

Are Florida Calves Predictable?

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The simple answer to the question asked by the title of this presentation is yes for individuals because calves are predictable based on their apparent age, weight, sex, genetic composition (breeding) and condition. The problem is the prediction may not be very desirable or accurate when the cattle in a group do not have these uniform characteristics. Even in groups that appear to be uniform but have widely varying backgrounds, predictability is difficult. Cattle feeders tell us that holsteins are the most predictable cattle they feed because they are so genetically similar.

What I am going to do today is take the data from last year's Pasture to Plate Project and look at how these cattle did as a pen and by groups to see if they were predictable. The project started with 92 head of steers from 5 owners located around the state. The cattle were assembled in Bartow and Ocala, individually weighed and valued by representatives of the Federal-State Market News Service. They were then shipped to Hereford, Texas and placed in a feedyard.

The cattle were given the feedyard initial processing including individual weights. Comparison of the weights taken prior to shipment with the feedlots initial weight revealed the steers lost an average of 37 pounds for a shrink of 6.9%. Shrink varied by owner group from a low of 4.74% to a high of 8.45%. The feedlot management assigned a market value to the pen of calves which valued the steers \$37.65 more than they were in Florida.

Other than being slow to increase feed intake, the cattle did well for a couple of weeks then sickness began to take a toll despite each

of the owners having been advised to prepare their cattle for the health challenges they would be exposed to. We ended up losing 4 head for a 4.1% death loss. Just as important is the \$15.00 per head cost for medicine to treat sick calves. Medicine is not the only cost on sick calves, they don't gain as well, so they require more time on feed. In this group the non-medicated cattle averaged \$78 more profit than the medicated. All 5 owners had medicated animals but there were differences in the average medicine cost per head. Figure 1 does illustrate that over 40 animals did not require medication during the feeding period.

Despite the worst winter weather the region has experienced, our cattle gained reasonably well at 2.7 lbs. per day. They averaged putting on 642 lbs. at a cost of \$0.4919 per lb. This compares very well to the average close outs reported at that time in the \$.52 to \$.53 and higher. Average daily gain is displayed in Figure 2 illustrating that most of the cattle gained well over 2.25 lbs per day.

The cattle were marketed in two groups; one in early May and the other in mid June. Fortunately, these were some of the higher markets for the year. Quality Grades on the cattle were acceptable since we had only one standard and one no roll. Thirty four percent graded choice and 64% were rolled select. Figure 3 is somewhat misleading because of the high bars for grade 3 (select) and 4 (choice-). This is a result of not being able to get detailed carcass data on the last slaughter group. They were all listed as select, choice or standard with no break down within the grades. In general the quality grades were about what I expected based on our observations of similar cattle.

The yield grades were quite acceptable (figure 4) with the exception of the 4 fours and 1 five. Again the data in figure 4 is incomplete since we were not able to get detailed carcass data on the last group.

Although the primary objective of the project was information not profit, it didn't disappoint any participants that it was profitable. Approximately 8% of the cattle lost \$25.00 or more including the 4 that died (Figure 5). The average steer netted \$136.98 after all costs including the \$35.00 shipping and administrative fee plus the appraised value at shipping were deducted.

How do Florida calves compare with similar calves from other areas? Two states with similar programs that have published data we can compare are Texas and Louisiana. In Texas's Ranch to Rail Program, they had 1595 steers belonging to 152 cattlemen and in Louisiana they had 53 cattlemen from 25 parishes participate. The data was reported in different formats by all three states, thus some of the information in table 1 is missing.

The differences between the state groups were not large. The starting value increased by approximately \$30.00 per head as you move closer to the feedlots suggesting that freight is a constraint in the market value of calves that are located a distance from the feeding area. The differences in income and starting value are also partially accounted for by weight differences. The biggest difference is in net per head between Louisiana and Florida/Texas. Unfortunately, there is not enough data in the report I used to tell if the net values were calculated by the same method. I believe it is safe to conclude that Florida calves performed very similar to our neighbors calves based on the data available in the table.

There are two additional points that need to be made about the Florida data. One is that when you look at the top and bottom 25% (Table 2 and 3) on performance and profitability, there were only 4 steers that were different between the two analyses. The best performing steers were heavier and fatter with a slightly higher quality grade suggesting to me they may have been past the ideal slaughter point. The data shows the lowest performing steers were heavier muscled (2.0 vs. 1.8 rea/cwt). They averaged a slightly lower marbling score despite averaging 0.4 in. fat over the rib eye. In terms of profitability, the top 25% averaged \$276.52 while the bottom 25% of those surviving to slaughter averaged a profit of \$35.37 and if you include the 4 that died the least profitable 25% averaged losing \$29.45. Another interesting point is the profitable steers averaged \$8.60 in medicine cost vs \$40.51 for the least profitable. My conclusion from these data is that we had some poor performance probably due to permanent effects of respiratory disease.

How does this data compare with other groups of Florida cattle? I am aware of about 6 years data collected over a 10 year period from one herd that has averaged 20 to 30% choice and 40 to 50% yield grade 1 and 2 with less than 10% yield grade 4 and above. This is not a sufficient sampling in size or numbers to be drawing any conclusions in regard to predictability of Florida calves. Hopefully, in time we will accumulate enough additional data to be more confident and predictable. Currently, in the Pasture to Plate Program, we have on feed 170 head belonging to 13 Florida cattlemen.

PASTURE TO PLATE

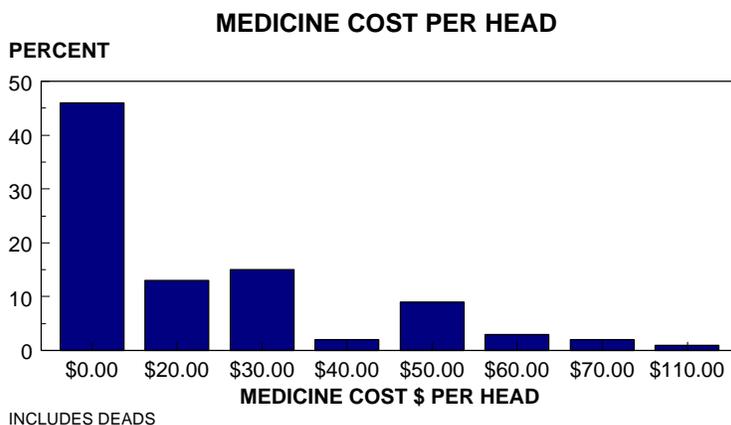


Figure 1. Medicine Cost

Table 1. SUMMARY OF CALVES FROM FLORIDA, LOUISIANA AND TEXAS FEEDLOT, CARCASS AND FINANCIAL PERFORMANCE			
PARAMETER	FLORIDA	LOUISIANA	TEXAS
INCOME/HEAD	\$905.10	\$915.13	\$932.45
VALUE AT START	\$400.89	\$429.95	\$468.16
FEED	\$284.08	\$312.00	\$275.15
MEDICINE/PROCES	\$15.07	included above	\$16.21
INTEREST	\$5.45	"	\$5.51
CHECKOFF/OTHER	\$1.00	"	\$4.78
FCA(SHIPPING)	\$35.92	"	"
DEATH LOSS	\$17.56	"	\$7.08
NET/HEAD	\$145.13	\$212.49	\$155.56
AVE DAILY GAIN	2.70	2.72	2.87
STARTING WT.	489	509	593
FINIAL WT.	1132	1149	1180
CARCASS WT.	718.8	745	
QUALITY GRADE	SELECT +	SELECT +	SELECT +
PERCENT CHOICE	34.8	38	37
YIELD GRADE	2.5 ¹	2.65	2.0+
FAT THICKNESS	0.51 ¹	0.39	
RIB EYE AREA	12.3 ¹	12.6	

¹ Data available only on 50% of cattle

PASTURE TO PLATE

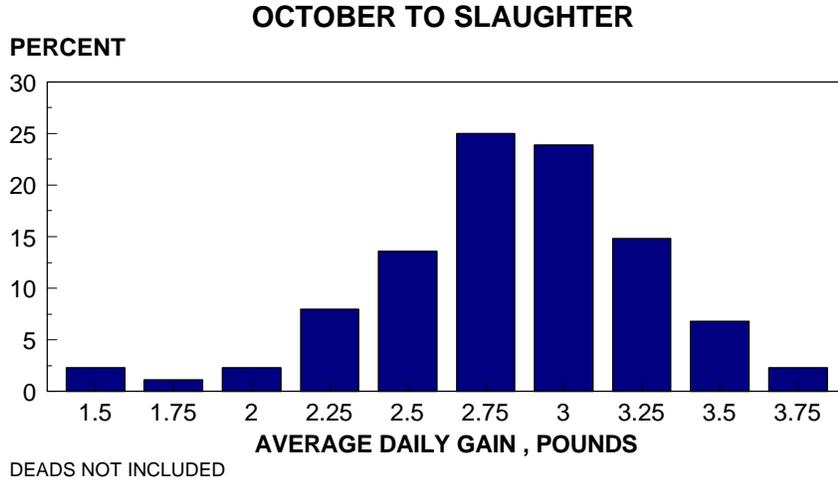


Figure 2. ADG

PASTURE TO PLATE

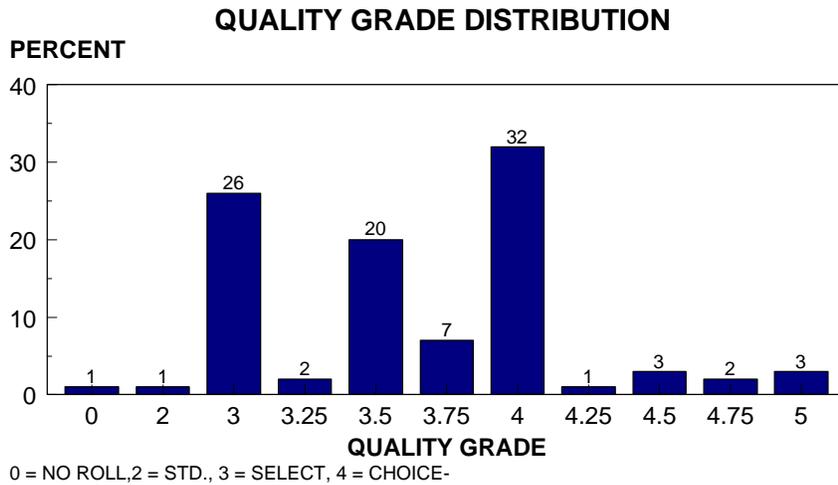


Figure 3. Quality Grade

PASTURE TO PLATE

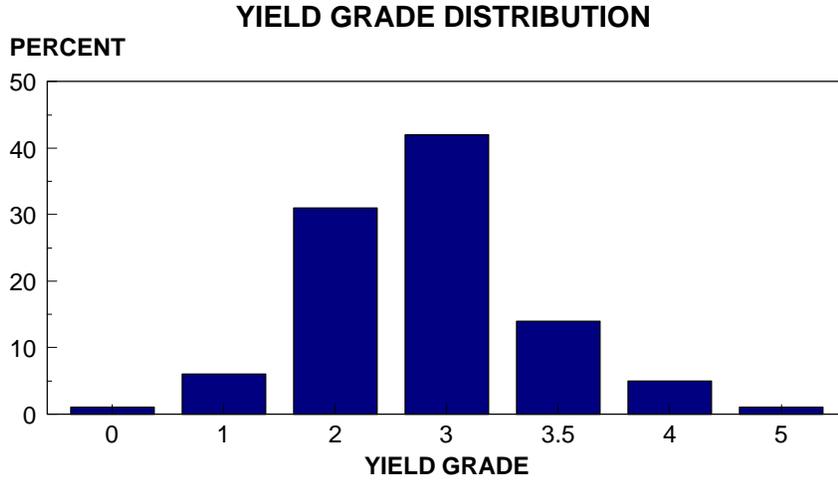


Figure 4. Yield Grade

PASTURE TO PLATE

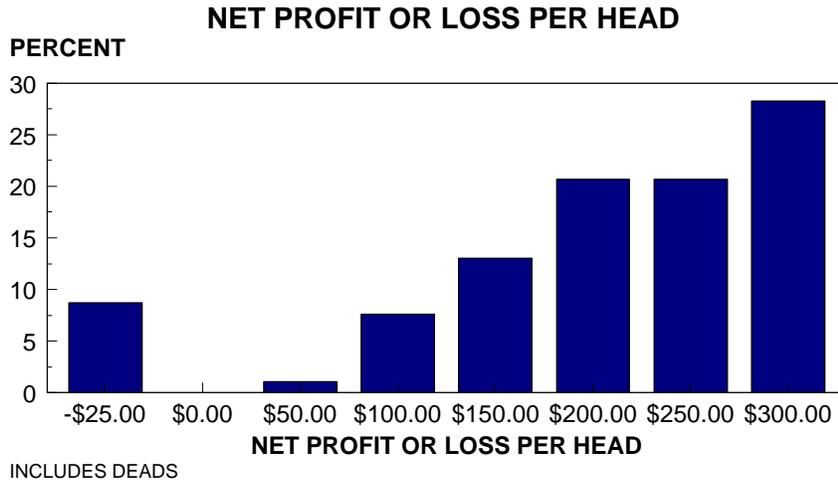


Figure 5. Profit or Loss

Table 2. Most/Least Profitable								
	Est. Live Weight	Carcass Weight	Market Value	Feed Cost	Medicine Cost	Net Return	Florida Value	Profit or loss
25% most profitable	1280	814	\$1,034.73	\$273.94	\$8.60	\$745.74	\$431.73	\$276.52
25% least profitable	1018	644	\$789.56	\$306.39	\$40.51	\$460.15	\$389.77	\$35.37
Average	1132	719	\$905.10	\$284.08	\$33.00	\$572.78	\$400.81	\$136.98

Table 3. Performance Summary												
	Fla. Wt.	Texas Wt.	Oct>SL Gain	Oct>SL ADG	Pay Wt.	Car. Wt.	Ribeye Area	Rea/Cwt	Fat	Yield Grade	Marbling	Quality Grade
25% best performance	582	534	753	3.23	1287	818	14.1	1.8	0.6	2.8	3.9	3.9
25% least performance	518	480	533	2.13	1013	641	13.3	2.0	0.4	2.0	3.4	3.2
AVE	526	489	642	2.70	1132	719	12.3	1.8	0.5	2.5	3.8	3.6