



# SISKIYOU STOCKMAN

*What's New in the "Top of the State". A report for Siskiyou Livestock Producers put out by the Farm Advisors Office, Cooperative Extension of the University of California, located at 1655 South Main Street, Yreka, California 96097*

July 2009

## Highlights from the Beef Improvement Federation Symposium, Sacramento, CA May 2009

More than 400 registrants from 12 countries, six Canadian provinces and 37 states attended the annual Beef Improvement Federation symposium in Sacramento, CA in May. A wide variety of topics related to beef improvement were discussed but the focus was the new and evolving DNA or genomic information. While it is too lengthy to summarize the entire conference I will provide a few highlights, keys and more interesting ideas and facts from my perspective. I have also included selected items provided by Dr. Alison Van Eenennaam, UC Davis, in her article published in the California Cattlemen's Association June 2009 issue.

1. **Large populations (thousands) of genotyped cattle are needed to develop DNA technology.**
2. **Development of DNA tests and their use in breeding decisions will not easily transfer across breeds.** That is, the way a gene marker is associated with a trait in one breed may not be the same as it is associated in another breed.
3. **Cattle genome research and data are handled very differently between dairy and beef breeds:** dairy breeds have significant database recordkeeping with the USDA, while beef breeds are primarily housed with breed associations. This may have significant impact on the development of genomic knowledge for beef breeds, and places severe constraints on some smaller breeds.



- Highlights from the Beef Improvement Meeting, Sacramento, CA May 2009
- Carcass data for beef, sheep and swine at fair
- Australian scientist to discuss drought management and cattle growth
- Drought or limited irrigation and early weaning

### Calendar

Aug 12-16	Siskiyou Golden Fair, Yreka, CA
Aug 27	Annual Cattle Tour, Bogus Creek Ranch (Foster Ranch), Montague, CA
Sept 10-13	Tulelake/Butte Valley Fair, Tulelake, CA
Sept 14	Drought and cattle management presentation by Australian, Dr. Malcolm McPhee, 7:30 pm. Cooperative Extension office, 1655 So. Main Street, Yreka, CA

4. **Early research findings emphasize results from “discovery” populations of cattle (the cattle used in the initial research on a particular gene or gene marker) do not necessarily apply to a different population or group of cattle even in the same breed.** Genemarkers that are found to be important in a discovery population of cattle should be tested or verified in a different group of cattle to confirm their effect.
5. **Continuing advances in the techniques for DNA testing, particularly in the human medicine field, are cascading down to cattle work,** with lower costs and tests that can now assay for thousands of genes.
6. **Evolving research shows traits are likely controlled by 100’s or 1000’s of genes.** The condition or make-up of a few genes typically will not have a major impact on a trait.
7. **The suggested model for implementing results from 100’s or 1000’s of genes or gene markers is a “marker-enhanced” EPD which will include existing pedigree and performance data if available for the trait.** It is hoped that eventually all DNA information will be incorporated into a single EPD value that explains significant amount of the genetic variation in a trait (i.e. is highly accurate).
8. **Results from DNA tests will be incorporated into American Angus Association EPDs sometime within the next 12 months.** Producers won’t necessarily see the DNA test results or need to understand them, the results will be incorporated into the EPDs that you already use. Using the DNA data should help to improve the accuracy of EPD’s.
9. **DNA tests for management, such as sorting cattle in feedlots, was also discussed.** Cargill is using a DNA test to sort cattle into feeding groups, and it was reported that they receive an estimated \$2 return for each \$1 spent on tests. It is important to remember this is not the same as using DNA tests for breeding decisions.

Within the foreseeable future it is likely that DNA-based information will allow for the development of EPDs that are more accurate, available for young animals (e.g. yearling bulls), and describe traits not

currently included in genetic evaluations (e.g. cow fertility, stayability).

Many of the presentations are available on the web at [www.bifconference.com](http://www.bifconference.com). A recap is also available at [calcattlemen.org](http://calcattlemen.org) under BIF 2009.

Today producers can prepare by determining traits that would be most helpful for their particular production conditions. This may involve “creative” thinking about traits that are not commonly described or available today. Some of these traits might include things like the typical ribeye area of their calves at harvest, longevity, and reproductive efficiency, tenderness, chemical composition of the meat, behavior, and disease prevalence. Factors that influence profitability at the ranch level are most important for immediate consideration, however factors important industry wide are also relevant, and eventually are likely key components to long-term profit. These tools have the potential to significantly improve the predictability of beef cattle performance in the foreseeable future. Take the time to keep informed of advances in this fast-evolving field.

### **Carcass data for beef, sheep and swine at fair**

Carcass data will be provided with ultrasound this year at the Siskiyou Golden Fair in Yreka for beef, sheep and swine. A certified ultrasound technician will scan each market steer, lamb and hog. Results of the scans will be provided to animal owners on Saturday at an educational event. Carcasses meeting specified standards will earn a certificate of merit. Partial funding for this first year will come from a donation by the local Siskiyou County Cattlemen’s Association.

Implementation of this new program will provide important carcass data for each species. This is especially welcome for sheep and swine because they have not had carcass information in the past. It will also provide more options for harvest and processing of steers since those steps won’t be necessary at a plant offering USDA grading services.

After careful review, the California Beef Cattle Improvement Association, CBCIA, has adopted ultrasound methods as an acceptable alternative to the traditional USDA carcass grading services. This

additional method is especially valuable to some fairs that are long-distances from USDA plants, and to provide carcass data back to youth in a timelier manner, enhancing the educational experience. Steer carcass contests can use either the USDA grading service or certified ultrasound technicians to obtain carcass data, whichever best suits their needs.

Details of this program can be found under CBCIA at <http://www.calcattlemen.org/>.

Beef cattle carcass awards for the market steers at the fair will be presented on Saturday, August 12 at the fair instead of during the annual cattle tour. The awards will be more closely coupled with educational presentations just prior to the award presentations. Carcass data will be available for each of the steers during the fair time greatly enhancing the educational aspects. The agenda for the presentations is tentative, as this is the first time for this arrangement. But we are hoping that the presentations of the awards can be about 1:00 on Saturday. Watch for detailed announcements later as this may change.

### **Australian scientist to discuss drought management and cattle growth**

Instead of a plane ticket to Australia, attend an evening presentation by Dr. Malcolm McPhee from Australia on drought management and cattle growth. The presentation starts at 7:30 p.m. Monday, September 14 in the Cooperative Extension office at 1655 So. Main Street in Yreka, CA. Visiting the U.S. from Armidale, Australia, Dr. McPhee will exchange ideas about drought management, natural droughts and perhaps appropriate for potential regulatory drought brought about by irrigation restrictions. Niche producers that are raising cattle as finished products will also want to attend to hear ideas about management tools to better predict and control carcass end products. If you can't get to Australia, then this is a really inexpensive way to hear about cattle production with a different viewpoint. Room size is limited so get there early.

The annual Cattle Tour is set for Thursday, August 27 in Shasta Valley. The tour will be held at the Bogus Creek Ranch of Harold Foster located in the northern end of Shasta Valley along Bogus Creek. Details of the tour are being developed but topics include: internal parasite control, trace mineral testing and supplementation, use of electronic identification (EID) devices and the tools associated with those tags, foothill abortion, on-site power generation plant and more. Additional information will be available at a later date.

### **Drought or limited irrigation and early weaning**

As water for irrigation becomes limited, especially this year due to reduced rainfall producers may want to consider weaning earlier than normal. Many producers with fall calving cows will routinely wean in June. Even spring calving cows can have calves weaned in August rather than waiting until September, October or even November to wean. From a physiological standpoint "normal" weaning would occur at 45 percent of the animals finished weight: about 575 pounds for a 1250 to 1300 pound finished steer. "Early" weaning would be prior to attaining 45 percent and does not present extraordinary management or risk.

The weaned pair will offer more opportunities for the cow to graze lower quality forages, and the weaned calf can graze the limited higher quality forages. Producers being forced to dry up fields or partially irrigate fields may still have sufficient high quality irrigated fields for their weaned calves but not for pairs. The dry cows will have adequate nutrition from the dried up or partially irrigated fields. Producers moving their weaning date up will want to coordinate the change with appropriate changes in their herd health program. Vaccinations prior to the stresses of weaning will help insure a strong immunity, and fewer weaning illnesses.

Early weaning isn't an all or nothing option. Sorting to wean the older/heavier cattle is an alternative.

## **Annual Siskiyou County Cattle Tour August 27**

This is your copy of the Siskiyou Stockman, which you requested, or which we thought would be of interest to you.

Sincerely,



Daniel J. Drake, Ph.D., PAS  
Farm Advisor - Livestock & Range  
CE Associate, Animal Science Dept., UC Davis  
530/842-2711



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Cooperative Extension  
University of California  
1655 So. Main Street  
Yreka, CA 96097

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