Can EPDs Make Quality Feeder Calves Bring More Money?

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One of the Industry's Biggest Problems:

Poor information leads to bad market signals.

- Good calves and bad calves bring about the same price.
- Ranchers don't get paid for quality.
- Feedlots can't find or sort quality.
- Despite huge ($200 / hd) differences in the true value of feeder calves!

Can EPDs Predict Feeder Calf Value?

- Do EPDs work? **YES**
- Do we have EPDs on the economically relevant traits for feedlot profitability? **YES**
  - Rate of gain (post weaning gain)
  - Yield (ribeye area and fat)
  - Quality (marbling)
  - Carcass Weight (CWT EPD or predict from above traits)
  - Feed Intake (Intake EPD when available)
- Do we know what these traits are worth? **YES**
- Now Verified Beef will offer an innovative prediction of feeder calf value!

Who is Verified Beef?

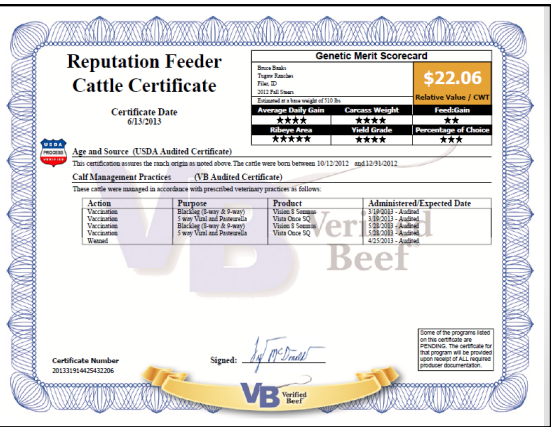
- Based in Bozeman, Montana.
- Started in 1999 by MSU, MSGA, and the Montana Beef Network.
- Privatized in 2008 to function as a for profit entity.
- Owned in partnership by MSGA and the Watts family.
- In 2012, provided A&S, NHTC, NE3, and Grassfed certification for over 200,000 calves. Source nationally, but primarily western states.

Reputation Feeder Cattle Certificate™

An innovative, patent pending program to improve industry value signals.

Three key elements:

1. Genetic Merit Scorecard:
   - A. Relative Market Value / CWT
   - B. Star scores showing quintile rank from 1 (bottom 20%) to 5 (top 20%)
     - i. Average Daily Gain
     - ii. Carcass Weight
     - iii. Feed:Gain
     - iv. Ribeye Area
     - v. Yield Grade
     - vi. Percentage Choice
2. Age & Source Verification
3. Audited Calf Management (vaccination & weaning)



The Calculations

- Estimated using BIO's simulation model which predicts post-weaning genetic merit.
- Gather EPDs on all bulls used in a commercial herd for the past 10 years.
- Must have registered bulls with EPDs!
- Use: WW, YW, REA, Marb, Fat, CWT, & Intake if available.
- Use MARC and Leachman EPD base adjustments.
- Standardize traits where variance is inappropriate (Ex.: MS for Salers & South Devon).
- National base price is calculated based on historical breed average EPD weighted for number of registered bulls produced by breed.
- Relative market value is set above or below a $10.00 / cwt base – only bottom 15% of calves are negative.

How do you select for it?

- Basically the bulls that rank high are:
  - High on post weaning gain.
  - High on ribeye and marbling.
  - Low on fat and high on carcass weight.
  - Better feed efficiency / lower feed intake.
- Highly correlated to Simmental TI (81.7%)
- Highly correlated to Angus $Beef (91.0%)
- Example Yearling Angus bulls:
  - High: +68 WW, +120 YW, +1.49 Mrb, +1.00 REA, -0.026 Fat, +49 CWT
  - Low: +25 WW, +34 YW, +0.28 Mrb, +0.06 REA, +0.060 Fat, +2 CWT

What does the rancher do?

- Contact Verified Beef.
- Release EPDs to VB from relevant associations.
- VB then runs the numbers.
- After seeing the Relative Market Value, the producer can then decide to order a certificate.
- Must age and source verify.
- Must document calf/feeder health and weaning.
- Provide VB with the method of marketing and appropriate contact information for a "show list."
- Cost: $300 for RMV. This can be applied to certification cost of between $3 and $7 per head.

The Feedlot Questions

We travelled the country and met with many of the top feedlots:

- What are the calves worth?
  - Relative Market Value
- What drives their value?
  - Star Ratings
- How can we validate the system?
  - Send in data on a herd of known quality and VB will score them for free.
- Were they properly managed prior to delivery?
  - Audited vaccinations & weaning
- How can we buy them?
  - VB is committed to supporting and enhancing existing marketing channels.
  - Web site "show list on a password protected site.
  - Outbound emails notifying buyers/feedlots of the calves available.
  - Therefore, not changing how or when the calves will be marketed.

Our question, will feedlots pay more for better calves?

Tugaw Fall '12 Steer Calves

Marketed May 31st, via Superior

- Pre-conditioned and weaned per a Vac 45 protocol.
- Sired by known, high quality genetics.
- Base weight of 540 pounds with a mid-June delivery date in Twin Falls, ID.
- Superior rep, Jim Davis, predicted the calves would bring between $1.50 and $1.58.

Genetic Merit Scorecard		
Bruce Banks Tugaw Ranches Filer, ID 2012 Fall Steers		$22.06 Relative Value / CWT
Estimated at a base weight of 710 lbs		
Average Daily Gain	Carcass Weight	Feed:Gain
★★★★	★★★★	★★
Ribeye Area	Yield Grade	Percentage of Choice
★★★★★	★★★★	★★★

Calves sold for $1.68 with aggressive bidding!

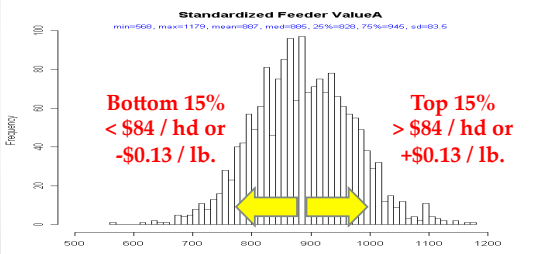
Conclusions

- By sending clear value signals:
  - Cow/calf producers will be paid for quality.
  - Feedlots can source based on value.
  - Seedstock producers will be paid more for better bulls.
  - Associations will benefit by increased value for registered bulls and significant disincentives for home raised bulls.
  - Also, associations can benefit financially through referral relationships with Verified Beef.
- Genetic improvement will accelerate.
- The industry will produce a better product!

Questions?

How big are the value differences?

DCFY Feedlot Data Analysis of 185,000 head, 2,800 lots over five years.
Standardized to 650 lb. in weight, removed market variation, $1.20 fed market, $6 / bu corn, typical grid marketing formula.



True breakeven purchase price range of $0.90 to $1.80 per lb. on a 650 lb steer!

Five Star ☆☆☆☆☆ Carcass Quality:

- Harvest data from June, 2012:
- 396 steers fed NHTC went:
  - 99.5% Choice
  - 88.4% CAB
  - 25.1% Prime
- 825 average carcass weight.
- Premium of $193 / head over Select!

Unmatched Quality!

Top Carcass Wgt & Conversion:

- Young cows (2 – 6 years of age) in body condition 5.5 weighed 1175 pounds.
- Back grounded from 575 to 750.
- Fed to an average carcass weight of 929 lbs on July 18th, 2012.
- Converted 5.4:1 on the finished ration from 750 pounds to a 1415 pay weight.
- Returned $1.72 / pound!

Worth $$$ over market!

Highest Genetic Merit Score Card Yet:

- Dec '11 cull heifer data:
  - From 882 lbs., gained 4.8 per day. Converted at 6.1:1.
  - 59.2% YG 1 & 2, No YG 4's.
  - 838 lb. carcass with a 14.0 REA!
  - 98% Choice with 75.5% CAB & Prime!
  - Returned $1267 per head!
- Dec '12 cull heifer data:
  - From 906 lbs., gained 4.9 per day. Converted 4.7:1
  - 42% YG 1 & 2, 4% YG 4's.
  - 882 lb. carcass with a 14.4 REA!
  - 98% Choice with 82% CAB & Prime!
  - Returned $1,317 per head!

Predictably Good
Rel. Mkt Value: +24.73