

## Iowa Beef Center

### A.S. Leaflet R3216

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#### Introduction

The Iowa Beef Center (IBC) is Iowa State University's extension and outreach program to cattle producers. Our center has a dedicated group of faculty and staff from the College of Agriculture and Life Sciences, the College of Veterinary Medicine, and Iowa State University Extension and Outreach. We work together to develop and deliver the latest research-based information to improve the profitability and vitality of Iowa's beef industry.

The priorities of the IBC are to:

- Enhance the understanding and management of costs and risk for Iowa beef producers including controlling costs, managing market risk, and understanding the Farm Bill
- Improve environmental stewardship and adapt to risk associated with environmental conditions including facility design, manure management, and grazing management
- Improve beef cattle production efficiency through genetic selection, herd expansion, and adapting new technology
- Assist expanding, transitioning and new operators or enterprises
- Enhance cattle value through supply chain information systems, quality management, animal care and traceability

#### Summary

During 2016, IBC staff made 183 presentations to more than 13,700 participants, conducted 564 personal consultations, and over 4,100 phone or email consultations. The webinars and videos IBC produced were viewed more than 20,000 times, and the online software tools had 375,000 downloads. There were 180,000 website visitors and 3,500 social media contacts.

IBC funded 4 mini grant projects investigating current industry questions including:

- Management effects on ergovaline content of stockpiled tall fescue for winter grazing
- Grazing cover crops
- Calving management on Iowa beef cattle farms
- Corn silage characteristics on Iowa farms

Iowa Beef Center staff are also involved in current ISU Beef Research projects related to cover crop grazing by stocker cattle, bull reproduction and fescue tolerance. Beef team staff authored nine 2017 Animal Industry Research reports. They annually conduct a needs assessment such as listening sessions, formal surveys, or think tanks.

The following are some examples of featured programs evaluated in 2016.

#### Keeping Iowa's cow-calf industry profitable through improved cow longevity.

The contrast between the beginning of 2015 and 2016 was stark in the beef cattle market. The year 2015 was a year of transition as the markets turned the corner from upward-trending prices to the reality of growth in cattle inventories and the beginning of cyclically lower prices. Many cow-calf operations that expanded through the purchase of record high-priced replacement heifers in 2014 and 2015 are now scrambling to pay for those females with calf price levels not seen since the fall of 2013. Now, perhaps more than ever, longevity is going to be the key to profitability when it comes to replacements that entered the herd over the past two years.

The Iowa Beef Center conducted the third part of a heifer development series which focused on selection and management practices that can enhance longevity of the beef female in the herd. This program was built on two previous heifer development programs which have also been recorded on YouTube for on-demand use in the future. In addition a Net Present Value and Buy or Raise decision tool were developed for this program and posted on-line.

In summary, 235 people attended one of the seven meetings. A total of 93% of respondents to the end-of-meeting evaluation said the program improved their knowledge of heifer retention economics, and 94% improved their knowledge of new selection indexes for udder and foot scores. A total 39% and 37.5% of participants said they plan to implement udder scoring and foot scoring, respectively, and 30% plan to calculate the Net Present Value of their own females. Since this program was created, the Net Present Value of replacement females decision tool has been downloaded >1700 times, the Buy or Raise replacement heifer decision tool has been downloaded >5400 times, and the heifer development YouTube videos have been viewed >13,500 times. Change in producer knowledge as a result of this program will lead to an increased beef cow retention and profitability for cow calf

producers, resulting in a strengthened Iowa agriculture and enhanced local economy.

### **Feedlot facilities for efficient and environmentally sustainable beef production and risk management.**

Iowa ranks fourth nationally in number of cattle on feed and produces over 2,000,000 head of feedlot cattle on slightly over 6000 individual operations annually. Cattle feeding is regarded as a high-risk enterprise. In recent years producers have invested in significant feedlot growth only to see the market collapse in 2015. Making a sound decision on type of facilities for their own operation impacts their financial and environmental risk and operation sustainability which impacts other Iowans and communities

The Iowa Feedlot Facilities Manual was updated in 2014 to reflect current facility costs and new research related to cattle performance in different facilities. In 2015, 11 workshops were held across the state to disseminate this new information and educate beef producers on the costs and benefits of various facility types. A series of YouTube videos were produced on the same information and posted on-line. A facility cost calculator was created and posted on line for individual comparisons.

The manual has been downloaded more than 11,000 times. More than 200 producers participated in the workshops with 54% increasing their knowledge of financial risk, and 60% increasing knowledge on facility and weather impacts on cattle performance. 97% said they had a better understanding of the tradeoff between facility investment and economics of cattle performance and manure value. A six month follow up showed 30% of the respondents used workshop information to manage risk, and 35% analyzed financial risk, operating costs, cattle performance, and manure value for their operation. Twenty eight participants said they had or were considering building or remodeling feedlot facilities, and 19 were planning to make changes in their operation to improve environmental stewardship. Participants also shared information from the workshop with another 560 individuals. Over 100 copies of the calculator have been downloaded. Six users replied to the online survey and said it helped them evaluate and make decisions on building feedlot facilities.

### **Veterinary feed directive: What you need to know.**

In response to growing concern about antibiotic resistance in human medicine, the Food and Drug Administration (FDA) has developed rule changes designed to force more veterinary oversight and more judicious use of antibiotics in animal agriculture. As a result, new FDA rules will require changes in how, when, and why feed additive and water soluble antibiotics are used in livestock production. The Veterinary Feed Directive (VFD) changes the way medically important antibiotics are purchased and used. Livestock producers, veterinarians, and feed distributors must be well-educated about the rule changes in order for them to be in compliance with FDA regulations

and to ensure access to antibiotics important for animal health and well-being.

The ISU Extension beef team and Iowa Farm Bureau coordinated 11 meetings across the state, followed by a webinar and 11 additional local meetings to educate livestock producers, veterinarians and feed distributors on the new regulations and implementation processes, as well as the judicious use of antibiotics in feed. In addition, a webinar was produced in cooperation with Iowa Farm Bureau, a centralized website was developed to provide quick access to resources related to the new antibiotic use regulations, and a podcast was broadcast with ISU small farms project.

More than 553 people attended the meetings. End of meeting evaluations showed that more than 90% of participants increased their knowledge of the VFD regulations, information required by VFDs, and the responsibilities of producers, veterinarians and feed distributors. In Summary, 91% plan to improve the communication they have with the other parties (producers, veterinarians, & feed distributors). A total of 81% plan to change how they use antibiotics to be more judicious in their use, and 83% plan to improve their record keeping as it relates to antibiotic use. The webinar had 20 participants and 152 views to date on the recording. The podcast had about 400 viewers. The webpage has had > 550 hits to date.

### **Moving forward.**

The Iowa Beef Center celebrated its 20<sup>th</sup> year of developing and delivering the latest in research based information to the beef industry in 2016. This team has over 200 years combined Extension education experience, and has received more than \$6.6 million in grant funding over the last 10 years. The Center also distributed more than \$89,000 to team members in the last 10 years via the mini-grant program for on-farm demonstrations and education development. Five statewide or multi-state conferences are offered annually, and staff are integral in several multi-state projects.

A few comments from a 2016 external review of the Beef Center summarize the impacts of the center "...the program needs to be complimented for efficiently and effectively using limited resources in the past, and their continued pursuit of achieving the vision goals in an ever changing economic and regulatory landscape... The IBC is a highly regarded and recognized source of timely, research-based information not only by the state of Iowa, but also by extension faculty and staff, industry consultants, and veterinarians working with producer clientele across the country... The Center's impact is evident not only in the State, but also across the U.S. beef industry. Information emanating from, and disseminated by the Center is an often cited resource used, valued, and shared by extension, consultants, industry leaders, and educators across the country in producer and student education... it is apparent

that the IBC brings national prominence to the Iowa State University Extension and Outreach Program.”

### **Acknowledgment**

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- Coalition to Support Iowa’s Farmers
- Iowa Beef Industry Council
- Iowa Cattlemen’s Association
- Iowa Farm Bureau Federation
- Iowa Forage and Grasslands Council
- Iowa Nutrient Research Center
- Leopold Center for Sustainable Agriculture
- Natural Resources Conservation Service
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- North Central SARE program
- Practical Farmers of Iowa
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- Numerous local industry partners