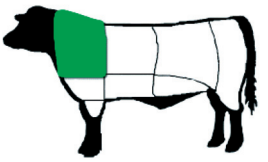
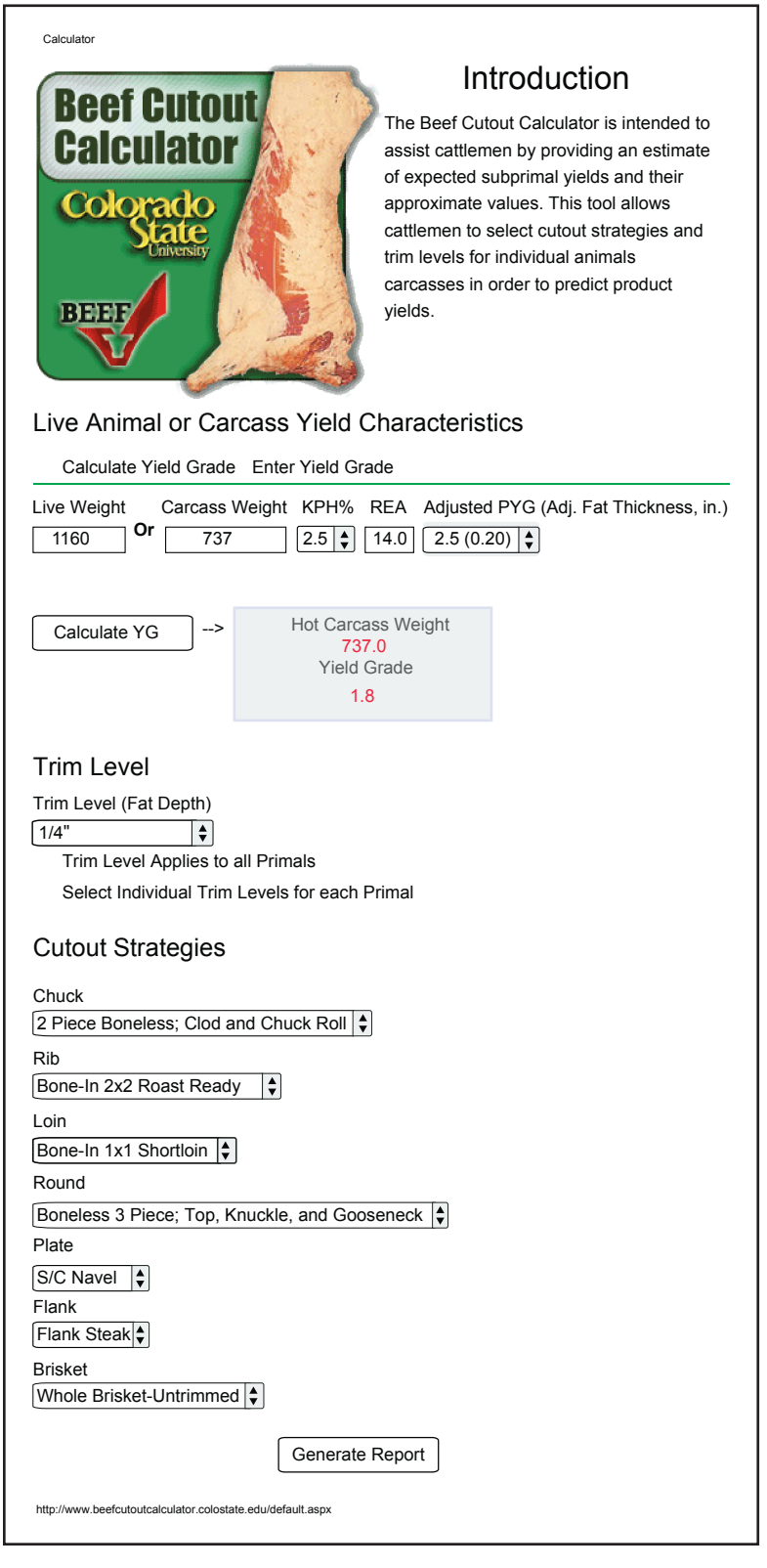
Calculating Yield



Online calculator estimates subprimal yields and values before cattle are marketed.

Fig. 1: Input screen of CSU Beef Cutout Calculator



Beef producers now have an online calculator to help estimate subprimal yields and their approximate values, based on current market prices, before their cattle go to market. The new resource, called the Beef Cutout Calculator, is available at *www.beefresearch.org* through the "Related Links" page. Funded by the beef checkoff, the online tool was designed by faculty and graduate students at Colorado State University (CSU).

By plugging a few numbers into this interactive tool, users can generate a report that estimates cutout weights for individual animals differentiated by yield grade, cutting style, external fat trim level, and initial live animal or carcass weight. Additionally, the report reflects current market values since the software uses the prior week's U.S. Department of Agriculture-Agricultural Marketing Service (USDA-AMS) National Weekly Beef Prices for Boxed Beef Cutouts & Cuts in its calculations. New USDA-AMS information is uploaded to the system every Friday.

"I think this calculator could be helpful to producers who feed their own cattle or those who don't, but have a relationship with a feeder," said Myron Williams, a South Dakota producer and chairman of the Industry and Producer Services Group of the Cattlemen's Beef Board (CBB). "It could help producers consider more market options, like trying for a grid or a specialty market, and help them build herd history, if that's a practice in their particular operation. It could also give the producer and the feeder a better idea of the animal's value."

Research-based calculations

Williams noted another value of the calculator is that it takes previous checkoff-funded research and finds a new use for it with the calculator application, expanding the value of the original producer investment.

The calculator is powered by proprietary software created by CSU graduate students to use data collected in a 1998 checkoff-funded study. The study examined instrument grading in determining beef carcass composition. CSU selected 300 carcasses that provided an equal representation of fat, lean and in-between animals, said Keith Belk, the CSU animal science professor who led the study. The carcasses were dissected sequentially — from the primal down to the first tier of subprimals and so forth — and weighed. The software uses this research data to estimate cutout weights.

While the calculations are strong value indicators, Belk said, it's important to keep in mind that they are based on averages of typical beef cattle harvested in the United States, and individual values may vary.

The calculated reports accommodate all users by providing IMPS/NAMP numbers for product identification, as well as illustrated carcass diagrams and digital photos of most of the common subprimal beef cuts. It was designed with user friendliness in mind and even displays on-screen video examples to walk users through the steps to generate a report.

Users select from several common cutout strategies, although not all cutout options are represented. Strategies depend on the fat trim level selected. For example, the bone-in rib is an option if the user selects commodity trim, but it is not an option if the user selects ⅛-inch trim. A possible site upgrade would include values for cuts targeting export markets.

Help at any level

The calculator could also help identify the value of various management decisions on the ranch or in the feedlot, Belk said.

"For example, a feeder is trying to decide on how much longer he/she might feed a group of cattle to try and 'hit the market peaks.' Then, by accounting for possible changes in carcass weight and grade as a result of such a decision, the feeder can project the net gain/loss given the current market conditions."

Belk added that the calculator is expected to help all levels of the production chain, including niche-market processors — such as very small- or medium-sized companies — or even consumers who buy a steer and have it processed for their own use.

The beef cutout calculator is available on the newly designed web site for the checkoff-funded Center for Research and Knowledge Management at *www.beefresearch.org*. Visitors can find checkoff-funded materials on current and past research in the areas of product enhancement, beef safety, human nutrition and market research. The site may also be accessed through CSU at *www.beefcutoutcalculator.colostate.edu/*.

Editor's Note: *This article was provided by the CBB.*

Fig. 2 : Summary report of the CSU Beef Cutout Calculator

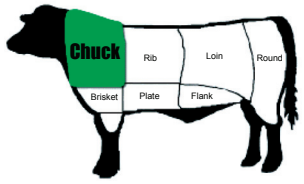
BasicReport

Back to calculator| Text Only

Summary

Hot Carcass Weight: **737** KPH: **2.5%** REA: **14.0** Adjusted PYG: **2.5** Yield Grade: **1.8**
Choice Carcass Value: **$1,124.14-$1,351.81** Live Choice Value: **$96.83-$116.44/cwt**
Select Carcass Value: **$1,028.90-$1,229.36** Live Select Value: **$88.62-$105.89/cwt**
Current Prices Week Ending: **12/1/2006**

Chuck 1/4" Cutout



NAMP/IMPS#	Name	Weight (lbs)	Choice Value	Select Value
116B	Scotty Tender from Chuck Roll	6.63	$9.55-$11.67	$9.61-$11.20
114A	S/T Shoulder Clod	42.98	$57.85-$67.91	$59.31-$66.19
116A	Chuck Roll	61.81	$87.15-$105.08	$87.77-$101.52
	Boneless Chuck Short Rib	4.04	$5.58-$7.07	$5.58-$7.07
	Shank Meat from Boneless Chuck	19.18	$21.48-$28.96	$21.48-$28.96
	Lifter Meat from Boneless Chuck	4.72	$9.44-$10.38	$9.44-$10.38
	85% Lean Trimmings	13.25	$14.84-$20.01	$14.84-$20.01
	73% Lean Trimmings	21.57	$14.79-$20.06	$14.79-$20.06
	Fat	13.76	$2.06-$2.06	$2.06-$2.06
134	Bone	40.16	$12.05-$12.05	$12.05-$12.05
		Totals:	$234.79-$285.25	$236.93-$279.51

Price ranges shown are based on USDA reported pri the week of 12/1/2006. Prices may not reflect actual market prices.

*Values generated by the Beef Cutout Calculator are estimates based on averages of typical beef cattle slaughtered in the United States. Individual values may vary.