



COOPERATIVE EXTENSION..UNIVERSITY OF CALIFORNIA

# LIVESTOCK & LAND NEWS

TEHAMA, GLENN, COLUSA



January 2005

1754 Walnut Street, Red Bluff, CA 96080 Phone (530) 527-3101

Josh Davy

Livestock & Natural Resources Program Rep

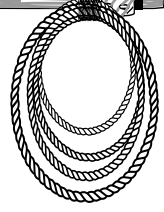
Richard P. Buchner

UC Farm Advisor, Orchard Crops/Tehama Co. Director

Prepared by Cindy McClain Office Manager / Ag Secretary



The University of California prohibits discrimination or harassment of any person on the basis of race, color, national origin, religion, sex, gender identity, pregnancy (including childbirth, and medical conditions related to pregnancy or childbirth), physical or mental disability, medical condition (cancer-related or genetic characteristics), ancestry, marital status, age, sexual orientation, citizenship, or status as a covered veteran (covered veterans are special disabled veterans, recently separated veterans, Vietnam era veterans, or any other veterans who served on active duty during a war or in a campaign or expedition for which a campaign badge has been authorized) in any of its programs or activities. University policy is intended to be consistent with the provisions of applicable State and Federal laws. Inquiries regarding the University's nondiscrimination policies may be directed to the Affirmative Action/Staff Personnel Services Director, University of California, Agriculture and Natural Resources, 300 Lakeside Drive, 6<sup>th</sup> Floor, Oakland, CA 94612-3550, (510) 987-0096.



## In This Issue:

- Results of Utah State Research on Timing of Castration
- Winter Animal Health Forum and Niche Meat Conference
- Beef Day
- Colusa Western Days

Check out the web site at <http://cetehama.ucdavis.edu> or <http://ceglenn.ucdavis.edu>

## Late Castration May Have a Place for British-Bred Calves Targeted for a Specialty Lean Beef Market

Delayed castration of male calves has been proposed as a means of improving performance and increasing red meat yield without seriously compromising meat quality. Previous research has shown mixed results, depending upon several variables such as the precise time of delayed castration, biological type/breed of calves, and post-castration nutrition. In this study, Utah State Univ. researchers assigned 65 British crossbred bull calves to three different treatments: 1) Early, castrated prior to 90 days of age; 2) Castrated at weaning at 225 days of age; 3) Late, castrated at 380 days of age. All calves were injected with Ralgro® at castration time. Weaning occurred on October 15. All calves were fed together during the entire feeding phase (Oct. 15 to slaughter). Calves were slaughtered based on days on feed and body weight. Castration was performed using the Callicrate Smart Bander™ bloodless method. Table 1 is a summary of daily gain and carcass characteristics.

**Table 1. Effects of age at castration on gain and carcass characteristics**

Item	Age at castration, days		
	90	225	380
ADG, weaning to slaughter, lb/day	2.40	2.38	2.42
Final live wt., lb	1,274	1,254	1,248
Dressing %	61.4	60.7	61.2
Hot carcass wt., lb	783	760	772
Marbling score	5.89 <sup>a</sup>	5.73 <sup>a</sup>	4.99 <sup>b</sup>
% grading Choice	87 <sup>a</sup>	75 <sup>a</sup>	48 <sup>b</sup>
Ribeye area, sq. in.	12.58 <sup>a</sup>	12.84 <sup>a,b</sup>	13.50 <sup>b</sup>
Backfat, in.	0.49	0.42	0.43
Cutability, % <sup>a</sup>	49.4 <sup>a</sup>	50.3 <sup>a,b</sup>	50.6 <sup>b</sup>
Yield grade	3.15 <sup>a</sup>	2.80 <sup>a,b</sup>	2.67 <sup>b</sup>

<sup>a,b</sup>Means with different superscripts in same row are significantly different (P<.05).

As shown above, there were no significant differences in average daily gain, final live weight, dressing percent, hot carcass weight, or backfat. However, marbling score and quality grade decreased significantly in the late castrates. Conversely, ribeye area increased and cutability and yield grade improved significantly as castration age increased.

Only a few previous studies have evaluated the effects of castration age on beef palatability. In this study, one consumer taste panel identified improved tenderness, juiciness, and overall acceptability in the early castrates, but a second taste panel detected no differences in palatability. There were no steaks rated as “unacceptable” in any of the treatments. Furthermore, Warner-Bratzler shear force measurements failed to detect any unacceptably tough steaks in the study.

These results suggest that late castration **MAY** be advantageous for British-bred calves in a specialty/niche market where customers will spend more for a leaner, but acceptably tender, product. The authors noted, however, that for producers to produce a higher quality grading product for the broader market, early castration would appear to be most advantageous under the conditions of this study

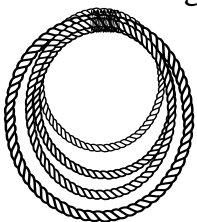
(Heaton et al. 2004. Proc. Western Section, ASAS. 55:130).


Harlan Ritchie, Steven Rust and Daniel Buskirk

Beef Cattle Specialists

Michigan State University

East Lansing, Michigan 48824





**Beef Day and Trade Show**  
*CSU, Chico – UC Cooperative Extension*  
*CSU, Chico Young Cattlemen – CBCIA*

**Saturday – February 19, 2005--CSU, Chico Farm Pavilion**

**8:00 - 9:00 am Registration, Trade Show**

**9:00 - 9:15 Introductions – Welcome - *Dr. Charles Crabb, Dean - College of Agriculture - CSU, Chico***

**9:15 - 9:30 “Electronic Identification for Dummy’s”, *Dr. Dave Daley – California State University, Chico***

**9:30 -10:15 “U.S. Beef Industry - Market Outlook”, *Randy Blach – Executive Vice President , Cattle Fax***

**10:15-10:30 Break – Coffee, Doughnuts and Trade Show**

**10:30-11:00 “A Retailers Perspective on the Beef Industry”, *Mark Kreul – In-N-Out Burger***

**11:00-11:30 Update - Northwest Pilot Project (Cattle ID), *Julie Morrison – Coordinator, Northwest Pilot Project***

**11:30-12:10 “International Beef Trade in a Post BSE World”, *Randy Blach–Executive Vice President , Cattle Fax***

**12:10-12:30 CCA Update**

**Mark Nelson – President, California Cattlemen’s Association**

**12:30-1:30 Tri-Tip BBQ and Trade Show, Young Cattlemen’s Auction**

**1:30- 2:00 Panel – Question and Answer Session, *Randy Blach, Mark Nelson, Mark Kreul and Julie Morrison***

***Moderator - Dr. Dave Daley***

**Choose One Session or Visit the Trade Show**

**2:00 - 3:00 Fort Dodge Animal Health / CSU, Chico - Quality Assurance, *Pat Sweene –Fort Dodge Animal Health***

**2:00 – 3:00 Weeds in Irrigated Pastures - *Josh Davy - UCCE***

**3:00 - 4:00 Sessions Repeated**

**4:00 Meeting Adjourned**

## WINTER CATTLE HEALTH FORUM

University of California Cooperative Extension will host a winter cattle health forum on Friday February 11<sup>th</sup> from 9 AM to noon at the Glenn County Fairgrounds cafeteria in Orland. The same program will be repeated at the Cottonwood Livestock Auction Yard on Saturday February 12<sup>th</sup>, also from 9 AM until noon.

Friday and Saturday's agendas will include talks from Dr. John Maas on the Northwest Pilot Project and a mandatory US animal ID update. Dr. Maas will also be giving an update on the BSE situation. Brad Brockman of Pfizer will speak on antibiotics for cattle. Rounding out the forum is a crystal ball on the cattle market and a presentation by Farm Advisor Larry Forero that caps the results of a study he has conducted on market data through the Western Video Market.

Mark your calendars to attend this FREE workshop. For more information please call Josh Davy at the Tehama County Cooperative Extension Office at 530-527-3101, or Larry Forero at the Shasta County Cooperative Extension Office at 530-224-4900.

NON-PROFIT  
US POSTAGE  
Paid  
Red Bluff, CA  
Permit No. 112

University of California  
Cooperative Extension - Tehama County  
1754 Walnut Street  
Red Bluff, CA 96080