

September 3, 1998

Ames, Iowa

Econ. Info. 1749

# LIVESTOCK FEED OPPORTUNITIES

Few sectors of Midwest agriculture are profitable today, but there are opportunities for profit in the coming year. One of the bright spots is cattle feeding. While feedlots have suffered significant losses since last fall, the prices of feeder cattle and corn have declined to the point that it is possible to hedge a profit to feedlots. The budgets on the next page detail four cattle feeding enterprises and one feeder pig finishing enterprise using feeder prices and futures prices from the week ending August 28, 1998.

Feeding steer calves and yearling steers indicated the largest hedgeable return while backgrounding steer calves and yearling heifers reported smaller, but positive returns. Finishing feeder pigs, even with 50-pound pigs at \$25/head, was unprofitable. The assumed corn price is \$1.70/bu, interest rate is 9%, and the labor, operating expenses, and facility costs are relatively low. Breakeven over total cost for the steer calves and yearling steers was \$60.52 and \$58.68, respectively. The closing futures prices for August 28 were used as was the five-year average basis.

One of the key variables in the budgets is the purchase price of the feeder animal. These prices were based on USDA reported prices for Direct trade feeder cattle and Direct trade feeder pigs in Iowa for the week ending August 28, 1998. These prices are reported at the following website:

http://www.ams.usda.gov/lsg/mncs/ls\_desm.htm.

Another way to view the return is in the value of the corn put thorough the livestock. If all other inputs including labor and facilities are paid the rate in the budget, and the return over total cost is divided by the number of bushels and added to the price of corn in the budget (\$1.70), the result is the corn value per bushel. As expected, the profitable enterprises add value to the corn with a few as high as \$2.40-2.50/bu. The unprofitable enterprise lowers the value of the corn.

# **Swine Herd Liquidation?**

Sow slaughter has been well above year-earlier levels since the first of August, and has exceeded 70,000 head a week for three weeks. If it continues at these levels, the breeding herd will begin to decline to the point that the pig crop and pork supplies will decline and lead to higher prices. When we have seen rapid liquidation in the past, slaughter has exceeded 80,000 head for several weeks; for example, 1988 (drought), 1989 (low prices and high feed costs) and 1994 (low prices). Prior to August 1, we have been below 70,000 since mid-1996 and even below 60,000 for a period in early 1997.

It is questionable if this limited increase in sow slaughter is sufficient to result in a yearover-year decline in the September 1 breeding herd. Historically, it has taken approximately 4 quarters of losses to trigger a liquidation and then, losses may continue until the supply of slaughter hogs declines 2 quarters later.

The recent break below \$30 will accelerate sow slaughter. Feed prices are the lowest in many years. However, the cash flow problems created by lower commodity prices may actually increase hog liquidation rather than postpone it as farmers look to improve liquidity. Losses began last November and liquidation may not start until the December report. The increased productivity of the breeding herd may result in larger pig crops even after the breeding herd begins to shrink. Under this scenario, tighter pork supplies may arrive in mid-1999 at the earliest.

#### ...John Lawrence

#### Feeder Cattle and Pig Budget Worksheet (Central Iowa) August 28, 1998

Prepared by Iowa State University Extension Economics

		BackGround	d Steer	Steer	Heifer	Feeder
Purchase Weight		500#	550#	750#	700#	
Finished Weight		775#	1150#	1250#	1050#	
Days on Feed		125	210	156	136	
Projected Marketing Date		31-Dec-98	26-Mar-99	31-Jan-99	11-Jan-99	03-3
COSTS (per head):						
Feeder Price/cwt		\$79.00	\$77.50	\$69.00	\$66.00	
Feeder Cost		\$395.00	\$426.25	\$517.50	\$462.00	9
FEED COSTS:						
Corn Price per bu.	\$1.70					
Corn Bu. Fed		26.5	61.0	63.0	54.0	
Corn Cost		\$45.05	\$103.70	\$107.10	\$91.80	S
Alfalfa-Brome Hay Price \$	/T \$55.00					
Hay fed (as fed tons)		0.30	0.65	0.35	0.27	
Hay Cost		\$16.50	\$35.75	\$19.25	\$14.85	

Supplement Price/lb.		\$0.155	\$0.155	\$0.085	\$0.085	S
Supplement Used - in lbs.		125	191	120	117	
Supplement Cost		\$19.38	\$29.61	\$10.20	\$9.95	S
TOTAL FEED COSTS:		\$80.93	\$169.06	\$136.55	\$116.60	
OTHER COSTS:						
Vet medical & operating		\$10.00	\$18.70	\$13.80	\$12.75	
Interest - Feeder	9.00%	\$12.17	\$22.07	\$19.91	\$15.49	
- Feed/Operating	9.00%	\$1.40	\$4.86	\$2.89	\$2.17	
Labor Cost per hour	\$7.00	\$9.00	\$21.00	\$14.00	\$10.50	
Death Loss % of purchase		1.50%	1.50%	0.75%	0.75%	
price						
- Cost		\$5.93	\$6.39	\$3.88	\$3.47	
Trucking./Marketing		\$6.50	\$8.80	\$10.80	\$9.80	
TOTAL OTHER COSTS		\$45.00	\$81.83	\$65.28	\$54.18	S
TOTAL VARIABLE COSTS		\$520.93	\$677.13	\$719.33	\$632.77	S
(per hd)						
TOTAL FIXED FACILITY COSTS		\$11.30	\$18.90	\$14.20	\$12.30	
TOTAL COST PER HEAD		\$532.23	\$696.03	\$733.53	\$645.07	¢
		ψ <i>JJ</i> 2.23	ψ070.05	Ψ133.33	$\psi 0 + J \cdot 0 i$	ч
Necessary Selling Price/cwt:		\$67.22	\$58.88	\$57.55	\$60.26	q
1.) To Cover Variable Costs		\$67.22 \$68.67	\$50.00 \$60.52	\$57.55 \$58.68	\$00.20 \$61.44	4
2.) To Cover Total Costs		<b>Φυο.υ</b> /	<b>700.3</b> 2	\$2 <b>0.</b> 00	<b>ФО1.44</b>	ų
Futures Price as of	28-Aug- 98	\$70.05	\$64.77	\$63.30	\$63.30	9
Estimated Basis		\$0.56	(\$0.54)	(\$0.63)	(\$0.90)	(
Expected Price/cwt by Hedging		\$70.61	\$64.23	\$62.67	\$62.40	9
Est. Return over Var. Costs/head		\$26.30	\$61.51	\$64.05	\$22.43	()
Est. Return over Total Costs/head		\$15.00	\$42.61	\$49.85	\$10.13	(
Value of Corn Through Livestock		2.27	2.40	2.49	1.89	

# Asian Crisis, Slightly Improved Crop Prospects Pressure Grain Markets

Corn and soybean prices have dropped sharply in recent weeks to levels not seen since the winter of 1987. Cash corn prices in north central Iowa in late August were 38 percent below a year earlier and 63 percent below two years ago. Unlike previous years when prices were equally depressed, declining prices this year are not being offset by rising government deficiency payments from a \$2.75 corn target price. As a result, the lower prices are sharply reducing incomes of corn, wheat, soybean, and grain sorghum producers, and revenues of many agribusiness firms also will be reduced. The full economic impact on farmers and the agribusiness sector will depend on how long the low prices continue.

The main factors behind the extremely depressed grain prices are: serious Asian demand problems, a large amount of maturing 1998-crop corn and soybean CCC loans, a record large U.S. soybean acreage, good but not exceptional 1998 corn crop prospects, and indications that storage space will be quite short this fall. Since CCC loans are marketing loans, prices dropping below the loan rate provide incentives for farmers to sell the grain, use the marketing loan which allows repayment at the Posted County Prices, avoiding interest costs on the loan, and gaining the difference between the PCP and the loan rate. This process forces grain into the market, in contrast to previous periods when low prices forced grain into CCC inventories, thus isolating it from the market. While a record U.S. corn crop is not expected, depressed export demand means that potential production modestly exceeds anticipated utilization for the year ahead.

This combination is expected to increase U.S. corn carryover stocks by 20 to 30% in 1999, but the carryover will be well below previous record highs. However, essentially all of the carryover stocks will need to be financed and owned privately. Previous government programs provided federal assistance in financing storage as well as substantial outright government ownership of grain. U.S, soybean carryover stocks a year from now are expected to be about 75% larger than on September 1, 1998.

# **Further Price Weakness Possible**

Several indicators point to a little further potential weakness in both corn and soybean prices during the harvest, although additional declines from current very low prices should be fairly small. While early signs point to some increase in U.S. corn exports in the late spring and early summer of 1999 that should strengthen spring prices, world competition is likely to be quite strong this fall and winter. Potentially increased exports late in the upcoming marketing year reflect: smaller crops in the former Soviet Union and eastern Europe than in 1997 due to less favorable weather, a likely decline in Argentina's spring-harvested 1999 feed grain crop, and the European Union's movement to implement a 10% acreage set aside for 1999. Much of the EU's grain crop is wheat and barley, which are harvested during the summer.

# **China A Potential Swing Factor**

China continues to be a major question mark in grain export prospects. Last year, part of its Corn/Soybean Belt had a severe drought that is estimated to have sharply reduced its

corn crop. Until late August, its corn crop was thought to be considerably larger than in 1997. However, the latest floods have affected some Chinese corn and soybean growing areas. The latest flooding, according to Chinese news stories, covered over 50 million acres. The size of the reported area is so large that one could question its credibility. If accurate, it would mean that cropland equivalent to nearly the entire corn and soybean area of Iowa, Illinois, and Indiana had been inundated. If true, China's corn crop and some old-crop stocks may have suffered serious damage.

Late-July and early August Chinese flooding was mainly in cotton and rice areas. The extent of damage to China's corn and soybean crops may not be known for some time. If it is large, there is a chance China may revert to a feed grain importer, after being an aggressive corn exporter for the last year. Either way, China is expected to continue to have sizable imports of U.S. soybeans and soybean products.

#### **Asian Economy**

Economic problems in Asia reflect extensive bad loans, bank problems, inadequate regulation of the financial sector, and structural changes that are widely expected to take three to four years to resolve. Because of these problems, most countries in the region are in serious economic recessions, and trade reports show sharp declines in livestock and poultry numbers in the region. Currency exchange rates of all countries in the region except China and Hong Kong have fallen sharply, relative to the U.S. dollar in the last year. This tends to partially offset the U.S. dollar price decline in the cost of farm products imported from the U.S. However, it also makes industrial products from the region more competitively priced for U.S. consumers, and is one of several reasons for longer-term optimism for the Asian economy. Weakening of other exchange rates in the region is causing some concern that China may need to devalue its currency. If that happens, it could be short-term negative to U.S. grain prices, as well as on U.S. financial markets.

#### Soybeans

Soybean prices are being pressured by the same influences as corn, plus indications that South America's competition in world markets will remain strong into at least midwinter. Also, some trade analysts believe potential U.S. soybean production may have increased at least slightly since USDA's early August crop survey. A yield forecasting model used by Dr. William Tierney at Kansas State University shows the potential U.S. average soybean yield at 2.8 bushels per acre above USDA's August crop report and 1.1 bushels above his model's late July forecast. Like corn, the soybean crop is maturing more rapidly than normal, and risk of damage from early frost appears to be very low. Harvesting of both crops is expected to start one to two weeks earlier than normal.

# **Storage Return Prospects**

Low corn and soybean prices this fall enhance the chance for modest storage returns from unhedged storage. Producers may also want to look carefully at potential returns from hedging and storing this year's crop, where good, well-managed, on-farm storage is available. Also, prices in many areas have fallen below CCC loan rates, making marketing loans and loan deficiency payments (LDPs) an important part of farmers' marketing alternatives. In many counties, where on-farm storage is available, the depressed basis, very large harvest-delivery to July spreads in the futures markets, and potential LDPs currently show potential net returns in the \$.37 to \$.44 range for storing until May. That is a net return for on-farm storage of corn, where grain can be kept in good condition until May, and moved out at that time without interfering with fieldwork. Costs for interest, extra drying and shrinkage to 14% moisture, and 1.5 cents for handling are deducted to arrive at the net returns calculations. The basis under July corn futures in mid-May 1999 is assumed to be similar to that of last spring, while the soybean basis is assumed to be at least five cents weaker. For storage in town, potential net returns are much smaller because of elevator storage charges. Potential net returns for on-farm soybean storage hedges, with similar assumptions, are in the low 30-cent range before adding in gains from marketing loans or LDPs.

#### **Robert Wisner**