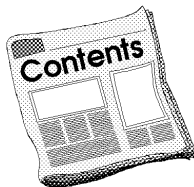


SISKIYOU STOCKMAN

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

December 2003



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Calendar

Jan. 9	Cattlemen's Feeder Sale, Cottonwood, CA
Jan. 27-31	Red Bluff Bull Sale, Red Bluff, CA
Feb. 5-7	Klamath Bull Sale, Klamath Falls, OR
Feb. 26	Cattle Health Meeting, Montague, CA

What's most important?

For the cow and calf producer, new technology such as new EPDs and genetic tests easily gives rise to arguments on what is most important. Sometimes it's easy to miss the forest while looking at the trees. Now that "everyone" has been using black cattle and the previously "mongrelized" herds are pretty much black, it would be a great time to conscientiously and thoroughly conduct a planned crossbreeding program. Far greater benefit will come from a well-conducted crossbreeding program than the typical differences in EPDs between bulls at a bull sale.

A well-conducted crossbreeding program doesn't have to be complicated: the true black baldy is the best example. The black-white faced females from matings of Angus and Hereford are mated to the opposite breed from their sire. You can't tell their sire by looking but only a little planning is needed to record the female's sire; then use the opposite breed of bull on them. The benefits are not only increased calf weaning weights but also improved lifetime performance of the dams – and the calves would still be black!

There are numerous other crossbreeding programs involving 3 or more breeds, but since most people haven't correctly conducted a two-breed program, why get

more detailed. But, if you really want to know just ask. Another option is using a composite breed. While not yet common, true composites could be used just like purebred bulls but nearly all of the benefits of crossbreeding would occur.

If you are the type of person that can keep a New Year's resolution or quit smoking without a patch you might be able to employ a terminal sire in your breeding program. Often a terminal sire has been a "meat" type bull that is used on dams with strong maternal traits. Typically this would be a high yielding lean-type sire breed. However, if you are mostly producing for the Choice grading market then a sire that excels in marbling could be a terminal sire. All of his calves would go to market and would benefit from his enhanced marbling.

Of comparable importance to a good breeding program is a short calving season. The increased uniformity of calves has all kinds of benefits. Larger more uniform lots usually spell higher prices. Labor is more effective, and reduced, with increased uniformity. For example, vaccines may be given at the most appropriate age, and most of the cattle are nearly the same age. A strung out calving season might provide some tail ender calves that could fit in small or oddball pastures, but not without extra sorting and labor costs. Then when it's time to sell, what do you do with those odd balls? Often it's more sorting, holding and costs.

Probably the simplest method to help start and keep a short calving season is to calve replacements before the main herd. Replacements that calve early with their first calf tend to have more calves and earlier calves which weigh more than those that calve later with their first calf. So, breed them to calve early. This is also a way to select for early maturity and fertility. Merely shortening the breeding season to attain that short calving season without

adequate nutrition will spell disaster. And just feeding more isn't always the answer and certainly can get expensive. Usually a small percentage of the cattle need better feed, some are about right, and others have plenty. At or before calving, sorting on body condition to allow increased feed to those in need will help prepare those cattle for rebreeding in a timely manner. Otherwise with a short calving season they end up open. Reproductive measurements such as time to return to estrus and subsequent pregnancy rates are impacted more in younger and older females at the same condition as prime age (4 to 8 years) cows, and especially when the younger and older cattle are in low condition. The saying goes "if a replacement heifer fails to breed it is genetics, if a 2 or 3 year old fails to rebreed it is management". That may not always be true but probably in many cases comes close. To help insure acceptable re-breeding, those in low condition and especially thin and young or old, at calving, need high quality feed and lots of it. It may be easier to provide increased nutrition and improved condition by sorting at weaning thereby giving the cattle a little longer to respond to the increase. Some producers have undoubtedly had thin scrawny cows that raised a large calf and still got rebred. In fact, there is a measure of pride in a cow that milks her condition down, and especially when she rebreeds. However, in general those kinds of cows will have a lower pregnancy rate (see Table 1) and you'll need to ask yourself if you can live with a 70 or 75 percent pregnancy. The alternative would be to give those cattle better feed to increase their condition.

So, what's the most important? I would argue that for most herds it's reaping the true crossbreeding benefit and a short calving season. Large herds may be able to sort or manage larger groups into more uniform lots, but they still can benefit from sound crossbreeding. Once these factors are

working well, there are lots of other items that can be improved to stay in the black,

which IS the most important.

Table 1. Summary from 9 years, 101,063 head at the Padlock Ranch in Wyoming showing a small percent of cattle were in low condition (less than 3 and 4) at weaning and had reduced reproductive performance.

	Body Condition Score				
	Less than 3	4	5	6	More than 6
Number of cattle	3,415	23,811	37,970	26,213	9,654
% of Herd	3.4	23.6	37.6	25.9	9.5
% Pregnant	75.7	85.4	93.8	95.6	95.6

Data from Cherni, M. 1993. Using body condition to score beef cattle. Volume 80, Number 7: Montana Farmer-Stockman. pp 10.

New EPDs

EPDs, Expected Progeny Differences, are making dramatic additions. Most producers are familiar with EPDs for growth traits such as weaning weight. Carcass EPDs have quickly become more widespread. New EPDs are more complex and involve multiple factors targeting important traits.

A relatively new trait is calving ease, which may be used in place of birth weight. Producers have long recognized that birth weight isn't the only factor affecting the ease of birth. Numerous tools have been considered to help select for easy calving. Usually low birthweight sires also have lower weaning weights due to the positive correlation between those traits. Calving ease EPD uses birthweight along with other factors to provide a single EPD for use in selecting sires and daughters that will calve more easily. Two calving ease EPDs are available. *Calving ease direct* is related to the ease of calves from sires, while *calving ease maternal* relates to the calving ease of daughters from sires. Some sires throw easy calving calves, but their daughters are not as easy calving as others. In some cases sires that have highly favorable calving ease will not have particularly small calves. Using calving ease EPDS, particularly high accuracy calving ease EPDs, should provide easier calving and greater opportunity for

also selecting sires with high weaning weights. Several breed associations have calving ease direct and maternal EPDs.

The Red Angus Association has introduced two new EPDs related to reproduction and a third will come shortly on feed requirements. The two new EPDs are: stayability and heifer pregnancy. Stayability is basically a guide to sustained fertility. It provides a measure of females remaining in the herd and having an annual calf. Heifer pregnancy is targeted at selecting daughters with greater ability to calve as 2 year olds. It is a measure of early maturity and fertility. It is an improvement over using scrotal circumference to select solely for early maturity. The third new EPD is Maintenance Energy requirement. Maintenance energy requirement is the amount of calories required for the animal to neither lose nor gain weight. On average, increased animal weight will require more energy. Also on average, higher milk producing cattle will have higher energy requirements. This EPD, expressed as the required Mcal (megacalories) per year, will help producers find cattle with lower energy requirements and thus reduced feed requirements. Producers could seek cattle with high milk production and low energy requirements. More complete descriptions can be found on the Red Angus Association web page (<http://www.redangus.org/genpred/FAQ.html#>)

[What is stayability?](#)).

Scheduled for release December 20 are three new EPDs (Angus Association). These are **Feedlot Value (\$F)**, **Grid Value (\$G)** and **Beef Value (\$B) EPDs**. These have been tabbed bio-economic EPDs as they use multiple traits and put a dollar value to biological factors. Existing EPDs are used but converted into economic values. For \$F EPDs, feedlot performance (days on feed, ration cost, cash price) are expected factors contributing to a dollar per head difference in EPDs between individuals. For \$G EPDs, quality and yield grades are used (relating to overweights, yield grade discounts and Choice-Select spread) to estimate the difference in grid value between individuals. The \$B EPD is comprised of both \$F and \$G, but it is not just the average or sum of the two. It is reported as the expected dollar per head difference in the progeny post weaning performance (feedlot) and carcass value (grid). These new EPDs are simpler to use than looking at all of the EPDs that go into them, but there are, of course, certain assumptions that are used to calculate these values. For example, Feedlot Value uses quality grade and yield grade schedules, premiums/discounts, and feedlot assumptions. These values do simplify things for producers, but will only be good if the assumptions that went into arriving at the values are valid for your production system. Educational programs by the Angus Associations will be presented across the country with one in Sacramento (see the Angus web site for details).

There will continue to be new EPDs making for a confusing array of options. Producers should keep in mind EPDs measure expected differences in progeny. When their accuracy is high (based on more records) they have proven remarkably consistent with actual results. In effect EPDs are selecting for specific, but unknown, genes, increasing their frequency.

Usually we don't know the gene and/or there may be several genes influencing the factor (such as marbling), but we are increasing the frequency of the genes we want. Genetic tests do much the same thing but increase one specific gene. The affects of selection for that single gene will depend on how powerful it is in determining an overall impact on the trait. That is, does it account for all of the marbling or only a small portion, with the rest influenced by other genes. In most cases producers should not select for a single trait but rather use several EPDs and genetic tests as many factors are important and selection should be for a variety of traits.

(Some information for this article provided by Dr. Alison Van Eenennaam, Dept. Animal Science, UC Davis.)

Non-irrigated Grasses

Non-irrigated grasses (dryland) are most commonly planted in the Intermountain area in the spring which means it is time to start planning and ordering seed for those activities. Results from a recent field trial provide suggestions on adapted varieties. The field trial was conducted cooperatively with the California Department of Fish and Game Wildlife Area in Montague, CA. It included both spring and fall seeding. Numerous varieties were included of both native and introduced perennial grass species. Based on this trial, there are new varieties that performed as well as the traditional standards of Oahe Intermediate or Luna Pubescent Wheatgrass. Based on visual ratings one and a half years after planting, the following were approximately equal rating for stand establishment: Luna Pubescent Wheatgrass, Manska Pubescent Wheatgrass, Oahe Intermediate Wheatgrass and Rush Intermediate Wheatgrass. The highest rated native plant in the trial was Bottlebrush squirreltail. Manska Pubescent Wheatgrass is a variety selected for

improved forage quality and may offer increased nutrition. Please contact me for complete trial results.

Re-Certification for Beef Quality Assurance

Cattle producers that have previously been certified in the California Cattlemen's Association Beef Quality Assurance program can seek re-certification. Re-certification is attained by successful completion of a test. Individuals previously certified have been notified of the re-certification process. It is up to them to make the next contact. Information and methods learned in the Quality Assurance program will help producers improve beef quality and signify to buyers of the care and handling of cattle offered for sale. Producers that have not previously completed the Quality Assurance course

Cattlemen's Feeder Sale

The annual feeder sale sponsored by the Siskiyou County Cattlemen's Association is set for Friday, January 9, 2004, at the Shasta Auction Yard in Cottonwood. Traditionally this has been a good sale. It is an opportunity to consolidate shipping and the extra attention of a special sale. Board of directors from the local Cattlemen's

should contact me and an initial course can be arranged and conducted.

Ranch Water Quality Plan Shortcourse

Numerous extended shortcourses have been held locally based on the California Rangeland Water Quality Management Plan. At these programs landowners have learned about factors affecting water quality on rangelands and prepared plans for addressing non-point water pollution on their property. These have been held on an ever-other year basis as needed. If individuals that have not previously participated are interested in attending the shortcourse, they should contact me at 530-842-2711. If interest is expressed, another program will be held.

Association helps organize the sale and can be contacted for further information. Contact John Jenner, 468-3486, JT Martin, 938-2498, Tom Nielsen, 435-2262, Joe Sammis, 397-3456 or any other director.

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Please send me _____ books at \$3.25 each. Enclosed is a check for the total amount made payable to UC Regents. Mail books to the address below:

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(Please mail completed form and check to: Cooperative Extension, 1655 S Main St, Yreka, CA 96097)

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

Sincerely,



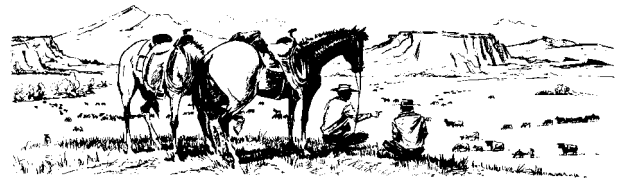
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