening sessions and join in the discussion.

The Trade Show also continues to be an important part of the symposium. Be sure to visit the trade show booths, talk to company personnel, and thank them for their support of the symposium through their booth registrations and sponsorships. Viewing the latest information in feed, livestock, livestock equipment, management tools and ag industry support services is an important part of the meeting.

If you have any questions during or after the symposium, please contact any of us. For additional proceedings or follow-up information, please contact the 2017 organizers at (307) 837-2000 or spaisley@uwyo.edu:

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