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BEEF FARM BUSINESS SUMMARY

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**NEW YORK STATE
1981**

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1981 BEEF FARM BUSINESS SUMMARY

The information in this report was compiled from data submitted by eight New York State beef producers through the help and cooperation of Cooperative Extension agents. The eight farms are not a scientific sample of New York's beef farm industry and the averages published in this report are not intended to represent the average of all New York beef farms.

The objectives of this Beef Farm Management project and this report are:

1. Help the primary cooperators summarize and analyze their beef enterprises.
2. Provide a format that other cow-calf producers can follow in summarizing and analyzing their businesses.
3. Present some basic data and guidelines that may be helpful to potential beef producers and cooperative extension agents.

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SUMMARY OF THE BEEF FARM BUSINESS

Resources Used in the Business

The quantities of land, labor, management, and capital used on the eight beef farms are shown in Table 1. The farms were small averaging only 93 acres of tillable land, 0.76 worker equivalent years per farm, 25 beef cows, and 54 beef animals.

Table 1. AVERAGE FARM RESOURCES
Average of Eight New York Beef Farms, 1982

Item	My Farm	Average	Range
Land:			
Tillable acres owned	_____	73	0-143
Tillable acres rented	_____	20	0-60
Total tillable acres	_____	93	0-203
Acres of pasture	_____	53	0-150
Total acres owned	_____	182	2.5-392
Labor and Management:			
Months of operator's labor	_____	7.5	2-12
Months of hired labor	_____	0.5	0-2
Months of unpaid family labor	_____	1.0	0-3
Worker equivalent, years	_____	0.76	0.33-1.08
Operators per farm	_____	0.63	0.17-1
Years experience as cattle producer	_____	14	7-30
Herd Size:			
Number of beef cows	_____	25	0-61
Number of beef animals	_____	54	8-141
Capital Investment:			
	Beginning of Year		End of Year
	My Farm	Average	My Farm Average
Land & buildings	\$ _____	\$ 80,000	\$ _____ \$ 81,438
Machinery & equipment	_____	13,294	_____ 17,080
Livestock	_____	20,633	_____ 28,255
Feed & supplies	_____	3,259	_____ 3,062
Total Farm Inventories	\$ _____	\$117,186	\$ _____ \$129,835

Farm Receipts

The largest average receipt was from the sale of slaughter cattle. Six of the eight farms sold slaughter cattle during 1981. Three farms sold feeder cattle and four reported sales of cattle for breeding purposes.

Table 2. AVERAGE FARM RECEIPTS
Average of Eight New York Beef Farms, 1981

Item	My Farm	Average	Percent of Total
Slaughter cattle sales	\$ _____	\$10,908	37
Feeder calves sold	_____	811	3
Cull cows	_____	806	3
Breeding stock	_____	4,489	15
Other livestock	_____	1,190	4
Crop sales	_____	1,507	5
Custom work	_____	250	1
Government payments	_____	390	1
Refunds	_____	363	1
Miscellaneous receipts	\$ _____	1,569	5
Total Cash Receipts	\$ _____	\$22,283	75
Increase in livestock inventory	_____	7,622	25
Increase in feed & supplies	_____	0	0
Total Farm Receipts	\$ _____	\$29,905	100
Livestock enterprise receipts	\$ _____	\$26,500	

Nonfarm receipts, such as income from off-farm employment, were excluded from total cash receipts. Refund and dividends that could not be specifically identified were included as farm receipts. Gas lease payments were also included.

The increase in livestock inventory is a noncash receipt attributed to a four percent growth in livestock numbers and a 30 percent increase in average value per head.

Farm Expenses

Total cash expenses averaged \$18,358 per farm, total farm expenses averaged \$22,360, and variable costs allocated to livestock enterprises averaged \$13,817 per farm.

Table 3. AVERAGE FARM EXPENSES
Average of Eight New York Beef Farms, 1981

Item	My Farm	Average	Percent of Total
Hired labor	\$ _____	\$ 568	3
Feed purchased	_____	5,877	32
Gasoline & oil	_____	1,281	7
Machinery repairs	_____	659	4
Farm auto expense	_____	282	2
Machinery hire	_____	393	2
Vet & medicine	_____	251	1
Breeding fees	_____	222	1
Feeders purchased	_____	1,363	8
Marketing & other livestock expense	_____	463	3
Fertilizer & lime	_____	1,001	5
Seed, spray & other crop expense	_____	688	4
Land, building & fence repair	_____	412	3
Taxes (farm share of real estate)	_____	1,137	6
Insurance (farm share)	_____	316	2
Rent	_____	205	1
Electricity & telephone (farm share)	_____	533	3
Interest paid	_____	2,141	10
Miscellaneous expenses	_____	566	3
Total Cash Expenses	\$ _____	\$18,358	100
Breeding stock purchased	_____	587	
Machinery depreciation	_____	2,707	
Building depreciation	_____	511	
Decrease in livestock inventory	_____	0	
Decrease in feed & supplies	_____	197	
Total Farm Expenses	\$ _____	\$22,360	
Livestock enterprise variable costs	\$ _____	\$13,817	

Farm Income

Net cash farm income is the money available to make principle payments and contribute toward family living and savings. Farm income includes all farm receipts including increases in the value of livestock inventories, and all farm expenses including capital expenditures for breeding livestock and depreciation on machinery and buildings. No charge is included for unpaid family labor, management or the use of equity capital.

Table 4. FARM INCOME AND PROFIT MEASURES
Average of Eight New York Beef Farms, 1981

Item	My Farm	Average
Total cash farm receipts	\$ _____	\$22,283
Total cash farm expenses	_____	<u>18,358</u>
Net Cash Farm Income	\$ _____	\$ 3,925
Total farm receipts	\$ _____	\$29,905
Total farm expenses	_____	<u>22,360</u>
Farm Income	\$ _____	\$ 7,545
Livestock enterprise receipts	\$ _____	\$26,500
Variable livestock enterprise costs	_____	<u>13,817</u>
Return Over Variable Costs	\$ _____	\$12,683
Farm income	\$ _____	\$ 7,545
Value of operator's labor & management	_____	<u>7,125</u>
Return on Equity Capital	_____	\$ 420
Rate of return on equity capital	_____ %	<1%

Return over livestock enterprise variable costs were computed by estimating the variable costs associated with the livestock enterprise and deducting them from livestock enterprise receipts. Variable costs exclude depreciation, taxes, insurance, interest paid on real estate and operating costs offset by nonlivestock enterprise receipts.

Return on equity capital is computed by deducting the value of operator's labor and management estimated by the cooperators from farm income.

BUSINESS ANALYSIS

Size of Business

The average size of these eight beef farms is identified in Table 1. All but one farm had beef cows. The seven farms with beef herds averaged 25 cows, 20 calves, five replacement heifers, and 1.3 bulls.

Herd and Crop Management

A good indication of cow-calf herd management performance is the ability to produce and raise close to one calf per cow annually. These beef producers weaned eight calves per 10 cows.

Crop production is reported as tons of dry matter. The hay crop averaged 1.7 tons of dry matter per acre. The hay crop includes dry hay, hay crop silage, and green chop. Forage dry matter includes corn silage which averaged 3.8 tons of dry matter per acre on the one farm reporting corn silage production.

Table 5. HERD AND CROP MANAGEMENT
Average of Eight New York Beef Farms, 1981

Item	My Farm	Average
Calves born per cow	_____	.94
Calves weaned per cow	_____	.8
Calves weaned as percent born	_____ %	88%
Average weaning weight	_____ lbs.	422 lbs.
Average weight slaughter cattle sold	_____ lbs.	899 lbs.
Tons hay crop dry matter per acre	_____	1.7
Tons forage dry matter per acre	_____	1.9
Tons dry matter harvested per cow	_____	5.5
Tillable acres per cow	_____	4.2
Pasture acres per cow	_____	2.4

The dry matter harvested (5.5 tons per cow per farm) on these farms is approximately twice that required to carry a cow-calf herd through the barn feeding season. Although some of this additional production was used to feed other beef animals and livestock on these farms, the average beef farmer in this study is not fully utilizing forage and land resources available for maximum beef production.

Financial Management

Completing a financial balance sheet is an important part of business summary and analysis. The net worth of these farms averaged \$116,371 which is 88 percent of total farm assets. Five of the eight farms reported some farm liability but only four reported a significant amount of farm debt.

Table 6. BEEF FARM BALANCE SHEET & FINANCIAL MEASURES
Average of Eight New York Beef Farms, 1981

Item	My Farm	Average
Farm Assets:		
Total farm inventories	\$ _____	\$129,835
Cash & accounts receivable	_____	1,200
Coop stocks & certificates	_____	1,539
Total Farm Assets	\$ _____	\$132,574
Farm Liabilities:		
Real estate mortgage	\$ _____	\$ 9,644
Liens on cattle & equipment	_____	1,500
Other secured intermediate loans	_____	3,751
Notes & other farm accounts	_____	1,308
Total Farm Liabilities	\$ _____	\$ 16,203
Farm Net Worth	\$ _____	\$116,371
Farm Equity	_____ %	88%
Debt per beef animal	\$ _____	\$ 300
Annual debt payments planned	\$ _____	\$ 3,291
Debt repayment as percent of livestock sales	_____ %	18%

The farms in this study show a very strong net worth and equity position. Eighty-eight percent of farm assets are owned by the farmer, borrowed capital accounts for the other 12 percent.

The average level of debt on these farms is relatively low at \$300 per beef animal. The planned schedule is to pay \$3,291 of interest and principle in 1982. The amount available for interest, principle payments, and contribution to family living was approximately \$6,000 in 1981.

The direct and opportunity costs of using capital in the farm is an important consideration for the beef producers. On the average these beef producers had \$2,400 invested in farm inventories per beef animal on the farm. Farm investment ranged from less than \$1,000 per head on a feedlot to over \$8,000 per head on a small cow-calf enterprise. The largest part or 63 percent of the total farm investment was in land and buildings. Much of the real estate investment is fixed for the part-time beef producers for they would continue to live on the farm even if they were to discontinue the beef enterprise.

Table 7. COST AND RETURN CONTROL MEASURES
Average of Eight New York Beef Farms, 1981

Item	My Farm	Average
Capital investment per beef animal	\$ _____	\$2,400
Machinery investment per beef animal	\$ _____	\$275
Real estate investment per beef animal	\$ _____	\$1,500
Feed purchased per head	\$ _____	\$109
Cash machinery expenses per head	\$ _____	\$48
Total cash expenses per head	\$ _____	\$340
Cattle & calf sales per cow	\$ _____	\$408
Slaughter sales per head sold	\$ _____	\$793
Value of beef producer per beef animal	\$ _____	\$460

Feed costs varied greatly between farms and was related to the number of slaughter animals produced. Feed cost ranged from \$0 to \$500 per head. Cash machinery expenses exclude depreciation and interest on machinery investment. Cash machinery costs ranged from \$25 per head to over \$70 per head on the farms with machinery.

Cattle and calf sales per cow was computed excluding farms without a cow-calf enterprise. The sales include all receipts from beef sales on these farms. Slaughter sales per head sold is total receipts from slaughter cattle sales divided by the number of head sold. Value of beef produced per beef animal is total sales from beef cattle plus the increase in beef cattle inventory, divided by the average number of beef animals in the beef enterprise.

Comparison with Prior YearsTable 8. COMPARISON OF DATA FROM NEW YORK BEEF FARM SUMMARIES,
1977, 1979 and 1981

Item	1977	1979	1981
Number of farms	14	6	8
<u>Size</u>			
Average number of cows	33	27	25
Average number of calves	23	22	20
Average number of beef animals	70	65	54
Average number sold for slaughter	6	5	7
Total tillable acres	119	104	106
Months of total labor per farm	10	9	9
Months of operator's labor per farm	8	6	7.5
<u>Herd Management</u>			
Calves born per cow	.82	.90	.94
Calves weaned per cow	.80	.90	.80
Calves weaned as percent born	96%	91%	88%
Average weaning weight (lbs.)	460	437	442
Average weight slaughter cattle (lbs.)	960	900	899
<u>Crop Management</u>			
Tons hay per acre	1.1	1.0	1.7
Tons forage dry matter per acre	1.2	1.3	1.9
Tons dry matter harvested per cow	3.9	4.8	5.5
Tillable acres per cow	3.6	3.9	4.2
Pasture acres per cow	3.1	2.8	2.4
<u>Financial Management</u>			
Capital investment per beef animal	\$ 2,000	\$ 2,800	\$ 2,400
Total cash expenses per head	140	207	340
Cattle & calf sales per cow	221	339	408
Net cash farm income	-1,591	177	3,925
Farm income	-5,627	1,985	7,545
Return over variable costs	-2,825	3,082	12,683