

BEEF CATTLE COMMENTS

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1. 6TH ANNUAL CORNELL BEEF REPLACEMENT AUCTION



Please join us on

SATURDAY, OCTOBER 29TH, 2011

SALE KICKS OFF AT 1:00PM, WITH WARM

LUNCH BEGINNING AT 12:00PM

We will be selling

QUALITY REPLACEMENT FEMALES

20-25 REGISTERED AND COMMERCIAL ANIMALS WITH EPD AND
ULTRASOUND DATA AVAILABLE.

HAND SELECTED FOR OPTIMISED PERFORMANCE AND CALVING EASE
WITH THE
FARMER IN MIND.

The location is

**CORNELL UNIVERSITY
TEACHING AND RESEARCH BARN**

681 CORNELL LANE

DRYDEN, NY 13053

Hosting this Sale

CORNELL UNIVERSITY STUDENTS

THAT ARE ENROLLED IN THE BEEF CATTLE MERCHANDISING
CLASS THROUGH THE ANIMAL SCIENCE DEPARTMENT. COME
AND SUPPORT THE FUTURE OF AGRICULTURE BY PURCHASING
THE FUTURE OF YOUR HERD.

FOR MORE INFORMATION:

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CHECK OUT OUR WEBSITE!

www.wix.com/beefcattle/beefsale

WE GROW THE *Fury* AND THE **BEST**

2. EDUCATION FOR CATTLE FEEDERS AND COW/CALF PRODUCERS.

January 20, 2012 NY Cattle Feeder's Conference

January 21, 2012 NY Beef Producer's Winter Management Meeting, 2012

Both events will be held in Syracuse, NY. The Cattle Feeders conference will focus on technologies to enhance production and control market risk. The Winter Management meeting will focus on production practices along with how to interact with the consumer to present a beef friendly message.

For information on these meetings, contact Mike Baker, Cornell Beef Extension Specialist, 607-255-5923, mjb28@cornell.edu or Brenda Bippert, Executive Secretary, NY Beef Producer's Association, 716-902-4305, nybeefproducers@aol.com.

3. NY FEEDLOT AND CARCASS VALUE DISCOVERY PROGRAM

All cattle (n = 130) from the 2010/2011 New York Feedlot and Carcass Value Discovery program have been marketed. Cattle arrived at the Cornell Beef Teaching and Research Center on November 4 & 5, 2010. The sire breed of the calves is shown in Table 1. The majority of the cattle were sired by Angus bulls. Of the 130 head consigned, 67% of the cattle were purebred and 33% crossbred. On November 11 all cattle weighing less than 685 lb were given Draxxin® based on body weight. Called metaphylaxis the purpose is to prevent bovine respiratory disease (BRD) in high stress cattle. Even though these cattle had all been weaned and vaccinated they came for 13 farms so the risk of BRD was deemed significant enough to use this preventative measure.

Table 1. Sire breed of calves consigned to NY Feedlot and Carcass Value Discovery Program, 2010/2010

Sire breed	No. calves
Angus	72
Simmental	7
Hereford	4
Murray Grey	2
Red Angus	2

The diet was predominantly of corn silage, corn grain, hay and dried distiller's grains (Table 2). Ionophores (eg. Rumensin® and Bovatec®) assist cattle in utilizing high concentrate diets. As ionophores are not allowed in the natural protocol the forage level is increased to combat acidosis that might result with higher levels of starch digestion. On a dry matter (DM) basis corn silage and dairy refusals are 50% grain and 50% forage. Using this principle the natural diet was 79.5% concentrate and the conventional diet was 82.3% concentrate, which should have resulted in a higher energy ration for the conventional cattle. However the apparent metabolizable energy (ME) of the diets was similar.

Table 2. Composition of Natural and Conventional diets in NY Feedlot and Carcass Value Discovery Program, 2010/2011

Ingredient	Natural			Conventional		
	Ingredient, %		DMI Steers, lb	Ingredient, %		DMI Steers, lb
As fed	DM	As fed		DM		
Corn silage	44.6	23.4	5.3	32.1	18.1	3.5
Dry shelled corn	32.4	44.7	10.1	27.9	41.4	7.9
Dairy refusals	-	-	-	24.6	17.3	3.3
Chopped hay	6.3	8.8	2.0			
Dried distiller's grains	14.6	19.8	4.5	13.9	20.5	3.9
Minerals	2.1	3.4	0.8	1.58	2.6	0.6
Total DMI			22.7			19.1
CP, %		12.6			12.5	
ME, mcal/lb		1.17			1.16	

After a two week adjustment period the cattle were officially weighed on test November 18 (Table 3). Data is sorted by feeding protocol and gender and reported as the mean, minimum and maximum value. This allows the producer to evaluate the range in performance against the performance of their individual cattle. Cattle raised under the conventional protocol were implanted using Revalor® and fed a diet containing Rumensin®. Cattle raised under the natural protocol were not treated with growth promoting implants and the diet contained no Rumensin® or other antibiotics. If the natural cattle got sick, they could be treated with antibiotics, but to be eligible for the natural market the withdrawal period is to be doubled.

Table 3. Feedlot performance of cattle in the New York Feedlot and Carcass Value Discovery Program, 2010/2011.

Feeding Protocol	Start wt, lb	Finish wt, lb	DOF	ADG, lb	FE
<u>CONVENTIONAL</u>					
Steers - 11 head					
Average	666	1251	199	3.0	8.0
Min.	440	1066	152	2.4	6.8
Max.	850	1478	237	3.6	9.0
HEIFERS - 6 head					
Average	503	1110	195	3.1	7.7
Min.	408	1021	188	2.6	6.9
Max.	700	1196	210	3.5	8.5
<u>NATURAL</u>					
STEERS - 69 head					
Average	617	1158	196	2.8	7.2
Min.	304	885	129	1.7	6.0
Max.	941	1440	237	3.7	8.8
HEIFERS - 45 head					
Average	644	1087	166	2.7	8.0
Min.	362	843	115	1.9	6.5
Max.	882	1344	237	3.3	9.3

Treatment for BRD was less than 1%. Previous years with no metaphylactic treatment, treatment rates were as high as 30%. The average finish weight of the Conventional and Natural steers was 1251 lb and 1158 lb, respectively, placing them as Large and Medium framed, respectively. The USDA Feeder cattle grading standards dictate that to be considered a large frame steer, it's finish weight at low Choice is >1250 lb and to be medium framed it's weight at low Choice is 1100 lb – 1250 lb. Average daily gain was 2.7 lb – 3.1 lb for the average animal. The range however was 1.7 lb to 3.7 lb. Interestingly the high and low ADG was recorded in the Natural steers. If the energy density of the natural diet had been lower than the conventional diet, one would expect the natural protocol to produce less ADG, however the highest ADG was also in this group.

Using the Cattle Value Discovery System software, projected intakes are computed using animal description, carcass and diet composition. This allows a projection of feed efficiency. In this set of cattle the average feed efficiency of all the natural cattle greater than the conventional cattle. Again this is unexpected as in general as the energy density of the diet increases so does the feed efficiency. However has stated earlier the apparent ME of the diets were similar.

Next month we will evaluate the carcass data performance.

The purpose of the Value Discovery Program is to teach cow/calf producers the value of their calves based on performance in the feedlot and on through the packing plant. Calves are accepted in November and fed till their most optimal profit potential during March-July. For more information contact Mike Baker, Cornell Beef Specialist mjb28@cornell.edu, 607-255-5923.

4. THE VALUE OF HAY-HOW MUCH CAN I PAY?

Along with record prices for beef cattle we're seeing record prices for feedstuffs. I received a question the other day from a farmer who regularly purchased corn silage to feed his cows. The price of that had increased from \$25/t to \$65/ton. His question was can he afford the silage at \$65/t? I developed a spreadsheet that compares the price of corn silage, dried distillers grains and shelled corn to the value of hay at several energy levels measured as TDN. When feedstuffs were inexpensive as shown in the second column, it was not unusual to replace hay with corn silage or concentrates to stretch the hay supply. For example a low quality hay at 56% TDN was valued at \$53/ton compared to corn silage at \$25/ton. In other words several years ago, when you could buy corn silage for \$25/ton, the value of the 56% TDN was only \$53/ton. At today's price of corn silage at \$65/t that same hay is worth \$137/t on an energy (TDN) basis. Likewise when corn was \$140/t, that 56% TDN hay was worth \$94/ton on a TDN basis. At this price, when hay was in short supply and expensive and you were faced with purchasing hay, it made more sense to replace some of that hay with corn grain to stretch the hay supply. At today's price of \$285/t for corn grain, on an energy basis, you would have to pay more than \$192/ton for hay before you could replace it with corn. The bottom line is hay is worth a lot due to the price of our traditional energy sources.

Hay TDN, %	Corn silage, ton		
	\$ 25	\$ 45	\$ 65
56	53	95	137

58	54	98	142
60	56	101	146
62	58	105	151
DDG, ton			
	\$ 95	\$ 200	\$ 220
Hay TDN, %	Hay value, \$/ton		
56	68	143	157
58	70	148	163
60	73	153	168
62	75	158	174
Corn grain, ton			
	\$ 140	\$ 265	\$ 285
Hay TDN, %	Hay value, \$/ton		
56	94	178	192
58	98	185	199
60	101	191	205
62	104	197	212

Knowing the nutrient composition of your feedstuffs has never been more important. You can't afford to feed high valued feedstuffs beyond the nutritional needs of the cattle, nor can you afford to supplement the herd if it is not needed. In some instances the price of hay is more than \$100/ton. If you know the nutritional value of the hay and you have an abundant supply, it may be a better financial decision to sell the extra hay.

5. FEEDER'S CORNER

a) *Monensin reduces incidence of fecal shedding of Escherichia coli O157:H7 in feedlot cattle*

Given the high price of corn and the inclusion of distillers grains (DG) in finishing diets has increased. Studies have suggested that DG in cattle diets has been shown to increase fecal shedding of *Escherichia coli* O157:H7. Researchers in Nebraska conducted an experiment using 720 cross bred steers to examine the effect of two levels of monensin, supplemental urea and ractopamine in the last 42 days of finishing. The diet was a steam-flaked corn grain-based diet containing wet sorghum DG. Across all animals, the average fecal prevalence of *E. coli* O157:H7 was 7.6% and ranged from 1.6 to 23.6%. Cattle fed monensin at 44 mg/kg of feed reduced the prevalence of fecal *E. coli* O157:H7 37% compared to cattle fed 33 mg/kg. Neither supplemental urea nor ractopamine had any effect on reducing the fecal prevalence of *E. coli* O157:H7. Additional research is needed to confirm the reduction in fecal shedding of *E. coli* O157:H7 in cattle fed monensin at 44 mg/kg of feed compared with cattle fed 33 mg/kg of feed.

(Reference article: Paddock, et al., 2011. Dietary monensin level, supplemental urea, and ractopamine on fecal shedding of *Escherichia coli* O157:H7 in feedlot cattle *J. Anim Sci.* 89 pp 2829-2835).

b) *Growth enhancement technologies improve feedlot and carcass performance, but used aggressively may impact cattle priced on a grid and consumer satisfaction.*

An experiment was conducted to examine effect of growth enhancement technologies on feed and carcass characteristics using 159 steers and 132 heifers. The treatments were:

Technology	Treatment			
	1	2	3	4
Initial implant, day 0	x	x	x	x
Terminal implant, day 63			x	x
Ractopamine, 28 day prior to slaughter		x		x

There was no difference in response to treatment by steers or heifers.

- Initial implanting improved ADG at 63 days on feed by 11.5%
- Implanting 90 days before slaughter improved ADG 15%
- Implanting twice (initial and 90 days before slaughter) and feeding ractopamine enhanced ADG during the final 28 d of finishing by 12%.
- The initial implant and ractopamine increased REA 0.5 in² while the terminal implant increased REA nearly 1 in².
- The initial implant, terminal implant and RAC increased HCW 24 lb, 35 lb, and 13 lb, respectively.
- Initial implanting reduced marbling by 20 points and terminal implanting reduced marbling 25 points
- Ractopamine did not affect marbling
- Cattle that received only 1 implant produced carcasses with carcass characteristics more in line with consumer demand as compared to twice implanted carcasses.
- Implanting did not reduce tenderness, however feeding of ractopamine did reduce tenderness

The authors concluded that cattle that received only 1 finishing implant (TRT1 and TRT2) produced carcasses that had a greater rate of conformity to beef marketing specifications compared with cattle that were implanted twice (TRT3 and TRT4). These results suggest that cattle feeders who receive price incentives for producing Choice and Prime, Yield grade 1 to 3 cattle with moderate-sized carcasses and REA may receive greater prices for their animals by electing to use a single-implant program. On the other hand, when BW is the primary driver of value, which is true for most marketing scenarios cattle feeders would realize the greatest economic benefit by implanting twice and, when feasible, supplementing with RAC.

(Reference article: Woerner, et al., 2011. Effects of sequential implanting and ractopamine hydrochloride supplementation on carcass characteristics and longissimus muscle tenderness of calf-fed steers and heifers. J. Anim Sci.89 pp 201-209).

6. BQA UPDATE

a) *BQA Program Expands to Level I and Level II BQA Certification*

At the last meeting of the NYBQA Advisory Committee, it was decided to expand the New York Beef Quality Assurance program to offer two levels of BQA Certification.

Completion of current BQA requirements will now be identified as **Level II Certification**. These requirements include:

1. Attend a classroom training or self study and complete BQA test
2. Attend a chute side training
3. Sign a BQA contract
4. Establish a Veterinary Client Patient Relationship (VCPR).

The **new Level I Certification** will consist of the first 3 requirements but will eliminate “Establish a Veterinary Client Patient Relationship (VCPR)”.

There are several reasons why a producer may not be able to establish a VCPR which led the committee to this decision. First, in NY, BQA is taught as part of the curriculum at three universities. Many of these students do not own cattle –therefore do not have a veterinarian, but intend to enter the cattle business after college. These students need to a form of certification to recognize their completion of the BQA training. Secondly, employees should be encouraged to become BQA certified but the veterinary relationship is normally established between the owner of the cattle or farm and the veterinarian. Also, in rare circumstances, professional veterinary services for cattle are not available.

The goal of BQA is to assure consumers that beef is safe, wholesome and raised with a concern for animal well being. To reach this goal, it is imperative that we reach any person that is currently or will be involved in the production of beef. For those not in a position to establish a VCPR or unable to do so, we can still offer and recognize their training on the principals of BQA. This in no way weakens our commitment to the goal of all producers working with a veterinarian; in fact only those that certify at Level II will be eligible to purchase a BQA Gate sign. This change however encourages BQA participation for all individuals working with cattle now or in the future.

If you have questions about the status of your certification and/or recertification, contact Carol Gills, NY Beef Industry Council, 315.339.6922, cgillis@nybeef.org.

If you have any questions about this policy change, please contact any member of the NY BQA Committee.

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b) *Answers to Your Questions about BQA or the Beef Check-off*

Why depend on the Check-off to promote beef? How does the check-off reach consumers? What’s this “I Heart Beef” campaign? Do influencers want to hear from us?

These are just a few of the questions producers have on their minds, and the checkoff is answering them via videos on a new [Farm Progress module](#). Hover your mouse over the “Ask” tab and click on the question to see the answer, direct from producers just like you.

Or, view these videos, and much more, on the [MyBeefCheckoff YouTube channel](#). Or if you have questions, feel free to send an email to Carol Gillis, Cgillis@nybeef.org or Mike Baker, mjb28@cornell.edu.

BQA is a voluntary program focused on increasing the quality, taste and safety of beef. Certification demonstrates your commitment to the principles of BQA. To find out how you can participate, contact Mike Baker, Cornell Beef Extension Specialist, 607-255-5923, mjb28@cornell.edu or Carol Gillis, NY Beef Industry Council Executive Director, 800-292-6922, cgillis@nybeef.org.

7. TO/DO MAY/JUNE

- 1) Consider marketing options for feeder cattle:
 - ◆ Special feeder calf sales, contact local sale barn for details
 - ◆ Retained Ownership, contact Mike Baker, 607-255-5923
- 2) Line up supplies for fall roundup and weaning. Consider the following:
 - a) Enroll your herd in the Cow Herd Appraisal Performance System (CHAPS) record keeping system. This program provides important data on the productivity of your cows based on the performance of their calves. Contact your local Cooperative Extension Agent, or call 607-255-5923.
 - b) Buy ear tags to identify replacement heifers and cows.
 - c) If deemed necessary (consult your veterinarian to do a fecal egg count) worm cows and bulls.
 - d) Apply lice and grub control before November 5.
 - e) Vaccinate calf crop for IBR, BVD, PI₃, BRSV, Pasteurella, Mannheimia, Clostridia spp., and Haemophilus somnus. If using a modified live vaccine, this must be done after calves are weaned. Killed vaccine products can be used on nursing calves.
 - f) Treat calves for worms and grubs and supplement with Selenium.
2. Pregnancy test and cull all open cows.
3. Cull problem cows and marginal producers. Production data is easily obtained using CHAPS.
4. Take forage sample for nutrient analysis. Depending on your locality, hay may be in short supply or of poor quality. Allocating the best feed to younger, higher producing animals will stretch out your supply. Contact local Cornell Cooperative Extension office for information.
5. Consider taking soil samples and top dressing fields requiring lime, phosphorous and/or potash.

8. PROFIT OPTIMIZATION AND EVALUATION PROGRAMS

a. New York Feedlot and Carcass Value Discovery Program

Purpose: Teach cow/calf producers the value of their calves based on performance in the feedlot and on through the packing plant. Calves are accepted in November or June and fed till their most optimal profit potential.

b. New York Pasture Finished Performance and Carcass Value Discovery Program.

Purpose. Patterned after the grain finished Value Discovery Program, yearling cattle are delivered in May and rotationally grazed through market or end of grass. Owners of cattle are responsible for the marketing of their cattle. Every effort will be made to collect carcass data on cattle.

c. Empire Heifer Development Program

Purpose: A management and marketing program for cow/calf producers to evaluate replacement heifer prospects and offer a marketing opportunity for quality heifers. Calves are accepted in November or December. Heifers can be bred artificially at the heifer rearing facility, or returned home for breeding. Eligible heifers can be sold as open in April or as bred heifers in the October Cornell Beef Replacement Sale.

For more information on any of these programs contact Mike Baker, Cornell Beef Specialist mjb28@cornell.edu, 607-255-5923, <http://www.ansci.cornell.edu/beef/>.