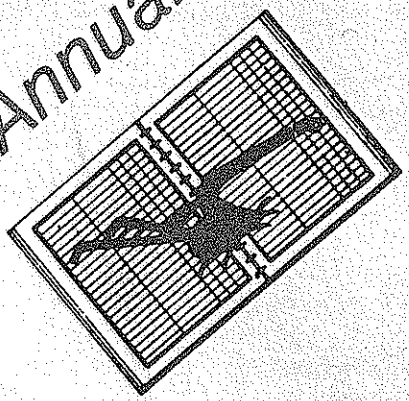
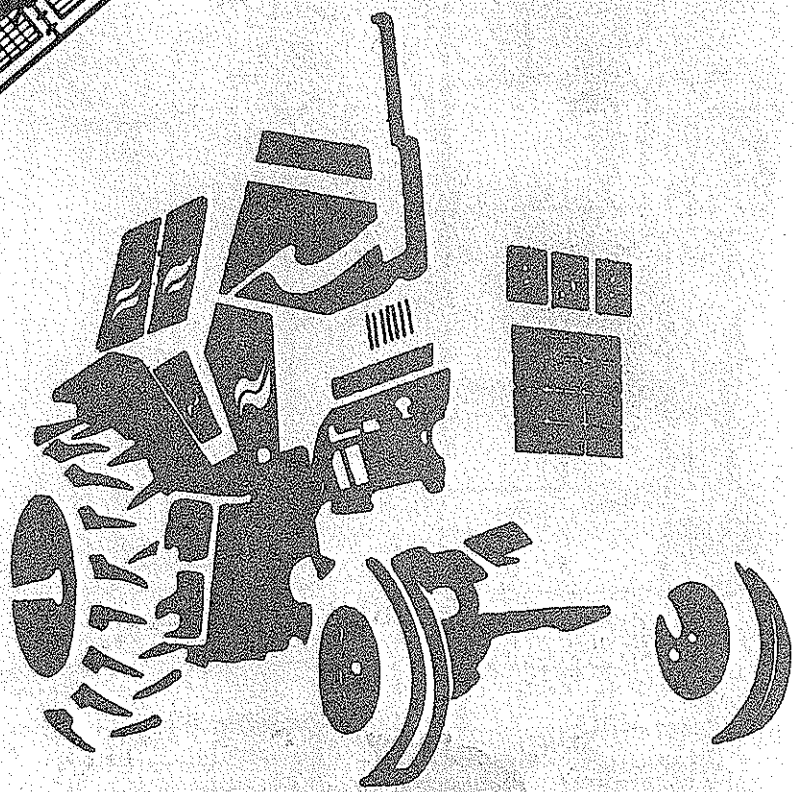
PERSONAL COPY OF:

Mr. Al Dalen

FARM BUSINESS MANAGEMENT

1986 Annual Report



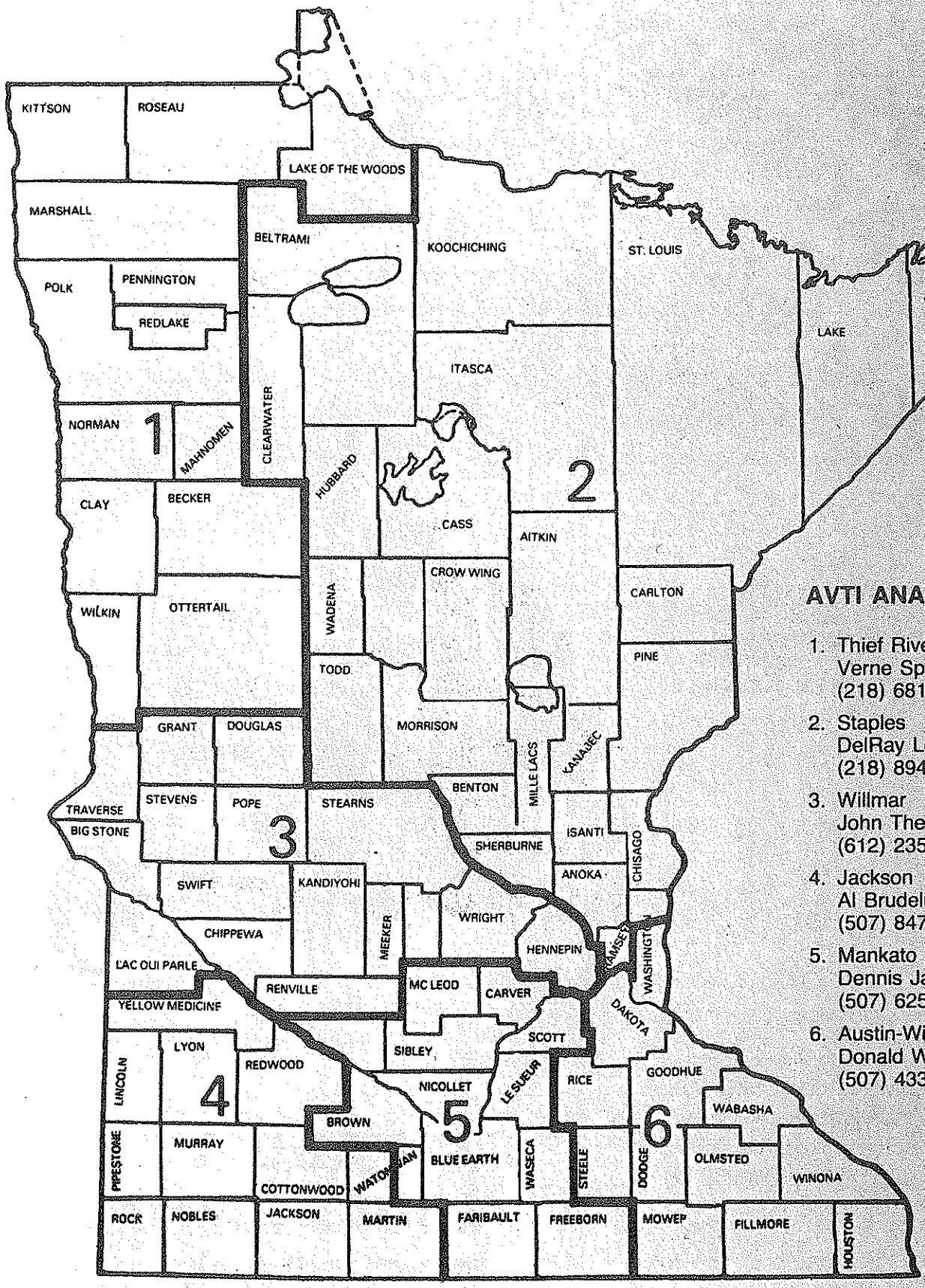


NORTHWESTERN MINNESOTA
REPORT NO. 32
AREA VOCATIONAL TECHNICAL
INSTITUTE
THIEF RIVER FALLS, MINN.

In Cooperation With The
STATE BOARD OF VOCATIONAL
TECHNICAL EDUCATION AND
AGRICULTURAL EDUCATION DEPARTMENT
UNIVERSITY OF MINNESOTA

AN ADULT EDUCATIONAL PROGRAM

VO-AG FARM MANAGEMENT AREAS



AVTI ANALYSIS CENTERS

1. Thief River Falls
   Verne Spengler
   (218) 681-5424
2. Staples
   DelRay Lecy
   (218) 894-1051
3. Willmar
   John Thell
   (612) 235-5114
4. Jackson
   Al Brudelie
   (507) 847-3320
5. Mankato
   Dennis Jackson
   (507) 625-3441
6. Austin-Winona
   Donald Walker
   (507) 433-0619

1986 REPORT OF THE FARM MANAGEMENT PROGRAM FOR VOCATIONAL AGRICULTURE IN NORTHWESTERN MINNESOTA

HERE'S WHERE YOU'LL FIND THE INFORMATION

	Page
Introduction	2
Schools Participating	3
Table 1 - Summary of Farm Inventories, Whole Farm*	4-5
Table 2A - Summary of Cash Receipts, Whole Farm*	6
Table 2B - Summary of Cash Expenses, Whole Farm*	7
Table 3 - Summary of Farm Earnings by Enterprise, Whole Farm*	8
Table 4 - Household and Personal Expense, Operator	9
Table 5 - Statement of Financial Position, Operator	10-11
Table 6A - Operator's Share of Cash Receipts	12
Table 6B - Operator's Share of Cash Expenses	13
Table 8 - Measures of Farm Organization and Management Efficiency	14
Thermometer Chart	15
Table 9 - Crop Acres and Yields	16
Table 10 - Detailed Crop Analyses:	
- Small Grains: Barley, Buckwheat, Flax, Oats, Spring Wheat, Winter Wheat	17-22
- Row Crops: Pinto Beans, Corn, Potatoes, Soybeans, Sugar Beets, Sunflowers	23-28
- Forages: Other Legume Hay, Corn Silage	29-30
- Grass and Legume Seeds: Red Clover Seed, Bluegrass Seed, Timothy Seed	31-33
- Summer Fallow	34
Livestock Analysis Introduction	35
Table 11A - Hogs, Farrow to Finish	36
Table 11B - Hogs, Finishing	37
Table 11C - Hogs, Weaning Pig Production	38
Table 12 - Dairy Cows Only	39
Table 13 - Other Dairy	40
Table 14 - All Dairy, Tables 12 and 13 Combined	41
Table 15A - Beef Breeding	42
Table 15B - Beef Feeders	43
Table 16A - Sheep	44
Average Prices Used & Work Units Explanation	45
Summary of Miscellaneous Items by Years	46
Summary of Farm Earnings by Years	47

*Whole farm includes all landlords and operators.

INTRODUCTION

Adult Farm Business Management Education programs have been part of the public school vocational agriculture offerings since 1952. From the early cooperative efforts of the State Department of Education, Department of Agricultural Education (U. of Minn.) and the Department of Agricultural Economics (U. of Minn.), the program has expanded to serve over 4,500 farm families in six regional farm management areas. Programs are managed by the State Board of Vocational-Technical Education, AVTI's and local school districts.

From the very beginning the purpose of the farm management education part of the adult agriculture program was to help farm families achieve their farm business and family goals through improved management organization and efficiency of their farms. The purpose has not changed.

To accomplish the purpose, programs have been organized to generally conform to the following guidelines:

1. Farmers enroll in a specific farm management course.
2. Each course has a specific major objective and specific units of instruction to meet the objective.
3. Courses are offered in sequence, and farmers are expected to enroll in the first course and follow the sequence. They may continue enrollment in the advanced courses as long as they desire.
4. There is continuity between the courses; each one leads to the other.
5. Part of the instruction is done on the farm with the individual farm family.

Most programs organize their courses around the same central themes. They are:

Year 1 - Farm Business records and accounts.
Year 2 - Farm Business analysis and evaluation.
Year 3 - Farm Business organization.
Advanced - (For students who have completed years 1, 2 and 3.) In the advanced series of classes and on-farm instructional visits, the major emphasis is on evaluating the business, examining alternatives and continuing the reorganization of the resources used in the business.

Like most education programs, enrollees benefit from the instruction in relation to how much effort they put into study. But there have been some research studies that show that on the average, enrollees get some exciting results.

Of course, some farmers may have benefited more, and some less, depending upon how seriously they studied the results of their business analysis and the kind of decisions they made as a result of the study.

The analysis of the records and the preparation of the reports for Northwestern Minnesota were done under the direction of Verne Spengler of the Area Vocational-Technical Institute at Thief River Falls. The program is locally supervised by Dr. Leo Ruberto, Superintendent of the Thief River Falls Public Schools and by Dr. Orley Gunderson, Director of the Area Vocational-Technical Institute.

A special thank you is due the clerical staff: Shirley Koop, Bernie Burger, Myrna Giauque, Wilma Bornholdt, Rita Wald, Thief River Falls; Norma Ackerson, Barnesville; Patty Maruska, Fosston; Arlene Furuseth, Roseau; Carol Lockhart, Ulen; Suzie Bucholz, Moorhead; Becky Crary, Detroit Lakes; Jane Salber, Fertile and Verona Onstad, Ada.

Esther Mattson, our secretary, oversees the general operation of this office, including correspondence, billing and organization.

SCHOOLS PARTICIPATING

This report deals with farmers enrolled in 24 schools in Northwestern Minnesota. A list of cooperating schools and instructors follows:

Schools	Instructors
Ada, Twin Valley	Peter Revier
Barnesville	Tom Risdal
Baudette	Gerald Ausmus
Detroit Lakes	Duane Lemmon
Fergus Falls	Allen Schoenbauer
Fertile	Ron Salber
Fosston	Doug Fjerstad
Frazee	Ron Monson
Goodridge	Wayne Ditmer
Hawley	Dennis Olsen
Henning	Charles Erickson
Kittson County	Mark Prosser
Mahnomen, Ulen, Twin Valley	Mike Lockhart
Moorhead	Rick Morgan
Red Lake Falls	Mark Berg
Roseau, Badger, Warroad	Duane Jaenicke
Thief River Falls, Plummer, Oklee, Red Lake Falls	Al Dalen
	Don Johnsen
	Danie Packard

WHY KEEP RECORDS?

Systematic use of records seems to raise the managerial level of the farmers. Once a farmer starts using records to check up on his performance, it is likely that he will continue for some years to improve his position above that of his less systematic neighbor.*

*Britannica Research Service

300 Records were included in the average.

520 Records were processed.

Table 1 - Whole Farm Inventories, 1986

	Items		Average of 300 Farms	
1	Size of Farm - Total Acres		867.6	
2	- Tillable Acres		775.9	
3	Work Units - Crops		315.01	
4	- Livestock		144.00	
5	- Other		7.41	
6	Total Size of Business in Work Units		466.41	
7	Number of Workers		1.64	
8	Farm Capital Investment per Worker	$	268148	
8A	Farm Capital Investment per Work Unit	$	1034	
			Jan. 1	Dec. 31
9	PRODUCTIVE LIVESTOCK			
10	Dairy Cows		10071	9913
11	Other Dairy Cattle		5283	5334
12	Beef Breeding Cattle		6473	6424
13	Beef Feeder Cattle		2454	2823
14	Hogs		1510	1532
15	Sheep (Incl. Feeders) & Goats		389	323
16	Poultry - All Types			
17	Other Livestock			
18	Total Productive Livestock	$	26180	26349
19	CROP, SEED, FEED & SUPPLIES		51323	49059
20	POWER, MACHINERY & EQUIPMENT			
21	Auto & Truck (Farm Share)		6609	6518
22	Power & Machinery		44093	42172
23	Irrigation Equipment		274	235
24	Custom Work Equipment		332	245
25	Livestock Equipment		3481	3187
26	Total Power, Mach. & Equip.	$	54789	52357
27	Land		284364	286039
28	Buildings-Fences-Etc.		26417	26018
29	Total Farm Capital	$	443072	439821
30	Increase or Decrease in Total Farm Capital			$ (-3251)

Table 1 lists the categories of farm capital for the average of farms and for the 60 most profitable and the 60 least profitable farms. These averages include the landlord's share of the investment for rented farms.

Livestock, crops, seed and feed reflect a conservative market price at the time the inventory is taken.

Machinery, equipment and building values reflect cost less depreciation.

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 - Whole Farm Inventories, 1986

	Items	Average of 60 High Farms	Average of 60 Low Farms
1	Size of Farm - Total Acres	1226.6	914.6
2	- Tillable Acres	1135.8	820.5
3	Work Units - Crops	530.53	315.55
4	- Livestock	129.87	70.89
5	- Other	16.68	5.06
6	Total Size of Business in Work Units	677.08	391.49
7	Number of Workers	2.09	1.63
8	Farm Capital Investment per Worker	$ 315277	323189
8A	Farm Capital Investment per Work Unit	$ 969	1427

		Jan. 1	Dec. 31	Jan. 1	Dec. 31
9	PRODUCTIVE LIVESTOCK				
10	Dairy Cows	9390	9623	3448	3545
11	Other Dairy Cattle	4637	4759	2505	2289
12	Beef Breeding Cattle	4699	4755	8530	7273
13	Beef Feeder Cattle	941	1261	3076	2440
14	Hogs	1882	2496	1261	953
15	Sheep (Incl. Feeders) & Goats	105	78	1058	997
16	Poultry - All Types				
17	Other Livestock				
18	Total Productive Livestock	$ 21654	22972	19879	17497
19	CROP, SEED, FEED & SUPPLIES	99453	112191	65337	48055
20	POWER, MACHINERY & EQUIPMENT				
21	Auto & Truck (Farm Share)	11689	11494	8383	8462
22	Power & Machinery	61710	66177	58926	52901
23	Irrigation Equipment	395	352	356	310
24	Custom Work Equipment	1653	1218		
25	Livestock Equipment	3182	3154	1203	1033
26	Total Power, Mach. & Equip.	$ 78629	82396	68869	62706
27	Land	406461	412471	350838	348979
28	Buildings-Fences-Etc.	33220	34037	25850	25645
29	Total Farm Capital	$ 639418	664067	530774	502881
30	Increase or Decrease in Total Farm Capital		$ 24649		$ (-27893)

Table 2A - Whole Farm Summary of Cash Receipts, 1986

	Items		Average of 300 Farms	High 60 Farms	Low 60 Farms
1	Sale of Livestock & Livestock Products				
2	Dairy Cows	$	1981	1657	503
3	Dairy Products		22213	21000	7578
4	Other Dairy Cattle		1575	1106	596
5	Beef Breeding Cattle		2823	2371	3369
6	Beef Feeder Cattle		2997	943	3050
7	Hogs Complete & Mixed		863		573
8	Hogs Finishing		1673	2791	1593
9	Hogs Producing Weaning Pigs		2127	4855	737
10	Sheep, Goats & Wool, Farm Flock		441	120	468
11	Sheep & Wool, Feeder Lambs				
12	Chickens (Incl. Hens & Broilers)				
13	Turkeys				
14	Eggs				
15	Other Productive Livestock & Products				
16	Other Misc. Livestock Income		147		8
17	Total Sales of Productive Lvstk.	$	36841	34843	18475
18	Sale of Crops				
19	Wheat		33818	74673	32312
19A	Durum		7		36
20	Other Small Grains		15412	23559	20037
21	Corn		4582	7018	4674
22	Soybeans		5909	9093	4452
22A	Sunflowers		1385	2147	2088
23	Other Row Crops		16925	51012	10960
24	Legumes & Other Forage		920	668	1515
25	Grass Seed		507	1153	822
26	Fruits & Nuts				
27	Veg. Roadside Market & Specialty		18		27
28	Nursery, Timber & Other		98	451	
29	Set Aside Acres - Gov't. Payments		25114	42159	26498
29A	PIK Acres				
29B	Sale of Crops & Supplies Pur. for Resale		133		125
30	Total Sales From Crops & Supplies	$	104829	211933	103545
31	Cap. Assets Sold (Auto/Trk./Mach.)		672	934	1026
31A	Cap. Assets Sold (Bldgs. & Imprvmnts)		30	62	
31B	Cap. Assets Sold (Land)		1125	1558	1912
32	Gas Tax Refund		39	31	51
33	Income From Work Off The Farm		971	1306	1136
34	Custom Work Enterprise Income		412	2051	
35	Patronage Refunds		408	937	418
36	Miscellaneous Farm Income		6347	12606	6078
37	Total Farm Sales	$	151674	266261	132640
38	Increase in Farm Capital			24649	
39	Family Living from The Farm		370	331	196
40	Total Farm Receipts (37)+(38)+(39)	$	152044	291241	132836

Table 2B - Whole Farm Summary of Cash Expenses, 1986

	Items	Average of 300 Farms	High 60 Farms	Low 60 Farms
1	Purchase of Livestock			
2	Dairy Cows	$ 273	215	
3	Other Dairy Cattle	194	165	30
4	Beef Breeding Cattle	278	393	170
5	Beef Feeder Cattle	1490	632	366
6	Hogs Complete & Mixed	11		23
7	Hogs Finishing	319	981	3
8	Hogs Producing Weaning Pigs	221	726	116
9	Sheep & Goats	32	6	7
10	Sheep, Feeder Lambs			
11	Chickens (Incl. Hens & Broilers)			
12	Turkeys			
13	Other Productive Livestock			
14	Miscellaneous Livestock Expense	3005	2759	1298
14A	Purc. of Crops/Supplies Purc. for Resale	10185	26046	8204
15	Feed Bought	7092	7802	3236
16	Fertilizer	11131	19123	11905
17	Chemicals	6108	12159	6729
18	Other Crops Expense	9436	15854	10227
19	Irrigation Operation Costs	11	21	27
20	Custom Work Enterprise Op.Costs, Inc.Labor	279	1392	
21	Custom Work Hired	3659	5263	2744
22	Repair & Upkeep of Livestock Equip.	641	977	220
23	Repair & Upkeep of Farm Real Estate	1047	1810	1035
24	Gas,Diesel & Lub. Bought (Farm Share)	6474	9325	6733
25	Repair & Operation of Mach,Trac,Trk & Auto	9521	14860	10180
26	Repair & Upkeep of Irrigation Equipment			1
27	Repairs - Custom Work Enterprise	52	258	
28	Wages of Hired Labor	5672	8964	7421
29	Personal Property & Real Estate Taxes	4413	7547	4726
30	General Farm Expense	3895	6480	4437
31	Telephone Expense (Farm Share)	416	434	471
32	Electricity Expense (Farm Share)	1676	2096	1379
33	Total Cash Operating Expense	$ 87531	146290	81687
34	Power, Crop & Gen. Mach. Bought (Fm. Sh.)	10669	21913	9889
35	Irrigation Equipment Bought			
36	Custom Work Equipment Bought			
37	Livestock Equipment Bought	403	466	122
38	New Real Estate - Bldgs./Improvements	2334	4119	2787
38A	New Real Estate - Land	2862	7013	583
39	Total Farm Purchases(33) thru (38A)	$ 103799	179801	95068
40	Decrease in Farm Capital	3034		27893
41	Interest on Farm Capital (7 pct. Charge)	30686	45622	36178
42	Unpaid Family Labor	10		
43	Labor Chg. for Partners & Other Operators			
44	Board Furnished Hired Labor	38	5	150
45	Total Farm Exp. (39) thru (44)	$ 137567	225428	159289
46	Ret. to Op. Labor & Mgmt.-Single Op. (WF) (2A/40) - (45)	$ 14477	65813	(-26453)
47	Number of Operators	1	1	1
48	Full Time Operator Equivalents	1.18	1.40	1.06
49	Ret. to Op.Lab. & Mgmt/Full Time Op.Equiv. (2B/43+46) Divided By (2B/48)	11528	54625	(-25543)

Table 3 - Whole Farm Enterprise Statement, 1986

	Items	Average of 300 Farms	High 60 Farms	Low 60 Farms
1	Returns & Net Increases			
2	Productive Livestock			
3	Dairy Cows	$ 21356	19898	7266
4	Other Dairy Cattle	4557	4333	1465
5	Beef Breeding Cattle	2901	2117	2960
6	Feeder Cattle	1508	599	1125
7	Hogs, Complete & Mixed	927		548
8	Hog Finishing Enterprise	1038	1962	824
9	Producing Weaning Pigs	2175	4591	1100
10	Sheep & Goats	353	87	408
11	Sheep, Feeder Lambs			
12	Chickens (Incl. Hens & Broilers)			
13	Turkeys			
14	Other Productive Livestock			
15	Total All Productive Livestock	$ 34814	33586	15696
16	Value of Feed Fed to Livestock (Minus)	15943	14742	9231
17	Return Over Feed from Livestock	18871	18844	6465
18	Crop, Seed & Feed	84434	184241	63122
18A	Crops & Supplies Purc. for Resale (Net)	(-10052)	(-26046)	(-8079)
19	Cooperative Patronage Refunds	408	937	418
20	Miscellaneous Farm Income	6347	12606	6078
21	Custom Work Enterprise	(-7)	(-34)	
22	Total Returns & Net Increases	$ 100002	190548	68003
23	Expenses & Net Decreases			
24	Truck & Auto (Farm Share)	$ 5423	6235	5456
25	Tractors & Crop Machinery	24850	37960	27617
26	Irrigation Equipment	30	42	46
27	Electricity	1676	2096	1379
28	Livestock Equipment	1374	1581	529
29	Buildings, Fences & Tiling	3744	5050	4027
30	Bare Land	(-5)	(-554)	530
31	Miscellaneous Livestock Expense	3005	2759	1298
32	Labor-Pd,Unpd,Custom Wrk (Excl. Cus.Lbr.)	6018	9483	7763
33	Labor Charge for Other Operator(s)			
34	Property Tax	4413	7547	4726
35	General Farm Expense	3895	6480	4437
35A	Telephone Expense	416	434	471
36	Interest on Farm Capital (7 Pct. Charge)	30686	45622	36178
37	Total Expenses & Net Decreases	$ 85525	124736	94456
38	Return to Oper. Labor & Mgmt. (Single Op.)	$ 14477	65813	(-26453)
39	Number of Farm Operators	1	1	1
40	Full Time Operators Equivalents	1.18	1.40	1.06
41	Return to Opr. Lab & Mgmt./Full Time Opr.	11528	54625	(-25543)

Table 4 - Operators Household Expense, 1986

	Items		Average of 174 Farms	High 34 Farms	Low 34 Farms
1	Number of Persons - Family		4	4	4
2	Number of Adult Equivalent - Family		3.1	3.3	3.0
3	Church & Welfare	$	874	1640	867
4	Medical Care & Health Insurance		2392	2727	2559
5	Food & Meals Bought		4004	4630	3827
6	Operating Expense & Supplies		2183	2555	2833
7	Furnishings & Equipment		790	946	841
8	Clothing & Clothing Materials		1116	1445	1137
9	Personal Care, Personal Spending		1831	2407	1448
10	Education		838	1279	687
11	Recreation		211	157	473
12	Gifts & Special Events		617	804	574
12A	Personal Interest		257	998	331
13	Personal Share Truck & Auto Expense		762	885	658
14	Operator Share Upkeep on Dwelling		37	19	5
14A	Cash Rent (Personal)				
15	Personal Share Tel. & Elec. Expense		782	1029	585
15A	Personal Share - Gen. Farm Expense		22	31	
16	Total Cash Living Expense	$	16716	21553	16826
17	Personal Share New Truck & Auto		627	946	425
18	New Dwelling Bought		985	221	589
19	Taxes & Other Deductions		1660	2784	1382
20	Life Insurance		1140	3012	1018
21	Total HH & Pers. (16) thru (20)	$	21127	28516	20240
22	Total Fam. Living from the Farm(33)		384	254	241
23	Total Cash & Non-Cash Expense (21) + (22)		21511	28770	20481
23A	Paid on Personal Debt		27		
23B	Savings & Investments (Excl. Life Ins.)		1262	3960	489
23C	Total Cash/Non-Cash Funds for Pers. Use	$	22800	32731	20970
24	FAMILY LIVING FROM THE FARM				
25			OPER.SHARE	OPER.SHARE	OPER.SHARE
26	Milk & Cream (Quarts)		386	317	182
27	Beef & Buffalo (Pounds)		547	277	348
28	Pork (Pounds)		71	65	92
29	Lamb, Mutton, Goat (Pounds)				
30	Poultry, All Fowl (Pounds)				
31	Eggs (Dozen)				
32	Veg., Fruits, Spuds, Other Prod. & Fuel				
33	Total Family Living from the Farm	$	384	254	241

Household and personal accounts are important if the family is to manage its financial affairs wisely. The household and personal expenses and receipts are presented in Table 4. These farmers spent an average of $ 21511 for family living, in addition to the food, fuel and housing furnished by the farm.

Table 5 - Statement of Financial Position - Operator, 1986

	Items		Average of 291 Farms Jan. 1	Dec. 31
1	Total Productive Livestock	$	25216	24967
2	Crop, Seed & Feed		49137	47121
3	Total Power, Mach. & Equip.		54267	52061
4	Land (Acres Owned 459.5)(Tillable 329.2)		161523	163244
5	Buildings, Fences, Etc.		26032	25557
6	Total Farm Capital	$	316174	312950
7	Non-Farm Assets		23990	25343
7A	Cash on Hand & In Bank		11286	13957
7B	Non-Farm Real Estate		678	726
8	Dwelling		24808	25396
9	Total Assets	$	376936	378372
10	Real Estate Mortgages		122794	120638
11	Chattel Mortgages		77967	76727
12	Notes		10462	12206
13	Accounts Payable		2341	2333
14	Total Liabilities	$	213563	211904
15	Farmers Net Worth	$	163373	166468
16	Gain (or Loss) in Net Worth			$ 3095
17	SUPPLEMENTARY MANAGEMENT INFORMATION			
18	Return to Op. Labor & Mgmt. (6B/47)	$	10808	
19	Return to Cap. & Family Labor(6B/48)		16444	
20	Non-Farm Income			
21	Outside Investment Income		1631	
22	Other Pers. Income & Income Tax Ref.		7707	
22A	Sale of (P.S.) Dwelling, Auto & Trk.		94	
23	Total Non-Farm Income	$	9432	
24	Total Family Farm & Non-Farm Inc.	$	25876	
25	Total Money Borrowed (Business & Pers.)		63177	
26	Total Paid on Debt (Prin.-Business Only)		65009	
27	Total Cash/Non-Cash Exp./Pers. Use(4/23C)		23067	
28	Ratio: Total Farm-Exp. to Rec. (O.S.)		.932	

		Jan. 1	Dec. 31
29	Ratio: Total-Assets to Liabilities	1.765	1.786
30	Ratio: Non-Real Estate-Assets to Liab.	1.806	1.791
31	Ratio: Real Estate-Assets to Liab.	1.735	1.782
32	Ratio: Net Worth to Total Liab.	.765	.786
*33	Ratio: Cash Op. Exp.to Adj.Total FmSls(O.S.)		.771
34	Ratio: Total Fm.Rec.to Av. Farm Cap. (W.S.)		.367
35	Ratio: Total Fm.Rec.to Av. Farm Cap. (O.S.)		.506
36	Inventoried Value of Farm Per Owned Acre		466
37	Inventoried Value of Farm Per Tillable Acre		543
38	Debt (All Sources) Per Acre Owned		461

*Adjusted farm sales does not include sale of capital assets.

**Items 1-5 show the distribution of capital invested by the operator in the farm business. All assets are based upon the modified cost (cost minus depreciation). Land may have been adjusted to reflect long term changes in value.

Table 5 - Statement of Financial Position - Operator, 1986

	Items	High 58 Farms		Low 58 Farms	
		Jan. 1	Dec. 31	Jan. 1	Dec. 31
	ASSETS				
1	Total Productive Livestock	$ 23566	24441	19620	16417
2	Crop, Seed & Feed	91724	106689	67772	49422
3	Total Power, Mach. & Equip.	77597	81331	68203	60756
4	Land(Acres Owned 557.8)(Tillable 393.0)	235797	241869	211843	210196
5	Buildings, Fences, Etc.	32529	32856	29633	28757
6	Total Farm Capital	$ 461212	487185	397072	365548
7	Non-Farm Assets	44606	46758	24973	26332
7A	Cash On Hand & In Bank	20226	22451	10924	14250
7B	Non-Farm Real Estate	959	959	605	847
8	Dwelling	32892	32976	27343	27721
9	Total Assets	$ 559896	590329	460918	434698
	LIABILITIES				
10	Real Estate Mortgages, Contracts	182132	174219	124423	118506
11	Chattel Mortgages	99795	95532	87299	88661
12	Notes	16189	18897	9777	11016
13	Accounts Payable	2279	1751	1293	1433
14	Total Liabilities	$ 300395	290399	222792	219615
15	NET WORTH	$ 259501	299930	238126	215083
16	Gain (or Loss) in Net Worth		$ 40429		$ (-23042)
17	SUPPLEMENTARY MANAGEMENT INFORMATION				
18	Return to Op. Labor & Mgmt. (6B/47)	$ 57158		(-27185)	
19	Return to Cap. & Family Labor (6B/48)	63556		(-14717)	
20	Non-Farm Income				
21	Outside Investment Income	3176		1496	
22	Other Pers. Income & Income Tax Ref.	7181		11133	
22A	Sale of (P.S.) Dwelling, Auto & Truck	280			
23	Total Non-Farm Income	$ 10637		12628	
24	Total Family Farm & Non-Farm Income	74193		(-2089)	
25	Total Money Borrowed (Bus. & Pers.)	78279		58080	
26	Total Paid on Debt (Prin.) - Bus. Only	88416		61098	
26A	Total Paid on Debt (Int.)				
27	Total Cash/Non-Cash Exp/Pers. Use(4/23C)	34359		22662	
28	Ratio: Total Farm-Expenses to Rec.(O.S.)	.806		1.195	
		Jan. 1	Dec. 31	Jan. 1	Dec. 31
29	Ratio: Total-Assets to Liabilities	1.864	2.033	2.069	1.979
30	Ratio: Non-Real Estate-Assets to Liab.	2.179	2.424	1.947	1.653
31	Ratio: Real Estate-Assets to Liab.	1.659	1.772	2.165	2.257
32	Ratio: Net Worth to Total Liab.	.864	1.033	1.069	.979
*33	Ratio: Cash Op.Ex. to Adj.Total FmSls(O.S.)		.740		.807
34	Ratio: Total Fm.Rec.to Av.Fm.Capital (W.F.)		.419		.298
35	Ratio: Total Fm.Rec.to Av.Fm.Capital (O.S.)		.622		.365
36	Inventoried Value of Farm Per Owned Acre		552		477
37	Inventoried Value of Farm Per Tillable Acre		618		555
38	Debt (All Sources) Per Acre Owned		521		392

*Adjusted farm sales does not include sale of capital assets.

**Items 1-5 show the distribution of capital invested by the operator to the farm business. All assets are based upon the modified cost (cost minus depreciation). Land may have been adjusted to reflect long term changes in value.

Table 6A - Operators Share of Cash Receipts, 1986

	Items	Average of 300 Farms	High 60 Farms	Low 60 Farms
1	Sale of Livestock & Livestock Products			
2	Dairy Cows	$ 1959	2343	979
3	Dairy Products	21771	27158	8128
4	Other Dairy Cattle	1522	1275	763
5	Beef Breeding Cattle	2707	2114	3172
6	Beef Feeder Cattle	2962	594	2692
7	Hogs Complete & Mixed	861	2019	573
8	Hogs Finishing	1637	2984	1434
9	Hogs Producing Weaning Pigs	2114	4855	973
10	Sheep, Goats & Wool, Farm Flock	417	120	356
11	Sheep & Wool, Feeder Lambs			
12	Chickens (Inc. Hens & Broilers)			
13	Turkeys			
14	Eggs			
15	Other Prod. Livestock & Products			
16	Other Misc. Livestock Income	146		8
17	Total Sales of Productive Lvsk.	$ 36095	43463	19078
18	Sale of Crops			
19	Wheat	33085	66643	36287
19A	Durum	7		36
20	Other Small Grain	14896	22174	18170
21	Corn	4966	7943	7122
22	Soybeans	5891	7236	6600
22A	Sunflowers	1380	1642	1977
23	Other Row Crops	16457	51772	10219
24	Legumes & Other Roughage	907	612	884
25	Grass Seed	505	1494	822
26	Fruits & Nuts			
27	Vegetables, Roadside Market & Specialty	18		
28	Nursery, Timber & Other	98	451	
29	Set Aside Acres - Gov. Payments	25130	40288	26579
29A	Pik Acres			
29B	Sale of Crops & Supplies Purc. for Resale	133		125
30	Total Sales from Crops & Supplies	$ 103472	200255	108821
31	Cap. Assets Sold (Auto/Trk/Mach)	778	1469	1039
31A	Cap. Assets Sold (Bldgs. & Improvements)	30	62	
31B	Cap. Assets Sold (Land)	821	932	1912
32	Gas Tax Refund	38	12	49
33	Income From Work Off the Farm	962	1299	995
34	Custom Work Enterprise Income	410		2051
35	Patronage Refunds	398	925	402
36	Misc. Farm Income	6316	10624	6748
37	Total Farm Sales	$ 149322	259041	141095
38	Increase in Farm Capital		25026	
39	Family Living From the Farm	369	350	205
40	Total Farm Receipts(37)+(38)+(39)	$ 149691	284417	141300
41	Adjusted Total Farm Sales (37) - (31)	147693	256578	138144
42	Total Cash Farm Operating Expense(6B/35)	114312	191217	112220
43	Net Cash Operating Income	$ 33381	65362	25924

Table 6B - Operators Share of Cash Expenses, 1986

	Items	Average of 300 Farms	High 60 Farms	Low 60 Farms
1	Purchase of Livestock			
2	Dairy Cows	$ 262	215	
3	Other Dairy Cattle	190	200	144
4	Beef Breeding Cattle	250	340	136
5	Beef Feeder Cattle	1211	445	353
6	Hogs Complete	11		23
7	Hogs Finishing	318	997	
8	Hogs Producing Weaning Pigs	220	726	119
9	Sheep, Farm Flock	31	3	7
10	Sheep, Feeder Lambs			
11	Chickens			
12	Turkeys			
13	Other Productive Livestock			
14	Miscellaneous Livestock Expense	2965	3622	1164
14A	Purc. of Crops/Supplies Purch. for Resale	10146	23175	9691
15	Feed Bought	6948	9919	3125
16	Fertilizer	11003	17595	12997
17	Chemicals	6075	12282	6918
18	Other Crop Expense	9331	15192	11601
19	Irrigation Operation Cost	12	26	27
20	Custom Work Oper. Cost, Incl. Labor	278		1392
21	Custom Work Hired	3586	5768	2412
22	Repair & Upkeep of Lvstk. Equipment	638	1156	428
23	Repair & Upkeep of Farm Real Estate	1037	1672	1071
24	Gas, Diesel & Lubricants (Farm Share)	6427	9003	6874
25	Repair & Op.-Mach.,Trac.,Trk.,Auto(F.S.)	9448	14384	10220
26	Repair & Upkeep of Irrigation Equip.			1
27	Repairs, Custom Work Enterprise	52		258
28	Wages of Hired Labor	5629	9682	7277
29	Personal Prop. & Real Estate Taxes	2701	4987	3153
30	Cash Rent	13093	23135	11689
31	General Farm Expenses	3881	6035	5075
32	Telephone Expense (F.S.)	411	470	488
33	Electricity Expense (F.S.)	1667	2435	1505
34	Interest Actually Paid	16492	27751	14073
35	Total Cash Operating Expense	$ 114312	191217	112220
36	Power, Crop & Gen. Mach. Bought (F.S.)	10586	20973	8670
37	Irrigation Equipment Bought			
38	Custom Work Enterprise Equip. Bought			
39	Livestock Equipment Bought	399	458	144
40	New Real Estate-Bldg./Improvements	2327	3380	2496
40A	New Real Estate - Land	2852	6689	850
41	Total Farm Purch. (35) thru (40A)	$ 130476	222716	124380
42	Decrease in Farm Capital	2877		31499
43	Interest on Farm Capital(7 pct. Charge)	5476	4925	12849
44	Unpaid Family Labor	10		
45	Board Furnished Hired Labor	37		150
46	Total Farm Expense (41) thru (45)	$ 138876	227641	168878
47	Return to Op. Labor & Mgmt. (O.S.) (6A/40)-(46)	$ 10815	56776	(-27578)
48	Return to Cap. & Fam.Labor(47)+(44)+(43)	$ 16301	61701	(-14729)

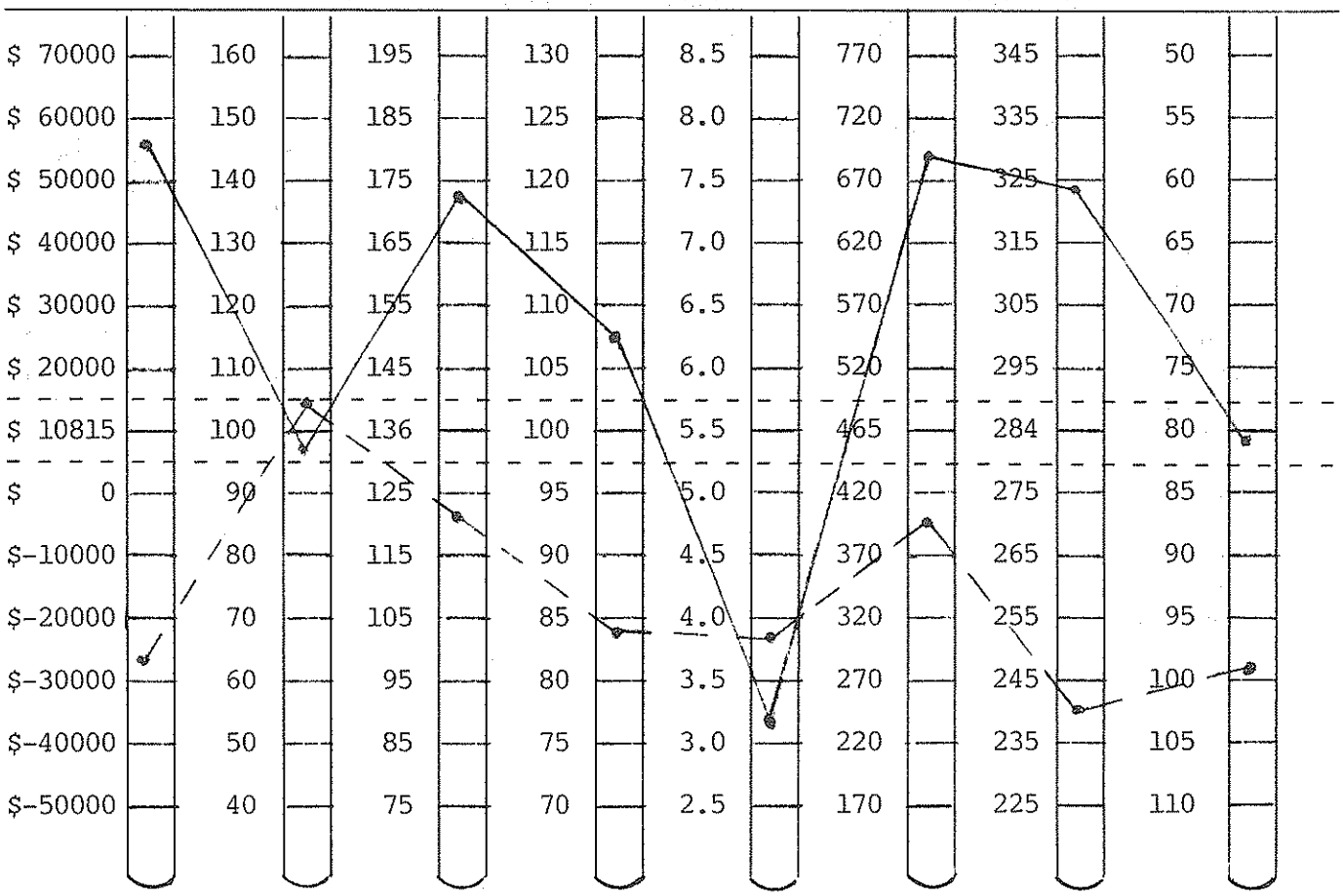
Table 8 - Measures of Farm Organization, 1986

	Items		Average of 300 Farms	High 60 Farms	Low 60 Farms
1	Return to Operators Labor & Mgmt.	$	10815	56776	(-27578)
2	Crop Yield Index		100.0	99.2	102.7
3	Percent Tillable Land in High Return Crops				
4	Gross Return/Tillable Acre (Exc. Past.)	$	136.48	170.79	121.65
5	Return per $100 Feed Fed Prod.Lvstk.Index		100.0	106.6	84.6
*6	Livestock Units per 100 Acres		5.53	3.23	3.69
7	Size of Business - Work Units		465.43	677.08	391.49
8	Work Units per Worker		283.80	323.96	240.18
9	Power,Mach.,Equip.,Bldg.Exp./Worker Unit		80.03	79.52	99.76
10	Farm Capital Investment per Worker	$	268374	311838	317072
11	Index of Return per $100 Feed Fed				
12	6100A Beef Breeding Farm, Whole Herd, Comm.		100.0	92.0	89.9
13	6120A Beef Breeding Farm,Whole Herd,Purebred		100.0	154.0	59.2
14	6140A Beef Feeders Feedlot		100.0	101.7	71.4
15	6290A Dairy Cows, Comm., General		100.0	108.5	92.0
16	6310A Other Dairy,Comm., Replacements		100.0	102.2	79.0
17	6470A Hogs, Farrow, Finish, General		100.0	108.6	71.2
18	6490A Hogs, Finishing		99.9	102.3	111.3
19	6510A Hogs, Weaning Pig Production		100.0		104.7
20	6670A Sheep, Farm, Commercial		100.0		78.0
30	Number of Animal Units		43.62	37.51	30.60
31	Work Units				
32	Crops		314.24	520.53	315.55
33	Productive Livestock		143.80	129.87	70.89
34	Other Productive Work Units		7.38	16.68	5.06
35	Expense Per Work Unit				
36	Tractor & Crop Machinery Expense	$	53.66	57.06	70.66
37	Farm Share of Auto & Truck Expense	$	11.71	9.36	13.94
38	Farm Share of Electric Expense	$	3.62	3.15	3.52
39	Livestock Equipment Expense	$	2.96	2.37	1.35
40	Building, Fence & Tiling Expense	$	8.08	7.58	10.29
40A	Other Exp./Work Units (Inc. Custom Ent.)				
40B	Gen. Farm Tele/Other Util.(Exc.Elect.)	$	9.32	10.21	12.54
40C	Hired Labor	$	12.17	13.24	18.96
**41	Tractor & Crop Mach. Exp./Crop Acre	$	32.04	33.42	33.63
42	Farm Power & Mach. Cost Alloc. to Lvsk.	$	2279.68	2864.23	1045.13
43	Bldg.,Fence & Tiling Cost Alloc.to Crops	$	3363.10	4622.60	3838.88
	BCAF 1				

44 *Acres include all tillable land, non-tillable hay & pasture.
45 **Acres include all tillable land plus acres in non-tillable hay.

THERMOMETER CHART
from
Table 8
Measures of Farm Organization

Return to Labor & Mgmt. (Op.Share) (line 1)	Crop Yields (line 2)	Gross Ret. Per Till. A. (line 4)	Ret. From Prod. Lvstk. (line 5)	Prod. Lvstk. Units/ 100 A. (line 6)	Work Units (line 7)	Work Units Per Worker (line 8)	Pw. Mach. Eq. & Bldg. Exp. Per Work Unit (line 9)
$ 70000	160	195	130	8.5	770	345	50
$ 60000	150	185	125	8.0	720	335	55
$ 50000	140	175	120	7.5	670	325	60
$ 40000	130	165	115	7.0	620	315	65
$ 30000	120	155	110	6.5	570	305	70
$ 20000	110	145	105	6.0	520	295	75
$ 10815	100	136	100	5.5	465	284	80
$ 0	90	125	95	5.0	420	275	85
$-10000	80	115	90	4.5	370	265	90
$-20000	70	105	85	4.0	320	255	95
$-30000	60	95	80	3.5	270	245	100
$-40000	50	85	75	3.0	220	235	105
$-50000	40	75	70	2.5	170	225	110



A farm's standing with respect to the various measures of farm organization and management efficiency can be charted with the thermometer above. The averages for the 300 farmers included in this summary are located between the dotted lines across the center of this page. Most profitable farms are indicated by a solid line while the least profitable are indicated by a broken line. Data for individual farms is found on your adjoining Table 8.

CROP ANALYSES

The crop analyses on the following pages show the yield, value per unit, crop product return, other crop income and total crop return for crops commonly grown in Northwestern Minnesota. Other crop income may include such items as government deficiency payments, sale of straw, and hail or crop insurance proceeds.

Direct costs such as fertilizer, chemicals, seed, hired labor, custom work and crop insurance premiums are costs that can be assigned to each individual crop in the account book.

"Allocated Costs" are a combination of cash and non-cash expenses and may be either calculated or assigned. A proportion of the total ownership and operation costs of power and machinery is calculated for each crop by using the work unit value for that crop. The farmer may modify this cost by assigning a specific power cost allocation factor (PCAF) for each crop. Land cost for rented land is the actual cash or share rent paid. Land cost for owned land is interest on investment plus real estate taxes paid.

Table 9 - Crop Acres and Yields, 1986

Crop	No. Farms Growing Crop	Average Acres	Average Yield/Acre
Barley	274	111	53.4 bu.
Buckwheat	9	28	3.7 cwt.
Flax	24	55	14.1 bu.
Oats	84	39	50.3 bu.
Rye	4	61	34.0 bu.
Spring Wheat	493	138	34.1 bu.
Winter Wheat	18	39	30.3 bu.
Pinto Beans	4	120	11.7 cwt.
Corn	223	46	83.5 bu.
Potatoes	6	93	124.0 cwt.
Soybeans	180	71	34.4 bu.
Sunflowers	47	95	13.9 cwt.
Sugar Beets (1)	66	141	43.6 cwt.
Alfalfa Hay	142	67	3.6 tons
Other Legume Hay	105	94	2.3 tons
Red Clover Seed	6	54	308 lbs.
Bluegrass Seed	4	138	319 lbs.
Timothy Seed	13	75	300 lbs.
Corn Silage	105	30	10.9 tons
Summer Fallow	292	122	

Supplementary Management Information

Items	Average of 300 Farms	High 60 Farms	Low 60 Farms
Percent Land Tillable	89.4	92.6	89.7
Fertilizer Cost Per Acre (2)	17.49	19.72	17.80
Crop Chemicals Per Acre (2)	9.27	12.19	8.37
Seed & Other Costs Per Acre (2)	13.07	15.43	12.45
Gas, Diesel & Lubricants Per Acre (2)	11.29	10.74	10.92
Repair & Maint. Cost/Acre (2)	16.06	16.70	16.03

(1) Sugar beet yield and price is listed in hundred weight of extractable sugar per acre.
(2) Tillable Land (-) Tillable Pasture, Fallow & Idle Land

Table 10 - Crop Data for Barley, 1986

	Items	Average of 274 Farms Per Acre	55 High Farms Per Acre	55 Low Farms Per Acre
1	Acres	110.7	108.6	69.7
2	Yield	53.4	72.1	32.8
3	Value per Bushel	1.47	1.68	1.30
4	Crop Product Return	$ 78.55	121.14	42.64
5	Other Crop Income	50.53	66.20	28.54
6	Total Crop Return	$ 129.08	187.34	71.18
7	DIRECT COSTS			
8	Fertilizer	$ 18.26	19.63	17.62
9	Chemicals	6.43	7.23	4.72
10	Seed	6.38	6.42	6.00
10A	Crop Drying	.33	.27	.27
10B	Other Expense	2.82	3.53	2.57
11	Special Hired Labor	.50	.03	2.70
12	Custom Work Hired	2.35	2.77	2.48
13	Irrigation Operation			
14	Total Direct Costs	$ 37.07	39.88	36.36
15	Return Over Direct Costs	$ 92.01	147.46	34.82
16	ALLOCATED COSTS (DIRECT & FIXED)			
17	Farm Power & Mach. - Ownership	$ 11.37	11.11	10.91
18	Farm Power & Mach. - Operation	15.32	15.10	14.74
19	Irrig. Equip. Ownership			
20	Land Costs	37.99	52.62	31.96
21	Miscellaneous Costs	.19	.19	.23
*22	Interest on Mach. & Equip. Invst.	3.49	3.70	2.69
23	Total Allocated Costs	$ 68.36	82.72	60.53
24	Return Over All Listed Costs	$ 23.65	64.74	(-25.71)
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 Prod.	1.97	1.70	2.95
29	Return Over Listed Costs per Unit	.44	.90	(-.78)
30	Breakeven Yield/Units of Prod.	71.7	73.0	74.5
30A	Estimated Total Mach. Cost/Acre	31.75	31.76	29.99
31	Total Listed Costs per Acre	$ 105.43	122.60	96.89

*Does not include interest on investment in irrigation equipment.
Lines 13, 17, 18 & 22 were allocated to this crop by special formula.

Table 10 - Crop Data for Buckwheat, 1986

	Items	Average of 9 Farms
1	Acres	27.9
2	Yield	3.7
3	Value per CWT	6.28
4	Crop Product Return	$ 23.19
5	Other Crop Income	
6	Total Crop Return	$ 23.19
7	DIRECT COSTS	
8	Fertilizer	
9	Chemicals	
10	Seed	$ 7.78
10A	Crop Drying	
10B	Other Expense	
11	Special Hired Labor	
12	Custom Work Hired	
13	Irrigation Operation	
14	Total Direct Costs	$ 7.78
15	Return Over Direct Costs	$ 15.41
16	ALLOCATED COSTS (DIRECT & FIXED)	
17	Farm Power & Mach. - Ownership	$ 10.59
18	Farm Power & Mach. - Operation	14.74
19	Irrig. Equip. Ownership	
20	Land Costs	31.33
21	Miscellaneous Costs	
*22	Interest on Mach. & Equip. Invst.	1.97
23	Total Allocated Costs	$ 58.63
24	Return Over All Listed Costs	$ (-43.22)
25	SUPPLEMENTARY MANAGEMENT INFORMATION	
26	Work Units Assigned per Acre	.30
27	Power Costs Allocation Factor	1.00
28	Total Listed Cost per Unit of Prod.	17.98
29	Return Over Listed Costs per Unit	(-11.70)
30	Breakeven Yield/Units of Prod.	10.6
30A	Estimated Total Mach. Cost/Acre	27.30
31	Total Listed Costs per Acre	$ 66.41

*Does not include interest on investment in irrigation equipment.
Lines 13, 17, 18 & 22 were allocated to this crop by special formula.

Table 10 - Crop Data for Flax, 1986

	Items	Average of 24 Farms Per Acre	12 High Farms Per Acre	12 Low Farms Per Acre
1	Acres	55.3	39.6	70.9
2	Yield	14.1	17.0	12.4
3	Value per Bushel	3.73	4.07	3.38
4	Crop Product Return	$ 52.41	69.37	41.95
5	Other Crop Income	.83	1.67	.35
6	Total Crop Return	$ 53.24	71.04	42.30
7	DIRECT COSTS			
8	Fertilizer	$ 10.40	8.33	11.57
9	Chemicals	7.11	7.78	6.76
10	Seed	7.12	7.98	6.64
10A	Crop Drying	.34		.54
10B	Other Expense	.90	1.09	.80
11	Special Hired Labor	.07	.15	.01
12	Custom Work Hired	.16	.23	.13
13	Irrigation Operation			
14	Total Direct Costs	$ 26.10	25.56	26.45
15	Return Over Direct Costs	$ 27.14	45.48	15.85
16	ALLOCATED COSTS (DIRECT & FIXED)			
17	Farm Power & Mach. - Ownership	$ 12.63	12.62	12.65
18	Farm Power & Mach. - Operation	12.59	11.89	13.00
19	Irrig. Equip. Ownership			
20	Land Costs	25.04	27.67	22.42
21	Miscellaneous Costs	.02		.01
*22	Interest on Mach. & Equip. Invst.	2.84	2.56	3.01
23	Total Allocated Costs	$ 53.12	54.74	51.09
24	Return Over All Listed Costs	$(-25.98)	(-9.26)	(-35.24)
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 Prod.	5.64	4.71	6.25
29	Return Over Listed Costs per Unit	(-1.85)	(-.54)	(-2.84)
30	Breakeven Yield/Units of Prod.	21.2	19.7	22.9
30A	Estimated Total Mach. Cost/Acre	28.17	27.22	28.75
31	Total Listed Costs per Acre	$ 79.22	80.30	77.54

*Does not include interest on investment in irrigation equipment.
Lines 13, 17, 18 & 22 were allocated to this crop by special formula.

Table 10 - Crop Data for Oats, 1986

	Items	Average of 84 Farms Per Acre	17 High Farms Per Acre	17 Low Farms Per Acre
1	Acres	39.4	43.8	33.5
2	Yield	50.3	69.4	25.3
3	Value per Bushel	1.23	1.32	1.04
4	Crop Product Return	$ 61.85	91.58	26.27
5	Other Crop Income	17.69	36.62	3.16
6	Total Crop Return	$ 79.54	128.20	29.43
7	DIRECT COSTS			
8	Fertilizer	$ 11.14	12.37	7.28
9	Chemicals	2.13	4.38	.18
10	Seed	6.62	5.91	9.67
10A	Crop Drying			
10B	Other Expense	1.29	2.40	.78
11	Special Hired Labor	.23	.91	.03
12	Custom Work Hired	3.38	2.63	6.72
13	Irrigation Operation			
14	Total Direct Costs	$ 24.79	28.60	24.66
15	Return Over Direct Costs	$ 54.75	99.60	4.77
16	ALLOCATED COSTS (DIRECT & FIXED)			
17	Farm Power & Mach. - Ownership	$ 12.16	14.57	10.21
18	Farm Power & Mach. - Operation	16.57	17.21	18.43
19	Irrig. Equip. Ownership			
20	Land Costs	28.38	32.59	24.47
21	Miscellaneous Costs			
*22	Interest on Mach. & Equip. Invst.	3.47	3.90	4.51
23	Total Allocated Costs	$ 60.58	68.27	57.62
24	Return Over All Listed Costs	$ (-5.83)	31.33	(-52.85)
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 Prod.	1.70	1.40	3.26
29	Return Over Listed Costs per Unit	(-.12)	.45	(-2.09)
30	Breakeven Yield/Units of Prod.	69.4	73.4	79.1
30A	Estimated Total Mach. Cost/Acre	34.45	37.43	37.63
31	Total Listed Costs per Acre	$ 85.37	96.87	82.28

*Does not include interest on investment in irrigation equipment.
Lines 13, 17, 18 & 22 were allocated to this crop by special formula.

Table 10 - Crop Data for Spring Wheat, 1986

	Items	Average of 493 Farms Per Acre	99 High Farms Per Acre	99 Low Farms Per Acre
1	Acres	138.0	159.4	95.7
2	Yield	34.1	43.1	23.8
3	Value per Bushel	2.40	2.49	2.29
4	Crop Product Return	$ 81.78	107.37	54.46
5	Other Crop Income	78.51	94.37	57.32
6	Total Crop Return	$ 160.29	201.74	111.78
7	DIRECT COSTS			
8	Fertilizer	$ 21.44	21.12	22.43
9	Chemicals	8.08	8.26	9.17
10	Seed	8.28	7.91	9.27
10A	Crop Drying	.59	.25	.77
10B	Other Expense	3.54	3.16	2.98
11	Special Hired Labor	.38	.10	1.09
12	Custom Work Hired	2.60	2.14	2.00
13	Irrigation Operation			
14	Total Direct Costs	$ 44.91	42.94	47.71
15	Return Over Direct Costs	$ 115.38	158.80	64.07
16	ALLOCATED COSTS (DIRECT & FIXED)			
17	Farm Power & Mach. - Ownership	$ 11.88	14.17	10.17
18	Farm Power & Mach. - Operation	15.57	15.43	15.22
19	Irrig. Equip. Ownership	.03	.13	
20	Land Costs	38.44	49.19	30.00
21	Miscellaneous Costs	.17	.03	.76
*22	Interest on Mach. & Equip. Invst.	3.41	4.13	2.91
23	Total Allocated Costs	$ 69.50	83.08	59.06
24	Return Over All Listed Costs	$ 45.88	75.72	5.01
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 Prod.	3.36	2.92	4.49
29	Return Over Listed Costs per Unit	1.35	1.76	.21
30	Breakeven Yield/Units of Prod.	47.7	50.6	46.6
30A	Estimated Total Mach. Cost/Acre	32.59	35.16	29.63
31	Total Listed Costs per Acre	$ 114.41	126.02	106.77

*Does not include interest on investment in irrigation equipment.
Lines 13, 17, 18 & 22 were allocated to this crop by special formula.

Table 10 - Crop Data for Winter Wheat, 1986

	Items		Average of 18 Farms Per Acre	9 High Farms Per Acre	9 Low Farms Per Acre
1	Acres		39.4	50.3	28.4
2	Yield		30.3	34.4	23.3
3	Value per Bushel		2.14	2.34	1.95
4	Crop Product Return	$	64.85	80.40	45.39
5	Other Crop Income		84.87	119.40	24.05
6	Total Crop Return	$	149.72	199.80	69.44
7	DIRECT COSTS				
8	Fertilizer	$	10.43	11.01	9.44
9	Chemicals		1.88	1.59	2.36
10	Seed		6.19	6.04	6.48
10A	Crop Drying		.25	.10	.53
10B	Other Expense		1.60	2.41	.18
11	Special Hired Labor				
12	Custom Work Hired		2.87	3.24	2.22
13	Irrigation Operation				
14	Total Direct Costs	$	23.22	24.39	21.21
15	Return Over Direct Costs	$	126.50	175.41	48.23
16	ALLOCATED COSTS (DIRECT & FIXED)				
17	Farm Power & Mach. - Ownership	$	15.90	11.98	22.90
18	Farm Power & Mach. - Operation		17.78	15.33	22.17
19	Irrig. Equip. Ownership				
20	Land Costs		28.67	33.44	23.89
21	Miscellaneous Costs		.51		1.37
*22	Interest on Mach. & Equip. Invst.		4.06	3.28	5.45
23	Total Allocated Costs	$	66.92	64.03	75.78
24	Return Over All Listed Costs	$	59.58	111.38	(-27.55)
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 Prod.		2.97	2.57	4.17
29	Return Over Listed Costs per Unit		1.97	3.24	(-1.18)
30	Breakeven Yield/Units of Prod.		42.1	37.8	49.7
30A	Estimated Total Mach. Cost/Acre		39.65	32.75	52.00
31	Total Listed Costs per Acre	$	90.14	88.42	96.99

*Does not include interest on investment in irrigation equipment.
Lines 13, 17, 18 & 22 were allocated to this crop by special formula.

Table 10 - Crop Data for Beans, Pinto, 1986

	Items	Average of 4 Farms
1	Acres	120.0
2	Yield	11.7
3	Value per CWT	14.94
4	Crop Product Return	$ 174.55
5	Other Crop Income	39.58
6	Total Crop Return	$ 214.13
7	DIRECT COSTS	
8	Fertilizer	$ 14.13
9	Chemicals	14.98
10	Seed	22.93
10A	Crop Drying	1.13
10B	Other Expense	13.91
11	Special Hired Labor	.30
12	Custom Work Hired	5.27
13	Irrigation Operation	
14	Total Direct Costs	$ 72.65
15	Return Over Direct Costs	$ 141.48
16	ALLOCATED COSTS (DIRECT & FIXED)	
17	Farm Power & Mach. - Ownership	$ 12.76
18	Farm Power & Mach. - Operation	26.80
19	Irrig. Equip. Ownership	
20	Land Costs	65.75
21	Miscellaneous Costs	
*22	Interest on Mach. & Equip. Invst.	5.08
23	Total Allocated Costs	$ 110.39
24	Return Over All Listed Costs	$ 31.09
25	SUPPLEMENTARY MANAGEMENT INFORMATION	
26	Work Units Assigned per Acre	.50
27	Power Costs Allocation Factor	1.00
28	Total Listed Cost per Unit of Prod.	15.67
29	Return Over Listed Costs per Unit	2.66
30	Breakeven Yield/Units of Prod.	12.3
30A	Estimated Total Mach. Cost/Acre	48.16
31	Total Listed Costs per Acre	$ 183.04

*Does not include interest on investment in irrigation equipment.
Lines 13, 17, 18 & 22 were allocated to this crop by special formula.

Table 10 - Crop Data for Corn for Grain, 1986

	Items	Average of 223 Farms Per Acre	45 High Farms Per Acre	45 Low Farms Per Acre
1	Acres	46.3	55.2	28.9
2	Yield	83.5	103.3	55.2
3	Value per Bushel	1.55	1.67	1.24
4	Crop Product Return	$ 129.48	172.45	68.41
5	Other Crop Income	64.95	89.96	23.46
6	Total Crop Return	$ 194.43	262.41	91.87
7	DIRECT COSTS			
8	Fertilizer	$ 23.39	26.18	18.58
9	Chemicals	8.77	7.48	9.69
10	Seed	16.37	17.36	15.88
10A	Crop Drying	8.51	9.73	8.13
10B	Other Expense	1.68	2.21	2.01
11	Special Hired Labor	.26		.03
12	Custom Work Hired	3.09	1.94	5.09
13	Irrigation Operation	.13	.51	
14	Total Direct Costs	$ 62.20	65.41	59.41
15	Return Over Direct Costs	$ 132.23	197.00	32.46
16	ALLOCATED COSTS (DIRECT & FIXED)			
17	Farm Power & Mach. - Ownership	$ 20.48	18.48	21.11
18	Farm Power & Mach. - Operation	26.14	26.19	25.27
19	Irrig. Equip. Ownership			
20	Land Costs	38.71	44.93	33.40
21	Miscellaneous Costs	.15	.02	.38
*22	Interest on Mach. & Equip. Invst.	6.92	8.26	6.23
23	Total Allocated Costs	$ 92.40	97.88	86.39
24	Return Over All Listed Costs	$ 39.83	99.12	(-53.93)
25	SUPPLEMENTARY MANAGEMENT INFORMATION			
26	Work Units Assigned per Acre	.55	.55	.55
27	Power Costs Allocation Factor	.99	1.00	1.00
28	Total Listed Cost per Unit of Prod.	1.85	1.58	2.64
29	Return Over Listed Costs per Unit	.48	.96	(-.98)
30	Breakeven Yield/Units of Prod.	99.7	97.8	117.6
30A	Estimated Total Mach. Cost/Acre	55.60	54.22	56.01
31	Total Listed Costs per Acre	$ 154.60	163.29	145.80

*Does not include interest on investment in irrigation equipment.
Lines 13, 17, 18 & 22 were allocated to this crop by special formula.

Table 10 - Crop Data for Potatoes, 1986

	Items	Average of 6 Farms
1	Acres	93.0
2	Yield	124.0
3	Value per CWT	3.65
4	Crop Product Return	$ 452.45
5	Other Crop Income	
6	Total Crop Return	$ 452.45
7	DIRECT COSTS	
8	Fertilizer	$ 26.67
9	Chemicals	24.32
10	Seed	31.84
10A	Crop Drying	
10B	Other Expense	22.93
11	Special Hired Labor	15.35
12	Custom Work Hired	16.72
13	Irrigation Operation	
14	Total Direct Costs	$ 137.83
15	Return Over Direct Costs	$ 314.62
16	ALLOCATED COSTS (DIRECT & FIXED)	
17	Farm Power & Mach. - Ownership	$ 68.08
18	Farm Power & Mach. - Operation	93.53
19	Irrig. Equip. Ownership	
20	Land Costs	45.18
21	Miscellaneous Costs	1.13
*22	Interest on Mach. & Equip. Invst.	23.19
23	Total Allocated Costs	$ 231.11
24	Return Over All Listed Costs	$ 83.51
25	SUPPLEMENTARY MANAGEMENT INFORMATION	
26	Work Units Assigned per Acre	3.00
27	Power Costs Allocation Factor	.89
28	Total Listed Cost per Unit of Prod.	2.98
29	Return Over Listed Costs per Unit	.67
30	Breakeven Yield/Units of Prod.	101.1
30A	Estimated Total Mach. Cost/Acre	184.80
31	Total Listed Costs per Acre	$ 368.94

*Does not include interest on investment in irrigation equipment.
Lines 13, 17, 18 & 22 were allocated to this crop by special formula.

Table 10 - Crop Data for Soybeans, 1986

	Items	Average of 180 Farms Per Acre	36 High Farms Per Acre	36 Low Farms Per Acre
1	Acres	71.1	77.1	65.5
2	Yield	34.4	41.0	23.4
3	Value per Bushels	4.40	4.57	4.28
4	Crop Product Return	$ 151.36	187.42	99.97
5	Other Crop Income	3.98	16.59	1.04
6	Total Crop Return	$ 155.34	204.01	101.01
7	DIRECT COSTS			
8	Fertilizer	$ 6.23	1.41	12.85
9	Chemicals	16.91	14.19	16.37
10	Seed	10.41	9.39	12.00
10A	Crop Drying	.38	.51	.47
10B	Other Expense	3.87	2.11	4.32
11	Special Hired Labor	.35	.03	1.01
12	Custom Work Hired	2.49	1.40	3.15
13	Irrigation Operation			
14	Total Direct Costs	$ 40.64	29.04	50.17
15	Return Over Direct Costs	$ 114.70	174.97	50.84
16	ALLOCATED COSTS (DIRECT & FIXED)			
17	Farm Power & Mach. - Ownership	$ 14.90	15.82	18.41
18	Farm Power & Mach. - Operation	18.52	16.41	22.26
19	Irrig. Equip. Ownership			
20	Land Costs	48.22	56.42	39.44
21	Miscellaneous Costs	.21	.01	.37
*22	Interest on Mach. & Equip. Invst.	4.99	5.91	5.02
23	Total Allocated Costs	$ 86.84	94.57	85.50
24	Return Over All Listed Costs	$ 27.86	80.40	(-34.66)
25	SUPPLEMENTARY MANAGEMENT INFORMATION			
26	Work Units Assigned per Acre	.45	.45	.45
27	Power Costs Allocation Factor	.97	.92	1.01
28	Total Listed Cost per Unit of Prod.	3.71	3.01	5.81
29	Return Over Listed Costs per Unit	.81	1.96	(-1.48)
30	Breakeven Yield/Units of Prod.	29.0	27.1	31.7
30A	Estimated Total Mach. Cost/Acre	40.07	39.07	47.79
31	Total Listed Costs per Acre	$ 127.48	123.61	135.67

*Does not include interest on investment in irrigation equipment.
Lines 13, 17, 18 & 22 were allocated to this crop by special formula.

Table 10 - Crop Data for Sugar Beets, 1986

	Items	Average of 66 Farms Per Acre	13 High Farms Per Acre	13 Low Farms Per Acre
1	Acres	140.8	107.4	108.1
2	Yield	43.6	52.7	31.4
3	Value per CWT	13.55	14.86	12.68
4	Crop Product Return	$ 590.60	782.71	398.58
5	Other Crop Income	11.70	9.41	11.26
6	Total Crop Return	$ 602.30	792.12	409.84
7	DIRECT COSTS			
8	Fertilizer	$ 20.58	21.63	21.60
9	Chemicals	46.24	37.60	38.46
10	Seed	24.77	22.23	22.49
10A	Crop Drying	.01		.04
10B	Other Expense	8.99	6.73	9.89
11	Special Hired Labor	32.34	31.90	36.60
12	Custom Work Hired	28.10	16.70	20.38
13	Irrigation Operation			
14	Total Direct Costs	$ 161.03	136.79	149.46
15	Return Over Direct Costs	$ 441.27	655.33	260.38
16	ALLOCATED COSTS (DIRECT & FIXED)			
17	Farm Power & Mach. - Ownership	$ 42.67	64.84	27.93
18	Farm Power & Mach. - Operation	73.77	77.43	66.72
19	Irrig. Equip. Ownership			
20	Land Costs	90.56	102.92	80.62
21	Miscellaneous Costs			
*22	Interest on Mach. & Equip. Invst.	15.73	19.68	12.03
23	Total Allocated Costs	$ 222.73	264.87	187.30
24	Return Over All Listed Costs	$ 218.54	390.46	73.08
25	SUPPLEMENTARY MANAGEMENT INFORMATION			
26	Work Units Assigned per Acre	2.00	2.00	2.00
27	Power Costs Allocation Factor	.84	.84	.88
28	Total Listed Cost per Unit of Prod.	8.80	7.63	10.71
29	Return Over Listed Costs per Unit	5.01	7.41	2.33
30	Breakeven Yield/Units of Prod.	28.3	27.0	26.6
30A	Estimated Total Mach. Cost/Acre	150.91	173.09	120.27
31	Total Listed Costs per Acre	$ 383.76	401.66	336.76

*Does not include interest on investment in irrigation equipment.
Lines 13, 17, 18 & 22 were allocated to this crop by special formula.

Table 10 - Crop Data for Sunflowers, 1986

	Items	Average of 47 Farms Per Acre	14 High Farms Per Acre	14 Low Farms Per Acre
1	Acres	94.5	101.3	90.3
2	Yield	13.9	19.1	9.6
3	Value per CWT	7.01	12.63	5.82
4	Crop Product Return	$ 97.44	241.19	56.14
5	Other Crop Income	3.05		8.15
6	Total Crop Return	$ 100.49	241.19	64.29
7	DIRECT COSTS			
8	Fertilizer	$ 18.79	16.74	19.40
9	Chemicals	9.94	10.28	9.19
10	Seed	12.68	14.14	11.48
10A	Crop Drying	2.17	1.89	2.66
10B	Other Expense	3.19	2.67	3.73
11	Special Hired Labor	.47	.32	.09
12	Custom Work Hired	2.79	2.24	5.23
13	Irrigation Operation			
14	Total Direct Costs	$ 50.03	48.28	51.78
15	Return Over Direct Costs	$ 50.46	192.91	12.51
16	ALLOCATED COSTS (DIRECT & FIXED)			
17	Farm Power & Mach. - Ownership	$ 17.24	19.34	15.09
18	Farm Power & Mach. - Operation	19.07	21.04	18.25
19	Irrig. Equip. Ownership			
20	Land Costs	35.97	51.03	21.75
21	Miscellaneous Costs	.32		.90
*22	Interest on Mach. & Equip. Invst.	5.29	6.07	4.93
23	Total Allocated Costs	$ 77.89	97.48	60.92
24	Return Over All Listed Costs	$ (-27.43)	95.43	(-48.41)
25	SUPPLEMENTARY MANAGEMENT INFORMATION			
26	Work Units Assigned per Acre	.40	.40	.40
27	Power Costs Allocation Factor	1.00	1.00	.98
28	Total Listed Cost per Unit of Prod.	9.20	7.63	11.68
29	Return Over Listed Costs per Unit	(-1.97)	5.00	(-5.02)
30	Breakeven Yield/Units of Prod.	18.2	11.5	19.4
30A	Estimated Total Mach. Cost/Acre	41.60	46.45	41.76
31	Total Listed Costs per Acre	$ 127.92	145.76	112.70

*Does not include interest on investment in irrigation equipment.
Lines 13, 17, 18 & 22 were allocated to this crop by special formula.

Table 10 - Crop Data for Legume Hay, 1986

	Items		Average of 105 Farms Per Acre	21 High Farms Per Acre	21 Low Farms Per Acre
1	Acres		93.6	50.6	141.8
2	Yield		2.3	5.1	1.1
3	Value per Ton		32.60	40.88	22.84
4	Crop Product Return	$	73.49	206.82	24.16
5	Other Crop Income		1.27	4.33	.04
6	Total Crop Return	$	74.76	211.15	24.20
7	DIRECT COSTS				
8	Fertilizer	$	4.23	4.15	1.11
9	Chemicals		.07	.20	
10	Seed		1.53	2.57	.53
10A	Crop Drying		.06	.02	
10B	Other Expense		.64	1.09	.21
11	Special Hired Labor		.12	.75	
12	Custom Work Hired		.91	4.13	.42
13	Irrigation Operation				
14	Total Direct Costs	$	7.56	12.91	2.27
15	Return Over Direct Costs	$	67.20	198.24	21.93
16	ALLOCATED COSTS (DIRECT & FIXED)				
17	Farm Power & Mach. - Ownership	$	13.28	14.49	11.39
18	Farm Power & Mach. - Operation		20.38	21.20	15.38
19	Irrig. Equip. Ownership				
20	Land Costs		25.26	36.52	18.10
21	Miscellaneous Costs		.02	.02	
*22	Interest on Mach. & Equip. Invst.		3.26	3.69	2.43
23	Total Allocated Costs	$	62.20	75.92	47.30
24	Return Over All Listed Costs	$	5.00	122.32	(-25.37)
25	SUPPLEMENTARY MANAGEMENT INFORMATION				
26	Work Units Assigned per Acre		.40	.40	.40
27	Power Costs Allocation Factor		.96	.98	.88
28	Total Listed Cost per Unit of Prod.		30.94	17.56	46.87
29	Return Over Listed Costs per Unit		2.22	24.18	(-24.00)
30	Breakeven Yield/Units of Prod.		2.1	2.2	2.2
30A	Estimated Total Mach. Cost/Acre		37.53	42.13	29.48
31	Total Listed Costs per Acre	$	69.76	88.83	49.57

*Does not include interest on investment in irrigation equipment.
Lines 13, 17, 18 & 22 were allocated to this crop by special formula.

Table 10 - Crop Data for Corn Silage, 1986

	Items	Average of 105 Farms Per Acre	21 High Farms Per Acre	21 Low Farms Per Acre
1	Acres	30.3	30.2	24.8
2	Yield	10.9	17.1	6.0
3	Value per Ton	13.78	14.62	11.76
4	Crop Product Return	$ 150.53	249.80	71.13
5	Other Crop Income	34.69	32.42	11.05
6	Total Crop Return	$ 185.22	282.22	82.18
7	DIRECT COSTS			
8	Fertilizer	$ 15.78	12.62	19.07
9	Chemicals	4.36	6.19	3.23
10	Seed	12.44	11.72	13.23
10A	Crop Drying	.07	.26	
10B	Other Expense	.63	.99	.52
11	Special Hired Labor	.07		
12	Custom Work Hired	1.62	1.03	3.10
13	Irrigation Operation	.40		
14	Total Direct Costs	$ 35.37	32.81	39.15
15	Return Over Direct Costs	$ 149.85	249.41	43.03
16	ALLOCATED COSTS (DIRECT & FIXED)			
17	Farm Power & Mach. - Ownership	$ 25.89	38.23	22.93
18	Farm Power & Mach. - Operation	35.66	38.48	32.34
19	Irrig. Equip. Ownership			
20	Land Costs	31.49	37.48	23.76
21	Miscellaneous Costs	.07	.17	.04
*22	Interest on Mach. & Equip. Invst.	6.57	9.15	6.10
23	Total Allocated Costs	$ 99.68	123.51	85.17
24	Return Over All Listed Costs	$ 50.17	125.90	(-42.14)
25	SUPPLEMENTARY MANAGEMENT INFORMATION			
26	Work Units Assigned per Acre	.60	.60	.60
27	Power Costs Allocation Factor	1.00	1.00	1.00
28	Total Listed Cost per Unit of Prod.	12.36	9.15	20.55
29	Return Over Listed Costs per Unit	4.60	7.37	(-6.97)
30	Breakeven Yield/Units of Prod.	9.8	10.7	10.6
30A	Estimated Total Mach. Cost/Acre	69.20	86.55	63.44
31	Total Listed Costs per Acre	$ 135.05	156.32	124.32

*Does not include interest on investment in irrigation equipment.
Lines 13, 17, 18 & 22 were allocated to this crop by special formula.

Table 10 - Crop Data for Medium Red Clover Seed, 1986

	Items	Average of 6 Farms
1	Acres	53.6
2	Yield	308.1
3	Value per Pound	.63
4	Crop Product Return	$ 194.10
5	Other Crop Income	6.53
6	Total Crop Return	$ 200.63
7	DIRECT COSTS	
8	Fertilizer	
9	Chemicals	$ .63
10	Seed	3.49
10A	Crop Drying	
10B	Other Expense	.41
11	Special Hired Labor	
12	Custom Work Hired	3.79
13	Irrigation Operation	
14	Total Direct Costs	$ 8.32
15	Return Over Direct Costs	$ 192.31
16	ALLOCATED COSTS (DIRECT & FIXED)	
17	Farm Power & Mach. - Ownership	$ 11.97
18	Farm Power & Mach. - Operation	20.13
19	Irrig. Equip. Ownership	
20	Land Costs	21.83
21	Miscellaneous Costs	
*22	Interest on Mach. & Equip. Invst.	4.10
23	Total Allocated Costs	$ 58.03
24	Return Over All Listed Costs	$ 134.28
25	SUPPLEMENTARY MANAGEMENT INFORMATION	
26	Work Units Assigned per Acre	.50
27	Power Costs Allocation Factor	.83
28	Total Listed Cost per Unit of Prod.	.22
29	Return Over Listed Costs per Unit	.44
30	Breakeven Yield/Units of Prod.	105.3
30A	Estimated Total Mach. Cost/Acre	38.73
31	Total Listed Costs per Acre	$ 66.35

*Does not include interest on investment in irrigation equipment.
Lines 13, 17, 18 & 22 were allocated to this crop by special formula.

Table 10 - Crop Data for Bluegrass Seed, 1986

	Items	Average of 4 Farms
1	Acres	137.8
2	Yield	319.2
3	Value per Pound	1.08
4	Crop Product Return	$ 344.75
5	Other Crop Income	.99
6	Total Crop Return	$ 345.74
7	DIRECT COSTS	
8	Fertilizer	$ 28.92
9	Chemicals	7.11
10	Seed	.71
10A	Crop Drying	
10B	Other Expense	.83
11	Special Hired Labor	
12	Custom Work Hired	3.32
13	Irrigation Operation	
14	Total Direct Costs	$ 40.89
15	Return Over Direct Costs	$ 304.85
16	ALLOCATED COSTS (DIRECT & FIXED)	
17	Farm Power & Mach. - Ownership	$ 11.00
18	Farm Power & Mach. - Operation	10.99
19	Irrig. Equip. Ownership	
20	Land Costs	24.25
21	Miscellaneous Costs	
*22	Interest on Mach. & Equip. Invst.	2.45
23	Total Allocated Costs	$ 48.69
24	Return Over All Listed Costs	$ 256.16
25	SUPPLEMENTARY MANAGEMENT INFORMATION	
26	Work Units Assigned per Acre	.40
27	Power Costs Allocation Factor	.60
28	Total Listed Cost per Unit of Prod.	.28
29	Return Over Listed Costs per Unit	.80
30	Breakeven Yield/Units of Prod.	83.0
30A	Estimated Total Mach. Cost/Acre	26.65
31	Total Listed Costs per Acre	$ 89.58

*Does not include interest on investment in irrigation equipment.
Lines 13, 17, 18 & 22 were allocated to this crop by special formula.

Table 10 - Crop Data for Timothy Seed, 1986

	Items	Average of 13 Farms Per Acre	6 High Farms Per Acre	6 Low Farms Per Acre
1	Acres	75.4	90.0	61.7
2	Yield	300.4	336.2	240.1
3	Value per Pound	.35	.38	.31
4	Crop Product Return	$ 105.13	127.77	74.44
5	Other Crop Income	2.12	1.24	2.98
6	Total Crop Return	$ 107.25	129.01	77.42
7	DIRECT COSTS			
8	Fertilizer	$ 20.81	22.70	18.80
9	Chemicals	1.74	1.52	2.37
10	Seed	.13	.24	
10A	Crop Drying			
10B	Other Expense	1.30	.62	2.54
11	Special Hired Labor			
12	Custom Work Hired	1.01	.77	.99
13	Irrigation Operation			
14	Total Direct Costs	$ 24.99	25.85	24.70
15	Return Over Direct Costs	$ 82.26	103.16	52.72
16	ALLOCATED COSTS (DIRECT & FIXED)			
17	Farm Power & Mach. - Ownership	$ 9.91	11.61	7.67
18	Farm Power & Mach. - Operation	9.14	9.63	7.85
19	Irrig. Equip. Ownership			
20	Land Costs	25.31	28.33	22.33
21	Miscellaneous Costs			
*22	Interest on Mach. & Equip. Invst.	1.91	1.93	1.79
23	Total Allocated Costs	$ 46.27	51.50	39.64
24	Return Over All Listed Costs	$ 35.99	51.66	13.08
25	SUPPLEMENTARY MANAGEMENT INFORMATION			
26	Work Units Assigned per Acre	.30	.30	.30
27	Power Costs Allocation Factor	.68	.68	.68
28	Total Listed Cost per Unit of Prod.	.24	.23	.27
29	Return Over Listed Costs per Unit	.12	.15	.05
30	Breakeven Yield/Units of Prod.	203.6	203.6	207.6
30A	Estimated Total Mach. Cost/Acre	21.63	23.68	17.97
31	Total Listed Costs per Acre	$ 71.26	77.35	64.34

*Does not include interest on investment in irrigation equipment.
Lines 13, 17, 18 & 22 were allocated to this crop by special formula.

Table 10 - Crop Data for Summer Fallow, 1986

	Items		Average of 292 Farms Per Acre	58 High Farms Per Acre	58 Low Farms Per Acre
1	Acres		121.6	98.1	136.9
2	Yield				
3	Value per				
4	Crop Product Return				
5	Other Crop Income				
6	Total Crop Return				
7	DIRECT COSTS				
8	Fertilizer	$	.27	.70	.70
9	Chemicals		.53	.07	2.13
10	Seed		.60	.32	1.37
10A	Crop Drying				
10B	Other Expense		.08		.13
11	Special Hired Labor		.16	.18	.56
12	Custom Work Hired		.30		1.04
13	Irrigation Operation				
14	Total Direct Costs	$	1.94	1.27	5.93
15	Return Over Direct Costs				
16	ALLOCATED COSTS (DIRECT & FIXED)				
17	Farm Power & Mach. - Ownership	$	11.59	12.02	11.83
18	Farm Power & Mach. - Operation		15.50	15.82	15.24
19	Irrig. Equip. Ownership				
20	Land Costs		32.68	36.59	34.97
21	Miscellaneous Costs		.01	.05	.01
*22	Interest on Mach. & Equip. Invst.		3.35	3.84	3.20
23	Total Allocated Costs	$	63.13	68.32	65.25
24	Return Over All Listed Costs				
25	SUPPLEMENTARY MANAGEMENT INFORMATION				
26	Work Units Assigned per Acre		.30	.30	.30
27	Power Costs Allocation Factor		.99	.96	.99
28	Total Listed Cost per Unit of Prod.				
29	Return Over Listed Costs per Unit				
30	Breakeven Yield/Units of Prod.				
30A	Estimated Total Mach. Cost/Acre		30.64	31.68	30.96
31	Total Listed Costs per Acre	$	65.07	69.59	71.18

*Does not include interest on investment in irrigation equipment.
Lines 13, 17, 18 & 22 were allocated to this crop by special formula.

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 17A pertain to the major livestock enterprises.

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

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 comparison.

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

The pasture charge allocation is determined by using a land charge. Actual acres for each class of livestock, with their respective land values are used.

The items listed as Supplementary Management Information provide 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 feed 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 - 6470 Hogs, Farrow to Finish, 1986

	Items	Average of 6 Farms
1	Pounds of Hogs Produced	79176
		PER CWT
2	Net Value Produced	$ 58.15
3	Other Miscellaneous Hog Income	
4	Total Value Produced	$ 58.15
5	POUNDS OF FEED FED	
6	Corn	140.6
7	Small Grain	145.2
8	Complete Ration	227.7
9	Protein, Salt & Mineral & Milk	49.5
10	Total Concentrates	563.0
11	Forages	
12	FEED COSTS	
13	Grains	9.01
14	Complete Ration	10.50
15	Protein, Salt & Mineral & Milk	.92
16	Forages	
17	Pasture	
18	Total Feed Costs	$ 20.43
19	Return Over Feed Costs	$ 37.72
20	OTHER DIRECTR COSTS	
21	Miscellaneous Livestock Expense	1.00
22	Veterinary Expense	.66
23	Custom Hauling, Grinding, Mktg., Etc.	.53
24	Special Hired Labor	
25	Total Other Direct Costs	$ 2.19
26	Return Over Feed & Other Direct Costs	$ 35.53
27	ALLOCATED COSTS	
28	Power & Machinery Costs (PCAF 1.00)	1.51
29	Livestock Equipment Costs (ECAF 1)	.60
30	Building & Fences (BCAF 1)	.43
31	Total Allocated Costs	$ 2.54
32	Return Over All Listed Costs	$ 32.99
33	SUPPLEMENTARY MANAGEMENT INFORMATION	
34	Return for $100 Feed Fed	284.63
35	Price Rec. per CWT All Animals	52.99
36	Price Rec. per CWT Sold Mkt. Only	49.80
37	Number of Litters Farrowed	61
37A	Litters/Bearing Female/Year	1.5
38	Number of Pigs Born per Litter	8.9
39	Number of Pigs Weaned per Litter	6.6
39A	Number of Pigs Produced/Litter	6.5
40	Percent Death Loss	17.1
41	Average Weight of All Hogs Sold	202.6
42	Average Weight of Mkt. Hogs Sold	216.9
43	Price per CWT Concentrate Fed	3.63
44	Price per CWT Protein, Salt & Mineral	1.86
45	Pounds of Pork Purchased	863
46	Total Listed Costs per CWT Pork Prod.	$ 25.16

Table 11B - 6490 Hogs, Finishing, 1986

	Items	Average of 6 Farms
1	Average Number of Pigs on Hand	252.8
2	Pounds of Hogs Produced	119336
		PER CWT
3	Net Value Produced	$ 42.54
4	Other Miscellaneous Hog Income	
5	Total Value Produced	$ 42.54
6	POUNDS OF FEED FED	
7	Corn	254.9
8	Small Grain	64.3
9	Complete Ration	10.5
10	Protein, Salt & Mineral & Milk	55.5
11	Total Concentrates	385.2
12	Forages	
13	FEED COST	
14	Grains	10.91
15	Complete Ration	1.15
16	Protein, Salt & Mineral & Milk	7.54
17	Forages	
18	Pasture	
19	Total Feed Costs	$ 19.60
20	Return Over Feed Costs	$ 22.94
21	OTHER DIRECT COSTS	
22	Misc. Livestock Expense	.55
23	Veterinary Expense	.20
24	Custom Hauling, Grinding, Mktg., Etc.	1.10
25	Special Hired Labor	
26	Total Other Direct Costs	$ 1.85
27	Return Over Feed & Other Direct Costs	$ 21.09
28	ALLOCATED COSTS	
29	Power & Mach. Costs (PCAF 1.00)	.94
30	Livestock Equip. Costs (ECAF 1)	.92
31	Building & Fences (BCAF 1)	.21
32	Total Allocated Costs	$ 2.07
33	Return Over All Listed Costs	$ 19.02
34	SUPPLEMENTARY MANAGEMENT INFORMATION	
35	Return for $100 Feed Fed	217.04
36	Price Received per CWT	50.02
37	Average Weight of Pigs Sold	235.6
38	Average Price Paid per Pig Bought	43.12
39	Average Weight per Pig Bought	41.9
40	Number of Pigs Purchased	363
41	Number Pigs Transferred In	235
42	Average Weight of Pigs Trans. In	59.3
43	Pounds of Pork Purchased	15217
44	Percent Death Loss	2.4
45	Price per CWT Concentrate	5.09
46	Price per CWT Protein, Salt & Min.	13.59
47	Effective Daily Gain-Lbs. per Day/Pig	1.29
48	Total Listed Cost per CWT Pork Prod.	23.52

Table 11C - 6510 Hogs, Weaning Pig Production, 1986

	Items	Average of 17 Farms	High 8 Farms	Low 8 Farms
		PER LITTER		
1	Number of Litters Farrowed	103	90	126
2	Net Value Produced	$ 368.46	412.94	338.50
3	Other Miscellaneous Weaning Pig Income			
4	Total Value Produced	$ 368.46	412.94	338.50
5	POUNDS OF FEED FED			
6	Corn	517.7	666.6	423.1
7	Small Grain	1302.8	1109.0	1401.4
8	Complete Ration	353.6	536.7	220.2
9	Protein, Salt & Mineral & Milk	262.7	239.8	283.4
10	Total Concentrates	2436.8	2552.1	2328.1
11	Forages	63.4	75.0	56.5
12	FEED COST			
13	Grains	62.47	51.40	69.84
14	Complete Ration	40.59	37.62	42.37
15	Protein, Salt & Mineral & Milk	56.76	65.82	51.46
16	Forages	1.17	1.53	.94
17	Pasture	.16	.39	
18	Total Feed Costs	$ 161.15	156.76	164.61
19	Return Over Feed Costs	$ 207.31	256.18	173.89
20	OTHER DIRECT COSTS			
21	Miscellaneous Livestock Expense	9.08	12.36	6.81
22	Veterinary Expense	9.12	10.46	8.34
23	Custom Hauling, Grinding, Mktg., Etc.	3.93	4.14	3.84
24	Special Hired Labor			
25	Total Other Direct Costs	$ 22.13	26.96	18.99
26	Return Over Feed & Other Direct Costs	$ 185.18	229.22	154.90
27	ALLOCATED COSTS			
28	Power & Machinery Costs (PCAF 1.00)	16.48	17.36	16.22
29	Livestock Equip. Costs (ECAF 1)	20.04	37.56	10.04
30	Building & Fences (BCAF 1)	3.08	1.98	3.82
31	Total Allocated Costs	$ 39.60	56.90	30.08
32	Return Over All Listed Costs	$ 145.58	172.32	124.82
33	SUPPLEMENTARY MANAGEMENT INFORMATION			
34	Return for $100 Feed Fed	228.65	263.43	205.64
35	Average Price Rec. per Animal Sold	51.46	49.54	52.76
36	Average Price per Pig Sold or Transf.	44.75	45.23	44.08
37	Average Wght. per Pig Sold or Transf.	48.8	52.2	44.6
38	Number of Pigs Produced	751	704	878
39	Number of Pigs Born per Litter	9.3	10.0	9.0
40	Number of Pigs Weaned per Litter	7.3	7.8	7.0
40A	Litters/Bearing Female/Year	1.7	1.5	1.9
40B	Pigs Produced Per Sow Per Year	12.4	11.7	13.3
41	Percent Death Loss	17.6	17.6	17.7
42	Price per CWT Concentrate Fed	6.56	6.07	7.03
43	Price per CWT Prot., Salt & Min. Fed	21.60	27.45	18.16
44	Feed & Direct Costs per Pig Produced	25.14	23.49	26.35
45	Total Listed Costs per Litter	222.88	240.62	213.68

Table 12 - 6290 Dairy Cows, Commercial, 1986

	Items	Average of 92 Farms	High 18 Farms	Low 18 Farms
1	Average Number of Cows	45.7	55.3	37.9
			PER COW	
2	Pounds of Milk	14561	16902	11347
3	Pounds of Butterfat	534.5	607.0	429.7
4	Percent of Butterfat in Milk	3.7	3.6	3.8
5	VALUE OF PRODUCE			
6	Dairy Products Sold	$ 1667.18	1947.90	1270.61
7	Dairy Products Used in Home	7.40	5.88	6.78
8	Milk Fed to Livestock	20.09	29.19	18.58
9	Net Change in Value of Cows	(-101.90)	(-94.18)	(-111.90)
10	Other Miscellaneous Dairy Income	2.04	8.61	
11	Total Value Produced	$ 1594.81	1897.40	1184.07
12	POUNDS OF FEED FED			
13	Corn	2851.1	4230.0	1808.2
14	Small Grain	1688.7	1184.7	1490.9
15	Complete Ration	920.0	449.9	1762.2
16	Protein, Salt & Mineral	1147.9	1178.6	1101.2
17	Total Concentrates	6607.7	7043.2	6162.5
18	Legume Hay	7333.2	7461.7	7937.5
19	Other Hay & Dry Roughage	619.2	1177.6	794.5
20	Silage	7852.3	7032.4	5325.4
20A	Haylage	2587.8	1294.0	2568.2
21	FEED COSTS			
22	Grains	152.45	167.99	106.60
23	Complete Ration	60.66	34.41	110.11
24	Protein/Salt/Minrl (Cost/CWT Fed)	129.98	139.39	111.06
25	Hay/Haylage & Dry Roughage	201.71	177.49	206.31
26	Silage	56.21	49.24	37.07
27	Pasture	4.27		11.56
28	Total Feed Costs	$ 605.28	568.52	582.71
29	Return Over Feed Costs	$ 989.53	1328.88	601.36
30	OTHER DIRECT COSTS			
31	Miscellaneous Livestock Expense	158.93	201.21	119.53
32	Veterinary Expense	35.16	51.90	16.68
33	Custom Hauling, Grinding, Marketing, Etc.	75.14	85.41	56.15
34	Special Hired Labor			
35	Total Other Direct Costs	$ 269.23	338.52	192.36
36	Return Over Feed & Other Direct Costs	$ 720.30	990.36	409.00
37	ALLOCATED COSTS			
38	Power & Mach. Costs (PCAF 1.00)	66.00	75.35	52.00
39	Livestock Equip. Costs (ECAF 1)	66.18	84.43	35.16
40	Bldgs. & Fences (BCAF 1)	18.71	22.34	13.76
41	Total Allocated Costs	$ 150.89	182.12	100.92
42	Return Over All Listed Costs	$ 569.41	808.24	308.08
43	SUPPLEMENTARY MANAGEMENT INFORMATION			
44	Return for $100 Feed Fed	263.48	333.74	203.20
45	Feed Cost per CWT Milk	4.15	3.37	5.14
46	Feed Cost per Pound of Butterfat	1.13	.94	1.36
47	Pounds of Milk per Pound of Concentrate	2.20	2.40	1.84
48	Average Price per CWT Milk Sold	11.65	11.74	11.41
49	Average Price per Pound of Butterfat	3.17	3.27	3.02
50	Total Listed Costs per CWT Milk Prod.	7.04	6.44	7.72
51	Dairy Cow Turnover Percentage	37.2	41.6	31.7
52	Total Listed Costs per Cow	$ 1025.40	1089.16	875.99

Table 13 - 6310 Other Dairy, Replacements, 1986

	Items	Average of 90 Farms	High 18 Farms	Low 18 Farms
1	Number of Head	59.3	51.3	56.4
			PER HEAD	
2	Net Value Produced	$ 267.76	357.52	180.21
3	Other Miscellaneous Income			
4	Total Income	$ 267.76	357.52	180.21
5	POUNDS OF FEED FED			
6	Corn	343.5	256.6	473.3
7	Small Grain	401.3	245.2	750.5
8	Complete Ration	147.6	26.4	300.0
9	Protein, Salt & Minerals	139.6	143.3	107.4
10	Hay & Dry Roughage	3536.3	2911.0	4758.1
11	Silage	4774.9	3640.9	5468.9
11A	Haylage	416.7	106.1	311.3
12	Milk	142.6	73.0	159.1
13	FEED COSTS			
14	Grains	25.30	15.87	40.14
15	Complete Ration	13.84	3.00	23.26
16	Protein, Salt & Minerals	16.22	17.13	17.16
17	Hay/Haylage & Dry Roughage	72.16	58.69	101.26
18	Silage	34.05	25.15	40.48
19	Milk	15.82	9.43	17.27
20	Pasture	2.61	.94	1.83
21	Total Feed Costs	$ 180.00	130.21	241.40
22	Return Over Feed Costs	$ 87.76	227.31	(-61.19)
23	OTHER DIRECT COSTS			
24	Miscellaneous Expense	.86	.64	.11
25	Veterinary Expense	.44	.29	.20
26	Custom Hauling, Grinding, Marketing,Etc.	.27	.06	
27	Special Hired Labor			
28	Total Other Direct Costs	$ 1.57	.99	.31
29	Return Over Feed & Other Direct Costs	$ 86.19	226.32	(-61.50)
30	ALLOCATED COSTS			
31	Power & Machinery Costs (PCAF 1.00)	11.39	9.27	12.12
32	Livestock Equip. Costs (ECAF 1)	11.48	11.52	9.14
33	Buildings & Fences (BCAF 1)	3.25	3.27	2.93
34	Total Allocated Costs	$ 26.12	24.06	24.19
35	Return Over All Listed Costs	$ 60.07	202.26	(-85.69)
36	SUPPLEMENTARY MANAGEMENT INFORMATION			
37	Return for $100 Feed Fed	148.75	274.57	74.65
38	Percent Death Loss - Total	7.4	6.0	8.3
39	Percent Calf Death Loss	17.0	13.0	22.9
40	Total Listed Costs per Head	$ 207.69	155.26	265.90

Table 14 - All Dairy & Dual Purpose Cattle, 1986

	Items	Average of 92 Farms	High 18 Farms	Low 18 Farms
1	Average Number of Cows	45.7	57.2	41.0
			PER COW	
2	Value of Dairy Products	$ 1694.66	1945.02	1286.22
3	Net Change in Value	237.61	317.85	111.61
4	Miscellaneous Dairy Income	2.04		
5	Total Value Produced	$ 1934.31	2262.87	1397.83
6	POUNDS OF FEED FED			
7	Grains	5487.8	6485.1	5042.5
8	Complete Rations	1107.7	621.0	1336.3
9	Prot.,Salt & Min., Incl. Milk Equiv.	1343.6	1490.3	1192.6
10	Hay & Dry Roughage	12438.4	12659.1	11181.6
11	Silage	13858.2	14944.2	10200.5
11A	Haylage	3116.7	2678.7	5867.2
12	FEED COSTS			
13	Grains	184.66	209.79	161.24
14	Complete Rations	78.25	50.54	89.20
15	Prot.,Salt & Min., Incl. Milk	170.53	181.36	134.10
16	Hay/Haylage & Dry Roughage	293.22	241.21	292.44
17	Silage	99.02	102.55	72.68
18	Pasture Costs	7.57	7.50	14.22
19	Total Feed Costs	$ 833.25	792.95	763.88
20	Return Over Feed Costs	$ 1101.06	1469.92	633.95
21	OTHER DIRECT COSTS			
22	Miscellaneous Livestock Expense	160.04	189.48	108.80
23	Veterinary Expense	35.71	47.92	16.61
24	Custom Hauling, Grinding, Mktg., Etc.	75.47	86.54	49.49
25	Special Hired Labor			
26	Total Other Direct Costs	$ 271.22	323.94	174.90
27	Return Over Feed & Other Direct Costs	$ 829.84	1145.98	459.05
28	ALLOCATED COSTS			
29	Power & Machinery Costs	80.12	91.58	69.20
30	Livestock Equipment Costs	80.34	107.95	40.34
31	Building & Fences	22.72	28.87	14.32
32	Total Allocated Costs	$ 183.18	228.40	123.86
33	Return Over All Listed Costs	$ 646.66	917.58	335.19
34	SUPPLEMENTARY MANAGEMENT INFORMATION			
35	Return for $100 Feed Fed	232.14	285.37	182.99
36	Total Listed Costs per Cow	$ 1287.65	1345.29	1062.64

Table 15A, 6100 Beef Breeding, Commercial, 1986

	Items		Average of 41 Farms	High 14 Farms	Low 14 Farms
1	Average Number of Beef Cows		63.7	75.4	49.7
2	Average No. of Other Beef Animals & Bulls		64.0	64.7	66.5
3	Pounds of Beef Produced		36320	48568	25178
4	Net Value Produced	$	318.16	349.14	273.88
5	Other Miscellaneous Beef Income				
6	Total Value Produced	$	318.16	349.14	273.88
7	POUNDS OF FEED FED				
8	Grain		464.4	490.4	368.8
9	Protein, Salt & Mineral		137.9	51.2	96.2
10	Legume Hay		6122.4	6461.7	5517.4
11	Other Hay & Dry Roughage		1451.7	915.5	2678.9
12	Silage		3790.5	3247.4	3861.8
12A	Haylage				
13	FEED COSTS				
14	Grain		15.35	17.36	13.06
15	Protein, Salt & Mineral		9.04	5.69	6.20
16	Legume Hay/Haylage		106.70	105.07	105.67
17	Other Hay & Dry Roughage		16.89	8.34	39.52
18	Silage		25.78	22.48	26.72
19	Pasture		17.94	11.99	19.48
20	Total Feed Costs	$	191.70	170.93	210.65
21	Return Over Feed Costs	$	126.46	178.21	63.23
22	OTHER DIRECT COSTS				
23	Misc. Livestock Expense		6.14	5.61	6.06
24	Veterinary Expense		5.82	4.95	6.32
25	Custom Hauling, Grinding, Mktg.,Etc.		7.24	7.37	6.00
26	Special Hired Labor				
27	Total Other Direct Costs	$	19.20	17.93	18.38
28	Return Over Feed & Other Direct Costs	$	107.26	160.28	44.85
29	ALLOCATED COSTS				
30	Power & Mach. Costs (PCAF 1.00)		15.35	12.21	17.90
31	Livestock Equip. Costs (ECAF 1)		7.42	4.09	6.51
32	Buildings & Fences (BCAF 1)		2.37	1.49	2.33
33	Total Allocated Costs	$	25.14	17.79	26.74
34	Return Over All Listed Costs	$	82.12	142.49	18.11
35	SUPPLEMENTARY MANAGEMENT INFORMATION				
36	Return for $100 Feed Fed		165.97	204.26	130.02
37	Price per CWT Sold		52.58	53.66	51.55
38	Price per CWT Calves Sold or Transf.		61.71	62.84	61.41
39	Average Wghts. per Head Sold		675.6	687.2	677.5
40	Average Wght. per Calf Sold or Transf.		478.8	493.6	485.1
41	Percent Death Loss		2.9	2.9	3.9
42	Percent Calf Crop		95.3	94.6	96.1
42A	Percent Calf Death Loss		6.7	7.1	8.5
43	Total Listed Costs per Cow	$	236.04	206.65	255.77

Table 15B - 6140 Beef Feeders, 1986

	Items		Average of 22 Farms	High 11 Farms	Low 11 Farms
			cwt		
1	Average Number of Beef Feeders		52.3	58.2	46.3
2	Pounds of Beef Produced		28972	30505	27438
3	Net Value Produced	$	49.96	58.84	40.08
4	Other Miscellaneous Beef Income				
5	Total Value Produced	$	49.96	58.84	40.08
6	POUNDS OF FEED FED				
7	Grain		331.8	267.3	403.6
8	Protein, Salt & Mineral		87.7	53.9	125.2
9	Legume Hay		426.4	473.1	374.4
10	Other Hay & Dry Roughage		115.9	66.2	171.3
11	Silage		662.1	575.2	758.7
11A	Haylage				
12	FEED COST				
13	Grain		11.28	10.04	12.65
14	Protein, Salt & Mineral		5.04	4.07	6.11
15	Legume Hay/Haylage		8.31	8.91	7.65
16	Other Hay & Dry Roughage		1.71	1.04	2.45
17	Silage		5.05	4.03	6.19
18	Pasture		.17		.35
19	Total Feed Cost	$	31.56	28.09	35.40
20	Return Over Feed Cost	$	18.40	30.75	4.68
21	OTHER DIRECT COSTS				
22	Miscellaneous Livestock Expense		1.17	.88	1.50
23	Veterinary Expense		1.64	2.23	.98
24	Custom Hauling, Grinding, Mkg. Etc.		2.33	2.89	1.71
25	Special Hired Labor				
26	Total Other Direct Costs	$	5.14	6.00	4.19
27	Return Over Feed & Other Direct Costs	$	13.26	24.75	.49
28	ALLOCATED COSTS				
29	Power & Mach. Costs (PCAF 1.00)		2.52	2.76	2.25
30	Livestock Equip. Costs (ECAF 1)		1.52	.99	2.10
31	Building & Fences (BCAF 1)		.54	.39	.70
32	Total Allocated Costs	$	4.58	4.14	5.05
33	Return Over All Listed Costs	$	8.68	20.61	(-4.56)
34	SUPPLEMENTARY MANAGEMENT INFORMATION				
35	Return for $100 Feed Fed		158.28	209.48	113.22
36	Price per CWT Sold		53.36	55.61	52.15
37	Average Weight per Head Sold		786.0	705.7	837.5
38	Price per CWT Bought		64.33	64.89	61.55
39	Average Weight per Head Bought		417.8	438.1	324.0
40	Number of Head Bought		51	81	22
41	Percent Death Loss		2.0	1.7	2.4
42	Effective Daily Gain-Pounds/Head/Day		1.52	1.44	1.62
43	Total Listed Cost per CWT Prod.	$	41.28	38.23	44.64

Table 16A - 6670 Sheep - Commercial, 1986

	Items		Average of 6 Farms
1	Average Number of Ewes		141.4
2	Pounds of Lamb & Mutton Produced		16461
3	Pounds of Wool Produced		1805
4	VALUE OF PRODUCE		
5	Wool		$ 19.17
6	Net Value Produced - Animals		93.08
7	Other Miscellaneous Sheep Income		.59
8	Total Value Produced		112.84
9	POUNDS OF FEED FED		
10	Grain		564.9
11	Protein, Salt & Mineral		6.5
12	Legume Hay		1240.0
13	Other Hay & Dry Roughage		318.2
14	Silage		
14A	Haylage		
15	FEED COSTS		
16	Grain		22.84
17	Protein, Salt & Mineral		1.31
18	Legume Hay/Haylage		16.82
19	Other Hay & Dry Roughage		5.57
20	Silage		
21	Pasture		2.72
22	Total Feed Costs		$ 49.26
23	Return Over Feed Costs		$ 63.58
24	OTHER DIRECT COSTS		
25	Miscellaneous Livestock Expense		2.07
26	Veterinary Expense		2.82
27	Custom Hauling, Grinding, Mktg., Etc.		6.70
28	Special Hired Labor		
29	Total Other Direct Costs		$ 11.59
30	Return Over Feed & Other Direct Costs		$ 51.99
31	ALLOCATED COSTS		
32	Power & Machinery Costs	(PCAF 1.00)	6.47
33	Livestock Equipment Costs	(ECAF 1)	1.61
34	Buildings & Fences	(BCAF 1)	2.20
35	Total Allocated Costs		$ 10.28
36	Return Over All Listed Costs		$ 41.71
37	SUPPLEMENTARY MANAGEMENT INFORMATION		
38	Return for $100 Feed Fed		229.06
39	Price per CWT Lamb & Mutton Sold		68.21
40	Price per CWT Lamb Sold or Transf.		70.18
41	Average Wt. of Lambs Sold or Transf.		99.7
42	Pounds of Wool per Sheep Sheared		10.8
43	Number of Ewes Kept for Lambing		151
44	Percent Lamb Crop		143.6
45	Percent Death Loss		12.0
45A	Percent Lamb Death Loss		17.0
46	Total Listed Costs per Ewe		$ 71.13

AVERAGES OF PRICES OF FEED AND PRODUCE USED IN HOME, 1986

Farm Grown Grains

Oats	$1.30 Bu.
Barley, Feed	1.35 Bu.
Wheat	2.35 Bu.
Oats Mixture	1.46 Bu.
Corn	1.66 Bu.

Forages

Alfalfa	$41.50 Ton
Wild Hay	22.00 Ton
Mixed Legume	32.00 Ton
Haylage (55% Moisture)	24.20 Ton
Corn Silage	13.83 Ton
Straw	.45 Bale

Milk for Feed

Whole Milk - Gr. A $10.84

Home Produce

Milk	.24 Qt.
Beef (live)	57.00 CWT
Hogs (live)	48.00 CWT

Board for Hired Labor - $5.00 per day (unless otherwise specified)

EXPLANATION OF "WORK UNITS"

The total "Work Units" for any one farm is a measure of the size of that farm's 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. The number of work units for each class of livestock and each acre of crop are presented below. Days of work off the farm for pay are not included in work units computations in this report.

Number of Units for Each Class of Livestock and Acre of Crop

Item	No. of Work Units	Item	No. of Work Units
Dairy Cows	7.00 per Head	Turkeys	25.00 per 100
Other Dairy Cows	1.20 per Head	Bees	.33 per Hive
Beef Breeding Cows	1.50 per Head	Small Grain	.30 per Acre
Feeder Cattle	.12 per CWT	Corn for Grain	.55 per Acre
Sheep, Farm Flock	.60 per Head	Corn Silage	.80 per Acre
Lambs, Feeders	.30 per CWT	Alfalfa	.60 per Acre
Hogs, Complete	.12 per CWT	Other Hay	.40 per Acre
Hogs, Finishing	.06 per CWT	Legume Seed	.40 per Acre
Hogs, Weaning Pigs	1.40 per Litter	Grass Silage	.40 per Acre
Chickens, Lay., Flock	5.00 per 100	Potatoes	3.00 per Acre
Chickens, Broilers	.20 per CWT	Sugar Beets	2.00 per Acre
Turkeys, Poults	.07 per CWT	Fallow	.30 per Acre
		Sunflowers	.40 per Acre

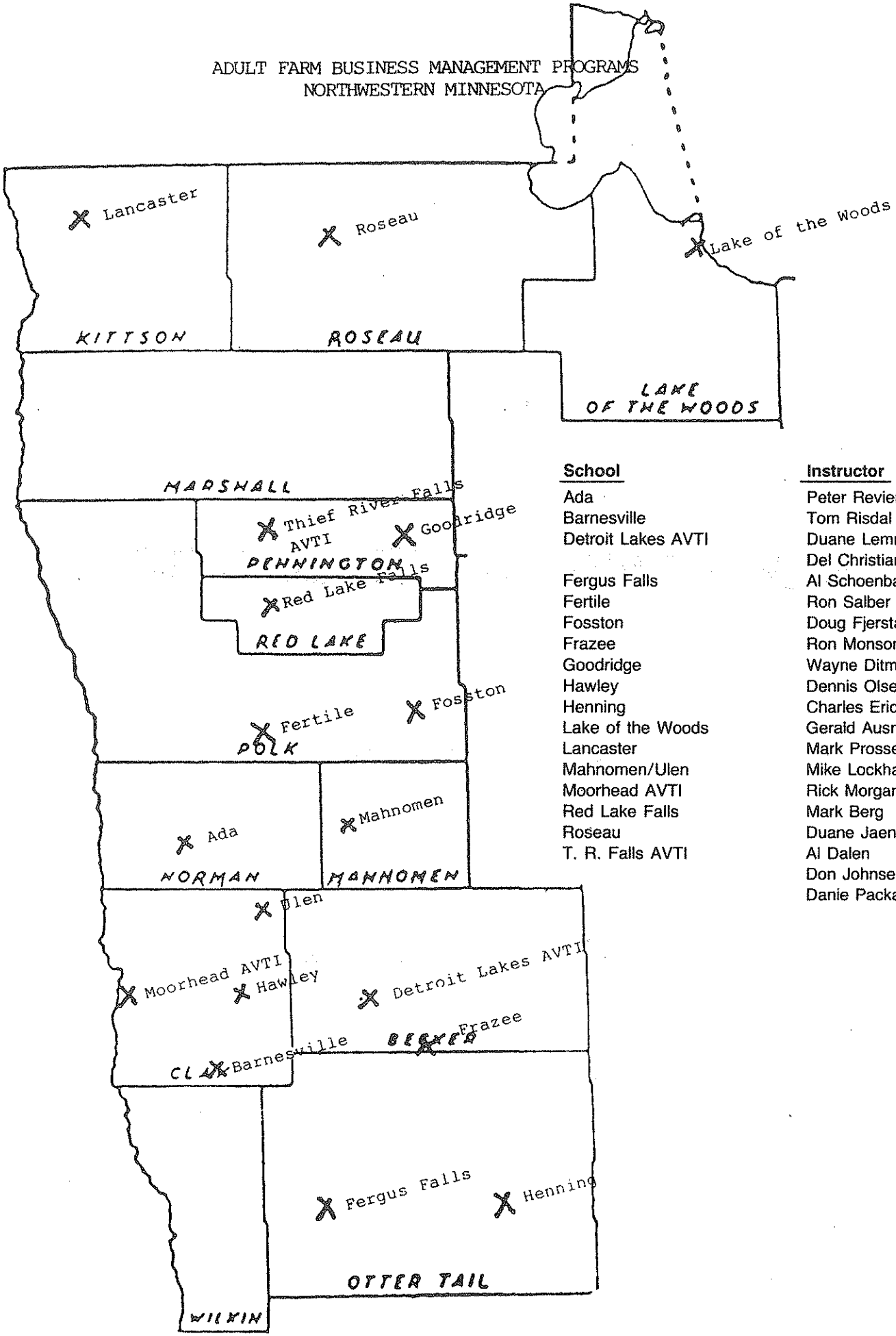
SUMMARY OF MISCELLANEOUS ITEM BY YEAR, 1986

Items	1982	1983	1984	1985	1986
Miscellaneous					
Average Tillable Acres	810.9	753.8	762.5	839.4	775.9
Total Farm Capital	527831	503774	497770	501762	439821
Expenses per Dollar Income	.99	.96	.94	.94	.93
Percent Income from Farm Crops	78	82	80	72	74
Percent Income from Farm Lvstk.	22	18	20	23	20
HH & Personal Expenses	22331	22052	22593	23439	22800
Trac. & Mach. Exp. per Crop Acre	38.91	36.29	36.70	35.26	32.04
Efficiencies					
Yield per Acre:					
Oats	61.0	51.2	64.3	59.7	50.3
Alfalfa	2.7	3.1	2.6	2.7	3.6
Barley	58.9	48.3	61.5	62.6	53.4
Wheat, Spring	38.7	26.5	48.8	53.1	34.1
Flax	5.7	5.3	16.5	15.2	14.1
Sugar Beets	42.9*	37.1*	40.3*	42.5*	43.6*
Corn	73.7	66.4	62.2	56.3	83.5
Sunflowers	11.6	10.0	11.1	8.1	13.9
Soybeans	27.8	33.4	25.4	22.3	34.4
*CWT Extractible Sugar					
Return Above Feed Cost Per:					
Dairy Cow	$ 1007	948	1008	968	990
CWT Hogs	28	4	6	7	23
Ewe	(-23)	21	34	39	64
Hogs, Litter	227	64	120	101	207
CWT Cattle	20	12	14	10	18
Beef Cow	95	44	75	60	126
Prices Received Per:					
Oats, Bushel	$ 1.42	1.52	1.54	1.22	1.23
Alfalfa, Ton	43.00	44.95	46.12	46.66	41.40
Barley, Bushel	1.87	2.28	2.03	1.87	1.47
Wheat, Bushel	3.79	3.76	3.40	3.30	2.40
Flax, Bushel	4.21	5.13	5.92	5.09	3.73
Sugar Beets, CWT Ext. Sugar	13.10	14.99	14.64	12.76	13.55
Corn, Bushel	2.23	2.83	2.56	2.01	1.55
Sunflowers, CWT	8.68	12.67	10.87	7.97	7.01
Soybeans, Bushel	5.03	7.41	5.77	4.82	4.40
CWT, Milk	12.97	12.75	12.61	11.90	11.65
CWT, Beef	60.00	60.00	59.02	51.14	53.36
CWT, Hogs	53.00	47.31	47.62	42.99	50.02
CWT, Lambs	51.00	55.00	61.67	67.07	68.21

SUMMARY OF FARM EARNINGS BY YEARS, 1986

Items	1982	1983	1984	1985	1986
Number of Records Analyzed	600	612	512	490	520
Farm Receipts					
Livestock	$ 38697	34373	34897	35603	36841
Crops	97287	99453	106918	113069	104829
Mach. & Equip. Sold & Gas Tax Ref.	2152	1036	2911	3457	1866
Income from Work Off the Farm	1063	907	1924	1433	1383
Miscellaneous	3703	3398	2973	5151	6755
(1) Total Farm Sales	$142903	139169	149623	158714	151674
(2) Increase in Farm Capital	1225	7528	8829	9	0
(3) Family Living from the Farm	536	509	460	369	370
(4) Total Farm Rec.(1 + 2 + 3)	144664	147206	158912	159092	152044
Farm Expenses					
Livestock & Livestock Exp.	$ 5721	5224	5384	5614	5823
Feed Bought	6035	6226	6021	6151	7092
Fertilizers & Chemicals	18730	18425	20176	21243	17239
Other Crop Expenses	15054	15580	16880	14441	19632
Custom Work Hired	4507	3775	4117	4357	3938
Gas, Oil & Grease Bought (F.S.)	9655	8431	8647	9031	6474
Rep. & Op. Mach.,Trac.,Auto (F.S.)	8974	8776	9282	10300	9573
Rep. & Upkeep of Real Estate	1117	1095	860	919	1047
Rep. & Upkeep of Livestock Equip.	429	478	661	624	641
Wages of Hired Labor	4713	4839	5066	5580	5672
Utility Exp. (F.S.)	1700	1786	2032	2148	2092
Real Estate Taxes	4115	4040	4769	5312	4413
Gen. Farm Expense	2829	2907	3202	3612	3895
(5) Total Cash Operating Exp.	$ 83578	81584	87097	89334	87531
(6) Pw.Crop & Gen.Mach.Bot(F.S.)	13382	12533	14347	12144	10669
(7) Livestock Equip. Bought	924	558	327	594	403
(8) Real Estate Bought	8526	9687	8787	7691	5196
(9) Total Farm Purch. (5 to 8)	106412	104362	110558	109763	103799
(10) Decrease in Farm Capital					3034
(11) Interest on Farm Capital	37019	35001	34535	35123	30686
(12) Unpaid Family Labor	51	45	92	16	10
(13) Labor Chg.for Part.&Other Op.	222	221	142	0	0
(14) Bd. Furn. Hired Labor	63	42	73	51	38
(15) Total Farm Exp. (9 to 14)	$143765	139672	145400	144953	137567
(16) Return to Labor & Mgmt (4-15)	$ 899	7534	13512	14139	14477

ADULT FARM BUSINESS MANAGEMENT PROGRAMS
NORTHWESTERN MINNESOTA



School	Instructor
Ada	Peter Revier
Barnesville	Tom Risdal
Detroit Lakes AVTI	Duane Lemmon
	Del Christianson
Fergus Falls	Al Schoenbauer
Fertile	Ron Salber
Fosston	Doug Fjerstad
Frazee	Ron Monson
Goodridge	Wayne Ditmer
Hawley	Dennis Olsen
Henning	Charles Erickson
Lake of the Woods	Gerald Ausmus
Lancaster	Mark Prosser
Mahnomen/Ulen	Mike Lockhart
Moorhead AVTI	Rick Morgan
Red Lake Falls	Mark Berg
Roseau	Duane Jaenicke
T. R. Falls AVTI	Al Dalen
	Don Johnsen
	Danie Packard

LOOK TO

VOCATIONAL EDUCATION

FOR YOUR FUTURE IN

MINNESOTA