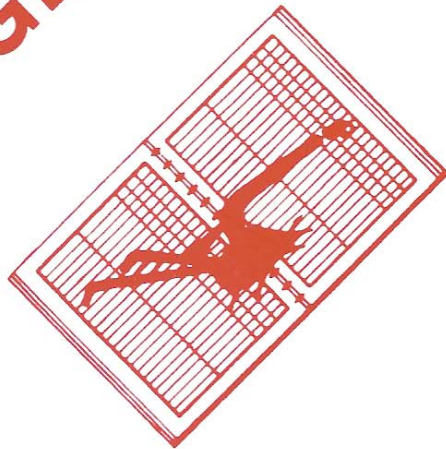


FARM BUSINESS MANAGEMENT



**1988 Annual Report
Northeast and East Central Minnesota
Report No. 33
April, 1989**

**AN ADULT
EDUCATION
PROGRAM**

**In cooperation with: Minnesota State Board of Vocational Technical Education; University of Minn.
Agricultural Education Division; Staples Technical Institute, Staples Minnesota**

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1988 REPORT OF THE FARM BUSINESS MANAGEMENT EDUCATION
PROGRAM IN NORTHEAST AND EAST CENTRAL MINNESOTA
DelRay Lacy - Area Agriculture Program Coordinator

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KEY TO COLOR CODE OF PAGES

WHITE - General & Summary Information
 GOLDENROD - Whole Farm Inventories & Earnings for Operator & Landlord
 BLUE - Operator's Share of Household Items, Net Worth, & Farm Earnings
 GREEN - Crop Information
 SALMON - Livestock Information

INTRODUCTION

Farm Business Management education programs have been a part of the Agriculture Education program in Minnesota schools since 1952. From the early cooperative efforts of the State Department of Education and the Department of Agriculture education (University of Minnesota), the program has expanded to serve over 6000 farm families each year in six farm management areas. Programs are now administered and managed by the State Board of Vocational Technical Education through the Technical Institutes and local school districts.

The purpose of farm management education is to help farm families achieve their farm business and family goals. This is done through improved management organization and efficiency of their farm operations. This purpose has not changed over the years.

To accomplish these purposes, programs have been organized to conform to the following guidelines:

1. Farm families enroll in a specific management course.
2. Each course has a specific objective and units of instruction to meet the objective.
3. Courses are offered in sequence and farmers are expected to enroll in the first of the sequence of courses.
4. There is continuity to each course. Each leads to the next course in the sequence.
5. Instruction occurs both in the classroom and on the farm with the farm family.

Programs organize their course around the same central theme. They are:

- Year 1 - Farm business records and accounts.
- Year 2 - Farm business analysis and evaluation.
- Year 3 - Farm business organization.
- Year 4 - Farm reorganization and enterprise efficiency.
- Year 5 - Current issues in farm management.
- Year 6 - Managing the business for family goal attainment.

Like most educational programs, members benefit from the instruction in relation to how much effort they put into study. Some farmers have benefitted more, and some less, depending upon how seriously they studied the results of their business analysis and the kind of decisions they made as a result of their analysis.

This year the farm business and enterprise analysis has been redesigned. Beginning this year, all specific and general farm expenses have been allocated to each farm enterprise. The items are: building expense, interest, utilities, insurance, and general farm expense.

The new analysis will more completely identify the expenses that each enterprise incurs. The return over listed costs for each of the enterprises may be used for family living, debt repayment, capital purchases or savings. We believe this makes the farm business analysis a more accurate report to be used for long range planning, short term cash purchase planning and cash flow projections.

This report and the individual cooperators' reports were completed under the direction of DelRay Lecy, Area Ag Coordinator at the Staples Technical Institute. Directing in a supervisory capacity were: Mr. Jack Nelson, Superintendent of Staples Public Schools; Dr. Stan Edin, Director of the Staples Technical Institute; Mr. John Murray, Adult Specialist, State Board of Vocational Technical Education; Dr. Edgar Persons, Head of the Agricultural Education Division, University of Minnesota. Clerical assistance was provided by Lorraine Anderson, Shirley Judd and Shelly Johnson. Data processing was done by Specialized Data Systems in Madison, Wisconsin.

The Records used in completing this report came from farmers enrolled in the Farm Business Management programs in Northeast and East Central Minnesota.

Below is a list of the Schools involved and the Instructors responsible for these programs:

Southern Polar Center (serving Barnum, & Moose Lake)	Darrel Ober
Bemidji TI (serving Bagley, Clearbrook, Gonvick, Bemidji, Blackduck, Kelliher and Northome)	Jim Sackett, Steve Ziegler
Duluth TI (serving St. Louis County)	Jim Takala
Foley	Kenneth Johnson
Freshwater Education District (serving Browerville, Clarissa, Eagle Bend, Bertha, Long Prairie, Pillager, Parkers Prairie, Staples and Motley)	Bob Anderson Bill Ladwig Dallas Sams
Long Prairie	Robert Johnson Lloyd Laine
Little Falls	Dave Stish
Milaca	Lee Todnem
Park Rapids	Craig Paskvan
Pierz	Ben Jorgensen
Pine City TI	Roger Thompson Dave Trampe
Princeton	Wes Wankel
Staples Technical Institute - Aitkin - Elk River	Brad Irwin Terry Phillips
Upsala	Del Pepple

"THE CAPITAL INVESTMENT PICTURE IN THE FARM BUSINESS"

TABLE 1 - RESOURCES USED IN THE BUSINESS* - 1988

ITEMS		AVERAGE OF 247 FARMS	
<hr/>			
<u>MEASURES OF FARM SIZE</u>			
2	ACRES-TOTAL	383.8	
3	-TILLABLE	245.6	
4	WORK UNITS-CROPS	118.4	
5	-LIVESTOCK	366.1	
6	-OTHER	4.6	
7	-TOTAL	489.2	
8	WORKERS-OPERATOR(S) YEAR EQUIVALENTS	1.11	
9	-HIRED	.32	
10	-CUSTOM	.02	
11	-UNPAID FAMILY	.16	
12	-TOTAL	1.61	
13	CAPITAL INVESTED-PER WORKER	\$ 151634	
14	-PER WORK UNIT	\$ 499	
 <u>WHOLE FARM INVENTORIES</u>			
		<u>JAN 1</u>	<u>DEC 31</u>
22	FEEDER CATTLE	\$ 3225	3649
23	MARKET HOGS	1370	1474
24	FEEDER LAMBS	16	21
25	POULTRY-ALL TYPES	62	184
26	OTHER LIVESTOCK-INCL. OTHER DAIRY	9994	10232
27	CROPS HELD FOR SALE & LIVESTOCK FEED	19423	18912
28	SUPPLIES/PREPAIDS, FUEL & LUBRICANTS	502	1050
29	ACCOUNTS RECEIVABLES & HEDGING ACCT. EQUITY	519	1314
30	DAIRY COWS	\$ 32517	32380
31	OTHER DAIRY	9297	9866
32	BEEF BREEDING	3750	4146
33	SWINE BREEDING	1322	1220
34	SHEEP BREEDING	56	55
35	OTHER BREEDING LIVESTOCK	389	382
36	AUTO & TRUCK (FARM SHARE)	2475	2931
37	POWER & MACHINERY	24297	24382
38	LIVESTOCK EQUIPMENT	8651	8722
39	CUSTOM EQUIPMENT	109	104
40	IRRIGATION EQUIPMENT	777	711
50	BARE LAND	82020	83776
51	LAND IMPROVEMENTS & TILE	264	226
52	BUILDINGS-FENCES-ETC.	41838	39551
60	TOTAL FARM CAPITAL	\$ 242973	245288
70	INCREASE OR DECREASE IN TOTAL FARM CAPITAL	\$	2315

*TABLE 1 INCLUDES THE LANDLORD'S SHARE OF THE INVESTMENT FOR RENTED FARMS. LIVESTOCK, CROPS, SEED, AND FEED REFLECT A CONSERVATIVE MARKET PRICE AT THE TIME THE INVENTORY IS TAKEN. MACHINERY, EQUIPMENT, AND BUILDING VALUES REFLECT COST LESS DEPRECIATION.

TABLE 1 - RESOURCES USED IN THE BUSINESS - 1988

TABLE 1 - RESOURCES USED IN THE BUSINESS - 1988					
ITEMS		49 MOST PROFITABLE FARMS	49 LEAST PROFITABLE FARMS		
<u>MEASURES OF FARM SIZE</u>					
2	ACRES-TOTAL	549.3	363.2		
3	-TILLABLE	381.6	222.9		
4	WORK UNITS-CROPS	187.6	112.6		
5	-LIVESTOCK	540.6	300.3		
6	-OTHER	8.0	.1		
7	-TOTAL	736.1	413.0		
8	WORKERS-OPERATOR(S) YEAR EQUIVALENTS	1.26	1.08		
9	-HIRED	.58	.24		
10	-CUSTOM	.03	.03		
11	-UNPAID FAMILY	.19	.18		
12	-TOTAL	2.06	1.53		
13	CAPITAL INVESTED-PER WORKER	\$ 168935	154491		
14	-PER WORK UNIT	\$ 473	572		
<u>WHOLE FARM INVENTORIES</u>					
		JAN 1	DEC 31	JAN 1	DEC 31
22	FEEDER CATTLE	\$ 5489	5205	1986	2771
23	MARKET HOGS	643	1118	2502	2883
24	FEEDER LAMBS	7	4	73	102
25	POULTRY-ALL TYPES			8	7
26	OTHER LIVESTOCK-INCL. OTHER DAIRY	15613	17133	9609	8438
27	CROPS HELD FOR SALE & LIVESTOCK FEED	29035	31468	15516	12190
28	SUPPLIES/PREPAIDS, FUEL & LUBRICANTS	1208	2528	306	614
29	ACCTS RECEIVABLE & HEDGING ACCT. EQUITY	1023	3126	207	570
30	DAIRY COWS	\$ 49873	51598	26122	23008
31	OTHER DAIRY	16513	18871	6929	6073
32	BEEF BREEDING	4722	4881	7159	7626
33	SWINE BREEDING	663	670	2867	2346
34	SHEEP BREEDING	57	57	224	220
35	OTHER BREEDING LIVESTOCK	1963	1928		
36	AUTO & TRUCK (FARM SHARE)	2265	3425	3444	2917
37	POWER & MACHINERY	34699	35737	23966	23501
38	LIVESTOCK EQUIPMENT	13911	14409	8883	8187
39	CUSTOM EQUIPMENT	306	300		
40	IRRIGATION EQUIPMENT	396	481	1009	907
50	BARE LAND	105521	113328	90334	90334
51	LAND IMPROVEMENTS & TILE	653	627	154	32
52	BUILDINGS-FENCES-ETC.	53554	51004	40589	38128
60	TOTAL FARM CAPITAL	\$ 338114	357898	241887	230854
70	INCREASE OR DECREASE IN TOTAL FARM CAPITAL		19784		-11033

TABLE 2A - WHOLE FARM SUMMARY OF CASH RECEIPTS - 1988

ITEMS	AVERAGE OF 247 FARMS	HIGH 49 FARMS	LOW 49 FARMS
1 <u>SALE OF LIVESTOCK AND LIVESTOCK PRODUCTS</u>			
2 DAIRY COWS	\$ 8078	12039	6363
3 DAIRY PRODUCTS	72085	115287	46512
4 OTHER DAIRY CATTLE	6177	11195	5709
5 BEEF BREEDING CATTLE	2841	4061	4211
6 BEEF FEEDER CATTLE	2290	1170	498
7 HOGS COMPLETE AND MIXED	2171	644	3975
8 HOGS FINISHING	1585	1412	2935
9 HOGS PRODUCING FEEDER PIGS	2057	2125	3528
10 SHEEP, GOATS, WOOL, BREEDING	68	71	272
11 SHEEP, GOATS, WOOL, FEEDING			
12 POULTRY, ALL FOWL	27	9	1
13 EGGS	460		34
14 CUSTOM/CONTRACT LIVESTOCK FEEDING			
15 OTHER PRODUCTIVE LIVESTOCK	41	209	
16 OTHER MISCELLANEOUS LIVESTOCK INCOME	142	642	68
17 TOTAL SALES OF PRODUCTIVE LIVESTOCK	\$ 98022	149464	74108
20 <u>SALE OF CROPS</u>			
21 WHEAT	115	546	
22 DURUM			
23 OTHER SMALL GRAIN	636	916	185
24 CORN	2017	4959	2327
25 SOYBEANS	771	1735	1416
26 SUNFLOWERS			
27 GRAIN SORGHUM & OTHER ROW CROPS	16	80	
28 LEGUMES & OTHER ROUGHAGE	769	1068	885
29 GRASS SEED	62	314	
30 FRUITS & NUTS			
31 VEGETABLES, ROADSIDE MARKET & SPECIALTY	89		
32 NURSERY, TIMBER & OTHER	49		154
33 <u>SALE OF CROPS & SUPPLIES PURCH FOR RESALE</u>	1292	4151	391
34 TOTAL SALES FROM CROPS AND SUPPLIES	\$ 5817	13768	5357
40 GOVERNMENT PAYMENTS & SET ASIDE ACRES	8636	14904	7127
41 GAS TAX REFUND	12	6	18
42 INCOME FROM WORK OFF THE FARM	453	1181	178
43 CUSTOM WORK ENTERPRISE INCOME	792	289	
44 PATRONAGE REFUNDS(CASH 999, EQUITY 342)	867	1031	810
45 <u>MISCELLANEOUS FARM INCOME</u>	1323	2195	1216
46 TOTAL OTHER FARM INCOME	12083	19606	9350
47 TOTAL FARM OPERATING INCOME	\$ 115923	182837	88815
50 AUTO, TRUCK, & MACHINERY SOLD	310	611	157
51 IRRIGATION EQUIPMENT SOLD			
52 CUSTOM WORK EQUIPMENT SOLD			
53 LIVESTOCK EQUIPMENT SOLD	33		9
54 BUILDINGS & FENCE SOLD			
55 LAND & LAND IMPROVEMENTS SOLD	263	1324	
56 <u>FARM CAPITAL LEASE INCOME</u>	113	132	16
57 TOTAL FARM CAPITAL SALES	719	2067	182
58 TOTAL FARM SALES	\$ 116642	184904	88996
60 INCREASE IN FARM CAPITAL	2315	19784	
61 <u>FAMILY LIVING FROM THE FARM</u>	815	1303	729
62 TOTAL FARM RECEIPTS (58)+(60)+(61)	\$ 119772	205991	89725

TABLE 2B - WHOLE FARM SUMMARY OF CASH EXPENSES - 1988

ITEMS	AVERAGE OF 247 FARMS	HIGH 49 FARMS	LOW 49 FARMS
4 PURCHASE OF LIVESTOCK			
5 DAIRY COWS	\$ 1709	1845	598
6 OTHER DAIRY CATTLE	1082	2397	704
7 BEEF BREEDING CATTLE	471	321	1513
8 BEEF FEEDER CATTLE	647		
9 HOGS COMPLETE AND MIXED	31	4	79
10 HOGS FINISHING	404	912	439
11 HOGS PRODUCING FEEDER PIGS	111		202
12 SHEEP AND GOATS			
13 SHEEP, FEEDERS			
14 POULTRY, ALL FOWL	143	2	3
15 CUSTOM/CONTRACT LIVESTOCK FEEDING			
16 OTHER PRODUCTIVE LIVESTOCK	27	135	
17 TOTAL LIVESTOCK PURCHASES	\$ 4626	5616	3538
20 VET, BREEDING, & MISC. LIVESTOCK EXPENSE	7039	11192	5374
21 PURCHASE OF CROPS/SUPPLIES FOR RESALE	1160	3576	484
22 FEED BOUGHT	26478	33271	24091
23 FERTILIZER	4759	8471	3856
24 CHEMICALS	1370	2523	1340
25 OTHER CROP EXPENSE	3140	5764	2230
26 IRRIGATION OPERATING EXPENSE	63	60	42
27 CUSTOM WORK OPERATION COSTS EXCLUDING LABOR	697	33	
28 CUSTOM WORK HIRED	3392	4555	2999
29 GAS, DIESEL, LUBRICANTS (FARM SHARE)	3107	4479	2919
30 REPAIR & UPKEEP OF LIVESTOCK EQUIPMENT	1452	2295	1367
31 REPAIR & UPKEEP OF FARM REAL ESTATE	949	1544	821
32 REPAIR & OPER. OF MACH., TRACTOR, TRUCK, AUTO	4841	6790	4596
33 REPAIR & UPKEEP OF IRRIGATION EQUIPMENT	27	56	24
34 REPAIR & UPKEEP OF CUSTOM WORK ENTERPRISE	50	167	
35 TOTAL ALL REPAIRS	7319	10852	6799
36 WAGES OF HIRED LABOR	4650	7417	5165
37 PERSONAL PROPERTY & REAL ESTATE TAXES	1048	1756	1041
38 GENERAL FARM EXPENSES	2265	3217	2090
39 UTILITIES	3355	4709	3073
40 TOTAL CASH OPERATING EXPENSE	\$ 74468	107491	65041
50 AUTO, TRUCK, & MACHINERY BOUGHT	6008	10056	4877
51 IRRIGATION EQUIPMENT BOUGHT	37	143	
52 CUSTOM WORK EQUIPMENT BOUGHT	5	24	
53 LIVESTOCK EQUIPMENT BOUGHT	1694	2745	1051
54 NEW REAL ESTATE-BUILDINGS & IMPROVEMENTS	1076	2270	682
55 NEW REAL ESTATE-LAND & IMPROVEMENTS	2420	9558	1417
56 FARM CAPITAL LEASE PAYMENTS, EXCEPT LAND	1090	2475	535
57 TOTAL CAPITAL PURCHASES	12331	27272	8562
58 TOTAL FARM PURCHASES	\$ 86799	134763	73603
60 DECREASE IN FARM CAPITAL			11033
61 INTEREST ON FARM CAPITAL (7% CHARGE)	17089	24360	16546
62 UNPAID FAMILY LABOR	884	1098	881
63 BOARD FURNISHED HIRED LABOR	183	112	418
64 TOTAL FARM EXPENSE	\$ 104955	160333	102481
*70***RET TO WHOLE FARM OPER LABOR & MGMT(2A/62)-(64)	\$ 14817	45658	-12756
71 NUMBER OF OPERATORS	1	1	1
72 FULL TIME OPERATOR EQUIVALENTS	1.10	1.26	1.08
73 RET/OPER LABOR & MGMT/FULL TIME OP EQUIV(70/72)	\$ 13470	36237	-11811

TABLE 3 - ENTERPRISE STATEMENT FOR THE WHOLE FARM - 1988

ITEMS	AVERAGE OF 247 FARMS	HIGH 49 FARMS	LOW 49 FARMS
2 <u>RETURNS & NET INCREASES</u>			
3 PRODUCTIVE LIVESTOCK			
5 NET LIVESTOCK LEASE INCOME	\$ -5	-11	-13
6 DAIRY COWS CATTLE	68629	111251	42786
7 OTHER DAIRY CATTLE	17058	31041	10425
8 BEEF BREEDING CATTLE	3105	4573	3625
9 BEEF FEEDER CATTLE	1530	755	752
10 HOGS COMPLETE AND MIXED	2191	729	4204
11 HOGS FINISHING ENTERPRISE	1063	912	2081
12 PRODUCING FEEDER PIGS	2057	2124	3388
13 SHEEP & GOATS AND WOOL	74	69	303
14 SHEEP & GOATS FEEDERS			
15 POULTRY, ALL FOWL	470	7	36
16 CONTRACT LIVESTOCK			
17 OTHER PRODUCTIVE LIVESTOCK	123	618	
18 TOTAL ALL PRODUCTIVE LIVESTOCK	\$ 96295	152068	67586
19 VALUE OF FEED FED TO LIVESTOCK	48700	70620	39540
20 RETURN OVER FEED FROM LIVESTOCK	\$ 47596	81448	28046
21 CROP, SEED, & FEED	25728	48737	16784
22 FERTILIZER, CHEMICALS, SEED, & OTHER	8809	15584	7166
23 RETURN OVER DIRECT COSTS: CROPS	\$ 16919	33154	9619
24 CROPS & SUPPLIES PURCH FOR RESALE (NET)	132	575	-93
25 COOPERATIVE PATRONAGE REFUNDS	867	1031	810
26 MISCELLANEOUS FARM INCOME/ACCTS RECEIVABLE	2048	3952	1579
27 CUSTOM WORK ENTERPRISE	25	13	
28 GOVERNMENT PAYMENT & SET ASIDE	8636	14904	7127
29 TOTAL RETURNS & NET INCREASES	\$ 76223	135077	47088
30 <u>EXPENSES & NET DECREASES</u>			
31 TRUCK & AUTO (FARM SHARE)	\$ 3989	4824	3915
32 TRACTORS & CROP MACHINERY	11760	17154	11377
33 IRRIGATION EQUIPMENT	131	114	126
34 UTILITIES	3355	4709	3073
35 LIVESTOCK EQUIPMENT	3389	5243	3216
36 BUILDINGS & FENCES	4875	7646	4349
37 LAND IMPROVEMENTS, & TILE	245	657	301
38 LAND	181	-193	1242
39 VET & MISC. LIVESTOCK EXPENSE	7039	11192	5374
40 ALL LABOR COSTS-PAID & UNPAID	6040	8740	7194
41 PROPERTY TAX	1048	1756	1041
42 GENERAL FARM EXPENSE	2265	3217	2090
43 INTEREST ON FARM CAPITAL (7% OPPORTUNITY CHG.)	17089	24360	16546
44 TOTAL EXPENSES & NET DECREASES	\$ 61411	89421	59845
*45***RETURN TO WHOLE FARM OPERATOR LABOR & MGMT	\$ 14812	45656	-12757
46 NUMBER OF FARM OPERATORS	1	1	2
47 FULL TIME OPERATOR EQUIVALENT	1.10	1.26	1.08
48 RETURN TO OPER LABOR & MGMT./FULL TIME OPER	\$ 13470	36237	-11811

TABLE 3 COMBINES TABLE 1, 2A, AND 2B. CASH RECEIPTS AND EXPENSES ARE ADJUSTED FOR CHANGES IN INVENTORY FOR EACH ENTERPRISE AND FOR EACH CATEGORY OF EXPENSE IN ORDER TO SHOW NET INCREASES AND DECREASES. THE RESULTING RETURN TO OPERATOR'S LABOR AND MANAGEMENT IS THE SAME AS THE FIGURE FOUND ON LINE 70 OF THE PREVIOUS PAGE.

TABLE 4 - NON FARM INCOME & HOUSEHOLD PERSONAL EXPENSE - 1988

ITEMS	AVERAGE OF 82 FARMS	PER ADULT EQUIV	HIGH 16 FARMS	LOW 16 FARMS
4 NUMBER OF PERSONS-FAMILY	4		4	4
5 NUMBER OF ADULT EQUIVALENTS-FAMILY	3.2		3.1	3.0
6 NON FARM INCOME				
7 OUTSIDE INVESTMENT INCOME	\$ 977		855	2059
8 OTHER PERSONAL INCOME & INCOME TAX REFUND	6498		3763	12379
9 SALE OF DWELLING, AUTO & TRUCK (PR. SH.)	58		105	
10 NET CASH FROM NON FARM BUSINESS	317		352	690
11 TOTAL NON FARM INCOME	\$ 7849	2453	5075	15127
<u>HOUSEHOLD EXPENSE</u>				
13 FAMILY DRAW (ALTERNATIVE TO DETAIL)				
14 CHURCH & CHARITY	643	201	595	399
15 MEDICAL CARE & HEALTH INSURANCE	2537	793	2884	1661
16 FOOD & MEALS BOUGHT	4270	1334	4696	4014
17 OPERATING EXPENSE & SUPPLIES	1178	368	1311	1183
18 FURNISHINGS & EQUIPMENT	1082	338	1164	782
19 CLOTHING & CLOTHING MATERIALS	987	308	997	864
20 PERSONAL CARE, PERSONAL SPENDING	734	229	1026	566
21 EDUCATION	368	115	93	525
22 RECREATION	777	243	832	540
23 GIFTS & SPECIAL EVENTS	843	263	915	579
24 PERSONAL INTEREST	206	64	495	88
25 TOT CASH HOUSEHOLD DETAIL EXP(L14-L24)	\$ 13624	4258	15008	11201
26 TRUCK & AUTO EXPENSE: PERSONAL	905	283	675	1045
27 UPKEEP ON DWELLING: PERSONAL	361	113	689	81
28 CASH RENT: PERSONAL				
29 TELEPHONE & ELECTRICITY EXPENSE: PERSONAL	839	262	1036	845
30 GENERAL FARM EXPENSE: PERSONAL	103	32	240	57
31 TOTAL CASH LIVING & OPERATING EXP.	\$ 15833	4948	17649	13230
32 NEW TRUCK & AUTO: PERSONAL	1078	337	2065	589
33 NEW DWELLING, BUILDINGS, LAND BOUGHT: PER.	1464	458	656	869
34 TAXES & OTHER DEDUCTIONS	1177	368	1203	1837
35 LIFE INSURANCE	502	157	652	380
36 PAID ON PERSONAL DEBT (PRINCIPAL)	432	135	398	402
37 SAVINGS & INVESTMENTS (EXCLUDING LIFE INS)	704	220	966	595
38 TOTAL NON FARM CASH EXPENSE	\$ 21190	6622	23589	17901
39 NON FARM EXP. MINUS NON FARM INC	13341	4169	18514	2773
40 TOTAL FAMILY LIVING FROM FARM	778	243	1073	693
41 TOTAL CASH & NON CASH EXPENSES	\$ 21968	6865	24662	18593
<u>SUPPLEMENTARY INFORMATION</u>				
43 FAMILY LIVING FROM THE FARM				
44 MILK & CREAM (QUARTS)	\$ 265		370	338
45 BEEF & BUFFALO (POUNDS)	470		687	287
46 PORK (POUNDS)	41		16	55
47 LAMB, MUTTON, GOAT (POUNDS)	2			
48 POULTRY, ALL FOWL (POUNDS)				13
49 EGGS (DOZEN)				
50 VEGETABLES, FRUITS, SPUDS, OTH PROD & WOOD				
51 TOTAL FAMILY LIVING FROM THE FARM	\$ 778		1073	693
52 <u>CALCULATED LIVING EXPENSE</u>				
53 TOTAL FAMILY INCOME	\$ 27265		54071	9084
54 MINUS CHANGE IN NET WORTH	\$ 7374		25887	-7963
55 APPARENT FAMILY LIVING	\$ 19891		28184	17047
56 TOTAL FAM LIVING/WORK UNIT: CALC.	\$ 43		32	43
57 NET FAMILY LIVING PER WORK UNIT	\$ 27		25	7

EXPLANATION OF TABLE 5.2 RATIO'S

- 32 THE CURRENT RATIO This is a measure of liquidity. It indicates the shortrun ability of the business to service debt. It demonstrates the adequacy of current assets, if liquidated, to pay off annual debts as they come due. Usually current assets have a life of 1 year or less. It is calculated by dividing current assets by current liabilities.
- 33 INTERMEDIATE RATIO Intermediate assets and liabilities are those where the finances used are converted into product in a period usually from one to ten years. Examples may be breeding livestock, machinery and equipment. The increase in the ratio over a period of time is a favorable sign. It is calculated by dividing intermediate assets by intermediate liabilities.
- 34 WORKING RATIO The desired trend is for this ratio to increase over time. It is also desirable for this ratio to be larger than the fixed ratio and net capital ratio. The farm business needs to have sufficient liquid assets and retain management flexibility to absorb price decreases and other factors negatively affecting current and intermediate asset values. This ratio is calculated by dividing current assets and intermediate assets by current liabilities and intermediate liabilities.
- 35 FIXED RATIO This ratio should be in excess of one but it is also important for this ratio to be increasing over time. This ratio should not be increased at the expense of a safe working ratio. It is calculated by dividing long term assets by long term liabilities.
- 36 NET CAPITAL RATIO Net capital ratio is one of three measures of solvency; how much value remains if all assets are converted to cash at inventoried value and the total debt is paid. This ratio reflects the risk-bearing capacity of the farm business by showing the percentage that assets could decline and still cover liabilities. The higher the ratio number, the better the risk. A ratio of less than 1.0 = insolvent, a ratio of 1.0 = a net worth of zero. A ratio of 2.0 is considered a safe ratio. This would allow a 50% reduction in asset value or 100% increase in liabilities before becoming insolvent. This ratio is calculated by dividing total assets by total liabilities.
- 37 EQUITY/ASSET This ratio shows the portion of total assets paid for and owned by the operator clear of financial claims. A ratio of .80 shows that the operator owns 80% of all total assets and a ratio of .44 shows he owns only 44 of all total assets. Therefore, this ratio should be increasing over time. It is calculated by dividing total equity by total assets.
- 38 DEBT/EQUITY This is another overall measure of solvency. It shows the relationship between debt and equity. A ratio of 1.00 indicates that equity and debt are equal. That would be equivalent to a net capital ratio of 2.00 to 1.00 and asset equity/asset ratio of .50 to 1.00. All measures of solvency use the same three measures of financial position. They all express relationships between assets, liabilities and net worth (or equity). Lenders prefer a debt/equity ratio of less than 1.0. It is calculated by dividing total liabilities by total equity.
- 39 CURRENT DEBT The lower the current debt structure ratio is, the more liquid the business. A ratio of .10 means only one dollar (\$1.00) out of every \$10 debt must be paid within the next year. A ratio of .50 means one half of the total debt must be paid in the next year. This ratio is calculated by dividing current liabilities by total liabilities.

TABLE 5.1 - OPERATOR'S FINANCIAL POSITION -1988

ITEMS		AVERAGE OF 247 FARMS	
	<u>CURRENT ASSETS:</u>	<u>JAN 1</u>	<u>DEC 31</u>
4	CASH,CHECKING,& SAVING ACCOUNT BALANCE: PERS	\$ 1041	1303
5	CASH,CHECKING,& SAVING ACCOUNT BALANCE: FARM	2086	2789
6	HEDGING ACCOUNT EQUITY	8	79
7	NOTES & ACCOUNTS RECEIVABLES: PERSONAL	756	644
8	NOTES & ACCOUNTS RECEIVABLES: FARM	510	1235
9	CROPS HELD FOR SALE	768	664
10	LIVESTOCK FEED	18418	18141
11	SUPPLIES/PREPAIDS	502	1049
12	FEEDER CATTLE & MARKET OTHER DAIRY	13037	13686
13	MARKET HOGS	1343	1454
14	FEEDER LAMBS & GOATS	16	21
15	POULTRY - ALL TYPES	62	184
16	OTHER LIVESTOCK	16	4
17	TOTAL CURRENT ASSETS	\$ 38564	41252
	<u>INTERMEDIATE ASSETS:</u>		
19	DAIRY COWS	\$ 32133	32170
20	OTHER DAIRY	9272	9837
21	BEEF BREEDING CATTLE	3543	3954
22	BREEDING HOGS	1281	1163
23	BREEDING SHEEP/GOATS	56	55
24	OTHER PRODUCTIVE LIVESTOCK	389	382
25	AUTO & TRUCK: PERSONAL SHARE	947	1407
26	AUTO & TRUCK: FARM SHARE	2416	2840
27	POWER, MACHINERY & EQUIPMENT	23852	23992
28	LIVESTOCK EQUIPMENT	8470	8581
29	CUSTOM WORK EQUIPMENT	109	104
30	IRRIGATION EQUIPMENT	698	643
31	STOCKS & BONDS & CO-OP EQUITY	1963	2186
35	OTHER HOUSEHOLD PERSONAL	8631	8881
36	RETIREMENT ACCOUNTS & LIFE INSURANCE	908	1094
37	TOTAL INTERMEDIATE ASSETS	\$ 94670	97290
	<u>LONG TERM ASSETS:</u>		
39	BUILDINGS & FENCES	\$ 38188	35966
40	LAND & LAND IMPROVEMENTS	74816	76533
41	DWELLING	26752	27648
42	REAL ESTATE PERSONAL	1223	1306
43	TOTAL LONG TERM ASSETS	\$ 140979	141454
44	TOTAL ASSETS	\$ 274213	279996
45	TOTAL PERSONAL ASSETS (INCL CASH)	\$ 42222	44468
46	TOTAL FARM ASSETS (INCL CASH)	\$ 231991	235528

THE OPERATOR'S FINANCIAL STATEMENT PRESENTS A PICTURE OF THE FINANCIAL STRUCTURE OF THE FARM BUSINESS AT THE BEGINNING AND END OF THE YEAR. THE CHANGE IN EQUITY, SHOWN ON TABLE 5.2 - LINE 24, IS A DOLLAR MEASURE OF PROGRESS. THIS STATEMENT, WHEN ACCURATELY KEPT OVER A PERIOD OF YEARS, IS ONE OF THE BEST MEASURES OF FINANCIAL PROGRESS.

THE SUPPLEMENTARY INFORMATION SHOWN ON TABLE 5.2 IS HELPFUL IN STUDYING THE FINANCIAL STRUCTURE OF THE FARM.

ALL ASSETS ARE BASED ON THE MODIFIED COST (COST MINUS DEPRECIATION). LAND MAY HAVE BEEN ADJUSTED TO REFLECT LONG TERM CHANGES IN VALUE.

TABLE 5.2 - OPERATOR'S FINANCIAL POSITION (CONTINUED) - 1988

ITEMS		AVERAGE OF 247 FARMS	
		JAN 1	DEC 31
<u>CURRENT LIABILITIES:</u>			
4	ACCOUNTS PAYABLE: PERSONAL	\$ 214	224
5	ACCOUNTS PAYABLE: FARM	2454	2681
6	CURRENT PORTION OF INTERMED & LONG TERM DEBT	14490	13756
7	DELINQUENT INTEREST	805	1240
8	RENTS & LEASE PAYMENTS DUE FROM PAST YEAR	43	41
9	TOTAL CURRENT LIABILITIES	\$ 18006	17943
<u>*INTERMEDIATE LIABILITIES:</u>			
11	NOTES PAYABLE: PERSONAL	\$ 188	161
12	NOTES PAYABLE: FARM	4439	4866
13	CHattel MORTGAGES: PERSONAL	118	310
14	CHattel MORTGAGES: FARM	54137	53067
16	TOTAL INTERMEDIATE LIABILITIES	\$ 58882	58405
<u>*LONG TERM LIABILITIES:</u>			
18	REAL ESTATE MORTGAGES & CONTRACTS: PERSONAL	\$ 695	794
19	REAL ESTATE MORTGAGES & CONTRACTS: FARM	83186	82037
21	TOTAL LONG TERM LIABILITIES	\$ 83882	82831
22	TOTAL LIABILITIES	\$ 160769	159179
23	EQUITY	\$ 113444	120817
24	CHANGE IN EQUITY	\$	7374
-----FINANCIAL RATIOS-----			
<u>DESCRIPTION, INCLUDING FORMULA:</u>			
32	CURRENT RATIO (5.1 L17 / T5.2 L9) CURRENT ASSETS / CURRENT LIABILITIES	2.14	2.30
33	INTERMEDIATE RATIO (T5.1 L37 / T5.2 L16) INTERMED. ASSETS / INTERMED. LIAB.	1.61	1.67
34	WORKING RATIO (T5.1L17+L37)/(T5.2L9+L16) (C. ASSETS+I. ASSETS)/(C. LIAB.+I. LIAB)	1.73	1.81
35	FIXED RATIO (T5.1 L43 / T5.2 L21) LONG TERM ASSETS / LONG TERM LIAB	1.68	1.71
36	NET CAPITAL RATIO (T5.1 L44 / T5.2 L22) TOTAL ASSETS / TOTAL LIABILITIES	1.71	1.76
37	EQUITY/ASSET RATIO (T5.2 L23 / T5.1 L44) TOTAL EQUITY / TOTAL ASSETS	0.41	0.43
38	DEBT/EQUITY RATIO (T5.2 L22 / T5.2 L23) TOTAL LIABILITIES / TOTAL EQUITY	1.42	1.32
39	CURRENT DEBT RATIO (T5.2 L9 / T5.2 L22) CURRENT LIABILITIES / TOTAL LIAB.	0.11	0.11
51	RETURN TO CAPITAL, FAMILY LABOR, & MANAGEMENT	\$ 19416	
52	TOTAL INCOME FROM NON-FARM SOURCE	\$ 7849	
53	TOTAL FAMILY INCOME	\$ 27265	
54	TOTAL FAMILY CASH & NON-CASH EXPENSE	\$ 21968	
55	TOTAL MONEY BORROWED	\$ 26396	
56	TOTAL PAID ON DEBT	\$ 28039	

*DOES NOT INCLUDE CURRENT PORTION OF PRINCIPAL DUE WITHIN NEXT 12 MONTHS

TABLE 5.1 - OPERATOR'S FINANCIAL POSITION - 1988

ITEMS		49 HIGH FARMS		49 LOW FARMS	
		JAN 1	DEC 31	JAN 1	DEC 31
	<u>CURRENT ASSETS:</u>				
4	CASH,CHECKING,& SAV ACC. BALANCE: PERS	\$ 2557	3468	1940	1855
5	CASH,CHECKING,& SAV ACC. BALANCE: FARM	3526	5373	1646	1026
6	HEDGING ACCOUNT EQUITY				
7	NOTES & ACCOUNTS RECEIVABLES: PERSONAL	776	722		
8	NOTES & ACCOUNTS RECEIVABLES: FARM	931	2874	224	601
9	CROPS HELD FOR SALE	841	295	213	328
10	LIVESTOCK FEED	27680	31292	18526	15264
11	SUPPLIES/PREPAIDS	1483	2314	421	675
12	FEEDER CATTLE & MARKET OTHER DAIRY	19557	22244	13530	12538
13	MARKET HOGS	509	492	3338	3647
14	FEEDER LAMBS & GOATS	7	4	73	102
15	POULTRY - ALL TYPES			8	7
16	OTHER LIVESTOCK	82	20		
17	TOTAL CURRENT ASSETS	\$ 57949	69098	39920	36042
	<u>INTERMEDIATE ASSETS:</u>				
19	DAIRY COWS	\$ 51129	53810	27166	24628
20	OTHER DAIRY	15907	18087	6710	5774
21	BEEF BREEDING CATTLE	2110	2353	7372	7820
22	BREEDING HOGS	604	693	3714	3003
23	BREEDING SHEEP/GOATS	57	57	224	220
24	OTHER PRODUCTIVE LIVESTOCK	1963	1928		
25	AUTO & TRUCK: PERSONAL SHARE	1511	1982	1167	1501
26	AUTO & TRUCK: FARM SHARE	2203	3017	3835	3337
27	POWER, MACHINERY & EQUIPMENT	34122	35169	27242	26944
28	LIVESTOCK EQUIPMENT	14367	14754	9082	8737
29	CUSTOM WORK EQUIPMENT	306	300		
30	IRRIGATION EQUIPMENT	1245	1250	1687	1507
31	STOCKS & BONDS & CO-OP EQUITY	4550	4849	1184	1487
35	OTHER HOUSEHOLD PERSONAL	10078	10642	9259	9514
36	RETIREMENT ACCOUNTS & LIFE INSURANCE	704	1011	1013	1391
37	TOTAL INTERMEDIATE ASSETS	\$ 140857	149901	99656	95863
	<u>LONG TERM ASSETS:</u>				
39	BUILDINGS & FENCES	\$ 49656	47469	41917	39081
40	LAND & LAND IMPROVEMENTS	93359	99201	86847	86722
41	DWELLING	32183	33437	28964	29299
42	REAL ESTATE PERSONAL	917	863	1827	1827
43	TOTAL LONG TERM ASSETS	\$ 176115	180970	159554	156928
44	TOTAL ASSETS	\$ 374922	399970	299131	288833
45	TOTAL PERSONAL ASSETS (INCL CASH)	\$ 53277	56974	45354	46873
46	TOTAL FARM ASSETS (INCL CASH)	\$ 321644	342996	253777	241961

TABLE 5.2 - OPERATOR'S FINANCIAL POSITION (CONTINUED) - 1988

ITEMS	49 HIGH FARMS		49 LOW FARMS	
	JAN 1	DEC 31	JAN 1	DEC 31
<u>CURRENT LIABILITIES:</u>				
4 ACCOUNTS PAYABLE: PERSONAL	70	74	446	301
5 ACCOUNTS PAYABLE: FARM	2441	2898	2975	3469
6 CURRENT PORTION OF INT. & LONG TERM DEBT	20050	20728	12943	11935
7 DELINQUENT INTEREST	23	226	2056	2907
8 RENTS & LEASE PYMTS DUE FROM PAST YEAR			217	183
9 TOTAL CURRENT LIABILITIES	\$ 22584	23927	18636	18795
<u>*INTERMEDIATE LIABILITIES:</u>				
11 NOTES PAYABLE: PERSONAL	235	141	178	148
12 NOTES PAYABLE: FARM	7534	8211	6482	7954
13 CHATTEL MORTGAGES: PERSONAL	117	603	141	283
14 CHATTEL MORTGAGES: FARM	70906	67404	63039	59562
16 TOTAL INTERMEDIATE LIABILITIES	\$ 78793	76359	69841	67947
<u>*LONG TERM LIABILITIES:</u>				
18 REAL ESTATE MORTGAGES & CONTRACTS: PER	449	1307	1378	1338
19 REAL ESTATE MORTGAGES & CONTRACTS: FARM	107510	106905	83687	83128
21 TOTAL LONG TERM LIABILITIES	\$ 107959	108212	85065	84465
22 TOTAL LIABILITIES	\$ 209336	208497	173542	171208
23 EQUITY	\$ 165585	191473	125589	117626
24 CHANGE IN EQUITY	\$	25887		-7963
-----FINANCIAL RATIOS-----				
<u>DESCRIPTION, INCLUDING FORMULA:</u>				
32 <u>CURRENT RATIO</u> (T5.1 L17 / T5.2 L9) CURRENT ASSETS / CURRENT LIABILITIES	2.57	2.89	2.14	1.97
33 <u>INTERMEDIATE RATIO</u> (T5.1 L37 / T5.2 L16) INTERMED. ASSETS / INTERMED. LIAB.	1.79	1.96	1.43	1.41
34 <u>WORKING RATIO</u> (T5.1 L17+L37)/(T5.2 L9+L16) (C. ASSETS+I. ASSETS)/(C. LIAB.+I. LIAB)	1.96	2.18	1.58	1.52
35 <u>FIXED RATIO</u> (T5.1 L43 / T5.2 L21) LONG TERM ASSETS / LONG TERM LIAB	1.63	1.67	1.88	1.86
36 <u>NET CAPITAL RATIO</u> (T5.1 L44 / T5.2 L22) TOTAL ASSETS / TOTAL LIABILITIES	1.79	1.92	1.72	1.69
37 <u>EQUITY/ASSET RATIO</u> (T5.2 L23 / T5.1 L44) TOTAL EQUITY / TOTAL ASSETS	.44	.48	.42	.41
38 <u>DEBT/EQUITY RATIO</u> (T5.2 L22 / T5.2 L23) TOTAL LIABILITIES / TOTAL EQUITY	1.26	1.09	1.38	1.46
39 <u>CURRENT DEBT RATIO</u> (T5.2 L9 / T5.2 L22) CURRENT LIABILITIES / TOTAL LIAB.	.11	.11	.11	.11
51 RETURN TO CAPITAL, FAMILY LABOR, & MANAGEMENT	\$ 48996			-6043
52 TOTAL INCOME FROM NON-FARM SOURCE	\$ 5075			15127
53 TOTAL FAMILY INCOME	\$ 54071			908
54 TOTAL FAMILY CASH & NON-CASH EXPENSE	\$ 24662			18593
55 TOTAL MONEY BORROWED	\$ 48319			17456
56 TOTAL PAID ON DEBT	\$ 49200			20017

*DOES NOT INCLUDE CUR PORTION OF PRINCIPAL DUE WITHIN NEXT 12 MO.

TABLE 6A - OPERATOR'S SHARE OF CASH RECEIPTS - 1988

ITEMS	AVERAGE OF 247 FARMS	HIGH 49 FARMS	LOW 49 FARMS
<u>SALE OF LIVESTOCK & LIVESTOCK PRODUCTS</u>			
2 DAIRY COWS	\$ 7869	12727	6437
3 DAIRY PRODUCTS	71373	119655	49761
4 OTHER DAIRY CATTLE	6053	11097	6453
5 BEEF BREEDING CATTLE	2635	2066	4299
6 BEEF FEEDER CATTLE	2280	315	528
7 HOGS COMPLETE & MIXED	1983	185	3975
8 HOGS FINISHING	1585	90	4834
9 HOGS PRODUCING FEEDER PIGS	2057	2181	4630
10 SHEEP, GOATS, WOOL: BREEDING	68	71	272
11 SHEEP, WOOL: FEEDERS			
12 POULTRY, ALL FOWL	27	9	1
13 EGGS	460		34
14 CUSTOM, CONTRACT LIVESTOCK FEEDING			
15 OTHER PRODUCTIVE LIVESTOCK	41	209	
16 OTHER MISCELLANEOUS LIVESTOCK INCOME	142	642	75
17 TOTAL SALES OF PRODUCTIVE LIVESTOCK	\$ 96572	149245	81300
<u>SALE OF CROPS</u>			
21 WHEAT	101	94	
22 DURUM			
23 OTHER SMALL GRAIN	628	519	310
24 CORN	1972	2198	3033
25 SOYBEANS	771	757	1331
26 SUNFLOWERS			
27 GRAIN SORGHUM & OTHER ROW CROPS	16	80	
28 LEGUMES & OTHER ROUGHAGE	726	598	848
29 GRASS SEED	62		
30 FRUITS & NUTS			
31 VEGETABLES, ROADSIDE MARKET, & SPECIALTY	89		
32 NURSERY, TIMBER, & OTHER	49		154
33 SALE OF CROPS SUPPLIES PURCHASED FOR RESALE	1214	1650	1022
34 TOTAL SALES FROM CROPS & SUPPLIES	\$ 5629	5894	6698
40 GOVERNMENT PAYMENTS & SET ASIDE ACRES	8599	12311	9063
41 GAS TAX REFUND	12	7	22
42 INCOME FROM WORK OFF FARM	451	931	204
43 CUSTOM WORK ENTERPRISE INCOME	792	289	
44 PATRONAGE REFUNDS (CASH 278, EQUITY 583)	861	1064	900
45 MISCELLANEOUS FARM INCOME	1320	2179	1204
46 TOTAL OTHER FARM INCOME	\$ 12035	16780	11393
47 TOTAL FARM OPERATING INCOME	114236	171920	99390
50 AUTO, TRUCK, & MACHINERY SOLD	310	578	152
51 IRRIGATION EQUIPMENT SOLD			
52 CUSTOM WORK EQUIPMENT SOLD			
53 LIVESTOCK EQUIPMENT SOLD	2		9
54 BUILDINGS & IMPROVEMENTS SOLD			
55 LAND & LAND IMPROVEMENTS SOLD	263	1324	
56 FARM CAPITAL LEASE INCOME	91	124	16
57 TOTAL FARM CAPITAL SALES	\$ 666	2027	176
58 TOTAL FARM SALES	114902	173947	99567
60 INCREASE IN FARM CAPITAL (NOT INCL CASH)	2834	19505	
61 FAMILY LIVING FROM THE FARM	801	1318	735
2 TOTAL FARM RECEIPTS (58)+(60)+(61)	\$ 118537	194770	100302
70 TOTAL FARM OPERATING INCOME (58)-(57)	\$ 114236	171920	99390
71 TOTAL CASH FARM OPERATING EXPENSE (65/43)	\$ 88194	124980	85491
*72***NET CASH OPERATING INCOME (70)-(71)	\$ 26042	46940	13899

TABLE 6B - OPERATOR'S SHARE OF CASH EXPENSES - 1988

ITEMS	AVERAGE OF 247 FARMS	HIGH 49 FARMS	LOW 49 FARMS
<u>PURCHASE OF LIVESTOCK</u>			
5 DAIRY COWS	\$ 1709	2666	570
6 OTHER DAIRY CATTLE	1060	2487	738
7 BEEF BREEDING CATTLE	445	7	1540
8 BEEF FEEDER CATTLE	647		66
9 HOGS COMPLETE & MIXED	31	7	79
10 HOGS FINISHING	404	28	434
11 HOGS PRODUCING FEEDER PIGS	111	5	281
12 SHEEP, GOATS, WOOL: BREEDING			
13 SHEEP, WOOL: FEEDERS			
14 POULTRY, ALL FOWL	143	2	3
15 CUSTOM, CONTRACT LIVESTOCK FEEDING			
16 OTHER PRODUCTIVE LIVESTOCK	27	135	
17 TOTAL LIVESTOCK PURCHASES	\$ 4578	5336	3711
20 VET, BREEDING, & MISCELLANEOUS LIVESTOCK EXP	6969	11406	5909
21 PURCHASE OR CROPS & SUPPLIES FOR RESALE	1160	1128	958
22 FEED BOUGHT	26284	34229	26346
23 FERTILIZER	4708	7195	4488
24 CHEMICALS	1355	2186	1637
25 OTHER CROP EXPENSE	3121	4761	2667
26 IRRIGATION OPERATION COST	63	166	49
27 CUSTOM WORK OPER COSTS EXCL LABOR & REPAIR	697	33	
28 CUSTOM WORK HIRED	3361	4540	3037
29 GAS, DIESEL, & LUBRICANTS	3080	4179	3021
30 REPAIR & UPKEEP OF LIVESTOCK EQUIPMENT	1435	2335	1576
31 REPAIR & UPKEEP OF FARM REAL ESTATE	944	1674	896
32 REPAIR & OPER. OF MACH., TRACTOR, TRUCK, AUTO	4817	6180	4866
33 REPAIR & UPKEEP OF IRRIGATION EQUIPMENT	27	76	42
34 REPAIR & UPKEEP OF CUSTOM WORK EQUIPMENT	50	167	
35 TOTAL ALL REPAIRS	7273	10432	7374
36 WAGES OF HIRED LABOR	4614	6477	6339
37 PERSONAL PROPERTY & REAL ESTATE TAXES	1033	1716	1108
38 GENERAL FARM EXPENSES	2248	3203	2232
39 UTILITIES	3326	4693	3351
40 FARM CAPITAL LEASE EXPENSE	3013	5632	2800
41 TOTAL INTEREST PAYABLE THIS YEAR	11311	17670	10464
42 INTEREST ACTUALLY PAID (\$ 10876)			
43 TOTAL CASH OPERATING EXPENSE	\$ 88194	124980	85491
50 AUTO, TRUCK, & MACHINERY BOUGHT	5947	9431	5734
51 IRRIGATION EQUIPMENT BOUGHT	37	147	
52 CUSTOM WORK EQUIPMENT BOUGHT	5	24	
53 LIVESTOCK EQUIPMENT BOUGHT	1690	2820	1513
54 NEW REAL ESTATE: BUILDINGS & FENCES	1076	2061	659
55 NEW REAL ESTATE: LAND & LAND IMPROVEMENTS	2420	7109	1417
57 TOTAL CAPITAL PURCHASES	\$ 11175	21592	9323
58 TOTAL FARM PURCHASES	99369	146573	94814
60 DECREASE IN FARM CAPITAL (NOT INCL CASH)			11196
61 INTEREST ON FARM CAPITAL: 7% CHARGE	4882	5281	6793
62 UNPAID FAMILY LABOR	884	1011	744
63 BOARD FURNISHED HIRED LABOR	177	104	52
64 TOTAL FARM EXPENSE	\$ 105312	152969	114076
*70***RETURN TO OPERATOR LABOR & MGMT(6A/62)-(64)	\$ 13225	41801	-13774
*71***RET: CAP & FAM LABOR (INCL SPOUSE FARM WAGES)	\$ 19416	48996	-6043

EXPLANATION OF WORK UNITS

The total "work unit" for any one farm is a measure of the size of that business. A work unit as used in this report is the average accomplishment of a farm worker, in a ten hour day, working on crops and productive livestock at an average efficiency, or ten hours of work off the farm for the pay.

WORK UNITS FOR CROPS, LIVESTOCK, AND WORK OFF THE FARM

<u>ITEM</u>		<u>ITEM</u>	
Dairy Cows	7.0/cow	Sunflowers	.40/acre
Other Dairy Cattle	1.2/Head	Barley, Wheat, Oats, Rye	.30/acre
Beef Breeding Cows	1.5 Head	Corn for Grain	.55/acre
Beef Feeders	.12/cwt	Soybeans	.45/acre
Hogs/Complete	.12/cwt	Edible Beans	.50/acre
Hogs/Finishing	.06/cwt	Alfalfa Hay	.60/acre
Hogs/Wean. Pigs	1.4/litter	O. Leg. & Mix Hay	.40/acre
Sheep, Farm Flock	.60/ewe	Other Grass Hay	.30/acre
Lambs, Feeders	.30/cwt	Wild Hay	.20/acre
Chickens, Lay. Flock	4.0/100	Corn Silage	.60/acre
Broilers	.20/cwt	Oat Silage	.40/acre
Turkeys, Lay. Flock	.20 head	Legume & Grass Silage	.40/acre
Turkey Poults	.12/cwt	Legume & Grass Seed	.40/acre
Set Aside (Tilled)	.20/acre		

MOST COMMON PRICES OF HOME GROWN FEED AND OTHER PRICES USED IN THE 1988 REPORT

<u>SMALL GRAIN & CORN</u>		<u>PASTURE PER HEAD PER MONTH</u>	
Barley (Feed)	\$ 2.00/bu.	Dairy Cows, Beef Cows	\$5.00
Corn	2.20/bu.	Other Dairy & Beef	4.00
Oats	2.00/bu.	Hogs	3.50
Alfalfa Hay	90.00/ton	Sheep	.70
Mixed Legume	60.00/ton	Lambs	.35
Other Grass Hay	35.00/ton		
Corn Silage	17.00/ton		

PRODUCTS USED IN THE HOME

Whole Milk Fed	\$10.00/ton	Whole Milk	\$.25/qt.
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MEASURES OF FARM ORGANIZATION AND MANAGEMENT EFFICIENCY

The following explanations and definitions are for use in interpreting Table 8 and the Thermometer Chart:

1. Return to Labor & Management. - A measure of the relative financial return for the operator labor, taking into account all income and expense, cash and non-cash, including a charge for the use of farm capital. This is based on the whole farm business and is found also in Table 2 and Table 3.
2. Crop Yield Index - A measure of the crop yield level for all crops produced, expressed as a percentage of the average; the average being 100%.
3. Return over all Listed Cost Per Tillable Acre (Excluding pasture) - This is the net return per tillable crop acre after all variable and allocated costs have been paid.
4. Gross Return per Acre - An additional measure of crop selection, based on total production times an average price for the crops, plus other crop income.
5. Return per \$100 Feed Fed to Productive Livestock - Measures the general level of efficiency for all livestock. It is expressed as a percentage of the average and combines the individual livestock indexes into one figure.
6. Livestock Units per 100 Acres - A measure of livestock density or population. Unit values are assigned to the various classes of livestock.
7. Size of Business - Work Units - A measure of the total work load. A Work Unit represents the average accomplishment of a worker in one 10 hour day. Work Unit values are assigned to each class of livestock, each crop, and other tasks utilizing farm labor.
8. Work Units per Worker - Measures labor efficiency. It is the total work units divided by the number of workers on the farm; including the operator, hired labor, and family labor.
9. Power, Machinery, Equipment and Building Expense per Work Unit - A measure of expense control. It is the total of items 31 through 36 in Table 3, divided by the number of Work Units.

Other items listed on Table 8 are related to the above measures and serve to further define and describe the efficiency level of the farm business. Note should be taken that items listed in Table 8 and the Thermometer Chart are to be considered in the light of the individual farm and farm operator. Although, in general, an above average level for each factor listed would indicate above average earnings, this may not be true when individual farms are considered. The inter-relationship of factors varies from farm to farm.

TABLE 8 - MEASURES OF FARM ORGANIZATION AND MANAGEMENT EFFICIENCY - 1988

ITEMS	AVERAGE OF 247 FARMS	HIGH 49 FARMS	LOW 49 FARMS
3 RETURN TO OPERATOR'S LABOR & MANAGEMENT	\$ 14817	45658	-12756
4 CROP YIELD INDEX	102.8	127.8	86.3
5 RET. OVER ALL LISTED COST/TILL. ACRE (EXCL. PAST)	\$ -17.63	.01	-42.46
6 GROSS RETURN PER TILLABLE ACRE (EXCL. PASTURE)	\$ 132.53	134.24	81.87
7 INDEX RETURN / \$100 FEED FED	100.0	108.3	98.4
8 LIVESTOCK UNITS / 100 ACRES*	30.68	26.00	27.83
9 SIZE OF BUSINESS IN TOTAL WORK UNITS	489.2	736.1	413.0
10 WORK UNITS / WORKER	303.85	357.33	269.93
11 POWER, MACHINERY, EQUIP, BLDG EXPENSE/WORK UNIT	\$ 56.22	53.92	63.09
30 NUMBER OF ANIMAL UNITS	89.77	116.51	78.61
31 <u>WORK UNITS:</u>			
32 CROPS	118.4	187.6	112.6
33 PRODUCTIVE LIVESTOCK	366.1	540.6	300.3
34 OTHER PRODUCTIVE UNITS	4.6	8.0	.1
35 <u>EXPENSES / WORK UNIT:</u>			
36 TRACTOR AND CROP MACHINERY	\$ 24.31	23.46	27.85
37 AUTO & TRUCK; FARM SHARE	\$ 8.16	6.56	9.48
38 ELECTRICITY; FARM SHARE	\$ 5.99	5.79	6.44
39 LIVESTOCK EQUIPMENT	\$ 6.93	7.12	7.79
40 BUILDING, FENCE, & TILING	\$ 9.97	10.39	10.53
41 <u>OTHER EXPENSE PER TOTAL WORK UNITS</u>			
42 GENERAL FARM, TELEPHONE, & OTHER UTILITIES	\$ 5.50	4.98	6.06
43 WAGES FOR HIRED LABOR	\$ 9.51	10.08	12.51
44 TRACTOR, CROP MACHINERY EXPENSE / CROP ACRE**	\$ 44.56	42.10	44.99
45 FARM POWER & MACHINERY COST ALLOCATED TO LVSTK	\$ 3365.85	4252.57	3278.11
46 FARM POWER & MACHINERY COST ALLOCATED TO CROPS	\$ 9922.15	14920.43	10025.89
47 BUILDING, FENCE, TILE COST ALLOCATED TO LVSTK	\$ 3675.53	6056.44	3330.85
48 BUILDING, FENCE, TILE COST ALLOCATED TO CROPS	\$ 1319.75	2157.91	1389.74
49 *ACRES INCLUDE ALL TILLABLE LAND, NON-TILLABLE HAY & PASTURE			
50 **ACRES INCLUDE ALL TILLABLE LAND PLUS ACRES IN NON-TILLABLE HAY			
51 <u>SUPPLEMENTARY OPERATOR'S MANAGEMENT INFORMATION</u>			
52 OPERATOR'S RETURN TO CAPITAL & FAMILY LABOR	\$ 19416	46615	-6942
53 OPERATOR'S DEPRECIATION: FARM POWER & CROP MACH.	\$ 5073	7128	5712
54 OPERATOR'S DEPRECIATION: IRRIGATION EQUIPMENT	\$ 92	58	102
55 OPERATOR'S DEPRECIATION: CUSTOM WORK EQUIPMENT	\$ 10	30	
56 OPERATOR'S DEPRECIATION: LIVESTOCK EQUIPMENT	\$ 1577	2188	1738
57 OPERATOR'S DEPRECIATION: BUILDINGS, FENCES	\$ 3298	4728	3157
58 OPERATOR'S DEPRECIATION: LAND IMPROVEMENT & TILE	\$ 245	657	301
TOTAL OPERATOR'S DEPRECIATION	\$ 10295	14789	11010

THERMOMETER CHART

Using the figures from Table 8, locate your standing with respect to the various measures of farm organization and management efficiency. The averages for the farms included in this summary are located between the dotted lines across the center portion of the chart.

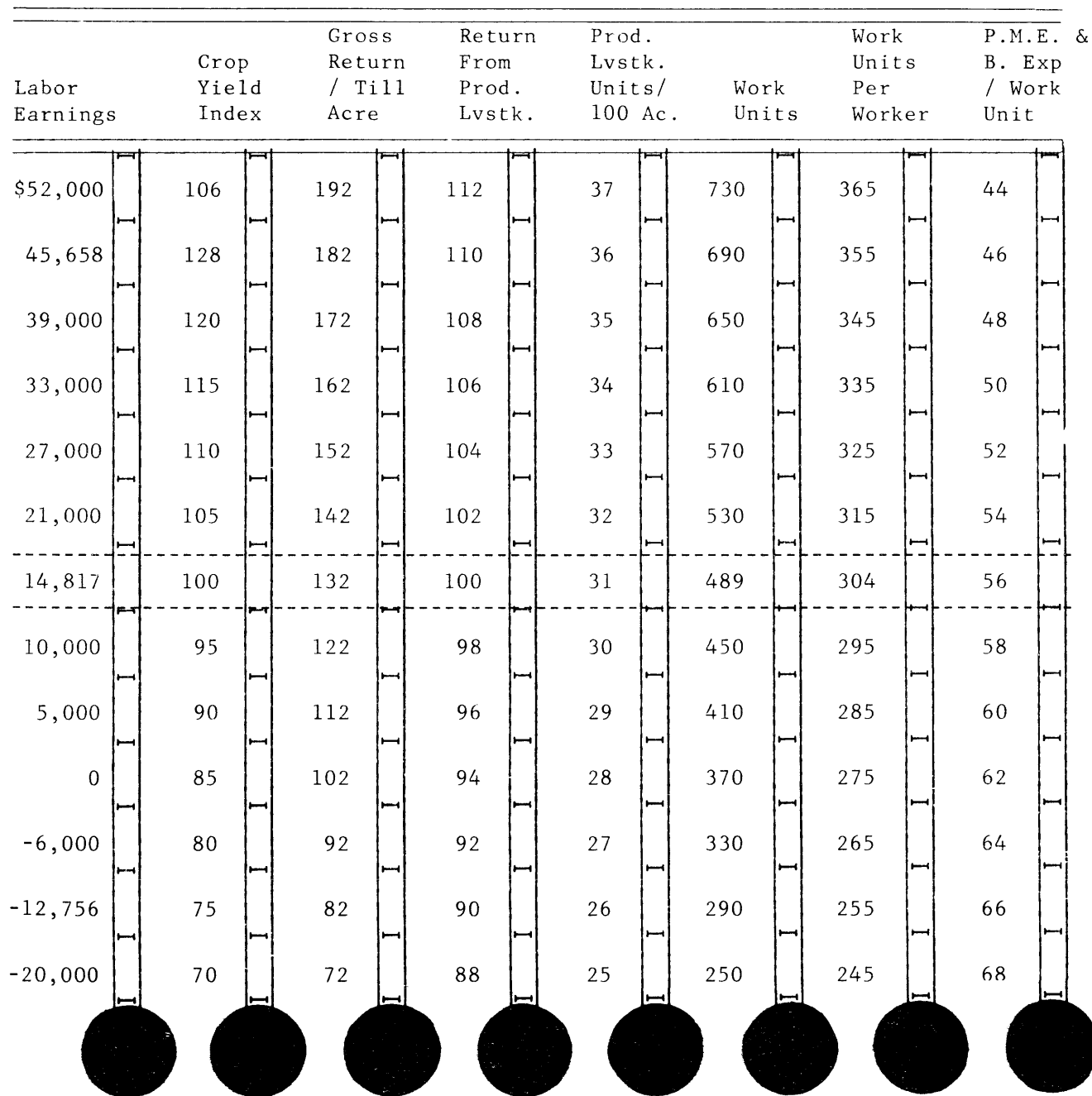


TABLE 9 - SELECTED CROP DATA FOR MAJOR CROPS, DISTRIBUTION OF ACRES & YIELDS - 1988

ITEMS		AVERAGE	HIGH	LOW
		OF 247	49	49
		FARMS	FARMS	FARMS
		ACRES	ACRES	ACRES
A	TOTAL SMALL GRAIN & CANNING PEAS	26.2	42.7	22.0
B	TOTAL ROW CROP	43.0	70.7	53.6
C	TOTAL LEGUMES, INCLUDING SEED	49.2	97.3	35.5
D	TOTAL OTHER HAY	49.2	46.1	57.9
E	TOTAL SILAGE & FODDER	60.2	95.9	49.4
F	TOTAL TILLABLE PASTURE	9.8	14.6	10.7
G	TOTAL GRASS CROPS	.2		.8
J	TOTAL ROADSIDE MARKET/SPECIALTY CROPS			
K	TOTAL FALLOW & SET ASIDE LAND	22.7	35.3	19.1
L	TOTAL TILLABLE LAND AND RECROPPED ACRES	260.5	402.7	248.9
M	TOTAL NON-TILLABLE HAY/PASTURE	30.3	45.4	33.5
N	TOTAL NON-TILLABLE FOREST CROPS	.1		.4
9985	WILD HAY NOT HARVESTED-NONTILLABLE	3.0	3.9	1.5
9986	PASTURE NOT HARVESTED	33.8	32.8	28.5
9987	TIMBER NOT HARVESTED	34.3	38.1	45.0
9988	ROADS AND WASTE	28.2	38.4	24.5
9989	FARMSTEAD	7.4	9.6	6.7
O	TOTAL LAND NOT HARVESTED	106.7	122.8	106.2
P	TOTAL NON-TILLABLE LAND	137.0	168.1	140.2
Q	TOTAL LAND IN FARM OR RANCH	383.8	549.3	363.2

SUPPLEMENTARY MANAGEMENT INFORMATION

9993	PERCENT LAND TILLABLE	66.4	71.1	67.9
9994	FERTILIZER COST PER ACRE	\$ 18.44	20.80	15.22
9995	CROP CHEMICALS PER ACRE	\$ 5.98	7.16	5.92
9996	SEED & OTHER COST PER ACRE	\$ 12.05	13.89	9.94
9997	FUEL & LUBRICANTS USED PER ACRE	\$ 13.29	12.29	12.97
9998	REPAIR AND MAINTENANCE COST PER ACRE	\$ 21.23	19.24	20.92
9999	*TOTAL ACRES CROPPED	227.97	352.85	219.94

*TILLABLE ACRES + RECROPPED ACRES MINUS TILLABLE PASTURE, FALLOW & IDLE ACRES.

CROP YIELDS - FROM TABLE 10 - 1988

CROP	NUMBER OF FARMS GROWING	AVERAGE YIELD/ ACRE	HIGH FARM ACRE	LOW FARM ACRE
<u>OWNED ACRES</u>				
BARLEY	36	21.9	39.2	3.1
OATS	95	17.1	42.0	0.0
CORN	118	43.2	89.9	7.3
CORN (IRRIGATED)	6	104.9		
SOYBEANS	17	18.9	27.6	12.9
ALFALFA HAY	155	1.9	3.3	0.7
RED CLOVER HAY	16	0.9	1.3	0.3
LEGUME GRASS MIXED HAY	99	1.3	2.2	0.5
CORN SILAGE	190	5.5	10.7	2.6
LEGUME GRASS SILAGE	14	2.6	3.4	1.7
<u>RENTED ACRES</u>				
CORN	83	54.5	95.5	15.7
CORN (IRRIGATED)	8	132.1		
ALFALFA HAY	72	2.1	3.2	0.6
OTHER TILLABLE GRASS HAY	54	1.0	3.5	0.3
CORN SILAGE	123	5.0	9.5	2.0

TABLE 10 - INDIVIDUAL CROP ENTERPRISE ANALYSIS

The individual crop analysis table shows acres, yield, value per unit, (usually the value per unit at harvest time), and gross return per acre for each crop raised by a particular farmer during the last crop year.

Costs such as fertilizer, chemicals, seed, crop drying expense, special hired labor, and custom work are costs that are assigned to each individual crop in the account book or computer record system. These costs are shown in table 10 under variable costs.

Other costs, called allocated costs, are calculated from the actual costs incurred. They are allocated by formula. The power and crop machinery expense is divided into ownership and operation costs for each crop. Allocated cost calculations are assigned to each production enterprise. Rented land cost is a reported cost from the farmer's records.

The total crop return minus the variable and allocated costs equals the return over listed costs, which is line 44.

All crop enterprises produced on a farm are listed separately. This allows the operator to compare the return over listed costs for each crop produced.

Land cost on owned land is the greater of the opportunity cost or the actual cost of ownership. Land cost for rented land is based on the actual rent paid for the use of the land.

TABLE 10 - CROP DATA FOR BARLEY - 1988

ITEMS	OWNED ACRES		
	AVERAGE OF 36 FARMS	HIGH 12 FARMS	LOW 12 FARMS
3 ACRES	31.9	42.1	26.9
	----- PER ACRE -----		
4 YIELD	21.9	39.2	3.1
5 VALUE PER UNIT	\$ 2.00	2.00	2.00
6 CROP PRODUCT RETURN	43.82	78.36	6.17
7 OTHER CROP INCOME	4.58	6.01	3.64
8 TOTAL CROP RETURN	\$ 48.40	84.37	9.81
<u>VARIABLE COSTS</u>			
10 FERTILIZER	\$ 10.78	15.32	10.82
11 CHEMICALS	2.63	4.63	1.26
12 SEED	7.96	6.89	8.36
13 CROP DRYING	.03	.05	
14 CROP INSURANCE	.72	1.35	.37
15 OTHER EXPENSES	.16	.31	
16 SPECIAL HIRED LABOR	.41		
17 CUSTOM WORK HIRED & LEASE EXPENSE	.50	.69	
18 IRRIGATION OPERATION			
19 ASSIGNED INTEREST			
20 TOTAL VARIABLE COSTS	\$ 23.20	29.24	20.82
21 RETURN OVER VARIABLE COSTS	25.20	55.13	-11.01
<u>ALLOCATED COSTS (VARIABLE & FIXED)</u>			
31 FARM POWER & MACHINERY - OWNERSHIP	\$ 7.81	7.53	9.11
32 FARM POWER & MACHINERY - OPERATION	14.14	12.95	14.54
33 BUILDING & FENCE COST	3.54	3.06	3.61
34 IRRIGATION OWNERSHIP COST			
35 LAND OWNERSHIP COST **			
36 LAND OPPORTUNITY OWNERSHIP COST **			
37 LAND COST	23.03	22.17	19.45
38 UTILITIES & GENERAL FARM EXPENSE	2.95	2.33	3.61
39 HIRED LABOR	2.16	3.04	.89
41 ACTUAL NON-REAL ESTATE INTEREST ALLOCATED	4.61	2.99	6.58
42 TOTAL ALLOCATED COSTS	\$ 58.24	54.07	57.79
43 TOTAL LISTED COSTS	\$ 81.44	83.31	78.61
44 RETURN OVER LISTED COSTS	\$ -33.04	1.06	-68.80

<u>SUPPLEMENTARY MANAGEMENT INFORMATION</u>			
51 TOTAL COST ADJ TO A MIN 7% INTEREST	\$ 80.66	83.47	75.24
52 WORK UNITS ASSIGNED / ACRE	.30	.30	.30
53 POWER COST ALLOCATION FACTOR	1.00	1.00	1.00
54 TOTAL LISTED COST / UNIT OF PRODUCTION	\$ 3.72	2.13	25.36
55 TOTAL ADJUSTED COST / UNIT OF PRODUCTION	\$ 3.68	2.13	24.39
56 CASH VARIABLE COST / UNIT OF PRODUCTION	\$ 2.15	1.29	14.98
57 RETURN OVER LISTED COSTS PER UNIT	\$ -1.51	.03	-22.19
58 BREAKEVEN YIELD / UNIT OF PRODUCTION (XX.X)	40.7	41.7	39.3
59 TOTAL ACRE IN. WATER APPLIED			
60 COST OF IRRIGATION*			
61 AVERAGE PRICE RECEIVED / UNIT SOLD			
2 QUANTITY SOLD (O.S.)			

* DOES NOT INCLUDE INTEREST COSTS

** THE LARGER OF THE OWNERSHIP (LINE 35) OR THE OPPORTUNITY (LINE 36) COST IS LISTED AS THE LAND COST ON LINE 37.

TABLE 10 - CROP DATA FOR OATS - 1988

		OWNED ACRES		
ITEMS		AVERAGE	HIGH	LOW
		OF 95 FARMS	19 FARMS	19 FARMS
3	ACRES	26.3	32.3	26.6
		-----	PER ACRE	-----
4	YIELD	17.1	42.0	0
5	VALUE PER UNIT	\$ 2.12	2.34	2.10
6	CROP PRODUCT RETURN	36.35	98.08	
7	OTHER CROP INCOME	9.35	18.48	3.98
8	TOTAL CROP RETURN	\$ 45.70	116.56	3.98
	<u>VARIABLE COSTS</u>			
10	FERTILIZER	\$ 13.12	14.33	11.28
11	CHEMICALS	1.22	2.94	
12	SEED	10.72	7.24	16.99
13	CROP DRYING			
14	CROP INSURANCE	.15	1.55	.08
15	OTHER EXPENSES	.19	.19	.26
16	SPECIAL HIRED LABOR	.57		.15
17	CUSTOM WORK HIRED & LEASE EXPENSE	1.63	1.89	
18	IRRIGATION OPERATION			
19	ASSIGNED INTEREST			
20	TOTAL VARIABLE COSTS	\$ 27.60	28.14	28.76
21	RETURN OVER VARIABLE COSTS	18.10	88.42	-24.78
	<u>ALLOCATED COSTS (VARIABLE & FIXED)</u>			
31	FARM POWER & MACHINERY - OWNERSHIP	\$ 8.82	6.97	8.08
32	FARM POWER & MACHINERY - OPERATION	15.21	11.52	16.17
33	BUILDING & FENCE COST	2.74	3.13	2.41
34	IRRIGATION OWNERSHIP COST			
35	LAND OWNERSHIP COST **			
36	LAND OPPORTUNITY OWNERSHIP COST **			
37	LAND COST	28.21	17.57	23.21
38	UTILITIES & GENERAL FARM EXPENSE	3.27	2.35	3.61
39	HIRED LABOR	1.94	1.55	1.58
41	ACTUAL NON-REAL ESTATE INTEREST ALLOCATED	5.55	3.31	4.55
42	TOTAL ALLOCATED COSTS	\$ 65.74	46.40	59.67
43	TOTAL LISTED COSTS	\$ 93.34	74.54	88.43
44	RETURN OVER LISTED COSTS	\$ -47.64	42.02	-84.45

	<u>SUPPLEMENTARY MANAGEMENT INFORMATION</u>			
51	TOTAL COST ADJ TO A MIN 7% INTEREST	\$ 89.16	75.26	85.19
52	WORK UNITS ASSIGNED / ACRE	.30	.30	.30
53	POWER COST ALLOCATION FACTOR	1.00	.95	1.04
54	TOTAL LISTED COST / UNIT OF PRODUCTION	\$ 5.46	1.77	
55	TOTAL ADJUSTED COST / UNIT OF PRODUCTION	\$ 5.20	1.79	
56	CASH VARIABLE COST / UNIT OF PRODUCTION	\$ 3.13	1.12	
57	RETURN OVER LISTED COSTS PER UNIT	\$ -2.79	1.00	
58	BREAKEVEN YIELD / UNIT OF PRODUCTION (XX.X)	44.0	31.9	
59	TOTAL ACRE IN. WATER APPLIED			
60	COST OF IRRIGATION*			
61	AVERAGE PRICE RECEIVED / UNIT SOLD			
62	QUANTITY SOLD (O.S.)			

* DOES NOT INCLUDE INTEREST COSTS

** THE LARGER OF THE OWNERSHIP (LINE 35) OR THE OPPORTUNITY (LINE 36) COST IS LISTED AS THE LAND COST ON LINE 37.

TABLE 10 - CROP DATA FOR CORN GRAIN - 1988

ITEMS	OWNED ACRES		
	AVERAGE OF 118 FARMS	HIGH 23 FARMS	LOW 23 FARMS
3 ACRES	45.4	42.6	70.2
	-----	PER ACRE	-----
4 YIELD	43.2	89.9	7.3
5 VALUE PER UNIT	\$ 2.59	2.59	2.69
6 CROP PRODUCT RETURN	111.87	232.39	19.64
7 OTHER CROP INCOME			
8 TOTAL CROP RETURN	\$ 111.87	232.39	19.64
<u>VARIABLE COSTS</u>			
10 FERTILIZER	\$ 26.23	29.25	12.88
11 CHEMICALS	11.61	13.62	5.61
12 SEED	13.30	17.37	7.98
13 CROP DRYING	1.12	1.36	
14 CROP INSURANCE	.66	1.08	.17
15 OTHER EXPENSES	.68	.77	.61
16 SPECIAL HIRED LABOR	.35		
17 CUSTOM WORK HIRED & LEASE EXPENSE	2.97	8.26	.17
18 IRRIGATION OPERATION			
19 ASSIGNED INTEREST			
20 TOTAL VARIABLE COSTS	\$ 56.94	71.71	27.42
21 RETURN OVER VARIABLE COSTS	54.93	160.68	-7.78
<u>ALLOCATED COSTS (VARIABLE & FIXED)</u>			
31 FARM POWER & MACHINERY - OWNERSHIP	\$ 18.72	20.12	13.46
32 FARM POWER & MACHINERY - OPERATION	25.86	34.06	18.06
33 BUILDING & FENCE COST	6.21	6.08	6.23
34 IRRIGATION OWNERSHIP COST			
35 LAND OWNERSHIP COST **			
36 LAND OPPORTUNITY OWNERSHIP COST **			
37 LAND COST	26.10	24.95	17.30
38 UTILITIES & GENERAL FARM EXPENSE	6.23	6.29	4.90
39 HIRED LABOR	4.10	3.47	2.08
41 ACTUAL NON-REAL ESTATE INTEREST ALLOCATED	11.04	9.77	8.43
42 TOTAL ALLOCATED COSTS	\$ 98.26	104.74	70.46
43 TOTAL LISTED COSTS	155.20	176.45	97.88
44 RETURN OVER LISTED COSTS	\$ -43.33	55.94	-76.32

<u>SUPPLEMENTARY MANAGEMENT INFORMATION</u>			
51 TOTAL COST ADJ TO A MIN 7% INTEREST	\$ 151.96	177.54	96.57
52 WORK UNITS ASSIGNED / ACRE	.55	.55	.55
53 POWER COST ALLOCATION FACTOR	.99	1.00	.93
54 TOTAL LISTED COST / UNIT OF PRODUCTION	\$ 3.59	1.96	13.41
55 TOTAL ADJUSTED COST / UNIT OF PRODUCTION	\$ 3.52	1.98	13.24
56 CASH VARIABLE COST / UNIT OF PRODUCTION	\$ 2.41	1.39	8.34
57 RETURN OVER LISTED COSTS PER UNIT	\$ -1.00	.62	-10.45
58 BREAKEVEN YIELD / UNIT OF PRODUCTION (XX.X)	59.9	68.1	32.7
59 TOTAL ACRE IN. WATER APPLIED			
60 COST OF IRRIGATION*			
61 AVERAGE PRICE RECEIVED / UNIT SOLD			
62 QUANTITY SOLD (O.S.)			

* DOES NOT INCLUDE INTEREST COSTS

** THE LARGER OF THE OWNERSHIP (LINE 35) OR THE OPPORTUNITY (LINE 36) COST IS LISTED AS THE LAND COST ON LINE 37.

TABLE 10 - CROP DATA FOR CORN GRAIN - 1988

ITEMS	RENTED ACRES		
	AVERAGE OF 83 FARMS	HIGH 16 FARMS	LOW 16 FARMS
3 ACRES	35.3	45.8	29.3
	-----	PER ACRE	-----
4 YIELD	54.5	95.5	15.7
5 VALUE PER UNIT	\$ 2.58	2.58	2.58
6 CROP PRODUCT RETURN	140.91	246.42	40.58
7 OTHER CROP INCOME			
8 TOTAL CROP RETURN	\$ 140.91	246.42	40.58
<u>VARIABLE COSTS</u>			
10 FERTILIZER	\$ 32.38	33.41	31.13
11 CHEMICALS	15.07	13.91	14.54
12 SEED	15.78	17.40	17.17
13 CROP DRYING	1.93	2.60	.38
14 CROP INSURANCE	1.25	1.77	
15 OTHER EXPENSES	1.39	1.29	2.05
16 SPECIAL HIRED LABOR	.08		.07
17 CUSTOM WORK HIRED & LEASE EXPENSE	4.82	5.37	.78
18 IRRIGATION OPERATION			
19 ASSIGNED INTEREST			
20 TOTAL VARIABLE COSTS	\$ 72.69	75.74	66.11
21 RETURN OVER VARIABLE COSTS	68.22	170.68	-25.53
<u>ALLOCATED COSTS (VARIABLE & FIXED)</u>			
31 FARM POWER & MACHINERY - OWNERSHIP	\$ 20.62	18.73	23.89
32 FARM POWER & MACHINERY - OPERATION	29.18	32.27	28.50
33 BUILDING & FENCE COST	6.83	5.50	6.20
34 IRRIGATION OWNERSHIP COST			
35 LAND OWNERSHIP COST			
36 LAND OPPORTUNITY OWNERSHIP COST			
37 LAND COST **	25.54	15.56	22.88
38 UTILITIES & GENERAL FARM EXPENSE	6.97	6.18	7.95
39 HIRED LABOR	6.29	4.48	3.96
41 ACTUAL NON-REAL ESTATE INTEREST ALLOCATED	11.78	7.31	13.21
42 TOTAL ALLOCATED COSTS	\$ 107.21	90.03	106.64
43 TOTAL LISTED COSTS	\$ 179.90	165.77	172.75
44 RETURN OVER LISTED COSTS	\$ -38.99	80.65	-132.17

<u>SUPPLEMENTARY MANAGEMENT INFORMATION</u>			
51 TOTAL COST ADJ TO A MIN 7% INTEREST	\$ 178.87	164.63	161.23
52 WORK UNITS ASSIGNED / ACRE	.55	.55	.55
53 POWER COST ALLOCATION FACTOR	.99	.99	.99
54 TOTAL LISTED COST / UNIT OF PRODUCTION	\$ 3.30	1.74	11.00
55 TOTAL ADJUSTED COST / UNIT OF PRODUCTION	\$ 3.28	1.72	10.27
56 CASH VARIABLE COST / UNIT OF PRODUCTION	\$ 2.33	1.32	7.63
57 RETURN OVER LISTED COSTS PER UNIT	\$ -.71	.84	-8.42
58 BREAKEVEN YIELD / UNIT OF PRODUCTION (XX.X)	69.7	64.3	67.0
59 TOTAL ACRE IN. WATER APPLIED			
60 COST OF IRRIGATION*			
61 AVERAGE PRICE RECEIVED / UNIT SOLD			
62 QUANTITY SOLD (O.S.)			

* DOES NOT INCLUDE INTEREST COSTS

** THE LAND COST ON THIS TABLE IS THE ACTUAL RENT PAID FOR THE PROPERTY.

TABLE 10 - CROP DATA FOR CORN FOR GRAIN (IRRIGATED) - 1988

ITEMS		OWNED ACRES ACREAGE OF 6 FARMS	RENTED ACRES AVERAGE OF 8 FARMS
3	ACRES	49.6	72.3
		PER ACRE	PER ACRE
4	YIELD	104.9	132.1
5	VALUE PER UNIT	\$ 2.51	2.60
6	CROP PRODUCT RETURN	263.33	343.18
7	OTHER CROP INCOME		
8	TOTAL CROP RETURN	\$ 263.33	343.18
	<u>VARIABLE COSTS</u>		
10	FERTILIZER	\$ 31.94	47.00
11	CHEMICALS	14.01	10.12
12	SEED	15.83	22.78
13	CROP DRYING	2.20	6.17
14	CROP INSURANCE		1.67
15	OTHER EXPENSES	.99	.65
16	SPECIAL HIRED LABOR		7.99
17	CUSTOM WORK HIRED & LEASE EXPENSE	7.52	6.20
18	IRRIGATION OPERATION	23.32	17.09
19	ASSIGNED INTEREST		
20	TOTAL VARIABLE COSTS	\$ 95.80	119.68
21	RETURN OVER VARIABLE COSTS	167.53	223.50
	<u>ALLOCATED COSTS (VARIABLE & FIXED)</u>		
31	FARM POWER & MACHINERY - OWNERSHIP	\$ 19.44	17.12
32	FARM POWER & MACHINERY - OPERATION	34.62	29.49
33	BUILDING & FENCE COST	11.21	5.08
34	IRRIGATION OWNERSHIP COST	20.13	4.30
35	LAND OWNERSHIP COST		
36	LAND OPPORTUNITY OWNERSHIP COST		
37	LAND COST	26.27	50.63
38	UTILITIES & GENERAL FARM EXPENSE	8.13	8.89
39	HIRED LABOR	2.46	2.95
41	ACTUAL NON-REAL ESTATE INTEREST ALLOCATED	7.14	6.72
42	TOTAL ALLOCATED COSTS	\$ 129.40	125.18
43	TOTAL LISTED COSTS	\$ 225.20	244.86
44	RETURN OVER LISTED COSTS	\$ 38.13	98.32

	<u>SUPPLEMENTARY MANAGEMENT INFORMATION</u>		
51	TOTAL COST ADJ TO A MIN 7% INTEREST	\$ 236.51	249.21
52	WORK UNITS ASSIGNED / ACRE	.65	.65
53	POWER COST ALLOCATION FACTOR	.99	1.00
54	TOTAL LISTED COST / UNIT OF PRODUCTION	\$ 2.15	1.85
55	TOTAL ADJUSTED COST / UNIT OF PRODUCTION	\$ 2.26	1.89
56	CASH VARIABLE COST / UNIT OF PRODUCTION	\$ 1.41	1.27
57	RETURN OVER LISTED COSTS PER UNIT	\$.36	.74
58	BREAKEVEN YIELD / UNIT OF PRODUCTION (XX.X)	89.7	94.2
59	TOTAL ACRE IN. WATER APPLIED	8.50	10.38
60	COST OF IRRIGATION*	\$ 43.45	21.39
61	AVERAGE PRICE RECEIVED / UNIT SOLD		
62	QUANTITY SOLD (O.S.)		

* DOES NOT INCLUDE INTEREST COSTS

TABLE - 10 - CROP DATA FOR SOYBEANS - 1988

OWNED ACRES

ITEMS		AVERAGE OF 17 FARMS	HIGH 8 FARMS	LOW 8 FARMS
3	ACRES	34.4	27.4	40.3
		-----	PER ACRE	-----
4	YIELD	18.9	27.6	12.9
5	VALUE PER UNIT	\$ 7.19	7.16	7.21
6	CROP PRODUCT RETURN	135.49	197.37	92.83
7	OTHER CROP INCOME			
8	TOTAL CROP RETURN	\$ 135.49	197.37	92.83
<u>VARIABLE COSTS</u>				
10	FERTILIZER	\$ 13.62	8.10	16.55
11	CHEMICALS	18.22	19.38	17.32
12	SEED	12.53	13.47	13.85
13	CROP DRYING	.57		1.07
14	CROP INSURANCE			
15	OTHER EXPENSES	.32	.73	.10
16	SPECIAL HIRED LABOR	1.15	3.10	
17	CUSTOM WORK HIRED & LEASE EXPENSE	2.01	5.44	
18	IRRIGATION OPERATION			
19	ASSIGNED INTEREST			
20	TOTAL VARIABLE COSTS	\$ 48.52	50.22	48.88
21	RETURN OVER VARIABLE COSTS	87.07	147.15	43.95
<u>ALLOCATED COSTS (VARIABLE & FIXED)</u>				
31	FARM POWER & MACHINERY - OWNERSHIP	\$ 21.70	22.08	16.63
32	FARM POWER & MACHINERY - OPERATION	22.79	25.91	18.14
33	BUILDING & FENCE COST	6.18	7.77	5.76
34	IRRIGATION OWNERSHIP COST			
35	LAND OWNERSHIP COST **			
36	LAND OPPORTUNITY OWNERSHIP COST **			
37	LAND COST	43.71	33.04	51.64
38	UTILITIES & GENERAL FARM EXPENSE	5.98	5.55	6.40
39	HIRED LABOR	4.43	1.24	6.87
41	ACTUAL NON-REAL ESTATE INTEREST ALLOCATED	17.56	17.52	15.68
42	TOTAL ALLOCATED COSTS	\$ 122.35	113.11	121.12
43	TOTAL LISTED COSTS	\$ 170.77	163.33	170.00
44	RETURN OVER LISTED COSTS	\$ -35.28	34.04	-77.17

<u>SUPPLEMENTARY MANAGEMENT INFORMATION</u>				
51	TOTAL COST ADJ TO A MIN 7% INTEREST	\$ 159.83	150.15	160.27
52	WORK UNITS ASSIGNED / ACRE	.45	.45	.45
53	POWER COST ALLOCATION FACTOR	1.00	1.00	1.00
54	TOTAL LISTED COST / UNIT OF PRODUCTION	\$ 9.04	5.92	13.18
55	TOTAL ADJUSTED COST / UNIT OF PRODUCTION	\$ 8.48	5.45	12.45
56	CASH VARIABLE COST / UNIT OF PRODUCTION	\$ 5.25	3.64	7.44
57	RETURN OVER LISTED COSTS PER UNIT	\$ -1.87	1.23	-5.98
58	BREAKEVEN YIELD / UNIT OF PRODUCTION (XX.X)	23.8	22.8	23.6
59	TOTAL ACRE IN. WATER APPLIED			
60	COST OF IRRIGATION*			
61	AVERAGE PRICE RECEIVED / UNIT SOLD			
62	QUANTITY SOLD (O.S.)			

* DOES NOT INCLUDE INTEREST COSTS

** THE LARGER OF THE OWNERSHIP (LINE 35) OR THE OPPORTUNITY (LINE 36) COST IS LISTED AS THE LAND COST ON LINE 37.

TABLE 10 - CROP DATA FOR ALFALFA HAY - 1988

ITEMS	OWNED ACRES		
	AVERAGE OF 155 FARMS	HIGH 31 FARMS	LOW 31 FARMS
3 ACRES	49.2	71.2	35.2
	-----	PER ACRE	-----
4 YIELD	1.9	3.3	.7
5 VALUE PER UNIT	\$ 85.46	83.29	90.00
6 CROP PRODUCT RETURN	165.02	272.57	58.81
7 OTHER CROP INCOME	.49	.24	.57
8 TOTAL CROP RETURN	\$ 165.51	272.81	59.38
<u>VARIABLE COSTS</u>			
10 FERTILIZER	\$ 16.57	15.15	16.51
11 CHEMICALS	.30	.11	.34
12 SEED	5.30	4.90	5.91
13 CROP DRYING			
14 CROP INSURANCE			
15 OTHER EXPENSES	2.05	2.60	.99
16 SPECIAL HIRED LABOR	.45	.15	.80
17 CUSTOM WORK HIRED & LEASE EXPENSE	1.30	1.63	.77
18 IRRIGATION OPERATION			
19 ASSIGNED INTEREST			
20 TOTAL VARIABLE COSTS	\$ 25.98	24.55	25.31
21 RETURN OVER VARIABLE COSTS	139.53	248.26	34.07
<u>ALLOCATED COSTS (VARIABLE & FIXED)</u>			
31 FARM POWER & MACHINERY - OWNERSHIP	\$ 18.37	15.59	15.31
2 FARM POWER & MACHINERY - OPERATION	31.38	32.35	28.44
33 BUILDING & FENCE COST	6.67	5.29	7.73
34 IRRIGATION OWNERSHIP COST			
35 LAND OWNERSHIP COST **			
36 LAND OPPORTUNITY OWNERSHIP COST **			
37 LAND COST	31.61	26.10	27.44
38 UTILITIES & GENERAL FARM EXPENSE	6.99	6.70	6.79
39 HIRED LABOR	5.61	4.65	2.67
41 ACTUAL NON-REAL ESTATE INTEREST ALLOCATED	11.46	9.38	13.75
42 TOTAL ALLOCATED COSTS	\$ 112.09	100.06	102.13
43 TOTAL LISTED COSTS	\$ 138.07	124.61	127.44
44 RETURN OVER LISTED COSTS	\$ 27.44	148.20	-68.06

<u>SUPPLEMENTARY MANAGEMENT INFORMATION</u>			
51 TOTAL COST ADJ TO A MIN 7% INTEREST	\$ 134.78	124.21	121.59
52 WORK UNITS ASSIGNED / ACRE	.60	.60	.60
53 POWER COST ALLOCATION FACTOR	.99	1.00	.94
54 TOTAL LISTED COST / UNIT OF PRODUCTION	\$ 72.67	37.76	182.06
55 TOTAL ADJUSTED COST / UNIT OF PRODUCTION	\$ 69.80	37.96	186.09
56 CASH VARIABLE COST / UNIT OF PRODUCTION	\$ 42.85	23.52	109.94
57 RETURN OVER LISTED COSTS PER UNIT	\$ 14.44	44.91	-97.23
58 BREAKEVEN YIELD / UNIT OF PRODUCTION (XX.X)	1.6	1.5	1.4
59 TOTAL ACRE IN. WATER APPLIED			
60 COST OF IRRIGATION*			
61 AVERAGE PRICE RECEIVED / UNIT SOLD			
2 QUANTITY SOLD (O.S.)			

* DOES NOT INCLUDE INTEREST COSTS

** THE LARGER OF THE OWNERSHIP (LINE 35) OR THE OPPORTUNITY (LINE 36) COST IS LISTED AS THE LAND COST ON LINE 37.

TABLE 10 - CROP DATA FOR ALFALFA HAY - 1988

ITEMS	RENTED ACRES		
	AVERAGE OF 72 FARMS	HIGH 14 FARMS	LOW 14 FARMS
3 ACRES	33.9	84.2	29.1
	-----	PER ACRE	-----
4 YIELD	2.1	3.2	.6
5 VALUE PER UNIT	\$ 82.51	86.79	90.24
6 CROP PRODUCT RETURN	170.38	274.18	52.71
7 OTHER CROP INCOME	.12		.79
8 TOTAL CROP RETURN	\$ 170.50	274.18	53.50
<u>VARIABLE COSTS</u>			
10 FERTILIZER	\$ 16.90	13.03	22.27
11 CHEMICALS	.27	.49	.21
12 SEED	5.75	5.96	7.15
13 CROP DRYING			
14 CROP INSURANCE			
15 OTHER EXPENSES	2.18	2.08	1.58
16 SPECIAL HIRED LABOR	.56		
17 CUSTOM WORK HIRED & LEASE EXPENSE	.91	.70	.10
18 IRRIGATION OPERATION			
19 ASSIGNED INTEREST			
20 TOTAL VARIABLE COSTS	\$ 26.58	22.26	31.31
21 RETURN OVER VARIABLE COSTS	143.92	251.92	22.19
<u>ALLOCATED COSTS (VARIABLE & FIXED)</u>			
31 FARM POWER & MACHINERY - OWNERSHIP	\$ 18.32	16.31	12.78
32 FARM POWER & MACHINERY - OPERATION	30.29	29.87	27.00
33 BUILDING & FENCE COST	5.01	3.92	5.00
34 IRRIGATION OWNERSHIP COST			
35 LAND OWNERSHIP COST			
36 LAND OPPORTUNITY OWNERSHIP COST			
37 LAND COST **	27.68	13.82	17.14
38 UTILITIES & GENERAL FARM EXPENSE	6.34	6.92	6.01
39 HIRED LABOR	5.72	5.87	3.85
41 ACTUAL NON-REAL ESTATE INTEREST ALLOCATED	8.91	7.78	8.28
42 TOTAL ALLOCATED COSTS	\$ 102.27	79.53	80.67
43 TOTAL LISTED COSTS	\$ 128.85	106.83	111.98
44 RETURN OVER LISTED COSTS	\$ 41.65	167.35	-58.48

<u>SUPPLEMENTARY MANAGEMENT INFORMATION</u>			
51 TOTAL COST ADJ TO A MIN 7% INTEREST	\$ 129.03	112.30	108.83
52 WORK UNITS ASSIGNED / ACRE	.60	.60	.60
53 POWER COST ALLOCATION FACTOR	.99	1.00	.95
54 TOTAL LISTED COST / UNIT OF PRODUCTION	\$ 61.36	33.38	186.63
55 TOTAL ADJUSTED COST / UNIT OF PRODUCTION	\$ 62.49	35.09	186.29
56 CASH VARIABLE COST / UNIT OF PRODUCTION	\$ 37.07	22.72	127.43
57 RETURN OVER LISTED COSTS PER UNIT	\$ 19.83	52.30	-97.47
58 BREAKEVEN YIELD / UNIT OF PRODUCTION (XX.X)	1.6	1.2	1.2
59 TOTAL ACRE IN. WATER APPLIED			
60 COST OF IRRIGATION*			
61 AVERAGE PRICE RECEIVED / UNIT SOLD			
62 QUANTITY SOLD (O.S.)			

* DOES NOT INCLUDE INTEREST COSTS

** THE LAND COST ON THIS TABLE IS THE ACTUAL RENT PAID FOR THE PROPERTY.

TABLE 10 - CROP DATA FOR MEDIUM RED CLOVER HAY - 1988

ITEMS	OWNED ACRES		
	AVERAGE OF 16 FARMS	HIGH 8 FARMS	LOW 8 FARMS
3 ACRES	19.2	23.5	14.9
	-----	PER ACRE	-----
4 YIELD	.9	1.3	.3
5 VALUE PER UNIT	\$ 72.78	71.61	79.80
6 CROP PRODUCT RETURN	68.23	94.47	26.78
7 OTHER CROP INCOME			
8 TOTAL CROP RETURN	\$ 68.23	94.47	26.78
<u>VARIABLE COSTS</u>			
10 FERTILIZER	\$ 10.99	11.32	10.40
11 CHEMICALS			
12 SEED	7.76	5.57	7.99
13 CROP DRYING			
14 CROP INSURANCE			
15 OTHER EXPENSES	1.20	1.91	.07
16 SPECIAL HIRED LABOR			
17 CUSTOM WORK HIRED & LEASE EXPENSE			.07
18 IRRIGATION OPERATION			
19 ASSIGNED INTEREST			
20 TOTAL VARIABLE COSTS	\$ 19.95	20.81	18.52
21 RETURN OVER VARIABLE COSTS	48.28	73.66	8.26
<u>ALLOCATED COSTS (VARIABLE & FIXED)</u>			
31 FARM POWER & MACHINERY - OWNERSHIP	\$ 20.78	20.68	20.94
32 FARM POWER & MACHINERY - OPERATION	19.48	18.17	21.54
33 BUILDING & FENCE COST	3.23	3.36	3.02
34 IRRIGATION OWNERSHIP COST			
35 LAND OWNERSHIP COST **			
36 LAND OPPORTUNITY OWNERSHIP COST **			
37 LAND COST	43.96	47.96	37.66
38 UTILITIES & GENERAL FARM EXPENSE	4.22	4.81	3.29
39 HIRED LABOR	3.59	5.28	1.01
41 ACTUAL NON-REAL ESTATE INTEREST ALLOCATED	7.45	6.13	9.60
42 TOTAL ALLOCATED COSTS	\$ 102.71	106.39	97.06
43 TOTAL LISTED COSTS	\$ 122.66	127.20	115.58
44 RETURN OVER LISTED COSTS	\$ -54.43	-32.73	-88.80

<u>SUPPLEMENTARY MANAGEMENT INFORMATION</u>			
51 TOTAL COST ADJ TO A MIN 7% INTEREST	\$ 118.33	122.68	111.48
52 WORK UNITS ASSIGNED / ACRE	.40	.40	.40
53 POWER COST ALLOCATION FACTOR	.96	1.00	.93
54 TOTAL LISTED COST / UNIT OF PRODUCTION	\$ 136.29	97.85	385.27
55 TOTAL ADJUSTED COST / UNIT OF PRODUCTION	\$ 126.22	93.00	332.20
56 CASH VARIABLE COST / UNIT OF PRODUCTION	\$ 60.77	42.46	179.87
57 RETURN OVER LISTED COSTS PER UNIT	\$ -60.48	-25.18	-296.00
58 BREAKEVEN YIELD / UNIT OF PRODUCTION (XX.X)	1.7	1.8	1.4
59 TOTAL ACRE IN. WATER APPLIED			
60 COST OF IRRIGATION*			
61 AVERAGE PRICE RECEIVED / UNIT SOLD			
62 QUANTITY SOLD (O.S.)			

* DOES NOT INCLUDE INTEREST COSTS

** THE LARGER OF THE OWNERSHIP (LINE 35) OR THE OPPORTUNITY (LINE 36) COST IS LISTED AS THE LAND COST ON LINE 37.

TABLE 10 - CROP DATA FOR OTHER GRASS HAY - 1988

ITEMS	RENTED ACRES		
	AVERAGE	HIGH	LOW
	OF 54 FARMS	10 FARMS	10 FARMS ^c
3 ACRES	34.6	15.8	29.8
	-----	PER ACRE	-----
4 YIELD	1.0	3.5	.3
5 VALUE PER UNIT	\$ 46.66	40.82	60.90
6 CROP PRODUCT RETURN	47.20	144.68	20.44
7 OTHER CROP INCOME			
8 TOTAL CROP RETURN	\$ 47.20	144.68	20.44
<u>VARIABLE COSTS</u>			
10 FERTILIZER	\$ 2.63		.77
11 CHEMICALS			
12 SEED	.46	2.09	.10
13 CROP DRYING			
14 CROP INSURANCE			
15 OTHER EXPENSES	1.27	5.95	.44
16 SPECIAL HIRED LABOR	.52		
17 CUSTOM WORK HIRED & LEASE EXPENSE	.20		.10
18 IRRIGATION OPERATION			
19 ASSIGNED INTEREST			
20 TOTAL VARIABLE COSTS	\$ 5.09	8.04	1.41
21 RETURN OVER VARIABLE COSTS	42.11	136.64	19.03
<u>ALLOCATED COSTS (VARIABLE & FIXED)</u>			
31 FARM POWER & MACHINERY - OWNERSHIP	\$ 11.53	8.67	10.57
32 FARM POWER & MACHINERY - OPERATION	16.04	19.05	18.07
33 BUILDING & FENCE COST	2.54	3.10	3.22
34 IRRIGATION OWNERSHIP COST			
35 LAND OWNERSHIP COST			
36 LAND OPPORTUNITY OWNERSHIP COST			
37 LAND COST **	13.61	17.90	10.40
38 UTILITIES & GENERAL FARM EXPENSE	2.86	3.54	2.38
39 HIRED LABOR	1.21	1.46	.57
41 ACTUAL NON-REAL ESTATE INTEREST ALLOCATED	6.88	6.65	8.66
42 TOTAL ALLOCATED COSTS	\$ 54.67	60.37	53.82
43 TOTAL LISTED COSTS	\$ 59.76	68.41	55.23
44 RETURN OVER LISTED COSTS	\$ -12.56	76.27	-34.79

<u>SUPPLEMENTARY MANAGEMENT INFORMATION</u>			
51 TOTAL COST ADJ TO A MIN 7% INTEREST	\$ 57.05	49.81	51.64
52 WORK UNITS ASSIGNED / ACRE	.30	.30	.30
53 POWER COST ALLOCATION FACTOR	.99	.94	1.00
54 TOTAL LISTED COST / UNIT OF PRODUCTION	\$ 59.76	19.55	184.10
55 TOTAL ADJUSTED COST / UNIT OF PRODUCTION	\$ 56.40	14.05	153.90
56 CASH VARIABLE COST / UNIT OF PRODUCTION	\$ 32.08	11.07	103.47
57 RETURN OVER LISTED COSTS PER UNIT	\$ -12.56	21.79	-115.97
58 BREAKEVEN YIELD / UNIT OF PRODUCTION (XX.X)	1.3	1.7	.9
59 TOTAL ACRE IN. WATER APPLIED			
60 COST OF IRRIGATION*			
61 AVERAGE PRICE RECEIVED / UNIT SOLD			
62 QUANTITY SOLD (O.S.)			

* DOES NOT INCLUDE INTEREST COSTS

** THE LAND COST ON THIS TABLE IS THE ACTUAL RENT PAID FOR THE PROPERTY.

TABLE 10 - CROP DATA FOR LEGUME-GRASS MIX HAY - 1988

		OWNED ACRES		
ITEMS		AVERAGE	HIGH	LOW
		OF 99	19	19
		FARMS	FARMS	FARMS
3	ACRES	53.3	56.1	42.3
		-----	PER ACRE	-----
4	YIELD	1.3	2.2	.5
5	VALUE PER UNIT	\$ 59.28	59.72	72.30
6	CROP PRODUCT RETURN	76.74	134.14	34.18
7	OTHER CROP INCOME	1.44		.19
8	TOTAL CROP RETURN	\$ 78.18	134.14	34.37
	<u>VARIABLE COSTS</u>			
10	FERTILIZER	\$ 6.00	8.36	1.80
11	CHEMICALS	.53		.09
12	SEED	2.85	.73	2.60
13	CROP DRYING			
14	CROP INSURANCE			
15	OTHER EXPENSES	1.59	1.62	1.28
16	SPECIAL HIRED LABOR	.02		.14
17	CUSTOM WORK HIRED & LEASE EXPENSE	.47	1.02	.28
18	IRRIGATION OPERATION			
19	ASSIGNED INTEREST			
20	TOTAL VARIABLE COSTS	\$ 11.46	11.73	6.19
21	RETURN OVER VARIABLE COSTS	66.72	122.41	28.18
	<u>ALLOCATED COSTS (VARIABLE & FIXED)</u>			
31	FARM POWER & MACHINERY - OWNERSHIP	\$ 12.57	12.07	11.11
32	FARM POWER & MACHINERY - OPERATION	20.17	17.72	19.91
33	BUILDING & FENCE COST	3.85	3.85	4.52
34	IRRIGATION OWNERSHIP COST			
35	LAND OWNERSHIP COST **			
36	LAND OPPORTUNITY OWNERSHIP COST **			
37	LAND COST	21.65	22.34	26.45
38	UTILITIES & GENERAL FARM EXPENSE	4.32	3.98	4.49
39	HIRED LABOR	2.70	2.96	3.19
41	ACTUAL NON-REAL ESTATE INTEREST ALLOCATED	6.60	5.88	9.83
42	TOTAL ALLOCATED COSTS	\$ 71.86	68.80	79.50
43	TOTAL LISTED COSTS	\$ 83.32	80.53	85.69
44	RETURN OVER LISTED COSTS	\$ -5.14	53.61	-51.32

	<u>SUPPLEMENTARY MANAGEMENT INFORMATION</u>			
51	TOTAL COST ADJ TO A MIN 7% INTEREST	\$ 81.61	79.29	78.44
52	WORK UNITS ASSIGNED / ACRE	.40	.40	.40
53	POWER COST ALLOCATION FACTOR	1.00	1.00	1.00
54	TOTAL LISTED COST / UNIT OF PRODUCTION	\$ 64.09	36.60	171.38
55	TOTAL ADJUSTED COST / UNIT OF PRODUCTION	\$ 63.04	35.30	165.90
56	CASH VARIABLE COST / UNIT OF PRODUCTION	\$ 34.81	19.21	87.22
57	RETURN OVER LISTED COSTS PER UNIT	\$ -3.95	24.37	-102.64
58	BREAKEVEN YIELD / UNIT OF PRODUCTION (XX.X)	1.4	1.3	1.2
59	TOTAL ACRE IN. WATER APPLIED			
60	COST OF IRRIGATION*			
61	AVERAGE PRICE RECEIVED / UNIT SOLD			
62	QUANTITY SOLD (O.S.)			

* DOES NOT INCLUDE INTEREST COSTS

** THE LARGER OF THE OWNERSHIP (LINE 35) OR THE OPPORTUNITY COST (LINE 36) IS LISTED AS THE LAND COST ON LINE 37.

TABLE 10 - CROP DATA FOR LEGUME-GRASS SILAGE - 1988

OWNED ACRES

ITEMS		AVERAGE OF 14 FARMS	HIGH 7 FARMS	LOW 7 FARMS
3	ACRES	43.9	45.4	42.3
4	YIELD	2.6	3.4	1.7
5	VALUE PER UNIT	\$ 50.08	46.14	58.34
6	CROP PRODUCT RETURN	128.91	155.48	100.69
7	OTHER CROP INCOME			
8	TOTAL CROP RETURN	\$ 128.91	155.48	100.69
<u>VARIABLE COSTS</u>				
10	FERTILIZER	\$ 21.55	23.41	19.62
11	CHEMICALS	.93	1.81	
12	SEED	6.72	5.64	7.87
13	CROP DRYING			
14	CROP INSURANCE			
15	OTHER EXPENSES			
16	SPECIAL HIRED LABOR			
17	CUSTOM WORK HIRED & LEASE EXPENSE	.14	.26	
18	IRRIGATION OPERATION			
19	ASSIGNED INTEREST			
20	TOTAL VARIABLE COSTS	\$ 29.34	31.12	27.49
21	RETURN OVER VARIABLE COSTS	99.57	124.36	73.20
<u>ALLOCATED COSTS (VARIABLE & FIXED)</u>				
31	FARM POWER & MACHINERY - OWNERSHIP	\$ 11.73	12.80	10.61
32	FARM POWER & MACHINERY - OPERATION	31.14	33.59	28.58
33	BUILDING & FENCE COST	3.94	5.97	1.86
34	IRRIGATION OWNERSHIP COST			
35	LAND OWNERSHIP COST **			
36	LAND OPPORTUNITY OWNERSHIP COST **			
37	LAND COST	44.67	34.08	56.13
38	UTILITIES & GENERAL FARM EXPENSE	5.95	6.74	5.08
39	HIRED LABOR	6.33	7.71	4.89
41	ACTUAL NON-REAL ESTATE INTEREST ALLOCATED	13.33	12.33	14.40
42	TOTAL ALLOCATED COSTS	\$ 117.09	113.22	121.49
43	TOTAL LISTED COSTS	\$ 146.43	144.34	148.98
44	RETURN OVER LISTED COSTS	\$ -17.52	11.14	-48.29

<u>SUPPLEMENTARY MANAGEMENT INFORMATION</u>				
51	TOTAL COST ADJ TO A MIN 7% INTEREST	\$ 125.13	137.05	112.62
52	WORK UNITS ASSIGNED / ACRE	.40	.40	.40
53	POWER COST ALLOCATION FACTOR	.97	1.00	.94
54	TOTAL LISTED COST / UNIT OF PRODUCTION	\$ 56.32	42.45	87.64
55	TOTAL ADJUSTED COST / UNIT OF PRODUCTION	\$ 48.61	40.67	65.26
56	CASH VARIABLE COST / UNIT OF PRODUCTION	\$ 33.11	26.91	47.32
57	RETURN OVER LISTED COSTS PER UNIT	\$ -6.74	3.28	-28.41
58	BREAKEVEN YIELD / UNIT OF PRODUCTION (XX.X)	2.9	3.1	2.6
59	TOTAL ACRE IN. WATER APPLIED			
60	COST OF IRRIGATION*			
61	AVERAGE PRICE RECEIVED / UNIT SOLD			
62	QUANTITY SOLD (O.S.)			

* DOES NOT INCLUDE INTEREST COSTS

** THE LARGER OF THE OWNERSHIP (LINE 35) OR THE OPPORTUNITY COST (LINE 36) IS LISTED AS THE LAND COST ON LINE 37.

TABLE 10 - CROP DATA FOR CORN SILAGE - 1988

ITEMS	OWNED ACRES		
	AVERAGE OF 190 FARMS	HIGH 38 FARMS	LOW 38 FARMS
3 ACRES	48.2	32.0	59.1
	-----	PER ACRE	-----
4 YIELD	5.5	10.7	2.6
5 VALUE PER UNIT	\$ 19.41	19.63	18.99
6 CROP PRODUCT RETURN	106.29	209.78	48.51
7 OTHER CROP INCOME			
8 TOTAL CROP RETURN	\$ 106.29	209.78	48.51
<u>VARIABLE COSTS</u>			
10 FERTILIZER	\$ 27.45	30.28	23.98
11 CHEMICALS	12.78	10.44	13.21
12 SEED	14.44	14.47	13.42
13 CROP DRYING			.03
14 CROP INSURANCE	.39	.31	.19
15 OTHER EXPENSES	.44	.03	.59
16 SPECIAL HIRED LABOR	.48	.56	.05
17 CUSTOM WORK HIRED & LEASE EXPENSE	1.22	1.84	.59
18 IRRIGATION OPERATION			
19 ASSIGNED INTEREST			
20 TOTAL VARIABLE COSTS	\$ 57.20	57.94	52.06
21 RETURN OVER VARIABLE COSTS	49.09	151.84	-3.55
<u>ALLOCATED COSTS (VARIABLE & FIXED)</u>			
31 FARM POWER & MACHINERY - OWNERSHIP	\$ 22.78	19.75	24.25
32 FARM POWER & MACHINERY - OPERATION	34.69	33.19	37.51
33 BUILDING & FENCE COST	6.64	6.63	7.92
34 IRRIGATION OWNERSHIP COST			
35 LAND OWNERSHIP COST **			
36 LAND OPPORTUNITY OWNERSHIP COST **			
37 LAND COST	36.02	25.15	38.26
38 UTILITIES & GENERAL FARM EXPENSE	6.89	6.50	7.11
39 HIRED LABOR	4.77	6.16	3.91
41 ACTUAL NON-REAL ESTATE INTEREST ALLOCATED	15.15	13.56	12.59
42 TOTAL ALLOCATED COSTS	\$ 126.94	110.94	131.55
43 TOTAL LISTED COSTS	\$ 184.14	168.88	183.61
44 RETURN OVER LISTED COSTS	\$ -77.85	40.90	-135.10

<u>SUPPLEMENTARY MANAGEMENT INFORMATION</u>			
51 TOTAL COST ADJ TO A MIN 7% INTEREST	\$ 176.83	162.88	180.42
52 WORK UNITS ASSIGNED / ACRE	.60	.60	.60
53 POWER COST ALLOCATION FACTOR	1.00	1.00	1.00
54 TOTAL LISTED COST / UNIT OF PRODUCTION	\$ 33.48	15.78	70.62
55 TOTAL ADJUSTED COST / UNIT OF PRODUCTION	\$ 32.28	15.24	70.62
56 CASH VARIABLE COST / UNIT OF PRODUCTION	\$ 21.58	10.97	43.53
57 RETURN OVER LISTED COSTS PER UNIT	\$ -14.15	3.82	-51.96
58 BREAKEVEN YIELD / UNIT OF PRODUCTION (XX.X)	9.5	8.6	9.7
59 TOTAL ACRE IN. WATER APPLIED			
60 COST OF IRRIGATION*			
61 AVERAGE PRICE RECEIVED / UNIT SOLD			
62 QUANTITY SOLD (O.S.)			

* DOES NOT INCLUDE INTEREST COSTS

** THE LARGER OF THE OWNERSHIP (LINE 35) OR THE OPPORTUNITY COST (LINE 36) IS LISTED AS THE LAND COST ON LINE 37.

TABLE 10 - CROP DATA FOR CORN FOR SILAGE - 1988

ITEMS	RENTED ACRES		
	AVERAGE OF 123 FARMS	HIGH 24 FARMS	LOW 24 FARMS
3 ACRES	29.2	25.4	29.3
	-----	PER ACRE	-----
4 YIELD	5.0	9.5	2.0
5 VALUE PER UNIT	\$ 19.35	19.60	19.08
6 CROP PRODUCT RETURN	96.75	185.98	39.08
7 OTHER CROP INCOME			
8 TOTAL CROP RETURN	\$ 96.75	185.98	39.08
<u>VARIABLE COSTS</u>			
10 FERTILIZER	\$ 27.91	27.32	22.56
11 CHEMICALS	13.05	13.03	12.66
12 SEED	13.87	14.80	11.98
13 CROP DRYING	.41	.43	.03
14 CROP INSURANCE			
15 OTHER EXPENSES	.41	1.14	.07
16 SPECIAL HIRED LABOR	.41	.79	
17 CUSTOM WORK HIRED & LEASE EXPENSE	1.64	4.06	.27
18 IRRIGATION OPERATION			
19 ASSIGNED INTEREST			
20 TOTAL VARIABLE COSTS	\$ 57.71	61.57	47.58
21 RETURN OVER VARIABLE COSTS	39.04	124.41	-8.50
<u>ALLOCATED COSTS (VARIABLE & FIXED)</u>			
31 FARM POWER & MACHINERY - OWNERSHIP	\$ 23.29	21.34	18.74
32 FARM POWER & MACHINERY -- OPERATION	34.18	32.52	33.27
33 BUILDING & FENCE COST	6.16	4.80	9.61
34 IRRIGATION OWNERSHIP COST			
35 LAND OWNERSHIP COST			
36 LAND OPPORTUNITY OWNERSHIP COST			
37 LAND COST **	23.34	9.21	18.17
38 UTILITIES & GENERAL FARM EXPENSE	6.88	6.77	7.03
39 HIRED LABOR	5.17	6.10	5.94
41 ACTUAL NON-REAL ESTATE INTEREST ALLOCATED	12.95	15.55	11.74
42 TOTAL ALLOCATED COSTS	\$ 111.97	96.29	104.52
43 TOTAL LISTED COSTS	\$ 169.68	157.86	152.10
44 RETURN OVER LISTED COSTS	\$ -72.93	28.12	-113.02

<u>SUPPLEMENTARY MANAGEMENT INFORMATION</u>			
51 TOTAL COST ADJ TO A MIN 7% INTEREST	\$ 168.53	163.82	145.29
52 WORK UNITS ASSIGNED / ACRE	.60	.60	.60
53 POWER COST ALLOCATION FACTOR	1.00	1.00	1.00
54 TOTAL LISTED COST / UNIT OF PRODUCTION	\$ 33.94	16.62	76.05
55 TOTAL ADJUSTED COST / UNIT OF PRODUCTION	\$ 33.71	17.27	70.95
56 CASH VARIABLE COST / UNIT OF PRODUCTION	\$ 23.38	12.90	52.75
57 RETURN OVER LISTED COSTS PER UNIT	\$ -14.59	2.96	-56.51
58 BREAKEVEN YIELD / UNIT OF PRODUCTION (XX.X)	8.8	8.1	8.0
59 TOTAL ACRE IN. WATER APPLIED			
60 COST OF IRRIGATION*			
61 AVERAGE PRICE RECEIVED / UNIT SOLD			
62 QUANTITY SOLD (O.S.)			

* DOES NOT INCLUDE INTEREST COSTS

** THE LAND COST ON THIS TABLE IS THE ACTUAL RENT PAID FOR THE PROPERTY.

COSTS AND RETURNS FROM LIVESTOCK ENTERPRISES

Productive livestock enterprises are an important part of many farm businesses in Minnesota. Farms involved in this report may have one or more livestock enterprises. The following tables pertain to these livestock enterprises.

Since feed is the largest single item of cost for all classes of livestock, return over feed costs has been used to classify farm livestock enterprises into high, low and average groups.

Other cash costs relatively easy to identify and classify in the farm records are listed in each of the tables as other direct costs.

Allocated costs include interest charges to the enterprise, allocated charges for hired labor, utilities, power and machinery, livestock equipment, and building and fence costs. These costs are allocated to each livestock enterprise by the computer using a carefully devised formula to make the proper allocations.

Each enterprise table includes supplementary management information. This information can provide clues indicating the strengths and weaknesses of each enterprise.

TABLE 11A - HOGS, FARROW TO FINISH - 1988

				AVERAGE OF 13 FARMS
1	PRODUCTION			1162
2	NET INCREASE IN VALUE: HOGS*	\$	PER CWT	/LITTER
3	OTHER MISCELLANEOUS INCOME			
4	TOTAL VALUE PRODUCED	\$	43.08	500.57
	<u>FEED FED: QUANTITY & COST</u>		<u>LBS/CWT</u>	
6	CORN		194.07	\$ 7.88 91.55
7	OTHER GRAIN		43.52	2.13 24.72
8	COMPLETE RATION		86.86	4.96 57.64
9	PROT., SALT, MIN.		33.94	8.13 94.45
10	TOTAL GRAIN MIX		358.39	23.10 268.36
11	FORAGES		26.62	.64 7.40
12	PASTURE			.07 .81
13	TOTAL FEED COST	\$	23.81	276.57
14	RETURN OVER FEED COSTS		19.27	224.00
	<u>OTHER DIRECT COSTS</u>			
16	VETERINARY		.76	8.87
17	BREEDING			
18	MISCELLANEOUS		.67	7.77
19	CUSTOM WORK & LEASE		.75	8.68
20	SPECIAL HIRED LABOR		.07	.83
21	ASSIGNED INTEREST			
22	TOTAL OTHER DIRECT COSTS	\$	2.25	26.15
23	TOTAL DIRECT COSTS INCL FEED	\$	26.06	302.72
24	RETURN OVER ALL DIRECT COSTS		17.02	197.85
	<u>ALLOCATED COSTS</u>			
27	ACT INT PD LESS INT ASSIGNED-L21	\$	2.18	25.31
28	GENERAL HIRED LABOR		.93	10.80
29	UTILITIES & MISCELLANEOUS		1.31	15.26
30	POWER & MACHINERY PCAF 1.00		1.02	11.81
31	LIVESTOCK EQUIPMENT ECAF 1.00		1.51	17.54
32	BUILDINGS & FENCES BCAF 1.00		2.94	34.20
33	TOTAL ALLOCATED COSTS		9.89	114.92
34	TOTAL ACTUAL LISTED COSTS		35.95	417.64
35	RETURN OVER ACTUAL LISTED COSTS		7.13	82.93
36	TOTAL COSTS ADJ TO 7% MIN INT.	\$	36.73	426.79
37	RETURN OVER LISTED & 7% OPPORTUNITY			
38	INTEREST COST		6.35	73.78
***** SUPPLEMENTARY MANAGEMENT INFORMATION *****				
40	RETURN/\$100 FEED FED	\$	180.99	
41	AVE WT./MKT. HOG SOLD		228	
42	PRICE REC'D/CWT. MKT HOGS	\$	44.23	
43	TOTAL NO. LITTERS FARROWED		47	
44	LITTERS/SOW/YEAR		1.62	
45	NO. PIGS BORN/LITTER		9.06	
46	NO. PIGS WEAN/LITTER		7.47	
47	NO. PIGS PRODUCED/SOW/YEAR		11.34	
48	LITTERS/CRATE/YEAR		5.22	
49	PIGS WEANED/CRATE/YEAR		39.00	
50	MKT. ANIMAL DEATH LOSS AS % OF TOTAL			
51	BREEDING HERD DEATH LOSS 4.50		4.50	
52	PRICE/CWT. GRAIN MIX FED	\$	6.44	
53	PRICE/CWT. PROT., SALT, MIN.	\$	23.96	
54	FARROWING RATE		161	

TABLE 11B - HOGS, FINISHING - 1988

				AVERAGE OF 9 FARMS	
				199.1	
1	PRODUCTION - POUNDS				
			PER CWT	PER HEAD	
2	NET INCREASE IN VALUE: HOGS*		\$ 33.67	67.04	
3	OTHER MISCELLANEOUS INCOME				
4	TOTAL VALUE PRODUCED		\$ 33.67	67.04	
	FEED FED: QUANTITY & COST	LBS/CWT			
6	CORN	243.0	\$ 9.63	19.17	
7	OTHER GRAIN	3.3	.20	.40	
8	COMPLETE RATION	71.7	5.09	10.14	
9	PROT., SALT, MIN.	70.7	10.26	20.44	
10	TOTAL GRAIN MIX	388.7	25.18	50.15	
11	FORAGES	2.7	.01	.02	
12	PASTURE				
13	TOTAL FEED COST		\$ 25.19	50.17	
14	RETURN OVER FEED COSTS		8.48	16.87	
	OTHER DIRECT COSTS				
16	VETERINARY		.37	.74	
17	MISCELLANEOUS		.21	.41	
18	CUSTOM WORK & LEASE EXPENSE		.36	.72	
19	SPECIAL HIRED LABOR				
20	ASSIGNED INTEREST		.05	.09	
21	TOTAL OTHER DIRECT COSTS		\$.99	1.96	
22	TOTAL DIRECT COSTS INCL FEED		\$ 26.18	52.13	
23	RETURN OVER ALL DIRECT COSTS		7.49	14.91	
	ALLOCATED COSTS				
26	ACT INT PD LESS INT ASSIGNED-L20		\$ 1.11	2.22	
27	GENERAL HIRED LABOR		1.67	3.32	
28	UTILITIES & MISCELLANEOUS		.96	1.92	
29	POWER & MACHINERY PCAF .93		1.18	2.36	
30	LIVESTOCK EQUIPMENT ECAF .92		1.29	2.57	
31	BUILDINGS & FENCES BCAF .96		1.25	2.48	
32	TOTAL ALLOCATED COSTS		\$ 7.46	14.87	
33	TOTAL ACTUAL LISTED COSTS		\$ 33.64	67.00	
34	RETURN OVER ACTUAL LISTED COSTS		.03	.04	
35	TOTAL COSTS ADJ TO 7% MIN INT.		\$ 35.28	70.25	
36	RETURN OVER LISTED & 7% OPPORTUNITY				
37	INTEREST COST		-1.61	-3.21	
***** SUPPLEMENTARY MANAGEMENT INFORMATION *****					
39	RETURN/\$100 FEED FED		\$ 133.62		
40	AVE WT./MKT. HOG SOLD		239.45		
41	PRICE REC'D/CWT. MKT HOGS		\$ 43.82		
42	AVE. WEIGHT/PIG PURCHASED		37.79		
43	AVE. PRICE/PIG PURCHASED		\$ 34.60		
44	NO. PIGS PURCHASED		329		
45	NO. PIGS TRANSFERRED OUT/IN		194		
46	POUNDS OF PORK PURCHASED		12434		
47	AVE NUMBER OF PIGS ON HAND		179.1		
48	PERCENT DEATH LOSS		4.23		
49	EFFECTIVE DAILY GAIN		1.39		
50	PRICE/CWT. GRAIN MIX FED		\$ 6.48		
51	PRICE/CWT. PROT., SALT, MIN.		\$ 14.52		
52	NUMBER OF PIGS PRODUCED		455		

TABLE 11C - HOGS, WEANING PIG PRODUCTION - 1988

AVERAGE OF 18 FARMS

1	PRODUCTION	651	93
		PER HEAD	/LITTER
2	NET INCREASE IN VALUE: HOGS*	\$ 41.94	293.58
3	OTHER MISCELLANEOUS INCOME		
4	TOTAL VALUE PRODUCED	\$ 41.94	293.58
	FEED FED: QUANTITY & COST		
		LBS/CWT	
6	CORN	241.57	\$ 7.67 53.69
7	OTHER GRAIN	25.79	.96 6.70
8	COMPLETE RATION	155.37	10.33 72.33
9	PROT., SALT, MIN.	75.07	8.45 59.18
10	TOTAL GRAIN MIX	497.80	27.41 191.90
11	FORAGES	4.19	.11 .77
12	PASTURE		
13	TOTAL FEED COST	\$ 27.52	192.67
14	RETURN OVER FEED COSTS	14.42	100.91
	OTHER DIRECT COSTS		
16	VETERINARY	1.12	7.82
17	BREEDING		
18	MISCELLANEOUS	1.15	8.04
19	CUSTOM WORK & LEASE	.33	2.30
20	SPECIAL HIRED LABOR		
21	ASSIGNED INTEREST		
22	TOTAL OTHER DIRECT COSTS	\$ 2.60	18.61
23	TOTAL DIRECT COSTS INCL FEED	30.12	210.83
24	RETURN OVER ALL DIRECT COSTS	11.82	82.75
	ALLOCATED COSTS		
27	ACT INT PD LESS INT ASSIGNED-L21	\$ 2.96	20.70
28	GENERAL HIRED LABOR	2.61	18.29
29	UTILITIES & MISCELLANEOUS	2.67	18.72
30	POWER & MACHINERY PCAF 1.00	1.70	11.90
31	LIVESTOCK EQUIPMENT ECAF 1.21	2.43	17.00
32	BUILDINGS & FENCES BCAF 1.24	3.32	23.23
33	TOTAL ALLOCATED COSTS	15.69	109.84
34	TOTAL ACTUAL LISTED COSTS	\$ 45.81	320.67
35	RETURN OVER ACTUAL LISTED COSTS	-3.87	-27.09
36	TOTAL COSTS ADJ TO 7% MIN INT.	\$ 46.05	322.34
37	RETURN OVER LISTED & 7% OPPORTUNITY		
38	INTEREST COST	-4.11	-28.76
***** SUPPLEMENTARY MANAGEMENT INFORMATION *****			
40	RETURN/\$100 FEED FED	\$ 152.37	
41	AVE WT./PIG SOLD OR TRANSFER	50	
42	PRICE REC'D/PIG SOLD	\$ 38.02	
43	LITTERS/SOW/YEAR	1.7	
44	NO. PIGS BORN/LITTER	10	
45	NO. PIGS WEAN/LITTER	7.9	
46	PIGS PRODUCED/SOW/YEAR	12.1	
47	LITTERS/CRATE/YEAR	7.2	
48	PIGS WEANED/CRATE/YEAR	56.62	
49	FDR PIG DEATHS: AS % OF TOT LOSS	98.2	
50	BREEDING DEATHS: AS % OF TOT LOSS	1.8	
51	PRICE/CWT. GRAIN MIX FED	\$ 7.27	
52	PRICE/CWT. PROT., SALT, MIN.	\$ 14.87	

TABLE 12 - DAIRY COWS, COMMERCIAL - 1988

AVERAGE OF 215 FARMS

1	AVERAGE NUMBER OF COWS		48.1	
			<u>PER COW</u>	<u>PER CWT</u>
2	POUNDS OF MILK		16062	
3	POUNDS OF BUTTERFAT		581	
4	PERCENT OF BUTTERFAT IN MILK		3.62	
5	VALUE OF PRODUCE			
6	DAIRY PRODUCTS SOLD		\$ 1835.57	
7	DAIRY PRODUCTS USED IN HOME		8.13	
8	MILK FED TO LIVESTOCK		15.01	
9	NET INCREASE IN VALUE:		-105.41	
10	OTHER MISCELLANEOUS INCOME			
11	TOTAL VALUE PRODUCED		\$ 1753.30	10.92
	<u>FEED FED: QUANTITY & COST</u>	<u>LBS/CWT</u>		
13	CORN	3823	\$ 153.14	.95
14	SMALL GRAIN	210	10.71	.07
15	COMPLETE RATION	1272	107.17	.67
16	PROT., SALT, MIN.	1377	214.45	1.34
17	TOTAL GRAIN MIX	6682	485.47	3.03
18	LEGUME HAY	4666	182.95	1.14
19	OTHER DRY HAY & ROUGHAGE	605	17.88	.11
20	HAYLAGE	2431	42.60	.27
21	SILAGE	8707	75.76	.47
22	PASTURE		5.01	.03
23	TOTAL FEED COSTS		\$ 809.67	5.05
24	RETURN OVER FEED COST		\$ 943.63	5.87
	<u>OTHER DIRECT COSTS</u>			
26	VETERINARY		\$ 39.29	.24
27	BREEDING		20.40	.13
28	MISCELLANEOUS		97.28	.61
29	CUSTOM WORK & LEASE EXPENSE		56.67	.35
30	SPECIAL HIRED LABOR		5.90	.04
31	ASSIGNED INTEREST		4.84	.03
32	TOTAL OTHER DIRECT COSTS		224.38	1.40
33	TOTAL DIRECT COSTS INCL FEED		\$ 1034.05	6.45
34	RETURN OVER ALL DIRECT COSTS		\$ 719.25	4.47
	<u>ALLOCATED COSTS</u>			
37	ACT INT PD LESS INT ASSIGNED-L31		94.94	.59
38	GENERAL HIRED LABOR		75.38	.47
39	UTILITIES & MISCELLANEOUS		91.97	.57
40	POWER & MACHINERY PCAF 1.00		59.30	.37
41	LIVESTOCK EQUIPMENT ECAF 1.05		58.58	.36
42	BUILDINGS & FENCES BCAF 1.06		69.87	.44
43	TOTAL ALLOCATED COSTS		\$ 450.04	2.80
44	TOTAL ACTUAL LISTED COSTS		\$ 1484.09	9.25
45	RETURN OVER ACTUAL LISTED COSTS		\$ 269.21	1.67
46	TOTAL COSTS ADJ TO 7% MIN INT.		\$ 1487.68	9.26
47	RETURN OVER LISTED & 7% OPPORTUNITY			
48	INTEREST COST		\$ 265.62	1.66
***** SUPPLEMENTARY MANAGEMENT INFORMATION *****				
50	RETURN/\$100 FEED FED		\$ 216.55	
51	POUNDS OF MILK/POUND GRAIN MIX		2.40	
52	AVERAGE PRICE/CWT. SOLD		\$ 11.58	
53	DAIRY COW TURNOVER PERCENTAGE		41.58	
54	APPROXIMATE DRY MATTER CONSUMED/COW/DAY		39	

TABLE 12 - DAIRY COWS, COMMERCIAL - 1988

		HIGH	LOW
		43	43
		FARMS	FARMS
1	AVERAGE NUMBER OF COWS	57.0	39.7
		PER COW	PER COW
2	POUNDS OF MILK	18388	12678
3	POUNDS OF BUTTERFAT	645	469
4	PERCENT OF BUTTERFAT IN MILK	3.51	3.70
5	VALUE OF PRODUCE		
6	DAIRY PRODUCTS SOLD	\$ 2111.77	1444.48
7	DAIRY PRODUCTS USED IN HOME	12.39	6.07
8	MILK FED TO LIVESTOCK	16.02	9.19
9	NET INCREASE IN VALUE:	-83.02	-140.48
10	OTHER MISCELLANEOUS INCOME		,
11	TOTAL VALUE PRODUCED	\$ 2057.16	1319.26
12	FEED FED: QTY & COST	LBS/COW	LBS/COW
13	CORN	4612	2902
14	SMALL GRAIN	172	296
15	COMPLETE RATION	673	2188
16	PROT., SALT, MIN.	1568	810
17	TOTAL GRAIN MIX	7025	6196
18	LEGUME HAY	4852	5581
19	OTHER DRY HAY & ROUGHAGE	365	778
20	HAYLAGE	2587	2108
21	SILAGE	7873	7926
22	PASTURE	2.86	8.34
23	TOTAL FEED COSTS	\$ 798.47	789.88
24	RETURN OVER FEED COST	\$ 1258.69	529.38
	OTHER DIRECT COSTS		
26	VETERINARY	\$ 44.74	30.28
27	BREEDING	23.51	13.10
28	MISCELLANEOUS	120.05	73.12
29	CUSTOM WORK & LEASE EXPENSE	58.61	49.95
30	SPECIAL HIRED LABOR	16.61	1.44
31	ASSIGNED INTEREST	10.54	
32	TOTAL OTHER DIRECT COSTS	\$ 274.06	167.89
33	TOTAL DIRECT COSTS INCL FEED	\$ 1072.53	957.77
34	RETURN OVER ALL DIRECT COSTS	\$ 984.63	361.49
	ALLOCATED COSTS		
37	ACT INT PD LESS INT ASSIGNED-L31	\$ 98.41	115.22
38	GENERAL HIRED LABOR	91.45	62.62
39	UTILITIES & MISCELLANEOUS	98.44	86.34
40	POWER & MACHINERY PCAF 1.00	55.95	66.64
41	LIVESTOCK EQUIPMENT ECAF 1.00	77.31	51.00
42	BUILDINGS & FENCES BCAF 1.00	77.43	63.09
43	TOTAL ALLOCATED COSTS	498.99	444.91
44	TOTAL ACTUAL LISTED COSTS	1571.52	1402.68
45	RETURN OVER ACTUAL LISTED COSTS	485.64	-83.42
46	TOTAL COSTS ADJ TO 7% MIN INT.	1570.17	1385.54
47	RETURN OVER LISTED & 7% OPPORTUNITY		
48	INTEREST COST	\$ 486.99	-66.28
***** SUPPLEMENTARY MANAGEMENT INFORMATION *****			
50	RETURN/\$100 FEED FED	\$ 257.64	167.02
51	POUNDS OF MILK/POUND GRAIN MIX	2.62	2.05
52	AVERAGE PRICE/CWT. SOLD	\$ 11.64	11.52
53	DAIRY COW TURNOVER PERCENTAGE	42.11	37.78
54	APPROXIMATE DRY MATTER CONSUMED/COW/DAY	39	39

TABLE 13 - OTHER DAIRY COMMERCIAL REPLACEMENTS - 1988

		AVERAGE OF 223 FARMS	HIGH 45 FARMS	LOW 45 FARMS
1	AVERAGE NUMBER OF HEAD	56.4	53.2	55.7
2	NET INCREASE IN VALUE:	PER HEAD	PER HEAD	PER HEAD
3	OTHER MISCELLANEOUS INCOME	\$ 362.91	519.89	243.86
4	TOTAL VALUE PRODUCED	\$ 362.91	519.89	243.86
	<u>FEE</u> <u>FED</u> : <u>QUANTITY & COST</u>	<u>AVERAGE</u> <u>LBS/HEAD</u>		
6	CORN	554	\$ 22.39	20.36
7	SMALL GRAIN	88	4.84	8.68
8	COMPLETE RATION	431	27.84	33.35
9	PROT., SALT, MIN.	148	24.63	25.41
10	TOTAL GRAIN MIX	1221	79.70	87.80
11	LEGUME HAY	1218	37.98	30.19
12	OTHER DRY HAY & ROUGHAGE	1077	28.40	21.32
13	HAYLAGE	197	3.76	.94
14	SILAGE	4755	42.11	34.14
15	MILK	126	12.36	12.59
16	PASTURE		7.41	6.75
17	TOTAL FEED COSTS	\$ 211.72	193.73	252.98
18	RETURN OVER FEED COST	\$ 151.19	326.16	-9.12
	<u>OTHER DIRECT COSTS</u>			
20	VETERINARY	\$ 4.89	4.42	4.97
21	BREEDING	3.12	4.55	2.03
22	MISCELLANEOUS	5.48	5.51	5.67
23	CUSTOM WORK & LEASE EXPENSE	2.27	2.46	1.42
24	SPECIAL HIRED LABOR	.59	.30	1.27
25	ASSIGNED INTEREST	.34	.55	.20
26	TOTAL OTHER DIRECT COSTS	\$ 16.69	17.79	15.56
27	TOTAL DIRECT COSTS INCL FEED	\$ 228.41	211.52	268.54
28	RETURN OVER ALL DIRECT COSTS	\$ 134.50	308.37	-24.68
	<u>ALLOCATED COSTS</u>			
30	ACTUAL INTEREST PAID LESS			
31	INTEREST ASSIGNED-L25	\$ 15.84	19.50	13.30
32	GENERAL HIRED LABOR	15.22	12.62	10.14
33	UTILITIES & MISCELLANEOUS	16.50	15.55	16.00
34	POWER & MACHINERY PCAF 1.00	10.14	9.07	10.28
35	LIVESTOCK EQUIPMENT ECAF 1.05	10.53	9.23	10.89
36	BUILDINGS & FENCES BCAF 1.05	11.87	13.33	10.31
37	TOTAL ALLOCATED COSTS	\$ 80.10	79.30	70.92
38	TOTAL ACTUAL LISTED COSTS	\$ 308.51	290.82	339.46
39	RETURN OVER ACTUAL LISTED COSTS	54.40	229.07	-95.60
40	TOTAL COSTS ADJ TO 7% MIN INT.	340.65	325.60	366.77
41	RETURN OVER LISTED & 7% OPPORTUNITY			
42	INTEREST COST	\$ 22.26	194.29	-122.91

	<u>SUPPLEMENTARY MANAGEMENT INFORMATION</u>			
44	RETURN/\$100 FEED FED	\$ 171.41	268.37	96.39
45	PERCENT CALF DEATH LOSS	12.00	8.89	17.82

TABLE 14 - ALL DAIRY + DUAL PURPOSE CATTLE - 1988

AVERAGE OF 225 FARMS

1	AVERAGE NUMBER OF COWS	48.2		
		<u>PER COW</u>	<u>PER CWT</u>	
2	POUNDS OF MILK	15957.49		
3	POUNDS OF BUTTERFAT	579.25		
4	PERCENT OF BUTTERFAT IN MILK	3.63		
5	VALUE OF PRODUCE			
6	DAIRY PRODUCTS SOLD	\$ 1827.20		
7	DAIRY PRODUCTS USED IN HOME	8.01		
8	MILK FED TO LIVESTOCK	14.88		
9	NET INCREASE IN VALUE:	327.37		
10	OTHER MISCELLANEOUS INCOME			
11	TOTAL VALUE PRODUCED	\$ 2177.46	13.65	
	<u>FEED FED: QUANTITY & COST</u>	<u>LBS/COW</u>		
13	CORN	4577	183.88	1.15
14	SMALL GRAIN	313	16.33	.10
15	COMPLETE RATION	1788	140.33	.88
16	PROT., SALT, MIN.	1556	257.88	1.62
17	TOTAL GRAIN MIX	8234	598.42	3.75
18	LEGUME HAY	6125	229.09	1.44
19	OTHER DRY HAY & ROUGHAGE	1864	51.06	.32
20	HAYLAGE	2575	45.54	.29
21	SILAGE	14413	126.33	.79
22	PASTURE		13.61	.09
23	TOTAL FEED COSTS	\$ 1064.05	6.68	
24	RETURN OVER FEED COST	\$ 1113.41	6.97	
	<u>OTHER DIRECT COSTS</u>			
26	VETERINARY	\$ 44.77	.28	
27	BREEDING	23.65	.15	
28	MISCELLANEOUS	104.17	.65	
29	CUSTOM WORK & LEASE EXPENSE	59.13	.37	
30	SPECIAL HIRED LABOR	6.33	.04	
31	ASSIGNED INTEREST	5.31	.03	
32	TOTAL OTHER DIRECT COSTS	243.36	1.52	
33	TOTAL DIRECT COSTS INCL FEED	\$ 1307.41	8.20	
34	RETURN OVER ALL DIRECT COSTS	\$ 870.05	5.45	
	<u>ALLOCATED COSTS</u>			
37	ACT INT PD LESS INT ASSIGNED-L31	\$ 113.03	.71	
38	GENERAL HIRED LABOR	108.01	.68	
39	UTILITIES & MISCELLANEOUS	112.47	.70	
40	POWER & MACHINERY	71.49	.45	
41	LIVESTOCK EQUIPMENT	71.08	.45	
42	BUILDINGS & FENCES	82.84	.52	
43	TOTAL ALLOCATED COSTS	558.92	3.51	
44	TOTAL ACTUAL LISTED COSTS	1866.33	11.71	
45	RETURN OVER ACTUAL LISTED COSTS	311.13	1.94	
46	TOTAL COSTS ADJ TO 7% MIN INT.	1883.20	11.80	
47	RETURN OVER LISTED & 7% OPPORTUNITY			
48	INTEREST COST	\$ 294.26	1.85	
***** SUPPLEMENTARY MANAGEMENT INFORMATION *****				
50	RETURN/\$100 FEED FED	\$ 205		
51	POUNDS OF MILK/POUND GRAIN MIX			
52	AVERAGE PRICE/CWT. SOLD	\$ 11.60		
53	DAIRY COW TURNOVER PERCENTAGE	41.49		
54	APPROXIMATE DRY MATTER CONSUMED/COW/	55		
55	PERCENT CALF DEATH LOSS	12.18		
56	TOTAL INVESTMENT/COW	\$ 5747.93		
57	TOTAL DEBT/COW	\$ 3293.57		

TABLE 14 - ALL DAIRY + DUAL PURPOSE CATTLE - 1988

		HIGH	LOW
		45	45
		FARMS	FARMS
1	AVERAGE NUMBER OF COWS	53.3	39.2
		PER COW	PER COW
2	POUNDS OF MILK	18326.79	12653.06
3	POUNDS OF BUTTERFAT	643.25	460.27
4	PERCENT OF BUTTERFAT IN MILK	3.51	3.64
5	VALUE OF PRODUCE		
6	DAIRY PRODUCTS SOLD	\$ 2094.43	1419.46
7	DAIRY PRODUCTS USED IN HOME	10.75	7.50
8	MILK FED TO LIVESTOCK	13.21	10.94
9	NET INCREASE IN VALUE:	471.52	128.98
10	OTHER MISCELLANEOUS INCOME	.02	
11	TOTAL VALUE PRODUCED	\$ 2589.93	1566.88
	<u>FEED FED: QUANTITY & COST</u>	<u>LBS/COW</u>	<u>LBS/COW</u>
13	CORN	5555 \$ 224.17	3149 123.27
14	SMALL GRAIN	242 12.55	305 15.36
15	COMPLETE RATION	1087 92.05	2673 218.67
16	PROT., SALT, MIN.	1894 307.77	822 145.36
17	TOTAL GRAIN MIX	8778 636.54	6949 502.66
18	LEGUME HAY	5816 225.59	7473 242.68
19	OTHER DRY HAY & ROUGHAGE	1557 41.71	2125 56.99
20	HAYLAGE	2394 46.42	1596 41.17
21	SILAGE	15154 136.06	10879 90.54
22	PASTURE	13.23	21.07
23	TOTAL FEED COSTS	\$ 1099.55	955.11
24	RETURN OVER FEED COST	\$ 1490.38	611.77
	<u>OTHER DIRECT COSTS</u>		
26	VETERINARY	\$ 56.53	34.95
27	BREEDING	27.97	15.97
28	MISCELLANEOUS	132.96	78.39
29	CUSTOM WORK & LEASE EXPENSE	57.26	50.03
30	SPECIAL HIRED LABOR	5.50	1.51
31	ASSIGNED INTEREST	6.47	3.49
32	TOTAL OTHER DIRECT COSTS	\$ 286.69	184.34
33	TOTAL DIRECT COSTS INCL FEED	\$ 1386.24	1139.45
34	RETURN OVER ALL DIRECT COSTS	\$ 1203.69	427.43
	<u>ALLOCATED COSTS</u>		
37	ACT INT PD LESS INT ASSIGNED-L31	\$ 111.97	113.21
38	GENERAL HIRED LABOR	111.52	81.28
39	UTILITIES & MISCELLANEOUS	120.73	101.73
40	POWER & MACHINERY	73.40	72.49
41	LIVESTOCK EQUIPMENT	91.85	57.15
42	BUILDINGS & FENCES	95.36	70.28
43	TOTAL ALLOCATED COSTS	\$ 611.83	496.14
44	TOTAL ACTUAL LISTED COSTS	1998.07	1635.59
45	RETURN OVER ACTUAL LISTED COSTS	591.86	-68.71
46	TOTAL COSTS ADJ TO 7% MIN INT.	2004.17	1924.36
47	RETURN OVER LISTED & 7% OPPORTUNITY		
48	INTEREST COST	\$ 585.76	-357.48
***** SUPPLEMENTARY MANAGEMENT INFORMATION *****			
50	RETURN/\$100 FEED FED	\$ 236	164
51	POUNDS OF MILK/POUND GRAIN MIX		
52	AVERAGE PRICE/CWT. SOLD	\$ 11.54	11.35
53	DAIRY COW TURNOVER PERCENTAGE	48.78	40.82
54	APPROXIMATE DRY MATTER CONSUMED/COW/	55	51
55	PERCENT CALF DEATH LOSS	10.97	13.97
56	TOTAL INVESTMENT/COW	\$ 6338.87	4961.20
57	TOTAL DEBT/COW	\$ 2915.87	3930.74

TABLE 15A - BEEF BREEDING CATTLE - 1988

AVERAGE OF 22 FARMS

1	AVERAGE NUMBER OF BEEF COWS		62.9
2	AVERAGE NUMBER OF OTHER BEEF/BULLS		61.4
3	POUNDS OF BEEF PRODUCED		PER COW
4	NET INCREASE IN VALUE: BEEF	\$	519.49
5	OTHER MISCELLANEOUS INCOME		
6	TOTAL VALUE PRODUCED	\$	519.49
	<u>FEED FED: QUANTITY & COST</u>	<u>LBS/COW</u>	
8	GRAIN	660.9	\$ 31.83
9	PROP., SALT, MIN.	81.5	11.76
10	LEGUME HAY	5529.7	118.60
11	OTHER DRY HAY AND ROUGHAGE	2626.1	46.76
12	SILAGE	2201.2	17.11
13	HAYLAGE		
14	PASTURE		28.66
15	TOTAL FEED COSTS	\$	254.72
16	RETURN OVER FEED COSTS	\$	264.77
	<u>OTHER DIRECT COSTS</u>		
18	VETERINARY	\$	11.00
19	BREEDING		4.12
20	MISCELLANEOUS		6.87
21	CUSTOM WORK & LEASE EXPENSE		7.73
22	SPECIAL HIRED LABOR		
23	ASSIGNED INTEREST		1.51
24	TOTAL OTHER DIRECT COSTS		31.23
25	TOTAL DIRECT COSTS INCL FEED	\$	285.95
26	RETURN OVER ALL DIRECT COSTS		233.54
	<u>ALLOCATED COSTS</u>		
28	ACTUAL INTEREST PAID LESS		
29	INTEREST ASSIGNED-L23	\$	12.11
30	GENERAL HIRED LABOR		32.05
31	UTILITIES & MISCELLANEOUS		15.81
32	POWER & MACHINERY	PCAF .99	10.12
33	LIVESTOCK EQUIPMENT	ECAF 1.17	11.33
34	BUILDINGS & FENCES	BCAF 1.17	12.58
35	TOTAL ALLOCATED COSTS		93.80
36	TOTAL ACTUAL LISTED COSTS	\$	379.75
37	RETURN OVER ACTUAL LISTED COSTS		139.74
38	TOTAL COSTS ADJ TO 7% MIN INT.		445.62
39	RETURN OVER LISTED & 7% OPPORTUNITY		
40	INTEREST COST	\$	73.87
***** SUPPLEMENTARY MANAGEMENT INFORMATION *****			
42	RETURN/\$100 FEED FED	\$	203.94
43	\$/CWT BREEDING ANIMALS SOLD	\$	49.74
44	AVE WEIGHT OF ANIMALS SOLD		708.91
45	NUMBER OF HEAD BOUGHT		3
46	PERCENT DEATH LOSS		2.92
47	PRICE/CWT CALF SOLD/TRANSFER	\$	75.26
48	AVE WEIGHT CALF SOLD/TRANSFER		623
49	PERCENT CALF CROP BORN		107.14
50	PERCENT CALF CROP WEANED		101.79
51	PERCENT CALF DEATH LOSS		6.67
52	CULL INCOME/BREEDING COW	\$	82.11
53	HAY EQUIVALENT/COW		4.44
54	CORN EQUIVALENT/COW		11.80

TABLE 15A - BEEF BREEDING CATTLE - 1988

			HIGH	LOW
			11	11
			FARMS	FARMS
1	AVERAGE NUMBER OF BEEF COWS		66.0	59.7
2	AVERAGE NUMBER OF OTHER BEEF/BULLS		67.7	55.1
			PER COW	PER COW
3	POUNDS OF BEEF PRODUCED		51487	42730
4	NET INCREASE IN VALUE: BEEF	\$	608.52	421.94
5	OTHER MISCELLANEOUS INCOME			
6	TOTAL VALUE PRODUCED	\$	608.52	421.94
	<u>FEED FED: QUANTITY & COST</u>	<u>LBS/COW</u>	<u>LBS/COW</u>	
8	GRAIN	531.9	\$ 25.05	39.36
9	PROT., SALT, MIN.	75.2	9.42	14.37
10	LEGUME HAY	7228.7	153.82	79.87
11	OTHER DRY HAY AND ROUGHAGE	1416.0	24.83	71.06
12	SILAGE	2405.0	17.82	16.33
13	HAYLAGE			
14	PASTURE		31.03	26.10
15	TOTAL FEED COSTS	\$	261.97	247.09
16	RETURN OVER FEED COSTS	\$	346.55	174.85
	<u>OTHER DIRECT COSTS</u>			
18	VETERINARY		\$ 11.76	10.18
19	BREEDING		6.32	1.71
20	MISCELLANEOUS		5.20	8.71
21	CUSTOM WORK & LEASE EXPENSE		6.76	8.81
22	SPECIAL HIRED LABOR			
23	ASSIGNED INTEREST		2.86	'
24	TOTAL OTHER DIRECT COSTS		32.90	29.41
25	TOTAL DIRECT COSTS INCL FEED		294.87	276.50
26	RETURN OVER ALL DIRECT COSTS	\$	313.65	145.44
	<u>ALLOCATED COSTS</u>			
28	ACTUAL INTEREST PAID LESS			
29	INTEREST ASSIGNED-L23	\$	16.33	10.04
30	GENERAL HIRED LABOR		10.68	49.52
31	UTILITIES & MISCELLANEOUS		12.46	18.73
32	POWER & MACHINERY	PCAF 1.00	12.59	7.41
33	LIVESTOCK EQUIPMENT	ECAF 1.00	10.21	12.17
34	BUILDINGS & FENCES	BCAF 1.00	15.52	9.34
35	TOTAL ALLOCATED COSTS		77.79	107.21
36	TOTAL ACTUAL LISTED COSTS	\$	372.66	383.71
37	RETURN OVER ACTUAL LISTED COSTS		235.86	38.23
38	TOTAL COSTS ADJ TO 7% MIN INT.		433.64	452.21
39	RETURN OVER LISTED & 7% OPPORTUNITY			
40	INTEREST COST	\$	174.88	-30.27
***** SUPPLEMENTARY MANAGEMENT INFORMATION *****				
42	RETURN/\$100 FEED FED	\$	232.28	170.77
43	\$/CWT BREEDING ANIMALS SOLD	\$	48.04	51.09
44	AVE WEIGHT OF ANIMALS SOLD		756.62	662.93
45	NUMBER OF HEAD BOUGHT		1	5
46	PERCENT DEATH LOSS		3.72	1.95
47	PRICE/CWT CALF SOLD/TRANSFER	\$	79.22	70.03
48	AVE WEIGHT CALF SOLD/TRANSFER		725	526
49	PERCENT CALF CROP BORN		117.54	98.18
50	PERCENT CALF CROP WEANED		108.77	92.73
51	PERCENT CALF DEATH LOSS		8.96	5.56
52	CULL INCOME/BREEDING COW	\$	67.05	98.91
53	HAY EQUIVALENT/COW		4.72	4.14
54	CORN EQUIVALENT/COW		9.50	14.37

TABLE 15B - BEEF FEEDERS, FEEDLOT - 1988

AVERAGE OF 21 FARMS

1	AVERAGE NUMBER OF ANIMALS		42.9	
2	POUNDS OF ANIMAL PRODUCED		30846	
			<u>PER CWT</u>	<u>PER HEAD</u>
3	NET INCREASE IN VALUE: ANIMALS	\$	63.58	457.13
4	OTHER MISCELLANEOUS INCOME			
5	TOTAL VALUE PRODUCED	\$	63.58	457.13
	<u>FEED FED: QUANTITY & COST</u>	<u>LBS/CWT</u>		
7	CORN	515.6	\$ 21.39	153.82
8	SMALL GRAINS	25.7	1.19	8.55
9	COMPLETE RATIONS	41.7	3.01	21.68
10	PROT., SALT, MIN.	47.8	7.33	52.73
11	LEGUME HAY	185.5	4.92	35.36
12	OTHER DRY HAY & ROUGHAGE	66.3	1.55	11.17
13	SILAGE	153.1	1.48	10.63
14	HAYLAGE	44.1	.95	6.81
15	PASTURE		.22	1.59
16	TOTAL FEED COST	\$	42.04	302.34
17	RETURN OVER FEED COSTS	\$	21.54	154.79
	<u>OTHER DIRECT COSTS</u>			
19	VETERINARY		\$ 1.24	8.95
20	MISCELLANEOUS		.41	2.96
21	CUSTOM WORK & LEASE EXPENSE		1.84	13.24
22	SPECIAL HIRED LABOR			
23	ASSIGNED INTEREST		.38	2.75
24	TOTAL OTHER DIRECT COSTS		3.87	27.90
25	TOTAL DIRECT COSTS INCL FEED	\$	45.91	330.24
26	RETURN OVER ALL DIRECT COSTS	\$	17.67	126.89
	<u>ALLOCATED COSTS</u>			
28	ACTUAL INTEREST PAID LESS			
29	INTEREST ASSIGNED-L23	\$	1.68	12.09
30	GENERAL HIRED LABOR		1.33	9.55
31	UTILITIES & MISCELLANEOUS		1.21	8.69
32	POWER & MACHINERY PCAF 1.00		1.03	7.41
33	LIVESTOCK EQUIPMENT ECAF 1.00		1.73	12.44
34	BUILDINGS & FENCES BCAF 1.00		1.71	12.28
35	TOTAL ALLOCATED COSTS	\$	8.69	62.46
36	TOTAL ACTUAL LISTED COSTS		54.60	392.70
37	RETURN OVER ACTUAL LISTED COSTS		8.98	64.43
38	TOTAL COSTS ADJ TO 7% MIN INT		59.59	428.46
39	RETURN OVER LISTED & 7% OPPORTUNITY			
40	INTEREST COST	\$	3.99	28.67
***** SUPPLEMENTARY MANAGEMENT INFORMATION *****				
42	RETURN/\$100 FEED FED	\$	151.20	
43	PRICE/CWT SOLD	\$	66.20	
44	AVERAGE WEIGHT ALL CATTLE SOLD		1055	
45	PRICE/CWT BOUGHT	\$	85.08	
46	AVERAGE WEIGHT CATTLE BOUGHT			
47	NUMBER OF HEAD BOUGHT		33	
48	PERCENT DEATH LOSS		3.09	
49	EFFECTIVE DAILY GAIN-POUND/HEAD/DAY		1.97	
50	PRICE TO COVER PURCH PRICE + LISTED	\$	80.65	
51	HAY EQUIVALENT/CWT		.16	
52	CORN EQUIVALENT/CWT		9.67	

MONEY SPENT BY THE AVERAGE NORTHEAST AND
EAST CENTRAL MINNESOTA FARMER

SUMMARY BY YEARS

	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
TO OTHER FARMERS FOR LIVESTOCK & CUSTOM WORK	6431	6755	7398	8636
TO THE AGRI-BUSINESS COMMUNITY FOR FERTILIZER, CHEMICALS, FEED, SEEDS, REPAIRS, FUEL & SUPP.	43700	43732	48090	56364
FOR EXTRA LABOR	2996	3314	4204	4614
SUPPORT OF LOCAL GOVT. (PROPERTY & OTHER TAX)	2171	1798	1916	2210
FOR UTILITIES (ELECTRICITY & TELEPHONE)	3791	3061	3855	4165
FOR USE OF OTHER PEOPLE'S CAPITAL (INTEREST & CASH RENT)	17928	15161	14173	14095
FARM EQUIPMENT/AUTO DEALERS (POWER, MACH, VEH.)	6925	7508	7275	8757
BUILDINGS AND LAND	2721	4547	5278	4960
FOOD, CLOTHING, HOUSE, FUEL, FURNITURE, PERSONAL CARE, PERSONAL SHARE-REPAIRS	7275	7321	8363	9517
CONTRIBUTIONS - CHURCH AND OTHER	642	676	581	643
MEDICAL CARE & HEALTH INSURANCE	1816	2386	2194	2537
EDUCATION, RECREATION, & GIFTS	2403	1417	1755	1988
LIFE INSURANCE & OTHER INVESTMENTS	1069	904	752	1206
	<hr/>	<hr/>	<hr/>	<hr/>
TOTAL MONEY SPENT BY ONE AVERAGE FARMER WITHIN THIS COMMUNITY & SERVICE AREA	99868	98580	105834	119692

Source: Table 4 and 6B of the Annual Northeast and East Central
Farm Business Management Education Report.

CASH SUMMARY OF THE FARM BUSINESS (WHOLE FARM) 1984 - 1988

	1984	1985	1986	1987	1988
<u>Farm Receipts</u>					
Dairy Cows	5974	4524	5190	5910	8078
Dairy Products	61193	61988	64497	66254	72085
Other Dairy	4641	4692	4013	6042	6177
Beef Cattle	3083	3066	4825	4192	5131
Hogs	4079	4960	4167	6371	5813
Other Livestock Income	38	580	1000	866	738
Corn	3720	2675	3672	2164	2017
Small Grains	1133	842	895	547	751
Other Crops	1727	1466	1724	1220	1756
Government Payments	232	610	2652	6424	8636
Sale: Crop Purch. for Resale	410	449	403	1250	1292
Capital Assets Sold/Lease Income	636	1357	960	1149	719
Other Farm Income	2969	2084	3749	3454	3447
1. Total Farm Sales	92820	92697	97343	105842	116642
2. Increase in Farm Capital				4521	2315
3. Family Living from the Farm	767	6464	729	692	815
4. Total Farm Receipts	93587	93343	98072	111055	119772
<u>Farm Expense</u>					
Dairy Cows Bought	1243	918	1210	1771	1709
Other Dairy Bought	790	987	695	849	1082
Beef Cattle Bought (incl. Feeders)	410	897	1128	728	1118
Hogs Bought	221	187	291	369	546
Other Livestock Bought	2	213	191	32	170
Miscellaneous Livestock Expense	5475	5386	6290	7077	7039
Purch: crops Purch. for Resale	230	405	416	1429	160
Feed Bought	14729	16190	17669	19656	26478
Fertilizer and Chemicals	6488	4685	5367	5208	6129
Other Crop Exp. (incl. Irrig Oper)	2827	3155	2740	2966	3203
Custom Work Enterprise/Work Hired	3303	3263	3274	3674	4089
Gas-Oil-Grease Bought (Farm Share)	3979	3880	2952	2994	3107
All Farm Repairs	6416	6468	6501	6869	7319
Wages of Hired Labor	2836	3007	3325	4213	4650
Real Estate and Property Taxes	1169	1189	1076	1067	1048
Utilities & General Farm Expense	4976	4868	4941	5128	5620
5. Total Cash Operating Exp.	55131	57497	58069	64029	74468
6. Capital Purchases	10773	7980	10016	10384	12331
7. Total Farm Purchases	66116	65478	68085	74413	86799
8. Decrease in Farm Capital	4520	5556	4721		
9. Interest on Farm Capital	18607	17483	16571	16227	17089
10. Unpaid Family Labor	1178	1005	976	992	884
11. Partners Labor/Board Furn.	955	798	385	795	183
12. Total Farm Expense	91376	90320	90738	92427	104955
13. Labor Earnings (I4-L12)	2211	3023	7334	18628	14817

A SUMMARY OF MISCELLANEOUS INFORMATION BY YEARS - 1988

	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
<hr/>					
<u>General Information:</u>					
Farm Size: Tillable Acres (Tbl. 1)	255.9	266.4	257.5	244.0	245.6
Total Farm Capital: Dec. 31 (Tbl. 1)	263556	246975	234363	234074	245428
Total Returns and Net Inc. (Tbl. 3)					
% of Returns from Livestock	53%	57%	64%	66%	63%
% of Returns from Crops	43%	38%	32%	31%	22%
% of Returns from Misc. Income	4%	5%	4%	3%	15%
Total Family Living Expense (Tbl. 4)	16513	16615	16760	17463	21190
Family Living Expense/Month (Tbl. 4)	1376	1385	1397	1455	1766
Total Equity: Dec. 31 (Tbl. 5)	122844	99323	111697	118889	120817
Annual Change in Equity (Tb. 5)	-6915	-8083	-975	11744	7374
Net Capital Ratio: Dec. 31 (Tbl. 5)	1.69	1.55	1.69	1.76	1.76
Return to Oper. Lab. & Mgmt. (Tbl. 6B)	658	1022	5173	16717	13225
Return to Cap. & Fam. Labor (Tbl. 6B)	4640	3824	9903	22156	19416
<hr/>					
<u>Crop Efficiencies (Owned Acres)</u>					
<u>Yield Per Acre</u>					
Barley (Bu.)	44.3	39.3	36.0	27.3	21.9
Oats (Bu.)	54.5	52.9	31.4	37.8	17.1
Corn (Bu.)	72.3	82.1	91.8	98.6	43.2
Alfalfa (Ton)	3.6	3.0	3.1	2.5	1.9
Legume-Grass Hay (Ton)	2.2	2.0	2.3	1.9	1.3
Corn Silage (Ton)	9.4	10.5	12.5	11.1	5.5
Return over listed costs (per ac.)					
Barley	13.85	-8.10	-22.44	.29	-33.04
Oats	15.94	-1.80	-20.99	-6.29	-47.64
Corn	7.15	28.53	-8.95	52.40	-43.33
Alfalfa Hay	136.46	93.61	79.32	60.25	27.44
Mixed Legume Hay	39.73	31.45	29.92	19.7	-5.14
Corn Silage	-1.23	12.01	20.42	54.26	-77.85
Tractor/Crop Machinery Exp./Acre	52.07	40.04	48.24	47.44	44.56
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<u>Livestock Efficiencies:</u>					
Dairy - Average No. of Cows	44.8	45.5	47.3	47.7	48.1
Milk Prod/Cow (lbs.)	13774	14161	14539	15067	16062
Return over Feed/Cow	785.15	830.75	884.37	1000.34	943.63
Ret. over listed costs/Cow	400.31	447.99	489.77	588.89	269.21
Return to \$100 Feed Fed/Cow	200.94	212.06	225.44	245.41	216.55
Swine (Weaning Pig Prod)					
No. of Litters Farrowed	124	92	85	113	93
Return over Feed/Litter	146.80	184.45	224.46	227.88	100.91
Ret. over listed costs/Litter	79.45	102.67	141.09	165.39	-27.09
Return to \$100 Feed Fed/Litter	174.69	219.88	230.75	249.76	152.37
Beef (Breeding Herd)					
Average No. of Cows	70.6	55.5	70.1	60.1	62.9
Return over Feed Costs/Cow	50.13	65.94	124.61	292.06	264.77
Return over listed costs/Cow	-15.10	-9.76	56.21	233.00	139.74
Return over \$100 Feed Fed/Cow	123.35	128.07	160.64	238.35	203.94
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SETTING GOALS

One of the primary aims of the Farm Management Education Program is to assist farmers in reaching their farm and family goals. Clarifying their ideas as to what they really want is a very important step in improving the farm business and as result improving family living. Sitting down as an operator or husband and wife and putting these goals in writing is done in one of the early classes in the Farm Business Management Education Program.

Planning goals is not easy. All members of a family may not agree on what goals are most important. The family may have to give serious thought and discussion to the goals they choose so that all members of the family can benefit from the farming business. Not all goals are related to farm income. Some very important goals for a family may be in the area of social, community, family, church, and educational activities.

Sitting up goals in a systematic way lets the family fit the wants and desires of all the family members into a plan. There are no right or wrong goals, since each family may approach the problems and opportunities they have in a different way. It is important that goals be reviewed frequently to see if conditions have changed. If the goals are inflexible, they may be a liability to progress rather than an asset.

Below is an example of the written goals of one family for the coming year. The following year these goals will be reviewed, evaluated, and probably changed or expanded to fit the ever changing needs and desires of the family.

<u>FARM FAMILY GOAL STATEMENT</u>		This Year	Later
<u>RANK</u>	<u>FOR A PROFITABLE FARM BUSINESS:</u>		
6	-Buy a new tractor to replace old John Deere A		X
1	-Raise the production of the dairy herd by 500 lbs. of milk per cow	X	
8	-Raise the production of the dairy herd from 14000 lbs. to 18000 lbs. per cow in 8 years		X
2	-Increase hay yield by 1 ton per acre in 3 years	X	
	<u>FOR SATISFYING LIVING:</u>		
5	-Install kitchen cabinets	X	
10	-Build new family room on west side of house		X
11	-Paint exterior of home	X	
12	-Landscape yard		X
	<u>FOR DEVELOPMENT OF FAMILY MEMBERS:</u>		
9	-Provide opportunity for son, Dave, to attend college in two years		X
7	-Provide money for Dad to attend the National Convention for a week this winter	X	
4	-Provide time and money for Dan to attend camp this summer	X	
	<u>FOR LONG-TERM FINANCIAL SECURITY:</u>		
3	-Improve net worth by at least 5% per year	X	
