

Keys for Producing High Quality Holstein Steers



Bill Halfman
UW Extension
Agriculture Agent



Common Traits that Discount Value -Avoid These Traits-

- Stags
 - Current cost of stags
 - Choice steer price \$140/ cwt
 - Slaughter bulls \$115/ cwt
 - \$25/ cwt x 15 CWTs = \$375/ head
- Cattle not finished
- Old cattle not finished

Sources of Stag Problems

- Incomplete Castration
 - Bander problems
 - Have both testicles descended when doing young calves?
- The “leave no doubt” solution to fix castration problems
 - Use a knife and count to 2

Sources of Stag Problems

- Mis-managed Implants
 - Not matching the implant strength to the energy density of the diet
 - Very aggressive program requires very high-energy diet
 - Crushing the pellet(s) when administering

Potential Outcome of a High Potency Program

- High potency programs can produce animals with staggy appearance, may result in discounts
 - Both selling live and on the rail



Keys to Success with Implants

- Match the implant potency program to the feeding program
- Matching potency of program to animal response to minimize potential negative side effects

Evaluate Outcomes

- It is important to monitor for positive and negative results and adjust implant program accordingly
 - Reduce potency
 - Delay implanting
 - Increase grain
 - Timely marketing



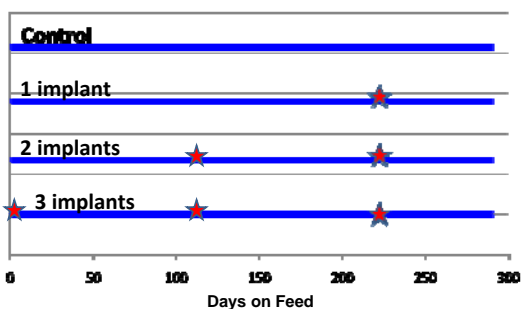
Holstein Trial

- Holstein steers implanted 0, 1, 2, or 3 times with combo (estradiol/trenbolone acetate) implant
 - Component TE-S
 - d 224; d 112 & 224; d 0, 112, & 224 DOF
- 128 steers with initial weight ~465 lb
- Fed 291 days, 83% concentrate : 17% corn silage diet

© 2008 Halfman and Lehmkuhler

Scheffler et al. 2003

Holstein Trial Treatments



Holstein Trial Economics

- Feed costs calculated with following prices
 - \$132/cwt Choice and \$119/cwt Select fed cattle price
 - \$4.00/bu rolled corn
 - \$200/ton DDGS
 - \$45/ton as-fed corn silage
- Added revenue calculated by
 - Feed efficiency advantage compared to control group weight gain
 - Plus added pounds (fed price – cost of gain price)
- Costs deducted
 - \$3.50 /implant + \$3 chute charge per implant
 - Pro-rated discount for Select based on % grade

© 2008 Halfman and Lehmkuhler

Holstein Result Summary

	Control	1X	2X	3X
Final wt	1294 ^b	1303 ^b	1387 ^c	1422 ^c
ADG	2.84 ^b	2.89 ^b	3.17 ^c	3.28 ^c
F/G	6.58 ^b	5.81 ^c	5.99 ^c	6.25 ^{bc}
Feed \$/lb gain	0.63	0.56	0.58	0.60
Added \$ to b	base	\$35.32	\$53.19	\$77.70
REA	11.58 ^f	11.89 ^g	12.46 ^{gh}	12.94 ^h
Maturity	55 ^f	61 ^f	78 ^g	88 ^h
≥Ch, %	100	90	82	90

Adapted from Scheffler et al. 2003

Classifying Combination Implants in Holstein Programs

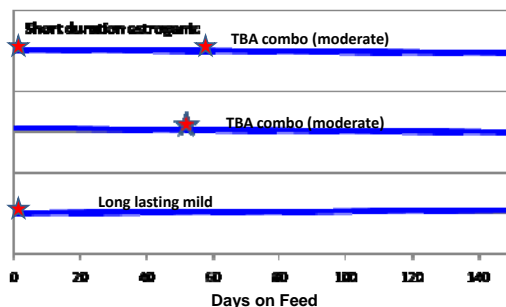
	TBA level
Mild	40mg
Moderate	80 to 100mg
Strong	120 mg
Extremely Strong	200 mg

Combination Implants have an androgenic compound (usually TBA) and an estrogenic compound. Usually in a similar ratio to each other across products, and the androgenic compound is the stronger of the two.

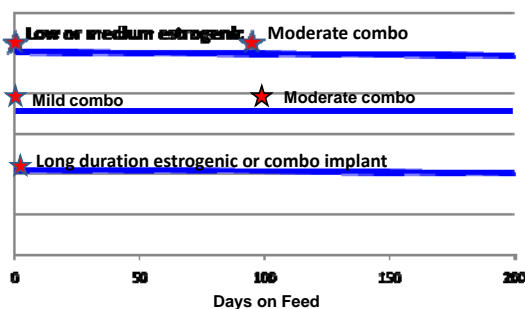
Implant programs for your consideration

- The following programs will work well with Holstein steers, minimize the risks of stags and have minimum impact on quality grade as long as energy levels are high enough
 - 10% or less roughage (DM basis).
 - 20% to 10% corn silage (DM basis).

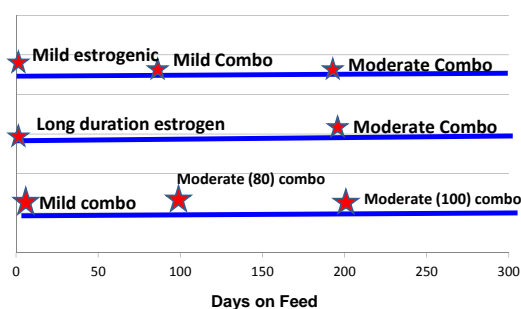
Cattle Fed for 150 days or less



Cattle Fed for about 200 days



Cattle Fed for about 300 days



Considerations

- You may find a moderate program works better than a high potency program with Holsteins
- Work backwards from expected sell date
- If high roughage (corn silage only), use low dose estrogen,
 - and may not see any advantage.
- Steers need ADG of 2.0 lb/d before they respond to an implant.

Additional Resources

- Texas Tech University – Intervet database
 - www.depts.ttu.edu/afs/implantdb/dbhome

Unfinished Cattle

- Feeding high roughage ration may cost you more money than you think
- Let's compare some feeding program scenarios

Prices in Examples

- Corn silage - \$45/ ton
- Rolled Corn - \$4.00/ bu
- DDGS - \$200/ ton
- Mineral Supplement Balancer - \$800/ ton
- Feeders - \$150 to \$160/ cwt
- Choice Feds - \$140/ cwt
- Bedding - 5 lb/ head per day at \$35/ ton
- Yardage - \$0.49/ head per day

Feeding Management Comparisons

Program	Silage Fed	High Energy Fed	Background on Silage	High Energy Fed Yearlings
Start weight	500	500	400	850
End weight	1500	1500	800	1500
Rate of gain	2.0	2.8	2.2	3.2
Feed to gain	10.0	7.4	6.7	7.3
Days on feed	500	357	182	203
Feed cost/ pound of gain	\$0.47	\$0.66	\$0.39	\$0.65

Detailed Example for High Energy Fed 10% Roughage Ration

RECIEPTS		Projected Sale Date:		2/2/2016		
Avg Out		Weight	Units	Price	Units	Dollars
Steers	1500	lbs.	\$140.00	\$/cwt.	\$2,100.00	
VARIABLE EXPENSES		Projected Purchase Date:		2/10/2015		
Amount		Unit	Price	Unit	Dollars	
Cattle costs						
Initial weight (pay weight)	500	lbs.	\$160.00	\$/cwt.	\$800.00	
Purchase costs			\$2.00	\$/hd.	\$2.00	
Total purchase expense					\$802.00	

Cattle Performance and Feed Cost Section

PREDICTED PERFORMANCE			
Predicted Average Daily Gain	2.80	lbs/d	Days on Feed
Predicted Feed to Gain ¹	7.4	lb:lb	Total Weight Gain
			1000
FEED COSTS			
<i>Enter values from Feed Costs Calculator worksheet</i>			
Feed cost per head per day	\$1.86	\$/hd	days
Total Feed Costs	\$662.99	\$/sect	
Feed Cost of gain, \$/lb	\$0.66	\$/lb	

Ration Cost Section

Calculate Feed Costs from a DM basis								
<i>Enter percent of diet ingredient on DM basis</i>								
Ingredient	Diet % on DM basis	Total DM, lbs	Ingredient DM, %	Total As-fed lbs	Unit	Price	Unit	Total Costs
Milk replacer	0	0	0	0	lbs.	\$8.11	\$/cwt.	\$0.00
Crack grain starter	0	0	0	0	lbs.	\$4.23	\$/cwt.	\$0.00
Corn	52	2848	88	4387	lbs.	\$4.00	\$/bu.	\$313.34
Other grain	0	0	0	0	lbs.	\$1.00	\$/bu.	\$0.00
Dried distillers grains	25	1394	92	1938	lbs.	\$200.00	\$/ton	\$199.80
Complete supplement	3	222	92	240	lbs.	\$800.00	\$/ton	\$95.90
Hay	0	0	0	0	lbs.	\$80.00	\$/ton	\$0.00
Haylage	0	0	0	0	lbs.	\$80.00	\$/ton	\$0.00
Corn silage	20	1480	38	2398	lbs.	\$45.00	\$/ton	\$53.95
Pasture	0	0	0	0	acre	\$65.00	\$/acre	\$0.00
Wiring and mill cost	0	0	0	0	lbs.	\$0.16	\$/cwt.	\$0.00
Total Feed Costs								\$662.99
Feed cost per head per day								\$1.86
Cost of gain, \$/lb								\$0.66

Other Costs Section

OTHER LIVESTOCK COSTS				
Death losses	3	%		\$24.06
Interest cost, cattle	\$802	\$	6	%APR \$47.08
Interest cost, feed	\$331	\$	6	%APR \$19.46
Bedding	1785	lbs.	\$35.00	\$/ton \$31.24
Veterinary cost			\$8.00	\$/hd. \$8.00
Health products (ie vaccines)			\$14.00	\$/hd. \$14.00
Growth promoters (ie implants)			\$6.00	\$/hd. \$6.00
Other supplies			\$7.00	\$/hd. \$7.00
Transportation			\$30.00	\$/hd. \$30.00
Marketing costs			\$12.00	\$/hd. \$12.00
Total livestock costs				\$198.84

Overhead and Returns Section

OVERHEAD COSTS (YARDAGE)		
<i>Enter value from Yardage Calculator worksheet or your own value</i>		
Daily Yardage Cost	\$0.49	Total Yardage Cost \$175.00
Total cost of gain, \$/lb		\$1.04
RETURN TO RESOURCES		
Estimated receipts		\$2,100.00
Variable expenses		\$1,663.83
Returns to labor, management & capital	\$/hd.	\$436.17
Fixed expenses		\$175.00
Returns to labor & management	\$/hd.	\$261.17

Feeding Management Comparisons

Program	Silage Fed	High Energy Fed	Background on Silage	High Energy Fed Yearlings
Income	\$1725	\$2100	\$1120	\$2100
Feeder value	\$802	\$802	\$602	\$1149
Total feed	\$473	\$662	\$155	\$425
Other costs*	\$228	\$199	\$120	\$163
Yardage	\$245	\$175	\$89	\$99
Return to labor & mgt	-\$23	\$261	\$154	\$262
Turns/year	0.7	1.0	2.0	1.8

*Other costs include death loss, interest on feed and cattle, veterinary, bedding, health products, implants, transportation, and marketing

Summary

- Having steers around a long time adds up in yardage costs
- High roughage, particularly at heavy weights, is extremely inefficient and reduces market price
- Corn silage backgrounding program can be a profitable option
- There is value in pushing them along when finishing the steers to shorten the time on feed and produce a higher value animal
- Put a sharp pencil to your own numbers and be honest with yourself.

Thank you for your attention!!