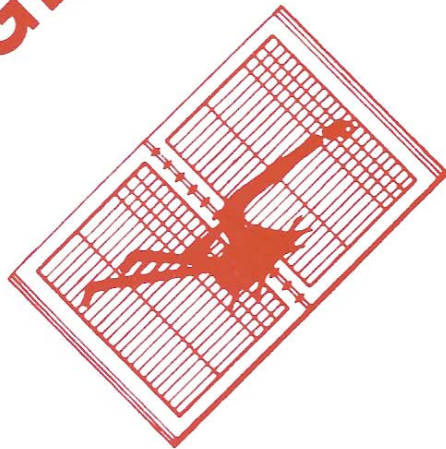


FARM BUSINESS MANAGEMENT



**1978 Annual Report
Northeast and East Central Minnesota
Report No. 23
April, 1979**

**AN ADULT
EDUCATIONAL
PROGRAM**

In cooperation with: Minnesota Department of Education, Vocational Division; University of Minn. Agricultural Education Department; Staples Area Vocational Technical Institute, Staples Minn.

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Area Vo-Ag Program Coordinator

<u>TABLE NO.</u>		<u>PAGE NO.</u>
	COLOR CODE EXPLANATION	
	INTRODUCTION	1 & 2
1	FARM INVENTORIES	3 & 4 & 4B
2A	FARM EARNINGS FOR WHOLE FARM RECEIPTS.	5
2B	FARM EARNINGS FOR WHOLE FARM EXPENSE	6
3	ENTERPRISE EARNINGS STATEMENT.	7
4	HOUSEHOLD EXPENSE	8
5	NET WORTH STATEMENT.	9 & 10
6A	OPERATOR'S SHARE OF CASH RECEIPTS.	11
6B	OPERATOR'S SHARE OF CASH EXPENSE	12
	EXPLANATION OF WORK UNITS & AVERAGE PRICES	13
8	MEASURES OF FARM ORGANIZATION AND EFFICIENCY	14 & 15
	THERMOMETER CHART	16
	RANGE IN LABOR EARNINGS.	17
	LABOR EARNINGS CORRELATED WITH EXCELLED FACTORS.	18
9	CROP PRODUCTION ACRE DISTRIBUTION	19
10	CROP ANALYSIS, INDIVIDUAL	20
	SPRING BARLEY.	21
	OATS FOR FEED.	22
	RYE.	23
	SPRING WHEAT	24
	CORN FOR GRAIN	25
	IRRIGATED CORN FOR GRAIN	26
	SOYBEANS	27
	ALFALFA HAY.	28
	MEDIUM RED CLOVER HAY.	30
	OTHER LEGUME HAY	31
	TILLABLE GRASS HAY	32
	LEGUME-GRASS MIXED HAY	33
	LEGUME-GRASS SILAGE.	34
	GRAIN SILAGE	35
	CORN & SORGHUM SILAGE.	36
	IRRIGATED CORN & SORGHUM SILAGE.	37
	PULP	38
	COST & RETURNS FROM LIVESTOCK ENTERPRISES , , , , ,	39
11A	HOGS, FARROW, FINISH, GENERAL.	40
11C	COSTS AND RETURNS FROM PRODUCING WEANING PIGS	41
12	DAIRY COWS	42
13	OTHER DAIRY.	43
14	ALL DAIRY & DUAL PURPOSE CATTLE	44
15A	BEEF BREEDING CATTLE (WHOLE HERD).	45
15B	BEEF FEEDERS (FEEDLOT)	46
16A	SHEEP FARM FLOCK	47
	SUMMARY OF FARM EARNINGS (1975-78)	48
	"CAPSULE" OF DATA: 1975-78	49
	HAVE YOU CHECKED YOUR GOALS LATELY	50
	WHAT DOES YOUR FAMILY WANT	51
	MONEY SPENT BY THE AVERAGE AREA FARMER	52

COLOR CODE EXPLANATION

This farm management summary is color coded for your convenience. Each color refers to a specific area.

WHITE.	INTRODUCTION & MISCELLANEOUS INFORMATION
GOLDENROD.	WHOLE FARM tables include both the landlord and the operator's inventory income and expenses.
BLUE	OPERATOR'S tables include inventories, income and expenses for the operator only. All landlord information is excluded from these tables.
PINK	CROP tables include the information for all crops grown on whole farm basis.
GREEN.	LIVESTOCK tables includes the information for all livestock enterprises and is listed on a whole farm basis.

INTRODUCTION

The Minnesota Vocational Agriculture Farm Management Program is available to all Minnesota farmers through their local Vocational Agricultural Instructor.

The basic plan available to farmers, is an annual analysis program (adequate for the majority of farmers).

For a cost of about \$50.00, the farmer receives a computerized depreciation schedule, and a very complete enterprise analysis of his farming operation. In addition he will be working with a Farm Management Instructor who teaches him basic accounting procedures and helps him to budget, interpret his analysis, and plan his operation and his credit needs. The "Ag Man" also helps him keep up with the latest agricultural developments. In short, the "Ag Man" helps the farmer to get the most out of his farm and himself.

In keeping with the times and to speed the analysis procedure, automatic data processing methods are used. Data is extracted from the individual farm record books at the Staples and satellite analysis centers and submitted to Specialized Data Systems at Madison, Wisconsin for processing by computer. Results are returned to the farmer as soon as the analysis is completed. Averages and indexes found in this record are computed after all Data forms have been processed.

The Staples Area Vocational-Technical Institute, in cooperation with the University of Minnesota and the Vocational Division of the Minnesota State Department of Education, is charged with the responsibility for operation and maintenance of the Vocational Agriculture Farm Management Program in Northeastern & East Central Minnesota. This 1978 report represents the twenty-third annual report for most of this area.

The report and analysis of records were completed under the direction of William E. Guelker, Area VoAg Coordinator at the Staples Area Vocational-Technical Institute. Clerical assistance was provided by Lorraine Anderson, Estelle Anderson, Alice Hogberg, Donna Korfe, Esther Johnson, Alice Lindahl, and Tom Schultz. In addition some Ag Instructors completed their own Data Forms with local secretarial help.

Directing locally in a supervisory capacity were: Dr. Duane Lund, Superintendent of Staples Public Schools and Mr. Mike Matanich, Director of the Staples Area Vocational-Technical Institute.

Cooperating agencies were represented by: Mr. Paul Day, Mr. Odell Bardusen, Mr. David McCullough, and Mr. Robert M. Madson of the Vocational Division, State Department of Education, and Dr. R. Paul Marvin, and Dr. Edgar Persons, of the Agriculture Education Department of the University of Minnesota.

SOURCE OF FARM RECORD ANALYSIS FOR 1978 FARM BUSINESS
SUMMARIES FOR THE NORTHEASTERN & EAST CENTRAL MINNESOTA AREA

<u>Class Location</u>	<u>Instructor</u>	<u>Percent of Time</u>		<u>Records</u>
		<u>Adult</u>	<u>Veterans</u>	<u>Processed</u>
Aitkin	Russell Ruud		100	10
Bagley	Ken Ostlund	100		29
Bagley	Bill Wendlandt		100	21
Barnum	Tom Hassett		100	18
Bemidji	Steve Ziegler		100	22
Bemidji	Jim Sackett	100		28
Brainerd	Tom Harper & Bill Gould		100	10
Cherry	Ed Takala	50		17
Cromwell	Gordon McVay		100	6
Eagle Bend	Larry DeWald		100	15
Foley	Lee Mesko	100		7
Foley	Kenneth Johnson		100	25
Little Falls	Wallace Payne		100	23
Little Falls	Arthur Tonn		100	19
Long Prairie	Robert Johnson	80		25
Long Prairie	Lloyd Lane		100	22
Milaca	John R. Larson	100		33
Northome	Bob Johnson		100	15
Osakis	Leland Wilkin	75		23
Park Rapids	Wendell Francis		100	11
Pierz	Ben Jorgenson	100		17
Pine City	Arvid Anderson	100		25
Pine City	Ray Collen		100	14
Princeton	Wes Wankel	50	50	26
Sebeka	Delbert Harrington	60		14
Sebeka	Cliff Gustafson		100	10
Staples	Don Eikmeier		100	16
Staples	DelRay Lecy	50		6
Staples	Len Maley	100		22
Wadena	William Fischer		100	14
Woodland Center	Robert Anderson	100		36
Woodland Center	Bill Ladwig	100		32
Willow River	E. B. Prachar	50	50	14

Total 625

Records this year for the 15th time were analyzed by electronic data processing with the work being done by Specialized Data Systems at Madison, Wisconsin.

TABLE 1 - SUMMARY OF FARM INVENTORIES - 1978 (WHOLE FARM)

		AVERAGE OF 291 FARMS	
1	SIZE OF FARM-TOTAL ACRES	334.8	
2	-TILLABLE ACRES	190.4	
3	WORK UNITS-CROPS	85.92	
4	-LIVESTOCK	218.19	
5	-OTHER	14.87	
6	TOTAL SIZE OF BUSINESS IN WORK UNITS	318.98	
7	NUMBER OF WORKERS	1.41	
8	FARM CAPITAL INVESTMENT PER WORKER	\$ 88493	
		<u>JAN. 1</u>	<u>DEC. 31</u>
9	PRODUCTIVE LIVESTOCK		
10	DAIRY COWS	11569	15235
11	OTHER DAIRY CATTLE	5474	9130
12	BEEF BREEDING CATTLE	2532	4063
13	BEEF FEEDER CATTLE	776	1710
14	HOGS	1631	2365
15	SHEEP (INCLUDING FEEDERS) & GOATS	112	133
16	POULTRY-ALL TYPES	5	5
17	OTHER LIVESTOCK	42	85
18	TOTAL PRODUCTIVE LIVESTOCK	\$ 22141	\$ 32725 *
19	CROP, SEED & FEED	10631	12947
20	POWER, MACHINERY & EQUIPMENT		
21	AUTO & TRUCK (FARM SHARE)	1447	1664
22	POWER & MACHINERY	14128	18419
23	IRRIGATION EQUIPMENT	1860	2193
24	CUSTOM WORK EQUIPMENT	59	97
25	LIVESTOCK EQUIPMENT	4255	5495
26	TOTAL POWER, MACHINERY & EQUIPMENT	\$ 21750	\$ 27867 *
27	LAND	38920	40817
28	BUILDINGS-FENCES-ETC.	18350	22214
29	TOTAL FARM CAPITAL	\$ 111792	\$ 136570 *
30	INCREASE OR DECREASE IN TOTAL FARM CAPITAL		\$ 24778 *

Table 1 lists the categories of farm capital for the average of 291 farms and for the 58 most profitable and 58 least profitable farms. These averages include the landlords share of the investment for rental 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 - SUMMARY OF FARM INVENTORIES - 1978

		MOST PROFITABLE FARMS 58 HIGH	
1	SIZE OF FARM --TOTAL ACRES	448.5	
2	--TILLABLE ACRES	272.4	
3	WORK UNITS--CROPS	129.67	
4	--LIVESTOCK	392.73	
5	--OTHER	14.66	
6	TOTAL SIZE OF BUSINESS IN WORK UNITS	537.06	
7	NUMBER OF WORKERS	1.68	
8	FARM CAPITAL INVESTMENT PER WORKER	\$ 131078	
		<u>JAN. 1</u>	<u>DEC. 31</u>
9	PRODUCTIVE LIVESTOCK		
10	DAIRY COWS	20644	29192
11	OTHER DAIRY CATTLE	12277	20704
12	BEEF BREEDING CATTLE	1981	3915
13	BEEF FEEDER CATTLE	2992	6123
14	HOGS	1173	1873
15	SHEEP (INCLUDING FEEDERS) & GOATS		
16	POULTRY-ALL TYPES	3	3
17	OTHER LIVESTOCK	32	32
18	TOTAL PRODUCTIVE LIVESTOCK	39102	61841 *
19	CROP, SEED & FEED	21153	26350
20	POWER, MACHINERY & EQUIPMENT		
21	AUTO & TRUCK (FARM SHARE)	1694	1849
22	POWER & MACHINERY	23393	28849
23	IRRIGATION EQUIPMENT	876	793
24	CUSTOM WORK EQUIPMENT	297	486
25	LIVESTOCK EQUIPMENT	9212	10496
26	TOTAL POWER, MACHINERY & EQUIP.	\$ 35474	\$ 42473 *
27	LAND	54626	56364
28	BUILDINGS-FENCES-ETC.	28156	34611
29	TOTAL FARM CAPITAL	\$ 178510	\$ 221640 *
30	INCREASE OR DECREASE IN TOTAL FARM CAPITAL		\$ 43129 *

Work units provide a measure of the work load as an indication of size. Some clue to the farm organization is indicated by the distribution of work between crops and livestock.

The number of workers listed on line 7 includes the operator(s), hired labor, and unpaid family labor as well as the labor portion of custom work hired.

TABLE 1 - SUMMARY OF FARM INVENTORIES - 1978

		LEAST PROFITABLE FARMS 58 LOW	
		JAN. 1	DEC. 31
1	SIZE OF FARM-TOTAL ACRES	278.3	
2	-TILLABLE ACRES	149.5	
3	WORK UNITS -CROPS	67.39	
4	-LIVESTOCK	115.29	
5	-OTHER	8.50	
6	TOTAL SIZE OF BUSINESS IN WORK UNITS	191.18	
7	NUMBER OF WORKERS	1.29	
8	FARM CAPITAL INVESTMENT PER WORKER	\$ 77731	
9	PRODUCTIVE LIVESTOCK		
10	DAIRY COWS	6200	7956
11	OTHER DAIRY CATTLE	2419	3606
12	BEEF BREEDING CATTLE	1369	3081
13	BEEF FEEDER CATTLE	359	337
14	HOGS	1584	2307
15	SHEEP (INCLUDING FEEDERS) & GOATS	68	93
16	POULTRY-ALL TYPES	2	4
17	OTHER LIVESTOCK	94	288
18	TOTAL PRODUCTIVE LIVESTOCK	\$ 12095	\$ 17672 *
19	CROPS, SEED & FEED	6452	6832
20	POWER, MACHINERY & EQUIPMENT		
21	AUTO & TRUCK (FARM SHARE)	1333	1333
22	POWER & MACHINERY	12424	14978
23	IRRIGATION EQUIPMENT	4032	5247
24	CUSTOM WORK EQUIPMENT		
25	LIVESTOCK EQUIPMENT	2259	3213
26	TOTAL POWER, MACHINERY & EQUIPMENT	\$ 20048	\$ 24771 *
27	LAND	41920	42590
28	BUILDINGS-FENCES-ETC.	15299	19562
29	TOTAL FARM CAPITAL	\$ 95815	\$ 111427 *
30	INCREASE OR DECREASE IN TOTAL FARM CAPITAL		\$ 15612 *

TABLE 2A - WHOLE FARM SUMMARY OF CASH RECEIPTS - 1978

	AVERAGE OF 291 FARMS	58 FARMS HIGH	58 FARMS LOW
1 SALE OF LIVESTOCK & LIVESTOCK PRODUCTS			
2 DAIRY COWS	\$ 2823	\$ 5464	\$ 1449
3 DAIRY PRODUCTS	27397	56104	11437
4 OTHER DAIRY CATTLE	2154	5033	1133
5 BEEF BREEDING CATTLE	1656	1230	905
6 BEEF FEEDER CATTLE	1757	6728	384
7 HOGS COMPLETE & MIXED	705	1821	157
8 HOGS FINISHING	185	9	
9 HOGS PRODUCING WEANING PIGS	3617	1836	3169
10 SHEEP, GOATS & WOOL, FARM FLOCK	72		64
11 SHEEP & WOOL, FEEDER LAMBS			
12 CHICKENS (INCLUDING HENS & BROILERS)	14	22	43
13 TURKEYS			
14 EGGS	16	12	4
15 OTHER PRODUCTIVE LIVESTOCK & PRODUCTS	3	1	
16 OTHER MISCELLANEOUS LIVESTOCK INCOME			
17 TOTAL SALES OF PRODUCTIVE LIVESTOCK	\$ 40398	\$ 78260	\$ 18744 *
18 SALE OF CROPS			
19 WHEAT	90	170	54
20 OTHER SMALL GRAINS	362	408	296
21 CORN	1855	2824	2732
22 SOYBEANS	123	228	332
23 OTHER ROW CROPS	21	86	
24 LEGUMES & OTHER FORAGE	486	698	595
25 GRASS SEED			
26 FRUITS & NUTS			
27 VEGETABLE ROADSIDE MARKET & SPECIALTY	136		
28 NURSERY, TIMBER & OTHER	131		181
29 SET ASIDE ACRES-GOVERNMENT PAYMENTS	140	179	207
30 TOTAL SALES FROM CROPS	\$ 3344	\$ 4593	\$ 4396 *
31 CAPITAL ASSETS SOLD	683	595	636
32 GAS TAX REFUND	90	151	54
33 INCOME FROM WORK OFF THE FARM	825	1177	428
34 CUSTOM WORK ENTERPRISE INCOME	40	201	
35 PATRONAGE REFUNDS	298	787	56
36 MISCELLANEOUS FARM INCOME	1421	1287	1359
37 TOTAL FARM SALES	\$ 47099	\$ 87050	\$ 25673 *
38 INCREASE IN FARM CAPITAL	24968	43216	16316
39 FAMILY LIVING FROM THE FARM	609	973	316
40 TOTAL FARM RECEIPTS (37)+(38)+(39)	\$ 72675	\$ 131239	\$ 42304 *

Table 2A provides a listing of the sources of cash income. The landlord's share of crops and other items is included in order to calculate earnings for the whole farm business. In addition to cash sales, the increases in farm capital and value of farm produce used in the home are listed. These items represent accrued and consumed income.

TABLE 2B - WHOLE FARM SUMMARY OF CASH EXPENSES - 1978

	AVERAGE OF 291 FARMS	58 FARMS HIGH	58 FARMS LOW
1 PURCHASE OF LIVESTOCK			
2 DAIRY COWS	\$ 1238	\$ 759	\$ 1799
3 OTHER DAIRY CATTLE	590	573	449
4 BEEF BREEDING CATTLE	519	348	1144
5 BEEF FEEDER CATTLE	901	3771	50
6 HOGS COMPLETE & MIXED	59	179	11
7 HOGS FINISHING	109	14	13
8 HOGS PRODUCING WEANING PIGS	217	71	315
9 SHEEP & GOATS	12		12
10 SHEEP, FEEDER LAMBS			
11 CHICKENS (INCLUDING HENS & BROILERS)	6	5	9
12 TURKEYS			
13 OTHER PRODUCTIVE LIVESTOCK	39		172
14 MISCELLANEOUS LIVESTOCK EXPENSE	1678	2792	901
15 FEED BOUGHT	7377	12670	4450
16 FERTILIZER	2075	3738	1710
17 CHEMICALS	511	1061	454
18 OTHER CROP EXPENSE	1363	2194	1157
19 IRRIGATION OPERATION COSTS	61	13	174
20 CUSTOM WORK ENTER. OPR. COSTS, INC. LABOR	8	41	
21 CUSTOM WORK HIRED	1633	2699	1159
22 REPAIR & UPKEEP OF LIVESTOCK EQUIPMENT	389	774	211
23 REPAIR & UPKEEP OF FARM REAL ESTATE	543	845	344
24 GAS, OIL & GREASE BOUGHT (FARM SHARE)	1729	2696	1437
25 REPAIR & OPR. OF MACH. TRACTOR, TRUCK & AUTO	2179	3657	1667
26 REPAIR & UPKEEP OF IRRIGATION EQUIP.	26		27
27 REPAIR, -CUSTOM WORK ENTERPRISE	6	31	
28 WAGES OF HIRED LABOR	1211	2429	657
29 PERSONAL PROPERTY & REAL ESTATE TAXES	586	1010	464
30 GENERAL FARM EXPENSE	831	1118	716
31 TELEPHONE EXPENSE (FARM SHARE)	183	194	201
32 ELECTRICITY EXPENSE (FARM SHARE)	800	1301	582
33 TOTAL CASH OPERATING EXPENSE	\$ 26881	\$ 44981	\$ 20284 *
34 POWER, CROP & GEN. MACH. BOUGHT (FARM SHARE)	8507	11453	7518
35 IRRIGATION EQUIPMENT BOUGHT	564		1588
36 CUSTOM WORK EQUIPMENT BOUGHT	48	241	
37 LIVESTOCK EQUIPMENT BOUGHT	2008	2882	1402
38 NEW REAL ESTATE & IMPROVEMENT	8078	10367	9842
39 TOTAL FARM PURCHASES (33) THRU (38)	\$ 46087	\$ 69925	\$ 40634 *
40 DECREASE IN FARM CAPITAL			
41 INTEREST ON FARM CAPITAL	8693	14005	7254
42 UNPAID FAMILY LABOR	662	831	488
43 LABOR CHARGE FOR PARTNERS & OTHER OPR.	395	925	241
44 BOARD FURNISHED HIRED LABOR	54	81	20
45 TOTAL FARM EXPENSE (39) THRU (44)	\$ 56080	\$ 85854	\$ 49340 *
46 *RET. OPR. LAB & MGT. - SGL OPR (WF)(2A/40)-(45)	\$ 16596	\$ 45386	\$ (-7036)*
47 NUMBER OF OPERATORS	1	1	1
48 FULL TIME OPERATOR EQUIVALENTS	1.06	1.13	1.05
49 RET. TO OPR. LABOR & MGT/FULL TIME OPR EQUIV.	15534	39748	(-6136)

*Return to Operators Labor & Mgmt. - the return for the operator's labor and management after all expenses are deducted.

TABLE 3 - ENTERPRISE STATEMENT - 1978

	AVERAGE OF 291 FARMS	58 FARMS HIGH	58 FARMS LOW
1 RETURNS & NET INCREASES			
2 PRODUCTIVE LIVESTOCK			
3 DAIRY COWS	\$ 28757	\$ 60471	\$ 11164
4 OTHER DAIRY CATTLE	9938	23462	3835
5 BEEF BREEDING CATTLE	2985	3407	1566
6 FEEDER CATTLE	1496	5477	286
7 HOGS, COMPLETE & MIXED	824	2142	198
8 HOG FINISHING ENTERPRISE	107	20	21
9 PRODUCING WEANING PIGS	3968	1976	3518
10 SHEEP & GOATS	81		77
11 SHEEP, FEEDER LAMBS			
12 CHICKENS (INCLUDING HENS & BROILERS)	30	38	48
13 TURKEYS			
14 OTHER PRODUCTIVE LIVESTOCK	7	1	21
15 TOTAL PRODUCTIVE LIVESTOCK	\$ 48193	\$ 96993	\$ 20735 *
16 VALUE OF FEED FED TO LIVESTOCK	19891	36968	10805
17 RETURN OVER FEED FROM LIVESTOCK	28302	60025	9930
18 CROP, SEED & FEED	13872	26342	7564
19 COOPERATIVE PATRONAGE REFUNDS	298	787	56
20 MISCELLANEOUS FARM INCOME	1421	1287	1359
21 CUSTOM WORK ENTERPRISE	15	77	
22 TOTAL RETURNS & NET INCREASES	\$ 43908	\$ 88517	\$ 18909 *
23 EXPENSES & NET DECREASES			
24 TRUCK & AUTO (FARM SHARE)	\$ 1880	2607	1875
25 TRACTORS & CROP MACHINERY	6471	10262	6372
26 IRRIGATION EQUIPMENT	251	83	377
27 ELECTRICITY	800	1301	582
28 LIVESTOCK EQUIPMENT	1171	2366	664
29 BUILDINGS, FENCES & TILING	2370	2843	3421
30 BARE LAND	153		1662
31 MISCELLANEOUS LIVESTOCK EXPENSE	1678	2792	901
32 LABOR	1850	3626	1217
33 LABOR CHARGE FOR OTHER OPERATOR(S)	395	925	241
34 PROPERTY TAX	586	1010	464
35 GENERAL FARM EXPENSE & TELEPHONE	1014	1312	917
36 INTEREST ON FARM CAPITAL	8693	14005	7254
37 TOTAL EXPENSES & NET DECREASES	\$ 27312	\$ 43131	\$ 25945 *
38 RETURN TO OPERATORS LABOR & MANAGEMENT	\$ 16596	\$ 45386	\$ (-7036)
39 NUMBER OF FARM OPERATORS	1	1	1

Table 3 combines Tables 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 net decreases. The resulting labor earnings are the same as those on Table 2B.

TABLE 4 - HOUSEHOLD EXPENSE - 1978

	AVERAGE OF 168 FARMS	34 FARMS HIGH	33 FARMS LOW
1 NUMBER OF PERSONS - FAMILY	4	5	4
2 NUMBER OF ADULT EQUIVALENT - FAMILY	2.9	3.5	2.5
3 CHURCH & WELFARE	\$ 324	\$ 528	\$ 257
4 MEDICAL CARE & HEALTH INSURANCE	1094	1556	871
5 FOOD & MEALS BOUGHT	2270	2544	2071
6 OPERATING EXPENSE & SUPPLIES	629	906	510
7 FURNISHINGS & EQUIPMENT	646	599	861
8 CLOTHING & CLOTHING MATERIALS	673	898	432
9 PERSONAL CARE, PERSONAL SPENDING	337	433	375
10 EDUCATION	236	309	299
11 RECREATION	302	360	288
12 GIFTS & SPECIAL EVENTS	339	583	213
13 PERSONAL SHARE TRUCK & AUTO EXPENSE	444	506	522
14 OPERATOR SHARE UPKEEP ON DWELLING	257	217	170
14A CASH RENT (PERSONAL)	3		
15 PERSONAL SHARE TELEPHONE & ELECT. EXP.	413	443	469
15A PERSONAL SHARE-GENERAL FARM EXPENSE	53	86	51
16 TOTAL CASH LIVING EXPENSE	\$ 8019	\$ 9967	\$ 7391*
17 PERSONAL SHARE NEW TRUCK & AUTO	395	615	390
18 NEW DWELLING BOUGHT	1536	29	2267
19 TAXES & OTHER DEDUCTIONS	581	741	704
20 LIFE INSURANCE & OTHER SAVINGS & INVEST.	570	632	311
21 TOTAL HOUSEHOLD & PERSONAL (16) THRU (20)	\$ 11102	\$ 11984	\$ 11063
22 TOTAL FAMILY LIVING FROM THE FARM (33)	621	893	295
23 TOTAL CASH & NON-CASH EXPENSES (21)+(22)	\$ 11723	\$ 12877	\$ 11358
FAMILY LIVING FROM THE FARM			
25			
26 MILK & CREAM (QUARTS)			
27 BEEF & BUFFALO (POUNDS)			
28 PORK (POUNDS)			
29 LAMB, MUTTON, GOAT (POUNDS)			
30 POULTRY, ALL FOWL (POUNDS)			
31 EGGS (DOZEN)			
32 VEG., FRUITS, SPUDS, OTHER PRODUCE & FUEL			
33 TOTAL FAMILY LIVING FROM THE FARM	\$ 621	\$ 893	\$ 295

The household and personal expenses and receipts presented in Table 4 are for those farms with complete accounts. These farmers spent an average of \$925 per month for family living in addition to the food, fuel, and housing furnished by the farm.

TABLE 5 - NET WORTH STATEMENT--OPERATOR - 1978
FOR THOSE FARMS WITH A COMPLETE RECORD OF ALL ASSETS AND LIABILITIES

		AVERAGE OF 287 FARMS	
		JAN. 1-----	DEC. 31
1	TOTAL PRODUCTIVE LIVESTOCK	\$ 21080	\$ 30849
2	CROP, SEED & FEED	10184	12453
3	TOTAL POWER, MACHINERY & EQUIPMENT	20930	26825
4	LAND	32870	34726
5	BUILDINGS, FENCES, ETC.	16879	20588
6	TOTAL FARM CAPITAL	\$ 101942	\$ 125441 *
7	NON-FARM ASSETS	6543	7383
7A	CASH ON HAND & IN BANK	1190	1702
8	DWELLING	10013	11677
9	TOTAL ASSETS	\$ 119689	\$ 146203 *
10	REAL ESTATE MORTGAGES	27195	33095
11	CHattel MORTGAGES	21352	24929
12	NOTES	3573	4702
13	ACCOUNTS PAYABLE	1607	2028
14	TOTAL LIABILITIES	\$ 53728	\$ 64753 *
15	FARMERS NET WORTH	\$ 65960	\$ 81450 *
16	GAIN (OR LOSS) IN NET WORTH		\$ 15489 *

17	SUPPLEMENTARY MANAGEMENT INFORMATION		
18	RET. TO OPR. LABOR & MGT. (6B/47)	\$ 15592	
19	RET. TO CAP. & FAMILY LABOR (6B/48)	20235	
20	NON-FARM INCOME		
21	OUTSIDE INVESTMENT INCOME	398	
22	OTHER PER. INC. & INC. TAX REFUND	3791	
22A	SALE OF (P.S.) DWELLING, AUTO & TRUCK	72	
23	TOTAL NON-FARM INCOME	\$ 4262	
24	TOTAL FAMILY FARM & NON-FARM INC.	\$ 24497	
25	TOTAL MONEY BORROWED	25083	
26	TOTAL PAID ON DEBT (PRINCIPAL)	13930	
27	TOTAL HOUSEHOLD & PER CASH/NON-CASH EXP.	9063	
28	RATIO: TOTAL FARM-EXP. TO RECEIPTS (O.S.)	.780	
		JAN. 1	DEC. 31
29	RATIO: TOTAL-ASSETS TO LIABILITIES	2.228	2.258
30	RATIO: NON-REAL ESTATE-ASSETS TO LIAB.	2.259	2.502
31	RATIO: REAL ESTATE-ASSETS TO LIAB.	2.198	2.024
32	RATIO: NET WORTH TO TOTAL LIABILITIES	1.228	1.258
33*	RATIO: CASH OPR. EXP. TO ADJ TOTAL FARM SALES (OS)		.689
34	RATIO: TOTAL FARM REC. TO AVE FARM CAP. (W.F.)		.580
35	RATIO: TOTAL FARM REC. TO AVE. FARM CAP. (O.S.)		.611

*ADJUSTED FARM SALES DOES NOT INCLUDE SALE OF CAPITAL ASSETS

The net worth statement presents a picture of the financial structure of the operator's share of the farm business at the beginning and at the end of the year. The gain or loss in net worth is a dollar measure of progress. This statement, accurately kept over a period of years is one of the best measures of financial progress.

The supplementary information listed in Table 5 is helpful in studying the financial structure of the farm. All figures are presented on the operators share only basis.

TABLE 5 - NET WORTH STATEMENT--OPERATOR - 1978 (Continued)
FOR THOSE FARMS WITH A COMPLETE RECORD OF ALL ASSETS AND LIABILITIES

		57 FARMS HIGH		58 FARMS LOW	
		JAN. 1	DEC. 31	JAN. 1	DEC. 31
1	TOTAL PRODUCTIVE LIVESTOCK	\$ 38642	\$ 60101	\$ 11404	\$ 16512
2	CROP, SEED & FEED	20901	25956	6368	6857
3	TOTAL POWER, MACH. & EQUIP	34277	41595	19296	22371
4	LAND	44630	46632	36490	37160
5	BUILDINGS, FENCES, ETC.	25393	32012	14753	18857
6	TOTAL FARM CAPITAL	\$ 163843	\$ 206295	\$ 88310	\$ 101757*
7	NON-FARM ASSETS	8174	8846	6730	8271
7A	CASH ON HAND & IN BANK	2517	2918	236	771
8	DWELLING	11669	13433	8959	11082
9	TOTAL ASSETS	\$ 186203	\$ 231493	\$ 104235	\$ 121881*
10	REAL ESTATE MORTGAGES	35072	43022	22781	30161
11	CHattel MORTGAGES	31441	33171	18448	20492
12	NOTES	5059	5565	3463	4822
13	ACCOUNTS PAYABLE	1451	2175	2434	2594
14	TOTAL LIABILITIES	\$ 73022	\$ 83933	\$ 47126	\$ 58069*
15	FARMERS NET WORTH	\$ 113181	\$ 147560	\$ 57110	\$ 63812*
16	GAIN (OR LOSS) IN NET WORTH		\$ 34379		\$ 6702*

17	SUPPLEMENTARY MANAGEMENT INFORMATION				
18	RET. TO OPR. LABOR & MGT. (6B/47)	\$ 43626		\$ (-7072)	
19	RET. TO CAP. & FAMILY LABOR (6B/48)	51392		(-3505)	
20	NON-FARM INCOME				
21	OUTSIDE INVESTMENT INCOME	91		1308	
22	OTHER PER INC & INC TAX REFUND	1914		6245	
22A	SALE OF (P.S.) DWELLING, AUTO, TRUCK	58		192	
23	TOTAL NON-FARM INCOME	\$ 2063		\$ 7745	
24	TOTAL FAMILY FARM & NON-FARM INC.	\$ 53455		\$ 4240	
25	TOTAL MONEY BORROWED	34681		23107	
26	TOTAL PAID ON DEBT (PRINCIPAL)	23388		11750	
27	TOTAL HOUSEHOLD & PER CASH/NON-CASH EXP (4/23)	11733		7576	
28	RATIO: TOTAL FARM EXPENSE TO RECEIPTS (O.S.)	.665		1.178	
		JAN. 1	DEC. 31	JAN. 1	DEC. 31
29	RATIO: TOTAL-ASSETS TO LIABILITIES	2.550	2.758	2.212	2.099
30	RATIO: NON-REAL ESTATE-ASSETS TO LIAB.	2.754	3.408	1.809	1.963
31	RATIO: REAL ESTATE-ASSETS TO LIAB.	2.329	2.140	2.643	2.225
32	RATIO: NET WORTH TO TOTAL LIABILITIES	1.550	1.758	1.212	1.099
33*	RATIO: CASH OPR EXP TO ADJ. TOTAL FARM SALES (O.S.)		.624		.953
34	RATIO: TOTAL FARM REC TO AVE FARM CAP. (W.F.)		.652		.411
35	RATIO: TOTAL FARM REC. TO AVE. FARM CAP. (O.S.)		.694		.418

*ADJUSTED FARM SALES DOES NOT INCLUDE SALE OF CAPITAL ASSETS

The ratio of Assets to Liabilities (Line 29) indicates the degree of solvency at the beginning and end of the year. This is often referred to as the "Net Capital Ratio". It answers the question, "How many dollars of total assets do I have to cover each dollar of debt."

The ratio of Expense to Sales (Line 33) is a way of expressing the so-called margin. It answers the question, "How many dollars does it cost me to take in \$100?"

TABLE 6A - OPERATORS SHARE OF CASH RECEIPTS - 1978

	AVERAGE OF 291 FARMS	58 FARMS HIGH	58 FARMS LOW
1 SALE OF LIVESTOCK & LIVESTOCK PRODUCTS			
2 DAIRY COWS	\$ 2705	\$ 5521	\$ 1434
3 DAIRY PRODUCTS	26411	54966	11509
4 OTHER DAIRY CATTLE	2086	4968	1122
5 BEEF BREEDING CATTLE	1639	1230	876
6 BEEF FEEDER CATTLE	1743	6728	449
7 HOGS COMPLETE & MIXED	617	1664	157
8 HOGS FINISHING	185	88	
9 HOGS PRODUCING WEANING PIGS	3591	2025	3196
10 SHEEP, GOATS & WOOL, FARM FLOCK	72		64
11 SHEEP & WOOL, FEEDER LAMBS			
12 CHICKENS (INCLUDING HENS & BROILERS)	14	22	43
13 TURKEYS			
14 EGGS	16	12	4
15 OTHER PRODUCTIVE LIVESTOCK & PRODUCTS	3	1	
16 OTHER MISCELLANEOUS LIVESTOCK INCOME			
17 TOTAL SALES OF PRODUCTIVE LIVESTOCK	\$ 39080	\$ 77226	\$ 18853 *
18 SALE OF CROPS			
19 WHEAT	89	163	54
20 OTHER SMALL GRAIN	313	335	269
21 CORN	1764	2644	2262
22 SOYBEANS	123	228	332
23 OTHER ROW CROPS	13	43	4
24 LEGUMES & OTHER ROUGHAGE	412	561	592
25 GRASS SEED			
26 FRUITS & NUTS			
27 VEGETABLES, ROADSIDE MARKET & SPECIALTY	136		
28 NURSERY, TIMBER & OTHER	131		172
29 SET ASIDE ACRES - GOVERNMENT PAYMENTS	137	219	202
30 TOTAL SALES FROM CROPS	\$ 3117	\$ 4192	\$ 3888 *
31 CAPITAL ASSETS SOLD	682	669	637
32 GAS TAX REFUND	88	153	49
33 INCOME FROM WORK OFF THE FARM	825	1325	476
34 CUSTOM WORK ENTERPRISE INCOME	40	201	
35 PATRONAGE REFUNDS	295	804	61
36 MISCELLANEOUS FARM INCOME	1419	1314	1281
37 TOTAL FARM SALES	\$ 45546	\$ 85883	\$ 25245 *
38 INCREASE IN FARM CAPITAL	24295	44016	14153
39 FAMILY LIVING FROM THE FARM	609	978	311
40 TOTAL FARM RECEIPTS (37)+(38)+(39)	\$ 70450	\$ 130877	\$ 39708
41 ADJUSTED TOTAL FARM SALES (37)-(31)	44864	85214	24608
42 TOTAL CASH FARM OPERATING EXPENSE	31098	53675	23449
43 NET CASH OPERATING INCOME	\$ 13766	\$ 31539	\$ 1159 *

Table 6A is derived the same way as Table 2A with the exception of the landlord's share which is left out. For the owner-operator, Table 2A and 6A are the same.

TABLE 5B - OPERATORS SHARE OF CASH EXPENSES - 1978

	AVERAGE OF 291 FARMS	58 FARMS HIGH	58 FARMS LOW
1 PURCHASE OF LIVESTOCK			
2 DAIRY COWS	\$ 1223	\$ 919	\$ 1799
3 OTHER DAIRY CATTLE	578	541	444
4 BEEF BREEDING CATTLE	452	348	826
5 BEEF FEEDER CATTLE	901	3771	50
6 HOGS COMPLETE	57	175	16
7 HOGS FINISHING	109	118	13
8 HOGS PRODUCING WEANING PIGS	209	48	315
9 SHEEP, FARM FLOCK	12		12
10 SHEEP, FEEDER LAMBS			
11 CHICKENS	6	5	9
12 TURKEYS			
13 OTHER PRODUCTIVE LIVESTOCK	38		176
14 MISCELLANEOUS LIVESTOCK EXPENSE	1649	2966	891
15 FEED BOUGHT	7220	12684	4347
16 FERTILIZER	2030	3772	1610
17 CHEMICALS	502	1100	414
18 OTHER CROP EXPENSE	1334	2237	1093
19 IRRIGATION OPERATION COST	61	13	170
20 CUSTOM WORK OPR COSTS, INC LABOR	8	41	
21 CUSTOM WORK HIRED	1596	2739	1125
22 REPAIR & UPKEEP OF LIVESTOCK EQUIP	385	742	223
23 REPAIR & UPKEEP OF FARM REAL ESTATE	534	883	336
24 GAS, OIL, GREASE BOUGHT (FARM SHARE)	1695	2673	1412
25 REPAIR & OPER OF MACH, TRACTOR, TRUCK, AUTO (FS)	2141	3746	1700
26 REPAIR & UPKEEP OF IRRIGATION EQUIPMENT	26		27
27 REPAIRS, CUSTOM WORK ENTERPRISE	6	31	
28 WAGES OF HIRED LABOR	1178	2563	668
29 PERSONAL PROPERTY & REAL ESTATE TAXES	533	1006	421
30 CASH RENT	820	1500	353
31 GENERAL FARM EXPENSES	820	1249	685
32 TELEPHONE EXPENSE (FARM SHARE)	177	197	183
33 ELECTRICITY EXPENSE (FARM SHARE)	778	1353	563
34 INTEREST EXPENSE	4020	6254	3568
35 TOTAL CASH OPERATING EXPENSE	\$ 31098	\$ 53675	\$ 23449 *
36 POWER, CROP & GEN MACH BOUGHT (FARM SHARE)	8327	11960	7103
37 IRRIGATION EQUIPMENT BOUGHT	564		515
38 CUSTOM WORK ENTERPRISE EQUIP BOUGHT	48	241	
39 LIVESTOCK EQUIPMENT BOUGHT	1990	2674	1570
40 NEW REAL ESTATE & IMPROVEMENTS	7946	10822	9852
41 TOTAL FARM PURCHASES (35) THRU (40)	\$ 49974	\$ 79371	\$ 42487 *
42 DECREASE IN FARM CAPITAL			
43 INTEREST ON FARM CAPITAL (EQUITY)	3982	6872	3084
44 UNPAID FAMILY LABOR	662	894	482
45 BOARD FURNISHED HIRED LABOR	54	83	20
46 TOTAL FARM EXPENSE (41) THRU (45)	\$ 54858	\$ 87251	\$ 46780 *
47 RET TO OPR LABOR & MGMT (OPR SHARE)(6A/40)-(46)\$	15592	\$ 43626	\$ (-7072)*
48 *RET TO CAPITAL & FAMILY LABOR (47)+(44)+(43)	\$ 20235	\$ 51392	\$ (-3505)

*Return to Capital and Family Labor represents the amount available for debt service, living expense, and savings.

EXPLANATION OF WORK UNITS

The total "work units" for any one farm is a measure of the size of that farm 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 pay.

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

Item		Item	
Dairy Cows	7.0/cow	Sunflowers	.55/acre
Other Dairy Cattle	1.2/head	Barley, Wheat, Oats, Rye	.30/acre
Beef Breeding Cows	1.5/head	Oat Silage	.40/acre
Beef Feeders	.12/cwt	Canning Corn	.40/acre
Hogs-Complete	.12/cwt	Corn for Grain	.55/acre
Hogs-Finishing	.06/cwt	Soybeans	.45/acre
Hogs-Wean. Pigs	1.4/litter	Corn & Cane Silage	.80/acre
Sheep, Farm Flock	.60/ewe	Alfalfa Hay	.60/acre
Lambs, Feeders	.30/cwt	O. Leg. & Mix Hay	.40/acre
Chickens, Lay. Flock	5.0/100	Tame Grass Hay	.20/acre
Broilers	.20/cwt	Annual Hay	.30/acre
Turkeys, Lay. Flock	25.0/100	Leg & Grass Silage	.40/acre
Turkey Poults	.12/cwt	Legume & Grass Seed	.40/acre
Labor Off the Farm	1.0/\$20	Summer Fallow Tilled	.40/acre
Diverted Acres	.20/acre	Wild Hay	.20/acre

AVERAGE PRICES OF HOME GROWN FEED AND OTHER PRICES USED IN 1978 REPORT

SMALL GRAIN & CORN

Corn	\$1.90/bu.
Oats	1.05/bu.
Soybeans	6.00/bu.
Wheat	3.00/bu.
Rye	2.00/bu.
Barley (Feed)	1.45/bu.
Potatoes	1.20/bu. (\$2.00/cwt.)

PASTURE PER HEAD PER MONTH

Dairy cows, Beef cows	\$4.00
Other Dairy & Beef	2.00
Hogs	.30
Pigs	.10
Sheep	.40
Lambs	.20

ROUGHAGES

Alfalfa Hay	\$50.00/ton
O. Leg & Mix	40.00/ton
Wild Annual & Tame	25.00/ton
Corn Silage	15.00/ton
Oatage	20.00/ton
Haylage	25.00/ton
Straw	20.00/ton (.45¢/bale)
Cornstover	7.00/ton

PRODUCTS USED IN THE HOME

Cream	\$1.50/qt.
Whole Milk	.25/qt.
Whole Milk fed	9.00/cwt.

UNPAID FAMILY LABOR

Second Operators Labor	\$550/month
Unpaid Family Labor	\$15/day

LAND COST used on Table 10 was considered to be the rental value of land on each farm. Interest on Farm Capital - 7%.

MEASURER OF FARM ORGANIZATION EFFICIENCY

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

1. LABOR EARNINGS - The basis for comparing the relationship between selected farm management factors and farm profit. "Labor Earnings" represents that share of the total farm income that is credited to the operator's labor and management. It is a whole farm figure taking into account all income and expense, cash and non-cash, including a charge for the use of farm capital. Tables 2B and 3 show two methods of determining labor earnings. The operator's share of labor earnings is shown on Table 6B and may be different from Whole Farm Labor Earnings.
2. CROP YIELDS INDEX - A measure of the crop yield level for all crops produced. It is expressed as a percentage of the average; the average being 100%.
3. GROSS RETURN PER TILLABLE ACRE - Reflects both crop selection and crop yield.
4. RETURN PER \$100 FEED FED TO PRODUCTIVE LIVESTOCK - A measure of the general level of efficiency for all livestock. It is expressed as a percentage with 100% representing average efficiency.
5. LIVESTOCK UNITS PER 100 ACRES - A measure of livestock density or population, particularly important for farms with limited cropland.
6. 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 to other tasks utilizing farm labor.
7. WORK UNITS PER WORKER - A measure of labor efficiency. It is determined by dividing the work units by the total number of workers.
8. POWER, MACHINERY, EQUIPMENT, AND BUILDING EXPENSE PER WORK UNIT - A measure of expense control. It is the total cost of items 24 through 29 in Table 3 divided by the number of Work Units.
9. FARM CAPITAL INVESTMENT PER WORKER - Another indication of size of business. Useful in relating farm businesses to other industries.

Other items listed on Table 8 are related to the above measures and serve to further define and describe the efficiency level of a farm business.

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

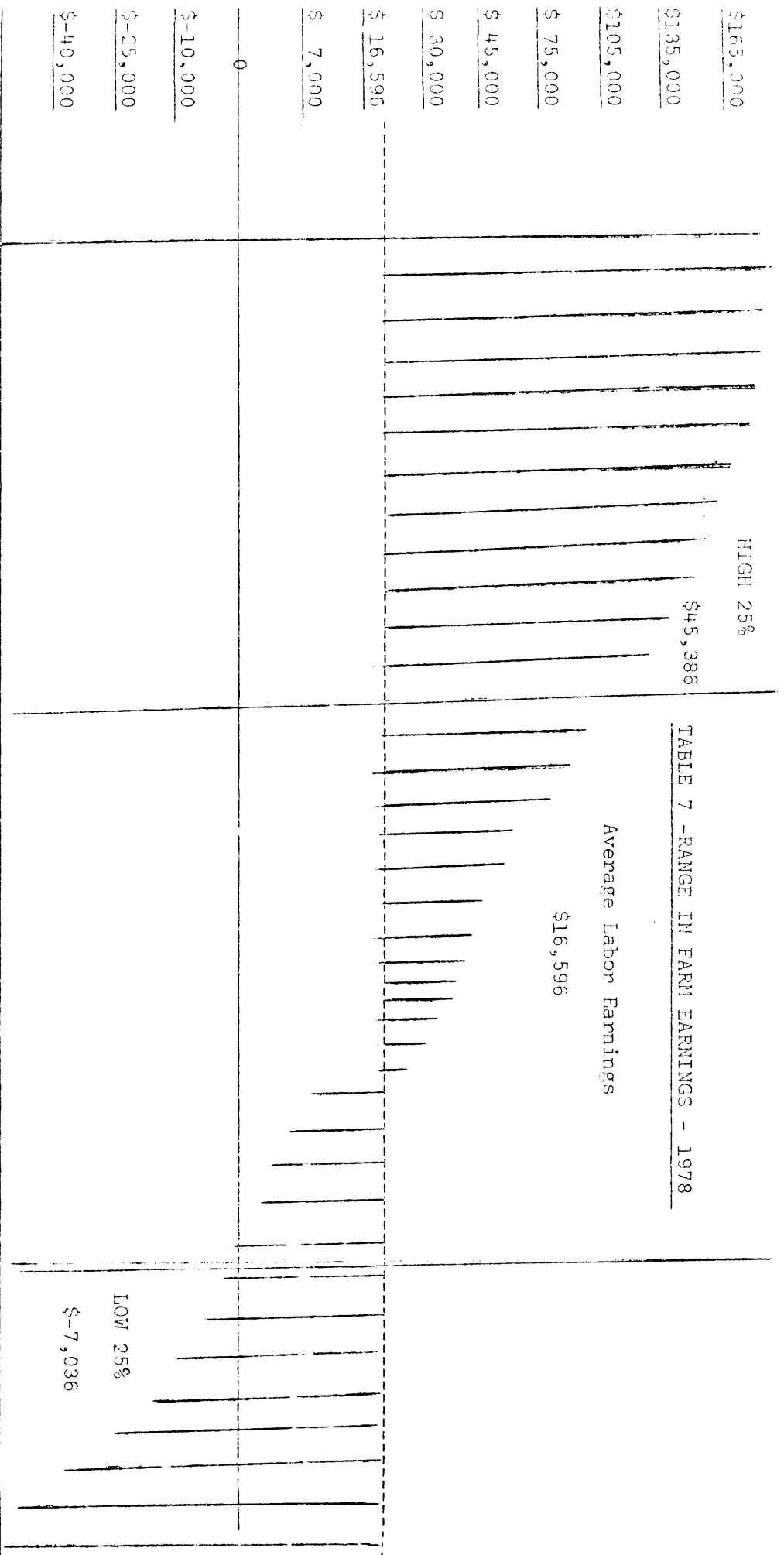
TABLE 8 - MEASURES OF FARM ORGANIZATION - 1978

		AVERAGE OF 291 FARMS	58 HIGH	58 LOW
1	RETURN TO OPERATORS LABOR & MANAGEMENT	\$ 16596	\$ 45386	\$(-7036)
2	CROP YIELD INDEX	100.0	111.3	86.1
3	PERCENT TILLABLE LAND IN HIGH RETURN CROPS			
4	GROSS RETURN PER TILLABLE ACRE (EX.PASTURE) \$	113.75	\$ 138.88	\$ 107.89
5	RETURN PER \$100 FEED FED PROD. LIVESTOCK INDEX	100.0	107.4	89.2
6	*LIVESTOCK UNITS PER 100 ACRES	24.18	28.89	18.88
7	SIZE OF BUSINESS-WORK UNITS	318.98	537.06	191.18
8	WORK UNITS PER WORKER	226.23	319.68	148.20
9	POWER,MACH.,EQUIP.,BLDG.EXP. PER WORK UNIT	\$ 40.60	\$ 36.29	\$ 69.51
10	FARM CAPITAL INVESTMENT PER WORKER	\$ 89072	\$119092	\$80327
11	INDEX OF RETURN PER \$100 FEED FED			
15	6100A BEEF BREEDING FARM,WHOLE HERD,COMM.	100.0	123.3	73.0
17	6130A BEEF FEEDERS GRASS FED	100.0	129.1	55.6
18	6140A BEEF FEEDERS FEEDLOT	100.0	89.1	
23	6290A DAIRY COWS, COMMERCIAL, GENERAL	100.0	114.0	79.5
25	6310A OTHER DAIRY, COMMERCIAL, REPLACEMENTS	100.0	105.1	83.5
27	6470A HOGS, FARROW, FINISH, GENERAL	100.0	109.5	
29	6510A HOGS, WEANING PIG PRODUCTION	100.0	120.7	77.5
29	6670A SHEEP, FARM, COMMERCIAL	100.0		65.6
30	NUMBER OF ANIMAL UNITS	53.63	94.76	30.74
31	WORK UNITS			
32	CROPS	85.92	129.67	67.39
33	PRODUCTIVE LIVESTOCK	218.19	392.73	115.29
34	OTHER PRODUCTIVE WORK UNITS	14.87	14.66	8.50
35	EXPENSES PER WORK UNITS			
36	TRACTOR & CROP MACHINERY EXPENSE	\$ 21.08	\$ 19.29	\$ 35.30
37	FARM SHARE OF AUTO & TRUCK EXPENSE	\$ 5.90	\$ 4.86	\$ 9.81
38	FARM SHARE OF ELECTRIC EXPENSE	\$ 2.51	\$ 2.43	\$ 3.04
39	LIVESTOCK EQUIPMENT EXPENSE	\$ 3.67	\$ 4.41	\$ 3.47
40	BUILDING, FENCES & TILING EXPENSE	\$ 7.43	\$ 5.30	\$ 17.89
41	*** TRACTOR & CROP MACH. EXP. PER CROP ACRE	\$ 33.65	\$ 37.40	\$ 42.14
42	FARM POWER & MACH. COST ALLOC. TO LIVESTOCK	\$ 1616.83	\$ 2902.17	\$1407.37
43	BLDG.,FENCE & TILING COST ALLOC. TO CROPS	\$ 707.00	\$ 708.25	\$1024.77
44	* ACRES INCLUDE ALL TILLABLE LAND, NON-TILLABLE HAY & PASTURE			
45	*** ACRES INCLUDE ALL TILLABLE LAND PLUS ACRES IN NON-TILLABLE HAY			

THERMOMETER CHART

Using your figures from Table 3, 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 from the center of the page.

Labor Earn- ings	Crop Yield	Gross Return per Till. A.	Return from Prod. Livstk	Prod. Lvstk. Units per 100 A.	Work Units per Worker	Work Units per Worker	P.M.E. & B. Exp. per Unit	Farm Capital Investment per Worker
160,000	170	155	136	40	700	500	14.00	170,000
130,000	155	150	130	36	650	450	18.00	145,000
105,000	140	147	124	34	600	400	24.00	138,000
80,000	125	145	118	32	575	375	30.00	130,000
60,000	113	142	112	30	550	350	34.00	125,000
45,386	111	139	107	29	537	320	36.00	119,092
37,000	109	132	106	28	500	300	37.00	114,000
30,000	106	126	104	26	450	275	38.00	107,000
23,000	103	120	102	25	385	250	39.00	95,000
16,596	100	114	100	24	319	226	41.00	88,072
7,000	95	112	96	23	290	200	50.00	86,000
0	90	110	92	21	240	175	60.00	83,000
-7,036	86	108	89	19	191	148	70.00	80,327
-14,000	70	90	80	17	160	125	75.00	60,000
-21,000	55	80	60	15	135	100	80.00	50,000
-28,000	36	70	40	13	100	75	100.00	40,000
-35,000	20	60	20	11	70	50	120.00	30,000



Each line represents 9 farm units. Every study of farm earnings shows a wide variation in earnings among farmers in a given year. Some of the causes for these differences in earnings, such as weather, may be beyond the control of the individual farmer. Other factors are within his control. The most important management factors affecting earnings are as follows:

1. Crop Yields
2. Gross Return Per Tillable Acre
3. Returns from livestock
4. Amount of livestock
5. Size of business
6. Work units per worker
7. Control over expenses
8. Farm investments per worker

LABOR EARNINGS CORRELATED WITH EXCELLED FACTORS

The thermometer chart shows eight major management factors that influence farm earnings within a given year. These eight factors are:

1. Crop yield
2. Gross Return for Tillage Acre
3. Returns from livestock
4. Amount of livestock
5. Work units per worker
6. Control over power & machinery expenses
7. Farm Investment Per Worker
- 8.

The combined effect of those management factors as related to farm earnings is shown on the table below. Attention is called to the fact that farmers exceeding the average in most of the management factors are also those reporting the highest labor earnings.

No. of factors in which farmers excelled	No. of Farms	2500	5000	9500	13000	16500	20000	23500	27000	30500	34000	37500	41000	43000	45000
0 - 1	72	2920													
2 - 3	142	5460													
4 - 5	90						16944								
6 - 7	89							26447							
8 - 9	34													43000	

This table should be studied along with the tables on Measures of Farm Organization and Management Efficiency and the Thermometer Chart. The importance of these three tables to determine the financial "Heartbeat" of a farm operation cannot be over emphasized.

TABLE 3 - CROP DATA FOR 291 FARMS - 1978

<u>Crop</u>	<u>Ave. Acres</u>	<u>Ave. Yield</u>	<u>Average Cost per Unit of Production</u>	<u>Average Return over listed Cost per acre</u>
Barley	36.7	31.0 bu.	1.58	1.90
Oats for Feed	31.5	44.3 bu.	1.26	(-7.86)
Rye	40.6	22.4 bu.	2.18	(-1.09)
Wheat	34.6	22.5 bu.	2.82	5.88
Corn	38.7	69.5 bu.	1.53	24.68
Soybeans	31.8	16.7 bu.	4.60	23.29
Alfalfa Hay	35.7	3.5 ton	24.52	70.53
Corn Silage	26.5	10.2 ton	10.39	48.61
Irrigated Corn	103.2	89.1 bu.	1.80	7.95
Irrigated Corn Silage	25.3	14.5	10.68	43.67

	<u>291 Farm AVERAGE</u>	<u>58 Farms High Earnings</u>	<u>58 Farms Low</u>
9992 SUPPLEMENTARY MANAGEMENT INFORMATION			
9993 PERCENT LAND TILLABLE	56.9	60.7	53.7
9995 *FERTILIZER COST PER ACRE	11.76	14.11	12.72
9996 *CROP CHEMICALS PER ACRE	3.02	4.21	3.36
9997 *SEED & OTHER COSTS PER ACRE	7.37	7.62	7.56
9998 *GAS, OIL & GREASE BOUGHT PER ACRE	7.56	8.42	6.86

TABLE 10 - CROPS ANALYSIS

The following crop analysis represent an attempt to show the comparable return to labor, management and capital per acre from each crop.

Out of pocket costs for fertilizer, chemicals, seed and miscellaneous crop expense, hired labor, custom work and irrigation operation are actual costs that are assigned to each individual crop in the account book. These costs are shown in Table 10, under the heading Direct Costs.

Other costs, called Allocated Costs, are not actual costs but are either calculated costs, assigned costs or non-cash costs. Line 17 represents the cost of ownership--depreciation. Line 18 represents the cost of operation--gas, oil, grease and repairs. Work units are used as a factor on allocating a portion of Line 17 and 18 to each crop. For a typical operation or where the crop is unusual, the Power Cost Allocations Factor (PCAF) on line 27 is used to modify the work unit for use in the allocation process. Land Cost is considered to be the cash rental value based on comparable or actual rental values for similar land in each local area. For the land owner this rental must be at least enough to cover taxes and interest on investment in the land.

Irrigation crops have been separated from dryland crops. On these Tables, line 13 represents operating costs for irrigation such as: gas, electricity and repairs. Line 19 represents depreciation on irrigation equipment.

TABLE 10 - CROP DATA FOR BARLEY, SPRING - 1978

	AVERAGE OF	14 FARMS	14 FARMS
	29 FARMS	HIGH	LOW
	PER ACRE	PER ACRE	PER ACRE
1 ACRES (TOTAL)	36.7	26.1	44.9
2 YIELD (BUSHEL)	31.0	45.4	22.2
3 VALUE PER PRODUCTION UNIT	\$ 1.54	\$ 1.48	\$ 1.60
4 CROP PRODUCT RETURN	47.77	67.20	35.52
5 OTHER CROP INCOME	3.02	5.17	2.12
6 TOTAL CROP RETURN	\$ 50.79	\$ 72.37	\$ 37.64*
7 DIRECT COSTS			
8 FERTILIZER	\$ 7.85	\$ 13.75	\$ 3.67
9 CHEMICALS	1.85	1.88	2.05
10 SEED & OTHER	5.10	5.79	4.14
11 SPECIAL HIRED LABOR			
12 CUSTOM WORK HIRED	1.14	2.38	.56
13 IRRIGATION OPERATION			
14 TOTAL DIRECT COSTS	\$ 15.94	\$ 23.80	\$ 10.42
15 RETURN OVER DIRECT COSTS	\$ 34.85	\$ 48.57	\$ 27.22 *
16 ALLOCATED COSTS			
17 FARM POWER & MACHINERY - OWNERSHIP	\$ 6.36	\$ 11.12	\$ 3.66
18 FARM POWER & MACHINERY - OPERATION	9.93	10.12	9.96
19 IRRIGATION EQUIPMENT - OWNERSHIP			
20 LAND COSTS	14.34	14.00	15.00
21 MISCELLANEOUS COSTS			
22 *INTEREST ON MACH. & EQUIP. INVESTMENT	2.32	3.82	1.53
23 TOTAL ALLOCATED COSTS	\$ 32.95	\$ 39.06	\$ 30.15
24 RETURN OVER ALL LISTED COSTS	\$ 1.90	\$ 9.51	\$ (-2.93)*
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	.30	.30	.30
27 POWER COSTS ALLOCATION FACTOR	.99	.99	.99
28 TOTAL LISTED COST PER UNIT OF PRODUCTION	1.58	1.38	1.83
29 RETURN OVER LISTED COSTS PER UNIT	.06	.21	(-.13)
30 BREAKEVEN YIELD/UNITS OF PRODUCTION	31.75	42.47	25.36
31 TOTAL LISTED COSTS PER ACRE	\$ 48.89	\$ 62.86	\$ 40.57 *
32 OTHER POSSIBLE COSTS NOT LISTED			
33 UTILITIES & OTHER GEN. FARM EXP.	_____	_____	_____
33A BUILDINGS, FENCES & TILING COST	_____	_____	_____
34 INTEREST ALLOCATION	_____	_____	_____
35 OTHER COSTS NOT LISTED	_____	_____	_____
36 TOTAL COSTS	_____	_____	_____

*DOES NOT INCLUDE INTEREST ON INVESTMENT IN IRRIGATION EQUIP OR LAND

TABLE 10 - CROP DATA FOR OATS, FEED - 1978

	AVERAGE OF 301 FARMS	150 FARMS HIGH	150 FARMS LOW
	PER ACRE	PER ACRE	PER ACRE
1 ACRES (TOTAL)	31.5	26.6	36.4
2 YIELD (BUSHEL)	44.3	62.1	31.5
3 VALUE PER PRODUCTION UNIT	.97	.97	.97
4 CROP PRODUCT RETURN	\$ 42.98	\$ 60.23	\$ 30.52
5 OTHER CROP INCOME	5.08	7.82	3.13
6 TOTAL CROP RETURN	\$ 48.06	\$ 68.05	\$ 33.65 *
7 DIRECT COSTS			
8 FERTILIZER	\$ 5.49	\$ 6.09	\$ 5.05
9 CHEMICALS	.35	.30	.38
10 SEED & OTHER	5.02	6.28	4.12
11 SPECIAL HIRED LABOR	.03		.08
12 CUSTOM WORK HIRED	2.41	3.46	1.65
13 IRRIGATION OPERATION			
14 TOTAL DIRECT COSTS	\$ 13.30	\$ 16.13	\$ 11.28
15 RETURN OVER DIRECT COSTS	\$ 34.76	\$ 51.92	\$ 22.37 *
16 ALLOCATED COSTS			
17 FARM POWER & MACHINERY - OWNERSHIP	\$ 9.25	\$ 9.15	\$ 9.36
18 FARM POWER & MACHINERY - OPERATION	10.69	10.56	10.82
19 IRRIGATION EQUIPMENT - OWNERSHIP			
20 LAND COSTS	19.38	21.31	17.54
21 MISCELLANEOUS COSTS	.10	.19	
22 *INTEREST ON MACH. & EQUIP. INVESTMENT	3.20	3.26	3.16
23 TOTAL ALLOCATED COSTS	\$ 42.62	\$ 44.47	\$ 40.91
24 RETURN OVER ALL LISTED COSTS	\$ (-7.86)	\$ 7.45	\$ (-18.54)*
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	.30	.30	.30
27 POWER COSTS ALLOCATION FACTOR	.98	.98	.98
28 TOTAL LISTED COST PER UNIT OF PRODUCTION	1.26	.98	1.66
29 RETURN OVER LISTED COSTS PER UNIT	(-.18)	.12	(-.59)
30 BREAKEVEN YIELD/UNITS OF PRODUCTION	57.65	62.47	53.80
31 TOTAL LISTED COSTS PER ACRE	\$ 55.92	\$ 60.60	\$ 52.19 *
32 OTHER POSSIBLE COSTS NOT LISTED			
33 UTILITIES & OTHER GEN. FARM EXP.	_____	_____	_____
33A BUILDINGS, FENCES & TILING COSTS	_____	_____	_____
34 INTEREST ALLOCATION	_____	_____	_____
35 OTHER COSTS NOT LISTED	_____	_____	_____
36 TOTAL COSTS	_____	_____	_____

*DOES NOT INCLUDE INTEREST ON INVESTMENT IN IRRIGATION EQUIP OR LAND

TABLE 10 - CROP DATA FOR RYE - 1978

		AVERAGE OF 12 FARMS	6 FARMS HIGH	6 FARMS LOW
		PER ACRE	PER ACRE	PER ACRE
1	ACRES (TOTAL)	40.6	38.4	42.8
2	YIELD (BUSHEL)	22.4	28.2	17.2
3	VALUE PER PRODUCTION UNIT	1.80	1.76	1.83
4	CROP PRODUCT RETURN	\$ 40.30	\$ 49.64	\$ 31.47
5	OTHER CROP INCOME	7.46	2.68	11.75
6	TOTAL CROP RETURN	\$ 47.76	\$ 52.32	\$ 43.22 *
7	DIRECT COSTS			
8	FERTILIZER	\$ 11.16	\$ 12.06	\$ 10.33
9	CHEMICALS			
10	SEED & OTHER	2.61	1.41	3.71
11	SPECIAL HIRED LABOR			
12	CUSTOM WORK HIRED	1.80	2.16	1.45
13	IRRIGATION OPERATION			
14	TOTAL DIRECT COSTS	\$ 15.57	\$ 15.63	\$ 15.49
15	RETURN OVER DIRECT COSTS	\$ 32.19	\$ 36.69	\$ 27.73 *
16	ALLOCATED COSTS			
17	FARM POWER & MACHINERY - OWNERSHIP	\$ 7.19	\$ 7.42	\$ 6.99
18	FARM POWER & MACHINERY - OPERATION	7.21	6.34	7.99
19	IRRIGATION EQUIPMENT - OWNERSHIP			
20	LAND COSTS	15.33	13.83	16.83
21	MISCELLANEOUS COSTS	.02		.05
22	*INTEREST ON MACH. & EQUIP. INVEST.	3.53	2.57	4.39
23	TOTAL ALLOCATED COSTS	\$ 33.28	\$ 30.16	\$ 36.25
24	RETURN OVER ALL LISTED COSTS	\$ (-1.09)	\$ 6.53	\$ (-8.52)*
25	SUPPLEMENTARY MANAGEMENT INFORMATION			
26	WORK UNITS ASSIGNED PER ACRE	.30	.30	.30
27	POWER COSTS ALLOCATION FACTOR	.96	1.00	.93
28	TOTAL LISTED COST PER UNIT OF PRODUCTION	2.18	1.62	3.01
29	RETURN OVER LISTED COSTS PER UNIT	(-.05)	.23	(-.49)
30	BREAKEVEN YIELD/UNITS OF PRODUCTION	27.14	26.02	28.27
31	TOTAL LISTED COSTS PER ACRE	\$ 48.85	\$ 45.79	\$ 51.74 *
32	OTHER POSSIBLE COSTS NOT LISTED			
33	UTILITIES & OTHER GEN. FARM EXP.	_____	_____	_____
33A	BUILDINGS, FENCES & TILING COSTS	_____	_____	_____
34	INTEREST ALLOCATION	_____	_____	_____
35	OTHER COSTS NOT LISTED	_____	_____	_____
36	TOTAL COSTS	_____	_____	_____

*DOES NOT INCLUDE INTEREST ON INVESTMENT IN IRRIGATION EQUIP OR LAND

TABLE 10 - CROP DATA FOR SPRING WHEAT - 1978

	AVERAGE OF 21 FARMS	10 FARMS HIGH	10 FARMS LOW
	PER ACRE	PER ACRE	PER ACRE
1 ACRES (TOTAL)	34.6	38.7	32.1
2 YIELD (BUSHEL)	22.5	27.7	16.3
3 VALUE PER PRODUCTION UNIT	2.89	2.91	2.86
4 CROP PRODUCT RETURN	\$ 65.06	\$ 80.54	\$ 46.51
5 OTHER CROP INCOME	4.42	7.47	1.00
6 TOTAL CROP RETURN	\$ 69.48	\$ 88.01	\$ 47.51 *
7 DIRECT COSTS			
8 FERTILIZER	\$ 9.83	\$ 10.80	\$ 8.29
9 CHEMICALS	2.60	1.40	4.24
10 SEED & OTHER	7.20	8.17	6.42
11 SPECIAL HIRED LABOR	.40		.93
12 CUSTOM WORK HIRED	1.30	1.34	1.34
13 IRRIGATION OPERATION			
14 TOTAL DIRECT COSTS	\$ 21.33	\$ 21.71	\$ 21.22
15 RETURN OVER DIRECT COSTS	\$ 48.15	\$ 66.30	\$ 26.29 *
16 ALLOCATED COSTS			
17 FARM POWER & MACHINERY - OWNERSHIP	\$ 11.70	\$ 12.05	\$ 11.73
18 FARM POWER & MACHINERY - OPERATION	12.44	10.38	14.99
19 IRRIGATION EQUIPMENT - OWNERSHIP			
20 LAND COSTS	15.33	14.40	15.20
21 MISCELLANEOUS COSTS			
22 *INTEREST ON MACH. & EQUIPMENT INVEST.	2.80	2.58	3.16
23 TOTAL ALLOCATED COSTS	\$ 42.27	\$ 39.41	\$ 45.08
24 RETURN OVER ALL LISTED COSTS	\$ 5.88	\$ 26.89	\$ (-18.79)**
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	.30	.30	.30
27 POWER COSTS ALLOCATION FACTOR	1.00	1.00	1.00
28 TOTAL LISTED COST PER UNIT OF PRODUCTION	2.82	2.21	4.07
29 RETURN OVER LISTED COSTS PER UNIT	.26	.97	(-1.15)
30 BREAKEVEN YIELD/UNITS OF PRODUCTION	22.01	21.00	23.18
31 TOTAL LISTED COSTS PER ACRE	\$ 63.60	\$ 61.12	\$ 66.30 *
32 OTHER POSSIBLE COSTS NOT LISTED			
33 UTILITIES & OTHER GEN. FARM EXP.	_____	_____	_____
33A BUILDINGS, FENCES & TILING COSTS	_____	_____	_____
34 INTEREST ALLOCATION	_____	_____	_____
35 OTHER COSTS NOT LISTED	_____	_____	_____
36 TOTAL COSTS	_____	_____	_____

*DOES NOT INCLUDE INTEREST ON INVESTMENT IN IRRIGATION EQUIP OR LAND

TABLE 10 - CROP DATA FOR CORN FOR GRAIN - 1978

	AVERAGE OF 343 FARMS	171 FARMS HIGH	171 FARMS LOW
	PER ACRE	PER ACRE	PER ACRE
1 ACRES (TOTAL)	38.7	39.0	38.3
2 YIELD (BUSHELS)	69.5	87.6	51.0
3 VALUE PER PRODUCTION UNIT	1.87	1.88	1.85
4 CROP PRODUCT RETURN	\$ 129.92	\$ 164.62	\$ 94.28
5 OTHER CROP INCOME	1.40	.15	2.64
6 TOTAL CROP RETURN	\$ 131.32	\$ 164.77	\$ 96.92 *
7 DIRECT COSTS			
8 FERTILIZER	\$ 20.44	\$ 23.03	\$ 17.83
9 CHEMICALS	6.80	7.72	5.85
10 SEED & OTHER	9.53	10.21	8.88
11 SPECIAL HIRED LABOR	.10	.13	.03
12 CUSTOM WORK HIRED	5.43	5.41	5.35
13 IRRIGATION OPERATION			
14 TOTAL DIRECT COSTS	\$ 42.30	\$ 46.50	\$ 37.94
15 RETURN OVER DIRECT COSTS	\$ 89.02	\$ 118.27	\$ 58.98 *
16 ALLOCATED COSTS			
17 FARM POWER & MACHINERY - OWNERSHIP	\$ 15.51	\$ 17.50	\$ 13.36
18 FARM POWER & MACHINERY - OPERATION	18.54	18.55	18.52
19 IRRIGATION EQUIPMENT - OWNERSHIP			
20 LAND COSTS	23.55	25.87	21.26
21 MISCELLANEOUS COSTS	.67	.10	1.25
22 *INTEREST ON MACH. & EQUIP. INVEST.	5.79	5.97	5.61
23 TOTAL ALLOCATED COSTS	\$ 64.34	\$ 68.04	\$ 60.55
24 RETURN OVER ALL LISTED COSTS	\$ 24.68	\$ 50.23	\$ (-1.57)*
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	.55	.55	.55
27 POWER COSTS ALLOCATION FACTOR	.95	.97	.94
28 TOTAL LISTED COST PER UNIT OF PRODUCTION	1.53	1.31	1.93
29 RETURN OVER LISTED COSTS PER UNIT	.36	.57	(-.03)
30 BREAK-EVEN YIELD/UNITS OF PRODUCTION	57.03	60.93	53.24
31 TOTAL LISTED COSTS PER ACRE	\$ 106.64	\$ 114.54	\$ 98.49 *
32 OTHER POSSIBLE COSTS NOT LISTED			
33 UTILITIES & OTHER GEN. FARM EXP.	_____	_____	_____
33A BUILDINGS, FENCES & TILING COSTS	_____	_____	_____
34 INTEREST ALLOCATION	_____	_____	_____
35 OTHER COSTS NOT LISTED	_____	_____	_____
36 TOTAL COSTS	_____	_____	_____

*DOES NOT INCLUDE INTEREST ON INVESTMENT IN IRRIGATION EQUIP OR LAND

TABLE 10 - CROP DATA FOR CORN FOR GRAIN (IRRIGATED) - 1978

	AVERAGE OF 21 FARMS	10 FARMS HIGH	10 FARMS LOW
	PER ACRE	PER ACRE	PER ACRE
1 ACRES (TOTAL)	103.2	72.7	142.7
2 YIELD (BUSHELS)	89.1	105.5	80.7
3 VALUE PER PRODUCTION UNIT	1.89	1.87	1.91
4 CROP PRODUCT RETURN	\$ 168.34	\$ 197.29	\$154.10
5 OTHER CROP INCOME			
6 TOTAL CROP RETURN	\$ 168.34	\$ 197.29	\$ 154.10 *
7 DIRECT COSTS			
8 FERTILIZER	\$ 35.48	\$ 34.97	\$ 35.92
9 CHEMICALS	9.91	7.66	11.10
10 SEED & OTHER	18.00	17.54	18.27
11 SPECIAL HIRED LABOR			
12 CUSTOM WORK HIRED	3.97	6.40	2.77
13 IRRIGATION OPERATION	7.74	7.37	7.93
14 TOTAL DIRECT COSTS	\$ 75.10	\$ 73.94	\$ 75.99
15 RETURN OVER DIRECT COSTS	\$ 93.24	\$ 123.35	\$ 78.11 *
16 ALLOCATED COSTS			
17 FARM POWER & MACHINERY - OWNERSHIP	\$ 15.03	\$ 15.29	\$ 14.86
18 FARM POWER & MACHINERY - OPERATION	15.14	19.33	12.95
19 IRRIGATION EQUIPMENT - OWNERSHIP	25.63	33.37	21.67
20 LAND COSTS	22.29	24.40	19.90
21 MISCELLANEOUS COSTS			
22 *INTEREST ON MACH. & EQUIP. INVEST.	7.20	7.32	7.14
23 TOTAL ALLOCATED COSTS	\$ 85.29	\$ 99.71	\$ 76.52
24 RETURN OVER ALL LISTED COSTS	\$ 7.95	\$ 23.64	\$ 1.59 *
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	.65	.65	.65
27 POWER COSTS ALLOCATION FACTOR	.96	.97	.96
28 TOTAL LISTED COST PER UNIT OF PRODUCTION	1.80	1.65	1.89
29 RETURN OVER LISTED COSTS PER UNIT	.09	.22	.02
30 BREAKEVEN YIELD/UNITS OF PRODUCTION	84.86	92.86	79.85
31 TOTAL LISTED COSTS PER ACRE	\$ 160.39	\$ 173.65	\$ 152.51 *
32 OTHER POSSIBLE COSTS NOT LISTED			
33 UTILITIES & OTHER GEN. FARM EXP.	_____	_____	_____
33A BUILDINGS, FENCES & TILING COSTS	_____	_____	_____
34 INTEREST ALLOCATION	_____	_____	_____
35 OTHER COSTS NOT LISTED	_____	_____	_____
36 TOTAL COSTS	_____	_____	_____

*DOES NOT INCLUDE INTEREST ON INVESTMENT IN IRRIGATION EQUIP OR LAND

TABLE 10 - CROP DATA FOR SOYBEANS - 1978

	AVERAGE OF 7 FARMS	3 FARMS HIGH	3 FARMS LOW
	PER ACRE	PER ACRE	PER ACRE
1 ACRES (TOTAL)	31.8	15.8	51.9
2 YIELD (BUSHELS)	16.7	21.1	15.2
3 VALUE PER PRODUCTION UNIT	6.00	6.00	6.00
4 CROP PRODUCT RETURN	\$ 100.00	\$126.46	\$ 90.98
5 OTHER CROP INCOME			
6 TOTAL CROP RETURN	\$ 100.00	\$ 126.46	\$ 90.98 *
7 DIRECT COSTS			
8 FERTILIZER	\$ 1.32	\$	\$ 1.02
9 CHEMICALS	8.21	10.25	7.36
10 SEED & OTHER	13.49	4.11	16.44
11 SPECIAL HIRED LABOR			
12 CUSTOM WORK HIRED	.57	1.90	
13 IRRIGATION OPERATION			
14 TOTAL DIRECT COSTS	\$ 23.59	\$ 16.26	\$ 24.82
15 RETURN OVER DIRECT COSTS	\$ 76.41	\$ 110.20	\$ 66.16 *
16 ALLOCATED COSTS			
17 FARM POWER & MACHINERY - OWNERSHIP	\$ 14.61	\$ 8.43	\$ 15.07
18 FARM POWER & MACHINERY - OPERATION	12.80	15.39	12.32
19 IRRIGATION EQUIPMENT - OWNERSHIP			
20 LAND COSTS	19.57	26.67	18.00
21 MISCELLANEOUS COSTS			
22 *INTEREST ON MACH. & EQUIP. INVESTMENT	6.14	2.91	6.66
23 TOTAL ALLOCATED COSTS	\$ 53.12	\$ 53.40	\$ 52.05
24 RETURN OVER ALL LISTED COSTS	\$ 23.29	\$ 56.80	\$ 14.11 *
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	.45	.45	.45
27 POWER COSTS ALLOCATION FACTOR	1.03	1.07	1.00
28 TOTAL LISTED COST PER UNIT OF PRODUCTION	4.60	3.30	5.07
29 RETURN OVER LISTED COSTS PER UNIT	1.40	2.70	.93
30 BREAK EVEN YIELD/UNITS OF PRODUCTION	12.79	11.61	12.81
31 TOTAL LISTED COSTS PER ACRE	\$ 76.71	\$ 69.66	\$ 76.87 *
32 OTHER POSSIBLE COSTS NOT LISTED			
33 UTILITIES & OTHER GEN FARM EXP.	_____	_____	_____
33A BUILDINGS, FENCES & TILING COSTS	_____	_____	_____
34 INTEREST ALLOCATION	_____	_____	_____
35 OTHER COSTS NOT LISTED	_____	_____	_____
36 TOTAL COSTS	_____	_____	_____

*DOES NOT INCLUDE INTEREST ON INVESTMENT IN IRRIGATION EQUIPMENT OR LAND

TABLE 10 - CROP DATA FOR ALFALFA HAY - 1978

	AVERAGE OF 244 FARMS	122 FARMS HIGH	122 FARMS LOW
	PER ACRE	PER ACRE	PER ACRE
1 ACRES (TOTAL)	35.7	39.8	31.7
2 YIELD	3.5	4.6	2.1
3 VALUE PER PRODUCTION UNIT	44.64	44.91	44.36
4 CROP PRODUCT RETURN	\$ 156.30	\$ 208.74	\$ 90.95
5 OTHER CROP INCOME	.08	.03	.16
6 TOTAL CROP RETURN	\$ 156.38	\$ 208.77	\$ 91.11 *
7 DIRECT COSTS			
8 FERTILIZER	\$ 6.81	\$ 7.59	\$ 5.80
9 CHEMICALS	.39	.58	.16
10 SEED & OTHER	6.89	8.22	5.17
11 SPECIAL HIRED LABOR	.11		.22
12 CUSTOM WORK HIRED	1.23	1.26	1.20
13 IRRIGATION OPERATION			
14 TOTAL DIRECT COSTS	\$ 15.43	\$ 17.65	\$ 12.55
15 RETURN OVER DIRECT COSTS	\$ 140.95	\$ 191.12	\$ 78.56 *
16 ALLOCATED COSTS			
17 FARM POWER & MACHINERY - OWNERSHIP	\$ 18.40	\$ 20.00	\$ 16.34
18 FARM POWER & MACHINERY - OPERATION	20.50	20.49	20.46
19 IRRIGATION EQUIPMENT - OWNERSHIP			
20 LAND COSTS	24.73	26.60	22.87
21 MISCELLANEOUS COSTS	.17		.38
22 *INTEREST ON MACH. & EQUIP. INVESTMENT	6.59	6.84	6.25
23 TOTAL ALLOCATED COSTS	\$ 70.42	\$ 73.96	\$ 66.30
24 RETURN OVER ALL LISTED COSTS	\$ 70.53	\$ 117.16	\$ 12.26 *
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	.60	.60	.60
27 POWER COSTS ALLOCATION FACTOR	1.00	1.01	.99
28 TOTAL LISTED COST PER UNIT OF PRODUCTION	24.52	19.70	38.46
29 RETURN OVER LISTED COSTS PER UNIT	20.14	25.21	5.97
30 BREAKEVEN YIELD/UNITS OF PRODUCTION	1.92	2.04	1.78
31 TOTAL LISTED COSTS PER ACRE	\$ 85.85	\$ 91.61	\$ 78.85 *
32 OTHER POSSIBLE COSTS NOT LISTED			
33 UTILITIES & OTHER GEN. FARM EXP.	_____	_____	_____
33A BUILDINGS, FENCES & TILING COSTS	_____	_____	_____
34 INTEREST ALLOCATION	_____	_____	_____
35 OTHER COSTS NOT LISTED	_____	_____	_____
36 TOTAL COSTS	_____	_____	_____

*DOES NOT INCLUDE INTEREST ON INVESTMENT IN IRRIGATION EQUIP OR LAND

TABLE 10 - CROP DATA FOR MEDIUM RED CLOVER HAY - 1978

	AVERAGE OF 40 FARMS	20 FARMS HIGH	20 FARMS LOW
	PER ACRE	PER ACRE	PER ACRE
1 ACRES (TOTAL)	20.0	12.2	27.9
2 YIELD (BUSHEL)	2.1	3.9	1.2
3 VALUE PER PRODUCTINN UNIT	36.38	35.55	37.20
4 CROP PRODUCT RETURN	\$ 74.60	\$ 139.84	\$ 45.34
5 OTHER CROP INCOME	5.50	6.48	5.02
6 TOTAL CROP RETURN	\$ 80.10	\$ 146.32	\$ 50.36 *
7 DIRECT COSTS			
8 FERTILIZER	\$ 2.90	\$ 2.95	\$ 2.87
9 CHEMICALS		.08	
10 SEED & OTHER	3.55	6.31	2.37
11 SPECIAL HIRED LABOR			
12 CUSTOM WORK HIRED	.50	1.23	.18
13 IRRIGATION OPERATION			
14 TOTAL DIRECT COSTS	\$ 6.95	\$ 10.57	\$ 5.42
15 RETURN OVER DIRECT COSTS	\$ 73.15	\$ 135.75	\$ 44.94
16 ALLOCATED COSTS			
17 FARM POWER & MACHINERY - OWNERSHIP	\$ 10.83	\$ 16.10	\$ 8.48
18 FARM POWER & MACHINERY - OPERATION	12.42	14.46	11.49
19 IRRIGATION EQUIPMENT - OWNERSHIP			
20 LAND COSTS	18.83	23.60	14.05
21 MISCELLANEOUS COSTS	.10	.25	
22 *INTEREST ON MACH. & EQUIP. INVESTMENT	3.85	4.33	3.62
23 TOTAL ALLOCATED COSTS	\$ 46.03	\$ 58.74	\$ 37.64
24 RETURN OVER ALL LISTED COSTS	\$ 27.12	\$ 77.01	\$ 7.30 *
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	.40	.40	.40
27 POWER COSTS ALLOCATION FACTOR	1.03	1.06	1.00
28 TOTAL LISTED COST PER UNIT OF PRODUCTION	25.85	17.60	35.35
29 RETURN OVER LISTED COSTS PER UNIT	13.22	19.58	5.97
30 BREAKEVEN YIELD/UNITS OF PRODUCTION	1.46	1.95	1.16
31 TOTAL LISTED COSTS PER ACRE	\$ 52.98	\$ 69.31	\$ 43.06 *
32 OTHER POSSIBLE COSTS NOT LISTED			
33 UTILITIES & OTHER GEN. FARM EXP.	_____	_____	_____
33A BUILDINGS, FENCES & TILING COSTS	_____	_____	_____
34 INTEREST ALLOCATION	_____	_____	_____
35 OTHER COSTS NOT LISTED	_____	_____	_____
36 TOTAL COSTS	_____	_____	_____

*DOES NOT INCLUDE INTEREST ON INVESTMENT IN IRRIGATION EQUIPMENT OR LAND

TABLE 10 - CROP DATA FOR OTHER LEGUME HAY - 1978

		AVERAGE OF 19 FARMS	9 FARMS HIGH	9 FARMS LOW
		PER ACRE	PER ACRE	PER ACRE
1	ACRES (TOTAL)	25.1	33.3	17.7
2	YIELD (BUSHEL)	2.4	2.9	1.4
3	VALUE PER PRODUCTION UNIT	34.63	37.11	32.67
4	CROP PRODUCT RETURN	\$ 81.39	\$ 108.11	\$ 44.29
5	OTHER CROP INCOME			
6	TOTAL CROP RETURN	\$ 81.39	\$ 108.11	\$ 44.29 *
7	DIRECT COSTS			
8	FERTILIZER	\$ 3.11	\$ 4.23	\$ 1.30
9	CHEMICALS			
10	SEED & OTHER	3.03	3.66	2.20
11	SPECIAL HIRED LABOR			
12	CUSTOM WORK HIRED	.56	.51	.73
13	IRRIGATION OPERATION			
14	TOTAL DIRECT COSTS	\$ 6.70	\$ 8.40	\$ 4.23
15	RETURN OVER DIRECT COSTS	\$ 74.69	\$ 99.71	\$ 40.06 *
16	ALLOCATED COSTS			
17	FARM POWER & MACHINERY - OWNERSHIP	\$ 14.66	\$ 17.32	\$ 10.61
18	FARM POWER & MACHINERY - OPERATION	14.36	15.27	12.96
19	IRRIGATION EQUIPMENT - OWNERSHIP			
20	LAND COSTS	17.26	20.78	14.11
21	MISCELLANEOUS COSTS			
22	*INTEREST ON MACH. & EQUIP. INVESTMENT	5.03	5.47	4.53
23	TOTAL ALLOCATED COSTS	\$ 51.31	\$ 58.84	\$ 42.21
24	RETURN OVER ALL LISTED COSTS	\$ 23.38	\$ 40.87	\$ (-2.15)*
25	SUPPLEMENTARY MANAGEMENT INFORMATION			
26	WORK UNITS ASSIGNED PER ACRE	.40	.40	.40
27	POWER COSTS ALLOCATION FACTOR	1.00	1.01	1.00
28	TOTAL LISTED COST PER UNIT OF PRODUCTION	24.66	23.08	34.25
29	RETURN OVER LISTED COSTS PER UNIT	9.97	14.03	(-1.58)
30	BREAKEVEN YIELD/UNITS OF PRODUCTION	1.68	1.81	1.42
31	TOTAL LISTED COSTS PER ACRE	\$ 58.01	\$ 67.24	\$ 46.44 *
32	OTHER POSSIBLE COSTS NOT LISTED			
33	UTILITIES & OTHER GEN. FARM EXP.	_____	_____	_____
33A	BUILDINGS, FENCES & TILING COSTS	_____	_____	_____
34	INTEREST ALLOCATION	_____	_____	_____
35	OTHER COSTS NOT LISTED	_____	_____	_____
36	TOTAL COSTS	_____	_____	_____

*DOES NOT INCLUDE INTEREST ON INVESTMENT IN IRRIGATION EQUIPMENT OR LAND

TABLE 10 - CROP DATA FOR OTHER TILLABLE GRASS HAY - 1978

	AVERAGE OF 106 FARMS	53 FARMS HIGH	53 FARMS LOW
	PER ACRE	PER ACRE	PER ACRE
1 ACRES (TOTAL)	42.5	31.1	53.9
2 YIELD (TONS)	1.3	2.1	.9
3 VALUE PER PRODUCTION UNIT	24.55	24.63	24.47
4 CROP PRODUCT RETURN	\$ 32.35	\$ 52.28	\$ 20.89
5 OTHER CROP INCOME	.19		.28
6 TOTAL CROP RETURN	\$ 32.54	\$ 52.28	\$ 21.17 *
7 DIRECT COSTS			
8 FERTILIZER	\$ 1.67	\$ 3.12	\$.85
9 CHEMICALS			
10 SEED & OTHER	1.11	1.38	.95
11 SPECIAL HIRED LABOR			
12 CUSTOM WORK HIRED	1.25	2.51	.52
13 IRRIGATION OPERATION			
14 TOTAL DIRECT COSTS	\$ 4.03	\$ 7.01	\$ 2.32
15 RETURN OVER DIRECT COSTS	\$ 28.51	\$ 45.27	\$ 18.85 *
16 ALLOCATED COSTS			
17 FARM POWER & MACHINERY - OWNERSHIP	\$ 14.98	\$ 7.57	\$ 19.26
18 FARM POWER & MACHINERY- OPERATION	9.28	8.86	9.52
19 IRRIGATION EQUIPMENT - OWNERSHIP			
20 LAND COSTS	14.68	19.04	10.32
21 MISCELLANEOUS COSTS	.07		.11
22 *INTEREST ON MACH. & EQUIP. INVESTMENT	3.83	2.82	4.42
23 TOTAL ALLOCATED COSTS	\$ 42.84	\$ 38.29	\$ 43.63
24 RETURN OVER ALL LISTED COSTS	\$ (-14.33)	\$ 6.98	\$ (-24.78)*
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	.30	.30	.30
27 POWER COSTS ALLOCATION FACTOR	.95	.95	.95
28 TOTAL LISTED COST PER UNIT OF PRODUCTION	35.57	21.36	53.83
29 RETURN OVER LISTED COSTS PER UNIT	(-10.88)	3.27	(-29.02)
30 BREAKEVEN YIELD/UNITS OF PRODUCTION	1.91	1.84	1.88
31 TOTAL LISTED COSTS PER ACRE	\$ 46.87	\$ 45.30	\$ 45.95 *
32 OTHER POSSIBLE COSTS NOT LISTED			
33 UTILITIES & OTHER GEN. FARM EXP.	_____	_____	_____
33A BUILDINGS, FENCES & TILING COSTS	_____	_____	_____
34 INTEREST ALLOCATION	_____	_____	_____
35 OTHER COSTS NOT LISTED	_____	_____	_____
36 TOTAL COSTS	_____	_____	_____

*DOES NOT INCLUDE INTEREST ON INVESTMENT IN IRRIGATION EQUIPMENT OR LAND

TABLE 10 - CROP DATA FOR LEGUME--GRASS MIX HAY - 1973

		AVERAGE OF 195 FARMS	97 FARMS HIGH	97 FARMS LOW
		PER ACRE	PER ACRE	PER ACRE
1	ACRES (TOTAL)	55.2	49.8	59.7
2	YIELD (TONS)	2.1	3.0	1.3
3	VALUE PER PRODUCTION UNIT	32.41	32.15	32.59
4	CROP PRODUCT RETURN	\$ 66.94	\$ 96.85	\$ 41.49
5	OTHER CROP INCOME	.09	.10	.08
6	TOTAL CROP RETURN	\$ 67.03	\$ 96.95	\$ 41.57 *
7	DIRECT COSTS			
8	FERTILIZER	\$ 3.73	\$ 5.64	\$ 2.13
9	CHEMICALS	.22	.34	.10
10	SEED & OTHER	2.99	3.63	2.43
11	SPECIAL HIRED LABOR	.85		1.57
12	CUSTOM WORK HIRED	.92	1.08	.80
13	IRRIGATION OPERATION			
14	TOTAL DIRECT COSTS	\$ 8.71	\$ 10.69	\$ 7.03
15	RETURN OVER DIRECT COSTS	\$ 58.32	\$ 86.26	\$ 34.54 *
16	ALLOCATED COSTS			
17	FARM POWER & MACHINERY - OWNERSHIP	\$ 17.98	\$ 15.09	\$ 19.99
18	FARM POWER & MACHINERY - OPERATION	14.02	13.51	14.63
19	IRRIGATION EQUIPMENT - OWNERSHIP			
20	LAND COSTS	18.70	22.72	14.79
21	MISCELLANEOUS COSTS	.09	.04	.15
22	*INTEREST ON MACH. & EQUIP. INVESTMENT	4.71	5.37	4.22
23	TOTAL ALLOCATED COSTS	\$ 55.50	\$ 56.73	\$ 53.78
24	RETURN OVER ALL LISTED COSTS	\$ 2.82	\$ 29.53	\$ (-19.24)*
25	SUPPLEMENTARY MANAGEMENT INFORMATION			
26	WORK UNITS ASSIGNED PER ACRE	.40	.40	.40
27	POWER COSTS ALLOCATION FACTOR	.98	1.00	.97
28	TOTAL LISTED COST PER UNIT OF PRODUCTION	31.10	22.39	47.78
29	RETURN OVER LISTED COSTS PER UNIT	1.36	9.80	(-15.12)
30	BREAKEVEN YIELD/UNTS OF PRODUCTION	1.98	2.10	1.87
31	TOTAL LISTED COSTS PER ACRE	\$ 64.21	\$ 67.42	\$ 60.81 *
32	OTHER POSSIBLE COSTS NOT LISTED			
33	UTILITIES & OTHER GEN. FARM EXP.	_____	_____	_____
33A	BUILDINGS, FENCES & TILING COSTS	_____	_____	_____
34	INTEREST ALLOCATION	_____	_____	_____
35	OTHER COSTS NOT LISTED	_____	_____	_____
36	TOTAL COSTS	_____	_____	_____

*DOES NOT INCLUDE INTEREST ON INVESTMENT IN IRRIGATION EQUIPMENT OR LAND

TABLE 10 - CROP DATA FOR LEGUME, LEGUME-GRASS SILAGE - 1978

		AVERAGE OF 12 FARMS	6 FARMS HIGH	6 FARMS LOW
		PER ACRE	PER ACRE	PER ACRE
1	ACRES (TOTAL)	26.0	26.5	25.6
2	YIELD (TONS)	4.8	5.9	3.8
3	VALUE PER PRODUCTION UNIT	19.31	17.78	20.83
4	CROP PRODUCT RETURN	\$ 93.58	\$ 104.68	\$ 78.95
5	OTHER CROP INCOME			
6	TOTAL CROP RETURN	\$ 93.58	\$ 104.68	\$ 78.95 *
7	DIRECT COSTS			
8	FERTILIZER	\$ 7.00	\$ 7.06	\$ 6.91
9	CHEMICALS			
10	SEED & OTHER	2.50	3.92	1.02
11	SPECIAL HIRED LABOR			
12	CUSTOM WORK HIRED	1.85	.30	3.44
13	IRRIGATION OPERATION			
14	TOTAL DIRECT COSTS	\$ 11.35	\$ 11.28	\$ 11.37
15	RETURN OVER DIRECT COSTS	\$ 82.23	\$ 93.40	\$ 67.58 *
16	ALLOCATED COSTS			
17	FARM POWER & MACHINERY - OWNERSHIP	\$ 8.51	\$ 4.42	\$ 12.70
18	FARM POWER & MACHINERY - OPERATION	17.24	\$ 19.46	\$ 14.87
19	IRRIGATION EQUIPMENT - OWNERSHIP			
20	LAND COSTS	16.67	18.33	15.00
21	MISCELLANEOUS COSTS			
22	*INTEREST ON MACH. & EQUIP. INVESTMENT	4.61	1.66	7.64
23	TOTAL ALLOCATED COSTS	\$ 47.03	\$ 43.87	\$ 50.21
24	RETURN OVER ALL LISTED COSTS	\$ 35.20	\$ 49.53	\$ 17.37 *
25	SUPPLEMENTARY MANAGEMENT INFORMATION			
26	WORK UNITS ASSIGNED PER ACRE	.40	.40	.40
27	POWER COSTS ALLOCATION FACTOR	1.00	1.01	1.00
28	TOTAL LISTED COST PER UNIT OF PRODUCTION	12.04	9.37	16.25
29	RETURN OVER LISTED COSTS PER UNIT	7.27	8.41	4.59
30	BREAKEVEN YIELD/UNITS OF PRODUCTION	3.02	3.10	2.96
31	TOTAL LISTED COSTS PER ACRE	\$ 58.38	\$ 55.15	\$ 61.58 *
32	OTHER POSSIBLE COSTS NOT LISTED			
33	UTILITIES & OTHER GEN. FARM EXP.			
33A	BUILDINGS, FENCES & TILING COSTS			
34	INTEREST ALLOCATION			
35	OTHER COSTS NOT LISTED			
36	TOTAL COSTS			

*DOES NOT INCLUDE INTEREST ON INVESTMENT IN IRRIGATION EQUIPMENT OR LAND

TABLE 10 - CROP DATA FOR GRAIN SILAGE - 1978

	AVERAGE OF 26 FARMS	13 FARMS HIGH	13 FARMS LOW
	PER ACRE	PER ACRE	PER ACRE
1 ACRES (TOTAL)	23.1	18.0	28.2
2 YIELD (TONS)	4.0	6.8	2.1
3 VALUE PER PRODUCTION UNIT	18.38	15.46	21.31
4 CROP PRODUCT RETURN	\$ 73.20	\$ 105.67	\$ 45.35
5 OTHER CROP INCOME			
6 TOTAL CROP RETURN	\$ 73.20	\$ 105.67	\$ 45.35 *
7 DIRECT COSTS			
8 FERTILIZER	\$ 9.39	\$ 11.67	\$ 7.94
9 CHEMICALS	.26	.44	.11
10 SEED & OTHER	8.87	11.33	7.30
11 SPECIAL HIRED LABOR			
12 CUSTOM WORK HIRED	4.07	9.44	.64
13 IRRIGATION OPERATION			
14 TOTAL DIRECT COSTS	\$ 22.59	\$ 32.88	\$ 15.99
15 RETURN OVER DIRECT COSTS	\$ 50.61	\$ 72.79	\$ 29.36 *
16 ALLOCATED COSTS			
17 FARM POWER & MACHINERY - OWNERSHIP	\$ 16.63	\$ 12.05	\$ 19.55
18 FARM POWER & MACHINERY - OPERATION	17.46	13.27	20.13
19 IRRIGATION EQUIPMENT - OWNERSHIP			
20 LAND COSTS	23.96	23.77	24.15
21 MISCELLANEOUS COSTS			
22 *INTEREST ON MACH. & EQUIP. INVESTMENT	5.66	3.97	6.74
23 TOTAL ALLOCATED COSTS	\$ 63.71	\$ 53.06	\$ 70.57
24 RETURN OVER ALL LISTED COSTS	\$ (-13.10)	\$ 19.73	\$ (-41.21)*
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	.40	.40	.40
27 POWER COSTS ALLOCATION FACTOR	1.14	1.30	.98
28 TOTAL LISTED COST PER UNIT OF PRODUCTION	21.66	12.59	40.68
29 RETURN OVER LISTED COSTS PER UNIT	(-3.28)	2.88	(-19.37)
30 BREAK-EVEN YIELD/UNITS OF PRODUCTION	4.70	5.56	4.06
31 TOTAL LISTED COSTS PER ACRE	\$ 86.30	\$ 85.94	\$ 86.56 *
32 OTHER POSSIBLE COSTS NOT LISTED			
33 UTILITIES & OTHER GEN. FARM EXP.	_____	_____	_____
33A BUILDINGS, FENCES & TILING COSTS	_____	_____	_____
34 INTEREST ALLOCATION	_____	_____	_____
35 OTHER COSTS NOT LISTED	_____	_____	_____
36 TOTAL COSTS	_____	_____	_____

*DOES NOT INCLUDE INTEREST ON INVESTMENT IN IRRIGATION EQUIPMENT OR LAND

TABLE 10 - CROP DATA FOR CORN & SORGHUM SILAGE - 1978

	AVERAGE OF 317 FARMS	158 FARMS HIGH	158 FARMS LOW
	PER ACRE	PER ACRE	PER ACRE
1 ACRES (TOTAL)	26.5	25.5	27.3
2 YIELD (TON)	10.2	13.4	7.3
3 VALUE PER PRODUCTION UNIT	15.03	15.10	14.95
4 CROP PRODUCT RETURN	\$ 153.70	\$ 201.92	\$ 108.42
5 OTHER CROP INCOME	1.25	2.55	.04
6 TOTAL CROP RETURN	\$ 154.95	\$ 204.47	\$ 108.46 *
7 DIRECT COSTS			
8 FERTILIZER	\$ 18.64	\$ 21.02	\$ 16.56
9 CHEMICALS	5.89	6.90	4.95
10 SEED & OTHER	8.60	9.49	7.69
11 SPECIAL HIRED LABOR	.04		.07
12 CUSTOM WORK HIRED	3.13	3.45	2.89
13 IRRIGATION OPERATION			
14 TOTAL DIRECT COSTS	\$ 36.30	\$ 40.86	\$ 32.16
15 RETURN OVER DIRECT COSTS	\$ 118.65	\$ 163.61	\$ 76.30 *
16 ALLOCATED COSTS			
17 FARM POWER & MACHINERY-OWNERSHIP	\$ 19.52	\$ 19.52	\$ 19.67
18 FARM POWER & MACHINERY - OPERATION	21.53	22.79	20.35
19 IRRIGATION EQUIPMENT - OWNERSHIP			
20 LAND COSTS	21.73	24.71	18.73
21 MISCELLANEOUS COSTS	.04	.04	
22 *INTEREST ON MACH. & EQUIP. INVESTMENT	7.18	7.58	6.83
23 TOTAL ALLOCATED COSTS	\$ 70.04	\$ 74.72	\$ 65.58
24 RETURN OVER ALL LISTED COSTS	\$ 48.61	\$ 88.89	\$ 10.72 *
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	.60	.60	.60
27 POWER COSTS ALLOCATION FACTOR	.99	1.01	.98
28 TOTAL LISTED COST PER UNIT OF PRODUCTION	10.39	8.64	13.47
29 RETURN OVER LISTED COSTS PER UNIT	4.76	6.65	1.48
30 BREAKEVEN YIELD/UNITS OF PRODUCTION	7.08	7.65	6.54
31 TOTAL LISTED COSTS PER ACRE	\$ 106.34	\$ 115.58	\$ 97.74 *
32 OTHER POSSIBLE COSTS NOT LISTED			
33 UTILITIES & OTHER GEN. FARM EXP.	_____	_____	_____
33A BUILDINGS, FENCES & TILING COSTS	_____	_____	_____
34 INTEREST ALLOCATION	_____	_____	_____
35 OTHER COSTS NOT LISTED	_____	_____	_____
36 TOTAL COSTS	_____	_____	_____

*DOES NOT INCLUDE INTEREST ON INVESTMENT IN IRRIGATION EQUIP OR LAND

TABLE 10 -CROP DATA FOR CORN & SORGHUM SILAGE (IRRIGATED) - 1978

		AVERAGE OF 7 FARMS	3 FARMS HIGH	3 FARMS LOW
		PER ACRE	PER ACRE	PER ACRE
1	ACRES (TOTAL)	25.3	17.7	34.6
2	YIELD (TON)	14.5	18.5	12.3
3	VALUE PER PRODUCTION UNIT	13.70	11.63	15.33
4	CROP PRODUCT RETURN	\$ 198.18	\$ 215.54	\$ 188.76
5	OTHER CROP INCOME			
6	TOTAL CROP RETURN	\$ 198.18	\$ 215.54	\$ 188.76 *
7	DIRECT COSTS			
8	FERTILIZER	\$ 24.43	\$ 24.63	\$ 27.60
9	CHEMICALS	8.89	7.18	9.62
10	SEED & OTHER	11.07	14.29	9.22
11	SPECIAL HIRED LABOR			
12	CUSTOM WORK HIRED	1.66	4.46	
13	IRRIGATION OPERATION	6.60	7.97	5.98
14	TOTAL DIRECT COSTS	\$ 52.65	\$ 58.53	\$ 52.42
15	RETURN OVER DIRECT COSTS	\$ 145.53	\$ 157.01	\$ 136.34 *
16	ALLOCATED COSTS			
17	FARM POWER & MACHINERY - OWNERSHIP	\$ 15.66	\$ 15.72	\$ 14.80
18	FARM POWER & MACHINERY - OPERATION	24.32	21.88	26.18
19	IRRIGATION EQUIPMENT - OWNERSHIP	30.32	27.51	30.12
20	LAND COSTS	24.29	23.33	25.00
21	MISCELLANEOUS COSTS			
22	*INTEREST ON MACH. & EQUIP. INVESTMENT	7.27	6.86	5.76
23	TOTAL ALLOCATED COSTS	\$ 101.86	\$ 95.30	\$ 101.86
24	RETURN OVER ALL LISTED COSTS	\$ 43.67	\$ 61.71	\$ 34.48 *
25	SUPPLEMENTARY MANAGEMENT INFORMATION			
26	WORK UNITS ASSIGNED PER ACRE	.80	.80	.80
27	POWER COSTS ALLOCATION FACTOR	1.00	1.00	1.00
28	TOTAL LISTED COST PER UNIT OF PRODUCTION	10.68	8.30	12.53
29	RETURN OVER LISTED COSTS PER UNIT	3.02	3.33	2.80
30	BREAKEVEN YIELD/UNITS OF PRODUCTION	11.28	13.23	10.06
31	TOTAL LISTED COSTS PER ACRE	\$ 154.51	\$ 153.83	\$ 154.28 *
32	OTHER POSSIBLE COSTS NOT LISTED			
33	UTILITIES & OTHER GEN. FARM EXP.	_____	_____	_____
33A	BUILDINGS, FENCES & TILING COSTS	_____	_____	_____
34	INTEREST ALLOCATION	_____	_____	_____
35	OTHER COSTS NOT LISTED	_____	_____	_____
36	TOTAL COSTS	_____	_____	_____

*DOES NOT INCLUDE INTEREST ON INVESTMENT IN IRRIGATION EQUIP OR LAND

TABLE 10 - CROP DATA FOR PULP - 1978

		AVERAGE OF 6 FARMS PER CORD
1	ACRES	
2	YIELD (TOTAL CORDS)	279
3	VALUE PER PRODUCTION UNIT	31.20
4	CROP PRODUCT RETURN	\$ 31.20
5	OTHER CROP INCOME	
6	TOTAL CROP RETURN	\$ 31.20 *
7	DIRECT COSTS	
8	FERTILIZER	\$
9	CHEMICALS	
10	STUMPAGE & OTHER	1.15
11	SPECIAL HIRED LABOR	
12	CUSTOM WORK HIRED	1.79
13	LOGGING EQUIPMENT OPERATION	2.54
14	TOTAL DIRECT COSTS	\$ 5.48
15	RETURN OVER DIRECT COSTS	\$ 25.72 *
16	ALLOCATED COSTS	
17	FARM POWER & MACHINERY - OWNERSHIP	\$ 3.14
18	FARM POWER & MACHINERY - OPERATION	1.43
19	LOGGING EQUIPMENT - OWNERSHIP	.54
20	LAND COSTS	
21	MISCELLANEOUS COSTS	
22	*INTEREST ON MACH. & EQUIP. INVESTMENT	.64
23	TOTAL ALLOCATED COSTS	\$ 5.78
24	RETURN OVER ALL LISTED COSTS	\$ 19.94 *
25	SUPPLEMENTARY MANAGEMENT INFORMATION	
26	WORK UNITS ASSIGNED PER UNIT	.30
27	POWER COSTS ALLOCATION FACTOR	.51
28	TOTAL LISTED COST PER UNIT OF PRODUCTION	11.25
29	RETURN OVER LISTED COSTS PER UNIT	19.95
30	BREAKEVEN YIELD/UNITS OF PRODUCTION	.36
31	TOTAL LISTED COSTS PER UNIT	\$ 11.26 *
32	OTHER POSSIBLE COSTS NOT LISTED	
33	UTILITIES & OTHER GENERAL FARM EXPENSES	_____
33A	BUILDINGS, FENCES & TILING COSTS	_____
34	INTEREST ALLOCATION	_____
35	OTHER COSTS NOT LISTED	_____
36	TOTAL COSTS	_____

*DOES NOT INCLUDE INTEREST ON INVESTMENT IN LOGGING EQUIP OR LAND

COSTS AND RETURNS FROM LIVESTOCK ENTERPRISES

Productive livestock enterprises are an important part of the farm business in all but a few of the farms involved in this report. Tables 11 through 16A pertain to the major livestock enterprises.

Feed is the largest single item of cost for all classes of livestock. However, the proportion of the total cost represented by feed varies considerably between classes of livestock. Feed makes up approximately 45 percent of the total cost of maintaining dairy cattle and poultry, 50 per cent in the case of a farm flock of sheep and 75-90 per cent for hogs, feeder cattle and feeder lambs. Consequently, it is necessary to secure a relatively higher return over feed from dairy cattle and poultry than from the other livestock enterprises in order to be able to cover all the costs other than feed.

Other Direct Costs are those costs which have been identified as cash costs attributable to the enterprise and recorded as such in the record.

Allocated costs are calculated costs and are derived by first allocating the total cost for each category between the crops and livestock; then further allocating the livestock portion to each livestock enterprise on a work unit basis.

In calculating the total return for the enterprise, the inventory change, purchase and sale of livestock, value of animals butchered, products sold, and products used in the home are considered in order to arrive at the total income or net increase for the enterprise. The net increase is divided by the net quantity produced or number of head to arrive at a per unit figure for comparison.

Feed costs are determined from feed records kept by the farm operator. Purchase price is used for all purchased feeds. An average price is charged for farm grown feed.

The items listed as Supplementary Management Information provides further clues to the reasons for good, bad, or average livestock returns.

All livestock costs and returns are computed on an annual basis. Thus, with feeder enterprises, inventories of feeder animals are involved. In such cases, the amount indicated as "Price Per Cwt. Bought" is the cost of those animals on hand at the end of the year; likewise, the amount given as "Price Per Cwt. Sold" is the price received for animals sold during the twelve month period, most of which were animals on hand at the beginning of the year.

TABLE 11A - HOGS, Farrow, Finish, General - 1978

	AVERAGE OF 12 FARMS	6 FARMS HIGH IN RETURN ABOVE FEED	6 FARMS LOW IN RETURN ABOVE FEED
1 POUNDS OF HOGS PRODUCED	26679	18628	34730
	PER CWT	PER CWT	PER CWT
2 NET INCREASE IN VALUE OF HOGS	\$ 62.54	\$ 71.23	\$ 57.89
3 OTHER MISCELLANEOUS HOG INCOME			
4 TOTAL VALUE PRODUCED	\$ 62.54	\$ 71.23	\$ 57.89 *
5 POUNDS OF FEED FED			
6 CORN	341.8	224.1	405.0
7 SMALL GRAIN	56.9	51.6	59.8
8 COMPLETE RATION	41.7	51.2	36.7
9 PROTEIN, SALT & MINERAL & MILK	50.2	52.2	49.2
10 TOTAL CONCENTRATES	490.6	379.1	550.7
11 FORAGES	28.1	13.4	36.0
12 FEED COSTS			
13 GRAINS	13.55	9.15	15.91
14 COMPLETE RATION	4.79	5.92	4.18
15 PROTEIN, SALT & MINERAL & MILK	6.30	6.59	6.15
16 FORAGES	.58	.27	.74
17 PASTURE	.03		.04
18 TOTAL FEED COSTS	\$ 25.25	\$ 21.93	\$ 27.02
19 RETURN OVER FEED COSTS	\$ 37.29	\$ 49.30	\$ 30.87 *
20 OTHER DIRECT COSTS			
21 MISCELLANEOUS LIVESTOCK EXPENSE	.75	.53	.87
22 VETERINARY EXPENSE	.69	1.10	.48
23 CUSTOM WORK	1.71	.63	2.29
24 SPECIAL HIRED LABOR			
25 TOTAL OTHER DIRECT COSTS	\$ 3.15	\$ 2.26	\$ 3.64
26 RETURN OVER FEED & OTHER DIRECT COSTS	\$ 34.14	\$ 47.04	\$ 27.23 *
27 ALLOCATED COSTS			
28 POWER & MACHINERY COSTS	1.91	2.07	1.84
29 LIVESTOCK EQUIPMENT COSTS	1.95	2.19	1.83
30 BUILDING & FENCES	2.12	2.47	1.94
31 TOTAL ALLOCATED COSTS	\$ 5.98	\$ 6.73	\$ 5.61
32 RETURN OVER ALL LISTED COSTS	\$ 28.16	\$ 40.31	\$ 21.62 *
33 SUPPLEMENTARY MANAGEMENT INFORMATION			
34 RETURN FOR \$100 FEED FED	247.71	324.80	214.24
35 PRICE RECEIVED PER CWT ALL ANIMALS	56.40	63.75	52.62
36 PRICE REC. PER CWT SOLD MKT ONLY			
37 NUMBER OF LITTERS FARROWED	27	21	32
38 NUMBER OF PIGS BORN PER LITTER	8.9	9.9	8.5
39 NUMBER OF PIGS WEANED PER LITTER	5.6	6.0	5.5
40 PERCENT DEATH LOSS	26.1	29.3	24.1
41 AVERAGE WEIGHT OF ALL HOGS SOLD	193.0	173.5	203.6
42 AVERAGE WEIGHT OF MKT HOGS SOLD			
43 PRICE PER CWT CONCENTRATE FED	5.02	5.71	4.76
44 PRICE PER CWT PROTEIN, SALT & MINERAL	12.55	12.62	12.50
45 POUNDS OF PORK PURCHASED	2087	3531	643
46 TOTAL LISTED COSTS PER CWT PORK PROD.	\$ 34.38	\$ 30.92	\$ 36.27*
47 UTILITIES & OTHER GEN. FARM EXPENSE	_____	_____	_____
48 INTEREST ALLOCATION	_____	_____	_____
49 OTHER COSTS NOT LISTED	_____	_____	_____
50 TOTAL COST	_____	_____	_____

TABLE 11C - HOGS, WEANING PIG PRODUCTION - 1978

	AVERAGE OF 53 FARMS	12 FARMS HIGH IN RETURN ABOVE FEED	12 FARMS LOW IN RETURN ABOVE FEED
1 NUMBER OF LITTERS FARROWED	55 PER LITTER	40 PER LITTER	41 PER LITTER
2 NET INCREASE IN VALUE OF HOGS	\$ 405.89	\$ 563.18	\$ 289.39
3 OTHER MISCELLANEOUS WEANING PIG INCOME			
4 TOTAL VALUE PRODUCED	\$ 405.89	\$ 563.18	\$ 289.39 *
5 POUNDS OF FEED FED			
6 CORN		1856.1	1446.6
7 SMALL GRAIN		843.3	621.5
8 COMPLETE RATION		205.8	952.0
9 PROTEIN, SALT & MINERAL & MILK		718.9	475.5
10 TOTAL CONCENTRATES		3624.1	3495.6
11 FORAGES		140.8	93.5
12 FEED COST			
13 GRAINS	64.73	78.00	69.90
14 COMPLETE RATION	38.76	23.00	78.61
15 PROTEIN, SALT & MINERAL & MILK	47.15	83.53	27.34
16 FORAGES	3.71	2.75	1.71
17 PASTURE	.20	.05	
18 TOTAL FEED COSTS	\$ 154.55	\$ 187.33	\$ 177.56
19 RETURN OVER FEED COSTS	\$ 251.34	\$ 375.85	\$ 111.83 *
20 OTHER DIRECT COSTS			
21 MISCELLANEOUS LIVESTOCK EXPENSE	7.11	10.90	7.49
22 VETERINARY EXPENSE	4.98	3.63	3.29
23 CUSTOM WORK	3.62	1.78	4.20
24 SPECIAL HIRED LABOR			
25 TOTAL OTHER DIRECT COSTS	\$ 15.71	\$ 16.31	\$ 14.98
26 RETURN OVER FEED & OTHER DIRECT COSTS	\$ 235.63	\$ 359.54	\$ 96.85 *
27 ALLOCATED COSTS			
28 POWER & MACHINERY COSTS	17.80	13.79	12.95
29 LIVESTOCK EQUIPMENT COSTS	8.59	7.38	8.03
30 BUILDING & FENCES	16.82	17.66	15.27
31 TOTAL ALLOCATED COST	\$ 43.21	\$ 38.83	\$ 36.25
32 RETURN OVER ALL LISTED COSTS	\$ 192.42	\$ 320.71	\$ 60.60 *
33 SUPPLEMENTARY MANAGEMENT INFORMATION			
34 RETURN FOR \$100 FEED FED	262.64	300.64	162.98
35 AVERAGE PRICE REC. PER ANIMAL SOLD	52.68	53.56	50.29
36 AVERAGE PRICE PER PIG SOLD OR TRANS.	46.79	42.45	45.77
37 AVERAGE WT. PER PIG SOLD OR TRANS.	42.6	38.5	44.3
38 NUMBER OF PIGS PRODUCED	397	369	242
39 NUMBER OF PIGS BORN PER LITTER	9.4	10.6	9.6
40 NUMBER OF PIGS WEANED PER LITTER	7.2	9.2	6.0
41 PERCENT DEATH LOSS	18.9	10.1	30.3
42 PRICE PER CWT CONCENTRATE FED		5.09	5.03
43 PRICE PER CWT PROT., SALT & MINERAL FED	10.87	11.62	5.75
44 FEED & SUPPLEMENTAL COSTS PER PIG PROD.	23.59	22.07	32.62
45 TOTAL LISTED COSTS PER LITTER	\$ 213.47	\$ 242.47	\$ 228.79 *
46 UTILITIES & OTHER GEN. FARM EXPENSE	_____	_____	_____
47 INTEREST ALLOCATION	_____	_____	_____
48 OTHER COSTS NOT LISTED	_____	_____	_____
49 TOTAL COSTS	_____	_____	_____

TABLE 12 - DAIRY COWS, COMMERCIAL, GENERAL - 1978

	AVERAGE OF 162 FARMS	32 FARMS HIGH IN RETURN ABOVE FEED	32 FARMS LOW RETURN ABOVE FEED
1 AVERAGE NUMBER OF COWS	34.5	35.3	30.5
	PER COW	PER COW	PER COW
2 POUNDS OF MILK	12573	14134	10330
3 POUNDS OF BUTTERFAT	462.0	511.2	385.7
4 PERCENT OF BUTTERFAT IN MILK	3.6	3.6	3.7
5 VALUE OF PRODUCE			
6 DAIRY PRODUCTS SOLD	\$ 1205.42	\$ 1405.33	\$ 976.49
7 DAIRY PRODUCTS USED IN HOME	8.38	8.90	8.49
8 MILK FED TO LIVESTOCK	14.72	14.08	11.15
9 NET INCREASES IN VALUE OF COWS	11.30	109.66	(-104.98)
10 OTHER MISCELLANEOUS DAIRY INCOME			
11 TOTAL VALUE PRODUCED	\$ 1239.83	\$ 1537.97	\$ 891.15 *
12 POUNDS OF FEED FED			
13 CORN	3349.3	3416.0	4233.3
14 SMALL GRAIN	823.6	892.7	797.3
15 COMPLETE RATION	1204.3	949.0	1117.6
16 PROTEIN, SALT & MINERAL	885.0	1350.7	491.9
17 TOTAL CONCENTRATES	6262.2	6608.4	6640.1
18 LEGUME HAY	5955.3	5432.4	6474.8
19 OTHER HAY & DRY ROUGHAGE	467.4	148.0	749.0
20 SILAGE	12501.8	11048.3	12444.5
21 FEED COSTS			
22 GRAINS	139.39	145.47	170.10
23 COMPLETE RATION	82.55	57.22	73.28
24 PROTEIN, SALT & MINERAL	66.30	75.61	58.92
25 ALL HAY & DRY ROUGHAGE	137.36	124.36	150.23
26 SILAGE	97.68	84.59	97.64
27 PASTURE	6.70	6.66	6.33
28 TOTAL FEED COSTS	\$ 530.58	\$ 493.91	\$ 556.50
29 RETURN OVER FEED COST	\$ 709.30	\$ 1044.06	\$ 334.65 *
30 OTHER DIRECT COSTS			
31 MISCELLANEOUS LIVESTOCK EXPENSE	40.23	51.33	34.33
32 VETERINARY EXPENSE	17.65	18.95	18.36
33 CUSTOM WORK HIRED	34.90	36.71	29.57
34 SPECIAL HIRED LABOR	.14	.71	
35 TOTAL OTHER DIRECT COSTS	\$ 92.92	\$ 107.70	\$ 82.26
36 RETURN OVER FEED & OTHER DIRECT COSTS	\$ 616.38	\$ 936.36	\$ 252.39 *
37 ALLOCATED COSTS			
38 POWER & MACHINERY COSTS	48.41	52.07	45.51
39 LIVESTOCK EQUIPMENT COSTS	35.47	39.30	45.40
40 BUILDING & FENCES	48.46	60.90	38.76
41 TOTAL ALLOCATED COSTS	\$ 132.34	\$ 152.27	\$ 129.67
42 RETURN OVER ALL LISTED COSTS	\$ 484.04	\$ 784.09	\$ 122.72 *
43 SUPPLEMENTARY MANAGEMENT INFORMATION			
44 RETURN FOR \$100 FEED FED	233.68	311.39	160.14
45 FEED COST PER CWT. MILK	4.22	3.50	5.38
46 FEED COST PER POUND OF BUTTERFAT	1.15	.97	1.44
47 POUNDS OF MILK PER POUND OF CONCENTRATE	2.01	2.14	1.56
48 AVE. PRICE PER CWT. MILK SOLD	9.80	10.12	9.64
49 AVE. PRICE PER POUND OF BUTTERFAT	2.71	2.80	2.58
50 TOTAL LISTED COSTS PER CWT. MILK PROD	6.01	5.33	7.44
51 DAIRY COW TURNOVER PERCENTAGE	31.9	28.3	29.5
52 TOTAL LISTED COSTS PER COW	\$ 755.84	\$ 753.88	\$ 768.43 *
53 UTILITIES & OTHER GEN. FARM EXP.	_____	_____	_____
54 INTEREST ALLOCATION	_____	_____	_____
55 OTHER COSTS NOT LISTED	_____	_____	_____
56 TOTAL COSTS	_____	_____	_____

TABLE 13 - OTHER DAIRY, COMMERCIAL, REPLACEMENTS - 1978

	AVERAGE OF 206 FARMS	41 FARMS HIGH IN RETURN ABOVE FEED	41 FARMS LOW IN RETURN ABOVE FEED
1 NUMBER OF HEAD	41.7	39.9	35.6
	PER HEAD	PER HEAD	PER HEAD
2 NET INCREASE IN VALUE	\$ 364.70	\$ 537.77	\$ 226.63
3 OTHER MISCELLANEOUS INCOME			
4 TOTAL INCOME	\$ 364.70	\$ 537.77	\$ 226.63 *
5 POUNDS OF FEED FED			
6 CORN	481.1	608.4	498.2
7 SMALL GRAIN	212.1	184.7	134.7
8 COMPLETE RATION	201.8	234.0	261.3
9 PROTEIN, SALT & MINERALS	89.7	88.2	166.1
10 HAY & DRY ROUGHAGE	2242.4	2088.4	3371.1
11 SILAGE	4816.3	5440.2	5374.5
12 MILK	119.2	90.3	136.5
13 FEED COSTS			
14 GRAINS	23.09	26.79	21.54
15 COMPLETE RATION	13.00	13.18	15.90
16 PROTEIN, SALT & MINERALS	9.28	11.65	9.61
17 HAY & DRY ROUGHAGE	43.29	38.52	63.71
18 SILAGE	38.54	43.58	41.88
19 MILK	10.89	8.22	12.42
20 PASTURE	5.20	5.31	4.19
21 TOTAL FEED COSTS	\$ 143.29	\$ 147.25	\$ 169.25
22 RETURN OVER FEED COSTS	\$ 221.41	\$ 390.52	\$ 57.38 *
23 OTHER DIRECT COSTS			
24 MISCELLANEOUS EXPENSE	2.64	3.36	2.16
25 VETERINARY EXPENSE	1.75	2.06	1.01
26 CUSTOM WORK HIRED	1.80	1.73	1.46
27 SPECIAL HIRED LABOR			
28 TOTAL OTHER DIRECT COSTS	\$ 6.19	\$ 7.15	\$ 4.63
29 RETURN OVER FEED & OTHER DIRECT COSTS	\$ 215.22	\$ 383.37	\$ 52.75 *
30 ALLOCATED COSTS			
31 POWER & MACHINERY COSTS	8.74	9.16	8.94
32 LIVESTOCK EQUIPMENT COSTS	6.25	7.88	5.20
33 BUILDING & FENCES	10.61	18.47	9.88
34 TOTAL ALLOCATED COSTS	\$ 25.60	\$ 35.51	\$ 24.02
35 RETURN OVER ALL LISTED COSTS	\$ 189.62	\$ 347.86	\$ 28.73
36 SUPPLEMENTARY MANAGEMENT INFORMATION			
37 RETURN FOR \$100 FEED FED	254.53	365.23	133.91
38 PERCENT DEATH LOSS-TOTAL	8.9	7.4	8.8
39 PERCENT CALF DEATH LOSS	16.2	12.8	18.8
40 TOTAL LISTED COSTS PER HEAD	\$ 175.08	\$ 189.91	\$ 197.90 *
41 UTILITIES & OTHER GEN. FARM EXP.	_____	_____	_____
42 INTEREST ALLOCATION	_____	_____	_____
43 OTHER COSTS NOT LISTED	_____	_____	_____
44 TOTAL COSTS	_____	_____	_____

TABLE 14 - ALL DAIRY AND DUAL PURPOSE CATTLE - 1978

	AVERAGE OF 225 FARMS	45 FARMS HIGH IN RETURN ABOVE FEED	45 FARMS LOW IN RETURN ABOVE FEED
1 AVERAGE NUMBER OF COWS	35.4 PER COW	39.2 PER COW	33.8 PER COW
2 VALUE OF DAIRY PRODUCTS	\$ 1236.16	\$ 1394.16	1035.50
3 NET INCREASE IN VALUE	465.76	812.96	146.69
4 MISCELLANEOUS DAIRY INCOME			
5 TOTAL VALUE PRODUCED	\$ 1701.92	\$ 2207.12	1182.19 *
6 POUNDS OF FEED FED			
7 GRAINS	4808.1	4884.7	5416.6
8 COMPLETE RATIONS	1716.5	1816.9	1349.0
9 PROT., SALT & MIN. INC. MILK EQUIV.	1024.3	927.4	772.4
10 HAY & DRY ROUGHAGE	8894.0	9177.2	9682.5
11 SILAGE	18238.3	19123.6	17645.6
12 FEED COST			
13 GRAINS	160.03	165.00	177.81
14 COMPLETE RATIONS	106.38	109.34	98.43
15 PROT., SALT & MIN. INC. MILK	102.74	114.46	102.37
16 HAY & DRY ROUGHAGE	186.24	201.71	200.65
17 SILAGE	145.17	156.58	148.37
18 PASTURE COSTS	13.56	14.08	7.84
19 TOTAL FEED COSTS	\$ 714.12	\$ 761.17	\$ 735.47
20 RETURN OVER FEED COSTS	\$ 987.80	\$ 1445.95	\$ 446.72 *
21 OTHER DIRECT COSTS			
22 MISCELLANEOUS LIVESTOCK EXPENSE	45.62	55.15	32.04
23 VETERINARY EXPENSE	20.65	23.90	18.28
24 CUSTOM WORK	38.11	41.28	30.56
25 SPECIAL HIRED LABOR	.93	2.83	
26 TOTAL OTHER DIRECT COSTS	\$ 105.31	\$ 123.16	\$ 80.88
27 RETURN OVER FEED & OTHER DIRECT COSTS	\$ 882.49	\$ 1322.79	\$ 365.84 *
28 ALLOCATED COSTS			
29 POWER & MACHINERY COSTS	60.05	61.53	55.74
30 LIVESTOCK EQUIPMENT COSTS	43.84	52.96	39.51
31 BUILDING & FENCES	66.74	85.76	40.89
32 TOTAL ALLOCATED COSTS	\$ 170.63	\$ 200.25	\$ 136.14
33 RETURN OVER ALL LISTED COSTS	\$ 711.86	\$ 1122.54	\$ 229.70 *
34 SUPPLEMENTARY MANAGEMENT INFORMATION			
35 RETURN FOR \$100 FEED FED	238.32	289.96	160.74
36 TOTAL LISTED COSTS PER COW	\$ 990.06	\$ 1084.58	\$ 952.49 *
37 UTILITIES & OTHER GEN. FARM EXP.	_____	_____	_____
38 INTEREST ALLOCATION	_____	_____	_____
39 OTHER COSTS NOT LISTED	_____	_____	_____
40 TOTAL COSTS	_____	_____	_____

TABLE 15A - BEEF BREEDING, FARM, WHOLE HERD, COMMERCIAL - 1978

	AVERAGE OF 53 FARMS	11 FARMS HIGH IN RETURN ABOVE FEED	11 FARMS LOW IN RETURN ABOVE FEED
1 AVERAGE NUMBER OF BEEF COWS	40.8	31.7	45.3
2 AVG. NUMBER OF OTHER BEEF ANIMALS & BULLS	32.2	39.3	24.7
3 POUNDS OF BEEF PRODUCED	17512	16165	12113
	PER COW	PER COW	PER COW
4 NET INCREASE IN VALUE	\$ 437.72	\$ 707.95	\$ 216.34
5 OTHER MISCELLANEOUS BEEF INCOME			
6 TOTAL VALUE PRODUCED	\$ 437.72	\$ 707.95	\$ 216.34 *
7 POUNDS OF FEED FED			
8 GRAIN	247.3	212.6	243.2
9 PROTEIN, SALT & MINERAL	47.7	65.3	11.0
10 LEGUME HAY	4130.4	5879.0	2810.0
11 OTHER HAY & DRY ROUGHAGE	1577.2	883.3	1385.1
12 SILAGE	3061.1	3992.0	3949.4
13 FEED COST			
14 GRAIN	9.22	7.73	10.29
15 PROTEIN, SALT & MINERAL	6.13	6.03	.99
16 LEGUME HAY	72.82	103.06	49.16
17 OTHER HAY & DRY ROUGHAGE	21.81	11.86	25.81
18 SILAGE	23.77	32.52	28.98
19 PASTURE	28.06	26.47	30.46
20 TOTAL FEED COSTS	\$ 161.81	\$ 187.67	\$ 145.69
21 RETURN OVER FEED COST	\$ 275.91	\$ 520.28	\$ 70.65 *
22 OTHER DIRECT COSTS			
23 MISCELLANEOUS LIVESTOCK EXP.	2.28	1.29	2.83
24 VETERINARY EXPENSE	4.29	2.24	2.74
25 CUSTOM WORK	4.41	7.48	5.78
26 SPECIAL HIRED LABOR			.04
27 TOTAL OTHER DIRECT COSTS	\$ 10.98	\$ 11.01	\$ 11.39
28 RETURN OVER FEED & OTHER DIRECT COSTS	\$ 264.93	\$ 509.27	\$ 59.26 *
29 ALLOCATED COSTS			
30 POWER & MACHINERY COSTS	19.86	15.23	28.15
31 LIVESTOCK EQUIPMENT COSTS	9.69	11.39	9.45
32 BUILDING & FENCES	21.82	13.25	59.93
33 TOTAL ALLOCATED COSTS	\$ 51.37	\$ 39.87	\$ 97.53
34 RETURN OVER ALL LISTED COSTS	\$ 213.56	\$ 469.40	\$ (-38.27)*
35 SUPPLEMENTARY MANAGEMENT INFORMATION			
36 RETURN FOR \$100 FEED FED	270.51	377.24	148.48
37 PRICE PER CWT. SOLD	54.15	53.78	42.20
38 PRICE PER CWT. CALVES SOLD OR TRANS.	62.88	58.89	60.76
39 AVG. WEIGHT PER HEAD SOLD	561.4	649.9	519.6
40 AVG. WEIGHT PER CALF SOLD OR TRANS.	462.0	489.6	470.1
41 PERCENT DEATH LOSS	3.8	4.0	3.3
42 PERCENT CALF CROP			
43 TOTAL LISTED COSTS PER COW	\$ 224.16	\$ 238.55	\$ 254.61 *
44 UTILITIES & OTHER GEN. FARM EXP.			
45 INTEREST ALLOCATION			
46 OTHER COSTS NOT LISTED			
47 TOTAL COSTS			

TABLE 15B - BEEF FEEDERS (FEED LOT) - 1978

	AVERAGE OF 9 FARMS
1 AVERAGE NUMBER OF BEEF FEEDERS	68.6
2 POUNDS OF BEEF PRODUCED	49489
3 NET INCREASE IN VALUE OF ANIMALS	\$ <u>PER CWT</u> 68.03
4 OTHER MISC. BEEF INCOME	
5 TOTAL VALUE PRODUCED	\$ 68.03 *
6 POUNDS OF FEED FED	
7 GRAIN	536.6
8 PROTEIN, SALT & MINERAL	19.1
9 LEGUME HAY	278.0
10 OTHER HAY & DRY ROUGHAGE	82.2
11 SILAGE	998.7
12 FEED COSTS	
13 GRAIN	18.16
14 PROTEIN, SALT & MINERAL	2.62
15 LEGUME HAY	6.15
16 OTHER HAY & DRY ROUGHAGE	1.23
17 SILAGE	7.59
18 PASTURE	.20
19 TOTAL FEED COST	\$ 35.95
20 RETURN OVER FEED COST	\$ 32.08 *
21 OTHER DIRECT COSTS	
22 MISC. LIVESTOCK EXPENSE	.79
23 VETERINARY EXPENSE	.41
24 CUSTOM WORK HIRED	.58
25 SPECIAL HIRED LABOR	
26 TOTAL OTHER DIRECT COSTS	\$ 1.78
27 RETURN OVER FEED & OTHER DIRECT COSTS	\$ 30.30 *
28 ALLOCATED COSTS	
29 POWER & MACHINERY COSTS	1.16
30 LIVESTOCK EQUIPMENT COSTS	.78
31 BUILDING & FENCES	.90
32 TOTAL ALLOCATED COSTS	\$ 2.84
33 RETURN OVER ALL LISTED COSTS	\$ 27.46 *
34 SUPPLEMENTARY MANAGEMENT INFORMATION	
35 RETURN FOR \$100 FEED FED	189.25
36 PRICE PER CWT SOLD	48.28
37 AVERAGE WEIGHT PER HEAD SOLD	1287.5
38 PRICE PER CWT BOUGHT	56.93
39 AVERAGE WEIGHT PER HEAD BOUGHT	630.8
40 NUMBER OF HEAD BOUGHT	74
41 PERCENT DEATH LOSS	1.2
42 EFFECTIVE DAILY GAIN-LBS PER HEAD PER DAY	1.98
43 TOTAL LISTED COST PER CWT PRODUCED	\$ 40.57 *
44 UTILITIES & OTHER GEN. FARM EXPENSE	_____
45 INTEREST ALLOCATION	_____
46 OTHER COSTS NOT LISTED	_____
47 TOTAL COSTS	_____

TABLE 16A - SHEEP, FARM, COMMERCIAL - 1978

	AVERAGE OF 5 FARMS
1 AVERAGE NUMBER OF EWES	79.9
2 POUNDS OF LAMB & MUTTON PRODUCED	8453
3 POUNDS OF WOOL PRODUCED	744
	PER EWE
4 VALUE OF PRODUCE	
5 WOOL	\$ 7.92
6 NET INC. IN VALUE OF ANIMALS	59.65
7 OTHER MISC. SHEEP INCOME	
8 TOTAL VALUE PRODUCED	\$ 67.57 *
9 POUNDS OF FEED FED	
10 GRAIN	138.3
11 PROTEIN, SALT & MINERAL	2.6
12 LEGUME HAY	753.4
13 OTHER HAY & DRY ROUGHAGE	30.0
14 SILAGE	85.1
15 FEED COST	
16 GRAIN	4.58
17 PROTEIN, SALT & MINERAL	.24
18 LEGUME HAY	14.27
19 OTHER HAY & DRY ROUGHAGE	.45
20 SILAGE	.64
21 PASTURE	.45
22 TOTAL FEED COSTS	\$ 20.63
23 RETURN OVER FEED COSTS	\$ 46.94 *
24 OTHER DIRECT COSTS	
25 MISC. LIVESTOCK EXPENSE	1.40
26 VETERINARY EXPENSE	.88
27 CUSTOM WORK	1.93
28 SPECIAL HIRED LABOR	
29 TOTAL OTHER DIRECT COSTS	\$ 4.21
30 RETURN OVER FEED & OTHER DIRECT COSTS	\$ 42.73 *
31 ALLOCATED COSTS	
32 POWER & MACHINERY COSTS	9.39
33 LIVESTOCK EQUIPMENT COSTS	2.41
34 BUILDING & FENCES	3.35
35 TOTAL ALLOCATED COSTS	\$ 15.15
36 RETURN OVER ALL LISTED COSTS	\$ 27.58 *
37 SUPPLEMENTARY MANAGEMENT INFORMATION	
38 RETURN FOR \$100 FEED FED	327.61
39 PRICE PER CWT LAMB & MUTTON SOLD	56.57
40 PRICE PER CWT. LAMB SOLD OR TRANS.	75.73
41 AVG. WEIGHT OF LAMBS SOLD OR TRANS.	71.9
42 POUNDS OF WOOL PER SHEEP SHEARED	
43 NUMBER OF EWES, KEPT FOR LAMBING	
44 PERCENT LAMB CROP	
45 PERCENT DEATH LOSS	9.5
46 TOTAL LISTED COSTS PER EWE	\$ 39.99 *
47 UTILITIES & OTHER GEN. FARM EXP.	
48 INTEREST ALLOCATION	
49 OTHER COSTS NOT LISTED	
50 TOTAL COSTS	

CASH SUMMARY OF FARM EARNINGS (WHOLE FARM) 1975-1978

	1975	1976	1977	1978
<u>FARM RECEIPTS</u>				
DAIRY CATTLE	1604	1350	2117	2823
DAIRY PRODUCTS	11380	16349	23595	27397
OTHER DAIRY	633	1220	1660	2154
BEEF CATTLE (INCL. FEEDERS)	1811	1767	1640	3413
HOGS	2067	2028	2581	4507
SHEEP AND WOOL	73	56	65	72
OTHER PRO. LIVESTOCK				33
CORN	219	171	1383	1855
WHEAT	69	119	115	90
OTHER SMALL GRAIN	449	191	322	362
OTHER CROPS	871	1004	414	1037
CAPITAL ASSETS SOLD	578	902	731	683
INCOME FROM WORK OFF THE FARM	419	400	484	825
MISCELLANEOUS FARM INCOME	575	674	1627	1849
1. TOTAL FARM SALES	21243	26906	37236	47100
2. INCREASE IN FARM CAPITAL	6753	7254	15334	24968
3. FAMILY LIVING FROM THE FARM	533	539	544	608
4. TOTAL FARM RECEIPTS 1 & 2 & 3	28529	34699	53114	72676
<u>FARM EXPENSE</u>				
DAIRY CATTLE BOUGHT	696	789	906	1238
OTHER DAIRY BOUGHT	219	313	586	590
BEEF CATTLE BOUGHT (INCL. FEEDERS)	455	288	375	1420
HOGS BOUGHT	259	182	327	385
SHEEP BOUGHT (INCL. FEEDERS)	5	50	10	12
OTHER PRO. LIVESTOCK				45
MISCELLANEOUS LIVESTOCK EXPENSE	726	1105	1366	1678
FEED BOUGHT	4286	7193	7952	7377
FERTILIZER	850	1052	2056	2075
OTHER CROP EXPENSE	975	925	1657	1935
CUSTOM WORK ENTERPRISE	--	23	24	18
CUSTOM WORK HIRED	870	1174	1461	1633
GAS-OIL-GREASE BOUGHT (FARM SHARE)	1204	1270	1524	1729
REPAIR & OPR. OF MACH., TRACTOR, TRUCK & AUTO (FARM SHARE)	1216	1396	1745	2143
REPAIR AND UPKEEP OF FARM REAL ESTATE	369	405	488	543
REPAIR AND UPKEEP OF LIVESTOCK EQUIP.	186	202	309	389
WAGES OF HIRED LABOR	587	835	1137	1211
ELECTRICITY EXPENSE (FARM SHARE)	367	468	617	861
REAL ESTATE & PERS. PROPERTY TAXES	307	390	515	586
TELEPHONE & GENERAL FARM EXPENSE	627	736	891	1014
5. TOTAL CASH OPERATING EXPENSE	14300	18921	24132	26882
6. POWER, CROP & GEN. MACH. BOUGHT	3776	4274	5617	9119
7. LIVESTOCK EQUIPMENT BOUGHT	504	687	1217	2008
8. NEW REAL ESTATE & IMPROVEMENTS	2727	3124	6702	8078
9. TOTAL FARM PURCHASES	21307	27006	37668	19205
10. DECREASE IN FARM CAPITAL	1246	1982	788	189
11. INTEREST ON FARM CAPITAL	3407	4134	2106	8693
12. UNPAID FAMILY LABOR	766	869	570	662
13. LABOR CHARGE FOR PARTNERS	74	101	48	395
14. BOARD FURNISHED HIRED LABOR	56	42	43	54
15. TOTAL FARM EXPENSE 9-14	26856	34134	41223	56080
16. LABOR EARNINGS 4-15	1093	1227	6969	16596

1975-1976-1977-1978 IN A CAPSULE

	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>
FARM SIZE (ACRES)	301.7	330.2	317.4	334.8
SIZE OF BUSINESS (WORK UNITS)*	335.9	264	307	318.98
RETURN TO CAPITAL & FAMILY LABOR	3047	3098	8654	20235
LABOR EARNINGS	1093	1227	6969	16596
NET WORTH (AVG. JAN. 1 & DEC. 31)	46622	49242	62543	73705
RATIO OF ASSETS OF LIABILITIES	2.50	2.35	2.29	2.24

SOURCE OF INCOME-CASH-RECEIPTS

INCOME FROM LIVESTOCK	84.7%	86%	85%	89%
INCOME FROM CROPS	7.4%	6%	7%	7%
MISCELLANEOUS INCOME	7.9%	8%	8%	4%

*One Work Unit equals one 10 hour working day.

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 a result improve family living.

Sitting down as an operator or husband and wife and putting these wants in writing is done in one of the early classes in the adult farm 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.

Setting 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 too inflexible, they may be a liability to progress rather than an asset.

On the next page 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.

WHAT DOES YOUR FAMILY WANT?

Name John Jones Family

Date 2-10-78

Address Anywhere, Minnesota

One of the steps for improving the farm and home business is to clarify what is wanted. You may know of things you have wanted as a family, but it takes considerable thought and discussion among family members to agree upon what is most important and which things come first. As a family write down your goals for this year and for the future, then number them in order of priority.

	This Year	Later
<u>FOR A PROFITABLE FARM BUSINESS:</u>		
6 Buy a new tractor to replace old John Deere A	✓	
1 Raise the production of the dairy herd by 500 lbs. milk per cow.	✓	
8 Raise the production of the dairy herd from 11000 lbs. to 15000 lbs. per cow in 10 years.		✓
2 Increase hay yield by 1 ton/acre in 3 yrs.	✓	✓
<u>FOR SATISFYING LIVING:</u>		
5 Install kitchen cabinets.	✓	
10 Build new family room on west side of house.	✓	
11 Paint exterior of home.	✓	✓
12 Landscape yard.		
<u>FOR DEVELOPMENT OF FAMILY MEMBERS:</u>		
9 Provide opportunity for son, Dave, to attend college in two years.		✓
7 Provide money for Dad to attend National Convention for a week this winter.	✓	
4 Provide time and money for Dan to attend camp this summer.	✓	
<u>FOR LONG-TERM FINANCIAL SECURITY:</u>		
3 Improve net worth by 20%/year.	✓	✓

MONEY SPENT BY THE AVERAGE NORTHEAST AND
EAST CENTRAL MINNESOTA FARMERS IN 1978

TO OTHER FARMERS FOR LIVESTOCK AND CUSTOM WORK (Line 2-13 plus line 20 & 21).	5189
TO THE AGRI-BUSINESS COMMUNITY FOR FERTILIZER, CHEMICALS, SEED, FEEDS, REPAIRS AND FUEL (Lines 14-18, 22-27 Plus line 31)	18342
FOR EXTRA LABOR (line 28).	1178
SUPPORT OF LOCAL GOVERNMENT (PROPERTY & OTHER TAX) (T6B, Line 29 plus (T4) line 19).	1114
FOR UTILITIES (ELECTRICITY AND TELEPHONE) (Line 19, 32-33).	1016
FOR USE OF OTHER PEOPLES CAPITAL (INTEREST AND CASH RENT)((T6B) Line 30 & 34), (T4) (14A)	4843
FARM EQUIPMENT DEALERS (POWER AND MACHINERY) (Line 36-37, 38 & 39 (T4) 17).	11324
NEW BUILDINGS AND LAND ((T6B) 40 (T4) 18)	9482
FOOD, CLOTHING, HOUSE FUEL, FURNITURE AND PERSONAL CARE((T4) 5-9)	4555
CONTRIBUTIONS - CHURCH AND OTHER ((T4) line 3)	324
MEDICAL CARE & HEALTH INSURANCE ((T4) Line 3)	1094
EDUCATION AND RECREATION((T4) Line 11-12-13)	877
LIFE INSURANCE AND OTHER INVESTMENTS (T4) Line 20)	570
 TOTAL MONEY SPENT BY THE AVERAGE FARMER WITHIN HIS COMMUNITY AND SERVICE AREA	 59908

ABOVE INFORMATION IS TAKEN FROM TABLES 4 and 6B OF THE
1978 ANNUAL NORTHEAST AND EAST CENTRAL VO-AG FARM
BUSINESS MANAGEMENT EDUCATION REPORT