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1978

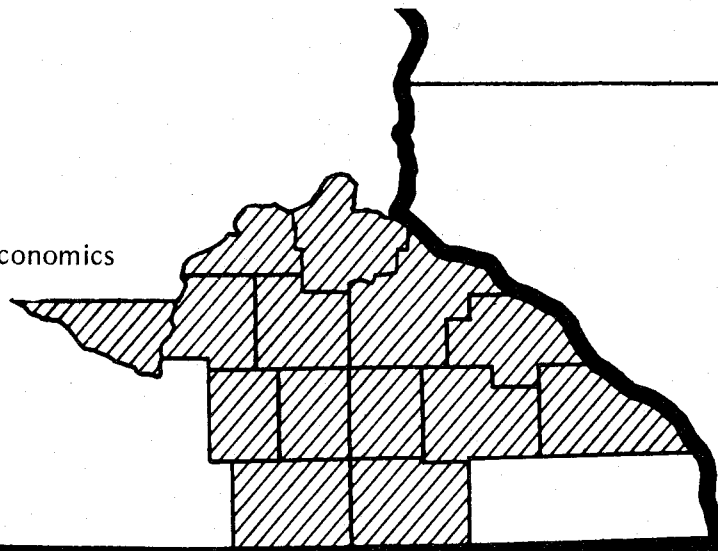
annual report

Southeastern Minnesota Farm Management Association

COOPERATING AGENCIES:

University of Minnesota, Institute of Agriculture
County Extension Services of the 14 Southeastern Counties
Southeastern Minnesota Farm Management Association

Economic Report ER 79-2
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1978 ANNUAL REPORT OF THE SOUTHEASTERN MINNESOTA
FARM MANAGEMENT ASSOCIATION

by

Delane E. Welsch and Hilbert B. Pfeifer, Jr.*

INTRODUCTION

The Department of Agricultural and Applied Economics and the Agricultural Extension Service of the University of Minnesota and the Agricultural Extension Agents of several southeastern Minnesota counties are cooperating with the Southeastern Minnesota Farm Management Association in maintaining a farm management service. The Association was organized in the fall of 1927 by farmers in that part of the state for the purpose of studying the farm business through farm records. Each farmer pays an annual fee which covers a large part of the cost, with the balance defrayed by the Agricultural Extension and Research programs of the University of Minnesota. The analysis of the records and the preparation of the report are handled by the Department of Agricultural and Applied Economics under the direction of Delane E. Welsch. Hilbert B. Pfeifer, Jr. is the fieldman for this project. Kenneth H. Thomas is the Extension Economist in Farm Management working closely with this Association. Edward Becker is the District Director of Agricultural Extension for the counties which are served by the Association.

Of the 122 farms in the Southeastern Association, 90 submitted records at the time of this report. The data for 74 farms are shown in the tables on succeeding pages. The rest were omitted from the information in the tables because the records were not sufficiently complete for a full analysis. No claim is made as to whether the farmers who belong to the Association are or are not representative of the southeastern Minnesota. However, this report should be of value to farmers and others interested in agriculture in that it illustrates how farm records may be used as a basis for making an analysis of a farm business. It also shows typical enterprise costs and returns for 1978 and the variation in enterprise earnings as well as in total farm earnings.

The content of this report is somewhat different from those prior to 1977. While the roots of the analysis lie in the work of the Department of Agricultural and Applied Economics and its predecessor units over the past 60 years, the more detailed analysis found in this report was developed by Professor Edgar Persons of the University of Minnesota. This analysis is also used by Vocational Agriculture Adult Farm Business Management Education classes throughout Minnesota and in some other states. The computer work was done by Specialized Data Systems, Inc., Madison, Wisconsin.

*Welsch is Professor of Farm Management, Pfeifer is jointly Area Farm Management Extension Agent and Fieldman for the Association. The authors wish to thank the following people for their contributions to this report: Dr. Edgar Persons for his advice and support as we became accustomed to the data processing procedure; Dale Miller, Shirley Koestler, Arlene Draeger, Delores Dallmann, Barbara Rolf, Alan Showman and Paul Friesen for their assistance in account book closing and coding; Alan Showman and Paul Friesen for their review of the analyses and correction of errors; Paul Hasbargen and Ken Thomas for much helpful advice; and Robin Smith and Eileen Miley for all of their clerical and secretarial work throughout the project, and especially for putting this report together.

DISTRIBUTION OF MEMBERSHIP - 1978

County	Number of Members	Number Submit Records	Association Officers	County Extension Directors
Dakota	10	7	Henry Scharr	Warren N. Sifferath
Dodge	13	9	Dean Wright, President	David H. Hanson
Freeborn	13	8	Jacob Kuiters	Eldon H. Senske
Goodhue	18	15	Owen Knutson	Richard C. Walter
Le Sueur	10	6	Kenneth Krenik	Robert Leary
Mower	3	2	Donald Zimmerman	Harlan L. Johnsrud
Nicollet	2	2		Gregory D. Luehr
Olmsted	10	6	Harold Frost	David Kjome
Rice	8	4	Dean Franz	Warren F. Liebenstein
Scott	11	8	Caldwell Ruehling	David Hart
			Arnie Schoenbauer, Sec. Tres.	
Steele	9	8	Vernal Wilker	Larry Tande
Wabasha	7	7	Forest Lamprecht	Matthias P. Metz
Waseca	2	2		Roger M. Wilkowske
Winona	<u>6</u>	<u>6</u>	Russell Wirt, V. President	Neil Brodwater
Total	122	90		

1978 ANNUAL REPORT OF THE SOUTHEASTERN MINNESOTA

FARM MANAGEMENT ASSOCIATION

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TABLE 1. FARM INVENTORIES - 1978 - S.E.

ITEMS	Average of 74 Farms		
1 SIZE OF FARM-TOTAL ACRES	385.1		
2 -TILLABLE ACRES	332.5		
3 WORK UNITS-CROPS	166.68		
4 -LIVESTOCK	358.58		
5 -OTHER	15.65		
6 TOTAL SIZE OF BUSINESS IN WORK UNITS	540.91		
7 NUMBER OF WORKERS	1.92		
8 FARM CAPITAL INVESTMENT PER WORKER	\$ 196,028		
		JAN. 1	DEC. 31
9 PRODUCTIVE LIVESTOCK			
10 DAIRY COWS	\$ 11,814	\$ 14,278	
11 OTHER DAIRY CATTLE	7,078	8,491	
12 BEEF BREEDING CATTLE	1,207	1,803	
13 BEEF FEEDER CATTLE	3,459	4,933	
14 HOGS	14,833	20,410	
15 SHEEP (INCL. FEEDERS) & GOATS	35	53	
16 POULTRY-ALL TYPES	57	8	
17 OTHER LIVESTOCK			
18 TOTAL PRODUCTIVE LIVESTOCK	\$ 38,483	\$ 49,977	
19 CROP, SEED AND FEED	\$ 49,689	\$ 61,238	
20 POWER, MACHINERY AND EQUIPMENT			
21 AUTO AND TRUCK (FARM SHARE)	\$ 4,141	\$ 5,286	
22 POWER AND MACHINERY	30,968	35,270	
23 IRRIGATION EQUIPMENT	330	298	
24 CUSTOM WORK EQUIPMENT			
25 LIVESTOCK EQUIPMENT	7,343	8,087	
26 TOTAL POWER, MACHINERY AND EQUIPMENT	\$ 42,783	\$ 48,942	
27 LAND	\$ 154,183	\$ 161,337	
28 BUILDINGS-FENCES-ETC.	53,251	62,304	
29 TOTAL FARM CAPITAL	\$ 338,389	\$ 383,797	
30 INCREASE OR DECREASE IN TOTAL FARM CAPITAL		\$ 45,408	

Table 1 shows the beginning and end of year inventory of farm capital. These inventories include both the value of the operator's assets as well as the land-lord's in the case of rented assets. (Table 5 shows only the operator's share of farm capital.) Values of Productive Livestock, and Crop, Seed and Feed reflect the physical amounts on hand at the beginning and end of year multiplied by a conservative market price at the time. Power, Machinery, and Equipment values are cost less depreciation. Land is usually valued at cost. Measures of farm size other than total farm capital are shown in lines 1 through 7. The concept of Work Units is discussed on page 14. The number of workers shown on line 7 includes operator(s), hired labor, unpaid family labor, and the labor portion of custom work hired.

TABLE 1. FARM INVENTORIES - 1978 (CONT.) - S.E.

ITEMS	15 Most Profitable Farms		16 Least Profitable Farms	
	JAN. 1	DEC. 31	JAN. 1	DEC. 31
1 SIZE OF FARM-TOTAL ACRES	501.7		311.0	
2 -TILLABLE ACRES	443.3		270.1	
3 WORK UNITS-CROPS	229.89		132.99	
4 -LIVESTOCK	496.26		212.30	
5 -OTHER	8.07		14.32	
6 TOTAL SIZE OF BUSINESS IN WORK UNITS	734.21		359.61	
7 NUMBER OF WORKERS	2.29		1.59	
8 FARM CAPITAL INVESTMENT PER WORKER	\$227,899		\$227,366	
9 PRODUCTIVE LIVESTOCK				
10 DAIRY COWS	\$ 12,083	\$ 13,897	\$ 6,677	\$ 7,385
11 OTHER DAIRY CATTLE	6,714	7,631	4,188	5,287
12 BEEF BREEDING CATTLE	1,557	2,039	2,080	3,123
13 BEEF FEEDER CATTLE	7,162	14,624	381	
14 HOGS	33,959	48,137	9,589	11,367
15 SHEEP (INCL. FEEDERS) & GOATS				
16 POULTRY-ALL TYPES				
17 OTHER LIVESTOCK				
18 TOTAL PRODUCTIVE LIVESTOCK	\$ 61,475	\$ 86,239	\$ 22,915	\$ 27,162
19 CROP, SEED AND FEED	\$ 75,951	\$102,423	\$ 36,338	\$ 35,652
20 POWER, MACHINERY AND EQUIPMENT				
21 AUTO AND TRUCK (FARM SHARE)	\$ 4,747	\$ 6,392	\$ 3,598	\$ 4,638
22 POWER AND MACHINERY	36,015	42,019	25,103	30,208
23 IRRIGATION EQUIPMENT	1,629	1,470		
24 CUSTOM WORK EQUIPMENT				
25 LIVESTOCK EQUIPMENT	10,881	10,795	5,382	6,774
26 TOTAL POWER, MACHINERY AND EQUIP.	\$ 53,272	\$ 60,676	\$ 34,084	\$ 41,619
27 LAND	\$167,096	\$175,994	\$210,551	\$210,449
28 BUILDINGS-FENCES-ETC.	64,391	75,291	48,515	51,030
29 TOTAL FARM CAPITAL	\$422,185	\$500,713	\$352,403	\$365,912
30 INCREASE OR DECREASE IN TOTAL FARM CAPITAL		\$ 78,529		\$ 13,509

* ALL FARMS ARE SORTED INTO HIGH AND LOW CATEGORIES ON SIZE OF LABOR EARNINGS. FOR TABLES 1, 2A, 2B, 3, 8, and 9, THIS IS ON WHOLE FARM BASIS, TAKEN FROM TABLE 2B, LINE 46. FOR TABLES 4, 5, 6A and 6B, THIS IS ON OPERATOR'S SHARE BASIS, TAKEN FROM TABLE 6B, LINE 47.

TABLE 2A. TOTAL FARM RECEIPTS - 1978 - S.E.

ITEMS	Average of 74 Farms	15 Most Profitable Farms	15 Least Profitable Farms
1 SALE OF LIVESTOCK AND LIVESTOCK PRODUCTS			
2 DAIRY COWS	\$ 4,503	\$ 3,619	\$ 2,628
3 DAIRY PRODUCTS	38,562	36,969	22,738
4 OTHER DAIRY CATTLE	3,103	1,413	2,024
5 BEEF BREEDING CATTLE	395	371	946
6 BEEF FEEDER CATTLE	7,482	14,421	448
7 HOGS COMPLETE AND MIXED	36,934	95,171	17,545
8 HOGS FINISHING	3,964		7,690
9 HOGS PRODUCING WEANING PIGS	\$ 50		
10 SHEEP, GOATS AND WOOL, FARM FLOCK	53		
11 SHEEP AND WOOL, FEEDER LAMBS			
12 CHICKENS (INCL. HENS AND BROILERS)	10		
13 TURKEYS			
14 EGGS	314		
15 OTHER PRODUCTIVE LIVESTOCK AND PRODUCTS			
16 OTHER MISC. LIVESTOCK INCOME			
17 TOTAL LIVESTOCK SALES	\$ 95,371	\$151,965	\$ 54,020
18 SALE OF CROPS			
19 WHEAT	250	109	458
20 OTHER SMALL GRAINS	537	723	162
21 CORN	17,743	22,727	14,151
22 SOYBEANS	13,509	15,378	9,759
23 OTHER ROW CROPS	932	1,760	935
24 LEGUMES AND OTHER FORAGE	250	664	193
25 GRASS SEED			
26 FRUITS AND NUTS			
27 VEG. ROADSIDE MARKET AND SPECIALTY			
28 NURSERY, TIMBER AND OTHER	9	45	
29 SET ASIDE ACRES-GOVERNMENT PAYMENTS	1,220	2,252	954
30 TOTAL CROP SALES	\$ 34,450	\$ 43,657	\$ 26,612
31 CAPITAL ASSETS SOLD	\$ 543	1,226	469
32 GAS TAX REFUND	210	220	156
33 INCOME FROM WORK OFF THE FARM	1,444	1,080	1,598
34 CUSTOM WORK ENTERPRISE INCOME			
35 PATRONAGE REFUNDS	1,779	2,152	1,168
36 MISCELLANEOUS FARM INCOME	1,970	1,931	1,198
37 TOTAL FARM SALES	\$135,766	\$202,231	\$ 85,220
38 INCREASE IN FARM CAPITAL	46,852	78,529	17,466
39 FAMILY LIVING FROM THE FARM	608	604	392
40 TOTAL FARM RECEIPTS (37)+(38)+(39)	\$183,227	\$281,364	\$103,079

TABLE 2B. TOTAL FARM EXPENSES AND LABOR AND MANAGEMENT EARNINGS - 1978 - S.E.

ITEMS	Average of 74 Farms	15 Most Profitable Farms	15 Least Profitable Farms
1 PURCHASE OF LIVESTOCK			
2 DAIRY COWS	\$ 812	\$ 162	\$ 187
3 OTHER DAIRY CATTLE	668	221	89
4 BEEF BREEDING CATTLE	67		33
5 BEEF FEEDER CATTLE	3,250	9,399	
6 HOGS COMPLETE AND MIXED	995	998	127
7 HOGS FINISHING	1,958	2,131	3,636
8 HOGS PRODUCING WEANING PIGS	25		
9 SHEEP AND GOATS	1		
10 SHEEP, FEEDER LAMBS			
11 CHICKENS (INCL. HENS AND BROILERS)	26		
12 TURKEYS			
13 OTHER PRODUCTIVE LIVESTOCK			
14 MISCELLANEOUS LIVESTOCK EXPENSE	4,535	5,349	3,315
15 FEED BOUGHT	14,234	22,355	9,342
16 FERTILIZER	7,484	10,146	6,407
17 CHEMICALS	3,969	5,379	2,729
18 OTHER CROP EXPENSE	8,724	10,225	5,848
19 IRRIGATION OPERATION COSTS	157	775	
20 CUSTOM WORK ENTERPRISE OPERATOR COSTS, INC. LABOR			
21 CUSTOM WORK HIRED	3,260	4,620	2,440
22 REPAIR + UPKEEP OF LIVESTOCK EQUIPMENT	1,136	2,036	858
23 REPAIR + UPKEEP OF FARM REAL ESTATE	1,685	2,183	1,096
24 GAS, OIL, GREASE BOUGHT (FARM SHARE)	3,253	3,940	2,466
25 REPAIR + OPERATOR OF MACH., TRACTOR, TRUCK AND AUTO	4,295	5,121	3,476
26 REPAIR + UPKEEP OF IRRIGATION EQUIPMENT			
27 REPAIRS, CUSTOM WORK ENTERPRISE			
28 WAGES OF HIRED LABOR	3,931	4,935	2,187
29 PERSONAL PROPERTY + REAL ESTATE TAXES	3,148	4,260	2,136
30 GENERAL FARM EXPENSE	2,032	2,237	1,656
31 TELEPHONE EXPENSE (FARM SHARE)	262	263	207
32 ELECTRICITY EXPENSE (FARM SHARE)	1,793	2,104	1,077
33 TOTAL CASH OPERATING EXPENSE	\$ 71,653	\$ 98,849	\$ 49,311
34 POWER, CROP AND GENERAL MACH. BOUGHT (FARM SHARE)	\$ 16,110	\$ 20,301	\$ 12,776
35 IRRIGATION EQUIPMENT BOUGHT			
36 CUSTOM WORK EQUIPMENT BOUGHT			
37 LIVESTOCK EQUIPMENT BOUGHT	2,851	2,610	3,267
38 NEW REAL ESTATE + IMPROVEMENT	21,728	27,689	7,002
39 TOTAL FARM PURCHASES (33) THRU (38)	\$112,342	\$149,440	\$ 72,355
40 DECREASE IN FARM CAPITAL	1,444		3,957
41 INTEREST ON FARM CAPITAL	25,277	32,301	25,141
42 UNPAID FAMILY LABOR	896	1,350	576
43 LABOR CHARGE FOR PARTNERS+OTHER OPERATORS	2,905	4,400	2,867
44 BOARD FURNISHED HIRED LABOR	308	234	216
45 TOTAL FARM EXPENSE (39) THRU (44)	\$143,172	\$187,725	\$105,112
46 RETURN TO OPER. LABOR & MGMT.-SINGLE OPER. (WHOLE FARM) (2A/40)-(45)	\$ 40,055	\$ 93,639	\$ (-2,033)
SEE PAGE 14 FOR EXPLANATION OF LINES 46 AND 49			
48 FULL TIME OPERATOR EQUIVALENTS	1.24	1.39	1.23
49 RETURN TO OPER. LABOR & MGMT/FULL TIME OPER. EQUIVALENT	\$ 37,113	83,934	962

TABLE 3. ENTERPRISE STATEMENT - 1978 - S.E.

ITEMS	Average of 74 Farms	15 Most Profitable Farms	15 Least Profitable Farms
1 RETURNS AND NET INCREASES			
2 PRODUCTIVE LIVESTOCK			
3 DAIRY COWS	\$ 40,539	\$ 38,375	\$ 23,759
4 OTHER DAIRY CATTLE	9,212	7,517	5,635
5 BEEF BREEDING CATTLE	1,074	1,436	1,530
6 FEEDER CATTLE	5,064	11,042	514
7 HOGS, COMPLETE & MIXED	40,618	105,022	19,902
8 HOG FINISHING ENTERPRISE	2,642	1,290	3,438
9 PRODUCING WEANING PIGS	376		
10 SHEEP AND GOATS	70		
11 SHEEP, FEEDER LAMBS			
12 CHICKENS (INCL. HENS AND BROILERS)	251		
13 TURKEYS			
14 OTHER PRODUCTIVE LIVESTOCK			
15 TOTAL ALL PRODUCTIVE LIVESTOCK	\$ 99,846	\$ 164,682	\$ 54,776
16 VALUE OF FEED FED TO LIVESTOCK	42,902	65,722	28,110
17 RETURN OVER FEED FROM LIVESTOCK	56,944	98,960	26,666
18 CROP, SEED AND FEED	54,203	86,801	29,521
19 COOPERATIVE PATRONAGE REFUNDS	1,779	2,152	1,168
20 MISCELLANEOUS FARM INCOME	1,970	1,931	1,198
21 CUSTOM WORK ENTERPRISE			
22 TOTAL RETURNS AND NET INCREASES	\$ 114,896	\$ 189,844	\$ 58,552
23 EXPENSES AND NET DECREASES			
24 TRUCK AND AUTO (FARM SHARE)	\$ 3,996	\$ 5,234	\$ 2,276
25 TRACTORS AND CROP MACHINERY	14,768	17,779	10,201
26 IRRIGATION EQUIPMENT	32	159	
27 ELECTRICITY	1,793	2,104	1,077
28 LIVESTOCK EQUIPMENT	3,523	4,940	3,028
29 BUILDINGS, FENCES AND TILING	7,063	9,476	5,583
30 BARE LAND		2	
31 MISC. LIVESTOCK EXPENSE	4,535	5,349	3,315
32 LABOR	5,505	7,701	3,099
33 LABOR CHARGE OTHER OPERATOR(S)	2,905	4,400	2,867
34 PROPERTY TAX	3,148	4,260	2,136
35 GENERAL FARM EXPENSE AND TELEPHONE	2,295	2,500	1,863
36 INTEREST ON FARM CAPITAL	25,277	32,301	25,141
37 TOTAL EXPENSES AND NET DECREASES	\$ 74,841	\$ 96,205	\$ 60,585
38 RETURN TO OPERATORS LABOR AND MANAGEMENT	\$ 40,055	\$ 93,639	\$ (-2,033)
39 NUMBER OF FARM OPERATORS	1	1	1

SEE PAGE 14 FOR EXPLANATORY NOTE FOR THIS TABLE.

TABLE 4. HOUSEHOLD & PERSONAL EXPENSE AND FAMILY LIVING FROM THE FARM - 1978 - S.E.

ITEMS	Average of 30 Farms	8 Most Profitable Farms	5 Least Profitable Farms
1 NUMBER OF PERSONS - FAMILY	4	5	3
2 NUMBER OF ADULT EQUIVALENT- FAMILY	3.3	3.7	2.5
3 CHURCH AND WELFARE	\$ 1,087	\$ 1,327	\$ 805
4 MEDICAL CARE AND HEALTH INSURANCE	1,504	1,435	1,445
5 FOOD AND MEALS BOUGHT	2,808	2,482	2,499
6 OPERATING EXPENSE AND SUPPLIES	885	981	1,357
7 FURNISHINGS AND EQUIPMENT	1,383	1,347	878
8 CLOTHING AND CLOTHING MATERIALS	1,013	930	791
9 PERSONAL CARE, PERSONAL SPENDING	589	784	467
10 EDUCATION	514	493	178
11 RECREATION	734	689	302
12 GIFTS AND SPECIAL EVENTS	1,119	773	1,472
13 PERSONAL SHARE TRUCK AND AUTO EXP.	716	838	671
14 OPER. SHARE UPKEEP ON DWELLING	283	207	293
14A CASH RENT - PERSONAL			
15 PERSONAL SHARE TEL. AND ELECT. EXP.	453	528	415
15A PERSONAL SHARE - GEN. FARM EXPENSE	26		66
16 TOTAL CASH LIVING EXPENSE	\$ 13,115	\$ 12,812	\$ 11,640
17 PERS. SHARE NEW TRUCK AND AUTO	479	479	255
18 NEW DWELLING BOUGHT	3,381		193
19 TAXES AND OTHER DEDUCTIONS	4,363	6,186	1,097
20 LIFE INSURANCE AND OTHER SAVING AND INVEST	3,903	6,030	2,138
21 TOTAL HOUSEHOLD AND PERSONAL (16)-(20)	\$ 25,241	\$ 25,506	\$ 15,324
22 TOTAL FAMILY LIVING FROM THE FARM (31)	\$ 637	804	306
23 TOTAL CASH AND NON-CASH EXPENSES (21)+(22)	\$25,878	\$ 26,310	\$ 15,629
24 FAMILY LIVING FROM THE FARM			
25	QUANTITY	QUANTITY	QUANTITY
26 MILK AND CREAM (QUARTS)	837	998	511
27 BEEF AND BUFFALO (POUNDS)	868	1,189	180
28 PORK (POUNDS)	134	213	280
29 POULTRY, ALL FOWL (POUNDS)			
30 EGGS (DOZEN)			
31 TOTAL FAMILY LIVING FROM THE FARM	\$ 637	\$ 804	\$ 306

TABLE 4 reports the cash and non-cash expenses of the farm operator's household. Averages include only those members who kept household and personal accounts complete enough to include at least line 5 (food and meals bought). As a result, only 30 out of the 74 farms were included in the averages. Accurate household and personal accounts are important if a family is to manage its financial affairs wisely and be able to check the accuracy of their financial account at the end of the year. If the family is unable or unwilling to keep accurate household records, then a household checking account separate from the farm checking account might be used.

TABLE 5. OPERATOR'S NET WORTH STATEMENT AND SUPPLEMENTARY FINANCIAL INFO. - 1978- S.E.

ITEMS	Average of 64 Farms	
	Jan. 1	Dec. 31
1 TOTAL PRODUCTIVE LIVESTOCK	\$ 36,739	\$ 48,550
2 CROP, SEED AND FEED	47,634	57,638
3 TOTAL POWER, MACHINERY AND EQUIPMENT	40,978	46,001
4 LAND	77,066	85,339
5 BUILDINGS, FENCES, ETC.	50,689	59,725
6 TOTAL FARM CAPITAL	\$ 253,105	\$ 297,253
7 NON-FARM ASSETS	25,014	28,652
7A CASH ON HAND & IN BANK	4,218	4,694
8 DWELLING	16,957	17,691
9 TOTAL ASSETS	\$ 299,294	\$ 348,290
10 REAL ESTATE MORTGAGES	49,359	56,721
11 CHATTEL MORTGAGES	18,848	21,453
12 NOTES	12,300	16,779
13 ACCOUNTS PAYABLE	8,898	10,398
14 TOTAL LIABILITIES	\$ 89,406	\$ 105,351
15 FARMERS NET WORTH	\$ 209,888	\$ 242,939
16 GAIN (OR LOSS) IN NET WORTH		\$ 33,051
17 SUPPLEMENTARY FINANCIAL INFORMATION		
18 RETURN TO OPERATORS LABOR & MANAGEMENT (6B/47)	\$ 39,466	
19 RETURN TO CAPITAL AND FAMILY LABOR (6B/48)	51,217	
20 NON-FARM INCOME		
21 OUTSIDE INVESTMENT INCOME	1,255	
22 OTHER PERSONAL INCOME & INCOME TAX REFUND	2,930	
22A SALE OF PERSONAL SHARE -DWELLING, AUTO & TRUCK	32	
23 TOTAL NON-FARM INCOME	\$ 4,216	
24 TOTAL FAMILY FARM AND NON-FARM INCOME	\$ 55,434	
25 TOTAL MONEY BORROWED	\$ 36,280	
26 TOTAL PAID ON DEBT (PRINCIPAL)	\$ 20,680	
27 TOTAL HOUSEHOLD + PERSONAL CASH/NON-CASH EXP (4/23)	\$ 15,725	
28 RATIO TOTAL FARM EXP TO TOTAL FARM REC OPER SHARE	.776	
	JAN. 1	DEC. 31
29 RATIO TOTAL ASSETS TO TOTAL LIABILITIES	3.348	3.306
30 RATIO NON-REAL EST. ASSETS-NON-REAL EST. LIAB.	3.860	3.815
31 RATIO REAL EST. ASSETS TO REAL EST. LIAB.	2.932	2.869
32 RATIO NET WORTH TO TOTAL LIABILITIES	2.348	2.306
33 RATIO CASH OPER. EXP TO ADJ. TOTAL FARM SALES (O.S.)		.645
34 RATIO TOTAL FARM RECEIPTS TO AVG. FARM CAPITAL (W.F.)		.486
35 RATIO TOTAL FARM RECEIPTS TO AVG. FARM CAPITAL (O.S.)		.639

TABLE 5 reports the assets, liabilities and resultant net worth position of the farm operator at the beginning and end of the year. (This asset list differs from TABLE 1 in that it includes the operator's non-farm assets and excludes the land-lord's share of farm assets) It also shows the change in net worth, or the growth in operator's equity (owned capital) during the year. Note that this TABLE 5 does not include addition to net worth resulting from appreciation in land values or

(continued next page)

TABLE 5. OPERATOR'S NET WORTH STATEMENT AND SUPP. FINANCIAL INFO - 1978 (CONT.) - S.E.

ITEMS	12 Most		15 Least	
	Profitable Farms		Profitable Farms	
	Jan. 1	Dec. 31	Jan. 1	Dec. 31
1 TOTAL PROD LIVESTK	\$ 60,831	\$ 94,001	\$ 17,950	\$ 20,371
2 CROP, SEED AND FEED	68,305	93,556	37,150	36,399
3 TOT PWR MACH EQUIP	50,471	55,590	26,926	31,966
4 LAND	103,578	114,700	66,400	66,298
5 BLDG FENCE TILE ETC	68,087	77,825	41,520	42,636
6 TOTAL FARM CAPITAL	\$351,271	\$435,672	\$189,946	\$197,670
7 NON-FARM ASSETS	37,429	45,073	29,995	26,344
7A CASH ON HAND & BANK	3,111	1,226	4,016	5,001
8 DWELLING	19,936	20,109	14,389	14,995
9 TOTAL ASSETS	\$411,746	\$502,080	\$238,346	\$244,011
10 REAL ESTATE MORTGAGE	100,852	105,891	37,320	36,015
11 CHATTEL MORTGAGES	24,347	26,313	14,872	20,471
12 NOTES	27,293	40,796	9,894	9,132
13 ACCOUNTS PAYABLE	9,085	8,735	867	2,879
14 TOTAL LIABILITIES	\$161,576	\$181,734	\$ 62,954	\$ 68,497
15 FARMER NET WORTH	\$250,170	\$320,345	\$175,392	\$175,513
16 GAIN (LOSS) NET WORTH		\$ 70,175		\$ 121
17 SUPPLEMENTARY FINANCIAL INFORMATION				
18 RT OP LAB MGT 6B/47	\$ 88,598		\$ 5,867	
19 RT CAP FAM LAB 6B/48	105,786		13,167	
20 NON-FARM INCOME				
21 OUTSIDE INV INCOME	1,575		1,580	
22 OTHER PER INC & TX RF	3,452		3,543	
22A SAL PER SHR-DWLNG				
23 TOT NON FM INCOME	\$ 5,027		\$ 5,123	
24 TOT FAM FM & NMF IN	\$110,813		\$ 18,291	
25 TOTAL MONEY BORROWED	\$ 62,828		\$ 13,025	
26 TOT PD ON PRINCIPAL	\$ 42,198		\$ 7,484	
27 TOT HH & PER C & NC 4/23	\$ 23,599		\$ 8,319	
28 RATIO: TOT FM EX/REC OS	.683		.933	
	JAN. 1	DEC. 31	JAN. 1	DEC. 31
29 RATIO: TOT ASSET T/LIAB	2.548	2.763	3.786	3.562
30 RATIO: NON REA/RE LIAB	3.625	3.816	4.527	3.697
31 RATIO: RE ASST/RE LIAB	1.900	2.008	3.277	3.441
32 RATIO: N WRTH/TOT LIAB	1.548	1.763	2.786	2.562
33 RATIO: CA OP EX/AFSA OF		.655		.704
34 R: T FM REC/AV FM CAP WF		.528		.301
35 R: T FM REC/AV FM CAP OS		.709		.452

other capital assets, so for credit purposes the operator may wish to revalue those classes of assets. While TABLE 1 showed farm assets for all 74 farms included in the Association averages, TABLE 5 includes data from only those 64 sole proprietorships which had complete net worth data. Net worth data for partnerships were excluded when each partner had a separate analysis.

TABLE 6A. OPERATORS SHARE OF TOTAL FARM RECEIPTS - 1978 - S.E.

ITEMS	Average of 74 Farms	15 Most Profitable Farms	15 Least Profitable Farms
1 SALE OF LIVESTOCK AND LIVESTOCK PRODUCTS			
2 DAIRY COWS	\$ 4,503	4,153	2,037
3 DAIRY PRODUCTS	38,562	42,187	19,285
4 OTHER DAIRY CATTLE	3,103	2,255	1,080
5 BEEF BREEDING CATTLE	395	371	946
6 BEEF FEEDER CATTLE	7,482	14,421	448
7 HOGS COMPLETE & MIXED	36,934	96,863	12,090
8 HOGS FINISHING	3,964		7,690
9 HOGS PRODUCING WEANING PIGS	50		
10 SHEEP, GOATS AND WOOL, FARM FLOCK	53		
11 SHEEP AND WOOL, FEEDER LAMBS			
12 CHICKENS (INCL. HENS AND BROILERS)	10		
13 TURKEYS			
14 EGGS	314		
15 OTHER PRODUCTIVE LIVESTOCK & PRODUCTS			
16 OTHER MISCELLANEOUS LIVESTOCK INCOME			
17 TOTAL SALES OF PRODUCTIVE LIVESTOCK	\$ 95,371	160,251	43,577
18 SALE OF CROPS			
19 WHEAT	250	109	240
20 OTHER SMALL GRAIN	537	723	339
21 CORN	17,038	19,020	15,223
22 SOYBEANS	12,873	15,362	10,236
23 OTHER ROW CROPS	869	1,452	
24 LEGUMES & OTHER ROUGHAGE	250	664	193
25 GRASS SEED			
26 FRUITS & NUTS			
27 VEGETABLES, ROADSIDE MAKT. & SPECIALTY			
28 NURSERY, TIMBER & OTHER	9	45	
29 SET ASIDE ACRES - GOVERNMENT PAYMENTS	1,214	2,138	854
30 TOTAL SALES FROM CROPS	\$ 33,040	39,513	27,085
31 CAPITAL ASSETS SOLD	543	1,176	152
32 GAS TAX REFUND	210	230	174
33 INCOME FROM WORK OFF THE FARM	1,444	1,431	1,579
34 CUSTOM WORK ENTERPRISE INCOME			
35 PATRONAGE REFUNDS	1,776	2,345	1,177
36 MISCELLANEOUS FARM INCOME	1,963	2,006	2,021
37 TOTAL FARM SALES	\$ 134,347	206,951	75,765
38 INCREASE IN FARM CAPITAL	46,816	84,777	11,471
39 FAMILY LIVING FROM THE FARM	608	594	332
40 TOTAL FARM RECEIPTS (37)+(38)+(39)	\$ 181,771	292,322	87,568
41 ADJUSTED TOTAL FARM SALES (37)-(31)	133,803	205,775	75,613
42 TOTAL CASH FARM OPERATING EXPENSE	83,958	125,965	53,201
43 NET CASH OPERATING INCOME	\$ 49,845	79,810	22,412

SEE PAGE 14 FOR EXPLANATORY NOTE FOR THIS TABLE.

TABLE 6B. OPERATOR'S SHARE OF TOTAL FARM EXPENSES - 1978 - S.E.

ITEMS	Average of 74 Farms	15 Most Profitable Farms	15 Least Profitable Farms
1 PURCHASE OF LIVESTOCK			
2 DAIRY COWS	\$ 812	3,322	187
3 OTHER DAIRY CATTLE	668	168	89
4 BEEF BREEDING CATTLE	67		33
5 BEEF FEEDER CATTLE	3,205	9,399	
6 HOGS COMPLETE	995	1,046	127
7 HOGS FINISHING	1,958	2,131	3,636
8 HOGS PRODUCING WEANING PIGS	25		
9 SHEEP, FARM FLOCK	1		
10 SHEEP, FEEDER LAMBS			
11 CHICKENS	26		
12 TURKEYS			
13 OTHER PRODUCTIVE LIVESTOCK			
14 MISCELLANEOUS LIVESTOCK EXPENSE	4,535	5,864	2,630
15 FEED BOUGHT	14,230	24,268	7,230
16 FERTILIZER	7,469	10,907	5,799
17 CHEMICALS	3,952	5,599	2,599
18 OTHER CROP EXPENSE	8,706	10,579	5,183
19 IRRIGATION OPERATION COST	113	558	
20 CUSTOM WORK OPERATOR COSTS, INCL. LABOR			
21 CUSTOM WORK HIRED	3,233	4,539	2,088
22 REPAIR + UPKEEP OF LIVESTOCK EQUIPMENT	1,136	2,077	681
23 REPAIR + UPKEEP OF FARM REAL ESTATE	1,685	2,195	861
24 GAS, OIL, GREASE BOUGHT (FARM SHARE)	3,253	4,059	2,263
25 RPR & OPN MACH, TRAC, TRUCK, AUTO (FS)	4,295	5,556	2,975
26 REPAIR & UPKEEP OF IRRIGATION EQUIPMENT			
27 REPAIRS, CUSTOM WORK ENTERPRISE			
28 WAGES OF HIRED LABOR	3,931	6,135	2,259
29 PERSONAL PROPERTY + REAL ESTATE TAXES	2,877	3,854	2,027
30 CASH RENT	4,699	9,074	3,150
31 GENERAL FARM EXPENSES	2,028	2,363	1,364
32 TELEPHONE EXPENSE (FARM SHARE)	261	283	206
33 ELECTRICITY EXPENSE (FARM SHARE)	1,789	2,384	971
34 INTEREST EXPENSE	8,013	9,606	6,843
35 TOTAL CASH OPERATING EXPENSE	\$ 83,958	125,965	53,201
36 POWER, CROP & GENERAL MACH. BOUGHT (FS)	16,110	21,259	9,759
37 IRRIGATION EQUIPMENT BOUGHT			
38 CUSTOM WORK ENTERPRISE EQUIPMENT BOUGHT			
39 LIVESTOCK EQUIPMENT BOUGHT	2,851	2,925	2,583
40 NEW REAL ESTATE + IMPROVEMENTS	21,679	28,774	4,907
41 TOTAL FARM PURCHASES (35) THRU (40)	\$124,597	178,924	70,450
42 DECREASE IN FARM CAPITAL	1,444		3,747
43 INTEREST ON FARM CAPITAL (EQUITY)	11,600	18,757	6,724
44 UNPAID FAMILY LABOR	896	1,374	576
45 BOARD FURNISHED HIRED LABOR	301	152	204
46 TOTAL FARM EXPENSE (41) THRU (45)	\$138,838	199,206	81,701
47 RETURN TO OPERATOR LABOR & MANAGEMENT (OPERATORS SHARE) (6A/40)-(46)	\$ 42,933	93,116	5,867
48 RETURN TO CAPITAL AND FAMILY LABOR (47)+(44)+(43)	\$ 55,428	113,247	13,167

EXPLANATORY NOTES FOR TABLES 2A, 2B, 3, 6A, 6B

TABLES 2A & 2B comprise the earnings statement for the whole farm (including both operator's and landlord's shares). Lines 1 through 34 and line 36 of TABLE 2A show all sources of cash income to the farm. Line 38 reflects any increase in farm capital, while line 39 credits the business for any produce used by the family. Line 35 records the amount of patronage refunds credited to the business, part of which may have been received as cash and part as equity shares. TABLE 2B shows in lines 1 through 39 all cash expenses of the farm except principal and interest payments on farm debt. Note that cash rent is also not included, as it is an internal farm transaction between operator and landlord. Line 40 reflects any decrease in inventory while line 41 shows an interest return or charge of 6% for all farm capital. Line 46, Labor Earnings, represents the return for the operator's labor and management after all expenses (cash, accrual and imputed) are deducted. In the case of partnerships, line 43 assigns a fixed return to one partner, with the residual return going to the other (line 46). In line 49, the fixed return to one partner is added back to the residual (line 46) and that number is divided equally among the partners.

TABLE 3 represents another way of categorizing and reporting the receipts, expenses and labor earnings of the total farm business. In lines 2-21, cash receipts are adjusted for changes in inventory for each production enterprise, thus giving a better picture of the "value produced" contribution of each enterprise. In lines 24-30, each category of cash expense is adjusted for inventory. Line 33, fixed return to one partner, and line 36, interest charge on farm capital, are handled in the same manner as comparable items were in TABLE 2B (lines 43 and 41, respectively). Although calculated in a different way, the resulting labor earnings (line 38) is equal to that in TABLE 2B (line 46). Lines 24, 25, 28, and 29 actually report the sum of four cost items for each of these categories of capital assets. They are: depreciation; gas, oil, and grease bought; repair and operation cost; and share of custom work hired that was attributed to this category of asset (i.e., 80% of milk hauling cost might be attributed to truck and auto expense. While depreciation cannot be calculated directly from these tables, it can be approximated by the calculation: beginning inventory (TABLE 1) plus asset bought (TABLE 2B) minus ending inventory (TABLE 1). The number missing for a complete depreciation calculation is capital asset sales, which is not given for each category of assets in these tables (but is given for all assets in TABLE 2A).

TABLES 6A & 6B constitute the earnings statement for the operator. TABLES 6A & 6B therefore, are similar to TABLES 2A & 2B, except 6A & 6B exclude the landlord's share of income and expenses. Thus for the full owner-operator, TABLES 2A & 6A should be identical through line 40. TABLES 2B and 6B differ in that 6B includes cash rent paid (line 30) and interest paid on borrowed money (line 34). Line 43 of TABLE 6B thus contains an interest charge on only the operator's equity farm capital, whereas in line 41, TABLE 2B, interest was charged on all farm capital. Line 48 of TABLE 6B thus represents return to operator and family unpaid labor and management and equity capital. When money spent on family living is subtracted from line 48, the remainder plus non-farm income should be equal to the increase in net worth, shown in line 16 of TABLE 5.

SUPPLEMENTARY INFORMATION USED IN ENTERPRISE ANALYSIS

Number of Work Units for Crop and Livestock Enterprises

Livestock Enterprise	Work Units	Crop Enterprise	Work Units Per Acre
Complete Hog Enterprise	.12/cwt	Oats, wheat	.30
Dairy cows	7.00/cow	Canning Corn	.50
Other Dairy Cattle	1.20/head	Corn for grain	.55
Beef Feeder Cattle, Feedlot	.12/cwt	Soybeans	.45
		Canning Peas	.40
		Alfalfa Hay, Corn Silage	.60
		Oats Silage	.40
		Legume Pastures	.05

Average Prices Used in Analysis

Product	Feed	Harvest	a/ Beginning Inventory	Ending Inventory	Pasture per head per mo
Oats/bu	\$ 1.10	\$ 0.75	\$ 1.15	\$ 1.15	Cows \$ 6.00
Wheat/bu	2.80	2.80	2.50	3.00	Calves 3.00
Corn for Grain/bu	2.00	1.80	1.85	1.95	Hogs 0.40
Soybeans/bu	--	6.00	5.50	6.25	
Alfalfa Hay/ton	40.00	40.00	50.00	40.00	Products Used at Home
All other Hay/ton	35.00	35.00	40.00	35.00	Straw \$.75/bale
Corn Silage/ton	15.00	15.00	15.00	15.00	Milk 1.00/gal.
Oats Silage/ton	12.00	12.00	15.00	12.00	Cream 1.00/qt.
Unpaid family labor \$600/mo. or \$3.00/hr.					Eggs 0.60/doz.
Board for hired labor \$4/day or \$1.00/meal					
Second Operator's Labor \$12,000/yr.					

Animal or Livestock Units Used in Analysis

Enterprise	Per Adult	Per Other
Complete Hogs	.40	.20
Dairy Cows	1.00	.50
Other Dairy Cattle	1.00	.50
Beef Feeder Cattle	1.00	1.00

a/ For crop enterprise analysis (TABLE 10's) a constant harvest price was used on almost all farms, but other prices were used on a few. Therefore when comparing your own individual analysis for a particular crop with the Association average, be sure to check the price used in your analysis with Association average price (line 3 of TABLE 10's) and adjust your returns accordingly.

DESCRIPTION OF MEASURES OF FARM ORGANIZATION AND MANAGEMENT EFFICIENCY

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

1. Labor Earnings - A measure of the relative financial return for the operator's labor taking into account all income and expense, cash and non-cash, including a charge for the use of farm capital. This is based on the whole farm business and is found in Table 2B and Table 3.
2. Crop Yield Index - A measure of the crop yield level for all crops produced expressed as a percentage of the Association average.
3. Percent of Tillable Land in High Return Crops - A measure of crop selection based on a rating of individual crops. Crop ratings take into account such things as dollar return, effect on soil, TDN yield, labor required, etc. Ratings can be found on Table 9.
4. Gross Return Per Acre - An additional measure of crop selection based on total production times and average price for the crops.
5. Return per \$100 Feed Fed to Productive Livestock - Measures the general level of efficiency for all livestock. It is expressed as a percentage of the Association average and combines the individual index for all livestock enterprises on the farm into one figure.
6. Livestock Units Per 100 Acres - A measure of livestock density or population. Unit values are assigned to the various classes of livestock.
7. Size of Business - Work Units - A measure of the size of farm business, or 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. Total work units may also be interpreted differently for different farm situations such as work efficiency, degree of mechanization, careful planning, or hours worked. While it does not measure how hard a farmer works, it does measure how much is being accomplished on the farm.
8. Work Units Per Worker - Measures labor efficiency. Total work units divided by the number of workers including the operator, hired labor, and family labor.
9. Power, Machinery, Equipment and Building Expense Per Work Unit - A measure of expense control. It is the total cost of items listed in Table 3 divided by the number of work units.
10. Farm Capital Investment Per Worker - Indicates size of business. Useful in comparing a farm business to other industries or businesses.

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 AND EFFICIENCY - 1978 - S.E.

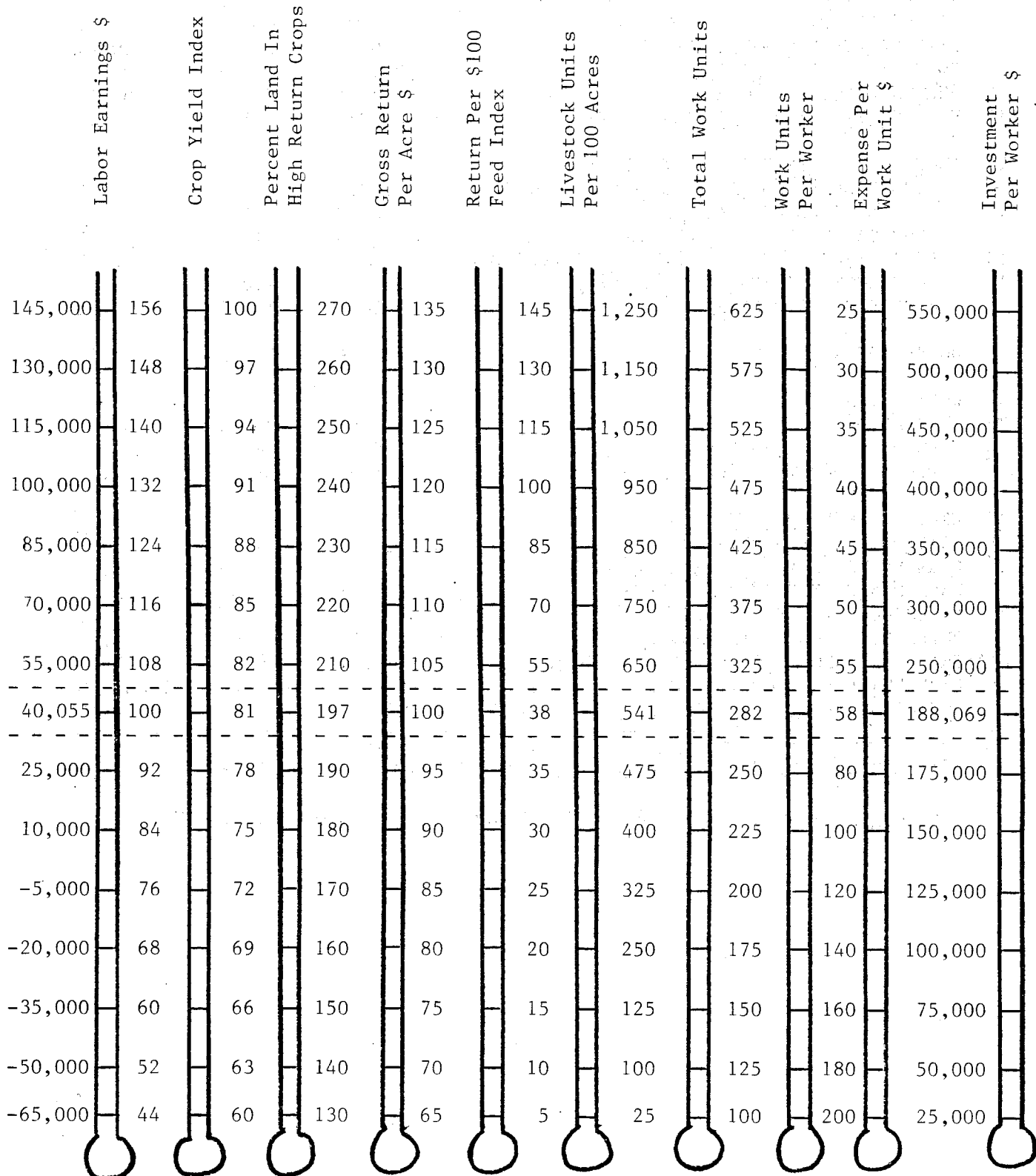
ITEMS	Average of 74 Farms	15 Most Profitable Farms	15 Least Profitable Farms
1 RETURN TO OPERATORS LABOR & MANAGEMENT	\$ 40,055	93,639	(-2,033)
2 CROP YIELD INDEX	99.9	112.6	91.0
3 PERCENT TILLABLE LAND IN HIGH RETURN CROP	81.0	84.9	83.4
4 GROSS RETURN PER TILL ACRE (EXCL PASTURE)	\$ 197.28	217.73	154.27
5 RET PER \$100 FEED FED PROD LVSTOCK INDEX	100.0	109.3	82.1
6 *LIVESTOCK UNITS PER 100 ACRES	37.77	53.05	25.60
7 SIZE OF BUSINESS-WORK UNITS	540.91	734.21	359.61
8 WORK UNITS PER WORKER	281.72	320.62	226.17
9 PWR MACH EQUIP BLDG EXPENSE/WORK UNIT	\$ 57.64	54.06	61.64
10 FARM CAPITAL INVESTMENT PER WORKER	\$ 188,069	201,506	225,885
11 INDEX OF RETURN PER \$100 FEED FED			
12 6100 BEEF BREEDING FARM, WHOLE HRD, COM	100.0	115.0	72.2
13 6140 BEEF FEEDERS FEEDLOT	100.0	90.8	---
14 6290 DAIRY COWS, COMMERCIAL, GENERAL	100.0	115.7	90.2
15 6310 OTHER DAIRY, COMMERCIAL, REPLACEMENTS	100.0	85.6	89.8
16 6470 HOGS, FARROW, FINISH, GENERAL	100.0	112.2	78.7
17 6490 HOGS, FINISHING	100.0	172.1	81.2
30 NUMBER OF ANIMAL UNITS	126.76	236.12	70.20
31 WORK UNITS			
32 CROPS	166.68	229.89	132.99
33 PRODUCTIVE LIVESTOCK	358.58	496.26	212.30
34 OTHER PRODUCTIVE WORK UNITS	15.65	8.07	14.32
35 EXPENSES PER WORK UNIT			
36 TRACTOR & CROP MACHINERY EXPENSE	\$ 27.36	24.43	28.37
37 FARM SHARE OF AUTO & TRUCK EXPENSE	\$ 7.39	7.13	6.33
38 FARM SHARE OF ELECTRIC EXPENSE	\$ 3.31	2.87	2.99
39 LIVESTOCK EQUIPMENT EXPENSE	\$ 6.51	6.73	8.42
40 BUILDING, FENCE & TILLING EXPENSE	\$ 13.06	12.91	15.53
41**TRACTOR & CROP MACH EXPENSE/CROP ACRE	\$ 44.41	40.11	37.77
42 FARM PWR & MACH COST ALLOCATED TO LVSTK	\$3,494.82	3,657.11	1,885.28
43 BUILDING, FENCE TILE COST ALLOC TO CROPS	\$1,985.62	1,560.65	2,194.16

* ACRES INCLUDE ALL TILLABLE LAND, NON-TILLABLE HAY & PASTURE

** ACRES INCLUDE ALL TILLABLE LAND PLUS ACRES IN NON-TILLABLE HAY

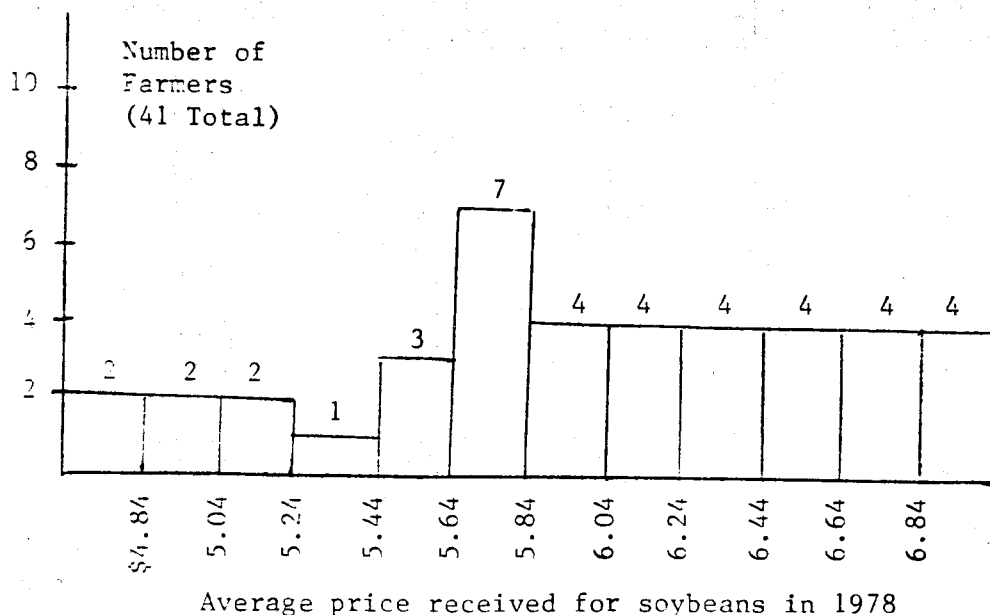
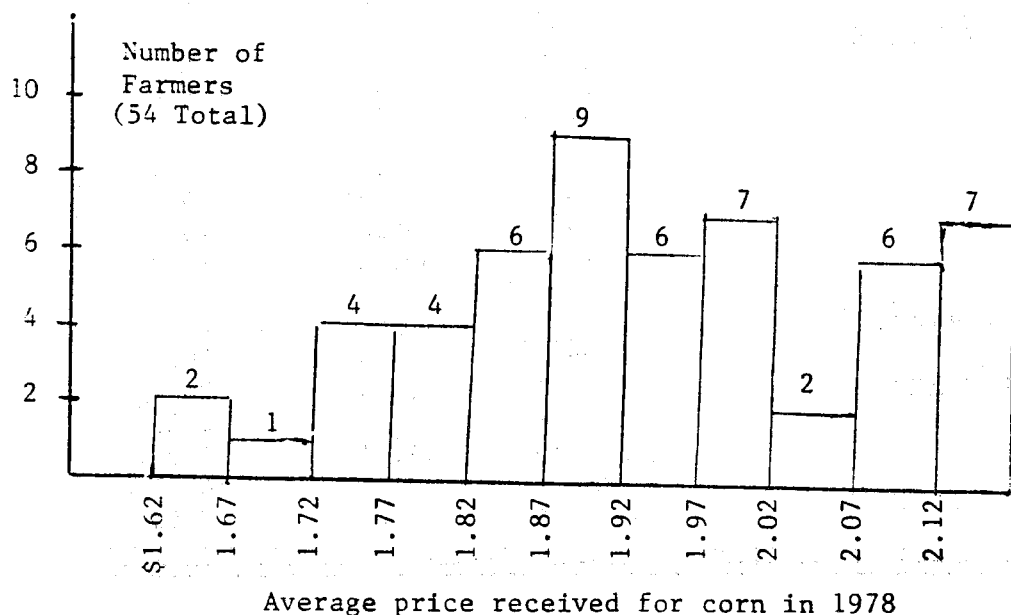
THERMOMETER CHART - 1978 - S.E.

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



MARKETING MANAGEMENT

During the course of account book close out and coding for the computer-run analysis, data were collected on corn and soybean marketing. It has been recognized for some time that the measures of farm organization and efficiency shown in Table 8 no longer adequately explain variations in labor and management earnings on specialized crop farms or farms on which the major source of income is from crops sales. Therefore in an attempt to improve the farm business analysis, our research in farm accounting is aimed at how farmers manage the marketing of their crops. Information on this page deals with average price received for all corn and all soybeans sold during the calendar year 1978. At a later time we will be looking at the effect of frequency of marketing throughout the year. The average price received for corn and soybeans by all farmers included on this page are shown between the dotted lines in the center of the thermometer chart.



Avg. price/bu. received for all sales in 1978

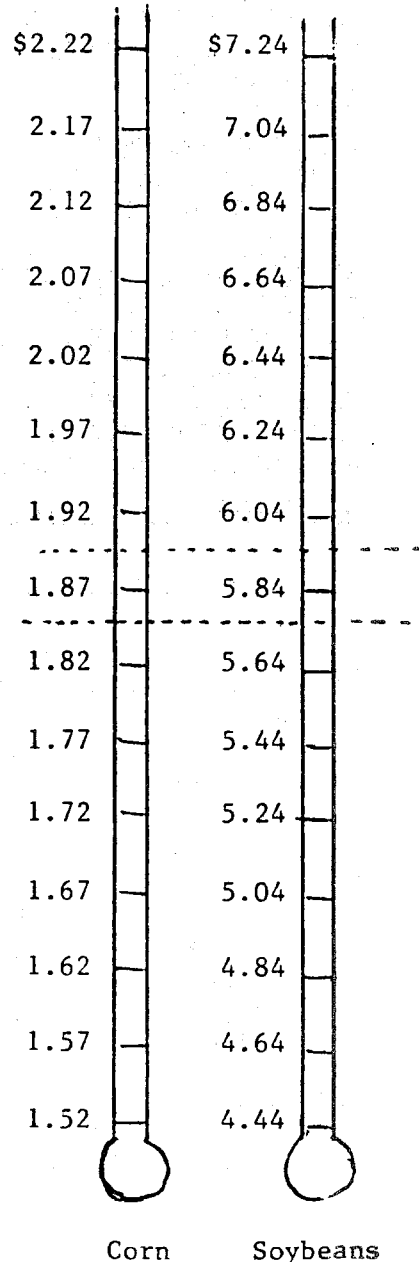


TABLE 9. CROP ACRES, YIELDS, RETURNS AND SUPPLEMENTARY MANAGEMENT INFORMATION - S.E.

CROP	Average of 74 Farms	15 Most Profitable Farms	15 Least Profitable Farms
	Acres	Acres	Acres
SMALL GRAIN & CANNING PEAS	22.3	20.1	13.8
ROW CROPS	230.7	336.9	194.2
LEGUMES, INCLUDING SEED	47.1	55.7	32.0
OTHER HAY	.9		
SILAGE & FODDER	12.3	9.0	7.9
TILLABLE PASTURE	5.5	1.5	4.5
FALLOW & IDLE LAND	13.7	20.0	17.9
TILLABLE LAND	332.5	443.2	270.3
NON TILLABLE HAY/PASTURE	3.1	1.9	4.1
WILD HAY NOT HARVESTED (NON TILLABLE)	3.1	2.0	8.4
PASTURE NOT HARVESTED	10.2	7.8	10.3
TIMBER NOT HARVESTED	14.0	18.2	3.9
ROADS & WASTE	11.6	19.4	6.7
FARMSTEAD	10.6	9.1	7.5
LAND NOT HARVESTED	49.5	56.5	36.8
NON TILLABLE LAND	52.6	58.4	40.9
LAND IN FARM OR RANCH	385.1	501.6	311.2
SUPPLEMENTARY MANAGEMENT INFORMATION			
PERCENT LAND TILLABLE	86.3	88.4	86.8
PERCENT LAND IN HIGH RETURN CROPS	81.0	84.9	83.4
FERTILIZER COST PER ACRE	\$ 23.25	26.11	22.25
CROP CHEMICALS PER ACRE	\$ 12.19	12.41	11.04
SEED & OTHER COSTS PER ACRE	\$ 16.31	16.50	16.61
GAS, OIL & GREASE BOUGHT PER ACRE	\$ 7.35	6.49	7.52

Crop	Crop Rank	No. Farms Growing	Acres Per Farm	Total Acres	Avg. Yield Per Acre	Return Over Direct Costs Per Acre
Barley	D	2	30.7	61	58.1 bu.	\$ 34.02
Oats	D	45	27.3	1,229	65.1 bu.	28.09
Spring Wheat	C	7	22.6	158	25.7 bu.	26.14
Canning Corn	B	3	62.0	186	\$101.10	47.80
Corn for Grain	A	75	156.4	11,730	124.8 bu.	77.13
Soybeans	A	44	101.7	4,475	39.2 bu.	32.66
Alfalfa Hay	B	62	55.9	3,466	4.6 t	22.38
Oats Silage	C	6	32.0	192	5.6 t	17.69
Corn Silage	A	37	19.6	725	17.9 t	59.84
Legume Pastures	D	16	25.4	406	\$ 49.92	9.42
Non-Tillable						
Pasture	D	10	23.0	230	\$ 42.17	1.35
Set Aside Acres	B	31	34.6	1,073	\$ 84.10 ^{a/}	3.41

^{a/} Average deficiency payment per acre.

DESCRIPTION OF CROPS TABLES

The following tables for each individual crop represent an attempt to calculate the costs and returns for these enterprises. Returns include the value of the crop produced -- line 4 -- (which was calculated as measured yield multiplied by a common harvest-time price -- see footnote for exceptions) plus other crop income. The latter has two components: a cash component, such as diverted acre payments, deficiency payments, crop insurance payments for a loss, sale of a by-product (such as straw) etc.; and a non-cash component, which is the operator's estimate of the value of straw, corn stalks, and other crop by-products and residues used in livestock enterprises.

Two categories of costs are calculated. The first consists of costs that are "directly" attributable to that crop, such as fertilizer, chemicals, seed, etc., and are normally recorded on pages 38-39 of the Account Book. These are normally all cash costs, although some may have been actually paid in a previous year, i.e., fertilizer paid for last year but used on this year's crop. Thus the sum of fertilizer costs for all crops may not necessarily equal total fertilizer purchased in the current year as reported in TABLES 2B and 6B. The costs in this "direct" category may also be called variable costs, in two ways. The first is in that the level of these costs per acre can be varied by the farmer, such as varying the amount of fertilizer per acre, etc. The second is in that the total of these costs usually vary in direct proportion to the number of acres grown. For example, if 10% fewer acres of corn were planted, expenses for corn seed and fertilizer might decrease by 10%. The second category of costs represents an attempt to "allocate" some costs that are not easily attributable to a specific enterprise. Some are cash costs and others are non-cash, some are variable and others are fixed or overhead costs. For example, the ownership cost of farm power and machinery consists of depreciation, which is a non-cash, fixed cost that continues even if corn acreage is cut back by 10%. In contrast, the operation cost of farm power and machinery, which, includes fuel, lubricants, and repair, is a cash variable cost.

The power and machinery costs (both ownership and operation) were allocated among crop (and livestock when present) enterprises on the basis of work units. The ownership costs and the total operation costs are each divided by the sum of total crop work units plus one-tenth of the total livestock work units (or one-twelfth if livestock work units are greater than 400) because livestock uses relatively less power per work unit than crops. The resulting ownership cost per work unit is then multiplied by the standard work unit per acre figure to obtain the allocated cost per acre. The same procedure is followed for operation costs. If the operator feels that this procedure does not adequately reflect his relative use of power among enterprises, or if he wants some enterprises to carry a relatively heavier cost burden than others, then he may modify the allocation by the use of different values for the Power Cost Allocation Factor (PCAF).

Land cost shown is an attempt to measure the opportunity cost of the land. For the tenant, the cash rent or equivalent was reported. For the owner-operator, the amount that could be received for renting out the land was obtained. Interest on machinery and equipment investment was calculated at 6% on the average amount held during the year (beginning plus ending inventories divided by two).

TABLE 10-0105 - CROP DATA FOR OATS - FEED - 1978 - S.E.

ITEMS	Average of 45 Farms	22 Farms Highest in Yield	22 Farms Lowest in Yield
1 ACRES	27.3	28.4	24.7
2 YIELD PER ACRE, BUSHELS	65.1	77.0	52.1
3 VALUE PER BUSHEL	\$.75	.75	.75
4 CROP PRODUCT RETURN	48.86	57.75	39.11
5 OTHER CROP INCOME	2.01	.74	3.68
6 TOTAL CROP RETURN PER ACRE	\$ 50.87	58.49	42.79
7 DIRECT COSTS PER ACRE			
8 FERTILIZER	\$ 5.05	5.67	4.94
9 CHEMICALS	3.48	6.65	.20
10 SEED & OTHER	10.11	8.84	10.61
11 SPECIAL HIRED LABOR			
12 CUSTOM WORK HIRED	4.14	4.19	4.33
13 IRRIGATION OPERATION			
14 TOTAL DIRECT COSTS PER ACRE	\$ 22.78	25.35	20.08
15 RETURN OVER DIRECT COSTS PER ACRE	\$ 28.09	33.14	22.71
16 ALLOCATED COSTS PER ACRE			
17 FARM POWER & MACHINERY - OWNERSHIP	\$ 13.86	11.58	17.70
18 FARM POWER & MACHINERY - OPERATION	9.71	9.32	10.49
19 IRRIGATION EQUIPMENT - OWNERSHIP			
20 LAND COSTS	63.73	66.14	61.27
21 MISCELLANEOUS COSTS			
22 INTEREST ON MACH. & EQUIP. INVESTMENT	3.53	2.80	4.69
23 TOTAL ALLOCATED COSTS PER ACRE	\$ 90.83	89.84	94.15
24 RETURN OVER ALL LISTED COSTS PER ACRE	\$(-62.74)	(-56.70)	(-71.44)
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	.30	.30	.30
27 POWER COSTS ALLOCATION FACTOR	.84	.84	.85
28 TOTAL LISTED COST PER BUSHEL	\$ 1.74	1.50	2.19
29 RETURN OVER LISTED COSTS PER BUSHEL	\$ (-.96)	(-.74)	(-1.37)
30* BREAK-EVEN YIELD, BUSHELS	151.48	153.59	152.31
31 TOTAL LISTED COSTS PER ACRE	\$113.61	115.19	114.23

* TO COVER TOTAL LISTED COSTS PER ACRE (LINE 31) AT PRICE GIVEN ON LINE 3.

TABLE 10-0195 - CROP DATA FOR SPRING WHEAT - 1978 - S.E.

ITEMS	Average of 7 Farms	3 Farms Highest in Yield	3 Farms Lowest in Yield
1 ACRES	22.6	22.0	22.8
2 YIELD PER ACRE, BUSHELS	25.7	30.4	21.4
3 VALUE PER BUSHEL	\$ 2.51	2.12	2.80
4 CROP PRODUCT RETURN	64.51	64.45	59.91
5 OTHER CROP INCOME	5.80		13.42
6 TOTAL CROP RETURN PER ACRE	\$ 70.31	64.45	73.33
7 DIRECT COSTS PER ACRE			
8 FERTILIZER	\$ 8.98	2.05	16.58
9 CHEMICALS	.04		
10 SEED & OTHER	7.39	4.55	10.92
11 SPECIAL HIRED LABOR			
12 CUSTOM WORK HIRED	9.73	2.91	17.85
13 IRRIGATION OPERATION			
14 TOTAL DIRECT COSTS PER ACRE	\$ 26.14	9.51	45.35
15 RETURN OVER DIRECT COSTS PER ACRE	\$ 44.17	54.94	27.98
16 ALLOCATED COSTS PER ACRE			
17 FARM POWER & MACHINERY - OWNERSHIP	\$ 22.83	31.65	15.65
18 FARM POWER & MACHINERY - OPERATION	9.64	10.84	9.99
19 IRRIGATION EQUIPMENT - OWNERSHIP			
20 LAND COSTS	64.29	75.00	58.33
21 MISCELLANEOUS COSTS			
22 INTEREST ON MACH. & EQUIP. INVESTMENT	3.94	4.75	3.28
23 TOTAL ALLOCATED COSTS PER ACRE	\$ 100.70	122.24	87.25
24 RETURN OVER ALL LISTED COSTS PER ACRE	\$ (-56.53)	(-67.30)	(-59.27)
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	.30	.30	.30
27 POWER COSTS ALLOCATION FACTOR	.77	.83	.63
28 TOTAL LISTED COST PER BUSHEL	\$ 4.93	4.33	6.20
29 RETURN OVER LISTED COSTS PER BUSHEL	\$ (-2.20)	(-2.21)	(-2.77)
30* BREAK-EVEN YIELD, BUSHELS	50.53	62.15	47.36
31 TOTAL LISTED COSTS PER ACRE	\$ 126.84	131.75	132.60

* TO COVER TOTAL LISTED COSTS PER ACRE (LINE 31) AT PRICE GIVEN IN LINE 3.

TABLE 10-0275 - CROP DATA FOR CORN FOR GRAIN - 1978 - S.E.

ITEMS	Average of 75 Farms	37 Farms Highest in Yield	37 Farms Lowest in Yield
1 ACRES	156.4	180.6	132.6
2 YIELD PER ACRE, BUSHELS	124.8	140.2	103.9
3 VALUE PER BUSHEL	\$ 1.80	1.80	1.80
4 CROP PRODUCT RETURN PER ACRE	224.73	252.36	187.10
5 OTHER CROP INCOME PER ACRE	.01	.02	
6 TOTAL CROP RETURN PER ACRE	\$ 224.74	252.38	187.10
7 DIRECT COSTS PER ACRE			
8 FERTILIZER	\$ 34.90	37.14	31.23
9 CHEMICALS	16.56	17.06	15.87
10 SEED & OTHER	21.55	22.11	20.81
11 SPECIAL HIRED LABOR	.02	.03	
12 CUSTOM WORK HIRED	4.05	3.53	4.89
13 IRRIGATION OPERATION	.05	.09	
14 TOTAL DIRECT COSTS PER ACRE	\$ 77.13	79.96	72.80
15 RETURN OVER DIRECT COSTS PER ACRE	\$ 147.61	172.42	114.30
16 ALLOCATED COSTS PER ACRE			
17 FARM POWER & MACHINERY - OWNERSHIP	\$ 27.53	29.96	24.50
18 FARM POWER & MACHINERY - OPERATION	19.67	19.77	19.47
19 IRRIGATION EQUIPMENT - OWNERSHIP			
20 LAND COSTS	68.44	74.05	62.51
21 MISCELLANEOUS COSTS	.04		.09
22 INTEREST ON MACH. & EQUIP. INVESTMENT	7.50	7.57	7.45
23 TOTAL ALLOCATED COSTS PER ACRE	\$ 123.18	131.35	114.02
24 RETURN OVER ALL LISTED COSTS PER ACRE	\$ 24.43	41.07	.28
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	.55	.55	.55
27 POWER COSTS ALLOCATION FACTOR	.91	.92	.90
28 TOTAL LISTED COST PER BUSHEL	\$ 1.60	1.51	1.80
29 RETURN OVER LISTED COSTS PER BUSHEL	\$.20	.29	
30* BREAK-EVEN YIELD, BUSHELS	111.28	117.39	103.79
31 TOTAL LISTED COSTS PER ACRE	\$ 200.31	211.31	186.82

* TO COVER TOTAL LISTED COSTS PER ACRE (LINE 31) AT PRICE GIVEN IN LINE 3.

TABLE 10-0335 - CROP DATA FOR SOYBEANS - 1978 - S.E.

ITEMS	Average of 44 Farms	22 Farms Highest in Yield	22 Farms Lowest in Yield
1 ACRES	101.7	94.1	109.4
2 YIELD PER ACRE - BUSHELS	39.2	45.1	34.1
3 VALUE PER BUSHEL	\$ 5.86	6.00	5.73
4 CROP PRODUCT RETURN PER ACRE	229.73	270.67	195.31
5 OTHER CROP INCOME PER ACRE			
6 TOTAL CROP RETURN PER ACRE	\$ 229.73	270.67	195.31
7 DIRECT COSTS PER ACRE			
8 FERTILIZER	\$ 5.68	6.28	5.16
9 CHEMICALS	13.73	14.85	12.75
10 SEED & OTHER	11.06	10.49	11.54
11 SPECIAL HIRED LABOR	.02	.03	
12 CUSTOM WORK HIRED	2.17	2.69	1.73
13 IRRIGATION OPERATION			
14 TOTAL DIRECT COSTS PER ACRE	\$ 32.66	34.34	31.18
15 RETURN OVER DIRECT COSTS PER ACRE	\$ 197.07	236.33	164.13
16 ALLOCATED COSTS PER ACRE			
17 FARM POWER & MACHINERY - OWNERSHIP	\$ 21.86	22.37	21.40
18 FARM POWER & MACHINERY - OPERATION	15.34	14.63	15.95
19 IRRIGATION EQUIPMENT - OWNERSHIP			
20 LAND COSTS	70.98	74.09	67.86
21 MISCELLANEOUS COSTS			
22 INTEREST ON MACH. & EQUIP. INVESTMENT	6.22	6.10	6.32
23 TOTAL ALLOCATED COSTS PER ACRE	\$ 114.40	117.19	111.53
24 RETURN OVER ALL LISTED COSTS PER ACRE	\$ 82.67	119.14	52.60
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	.45	.45	.45
27 POWER COSTS ALLOCATION FACTOR	.93	.93	.93
28 TOTAL LISTED COST PER BUSHEL	\$ 3.75	3.36	4.19
29 RETURN OVER LISTED COSTS PER BUSHEL	\$ 2.11	2.64	1.54
30* BREAK-EVEN YIELD, BUSHELS	25.10	25.26	24.91
31 TOTAL LISTED COSTS PER ACRE	\$ 147.06	151.53	142.71

* TO COVER TOTAL LISTED COSTS PER ACRE (LINE 31) AT PRICE GIVEN IN LINE 3.

TABLE 10-0400 - CROP DATA FOR ALFALFA HAY - 1978 - S.E.

ITEMS	Average of 62 Farms	31 Farms	31 Farms
		Highest in Yield	Lowest in Yield
1 ACRES	55.9	68.7	43.1
2 YIELD PER ACRE, TONS	4.6	5.6	3.1
3 VALUE PER TON	\$ 40.00	40.00	40.00
4 CROP PRODUCT RETURN PER ACRE	\$ 184.62	222.42	123.43
5 OTHER CROP INCOME PER ACRE			
6 TOTAL CROP RETURN PER ACRE	\$ 184.62	222.42	123.43
7 DIRECT COSTS PER ACRE			
8 FERTILIZER	\$ 9.37	10.73	7.22
9 CHEMICALS	.38	.55	.09
10 SEED & OTHER	9.41	10.32	7.96
11 SPECIAL HIRED LABOR			
12 CUSTOM WORK HIRED	3.06	3.03	3.11
13 IRRIGATION OPERATION	.16	.28	
14 TOTAL DIRECT COSTS PER ACRE	\$ 22.38	24.91	18.38
15 RETURN OVER DIRECT COSTS PER ACRE	\$ 162.24	197.51	105.05
16 ALLOCATED COSTS PER ACRE			
17 FARM POWER & MACHINERY - OWNERSHIP	\$ 31.71	34.66	27.00
18 FARM POWER & MACHINERY - OPERATION	20.87	22.55	18.19
19 IRRIGATION EQUIPMENT - OWNERSHIP			
20 LAND COSTS	65.08	68.39	61.77
21 MISCELLANEOUS COSTS	.02		.05
22 INTEREST ON MACH. & EQUIP. INVESTMENT	7.74	8.43	6.65
23 TOTAL ALLOCATED COSTS PER ACRE	\$ 125.42	134.03	113.66
24 RETURN OVER ALL LISTED COSTS PER ACRE	\$ 36.82	63.48	(-8.61)
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	.60	.60	.60
27 POWER COSTS ALLOCATION FACTOR	.90	.96	.84
28 TOTAL LISTED COST PER TON	\$ 32.02	28.58	42.79
29 RETURN OVER LISTED COSTS PER TON	\$ 7.98	11.42	(-2.79)
30* BREAK-EVEN YIELD, TONS	3.70	3.97	3.30
31 TOTAL LISTED COSTS PER ACRE	\$ 147.80	158.94	132.04

* TO COVER TOTAL LISTED COSTS PER ACRE (LINE 31) AT PRICE GIVEN IN LINE 3.

TABLE 10-0545 - CROP DATA FOR GRAIN (OATS) SILAGE - 1978 - S.E.

ITEMS		Average of 6 Farms		
1	ACRES		32.0	
2	YIELD PER ACRE, TONS		5.6	
3	VALUE PER TON		\$ 12.00	
4	CROP PRODUCT RETURN PER ACRE		\$ 66.75	
5	OTHER CROP INCOME PER ACRE			
6	TOTAL CROP RETURN PER ACRE		\$ 66.75	
7	DIRECT COSTS PER ACRE			
8	FERTILIZER		\$ 10.81	
9	CHEMICALS			
10	SEED & OTHER		6.50	
11	SPECIAL HIRED LABOR			
12	CUSTOM WORK HIRED			
13	IRRIGATION OPERATION		.38	
14	TOTAL DIRECT COSTS PER ACRE		\$ 17.69	
15	RETURN OVER DIRECT COSTS PER ACRE		\$ 49.06	
16	ALLOCATED COSTS PER ACRE			
17	FARM POWER & MACHINERY - OWNERSHIP		\$ 25.75	
18	FARM POWER & MACHINERY - OPERATION		13.32	
19	IRRIGATION EQUIPMENT - OWNERSHIP			
20	LAND COSTS		62.50	
21	MISCELLANEOUS COSTS			
22	INTEREST ON MACH. & EQUIP. INVESTMENT		6.50	
23	TOTAL ALLOCATED COSTS PER ACRE		\$108.07	
24	RETURN OVER ALL LISTED COSTS PER ACRE		\$(-59.01)	
25	SUPPLEMENTARY MANAGEMENT INFORMATION			
26	WORK UNITS ASSIGNED PER ACRE	.40	.40	.40
27	POWER COSTS ALLOCATION FACTOR	.85	1.00	.70
28	TOTAL LISTED COST PER TON	\$ 22.61	19.21	38.20
29	RETURN OVER LISTED COSTS PER TON	\$(-10.61)	(-7.21)	(-26.20)
30*	BREAK-EVEN YIELD, TONS	10.48	10.37	11.14
31	TOTAL LISTED COSTS PER ACRE	\$ 125.76	124.45	133.66

* TO COVER TOTAL LISTED COSTS PER ACRE (LINE 31) AT PRICE GIVEN IN LINE 3.

TABLE 10-0550 - CROP DATA FOR CORN SILAGE - 1978 - S.E.

ITEMS	Average of 37 Farms	18 Farms Highest in Yield	19 Farms Lowest in Yield
1 ACRES	19.6	20.2	19.9
2 YIELD PER ACRE, TONS	17.9	21.3	14.4
3 VALUE PER TON	\$ 14.84	15.00	14.67
4 CROP PRODUCT RETURN PER ACRE	265.77	319.31	210.85
5 OTHER CROP INCOME PER ACRE			
6 TOTAL CROP RETURN PER ACRE	\$ 265.77	319.31	210.85
7 DIRECT COSTS PER ACRE			
8 FERTILIZER	\$ 26.79	28.91	24.92
9 CHEMICALS	14.74	14.01	15.58
10 SEED & OTHER	13.98	11.19	16.83
11 SPECIAL HIRED LABOR			
12 CUSTOM WORK HIRED	4.23	4.26	3.72
13 IRRIGATION OPERATION	.10	.20	
14 TOTAL DIRECT COSTS PER ACRE	\$ 59.84	58.57	61.05
15 RETURN OVER DIRECT COSTS PER ACRE	\$ 205.93	260.74	149.80
16 ALLOCATED COSTS PER ACRE			
17 FARM POWER & MACHINERY - OWNERSHIP	\$ 28.95	37.37	20.44
18 FARM POWER & MACHINERY - OPERATION	22.39	21.98	22.57
19 IRRIGATION EQUIPMENT - OWNERSHIP			
20 LAND COSTS	65.00	65.83	63.89
21 MISCELLANEOUS COSTS			
22 INTEREST ON MACH. & EQUIP. INVESTMENT	7.25	9.10	5.39
23 TOTAL ALLOCATED COSTS PER ACRE	\$ 123.59	134.28	112.29
24 RETURN OVER ALL LISTED COSTS PER ACRE	\$ 82.34	126.46	37.51
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	.60	.60	.60
27 POWER COSTS ALLOCATION FACTOR	.90	.95	.85
28 TOTAL LISTED COST PER TON	\$ 10.24	9.06	12.06
29 RETURN OVER LISTED COSTS PER TON	\$ 4.60	5.94	2.61
30* BREAK-EVEN YIELD, TONS	12.36	12.86	11.82
31 TOTAL LISTED COSTS PER ACRE	\$ 183.43	192.85	173.34

* TO COVER TOTAL LISTED COSTS PER ACRE (LINE 31) AT PRICE GIVEN IN LINE 3.

TABLE 10-0570 - CROP DATA FOR LEGUME PASTURES - 1978 - S.E.

ITEMS	Average of 16 Farms	8 Farms Highest in Yield	8 Farms Lowest in Yield
1 ACRES	25.4	18.8	32.0
2 YIELD PER ACRE	49.92	91.17	25.69
3 VALUE PER PRODUCTION UNIT	\$ 1.00	1.00	1.00
4 CROP PRODUCT RETURN PER ACRE	49.92	91.17	25.69
5 OTHER CROP INCOME			
6 TOTAL CROP RETURN PER ACRE	\$ 49.92	91.17	25.69
7 DIRECT COSTS PER ACRE			
8 FERTILIZER	\$ 2.24	3.65	1.56
9 CHEMICALS	.33		.50
10 SEED & OTHER	.71	1.90	.14
11 SPECIAL HIRED LABOR			
12 CUSTOM WORK HIRED	6.14		9.11
13 IRRIGATION OPERATION			
14 TOTAL DIRECT COSTS PER ACRE	\$ 9.42	5.55	11.31
15 RETURN OVER DIRECT COSTS PER ACRE	\$ 40.50	85.62	14.38
16 ALLOCATED COSTS PER ACRE			
17 FARM POWER & MACHINERY - OWNERSHIP	\$.98	1.67	.65
18 FARM POWER & MACHINERY - OPERATION	.58	.98	.39
19 IRRIGATION EQUIPMENT - OWNERSHIP			
20 LAND COSTS	54.69	58.13	51.25
21 MISCELLANEOUS COSTS			
22 INTEREST ON MACH. & EQUIP. INVESTMENT	.25	.43	.17
23 TOTAL ALLOCATED COSTS	\$ 56.50	61.21	52.46
24 RETURN OVER ALL LISTED COSTS PER ACRE	\$(-16.00)	24.41	(-38.08)
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	.04	.04	.04
27 POWER COSTS ALLOCATION FACTOR	.38	.44	.33
28 TOTAL LISTED COST PER UNIT OF PRODUCTION	\$ 1.31	.69	2.28
29 RETURN OVER LISTED COSTS PER UNIT	\$ (-.11)	.61	(-1.24)
30* BREAKEVEN YIELD/UNITS OF PRODUCTION	74.91	75.86	72.47
31 TOTAL LISTED COSTS PER ACRE	\$ 65.92	66.76	63.77

* TO COVER TOTAL LISTED COSTS PER ACRE (LINE 31) AT PRICE GIVEN IN LINE 3.

TABLE 10-0585 - CROP DATA FOR NON-TILLABLE PRAIRIE PASTURE - 1978 - S.E.

ITEMS	Average of 10 Farms
1 ACRES	23.0
2 YIELD PER ACRE	42.17
3 VALUE PER PRODUCTION UNIT	\$ 2.40
4 CROP PRODUCT RETURN PER ACRE	101.22
5 OTHER CROP INCOME	1.65
6 TOTAL CROP RETURN PER ACRE	\$ 102.87
7 DIRECT COSTS PER ACRE	
8 FERTILIZER	\$.70
9 CHEMICALS	.17
10 SEED & OTHER	.48
11 PECIAL HIRED LABOR	
12 CUSTOM WORK HIRED	
13 IRRIGATION OPERATION	
14 TOTAL DIRECT COSTS PER ACRE	\$ 1.35
15 RETURN OVER DIRECT COSTS PER ACRE	\$ 101.52
16 ALLOCATED COSTS PER ACRE	
17 FARM POWER & MACHINERY - OWNERSHIP	\$.40
18 FARM POWER & MACHINERY - OPERATION	.26
19 IRRIGATION EQUIPMENT - OWNERSHIP	
20 LAND COSTS	55.00
21 MISCELLANEOUS COSTS	
22 INTEREST ON MACH. & EQUIP. INVESTMENT	.08
23 TOTAL ALLOCATED COSTS	\$ 55.74
24 RETURN OVER ALL LISTED COSTS PER ACRE	\$ 45.78
25 SUPPLEMENTARY MANAGEMENT INFORMATION	
26 WORK UNITS ASSIGNED PER ACRE	.01
27 POWER COSTS ALLOCATION FACTOR	.61
28 TOTAL LISTED COSTS PER UNIT OF PRODUCTION	\$ 1.35
29 RETURN OVER LISTED COSTS PER UNIT	\$ 1.09
30 * BREAKEVEN YIELD/UNITS OF PRODUCTION	\$ 23.79
31 TOTAL LISTED COSTS PER ACRE	\$ 57.09

* TO COVER TOTAL LISTED COSTS PER ACRE (LINE 31) AT PRICE GIVEN IN LINE 3.

TABLE 10-1180 - CROP DATA FOR SET ASIDE ACRES - TILLED - 1978 - S.E.

ITEMS	Average of 31 Farms	15 Farms Highest in Yield	15 Farms Lowest in Yield
1 ACRES	34.6	34.0	36.3
2 *YIELD PER ACRE	84.1	99.5	69.1
3 VALUE PER PRODUCTION UNIT	\$ 1.00	1.00	1.00
4 CROP PRODUCT RETURN PER ACRE	84.13	99.47	69.15
5 OTHER CROP INCOME	11.68		23.00
6 TOTAL CROP RETURN PER ACRE	\$ 95.81	99.47	92.15
7 DIRECT COSTS PER ACRE			
8 FERTILIZER	\$.43		.83
9 CHEMICALS			
10 SEED & OTHER	2.89	3.00	2.89
11 SPECIAL HIRED LABOR			
12 CUSTOM WORK HIRED	.09	.18	
13 IRRIGATION OPERATION			
14 TOTAL DIRECT COSTS PER ACRE	\$ 3.41	3.18	3.72
15 RETURN OVER DIRECT COSTS PER ACRE	\$ 92.40	96.29	88.43
15 ALLOCATED COSTS PER ACRE			
17 FARM POWER & MACHINERY - OWNERSHIP	\$ 4.90	4.71	5.08
18 FARM POWER & MACHINERY - OPERATION	3.41	3.21	3.28
19 IRRIGATION EQUIPMENT - OWNERSHIP			
20 LAND COSTS	67.68	69.33	66.53
21 MISCELLANEOUS COSTS			
22 INTEREST ON MACH. & EQUIP. INVESTMENT	1.51	1.15	1.87
23 TOTAL ALLOCATED COSTS PER ACRE	\$ 77.50	78.40	76.76
24 RETURN OVER ALL LISTED COSTS PER ACRE	\$ 14.90	17.89	11.67
25 SUPPLEMENTARY MANAGEMENT INFORMATION			
26 WORK UNITS ASSIGNED PER ACRE	.20	.20	.20
27 POWER COSTS ALLOCATION FACTOR	.58	.52	.62
28 TOTAL LISTED COSTS PER UNIT OF PRODUCTION	\$.96	.82	1.16
29 RETURN OVER LISTED COSTS PER UNIT	\$.18	.18	.17
30 ** BREAKEVEN YIELD/UNITS OF PRODUCTION	\$ 80.91	81.58	80.48
31 TOTAL LISTED COSTS PER ACRE	\$ 80.91	81.58	80.48

* DEFICIENCY PAYMENT RECEIVED DIVIDED BY ACRES PLANTED EQUALS YIELD (IN \$)
PER ACRE, MULTIPLIED BY 1 (LINE 3) EQUALS CROP RETURN PER ACRE OF SET ASIDE.

** TO COVER TOTAL LISTED COSTS PER ACRE (LINE 31) AT PRICE GIVEN IN LINE 3.

DESCRIPTION OF LIVESTOCK TABLES

Livestock provide an important source of farm income, especially on farms with relatively small acreages, or acreages not well suited to the production of cash crops. If the crop land area is limited, and/or the farm family is short of capital relative to labor, livestock may be needed to provide the volume of earnings necessary for family living and to meet goals that the farm family hopes to achieve.

The following tables provide cost and return calculations for the livestock enterprises on the farms included in this report. Since feed is the largest single item of cost for all classes of livestock, return above feed cost was used to classify farms into high or low in the following tables. The reader is cautioned to remember that farms are classified into the high or low return above feed cost categories for each table, so that a particular farm might be in the low category in one livestock table and in the high category in another livestock table. And these classifications are separate and independent of the classifications based on labor earnings used in TABLES 1 through 6B. Feed costs are determined from feed records kept by the farm operator. Given the overwhelming importance of feed as the major cost of livestock production, it is suggested that the livestock producer try to keep an accurate set of feed records for each major livestock enterprise.

Purchase price is used for all feeds purchased from off the farm. An average price, shown elsewhere in this report, is charged for each kind of home-grown feed.

In general, the net increase in value of animals is calculated as: ending inventory plus sales plus transfers out plus butchered minus beginning inventory minus purchases minus transfers in. For fed livestock, pounds or cwt produced is calculated in the same way. Since inventory values play such an important role in determining net increase in value, producers are urged to be extremely careful in changing inventory prices, especially of breeding livestock which may be on hand during the whole year. This is, paper gains and losses from changing prices of inventory should be avoided.

Return over feed costs, because of the proportion of total costs represented by feed, is an important overall measure, and very useful in comparing an enterprise over time on the same farm or with other farms in a given year. It is a general measure that indicates success in getting top dollar for products sold, as well as in holding down feed costs. The relative size of the return over feed cost, or a companion measure, return for \$100 feed fed, varies by kind of enterprise, depending upon the size of non-feed costs. For example, dairy cows, with high labor and building and equipment costs, need a higher return above feed cost and return per \$100 feed fed than a low labor, low building/equipment cost enterprise such as feeder cattle. It also varies by year as both commodity prices and feed prices vary.

A few of the other direct cash costs, such as veterinary costs, bedding, etc. are shown in each livestock table. Certain overhead costs were also allocated among enterprises, using the work unit procedure described for the crops tables, which again can be modified by use of power and machinery, livestock equipment, and building and fences cost allocation factors. (PCAF, ECAF, and BCAF, respectively)

TABLE 11A-6470 - COSTS AND RETURNS FROM COMPLETE HOG ENTERPRISE* - 1978 - S.E.

ITEMS	Average of 31 Farms	10 Farms	10 Farms
		Highest in Return Above Feed Cost	Lowest in Return Above Feed Cost
1 POUNDS OF HOGS PRODUCED	182661 Per cwt.	176456 Per cwt.	142159 Per cwt.
2 NET INCREASE IN VALUE OF HOGS	\$ 50.28	55.98	45.76
3 OTHER MISCELLANEOUS HOG INCOME			
4 TOTAL VALUE PRODUCED	\$ 50.28	55.98	45.76
5 POUNDS OF FEED FED			
6 CORN	314.6	307.8	347.8
7 SMALL GRAIN	17.0	5.4	46.7
8 COMPLETE RATION	.9	2.8	.3
9 PROTEIN, SALT & MINERAL & MILK	83.6	78.6	86.2
10 TOTAL CONCENTRATES	416.1	394.6	481.0
11 FORAGES	2.1	1.6	1.1
12 FEED COST			
13 GRAINS	\$ 11.80	11.18	14.12
14 COMPLETE RATION	.13	.36	.08
15 PROTEIN, SALT & MINERAL & MILK	10.26	8.54	12.82
16 FORAGES	.04	.03	.02
17 PASTURE			
18 TOTAL FEED COSTS	\$ 22.23	20.11	27.04
19 RETURN OVER FEED COSTS	\$ 28.05	35.87	18.72
20 OTHER DIRECT COSTS			
21 MISCELLANEOUS LIVESTOCK EXPENSE	\$.88	.72	.99
22 VETERINARY EXPENSE	.59	.49	.66
23 CUSTOM WORK	.76	1.05	.60
24 SPECIAL HIRED LABOR			
25 TOTAL OTHER DIRECT COSTS	\$ 2.23	2.26	2.25
26 RETURN OVER FEED & OTHER DIRECT COSTS	\$ 25.82	33.61	16.47
27 ALLOCATED COSTS			
28 POWER & MACHINERY COSTS	\$ 1.30	1.23	1.43
29 LIVESTOCK EQUIPMENT COSTS	1.58	2.01	1.41
30 BUILDING & FENCES	2.35	2.23	2.36
31 TOTAL ALLOCATED COSTS	\$ 5.23	5.47	5.20
32 RETURN OVER ALL LISTED COSTS	\$ 20.59	28.14	11.27
33 SUPPLEMENTARY MANAGEMENT INFORMATION			
34 RETURN FOR \$100 FEED FED	\$ 226.17	278.37	169.24
35 PRICE RECEIVED PER CWT. ALL ANIMALS	\$ 47.70	48.05	47.15
36 PRICE RECEIVED/CWT SOLD MKT ONLY	\$ 48.16	48.43	48.70
37 NUMBER OF LITTERS FARROWED	106	106	69
38 NUMBER OF PIGS BORN PER LITTER	9.3	9.5	9.5
39 NUMBER OF PIGS WEANED PER LITTER	7.2	7.2	7.2
40 PERCENT DEATH LOSS	15.2	15.6	14.1
41 AVERAGE WEIGHT OF ALL HOGS SOLD	238.7	242.8	234.6
42 AVERAGE WEIGHT OF MKT. HOGS SOLD	227.7	234.5	224.8
43 PRICE PER CWT. CONCENTRATE FED	\$ 5.33	5.09	5.62
44 PRICE/CWT PROT SALT MIN. FED	\$ 12.27	10.89	14.88
45 POUNDS OF PORK PURCHASED	1993	680	4230
46 TOTAL LISTED COSTS/CWT PORK PROD.	\$ 29.69	27.84	34.49

*FARMS INCLUDED IN TABLE 11A CARRIED OUT A COMPLETE PROGRAM OF FARROWING AND MARKETING THEIR OWN HOGS. THE FEED COSTS INCLUDE FEED FOR THE BREEDING HERD AND MARKET ANIMALS.

TABLE 12-6290 - COSTS AND RETURNS FROM DAIRY COWS, COMMERCIAL HERDS - 1978 - S.E.

ITEMS	Average of 40 Farms	13 Farms	13 Farms
		Highest in Return Above Feed Costs	Lowest in Return Above Feed Costs
1 AVERAGE NUMBER OF COWS	53.4 Per Cow	56.3 Per Cow	47.7 Per Cow
2 POUNDS OF MILK	13913	15034	12358
3 POUNDS OF BUTTERFAT	522.9	550.6	505.9
4 PERCENT OF BUTTERFAT IN MILK	3.8	3.6	4.1
5 VALUE OF PRODUCE			
6 DAIRY PRODUCTS SOLD	\$1,382.53	1,503.82	1,248.60
7 DAIRY PRODUCTS USED IN HOME	6.07	5.19	9.25
8 MILK FED TO LIVESTOCK	4.48	4.49	7.67
9 NET INCREASE IN VALUE OF COWS	51.63	69.41	4.42
10 OTHER MISCELLANEOUS DAIRY INCOME			
11 TOTAL VALUE PRODUCED	\$1,444.71	1,582.91	1,269.94
12 POUNDS OF FEED FED			
13 CORN	6,039.9	5,504.1	6,076.9
14 SMALL GRAIN	371.1	241.8	515.7
15 COMPLETE RATION	13.9		44.8
16 PROTEIN, SALT & MINERAL	605.5	470.9	758.6
17 TOTAL CONCENTRATES	7,029.5	6,216.8	7,396.0
18 LEGUME HAY	7,739.0	9,124.2	5,669.4
19 OTHER HAY & DRY ROUGHAGE	378.2		1,281.4
20 SILAGE	7,601.1	7,706.0	8,227.7
21 FEED COSTS			
22 GRAINS	\$ 225.90	209.77	230.21
23 COMPLETE RATION	.73		2.49
24 PROTEIN, SALT & MINERAL	94.10	61.97	131.87
25 ALL HAY & DRY ROUGHAGE	131.35	120.64	131.72
26 SILAGE	59.19	57.00	65.26
27 PASTURE	3.73	1.83	2.96
28 TOTAL FEED COSTS	\$ 515.00	451.21	564.51
29 RETURN OVER FEED COSTS	\$ 929.71	1,131.70	705.43
30 OTHER DIRECT COSTS			
31 MISCELLANEOUS LIVESTOCK EXPENSE	\$ 70.45	68.97	62.70
32 VETERINARY EXPENSE	32.47	31.85	29.81
33 CUSTOM WORK HIRED	39.27	42.22	37.84
34 SPECIAL HIRED LABOR			
35 TOTAL OTHER DIRECT COSTS	\$ 142.19	143.04	130.35
36 RET. OVER FEED & OTHER DIRECT COSTS	\$ 787.52	988.66	575.08
37 ALLOCATED COSTS			
38 POWER & MACHINERY COSTS	\$ 69.97	70.96	68.03
39 LIVESTOCK EQUIPMENT COSTS	55.43	65.74	47.31
40 BUILDING & FENCES	96.91	116.75	94.51
41 TOTAL ALLOCATED COSTS	\$ 222.31	253.45	209.85
42 RETURN OVER ALL LISTED COSTS	\$ 565.21	735.21	365.23
43 SUPPLEMENTARY MANAGEMENT INFORMATION			
44 RETURN FOR \$100 FEED FED	\$ 280.52	350.82	224.96
45 FEED COST PER CWT. MILK	\$ 3.70	3.00	4.57
46 FEED COST PER POUND OF BUTTERFAT	\$.98	.82	1.12
47 POUNDS OF MILK/POUND OF CONCEN	1.98	2.42	1.67
48 AVERAGE PRICE PER CWT. MILK SOLD	\$ 10.01	10.06	10.24
49 AVERAGE PRICE/POUND OF BUTTERFAT	\$ 2.64	2.73	2.50
50 TOTAL LISTED COSTS/CWT MILK PRO	\$ 6.32	5.64	7.32
51 DAIRY COW TURNOVER PERCENTAGE	35.6	37.3	33.5
52 TOTAL LISTED COSTS PER COW	\$ 879.50	847.70	904.71

TABLE 13-6310 - COSTS AND RETURNS FROM OTHER DAIRY CATTLE COMMERCIAL HERD REPLACEMENTS - S.E.

ITEMS	Average of 41 Farms	14 Highest in Return Above Feed Per Cow	14 Lowest in Return Above Feed Per Cow
1 NUMBER OF HEAD	69.6 Per Cow	71.2 Per Cow	69.8 Per Cow
2 NET INCREASE IN VALUE	\$ 243.51	299.85	190.39
3 OTHER MISCELLANEOUS INCOME			
4 TOTAL INCOME	\$ 243.51	299.85	190.39
5 POUNDS OF FEED FED			
6 CORN	980.4	876.2	957.9
7 SMALL GRAIN	147.0	118.7	107.0
8 COMPLETE RATION	48.9	37.3	98.0
9 PROTEIN, SALT & MINERALS	161.6	142.0	195.9
10 HAY & DRY ROUGHAGE	3,221.0	3,029.7	3,857.3
11 SILAGE	3,501.5	1,747.6	5,902.6
12 MILK	34.1	32.1	41.8
13 FEED COST			
14 GRAINS	\$ 40.13	35.41	37.41
15 COMPLETE RATION	1.82	2.58	2.16
16 PROETIN, SALT & MINERALS	21.81	21.71	21.33
17 HAY & DRY ROUGHAGE	60.19	49.33	76.98
18 SILAGE	24.08	13.37	38.18
19 MILK	3.35	3.26	3.95
20 PASTURE	2.16	3.08	1.07
21 TOTAL FEED COSTS	\$ 153.54	128.74	181.08
22 RETURN OVER FEED COSTS	\$ 89.97	171.11	9.31
23 OTHER DIRECT COSTS			
24 MISCELLANEOUS EXPENSE	\$ 5.33	9.54	3.83
25 VETERINARY EXPENSE	3.03	3.58	3.94
26 CUSTOM WORK HIRED	1.84	1.17	1.58
27 SPECIAL HIRED LABOR			
28 TOTAL OTHER DIRECT COSTS	\$ 10.20	14.29	9.35
29 RET OVER FEED & OTHER DIRECT COSTS	\$ 79.77	156.82	(-.04)
30 ALLOCATED COSTS			
31 POWER & MACHINERY COSTS	\$ 8.39	9.15	7.72
32 LIVESTOCK EQUIPMENT COSTS	6.10	8.22	4.76
33 BUILDING & FENCES	9.59	13.14	9.18
34 TOTAL ALLOCATED COSTS	\$ 24.08	30.51	21.66
35 RETURN OVER ALL LISTED COSTS	\$ 55.69	126.31	(-21.70)
36 SUPPLEMENTARY MANAGEMENT INFORMATION			
37 RETURN FOR \$100 FEED FED	\$ 158.60	232.92	105.14
38 PERCENT DEATH LOSS - TOTAL	8.0	8.6	7.8
39 PERCENT CALF DEATH LOSS	17.3	19.6	16.9
40 TOTAL LISTED COSTS PER COW	\$ 187.82	173.54	212.09

TABLE 14 - COSTS AND RETURNS FROM ALL DAIRY CATTLE - 1978 - S.E.

ITEMS	Average of 40 Farms	13 Farms Highest in Return Above Feed Costs	13 Farms Lowest in Return Above Feed Costs
1 AVERAGE NUMBER OF COWS	53.4	46.4	53.9
	Per Cow	Per Cow	Per Cow
2 VALUE OF DAIRY PRODUCTS	\$1,393.05	1,465.82	1,333.27
3 NET INCREASE IN VALUE	369.29	573.64	250.20
4 MISCELLANEOUS DAIRY INCOME			
5 TOTAL VALUE PRODUCED	\$1,762.34	2,039.46	1,583.47
6 POUNDS OF FEED FED PER COW			
7 GRAINS	7,888.9	7,740.9	8,262.2
8 COMPLETE RATIONS	78.3	15.9	19.7
9 PRO SALT MIN INCL MILK EQUIV	822.9	677.1	1,181.6
10 HAY & DRY ROUGHAGE	12,354.7	13,317.3	11,610.4
11 SILAGE	12,138.6	11,691.0	14,123.0
12 FEED COST PER COW			
13 GRAINS	\$ 278.48	282.41	280.11
14 COMPLETE RATIONS	3.16	1.55	2.37
15 PROT, SALT & MIN, INCL MILK	127.51	107.39	188.89
16 HAY & DRY ROUGHAGE	210.45	231.79	211.06
17 SILAGE	90.32	87.33	102.28
18 PASTURE COSTS	6.61	6.59	2.24
19 TOTAL FEED COSTS	\$ 716.53	717.06	786.95
20 RETURN OVER FEED COSTS PER COW	\$1,045.81	1,322.40	796.52
21 OTHER DIRECT COSTS			
22 MISCELLANEOUS LIVESTOCK EXPENSE	\$ 77.42	84.70	71.63
23 VETERINARY EXPENSE	36.48	44.63	33.12
24 CUSTOM WORK	41.61	43.60	43.65
25 SPECIAL HIRED LABOR			
26 TOTAL OTHER DIRECT COSTS	\$ 155.51	172.93	148.40
27 RET OVER FEED & OTHER DIRECT COSTS	\$ 890.30	1,149.47	648.12
28 ALLOCATED COSTS			
29 POWER & MACHINERY COSTS	\$ 79.44	77.30	75.02
30 LIVESTOCK EQUIPMENT COSTS	62.20	81.68	50.36
31 BUILDING & FENCES	107.35	110.23	99.80
32 TOTAL ALLOCATED COSTS	\$ 248.99	269.21	225.18
33 RETURN OVER ALL LISTED COSTS	\$ 641.31	880.26	422.94
34 SUPPLEMENTARY MANAGEMENT INFORMATION			
35 RETURN FOR \$100 FEED FED	\$ 245.95	284.42	201.21
36 TOTAL LISTED COSTS PER COW	\$1,121.03	1,159.20	1,160.53

TABLE 15B-6140 - COST AND RETURNS FROM BEEF FEEDER CATTLE, FEEDLOT - 1978 - S.E.

ITEMS	Average of 14 Lots
1 AVERAGE NUMBER OF BEEF FEEDERS	59.4
2 POUNDS OF BEEF PRODUCED	35,994
	Per Cwt
3 NET INCREASE IN VALUE OF ANIMALS	\$ 70.07
4 OTHER MISCELLANEOUS BEEF INCOME	
5 TOTAL VALUE PRODUCED	\$ 70.07
6 POUNDS OF FEED FED	
7 GRAIN	458.3
8 PROTEIN, SALT & MINERAL	38.5
9 LEGUME HAY	352.4
10 OTHER HAY & DRY ROUGHAGE	
11 SILAGE	779.7
12 FEED COST	
13 GRAIN	\$ 16.43
14 PROTEIN, SALT & MINERAL	5.18
15 LEGUME HAY	7.19
16 OTHER HAY & DRY ROUGHAGE	
17 SILAGE	5.20
18 PASTURE	.64
19 TOTAL FEED COST	\$ 34.64
20 RETURN OVER FEED COST	\$ 35.43
21 OTHER DIRECT COSTS	
22 MISCELLANEOUS LIVESTOCK EXPENSE	\$.97
23 VETERINARY EXPENSE	.38
24 CUSTOM WORK HIRED	.60
25 SPECIAL HIRED LABOR	
26 TOTAL OTHER DIRECT COSTS	\$ 1.95
27 RET OVER FEED & OTHER DIRECT COSTS	\$ 33.48
28 ALLOCATED COSTS	
29 POWER & MACHINERY COSTS	\$ 1.44
30 LIVESTOCK EQUIPMENT COSTS	.94
31 BUILDINGS & FENCES	2.10
32 TOTAL ALLOCATED COSTS	\$ 4.48
33 RETURN OVER ALL LISTED COSTS	\$ 29.00
34 SUPPLEMENTARY MANAGEMENT INFORMATION	
35 RETURN FOR \$100 FEED FED	\$202.28
36 PRICE PER CWT. SOLD	\$ 50.62
37 AVERAGE WEIGHT PER HEAD SOLD	1,118.2
38 PRICE PER CWT. BOUGHT	\$ 60.19
39 AVERAGE WEIGHT PER HEAD BOUGHT	508.4
40 NUMBER OF HEAD BOUGHT	55
41 PERCENT DEATH LOSS	1.4
42 EFFECTIVE DAILY GAIN-LB/HEAD/DAY	1.66
43 TOTAL LISTED COST/CWT. PRODUCED	\$ 41.07

Southeastern Minnesota Farm Management Association
1978 Averages by Type of Farm

ITEM	Average All Farms	Hogs Farrow to Finish	Dairy 55-74	Cash Crop Plus Hog Complete	Cash Crop Plus Dairy	Cash Crop
Number of farms	74	7	6	12	16	9
Land						
Acres per farm	385	338	268	431	410.5	545.8
Acres tillable	333	263	235	394	368	482
% tillable in high return crops	81	87.3	66.4	93.0	77.9	88.7
% tillable in corn & corn silage	50.6	46.3	41.2	54.2	51.5	42.6
% tillable in soybeans	18	6.1	2.1	30.5	13.4	34.8
% tillable in alfalfa	14.1	4.3	27.9	.7	20.4	1.6
Labor						
Number of workers	1.9	2	2.12	1.78	2.19	1.58
Total work units	541	535	662	473	679	270
Work units in crops	167	139	116	198	186	233
Work units in livestock	359	383	542	268	457	12
Units per worker	285	268	312	266	310	171
Capital						
Average farm capital managed	\$ 361,093	296,799	250,389	454,179	384,849	527,799
Capital managed per worker	\$ 196,028	148,400	118,084	255,157	175,730	334,050
Earnings						
Net cash operating income	\$ 49,845	50,408	60,180	52,842	49,195	33,285
Labor and management earnings	\$ 40,055	58,923	29,382	56,024	43,218	16,418
Rate earned on investment whole farm (%)	14.8	22.8	13.9	16.7	15.1	7.8
Total farm sales	\$ 135,766	169,974	125,543	152,726	135,734	119,484
Total value added	\$ 114,896	128,739	107,978	138,089	125,928	93,353
Proportion of Sales						
From livestock (%)	49.6	70.6	64.3	48.1	43.5	1.7
From crops (%)	47.2	26.8	31.4	49.9	53.8	89.2
Expenses						
Cash exp./\$100 sales	\$ 53	64	44	53	54	46
Purchases/\$100 sales	\$ 83	81	73	86	83	66
Yields						
Corn/bu.	124.8	120.4	118.5	126.1	132.6	125.9
Soybeans/bu.	39.2	42.1	43	41.7	41.3	35.5
Alfalfa/ton	4.6	2.7	4.8	3.6	4.6	3.3
Corn & Sorghum silage/ton ^{a/}	17.9	17	20.4	---	18.9	20

Summary by Years, Southeastern Minnesota Farm Management Association

ITEM	Average 1960-64	Average 1965-69	Average 1970-74	1972	1973	1974	1975	1976	1977	1978
Number of farms	158	134	114	114	118	112	101	78	80	74
Total farm capital managed	\$ 60988	\$ 84088	\$148924	\$137338	\$174068	\$204978	\$246038	\$221625	\$314740	\$361093
Monthly charge for:										
Unpaid family labor <u>a/</u>	147	160	410	300	350	400	450	500	500	600
Second operator <u>a/</u>	187	295	<u>b/</u>	600	<u>b/</u>	<u>b/</u>	<u>b/</u>	<u>b/</u>	833	833
Board for hired labor <u>a/</u>	40	45	69	60	75	90	120	130	120	120
FARM EXPENSES										
Dairy cattle bought	\$ 265	\$ 398	\$ 584	\$ 363	\$ 527	\$ 966	\$ 522	\$ 457	\$ 900	\$ 1480
Beef cattle bought	1185	791	2304	2536	3768	2080	2770	1506	1821	3272
Hogs bought	386	504	796	751	1523	557	1573	1387	2199	2978
Sheep bought (incl. feeders)	88	7	8	11	4	8	7	8	1	1
Poultry bought (incl. turkeys)	154	110	34	9	24	14	39	36	---	26
Horses bought	2	1	2	--	7	--	--	6	---	--
Miscellaneous livestock expense	731	947	1723	1662	1978	2161	2552	3397	3668	4535
Fertilizers bought	1085	1978	3906	2940	4286	7362	7996	6169	7943	7484
Miscellaneous crop expense <u>c/</u>	926	1878	3960	3341	4869	6029	7266	6768	9016	12850
Feed bought	3735	4279	7184	5975	10372	10030	12059	14883	14217	14234
Custom work hired	857	1295	1953	1908	2023	2222	2285	2586	3280	3260
Power & Crop machinery (new)	1803	3538	6984	6434	9096	9919	11499	9506	13773	16110
Power & Crop machinery (upkeep) <u>e/</u>	2378	2712	4757	4254	5444	6384	7178	7123	8785	9341
Livestock equipment (new)	412	658	1547	954	1544	3099	1673	2503	2908	2851
Livestock equipment (upkeep)	171	225	505	440	649	710	794	937	1067	1136
New real estate & Improvements	1229	1930	3757	3909	3648	5479	8584	6625	21806	21728
Buildings and fencing (upkeep)	344	436	812	684	994	1188	1272	1177	1932	1685
Hired labor	922	1123	2086	1895	2335	2642	2896	3243	3947	3931
Taxes	1301	1589	2191	2129	2287	2232	2795	2544	3262	3148
General farm expense <u>f/</u>	409	555	959	901	1069	1270	1586	1698	2278	2294
Total farm purchases	\$ 18383	\$ 24954	\$ 46052	\$ 41096	\$ 56447	\$ 64352	\$ 75319	\$ 72559	\$102803	\$112342
Decrease in farm capital	-	-	-	-	-	-	-	-	-	-
Interest on farm capital <u>d/</u>	3049	4482	9345	8240	10444	14349	17223	15514	18884	25277
Unpaid family labor	629	815	3485	1532	8186	5132	4578	4254	2864	896
Board furnished hired labor	101	64	72	45	55	140	83	137	535	308
Total farm expenses	\$ 22162	\$ 30315	\$ 58954	\$ 50913	\$ 75132	\$ 83973	\$ 97203	\$ 92464	\$125086	\$138823

a/ These adjustments should be considered in comparing 1977 with previous years.

b/ Labor earnings was divided between the various partners.

c/ Includes chemicals.

d/ Interest was calculated at the rate of 5% on capital managed from 1950 to 1966, at 5.5% from 1967 to 1969, at 6% from 1970-1973, at 7% in 1974-76, and 6% in 1977.

e/ Including electricity expense (farm share)

f/ Including telephone expense (farm share)

Summary by Years, Southeastern Minnesota Farm Management Association (cont.)

ITEM	Average 1960-64	Average 1965-69	Average 1970-74	1972	1973	1974	1975	1976	1977	1978
FARM RECEIPTS										
Dairy cattle sold	\$ 2061	\$ 3246	\$ 4746	\$ 4694	\$ 5855	\$ 5552	\$ 4825	\$ 4937	\$ 5009	\$ 7601
Dairy products sold	8105	11631	19710	17262	20694	26432	24988	29269	32495	38562
Beef cattle sold	2688	2148	5039	5319	6310	5983	6206	4631	5988	7877
Hogs sold	5961	7973	14437	12516	22993	20670	33495	31272	35029	40948
Sheep and wool sold	222	95	104	111	118	111	92	107	27	53
Poultry (incl. turkeys) sold	88	82	12	8	13	8	4	7	---	10
Eggs sold	1015	732	125	90	85	96	107	170	99	314
Horses sold	4	1	---	1	1	---	---	3	1	---
Corn sold	1594	2467	8865	5255	11136	18267	13527	13763	16256	17743
Soybeans sold	---	1689	6062	4464	7991	12156	7897	8217	13767	13509
Small grain sold	624	492	587	259	494	1407	1375	1974	1560	787
Other crops sold ^{a/}	2181	2582	2553	4023	2568	1364	1825	1242	2616	2411
Mach., & equip. sold & tax ref.	323	379	460	348	397	664	532	423	801	753
Income from work off the farm	239	432	608	484	889	923	1417	1111	1169	1444
Miscellaneous farm income	559	1022	1523	1508	1768	1805	2562	2337	2566	3745
Total farm sales	\$ 25664	\$ 34971	\$ 64831	\$ 56342	\$ 81312	\$ 95438	\$ 98862	\$ 99463	\$117383	\$135757
Increase in farm capital	601	3516	13137	10109	33825	12241	11377	10400	30425	45408
Family living from the farm	307	321	437	380	526	564	558	573	550	608
Total farm receipts	\$ 26572	\$ 38808	\$ 78405	\$ 66831	\$115663	\$108243	\$110797	\$110436	\$148359	\$181773
Total farm expenses	22162	30515	58954	50913	75132	83973	97203	92464	125086	141728
Labor and management earnings	\$ 4410	\$ 8293	\$ 19451	\$ 15918	\$ 40531	\$ 24270	\$ 13594	\$ 17972	\$ 23273	\$ 40045
MEASURES OF FARM ORGANIZATION AND MANAGEMENT EFFICIENCY										
Percent land in high ret crops ^{b/}	60.1	60.5	65.2	64.8	65.3	66.3	67.8	67.3	80.2	81.0
Livestock units per 100 acres ^{c/}	36.4	34.3	42.1	33.1	36.9	36.9	36.4	40.6	36.9	37.8
Work units ^{d/}	548	505	462	446	482	509	522	494	516	541
Work units per worker ^{d/}	318	305	323	262	284	283	272	261	276	282
Expenses per work unit ^{d/}	\$ 11.61	\$ 17.99	\$ 33.94	\$ 31.75	\$ 38.89	\$ 41.48	\$ 44.92	\$ 48.72	\$ 58.12	\$ 57.64

^{a/} Includes soybeans 1950-1965, crop disaster payments 1976, and 1977 government payments for set aside acres.

^{b/} The crop ratings used in calculating the percentage of the tillable land in high return crops were considerably changed in 1957 and 1977.

^{c/} The basis for computing animal units was revised in 1951.

^{d/} The basis for computing work units was revised in 1953, 1967, and 1970.

Summary of Miscellaneous Items by Years - S.E.

ITEM	Average 1960-64	Average 1965-69	Average 1970-74	1972	1973	1974	1975	1976	1977	1978
RETURN ABOVE FEED COST PER										
Dairy cow	\$183.05	\$266.74	\$409.16	\$417.68	\$455.85	\$424.99	\$340.01	\$564.65	\$717.77	\$934.05
100 lbs. feeder cattle prod.	1.78	5.08	3.28	17.82	14.06	-28.90	7.09	-8.29	2.04	32.97
Ewe	5.40	7.52	10.36	16.75	15.99	-3.04	-19.17	-1.40	-	43.45
100 lbs. hogs produced	4.57	8.86	10.66	14.17	21.49	6.42	21.35	11.59	21.83	28.05
Hen	1.27	.84	.82	.14	1.67	2.22	-.01	1.56	-	1.29
Beef cow	-	-	30.17	30.69	61.27	-63.88	-103.52	124.67	13.78	199.11
FEED COST PER										
Dairy cow	\$169.62	\$215.79	\$332.30	\$257.59	\$381.72	\$521.92	\$622.52	\$649.52	\$546.06	\$516.16
100 lbs. feeder cattle prod.	19.10	21.60	30.78	22.10	36.23	51.39	45.33	49.91	44.39	32.03
Ewe	13.46	19.51	32.17	24.58	32.46	56.97	66.60	67.05	-	27.67
100 lbs. hogs produced	10.65	11.90	16.86	12.88	20.77	26.00	27.35	24.95	19.60	22.23
Hen	3.28	3.31	3.38	2.78	4.27	3.88	5.44	5.14	-	5.26
Beef cow	-	-	132.41	121.69	147.62	189.10	193.42	241.27	179.65	160.96
MISCELLANEOUS LIVESTOCK INFORMATION										
Number of dairy cows ^{a/}	22.2	24.2	26.6	25.7	25.8	27.6	25.3	22.4	26.0	16.0
Pounds of feeder cattle prod. ^{a/}	5573	4308	7297	7211	8593	7882	6770	4655	4964	3118
Litters of pigs ^{a/}	19.4	19.7	26.6	24.3	34.3	34.1	39.1	40.5	45	44
Pounds of hogs produced ^{a/}	36619	36519	46973	47090	56762	59433	68265	72232	82772	76520
Number of hens ^{a/}	197	138	26	23	14	15	17	20	-	38
Pounds of butterfat per dairy cow	375	417	458	461	457	462	474	486	509	517
Pigs weaned per litter ^{a/}	7.1	7.3	7.2	7.2	7.2	7.2	7.4	7.5	7.4	7.2
Number of head of ewes ^{a/}	4	3	2	2	2	2	1	1	-	1
Eggs per hen	205	201	186	198	168	181	200	185	-	243

- Information not available

^{a/} The reader is cautioned that these six items are calculated as follows. The total number of head, pounds, litters, hens, etc., reported by all farmers whose records are included in the summary averages, is divided by the number of records included in the analysis (first line, table 22). Thus, items are not averages per farm reporting this item, instead they are averages for all farms included in the summary, regardless of whether all farms had that particular livestock enterprise or not. The correct interpretation of such information is to display trends over time in agriculture in the areas in which record keepers live whose records are included in the summary. For example, the number of hens is increasing, the number of litters being farrowed is increasing, etc., in the general area covered by the Southeast Farm Management Association.

Summary of Miscellaneous Items by Years (continued) S.E.

ITEM	Average 1960-64	Average 1965-69	Average 1970-74	1972	1973	1974	1975	1976	1977	1978
PRICE RECEIVED PER										
Pound of butterfat in milk	\$.94	\$ 1.15	\$ 1.60	\$ 1.43	\$ 1.73	\$ 2.06	\$ 2.07	\$ 2.46	\$ 2.49	\$ 1.69
Cwt. of milk	3.48	4.31	6.01	5.47	6.50	7.75	7.93	9.11	9.12	9.89
Cwt. of hogs	15.55	20.89	28.41	26.13	41.28	34.67	47.91	42.95	40.61	47.70
Cwt. of feeder cattle sold	22.61	24.02	34.22	33.48	43.58	38.02	37.80	35.03	37.85	49.57
Pound of wool sold	.62	.56	.67	.86	1.08	.36	.24	-	-	-
Dozen of eggs sold	.28	.28	.34	.25	.46	.47	.45	-	-	.41
PRICE OF FEED										
Corn (per bu.)	\$.99	\$ 1.10	\$ 1.57	\$ 1.08	\$ 1.70	\$ 2.75	\$ 2.65	\$ 2.45	\$ 2.00	\$ 1.80
Barley (per bu.)	.91	.97	1.06	.92	1.55	-	-	-	1.60	1.75
Oats (per bu.)	.61	.62	.89	.65	.90	1.70	1.45	1.45	1.20	.75
Oilmeal (per cwt.)	4.36	4.99	7.46	6.35	13.50	-	-	-	-	-
Alfalfa (per ton)	19.40	20.80	26.20	21.00	30.00	40.00	60.00	70.00	50.00	40.00
Timothy hay (per ton)	11.22	12.00	14.44	11.60	18.70	18.70	-	-	-	-
Corn silage (per ton)	6.60	7.36	9.15	7.25	10.00	14.00	20.00	22.00	16.00	14.84
ACRES PER FARM										
Small grains	34.5	30.4	26.1	23.4	24.3	29.2	29.4	32.6	34.1	22.3
Cultivated crops	103.6	132.4	187.5	175.7	215.3	223.8	249.9	207.1	245.9	243.0
Tillable land in hay	39.4	40.0	43.3	41.3	41.4	43.5	45.6	45.1	46.0	48.0
Tillable land in pasture	16.6	12.8	9.2	8.6	8.6	7.0	7.5	6.8	2.8	5.5
Tillable land not cropped ^{a/}	14.4	22.0	18.4	37.7	8.2	.8	.8	1.5	-0.7 ^{b/}	13.7
Total tillable land	208.5	237.6	284.5	286.7	297.8	304.3	333.2	293.1	328.1	332.5
Non-tillable land	47.3	46.3	49.7	51.5	47.1	52.9	52.8	47.3	51.9	52.6
Total acres per farm	255.8	283.9	334.2	338.2	344.9	357.2	386.0	340.4	380.0	385.1
YIELD PER ACRE										
Corn (bu.)	72.4	86.8	96.2	101.1	109.3	77.6	90.1	86.1	119.9	124.8
Barley (bu.)	44.9	51.4	47.6	53.4	54.8	42.8	31.3	58.5	71.2	58.1
Oats (bu.)	58.3	62.4	61.6	66.6	61.0	63.5	62.4	67.0	76.0	65.1
Alfalfa (tons)	3.0	3.2	3.6	3.6	3.6	3.7	3.5	3.2	4.3	4.6
Soybeans (bu.)	23.6	24.4	28.4	30.9	33.0	23.1	28.1	29.8	43.0	39.2

- Information not available.

^{a/} Including feed grain program.^{b/} Negative sign means that area double cropped exceeded area not cropped by amount shown.