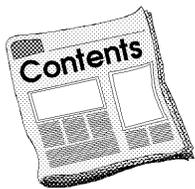


SISKIYOU STOCKMAN

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

February 2011

Pinkeye



- Pinkeye
- Coping with constraints: Crossbreeding
- Improving cattle performance and capturing financial rewards

Calendar

Feb 24	Annual Cattle Health and Pie Meeting, 7:30 pm, Montague Elementary School, Montague, CA.
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For Scrabble addicts it is keratoconjunctivitis, but for most of us it is Pinkeye, the pesky eye infection leading to cloudy, ulcerated and often permanently damaged eyes in cattle. Fortunately Pinkeye usually occurs at low levels effecting only a small portion of cattle. That was the usual situation for two local herds until last year. Without warning or doing anything different than usual nearly 50 percent of their calves got Pinkeye. The calves did not respond well to treatment. Cultures from the infected eyes revealed a "new" pathogen was the culprit.

Pinkeye like this is happening in other locations and the annual Cattle Health meeting will make Pinkeye its focus. To find out what is happening and to be prepared in case you encounter a similar spike in your herds attend the meeting on **Thursday, February 24 at 7:30 pm. at the Montague Elementary school** in Montague, CA.

The program includes:

- Dr. John Angelos, School of Veterinary Medicine, UC Davis.
- Industry representatives covering animal health products for Pinkeye
- Dr. John Maas, Extension Veterinarian, UC Davis, on applied practices if and when Pinkeye strikes.

We believe this to be a can't miss program that concludes with pies baked by our local CattleWomen.

Improved cattle performance and capturing financial rewards

Improved selling prices are certainly helping but increasing purchasing costs and additional resource constrictions squeeze the potential for profit in the cattle industry. If forage production is well managed, adequate moisture, fertility, adequate stand of adapted plants and good grazing management are all present, perhaps further attention to the cattle might be beneficial. Recently I reviewed cattle production records that are helpful in discussing that process.

The records I accessed were for a spring calving herd. They weaned in November and carried the calves over until July when they entered the feedlot. They were harvested in about 80 days. There was carcass data on about 1,300 for calf crops from 2005-2009, with on-ranch weights for the last two calf crops. The overall averages were:

205-day weight 552	carcass wt. 755
weaning wt 543	ribeye area 13.25
long yearling wt. 936	fat thickness 0.22
feedlot in wt. 955	yield grade 2.17
harvest wt. 1252	quality grade midway between Select + and Choice-

My questions were if some calves were significantly better than others, and if so, how much? What did the cows look like for those better calves? For each year I selected the top and bottom 10% based on their carcass value (gross return from the carcass). I looked at the smaller subset for which I had on-ranch and cow data, still selecting out the top and bottom 10%. As shown in Table 1 the subset was very similar to all of the calves. I used actual prices for Nov 2008 when the calves could have sold at weaning, and July 2009 when they could have sold entering the feedlot. I also included estimates of cow costs.

There was a difference of 77 pounds between groups at weaning. However, due to the price difference between weights (\$98 vs \$90) there was only a \$26 difference in gross return at weaning (if they had been sold). The top calves were from somewhat heavier cows so had slightly higher annual costs. When estimated cow costs are included the difference between the top and bottom calves was only \$8 despite the top calves weighing 77 pounds more.

The calves could have been sold in July instead of entering the feedlot. At that time the difference between groups had grown and was 120 pounds. The price difference was less (\$87 vs. \$85) so the top group was worth \$86 more per head. At the heavier weight the pricing structure rewarded the superior growth. If you

figure the postweaning phase as a separate enterprise and deduct the original price(value) of the calves and the cost of putting on the postweaning gain, the top group yielded \$182 per head which was \$44 more than the bottom group. Superior performance definitely was financially rewarding for heavier weight calves for this particular year.

After the feedlot the top group was worth \$290 more than the bottom group (Table 1). When you figure the feedlot as an enterprise (the cost of the calves into the feedlot and feedlot costs), the net return or profit was \$88 more for the top group (Table 2). Far less than the \$290 difference in gross but still substantial.

Financially the rancher would have been better off to sell the cattle as heavyweight yearlings instead of taking them into the feedlot for this particular year. Due to the pricing structure for 2008 superior gaining cattle *at weaning* did not return much more money. Cattle that returned more from their carcass value weighed more and gained more throughout their life. In this case heavier carcasses did not result in finished cattle with excessive external fat or ribeye area. Thus, there were no discounts for large carcasses, instead more gross return. The groups were about the same age at harvest but the top group produced \$0.50 more gross return for each day of age.

Since these cattle were run together, fed together and harvested together, differences are likely mostly genetic. Descriptors of the cows suggest that the top group cows were larger framed cattle but still moderate in frame. Cow progeny performance was clearly an accurate method to determine the cows raising superior calves. Cow weight or calf weight:cow weight ratio alone were not good indicators of superior progeny performance. Culling small framed cows would be an easy way to quickly reduce the inferior calves, but progeny performance was the best selection tool in this situation. Without sire paternity, it is impossible to determine sire effects.

The pricing system often removed or reduced major differences in performance between the groups, especially for lightweight calves for this particular year. On average, cattle in the bottom group did not overcome their initial reduced growth, suggesting selling those smaller lighter-weight, poorer-growing cattle, especially during periods of reduced feed resources, would be economically advantageous. Additionally cattle improvement goals must be cognizant of the pricing and marketing system.

Table 1. On-ranch pre-weaning, post-weaning, feedlot performance and cow descriptions of calves divided into the top and bottom 10 percent based on gross income from the carcass.

AVG CALF DATA	Weighted Average for calf crops 2005-2009 n=1352			Subset of calves with ranch data from 2008 & 2009 n=251		
	Top 10%	Bottom 10%	Difference	Top 10%	Bottom 10%	Difference
Gross Income	\$1,216	\$894	\$322	\$1,285	\$995	\$290
Feedlot In weight	925	853	73	1015	895	120
Days on feed	82.6	83.1	-0.5	80.28	78.60	1.68
ADG	4.7	2.8	1.9	4.42	3.01	1.41
Carcass weight	793	656	137	826	685	141
Ribeye area	13.4	12.1	1.3	13.83	12.72	1.12
Fat thickness	0.25	0.27	-0.02	0.22	0.22	0.00
Yield grade	2.35	2.28	0.07	2.26	2.09	0.17
Marbling score	411	381	30	408	396	12
RANCH DATA						
Avg of Birth Date				9/25/08	10/3/08	-8
Avg of Age at weaning weight				212.5	204.6	7.9
Avg actual weaning wt				582.0	505.0	77.0
Avg of 205 day Wean Wt				581	524	57
Avg of Weight per Day of Age				2.65	2.48	0.16
Avg of ADG Calf				2.40	2.11	0.29
Avg of Yrlg Weight				996	876	121
Avg of Frame Score Yrlg				5.28	3.94	1.34
FEEDLOT DATA						
Avg of Carcass Kill Date				4/25/10	5/1/10	-6
Avg of Age at Harvest				577	575	2
Avg of Feeding Final Weight				1370	1135	235
Avg of Gross Income per day of age				\$2.23	\$1.73	\$0.50
COW DESCRIPTION						
	Dams from top and bottom 10%, n=49					
Avg of Age				7.5	8.4	-0.8
Avg of Weight				1310	1233	77
Avg of calculated frame score from cow wt				6.8	5.8	1.0
Avg of No. Weaned				2.8	2.4	0.3
Avg of Avg Interval				365.7	366.7	-0.9
Avg of calf wean wt/cow weight, %				0.44	0.42	0.01
PROGENY HISTORY						
On Ranch						
Avg of Avg Adj BW				81.2	79.0	2.2
Avg of Avg Wean Wt				564	516	48
Avg of Avg 205 day weaning weight				577	527	50
Avg of Avg Ratio WW				102.5	96.3	6.2
Avg of MPPA				101.6	97.8	3.8

Feedlot			
Avg of Avg Feeding Days	80.7	78.3	2.4
Avg of Avg Feeding ADG	4.4	3.2	1.2
Avg of Avg Feeding Final Weight	1353	1159	194
Avg of Avg Carcass Hot Weight	815	700	115
Avg of Avg Carcass REA	13.7	12.8	0.9
Avg of Avg Carcass Backfat	0.22	0.22	0.00
Avg of Avg Carcass Final YG	2.26	2.12	0.15
Avg of Avg Carcass Marbling Num	414	399	15
Avg of Avg Carcass Return/Head	\$1,258	\$1,050	\$208

Table 2. Financial evaluation of top and bottom category calves.

AVG CALF DATA	Top 10%	Bottom 10%	Difference
Pre-Weaning Data			
Avg actual weaning wt	582	505	77
Market price, \$/100 lbs.	\$90	\$98	
Cost (Value) of calves, per head	\$521	\$495	\$26
Lbs of TDN required for cow wt	5312	5098	214
Cost/lb of TDN using \$50/ton of hay equivalent and 54% TDN	0.0514	0.0514	0
Annual feed cost	\$273	\$262	11
Annual cost assuming feed costs are 60% of total costs	\$455	\$437	18
Profit/Loss at weaning	\$65	\$58	8
Post-Weaning Data			
Feedlot In weight	1015	895	120
Market price, \$/100 lbs.	\$85	\$87	
Cost (Value) of calves, per head	\$863	\$776	\$86
Gain from weaning to feedlot	433	390	43
Cost of gain at \$0.37/lb of gain	\$160	\$144	\$16
Profit/Loss from wean to feedlot (only cost of gain)	\$182	\$137	\$44
Feedlot Data			
Gross Income	\$1,285	\$995	\$290
Avg of Feeding Final Weight	1370	1135	\$235
Feedlot gain, lbs	355	240	115
Feedlot cost of gain at \$1.00/lb of gain	\$355	\$240	\$115
Profit/Loss from Feedlot In to Out (only cost of gain)	\$67	-\$21	\$88

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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