

Annual Report

VOCATIONAL AGRICULTURE FARM ANALYSIS

EAST SOUTH CENTRAL MINNESOTA

1969

Austin Area Vocational School

IN COOPERATION WITH

*VOCATIONAL DIVISION, MINNESOTA DEPARTMENT OF EDUCATION
AND AGRICULTURAL EDUCATION DEPARTMENT
UNIVERSITY OF MINNESOTA*

1969 VOCATIONAL AGRICULTURE FARM ANALYSIS REPORT
EAST SOUTH CENTRAL AREA - CHARLES PAINTER, COORDINATOR

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INTRODUCTION

THE FIRST ANALYSIS MADE BY THE AUSTIN AREA VOCATIONAL-TECHNICAL SCHOOL WAS FOR THE YEAR 1955. THREE OTHER ANALYSIS CENTERS IN MINNESOTA WERE ALSO INVOLVED WITH ANALYSIS. A COMPLETE REORGANIZATION OF THE ANALYSIS PROGRAM IN 1967 ADDED CROP PRODUCTION COSTS AND MORE ANIMAL PRODUCTION ITEMS.

ADDITIONAL INFORMATION HAS ADDED MUCH TO THE VOLUME OF OUR REPORT NECESSITATING BREVITY IN OUR INTRODUCTION. THE ASSISTANCE AND COUNSEL PROVIDED BY THE FOLLOWING PEOPLE IS MUCH APPRECIATED: AUDREY ANHORN, MADGE ANDERSON, PATRICIA FRANCIS, NADINE FOGONES, ELAINE HARBER, EILEEN HEIMSNES, DARLENE MILLER, LYNDA PLANZ, HELEN BERGH, ARLENE BEDNAR, VIVIAN ANDERSON, DONNA QUALEY.

HARLAN KOCH, I.T. MICKELSON, MORTON CARNEY, ODELL BARDUSON, EDGAR PERSONS, MILO PETERSON, TRUMAN NODLAND. DATA PROCESSING WAS DONE BY AGRICULTURAL RECORDS COOPERATIVE, MADISON, WISCONSIN.

PARTICIPATING SCHOOLS TO DATE HAVE SUBMITTED MORE THAN 300 ACCOUNT BOOKS. THESE ARE INDICATED BELOW. BOOKS ARE STILL COMING IN.

<u>SCHOOL</u>	<u>BOOKS</u>	<u>INSTRUCTOR</u>	<u>SCHOOL</u>	<u>BOOKS</u>	<u>INSTRUCTOR</u>
ADAMS	41	DWAIN VANGSNES	FREEBORN	3	MIKE TAYLOR
ALDEN	1	JOHN NELSON	HAYFIELD	13	BRUCE OXTON
AUSTIN	14	JOE RAINE	KENYON	12	FRANK WHITE
BLOOMING PRAIRIE	52	GENE FRANCIS	NEW RICHLAND	12	RUSSELL SCHMEISING
		HAROLD ULRICH	NORTHFIELD	18	HAROLD PAULSON
BYRON	2	GILMAN SCHUBERT	OWATONNA	22	JOHN ZWIEBEL
ELKTON	2	LYNN LAGERSTEDT	SPRING VALLEY	16	JAMES ERREDGE
FARIBAULT	88	RALPH PALAN	STEWARTVILLE	7	FRANK QUAM
		ROGER WENESS	WEST CONCORD	3	WESLEY FAUSCH
		CLARENCE ANDERSON	ZUMBROTA	1	EUGENE HUNDEBY

ELEVEN "MAIL IN" COOPERATORS ARE NOT INCLUDED IN THE ABOVE FIGURES. OTHER VOCATIONAL AGRICULTURE INSTRUCTORS IN COOPERATING SCHOOLS: LEROY SWANSON, ADAMS; DONALD RITLAND, AUSTIN; HOWARD BODE, BLOOMING PRAIRIE; PAUL DAY AND PAUL THOMAS, FARIBAULT; BERT FULLER AND FRANK MOON, HAYFIELD; JOHN SHELSTAD, KENYON; LEE MENDENHALL, NEW RICHLAND; RICHARD FORSLINE, NORTHFIELD; GLENN EDIN AND DONALD BARBER, OWATONNA; ARTHUR BERGMAN, SPRING VALLEY.

TABLE 1 - FARM INVENTORIES - 1969

ITEMS		AVERAGE OF 228 FARMS	
1-2	SIZE OF FARM-TOTAL ACRES & TILLABLE A	319.6	280.9
3	WORK UNITS-CROPS	127.37	
4-5	LIVESTOCK & OTHER	247.53	17.40
6	TOTAL SIZE-WORK UNITS	392.30	
7	NUMBER OF WORKERS	1.5	
7A	FARM CAPITAL INVESTMENT PER WORKER	\$ 89568	
8	PRODUCTIVE LIVESTOCK	JAN. 1	DEC. 31
9	DAIRY COWS	\$ 4567	\$ 4630
10	OTHER DAIRY CATTLE	2446	2935
11	BEEF BREEDING CATTLE	648	666
12	BEEF FEEDER CATTLE	3258	3931
13	HOGS	4761	6536
14-16	OTHER PRODUCTIVE LIVESTOCK	141	130
17	TOTAL PRODUCTIVE LIVESTOCK	\$ 15821	\$ 18828
18	CROP, SEED AND FEED	\$ 13247	\$ 14327
19	POWER, MACHINERY & EQUIPMENT		
20	AUTO & TRUCK (FARM SHARE)	\$ 1736	\$ 1983
21	POWER & MACHINERY	12469	14350
22	LIVESTOCK EQUIPMENT	2961	3145
23	TOTAL POWER, MACHINERY & EQUIPMENT	\$ 17166	\$ 19478
24	LAND	\$ 52996	\$ 53108
25	BUILDINGS-FENCES-ETC.	\$ 21998	\$ 23312
26	TOTAL FARM CAPITAL	\$121228	\$129053

ITEMS		46 MOST PROFIT FARMS		46 LEAST PROFIT FARMS	
1-2	SIZE OF FARM-TOTAL A & TILL A	388.3	350.4	312.1	267.0
3	WORK UNITS-CROPS	160.24		118.98	
4-5	LIVESTOCK & OTHER	331.00	33.45	165.14	16.20
6	TOTAL SIZE-WORK UNITS	524.69		300.32	
7	NUMBER OF WORKERS	1.7		1.4	
7A	FARM CAP. INVESTMENT PER WORKER	\$104435		\$ 86035	
8	PRODUCTIVE LIVESTOCK	JAN. 1	DEC. 31	JAN. 1	DEC. 31
9	DAIRY COWS	\$ 2694	\$ 2982	3500	\$ 3401
10	OTHER DAIRY CATTLE	1255	1755	2180	2473
11	BEEF BREEDING CATTLE	387	305	1202	1198
12	BEEF FEEDER CATTLE	5188	7310	4310	3946
13	HOGS	13420	19279	1644	1862
14-16	OTHER PRODUCTIVE LIVESTOCK	118	256	23	16
17	TOTAL PRODUCTIVE LIVESTOCK	\$ 23062	\$ 31887	\$ 12859	\$ 12896
18	CROPS, SEED AND FEED	\$ 19568	\$ 23813	\$ 12630	\$ 11359
19	POWER, MACHINERY & EQUIPMENT				
20	AUTO & TRUCK (FARM SHARE)	\$ 2490	\$ 12782	\$ 11541	\$ 11671
21	POWER AND MACHINERY	16981	19420	10024	12348
22	LIVESTOCK EQUIPMENT	4729	4841	1648	1903
23	TOTAL POWER-MACH-EQUIPMENT	\$ 24200	\$ 27043	\$ 13213	\$ 15922
24	LAND	\$ 64166	\$ 64770	\$ 53298	\$ 53281
25	BUILDINGS-FENCES-ETC.	\$ 30056	\$ 31883	\$ 18015	\$ 20309
26	TOTAL FARM CAPITAL	\$161052	\$179396	\$110015	\$113767

TABLE 1 INCLUDES ANY LANDLORDS SHARE OF LAND AND OTHER PROPERTY. LAND IS VALUED AT COST INSTEAD OF MARKET VALUE - BUILDING AND EQUIPMENT AT DEPRECIATED VALUE.

TABLE 2A - WHOLE FARM SUMMARY OF CASH RECEIPTS - 1969

ITEMS	AVERAGE OF 228 FARMS	46 MOST PROFITABLE FARMS	46 LEAST PROFITABLE FARMS
1 SALE OF LIVESTOCK & LIVESTOCK PRODUCTS			
2 DAIRY COWS	\$ 1471	\$ 880	\$ 1291
3 DAIRY PRODUCTS	9438	5835	7061
4 OTHER DAIRY CATTLE	984	628	523
5 BEEF BREEDING CATTLE	169	167	290
6 BEEF FEEDER CATTLE	7352	16946	7574
7A HOGS COMPLETE	11046	34811	3031
7B HOGS FINISHING	3711	9102	1229
7C HOGS PRODUCING WEANING PIGS	384	14	183
8 SHEEP & WOOL	78	77	18
9 CHICKENS (INCLUDING HENS & BROILERS)	52	124	25
10 TURKEYS			
11 EGGS	464	802	35
12 OTHER PRODUCTIVE LIVESTOCK			
12A TOTAL SALES OF PRODUCTIVE LIVESTOCK	\$35149	\$69386	\$21260
13 SALE OF CROPS			
14 CORN	\$ 3715	\$ 4680	\$ 4740
15 SOYBEANS, FLAX, SUNFLOWERS	3756	4462	4272
16 WHEAT, OATS, BARLEY, RYE	412	380	371
17 POTATOES, SUGAR BEETS, & OTHER	394	409	385
18 HAY, SILAGE & OTHER CROPS	116	111	60
19 DIVERTED ACRE PAYMENT	2373	2883	2258
19A TOTAL SALES FROM CROPS	\$10766	\$12925	\$12086
20 CAPITAL ASSETS SOLD	532	922	931
21 GAS TAX REFUND	233	266	211
22 INCOME FROM WORK OFF THE FARM	671	1013	747
23 PATRONAGE REFUNDS	429	506	292
24 MISCELLANEOUS FARM INCOME	364	548	327
25 TOTAL FARM SALES	\$48144	\$85566	\$35854
26 INCREASE IN FARM CAPITAL	\$ 7823	\$18348	\$ 3754
27 FAMILY LIVING FROM THE FARM	395	392	363
28 TOTAL FARM RECEIPTS (25)+(26)+(27)	\$56362	\$104306	\$39971
29 ADJUSTED TOTAL FARM SALES (25)-(20)	\$47612	\$84644	\$34923
30 TOTAL CASH FARM OPERATING EXPENSE	\$27558	\$52727	\$21035
31 NET CASH OPERATING INCOME	\$20054	\$31917	\$13888

TABLE 2B - WHOLE FARM SUMMARY OF CASH EXPENSES - 1969

ITEMS	AVERAGE OF 228 FARMS	46 MOST PROFITABLE FARMS	46 LEAST PROFITABLE FARMS
1 PURCHASE OF LIVESTOCK			
2 DAIRY COWS	\$ 290	\$ 296	\$ 319
3 OTHER DAIRY CATTLE	242	59	228
4 BEEF BREEDING CATTLE	39	31	78
5 BEEF FEEDER CATTLE	4399	11717	3642
6A HOGS COMPLETE	433	1158	219
6B HOGS FINISHING	1091	2466	386
6C HOGS PRODUCING WEANING PIGS	61		28
7 SHEEP	16	49	4
8 CHICKENS (INCL. HENS & BROILERS)	93	250	7
9 TURKEYS			
10 OTHER PRODUCTIVE LIVESTOCK			
11 MISCELLANEOUS LIVESTOCK EXPENSE	1076	1749	633
12 FEED BOUGHT	6385	15866	2898
13 FERTILIZER	2263	3540	2113
14 CHEMICALS	1067	1712	1075
15 OTHER CROP EXPENSE	1457	2208	1587
16 CUSTOM WORK HIRED	1475	1717	1413
17 REPAIR + UPKEEP OF LIVESTOCK EQUIPMENT	287	499	193
18 REPAIR + UPKEEP OF FARM REAL ESTATE	568	975	516
19 GAS, OIL, GREASE BOUGHT (FARM SHARE)	1357	1694	1309
20 REPAIR+OPER. OF MACH, TRACTOR, TRUCK, AUTO (F.S.)	1602	2028	1546
21 WAGES OF HIRED LABOR	758	1485	433
22 PERSONAL PROPERTY + REAL ESTATE TAXES	1523	1846	1447
23 GENERAL FARM EXPENSE	519	663	503
24 TELEPHONE EXPENSE (FARM SHARE)	103	126	98
25 ELECTRICITY EXPENSE (FARM SHARE)	454	593	360
26 TOTAL CASH OPERATING EXPENSE	\$27558	\$52727	\$21035
27 POWER, CROP & GENERAL MACH, BOUGHT (FARM SHARE)	\$ 5115	\$ 6886	\$ 5060
28 LIVESTOCK EQUIPMENT BOUGHT	752	939	560
29 NEW REAL ESTATE + IMPROVEMENT	3301	5365	4378
30 TOTAL FARM PURCHASES (26) THRU (29)	\$36726	\$65917	\$31033
31 DECREASE IN FARM CAPITAL			
32 INTEREST ON FARM CAPITAL	\$ 7508	\$10213	\$ 6713
33 UNPAID FAMILY LABOR	685	454	607
34 LABOR CHARGE FOR PARTNERS + OTHER OPERATORS	508	1035	678
35 BOARD FURNISHED HIRED LABOR	73	53	82
36 TOTAL FARM EXPENSE (30) THRU (35)	\$45500	\$77672	\$39113
37 LABOR EARNINGS (WHOLE FARM) (2A/28)-(36)	\$10862	\$26634	\$ 858
38 NUMBER OF OPERATORS	1	1	1

TABLE 3 - ENTERPRISE STATEMENT - 1969

ITEMS	AVERAGE OF		46 MOST	46 LEAST
	228	FARMS	PROF. FARMS	PROF. FARMS
1 RETURNS AND NET INCREASES				
2 PRODUCTIVE LIVESTOCK				
3 DAIRY CATTLE	\$ 9617		\$ 5987	\$ 7185
4 OTHER DAIRY CATTLE	2751		2048	1749
5 BEEF BREEDING CATTLE	317		102	631
6 FEEDER CATTLE	3391		7365	3090
7 COMPLETE HOG ENTERPRISE	12177		38837	2986
8 HOG FINISHING ENTERPRISE	2704		6801	936
9 PRODUCING WEANING PIGS	527		659	165
10 FARM FLOCK SHEEP	65		102	8
11 FEEDER LAMBS				
12 CHICKENS (INCL. HENS & BROILERS)	417		745	59
13 TURKEYS				
14 OTHER PRODUCTIVE LIVESTOCK				
15 ALL PRODUCTIVE LIVESTOCK	\$31966		\$62646	\$16809
16 VALUE OF FEED FED TO LIVESTOCK	15492		28760	9708
17 RETURN OVER FEED FROM LIVESTOCK	16474		33886	7101
18 CROP, SEED AND FEED	16087		22536	12794
19 INCOME FROM LABOR OFF THE FARM	348		669	324
20 COOPERATIVE PATRONAGE REFUNDS	429		506	292
21 MISCELLANEOUS FARM INCOME	364		547	327
22 TOTAL RETURNS & NET INCREASES	\$33702		\$58144	\$20838
23 EXPENSES AND NET DECREASES				
24 TRUCK AND AUTO (FARM SHARE)	\$ 1494		\$ 1885	\$ 1447
25 TRACTORS AND CROP MACHINERY	4751		6277	4221
26 ELECTRICITY	454		593	360
27 LIVESTOCK EQUIPMENT	872		1390	520
28 BUILDINGS, FENCES & TILING	2039		3233	1765
29 BARE LAND	-15		-72	
30 MISCELLANEOUS LIVESTOCK EXPENSE	1076		1749	633
31 LABOR	2008		2572	1595
32 LABOR CHARGE FOR OTHER OPERATOR(S)	508		1035	678
33 PROPERTY TAX	1523		1846	1447
34 GENERAL FARM EXPENSE & TELEPHONE	622		789	601
35 INTEREST ON FARM CAPITAL	7508		10213	6713
36 TOTAL EXPENSES & NET DECREASES	\$22840		\$31510	\$19980
37 LABOR EARNINGS	\$10862		\$26634	\$ 858
38 NUMBER OF FARM OPERATORS	1		1	1

TABLE 3 SHOWS THE RECEIPTS AND EXPENSES ADJUSTED FOR CHANGES IN INVENTORY FOR EACH ENTERPRISE AND EACH CATEGORY OF EXPENSE IN ORDER TO SHOW NET INCREASES AND NET DECREASES AND IS ANOTHER METHOD OF DETERMINING LABOR EARNINGS.

TABLE 4 - HOUSEHOLD EXPENSE - 1969

ITEMS	AVERAGE OF 132 FARMS	26 MOST PROFIT. FARMS	31 LEAST PROFIT. FARMS
1 NUMBER OF PERSONS-FAMILY	5	6	4
2 NUMBER OF ADULT EQUIVALENT-FAMILY	3.8	4.1	3.2
3 CHURCH AND WELFARE	\$ 333	\$ 567	\$ 275
4 MEDICAL CARE AND HEALTH INSURANCE	753	899	640
5 FOOD AND MEALS BOUGHT	1264	1188	1142
6 OPERATING EXPENSE AND SUPPLIES	409	476	367
7 FURNISHINGS AND EQUIPMENT	465	484	516
8 CLOTHING AND CLOTHING MATERIALS	488	517	440
9 PERSONAL CARE-PERSONAL SPENDING	167	170	175
10 EDUCATION	170	156	142
11 RECREATION	206	220	167
12 GIFTS AND SPECIAL EVENTS	202	174	223
13 PERSONAL SHARE TRUCK & AUTO EXPENSE	294	289	311
14 OPERATORS SHARE UPKEEP ON DWELLING	143	142	241
15 PERSONAL SHARE TEL. & ELECT. EXPENSE	155	199	134
16 TOTAL CASH LIVING EXPENSE	\$5049.	\$5481	\$4773
17 PERSONAL SHARE NEW TRUCK & AUTO	324	443	269
18 NEW DWELLING BOUGHT	220	66	338
19 TAXES AND OTHER DEDUCTIONS	722	1376	437
20 LIFE INS. & OTHER SAVINGS & INVESTMENTS	1274	1653	396
21 TOTAL HOUSEHOLD & PERSONAL (16)-(20)	\$7589	\$9019	\$6213
22 TOTAL FAMILY LIVING FROM THE FARM (33)	\$ 400	\$ 387	\$ 348
23 TOTAL CASH & NON-CASH EXP. (21)+(22)	\$7989	\$9406	\$6561
24 FAMILY LIVING FROM THE FARM			
25	OPR.SHARE	OPR. SHARE	OPR. SHARE
26 MILK AND CREAM	\$ 95	\$ 60	\$ 68
27 BEEF	201	178	204
28 PORK	74	138	53
29 LAMB			
30 POULTRY	5		2
31 EGGS	4	2	
32 VEG., FRUIT,POTATOES,FUEL-ALSO OTHER PRODUCE	21	10	21
33 TOTAL FAMILY LIVING FROM THE FARM	\$ 400	\$ 388	\$ 348

TABLE 5 - NET WORTH STATEMENT-OPERATOR - 1969

ITEMS	AVERAGE OF 186 FARMS		31 MOST PROF. FARMS		27 LEAST PROF. FARMS	
	JAN.1	DEC.31	JAN.1	DEC.31	JAN.1	DEC.31
1 TOTAL LIVESTOCK	\$ 14091	16960	19772	26611	11259	12198
2 CROP, SEED & FEED	11971	13126	17307	22292	13101	11234
3 TOTAL POWER, MACHINERY	15880	18095	22193	25351	11416	13152
4 LAND	25399	25557	35515	37055	19298	18306
5 BUILDINGS, FENCES, ETC.	17499	18607	25345	27002	11950	13390
6 TOTAL FARM CAPITAL	\$ 84840	92345	120132	138311	67024	68280
7 NON-FARM ASSETS	\$ 9684	10925	12198	14400	10356	11600
8 DWELLING	5228	5532	8014	8046	3964	4217
9 TOTAL ASSETS	\$ 99752	108802	140344	160757	81344	84097
10 REAL ESTATE DEBT	\$ 25784	25350	32553	31722	19793	19502
11 CHATTEL MORTGAGES	12468	13562	13153	13473	17846	15886
12 NOTES	4377	4887	4390	5955	3887	6196
13 ACCOUNTS PAYABLE	1724	1756	2901	1948	1272	2129
14 TOTAL LIABILITIES	\$ 44353	45555	52997	53098	42798	43713
15 FARMERS NET WORTH	\$ 55399	63247	87347	107659	38546	40384
16 GAIN IN NET WORTH	\$	7848		20312		1838
17 SUPPLEMENTARY MANAGEMENT INFORMATION						
18 OPERATORS LABOR EARNINGS	\$ 10222		25164		-335	
19 RET. TO CAPITAL & FAMILY LABOR	13761		30178		2088	
20 NON-FARM INCOME						
21 OUTSIDE INVESTMENT INCOME	178		332		331	
22 OTHER PERSONAL INCOME	1265		416		4875	
23 TOTAL NON-FARM INCOME	\$ 1443		748		5206	
24 TOTAL MONEY BORROWED	13994		16020		19128	
25 TOTAL PAID ON DEBT(PRINCIPAL)	13377		15525		18619	
26 TOTAL HOUSEHOLD + PERS. EXP.	6498		8394		6170	
27 RATIO FARM EXP.TO FM.RECEIPTS	.793		.695		1.010	
28 RATIO ASSETS TO LIAB.-JAN.	2.249	2.388	2.648	3.028	1.901	1.924
29 RATIO NON-REAL ESTATE ASSETS NON-REAL ESTATE LIAB.	2.78	2.93	3.50	4.15	2.01	1.99
30 RATIO REAL ESTATE ASSETS TO REAL ESTATE LIAB.	1.87	1.96	2.12	2.27	1.78	1.84
31 RATIO - NET WORTH TO TOTAL LIAB.	1.25	1.39	1.65	2.03	.90	.92
32 *RATIO CASH OPERATING EXP. TO ADJ. TOTAL FARM SALES		.66		.62		.77

* ADJUSTED TOTAL FARM SALES DOES NOT INCLUDE SALE OF CAPITAL ASSETS.

THE GAIN OR LOSS IN NET WORTH IS A DOLLAR MEASURE OF PROGRESS. IT REPRESENTS THE REMAINDER OF NET EARNINGS AFTER PERSONAL AND LIVING EXPENSES. ACCURATE NET WORTH STATEMENTS ARE EXTREMELY VALUABLE TO THE FARM OPERATOR. REPORTS SHOWING EXTREME DISCREPANCIES WERE NOT USED IN THIS TABLE.

TABLE 6A - OPERATORS SHARE OF CASH RECEIPTS - 1969

ITEMS	AVERAGE OF 228 FARMS	36 MOST PROFIT. FARMS	36 LEAST PROFIT. FARMS
1 SALE OF LIVESTOCK & LIVESTOCK PRODUCTS			
2 DAIRY COWS	\$ 1311	\$ 737	\$ 1295
3 DAIRY PRODUCTS	8451	5463	6634
4 OTHER DAIRY CATTLE	878	672	570
5 BEEF BREEDING CATTLE	144	164	332
6 BEEF FEEDER CATTLE	7013	17739	5570
7A HOGS COMPLETE	10413	35424	2344
7B HOGS FINISHING	3686	2620	1585
7C HOGS PRODUCING WEANING PIGS	362	75	204
8 SHEEP AND WOOL	77	346	23
9 CHICKENS (INCLUDING HENS & BROILERS)	44	3	32
10 TURKEYS			
11 EGGS	461	7	
12 OTHER PRODUCTIVE LIVESTOCK			
12A TOTAL SALES OF PRODUCTIVE LIVESTOCK	\$32840	\$63250	\$18589
13 SALE OF CROPS			
14 CORN	\$ 3143	\$ 4353	\$ 3621
15 SOYBEANS, FLAX, SUNFLOWERS	3338	3962	3758
16 WHEAT, OATS, BARLEY, RYE	327	343	293
17 POTATOES, SUGAR BEETS, CANNING AND OTHER CROPS A+B	381	392	207
18 HAY, SILAGE AND OTHER CROPS	73	121	51
19 DIVERTED ACRE PAYMENT	2110	2631	1826
19A TOTAL SALES FROM CROPS	\$ 9372	\$11802	\$ 9756
20 CAPITAL ASSETS SOLD	252	413	222
21 GAS TAX REFUND	222	249	211
22 INCOME FROM WORK OFF THE FARM	646	1161	646
23 PATRONAGE REFUNDS	400	563	269
24 MISCELLANEOUS FARM INCOME	360	637	347
25 TOTAL FARM SALES	\$44092	\$78075	\$30040
26 INCREASE IN FARM CAPITAL	\$ 7464	\$19011	\$ 1997
27 FAMILY LIVING FROM THE FARM	374	395	347
28 TOTAL FARM RECEIPTS (25)+(26)+(27)	\$51930	\$97481	\$32384
29 ADJUSTED TOTAL FARM SALES (25)-(20)	\$43840	\$77662	\$29818
30 TOTAL CASH FARM OPERATING EXPENSE	29708	53280	22021
31 NET CASH OPERATING INCOME	\$14132	\$24382	\$ 7797

TABLES 6A AND 6B ARE IDENTICAL TO TABLES 2A AND 2B EXCEPT THAT THE LANDLORD'S SHARE IS OMITTED AND INTEREST ON EQUITY IS CREDITED TO THE OPERATOR.

TABLE 6B - OPERATORS SHARE OF CASH EXPENSES - 1969

ITEMS	AVERAGE OF 228 FARMS	36 MOST PROFIT. FARMS	36 LEAST PROFIT. FARMS
1 PURCHASE OF LIVESTOCK			
2 DAIRY COWS	\$ 257	\$ 170	\$ 355
3 OTHER DAIRY CATTLE	223	96	337
4 BEEF BREEDING CATTLE	31	40	100
5 BEEF FEEDER CATTLE	4335	13048	2626
6A HOGS COMPLETE	416	949	266
6B HOGS FINISHING	1083	438	514
6C HOGS PRODUCING WEANING PIGS	39	8	35
7 SHEEP	16	51	5
8 CHICKENS	93	1	1
9 TURKEYS			
10 OTHER PRODUCTIVE LIVESTOCK			
11 MISCELLANEOUS LIVESTOCK EXPENSE	998	1496	632
12 FEED BOUGHT	6092	14419	2509
13 FERTILIZER	2065	3369	1613
14 CHEMICALS	972	1616	1030
15 OTHER CROP EXPENSE	1350	2075	1277
16 CUSTOM WORK HIRED	1384	1742	1290
17 REPAIR + UPKEEP OF LIVESTOCK EQUIPMENT	272	416	171
18 REPAIR + UPKEEP OF FARM REAL ESTATE	488	681	376
19 GAS, OIL, GREASE BOUGHT (FARM SHARE)	1284	1603	1085
20 REPAIR + OPER. OF MACH. TRACTOR TRUCK, AUTO (FARM SHARE)	1567	1849	1558
21 WAGES OF HIRED LABOR	742	1279	564
22 PERSONAL PROPERTY + REAL ESTATE TAXES	917	1253	742
23 CASH RENT	1479	1924	1907
24 GENERAL FARM EXPENSE	488	658	482
25 TELEPHONE EXPENSE (FARM SHARE)	98	118	88
26 ELECTRICITY EXPENSE (FARM SHARE)	431	558	313
27 INTEREST EXPENSE	2588	3423	2146
28 TOTAL CASH OPERATING EXPENSE	\$29708	\$53280	\$22022
29 POWER, CROP & GEN. MACH. BOUGHT (FARM SHARE)	\$ 4774	\$ 6678	\$ 3756
30 LIVESTOCK EQUIPMENT BOUGHT	704	1050	394
31 NEW REAL ESTATE + IMPROVEMENTS	2862	5548	3407
32 TOTAL FARM PURCHASES (28) THRU (31)	\$38048	\$66556	\$29579
33 DECREASE IN FARM CAPITAL			
34 INTEREST ON FARM CAPITAL	\$ 2948	\$ 4802	\$ 2081
35 UNPAID FAMILY LABOR	685	456	891
36 LABOR CHG. FOR PARTNERS + OTHER PARTNERS			
37 BOARD FURNISHED HIRED LABOR	67	45	113
38 TOTAL FARM EXPENSE (32) THRU (37)	\$41748	\$71859	\$32664
39 LABOR EARNINGS (OPER.SHARE) (6A/28)-(38)	\$10182	\$25622	\$ -280
40 RETURN TO CAPITAL AND FAMILY LABOR	\$13815	\$30880	\$ 2692

LINE 40 REPRESENTS AVAILABLE INCOME FOR THE FARM FAMILY.

WORK UNITS

THE TOTAL "WORK UNITS" FOR ANY ONE FARM IS A MEASURE OF THE SIZE OF THAT FARM BUSINESS. A WORK UNIT AS USED IN THIS REPORT IS THE AVERAGE ACCOMPLISHMENT OF A FARM WORKER IN A TEN HOUR DAY. THE NUMBER OF WORK UNITS PER FARM OR PER WORKER MAY BE INTERPRETED DIFFERENTLY FOR DIFFERENT FARM SITUATIONS AS WORK EFFICIENCY, DEGREE OF MECHANIZATION, CAREFUL PLANNING OR HOURS WORKED. OCCASIONALLY HIGH WORK UNITS PER WORKER INDICATES AN EXCESSIVE WORK LOAD. THE NUMBER OF WORK UNITS FOR EACH CLASS OF LIVESTOCK AND EACH ACRE OF CROP ARE PRESENTED IN TABLE 7. THE WORK UNIT RATING WAS REVISED IN 1968.

TABLE 7 NUMBER OF WORK UNITS FOR SOME CLASSES OF LIVESTOCK AND COMMON CROPS

ITEM	NUMBER OF WORK UNITS	ITEM	NUMBER OF WORK UNITS
DAIRY & DUAL PURPOSE COWS	7.0 PER HEAD	TURKEY POULTS	.12 PER 100#
OTHER DAIRY & DUAL PURP.CATTLE	1.2 PER HEAD	CANNING PEAS	.3 PER ACRE
BEEF BREEDING HERD	1.5 PER COW & REPLACEMENT	SOYBEANS FOR GRAIN	.45 PER ACRE
FEEDER CATTLE	.12 PER 100#	SMALL GRAIN	.3 PER ACRE
SHEEP-FARM FLOCK	.6 PER EWE & REPLACEMENT	SWEET CORN	.4 PER ACRE
LAMBS-FEEDERS	.3 PER 100#	CORN, HUSKED	.55 PER ACRE
HOGS-COMplete	.12 PER 100#	\$20 CUSTOM WORK	1.0
HOGS-FINISHING	.06 PER 100#	ALFALFA HAY	.6 PER ACRE
HOGS-WEANING	1.4 PER LITTER	OTHER HAY CROPS	.4 PER ACRE
CHICKENS-LAYING	5.0 PER 100 HENS	CORN, SILAGE	.8 PER ACRE
CHICKENS-REPLACEMENT	5.0 PER 100 HENS	SUGAR BEETS	2.0 PER ACRE
		DIVERTED ACRES	.2 PER ACRE

COSTS AND RETURNS FROM YOUR LIVESTOCK ENTERPRISES

FEED IS THE LARGEST SINGLE ITEM OF COST FOR ALL CLASSES OF LIVESTOCK. THE PROPORTION OF THE TOTAL COST REPRESENTED BY FEED VARIES BETWEEN CLASSES OF LIVESTOCK. FEED MAKES UP APPROXIMATELY 45% OF THE TOTAL COSTS OF MAINTAINING A DAIRY COW HERD AND AS MUCH AS 65% TO 75% FOR HOGS AND FEEDER CATTLE. IT IS NECESSARY TO SECURE A RELATIVELY HIGHER RETURN OVER FEED FROM DAIRY CATTLE AND POULTRY THAN FROM THE OTHER LIVESTOCK ENTERPRISES TO COVER COSTS OTHER THAN FEED COSTS. WHEN FEED PRICES ARE LOW, THE PERCENT OF TOTAL COST REPRESENTED BY FEED IS LOWER.

RECENT ANALYSIS INFORMATION INCLUDES SOME OTHER LIVESTOCK PRODUCTION COSTS. THE REVISED MINNESOTA FARM ACCOUNT BOOK MAKES SUCH DETAIL POSSIBLE. THE VALUE OF THIS INFORMATION IS ENTIRELY DEPENDENT UPON THE COMPLETENESS AND ACCURACY OF THE APPROPRIATE RECORDS. PRINCIPAL COSTS NOT INCLUDED IN THE ANALYSIS ARE LABOR AND HOUSING.

AVERAGE PRICES USED FOR SOME COMMON FEEDS - 1969

CORN	\$1.05 BU.	GOOD ALFALFA HAY	\$20.00 T.
OATS	.60 BU.	EXTRA CHOICE ALFALFA HAY	22.00 T.
BARLEY	.90 BU.	CORN SILAGE	7.00 T.
WHEAT	1.55 BU.	OAT SILAGE	6.00 T.

PASTURE PER HEAD PER MONTH

COWS AND BULLS	\$4.50	PIGS	.08
COWS-BULLS (GREEN CHOP)	6.00	EWES	.40
YOUNG CATTLE	2.25	LAMBS	.20
HOGS	.16		

THIS INFORMATION RELATES TO LIVESTOCK TABLES - PAGES 20 THROUGH 28

RANGE OF LABOR EARNINGS - 1969

6 FARMS EXCEEDED \$35000
 6 FARMS WITH \$30815 TO \$34477
 21 FARMS WITH \$20010 TO \$29281

\$35000

63 FARMS WITH \$10066 TO \$19006

\$20000

AVERAGE \$10,862

66 FARMS WITH \$5114 TO 9995

\$10000

53 FARMS WITH \$112 TO \$4905

THIS TABLE PROVIDES A GRAPHIC DESCRIPTION OF THE VARIATION IN LABOR EARNINGS OF THE FARMS INCLUDED IN THE 1969 ANALYSIS AVERAGES. THERE IS INSUFFICIENT SPACE TO SHOW ALL EARNINGS. LINES ARE DRAWN TO SHOW EVERY FOURTH FARM.

13 FARMS MINUS
 LABOR EARNINGS -\$2000

-\$2000

MEASURES OF FARM ORGANIZATION AND MANAGEMENT EFFICIENCY

TABLE 8 COMPARES EFFICIENCIES IN FARM MANAGEMENT BETWEEN AVERAGE, HIGH RETURN AND LOW RETURN FARMS. THIS IS GRAPHICALLY ILLUSTRATED BY A THERMOMETER CHART ON PAGE 14.

"LABOR EARNINGS" IS THE BASIS FOR COMPARING THE RELATIONSHIP BETWEEN SELECTED FARM MANAGEMENT FACTORS AND FARM PROFIT. "LABOR EARNINGS" REPRESENTS THAT SHARE OF THE TOTAL FARM INCOME THAT IS CREDITED TO THE OPERATOR'S LABOR AND MANAGEMENT. IT IS A WHOLE FARM FIGURE. THE OPERATOR'S SHARE MAY BE QUITE DIFFERENT. TABLES 2B AND 3 SHOW TWO METHODS OF DETERMINING LABOR EARNINGS. THE OPERATOR'S SHARE OF LABOR EARNINGS IS SHOWN IN TABLE 6B. THE RANGE OF EARNINGS OF THE COOPERATORS IS ILLUSTRATED BY A "RANGE OF EARNINGS" CHART ON PAGE 11.

FACTORS

1. CROP YIELD INDEX - CROP YIELDS ARE EXPRESSED IN TERMS OF AVERAGES WITH AN INDEX OF 100 REPRESENTING THE COMBINED AVERAGE OF ALL CROPS. AN INDEX OF MORE THAN 100 IS ABOVE AVERAGE WHILE AN INDEX OF LESS THAN 100 IS BELOW AVERAGE.
2. PERCENT OF TILLABLE LAND IN HIGH RETURN CROPS - THIS RATING IS BASED ON A FULL SCORE FOR THE HIGHEST RATED (A) CROPS TO NO SCORE FOR THE LOWEST RATED (D) CROPS. THE RATINGS ARE GIVEN ON PAGE 15.
3. GROSS RETURN PER ACRE REFLECTS BOTH CROP SELECTION AND CROP YIELD.
4. RETURN PER \$100 FEED FED TO PRODUCTIVE LIVESTOCK IS A MEASURE OF THE GENERAL LEVEL OF EFFICIENCY FOR ALL LIVESTOCK. IT IS EXPRESSED AS A PERCENTAGE WITH 100 REPRESENTING AVERAGE EFFICIENCY WHILE INDEXES HIGHER THAN 100 REPRESENT ABOVE AVERAGE EFFICIENCY AND THOSE LESS THAN 100 BELOW AVERAGE EFFICIENCY.
5. LIVESTOCK UNITS PER 100 ACRES IS IMPORTANT FOR FARMS WITH LIMITED CROPLAND. EXAMPLES OF LIVESTOCK UNITS ARE ONE DAIRY COW, TWO GROWING DAIRY ANIMALS, SEVEN SHEEP, AND FIFTY LAYING HENS.
6. SIZE OF BUSINESS IN WORK UNITS - THE WORK UNIT MEASURES SIZE ON THE BASIS OF WORK LOAD. A WORK UNIT REPRESENTS WHAT THE AVERAGE WORKER IS EXPECTED TO ACCOMPLISH IN A TEN HOUR DAY. VALUES ARE ASSIGNED TO VARIOUS CLASSES OF CROPS AND LIVESTOCK AS SHOWN IN TABLE 7 ON PAGE 10.
7. WORK UNITS PER WORKER IS A MEASURE OF LABOR EFFICIENCY. IT IS DETERMINED BY DIVIDING THE WORK UNITS BY THE NUMBER OF WORKERS.
8. POWER, MACHINERY, EQUIPMENT AND BUILDING EXPENSE PER WORK UNIT IS A MEASURE OF EXPENSE CONTROL. IT CAN BE DETERMINED BY DIVIDING THE MECHANIZATION AND BUILDING COSTS IN TABLE 3 BY THE NUMBER OF WORK UNITS.
9. FARM CAPITAL INVESTMENT PER WORKER IS ANOTHER WAY OF MEASURING SIZE OF BUSINESS.

WHILE THE TOTAL NUMBER OF FACTORS IN WHICH ANY FARM OPERATION MAY EXCEL IS ALWAYS INTERESTING AND GENERALLY IMPORTANT, PROFIT IS INFLUENCED MORE BY COMBINATIONS OF FACTORS. ONE IDEAL COMBINATION IS A HEAVILY STOCKED FARM WITH A HIGH FEEDING EFFICIENCY AND HIGH YIELDING CROPS. THE OPPOSITE SITUATION, A HIGH CONCENTRATION OF INEFFECTUALLY MANAGED LIVESTOCK, CAN BE QUITE DISASTROUS.

TABLE 8 - MEASURES OF FARM ORGANIZATION - 1969

ITEMS	AVERAGE OF 228 FARMS	46 MOST PROFIT. FARMS	46 LEAST PROFIT. FARMS
1 LABOR EARNINGS	\$10862	\$26634	\$ 858
2 CROP YIELDS-INDEX	100	106	100
3 PERCENT TILL. LAND IN H.R. CROPS	68.3	75.3	66.9
4 GROSS RET. PER TILL. ACRE(EXCL.PASTURE)	\$ 72.08	\$ 83.63	\$ 66.12
5 RET. FOR \$100 TO PROD. LIVESTOCK-INDEX	100	109	88
6 LIVESTOCK UNITS PER 100 ACRES*	35.2	54.9	25.3
7 SIZE OF BUSINESS - WORK UNITS	392.3	524.7	300.3
8 WORK UNITS PER WORKER	269.4	322.8	214.0
9 POWER MACH. EQUIP. BLDG. EXP. PER WORK UNIT	\$ 26.40	\$ 26.00	\$ 32.09
10 FARM CAPITAL INVESTMENT PER WORKER	\$89568	\$104435	\$86035
11 INDEX OF RETURN FOR \$100 FEED FROM			
12 COMPLETE HOG ENTERPRISE	100	102	87
13 HOG FINISHING ENTERPRISE	100	107	78
14 PRODUCING WEANING PIGS	100		93
15 DAIRY CATTLE	100	108	99
16 OTHER DAIRY	100	125	83
17 ALL DAIRY & DUAL PURPOSE CATTLE	100	112	95
18 BEEF BREEDING CATTLE	100	97	110
19 BEEF FEEDER CATTLE	100	109	79
20 SHEEP FARM FLOCK	100	106	113
21 FEEDER LAMBS			
22 CHICKENS-LAYING FLOCK	100	116	29
23 CHICKENS-BROILERS	100		100
24 TURKEYS-LAYING FLOCK			
25 TURKEY-POULTS			
26 OTHER PRODUCTIVE LIVESTOCK			
27 NUMBER OF ANIMAL UNITS	91	167	62
28 WORK UNITS			
29 CROPS	127.3	160.2	118.9
30 PRODUCTIVE LIVESTOCK	247.5	331.0	165.1
31 OTHER PRODUCTIVE WORK UNITS	17.4	33.4	16.2
32 EXPENSES PER WORK UNIT			
33 TRACTOR & CROP MACHINERY EXPENSE	\$ 13.37	\$ 12.21	\$ 16.85
34 FARM SHARE OF AUTO & TRUCK EXPENSE	4.18	3.77	5.47
35 FARM SHARE OF ELECTRICITY EXPENSE	1.24	1.20	1.38
36 LIVESTOCK EQUIPMENT EXPENSE	2.17	2.72	1.66
37 BUILDING, FENCING & TILING EXPENSE	5.42	6.08	6.71
38 TRAC.& CROP MACH.EXP. PER CROP ACRE**	\$ 18.17	\$ 19.30	\$ 17.83
39 *ACRES INCLUDE ALL TILLABLE LAND, NON-TILLABLE HAY AND PASTURE			
40 **ACRES INCLUDE ALL TILLABLE LAND PLUS ACRES IN WILD HAY			

THERMOMETER CHART

USING YOUR FIGURES FROM TABLE 8, LOCATE YOUR STANDING WITH RESPECT TO THE VARIOUS MEASURES OF FARM ORGANIZATION AND MANAGEMENT EFFICIENCY, THE AVERAGES FOR THE 228 FARMS INCLUDED IN THIS SUMMARY ARE LOCATED BETWEEN THE DOTTED LINES ACROSS THE CENTER OF THIS PAGE.

	Labor Earnings \$	Crop Yield Index	Per Cent Land in High Return Crops	Gross Return Per Acre \$	Return Per \$100 Feed Index	Livestock Units Per 100 Acres	Total Work Units	Work Units Per Worker	Expense Per Work Unit \$	Investment Per Worker \$
\$35000	125		88	100	130	60	650	390	14	200000
\$30000	125		88	100	130	60	650	390	14	200000
\$25000	- 120 -	-	84 -	93 -	123 -	55 -	575 -	360 -	16 -	180000 -
\$21000	- 115 -	-	80 -	87 -	117 -	50 -	500 -	340 -	18 -	160000 -
\$18000	- 110 -	-	78 -	83 -	112 -	46 -	450 -	320 -	20 -	140000 -
\$15000	- 106 -	-	75 -	78 -	108 -	42 -	425 -	300 -	22 -	120000 -
\$13000	- 103 -	-	73 -	74 -	104 -	38 -	410 -	285 -	24 -	100000 -
\$10862	- 100 -	-	68 -	72 -	100 -	35 -	392 -	269 -	26 -	89000 -
\$ 8500	- 97 -	-	65 -	68 -	96 -	32 -	375 -	250 -	27 -	75000 -
\$ 7000	- 94 -	-	63 -	65 -	92 -	29 -	360 -	235 -	28 -	65000 -
\$ 5000	- 91 -	-	60 -	62 -	88 -	26 -	330 -	220 -	29 -	55000 -
\$ 3000	- 88 -	-	57 -	60 -	84 -	23 -	300 -	200 -	30 -	50000 -
\$ 1000	- 85 -	-	53 -	57 -	80 -	20 -	260 -	180 -	31 -	45000 -
0	- 80 -	-	46 -	55 -	75 -	17 -	230 -	160 -	33 -	40000 -
-\$ 1000	- 75 -	-	40 -	52 -	70 -	14 -	200 -	140 -	35 -	35000 -

TABLE 9 CROP ACRES AND YIELDS - 1969

CROPS		CROP	RATING-AVERAGE OF 221 FARMS		45 MOST	45 LEAST
			ACRES	YIELD	PROF. FARMS YIELD	PROF. FARMS YIELD
1	OATS AND MIXTURES	D	22.3	55.6	52.1	54.2
2	OATS SILAGE	C	.9	6.7T	5.5T	7.5T
3	CANNING PEAS	B	1.7	\$57.65	\$72.50	\$57.27
4	WHEAT	C	3.9	25.9	29.0	22.2
5	BARLEY	D	.1	40.0		
6	FLAX					
7	RYE					
8	TOTAL SMALL GRAIN & PEAS		28.9			
9	CANNING CORN	B	3.0	\$78.67	\$72.00	\$70.26
10	CORN GRAIN AND SEED CORN	A	95.8	99.6	107.3	91.0
11	SOYBEANS-GRAIN	B	66.2	26.0	28.7	23.9
12	CORN AND CANE SILAGE	B	10.5	14.9T	16.1T	13.0T
13	CORN AND CANE FODDER					
14	POTATOES					
15	SUGAR BEETS	A	.5	12.0T		
17	OTHER CULTIVATED CROPS - A					
18	OTHER CULTIVATED CROPS - B					
19	TOTAL CULTIVATED CROPS		176.0			
20	ALFALFA HAY	B	27.0	3.5T	3.8T	3.1T
21	OTHER LEGUME HAY	C	1.0	3.0T	5.0T	5.0T
22	TAME GRASS HAY	D				
23	ANNUAL HAY	D	.6	2.0T		2.0T
24	LEGUME AND GRASS SILAGE	D	.4	7.5T		3.8T
25	LEGUME SEED					
26	GRASS SEED					
27	TOTAL HAY		29.0			
28	ALFALFA & MIXED PASTURE		3.8			
29	OTHER LEGUME PASTURE	C or B	.2			
30	OTHER TILLABLE PASTURE	D	1.2			
31	TOTAL TILLABLE PASTURE		5.2			
32	DIVERTED ACRES INCOME	A	39.2	\$58.78	\$61.54	\$57.63
33	SUMMER FALLOW - TILLED	D				
34	OTHER TILLABLE LAND IDLE	D	.6			
35	TOTAL TILLABLE LAND		278.9			
36	WILD HAY		.7			
37	NON-TILLABLE PASTURE		13.7			
38	TIMBER		3.1			
39	ROADS AND WASTE		11.7			
40	FARMSTEAD		9.1			
41	TOTAL ACRES IN FARM		317.2			
42	SUPPLEMENTARY MANAGEMENT INFORMATION					
43	PERCENT LAND TILLABLE			87.9	90.2	85.8
44	PERCENT IN HIGH RETURN CROPS			69.4	74.6	68.8
45	*FERTILIZER COST PER ACRE			\$ 8.18	\$10.19	\$ 8.01
46	*CROP CHEMICALS PER ACRE			\$ 3.85	\$ 4.98	\$ 3.86
47	*SEED AND OTHER COSTS PER ACRE			\$ 5.28	\$ 6.32	\$ 6.02
48	*GAS, OIL, GREASE BOUGHT PER ACRE			\$ 3.13	\$ 3.07	\$ 3.36
49	*TILLABLE LAND MINUS PASTURE					

TABLE 10 CROP DATA FOR OATS - 181 FARMS - 1969

ITEMS	TOTAL	PER ACRE AVERAGE	90 HIGH	90 LOW
1 ACRES		27.3	27.9	26.6
2 YIELD/ACRE		55.4	68.2	42.1
3 VALUE/UNIT		\$.61	\$.61	\$.61
4 GROSS RETURN	\$938.85	\$34.39	\$42.85	\$25.95
5 SUPPLEMENTAL COSTS				
6 FERTILIZER		\$ 2.27	\$ 2.54	\$ 1.95
7 CHEMICALS		.15	.11	.19
8 SEED AND OTHER		3.59	3.51	3.61
9-10 CUSTOM WORK & HIRED LABOR		2.23	2.51	2.03
11 TOTAL SUPPLEMENTAL COSTS	\$224.95	\$ 8.24	\$ 8.67	\$ 7.78
12 RETURN OVER SUPPLEMENTAL COST	\$713.90	\$26.15	\$34.18	\$18.17
13 ALLOCATED COSTS				
14 POWER & CROP MACHINERY EXPENSE		\$10.56	\$11.19	\$10.68
15-16 LAND COST & MISC. COSTS		23.81	24.48	23.16
17 TOTAL ALLOCATED COSTS	\$938.30	34.37	35.67	33.84
		PER UNIT		
18 TOTAL LISTED COSTS	\$1163.25	\$.77	\$44.34	\$41.62
19 RETURN OVER ABOVE COSTS	(-\$224.40)	(-\$ 8.22)	(-\$ 1.49)	(-\$15.67)

TABLE 10 CROP DATA FOR WHEAT - 70 FARMS - 1969

ITEMS	TOTAL	PER ACRE
1 ACRES	12.2	
2 YIELD/ACRE		26.1
3 VALUE/UNIT		\$ 1.90
4 GROSS RETURN	\$594.02	\$48.69
5 SUPPLEMENTAL COSTS		
6 FERTILIZER		\$ 6.15
7 CHEMICALS		.25
8 SEED AND OTHER		5.25
9-10 HIRED LABOR & CUSTOM WORK		2.54
11 TOTAL SUPPLEMENTAL COSTS	\$173.12	\$14.19
12 RETURN OVER SUPPLEMENTAL COSTS	\$420.90	\$34.50
13 ALLOCATED COSTS		
14 POWER & CROP MACHINERY EXPENSE		\$10.56
15-16 LAND COST & MISC. COSTS		25.00
17 TOTAL ALLOCATED COSTS	\$433.83	\$35.56
		PER UNIT
18 TOTAL LISTED COSTS	\$1.90	\$606.95
19 RETURN OVER ABOVE COSTS	(-\$ 12.93)	(-\$ 1.06)

TABLE 10 CROP DATA FOR CORN - 220 FARMS - 1969

ITEMS	TOTAL	PER ACRE AVERAGE	109 HIGH	109 LOW
1 ACRES		96.2	109.7	82.6
2 YIELD/ACRE		99.7	112.5	82.6
3 VALUE/UNIT		\$ 1.05	\$ 1.05	\$ 1.05
4 GROSS RETURN	\$9763.34	\$101.49	\$118.52	\$84.59
5 SUPPLEMENTAL COSTS				
6 FERTILIZER		\$ 16.28	\$ 18.08	\$13.95
7 CHEMICALS		6.53	7.34	5.46
8 SEED AND OTHER		8.04	8.60	7.22
9-10 CUSTOM WORK & HIRED LABOR		4.20	3.73	4.87
11 TOTAL SUPPLEMENTAL COSTS	\$3371.81	\$ 35.05	\$ 37.75	\$31.50
12 RET.OVER SUPPLEMENTAL COSTS	\$6391.53	\$ 66.44	\$ 80.77	\$53.09
13 ALLOCATED COSTS				
14 POWER & CROP MACHINERY EXPENSE		\$ 19.36	\$ 20.52	\$19.58
15-16 LAND COST & MISC. COSTS		24.76	25.66	23.46
17 TOTAL ALLOCATED COSTS	\$4244.34	\$ 44.12	\$ 46.18	\$43.04
		PER UNIT		
18 TOTAL LISTED COSTS	\$7616.15	.79 \$79.17	\$ 83.93	\$74.54
19 RETURN OVER ABOVE COSTS	\$2147.19	\$22.32	\$ 34.59	\$10.05

TABLE 10 CROP DATA FOR SOYBEANS - 180 FARMS - 1969

ITEMS	TOTAL	PER ACRE AVERAGE	90 HIGH	90 LOW
1 ACRES		81.3	100.1	62.4
2 YIELD/ACRE		26.0	30.1	19.5
3 VALUE/UNIT		\$ 2.20	\$ 2.20	\$ 2.20
4 GROSS RETURN	\$4481.26	\$55.12	\$67.07	\$43.16
5 SUPPLEMENTAL COSTS				
6 FERTILIZER		\$ 2.18	\$ 2.61	\$ 1.49
7 CHEMICALS		4.66	5.00	4.13
8 SEED AND OTHER		3.71	4.01	3.24
9-10 HIRED LABOR & CUSTOM WORK		1.54	1.32	1.89
11 TOTAL SUPPLEMENTAL COSTS	\$ 982.92	\$12.09	\$12.94	\$10.75
12 RET.OVER SUPPLEMENTAL COSTS	\$3498.34	\$43.03	\$54.13	\$32.41
13 ALLOCATED COSTS				
14 POWER & CROP MACHINERY EXPENSE		\$15.84	\$16.79	\$16.02
15-16 LAND COST & MISC. COSTS		24.54	25.42	23.17
17 TOTAL ALLOCATED COSTS	\$3282.89	\$40.38	\$42.21	\$39.19
		PER UNIT		
18 TOTAL LISTED COSTS	\$4265.81	2.02 \$52.47	\$55.15	\$49.94
19 RETURN OVER ABOVE COSTS	\$ 215.45	\$ 2.65	\$11.92	(\$-6.78)

TABLE 10 CROP DATA FOR CORN SILAGE - 139 FARMS - 1969

ITEMS	TOTAL	PER ACRE
1 ACRES	16.7	
2 YIELD/ACRE		14.9T
3 VALUE/UNIT		\$ 6.99
4 GROSS RETURN	\$1758.34	\$105.29
5 SUPPLEMENTAL COSTS		
6 FERTILIZER		\$ 14.79
7 CHEMICALS		5.81
8 SEED AND OTHER		5.45
9-10 CUSTOM WORK AND HIRED LABOR		3.23
11 TOTAL SUPPLEMENTAL COSTS	\$ 488.98	\$ 29.28
12 RETURN OVER SUPPLEMENTAL COSTS	\$1269.36	\$ 76.01
13 ALLOCATED COSTS		
14 POWER AND CROP MACHINERY EXPENSE		\$ 28.16
15-16 LAND COST AND MISC. COSTS		24.07
17 TOTAL ALLOCATED COSTS	\$ 872.24	\$ 52.23
18	PER UNIT	
18 TOTAL LISTED COSTS	\$5.47 \$1361.22	\$ 81.51
19 RETURN OVER ABOVE COSTS	\$ 397.12	\$ 23.78

TABLE 10 CROP DATA FOR ALFALFA HAY - 173 FARMS - 1969

ITEMS	TOTAL	PER ACRE AVE.	86 HIGH	86 LOW
1 ACRES		34.4	37.3	31.7
2 YIELD/ACRE		3.5T	4.2T	2.7T
3 VALUE/UNIT		\$19.88	\$19.75	\$20.01
4 GROSS RETURN	\$2363.97	\$68.72	\$82.72	\$54.70
5 SUPPLEMENTAL COSTS				
6 FERTILIZER		\$ 2.67	\$ 3.32	\$ 1.92
7 CHEMICALS		.06	.08	
8 SEED AND OTHER		5.52	5.87	5.08
9-10 HIRED LABOR & CUSTOM WORK		1.48	1.29	1.77
11 TOTAL SUPPLEMENTAL COSTS	\$ 334.71	\$ 9.73	\$10.56	\$ 8.77
12 RETURN OVER SUPPL. COSTS	\$2029.26	\$58.99	\$72.16	\$45.93
13 ALLOCATED COSTS				
14 POWER & CROP MACHINERY EXPENSE		\$21.12	\$22.38	\$21.36
15-16 LAND COST & MISC. COSTS		23.90	24.10	23.53
17 TOTAL ALLOCATED COSTS	\$1548.69	\$45.02	\$46.48	\$44.89
		PER UNIT		
18 TOTAL LISTED COSTS	\$1883.40	\$15.57 \$54.75	\$57.04	\$53.66
19 RETURN OVER ABOVE COSTS	\$ 480.57	\$13.97	\$25.68	\$ 1.04

TABLE 10 CROP DATA FOR CANNING PEAS - 15 FARMS - 1969

		TOTAL	PER ACRE
1	ACRES	25.3	
2	YIELD/ACRE		\$57.23
4	GROSS RETURN	\$1419.84	\$56.12
5	SUPPLEMENTAL COSTS		
6	FERTILIZER		\$ 4.62
7	CHEMICALS		1.46
8	SEED AND OTHER		10.95
9-10	CUSTOM WORK & HIRED LABOR		1.26
11	TOTAL SUPPLEMENTAL COSTS	\$ 462.74	\$18.29
12	RETURN OVER SUPPLEMENTAL COSTS	\$ 957.10	\$37.83
13	ALLOCATED COSTS		
14	POWER AND CROP MACHINERY EXPENSE		\$10.56
15-16	LAND COST & MISC. COSTS		24.86
17	TOTAL ALLOCATED COSTS	\$ 896.13	\$35.42
18	TOTAL LISTED COSTS	PER UNIT \$.94	\$53.71
19	RETURN OVER ABOVE COSTS	\$ 60.97	\$ 2.41

TABLE 10 CROP DATA FOR CANNING CORN - 15 FARMS - 1969

ITEMS		TOTAL	PER ACRE
1	ACRES	44.2	
2	YIELD/ACRE		\$78.69
4	GROSS RETURN	\$3404.28	\$77.02
5	SUPPLEMENTAL COSTS		
6	FERTILIZER		\$13.24
7	CHEMICALS		3.73
8	SEED AND OTHER		3.67
9-10	HIRED LABOR & CUSTOM WORK		2.49
11	TOTAL SUPPLEMENTAL COSTS	\$1022.35	\$23.13
12	RETURN OVER SUPPLEMENTAL COSTS	\$2381.93	\$53.89
13	ALLOCATED COSTS		
14	POWER & CROP MACHINERY EXPENSE		\$14.08
15-16	LAND COST & MISC. COSTS		23.21
17	TOTAL ALLOCATED COSTS	\$1648.22	\$37.29
18	TOTAL LISTED COSTS	PER UNIT \$.77	\$60.42
19	RETURN OVER TOTAL COSTS	\$ 733.71	\$16.60

TABLE 10 CROP DATA FOR DIVERTED ACRES - 164 FARMS - 1969

ITEMS		TOTAL	PER ACRE
1	ACRES	52.8	
2	YIELD/ACRE		\$58.81
3	VALUE/UNIT		1.00
4	GROSS RETURN	\$3151.63	\$59.69
5-12	SUPPLEMENTAL COSTS	\$ 24.29	\$.46
13	ALLOCATED COSTS		
14	POWER & CROP MACHINERY EXPENSE		\$ 7.04
15	LAND COST		\$24.66
16	MISC.		
17	TOTAL ALLOCATED COSTS	PER UNIT \$1673.76	\$31.70
18	TOTAL COSTS (INC. SUPP. COSTS)	\$.55	\$32.16
19	RETURN OVER TOTAL COSTS	\$1453.58	\$27.53

COSTS AND RETURNS FROM LIVESTOCK ENTERPRISES

THE IMPORTANCE OF LIVESTOCK IS DEPENDENT UPON A NUMBER OF FACTORS. FOR MOST FARMS THE ACREAGE OF CROPLAND IS LIMITED. PRODUCTIVE LIVESTOCK ADDS TO THE TOTAL FARM INCOME AND MAY BE NEEDED TO PROVIDE THE VOLUME NECESSARY FOR LIVING AND TO MEET GOALS THE FARM FAMILY HOPES TO ACHIEVE. TO PROVIDE FOR LIVING AND PERSONAL EXPENSES OF \$8000, THE AVERAGE OF THE 1969 ANALYSIS FARMS WOULD HAVE NEEDED TO GROSS FROM \$30,000 TO \$40,000, DEPENDING ON THE ENTERPRISE COMBINATION. A GROSS RETURN PER ACRE OF \$72 (AVERAGE FOR 228 FARMS FROM CROPS) WOULD REQUIRE ABOUT 600 ACRES OF CROP LAND. THIS IS MORE THAN DOUBLE THE AVERAGE CROP ACREAGE FOR THE 228 FARMS.

FEED IS THE LARGEST SINGLE ITEM OF COST IN LIVESTOCK PRODUCTION. RETURN ABOVE FEED COST IS THE BASIS FOR CLASSIFYING THE VARIOUS LIVESTOCK PRODUCTION UNITS. THE HIGH AND LOW GROUPS ARE HIGH OR LOW IN RELATION TO RETURN OVER FEED COST FOR A PARTICULAR ANIMAL ENTERPRISE. THEY BEAR NO DIRECT RELATIONSHIP TO THE HIGH AND LOW RETURN FARMS IN TABLES 1, 2A, 2B, 3 AND 8.

SOME OTHER CASH COST ITEMS ARE LISTED IN EACH OF THE TABLES AS "SUPPLEMENTAL COSTS." NO ATTEMPT HAS BEEN MADE TO ALLOCATE SUCH EXPENSES AS TAXES, INSURANCE, INTEREST ON INVESTMENT, HOUSING, EQUIPMENT, AND HIRED LABOR. THESE COSTS MUST COME FROM "RETURN OVER FEED AND SUPPLEMENTARY COSTS." WHAT WOULD REMAIN AFTER THAT COULD BE CONSIDERED AS RETURN FOR THE OPERATOR'S LABOR AND MANAGEMENT.

THE TOTAL RETURN FOR AN ENTERPRISE INCLUDES GAIN IN INVENTORY, SALE OF LIVESTOCK, VALUE OF ANIMALS TRANSFERRED TO OTHER ENTERPRISES, VALUE OF PRODUCTS SOLD, AND ANIMALS AND PRODUCTS USED IN THE HOME. TO DETERMINE THE NET RETURN IT IS NECESSARY TO SUBTRACT ANY LOSS IN INVENTORY, PURCHASE OF LIVESTOCK, AND ANIMALS TRANSFERRED IN FROM ANOTHER ENTERPRISE. THE NET RETURN ON ANIMALS IS DESCRIBED AS "NET INCREASE IN VALUE." ANIMAL PRODUCTS ARE NOT INCLUDED IN THIS FIGURE. BOTH THE TOTAL NET INCREASE FIGURE AND THE NET INCREASE PER UNIT ARE SHOWN IN THE LIVESTOCK REPORTS.

FEED COSTS ARE DETERMINED FROM THE FEED RECORDS FOUND IN THE ACCOUNT BOOK. THE PURCHASE PRICE IS USED FOR FEEDS PURCHASED. AN AVERAGE YEARLY PRICE IS CHARGED FOR FARM GROWN FEED. THESE PRICES ARE SHOWN ON PAGE 10.

COSTS AND RETURNS FROM ALL LIVESTOCK ENTERPRISES ARE COMPUTED ON A YEARLY BASIS. FEEDING ANIMALS ARE OFTEN PURCHASED IN ONE YEAR AND SOLD IN ANOTHER. INVENTORIES ON SUCH ANIMALS SHOULD BE THE RESULT OF SKILLFUL APPRAISAL OF BOTH WEIGHTS AND VALUES. PRICES PER CWT. SOLD AND PRICES PER CWT. BOUGHT ARE USUALLY FOR DIFFERENT ANIMALS AND REFLECT ONLY THE YEARLY MARKET SITUATION.

A TERM USED IN MEASURING ANIMAL PRODUCTION INTENSITY IS "ANIMAL UNIT." AN "ANIMAL UNIT" REPRESENTS, FOR EXAMPLE, ONE DAIRY COW OR BULL, TWO OTHER DAIRY CATTLE, ONE FEEDER STEER, SEVEN SHEEP, FOURTEEN LAMBS, TWO AND ONE-HALF SOWS, FIVE PIGS AND ELEVEN HUNDRED POUNDS OF TURKEY PRODUCED. IT MEASURES LIVESTOCK UNITS PER 100 ACRES IN TABLE 8.

TABLE 11A - COSTS AND RETURNS FROM COMPLETE HOG ENTERPRISE - 1969

ITEMS	AVERAGE OF 102 FARMS	34 FARMS	34 FARMS
		HIGH IN RETURN ABOVE FEED COST	LOW IN RETURN ABOVE FEED COST
1 POUNDS OF HOGS PRODUCED	103083	198985	32223
2 VALUE (NET INCREASE)	\$ 25.72	\$ 26.10	\$ 24.95
3 POUNDS OF FEED FED			
4 CORN	326.3	323.5	334.8
5 SMALL GRAIN	26.4	21.1	50.4
6 PROTEIN, SALT AND MINERAL	72.7	76.0	64.6
7 COMPLETE RATION	.6	.7	1.4
8 TOTAL CONCENTRATES	426.0	421.3	451.2
9 FORAGES	5.7	7.7	1.8
10 FEED COST			
11 CONCENTRATES AND FORAGES	11.56	11.52	11.74
12 PASTURE	.02	.03	
13 TOTAL FEED COSTS	\$ 11.58	\$ 11.55	\$ 11.74
14 RETURN OVER FEED COST	\$ 14.14	\$ 14.55	\$ 13.21
15 SUPPLEMENTAL COSTS			
16 MISCELLANEOUS LIVESTOCK EXPENSE	.23	.24	.23
17 VETERINARY EXPENSE	.32	.37	.19
18 CUSTOM WORK	.29	.20	.43
19 TOTAL SUPPLEMENTAL COSTS	\$.84	\$.81	\$.85
20 RETURN OVER FEED & SUPPLEMENTAL COSTS	\$ 13.30	\$ 13.74	\$ 12.36
21 SUPPLEMENTARY MANAGEMENT INFORMATION			
22 RETURN FOR \$100 FEED FED	\$222.15	\$226.01	\$212.53
23 PRICE RECEIVED PER CWT.	\$ 23.52	\$ 23.74	\$ 22.99
24 NUMBER OF LITTERS FARROWED	58	111	19
25 NUMBER OF PIGS BORN PER LITTER	9.3	9.5	8.9
26 NUMBER OF PIGS WEANED PER LITTER	7.6	7.9	6.7
27 PER CENT DEATH LOSS	12.1	11.2	16.7
28 AVERAGE WEIGHT OF HOGS SOLD	227.1	225.4	233.9
29 PRICE PER CWT. CONCENTRATE FED	\$ 2.70	\$ 2.72	\$ 2.60
30 POUNDS OF PORK PURCHASED	1879	2307	1054

ONLY FARMS THAT HAVE A COMPLETE PROGRAM OF FARROWING AND MARKETING HOGS ARE INCLUDED IN TABLE 11A. OPERATORS WHO DID NOT HAVE HOGS FOR A COMPLETE YEAR WERE NOT INCLUDED IN THESE AVERAGES. THE COSTS IN THIS TABLE INCLUDE THOSE OF BOTH THE BREEDING HERD AND MARKET ANIMALS.

TABLE 11B - COSTS AND RETURNS FROM HOG FINISHING ENTERPRISE - 1969

ITEMS	AVERAGE OF		
	30 FARMS	10 HIGH	10 LOW
1 AVERAGE NUMBER OF PIGS ON HAND	184.9	385.9	48.2
2 POUNDS OF HOGS PRODUCED PER CWT. PRODUCED	79292	172026	20112
3 VALUE (NET INCREASE)	\$ 20.78	\$ 20.57	\$ 21.21
4 POUNDS OF FEED FED			
5 CORN	331.0	310.6	470.1
6 SMALL GRAIN	20.0	20.9	21.5
7 PROTEIN, SALT AND MINERAL	59.1	56.2	73.9
8 COMPLETE RATION			
9 TOTAL CONCENTRATES	410.1	387.7	565.5
10 FORAGES	.3	.4	
11 FEED COST			
12 CONCENTRATES AND FORAGES	10.70	10.04	14.61
13 PASTURE			
14 TOTAL FEED COSTS	\$ 10.70	\$ 10.04	\$ 14.61
15 RETURN OVER FEED COST	\$ 10.08	\$ 10.53	\$ 6.60
16 SUPPLEMENTAL COSTS			
17 MISCELLANEOUS LIVESTOCK EXPENSE	.13	.12	.12
18 VETERINARY EXPENSE	.10	.10	.13
19 CUSTOM WORK	.28	.19	.41
20 TOTAL SUPPLEMENTAL COSTS	\$.51	\$.41	\$.66
21 RETURN OVER FEED & SUPPLEMENTAL COSTS	\$ 9.57	\$ 10.12	\$ 5.94
22 SUPPLEMENTAL MANAGEMENT INFORMATION			
23 RETURN FOR \$100 FEED FED	\$194.22	\$204.90	\$145.17
24 PRICE RECEIVED PER CWT.	\$ 23.74	\$ 23.80	\$ 23.35
25 AVERAGE WEIGHT OF PIGS SOLD	219.8	219.1	219.3
26 AVERAGE PRICE PAID PER PIG BOUGHT	18.32	18.51	17.29
27 AVERAGE WEIGHT PER PIG BOUGHT	38.0	38.1	40.0
28 NUMBER OF PIGS PURCHASED	433	969	105
29 POUNDS OF PORK PURCHASED	16436	36903	4201
30 PERCENT DEATH LOSS	2.7	2.6	5.7
31 PRICE PER CWT. CONCENTRATE FED	\$ 2.61	\$ 2.59	\$ 2.58

TABLE 11B INCLUDES ONLY THOSE OPERATORS WHO PURCHASED ALL OF THE HOGS FED. SOME OPERATORS DID MAINTAIN BOTH BREEDING AND FINISHING OPERATIONS, BUT SUCH OPERATIONS WERE NOT INCLUDED IN THESE AVERAGES.

TABLE 11C - WEANING PIG ENTERPRISE - 1969

ITEMS	AVERAGE OF 7 FARMS	
	HERD TOTAL	PER LITTER
1 NUMBER OF LITTERS FARROWED	67	
2 TOTAL VALUE PRODUCED	\$10896	\$162.63
3 POUNDS OF FEED FED		
4 CORN		1528.2
5 SMALL GRAIN		153.4
6 PROTEIN, SALT AND MINERAL		410.9
7 COMPLETE RATION		
8 TOTAL CONCENTRATES		2092.5
9 FORAGES		36.3
10 FEED COST		
11 CONCENTRATES AND FORAGES		65.91
12 PASTURE		
13 TOTAL FEED COSTS	\$4416	\$ 65.91
14 RETURN OVER FEED COST	\$6480	\$ 96.72
15 SUPPLEMENTAL COSTS		
16 MISCELLANEOUS LIVESTOCK EXPENSE		1.42
17 VETERINARY EXPENSE		4.66
18 CUSTOM WORK		1.00
19 TOTAL SUPPLEMENTAL COSTS	\$474	\$ 7.08
20 RETURN OVER FEED AND SUPPLEMENTAL COSTS	\$6006	\$ 89.64
21 SUPPLEMENTARY MANAGEMENT INFORMATION		
22 RETURN FOR \$100 FEED FED	\$246.74	
23 AVERAGE PRICE RECEIVED PER PIG SOLD	\$ 21.57	
24 NUMBER OF PIGS PRODUCED	493	
25 NUMBER OF PIGS BORN PER LITTER	9.3	
26 NUMBER OF PIGS WEANED PER LITTER	7.4	
27 PER CENT DEATH LOSS	15.8	
28 PRICE PER CWT. CONCENTRATE FED	\$ 3.13	
29 FEED AND SUPPL. COSTS PER PIG PRODUCED	\$ 9.92	

THE INFORMATION PRESENTED IN TABLE 11C INCLUDES COSTS OF MAINTAINING THE BREEDING HERD AND RAISING THE PIGS TO WEANING WEIGHT. THIS TABLE PROVIDES COSTS AND RETURNS ON A PER LITTER BASIS RATHER THAN PER CWT. BASIS.

TABLE 12 - DAIRY COWS - 1969
FACTORS OF COST AND RETURNS FROM DAIRY COWS

	AVERAGE OF 125 HERDS	42 HERDS HIGHEST RET. ABOVE FEED COST	42 HERDS LOWEST RET. ABOVE FEED COST
1 AVERAGE NUMBER OF COWS	32.2	41.4	23.2
2 POUNDS OF MILK	11262	12195	10014
3 POUNDS OF BUTTERFAT	412.2	451.2	359.9
4 PER CENT OF BUTTERFAT IN MILK	3.7	3.7	3.6
5 VALUE OF PRODUCE			
6 DAIRY PRODUCTS SOLD	518.17	583.62	431.85
7 DAIRY PRODUCTS USED IN HOME	4.94	4.69	5.43
8 MILK FED TO LIVESTOCK	5.22	5.82	3.75
9 NET INCREASES IN VALUE OF COWS	(-1.46)	(-.97)	(-3.84)
10 TOTAL VALUE PRODUCED	\$526.87	\$593.16	\$437.19
11 POUNDS OF FEED FED			
12 CORN	3870.2	4037.6	3630.0
13 SMALL GRAIN & COMPLETE DAIRY RATION	618.2	517.6	812.5
14 PROTEIN, SALT & MINERAL	594.3	615.5	478.1
15 TOTAL CONCENTRATES	5082.7	5170.7	4920.6
16 LEGUME HAY	6234.3	6077.2	6605.9
17 OTHER HAY AND DRY ROUGHAGE	106.8	4.0	17.5
18 SILAGE	9427.1	10522.4	8315.7
19 FEED COSTS			
20 CONCENTRATES	115.96	118.82	110.34
21 ROUGHAGES	94.81	96.69	93.75
22 PASTURE	7.61	6.14	8.79
23 TOTAL FEED COSTS	\$218.38	\$221.65	\$212.88
24 RETURN OVER FEED COSTS	\$308.49	\$371.51	\$224.31
25 SUPPLEMENTAL COSTS			
26 MISCELLANEOUS LIVESTOCK EXPENSE	\$ 19.63	\$ 23.24	\$ 14.78
27 VETERINARY EXPENSE	10.62	13.62	6.98
28 CUSTOM WORK	24.04	27.49	20.52
29 TOTAL SUPPLEMENTAL COSTS	\$ 54.29	\$ 64.35	\$ 42.28
30 RETURN OVER FEED & SUPPLEMENTAL COSTS	\$254.20	\$307.16	\$182.03
31 SUPPLEMENTARY MANAGEMENT INFORMATION			
32 RETURN FOR \$100 FEED FED	\$241.25	\$267.62	\$205.37
33 FEED COST PER CWT. MILK	\$ 1.94	\$ 1.82	\$ 2.13
34 FEED COST PER LBS. OF BUTTERFAT	\$.530	\$.491	\$.591
35 GRAIN FED PER LB. OF MILK	2.216	2.358	2.035
36 AVERAGE PRICE PER CWT. MILK SOLD	\$ 4.70	\$ 4.88	\$ 4.41
37 AVERAGE PRICE PER LB. BUTTERFAT	\$ 1.28	\$ 1.32	\$ 1.23

TABLE 13 - OTHER DAIRY CATTLE - 1969

ITEMS	AVERAGE OF 123 HERDS	41 HIGHEST RET. ABOVE FEED COST	41 LOWEST RET. ABOVE FEED COST
1 NUMBER OF HEAD	39.3	50.2	36.1
2 NET INC. IN VALUE	\$124.61	\$149.50	\$ 86.73
3 POUNDS OF FEED FED			
4 CONCENTRATES	1327.4	1267.4	1348.0
5 HAY AND ROUGHAGE	2239.8	2189.2	2394.4
6 SILAGE	3815.9	3635.8	4103.2
7 MILK	99.7	89.2	114.7
8 FEED COST			
9 CONCENTRATES	32.67	32.07	32.58
10 ROUGHAGES	34.58	33.73	36.32
11 MILK	4.33	4.00	4.71
12 PASTURE	3.61	3.39	4.24
13 TOTAL FEED COSTS	\$ 75.19	\$ 73.19	\$ 77.85
14 RETURN OVER FEED COST	\$ 49.42	\$ 76.31	\$ 8.88
15 SUPPLEMENTAL COSTS			
16 MISC. LIVESTOCK EXPENSE	1.25	1.39	1.05
17 VETERINARY EXPENSE	1.40	1.31	1.36
18 CUSTOM WORK	1.02	.86	1.39
19 TOTAL SUPPLEMENTAL COSTS	\$ 3.67	\$ 3.56	\$ 3.80
20 RETURN OVER FEED & SUPPL. COSTS	\$ 45.75	\$ 72.75	\$ 5.08
21 SUPPLEMENTARY MANAGEMENT INFORMATION			
22 RETURN FOR \$100 FEED FED	\$165.72	\$204.27	\$111.42
23 PERCENT DEATH LOSS	9.1	8.4	9.7

TABLE 14 - ALL DAIRY CATTLE - 1969

ITEMS	AVERAGE OF 125 HERDS	42 HIGHEST	42 LOWEST
		RETURN ABOVE FEED COST	RETURN ABOVE FEED COST
1 AVERAGE NUMBER OF COWS	32.2	41.2	23.4
2 VALUE OF DAIRY PRODUCTS	\$528.35	\$591.53	\$447.61
3 NET INC. IN VALUE	\$148.20	\$171.29	\$123.80
4 TOTAL VALUE PRODUCED	\$676.55	\$762.82	\$571.41
5 POUNDS OF FEED FED			
6 CONCENTRATES	6688.9	6730.8	6535.9
7 HAY AND DRY ROUGHAGE	9036.7	9055.5	9492.7
8 SILAGE	14022.6	15467.6	11787.6
9 FEED COST			
10 CONCENTRATES	160.40	164.32	152.09
11 ROUGHAGE	136.43	142.04	133.50
12 PASTURE COSTS	11.93	10.73	11.58
13 TOTAL FEED COSTS	\$308.76	\$317.09	\$297.17
14 RETURN OVER FEED COST	\$367.79	\$445.73	\$274.24
15 SUPPLEMENTAL COSTS			
16 MISCELLANEOUS LIVESTOCK EXPENSE	\$ 21.12	\$ 24.93	\$ 16.07
17 VETERINARY EXPENSE	12.30	15.49	8.03
18 CUSTOM WORK	25.28	28.62	22.09
19 TOTAL SUPPLEMENTAL COSTS	\$ 58.70	\$ 69.04	\$ 46.19
20 RETURN OVER FEED & SUPPL. COSTS	\$309.09	\$376.69	\$228.05
21 SUPPLEMENTARY MANAGEMENT INFORMATION			
22 RETURN FOR \$100 FEED FED	\$219.12	\$240.57	\$192.28

TABLE 14 PRESENTS A PICTURE OF THE COSTS AND RETURNS FROM THE WHOLE DAIRY HERD ON A PER COW BASIS. THE HIGH AND LOW GROUPS IN ALL DAIRY TABLES ARE BASED ON RETURNS ABOVE FEED COST FOR THE COW HERD, RATHER THAN ON YEARLY BUTTERFAT PER COW. SOME IMPORTANT COSTS NOT INCLUDED IN THESE TABLES ARE THOSE FOR LABOR, HOUSING AND DAIRY EQUIPMENT.

TABLE 15A - BEEF BREEDING CATTLE - 1969

ITEMS	AVERAGE OF 15 FARMS	
	HERD TOTAL	PER COW
1 AVERAGE NUMBER OF BEEF COWS	34.4	
2 AVERAGE NUMBER OF OTHER BEEF ANIMALS & BULLS	21.9	
3 POUNDS OF BEEF PRODUCED	13057	
4 NET INCREASE IN VALUE	\$4458	\$129.59
5 POUNDS OF FEED FED		
6 GRAIN		263.3
7 PROTEIN, SALT AND MINERAL		95.4
8 LEGUME HAY		1718.2
9 OTHER HAY AND DRY ROUGHAGE		
10 SILAGE		8800.0
11 FEED COST		
12 CONCENTRATES		10.00
13 ROUGHAGES		38.90
14 PASTURE		27.65
15 TOTAL FEED COSTS	\$2635	\$ 76.61
16 RETURN OVER FEED COST	\$1823	\$ 52.98
17 SUPPLEMENTAL COSTS		
18 MISCELLANEOUS LIVESTOCK EXPENSE		1.83
19 VETERINARY EXPENSE		1.37
20 CUSTOM WORK		.84
21 TOTAL SUPPLEMENTAL COSTS	\$ 139	\$ 4.04
22 RETURN OVER FEED & SUPPLEMENTAL COSTS	\$1684	\$ 48.94
23 SUPPLEMENTAL MANAGEMENT INFORMATION		
24 RETURN FOR \$100 FEED FED	\$ 169.18	
25 PRICE PER CWT. SOLD	\$ 25.70	
26 AVERAGE WEIGHT PER HEAD SOLD	704	
27 PER CENT DEATH LOSS	3.5	
28 PER CENT CALF CROP		

TABLE 15B - FEEDER CATTLE - 1969

ITEMS	AVERAGE OF 40 FARMS	13 HIGHEST IN RETURN ABOVE FEED COST	13 LOWEST IN RETURN ABOVE FEED COST
1 AVERAGE NUMBER OF BEEF FEEDERS	93.3	201.4	40.2
2 POUNDS OF BEEF PRODUCED PER CWT. PRODUCED	60392	132213	22989
3 NET INCREASE IN VALUE OF ANIMALS	\$ 28.83	\$ 30.40	\$ 23.35
4 POUNDS OF FEED FED			
5 GRAIN	613.2	618.6	726.6
6 PROTEIN, SALT AND MINERAL	65.1	69.2	59.1
7 LEGUME HAY	186.1	187.3	111.6
8 OTHER HAY AND DRY ROUGHAGE	1.2		7.4
9 SILAGE	749.9	694.6	1324.3
10 FEED COST			
11 CONCENTRATES	15.15	15.34	17.06
12 ROUGHAGES	4.14	4.20	4.85
13 PASTURE	.02		.04
14 TOTAL FEED COSTS	\$ 19.31	\$ 19.54	\$ 21.95
15 RETURN OVER FEED COST	\$ 9.52	\$ 10.86	\$ 1.40
16 SUPPLEMENTAL COSTS			
17 MISCELLANEOUS LIVESTOCK EXPENSE	.29	.32	.27
18 VETERINARY EXPENSE	.76	.90	.33
19 CUSTOM WORK	.80	.82	.83
20 TOTAL SUPPLEMENTAL COSTS	\$ 1.85	\$ 2.04	\$ 1.43
21 RETURN OVER FEED & SUPPLEMENTAL COSTS	\$ 7.67	\$ 8.82	\$(-.03)
22 SUPPLEMENTARY MANAGEMENT INFORMATION			
23 RETURN FOR \$100 FEED FED	\$149.32	\$155.59	\$106.38
24 PRICE PER CWT. SOLD	\$ 27.46	\$ 27.69	\$ 26.50
25 AVERAGE WEIGHT PER HEAD SOLD	969.2	976.3	911.6
26 PRICE PER CWT. BOUGHT	\$ 28.53	\$ 28.09	\$ 31.81
27 AVERAGE WEIGHT PER HEAD BOUGHT	558.2	592.4	453.1
28 NUMBER OF HEAD BOUGHT	153	379	51
29 PER CENT DEATH LOSS	1.9	1.5	2.7

THE FIGURES REPRESENTED HERE ARE CALCULATED FROM AN ANNUAL RECORD AND DO NOT FOLLOW THROUGH ANY PARTICULAR LOT FED. CATTLE NOT SOLD ARE INCLUDED IN THE CLOSING INVENTORY, WITH ESTIMATES OF WEIGHTS AND VALUES. PRICE PAID (LINE 26) IS THE PRICE PAID FOR CATTLE BOUGHT DURING THE YEAR, AND NOT FOR THOSE SOLD DURING THE YEAR.

TABLE 16A - SHEEP FLOCK - 1969

ITEMS	AVERAGE of 8 FARMS	
	FLOCK TOTAL	PER EWE
1 AVERAGE NUMBER OF EWES	50.0	
2 POUNDS OF LAMB & MUTTON PRODUCED	3212	
3 POUNDS OF WOOL PRODUCED	519	
4 VALUE OF PRODUCE		
5 WOOL		5.74
6 NET INCREASE IN VALUE OF ANIMALS		25.72
7 TOTAL VALUE PRODUCED	\$1573	\$ 31.46
8 POUNDS OF FEED FED		
9 GRAIN		209.1
10 PROTEIN, SALT AND MINERAL		21.7
11 LEGUME HAY		596.0
12 OTHER HAY AND DRY ROUGHAGE		
13 SILAGE		520.8
14 FEED COST		
15 CONCENTRATES		5.48
16 ROUGHAGES		5.66
17 PASTURE		2.28
18 TOTAL FEED COSTS	\$671	\$ 13.42
19 RETURN OVER FEED COST	\$902	\$ 18.04
20 SUPPLEMENTAL COSTS		
21 MISCELLANEOUS LIVESTOCK EXPENSE		\$ 1.08
22 VETERINARY EXPENSE		\$.88
23 CUSTOM WORK		\$ 1.90
24 TOTAL SUPPLEMENTAL COSTS	\$ 193	\$ 3.86
25 RETURN OVER FEED AND SUPPLEMENTAL COSTS	\$ 709	\$ 14.18
26 SUPPLEMENTARY MANAGEMENT INFORMATION		
27 RETURN FOR \$100 FEED FED	\$ 234.43	
28 PRICE PER CWT. LAMB & MUTTON SOLD	\$ 20.70	
29 POUNDS OF WOOL PER SHEEP SHEARED	9.8	
30 NUMBER OF EWES KEPT FOR LAMBING	42	
31 PER CENT LAMB CROP	148	
32 PER CENT DEATH LOSS	15.6	

TABLE 17A - LAYING FLOCK CHICKENS - 1969

ITEMS	AVERAGE OF 7 FARMS	
	FLOCK TOTAL	PER HEN
1 AVERAGE NUMBER OF HENS	1110.8	
2 VALUE OF PRODUCE PER HEN		
3 EGGS SOLD AND USED		5.94
4 INC. IN VALUE OF FLOCK		(-.34)
5 TOTAL VALUE PRODUCED	\$6220	5.60
6 POUNDS OF FEED FED PER HEN		
7 GRAIN		72.3
8 PROTEIN, SALT AND MINERAL		25.5
9 COMPLETE COMMERCIAL FEED		
10 TOTAL POUNDS OF FEED		97.8
11 TOTAL FEED COST PER HEN	3099	2.79
12 RETURN OVER FEED COST	\$3121	2.81
13 SUPPLEMENTAL COSTS	\$ 222	.20
14 RETURN OVER FEED AND SUPPLEMENTAL COSTS	\$2899	2.61
15 SUPPLEMENTARY MANAGEMENT INFORMATION		
16 RETURN FOR \$100 FEED FED	\$ 200.71	
17 EGGS LAID PER HEN	199	
18 PRICE PER DOZEN EGGS SOLD - CENTS	\$.36	
19 FEED COST PER DOZEN EGGS - CENTS	\$.17	
20 RETURN OVER FEED COSTS PER DOZEN EGGS	\$.17	
21 PERCENT DEATH LOSS	13.5	

ONLY LAYING OPERATIONS THAT WERE CONTINUOUS FOR TWELVE MONTHS ARE SHOWN IN THIS TABLE. FLOCKS OF LESS THAN 400 WERE ALSO ELIMINATED.

LABOR EARNINGS CORRELATED WITH EXCELLED FACTORS

STUDIES OF EARNINGS OF FARMERS IN THIS REPORT WERE MEASURED BY NINE MANAGEMENT FACTORS CAUSING VARIATIONS IN EARNINGS AMONG FARMERS WITHIN A GIVEN YEAR. THESE NINE FACTORS SHOWN IN TABLE 8 ARE CROP YIELDS, CHOICE OF CROPS, GROSS RETURNS PER ACRE, RETURNS FROM LIVESTOCK, AMOUNT OF LIVESTOCK, SIZE OF BUSINESS, ACCOMPLISHMENTS PER WORKER, CONTROL OVER EXPENSES, AND INVESTMENT PER WORKER. GROSS RETURN PER ACRE AND INVESTMENT PER WORKER ARE EXPANSIONS OF OTHER MEASURES. THEY ARE OMITTED FROM THIS YEAR'S TABLE 18 IN ORDER TO AVOID ANY IMBALANCE OF EMPHASIS. THE COMBINED OR CUMULATIVE INFLUENCE OF SEVEN MANAGEMENT FACTORS ON EARNINGS IS SHOWN IN TABLE 18. COMPARISONS OF HOW INDIVIDUALS WERE RELATED TO INCOME LEVELS IS SHOWN IN TABLE 8.

TABLE 18 - 228 FARMS

NUMBER OF FACTORS IN WHICH FARMERS EXCELLED (SEVEN)	NUMBER OF FARMS	AVERAGE LABOR EARNINGS
0 OR 1	28	XXXX \$3812
2	48	XXXXXX \$6191
3	54	XXXXXXXXXX \$8673
4	46	XXXXXXXXXXXXX \$11409
5	30	XXXXXXXXXXXXXXXXXX \$15538
6 OR 7	22	XXXXXXXXXXXXXXXXXXXXXXXXXXXXX \$27661

COMMENTS AND OBSERVATIONS

OVER 300 FARM RECORDS HAD BEEN RECEIVED AT THE TIME THIS REPORT WAS COMPILED. A FEW MORE RECORDS ARE EXPECTED. VERY FEW OF THE EARLY BOOKS WERE SCREENED FROM THE WHOLE FARM AVERAGES. THESE WERE MOSTLY THOSE HAVING LESS THAN ONE FULL-TIME WORKER. IT IS HOPED THAT INFORMATION ON LATE BOOKS CAN BE SUMMARIZED AT SOME LATER DATE.

THE PROMPTNESS OF AGRICULTURAL RECORDS COOPERATIVE IN GETTING AVERAGES BACK EARLY WAS MOST HELPFUL. THIS YEAR THE AVERAGES WERE RUN WITHOUT NEED FOR CORRECTION.

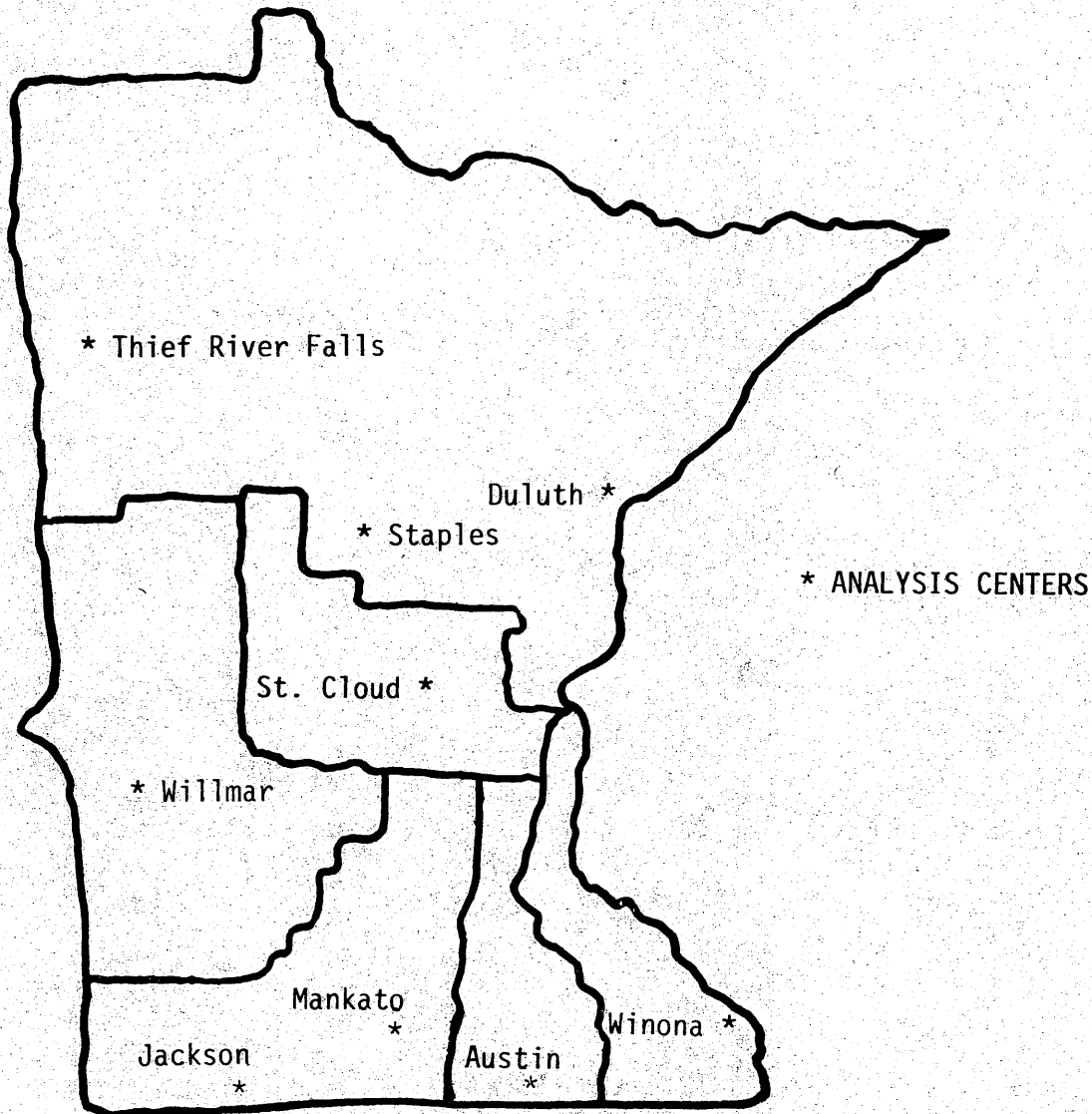
INSTRUCTORS ARE URGED TO ENCOURAGE COOPERATORS TO KEEP COMPLETE RECORDS. FAULTY DISTRIBUTION OF CROP AND FEED COSTS RESULTS IN QUESTIONABLE ANALYSIS INFORMATION. OF PARTICULAR CONCERN IS THAT MORE COOPERATORS SUBMIT HOUSEHOLD AND NET WORTH INFORMATION. SUCH INFORMATION WOULD ALSO PROVIDE MORE CASES FOR TABLES 6A AND 6B. OF STILL GREATER IMPORTANCE IS THE VALUE OF THIS INFORMATION TO THE COOPERATING FARM FAMILIES. COOPERATORS SHOULD BE ENCOURAGED TO GET ACCOUNT BOOKS TO THE ANALYSIS CENTER BEFORE THEY FILE FOR INCOME TAX. THIS WILL REDUCE THE POSSIBLE NUMBER OF ERRORS IN THE TAX REPORT.

SUMMARY OF FARM EARNINGS BY YEARS

SALE OF LIVESTOCK & LIVESTOCK PRODUCTS	1966	1967	1968	1969
DAIRY CATTLE	\$ 2068	\$ 2577	\$ 2373	\$ 2455
DAIRY PRODUCTS	7342	8112	8917	9438
BEEF CATTLE	5414	5795	5984	7521
HOGS	11688	10948	11901	15141
SHEEP & WOOL	78	53	60	78
POULTRY & EGGS (INCL. TURKEYS)	690	312	341	516
<u>SALE OF CROPS</u>				
CORN	2418	2670	2537	3715
SOYBEANS & OTHER CROP SALES	3859	4121	4365	4678
DIVERTED ACRE PAYMENT	1606	872	1749	2373
CAPITAL ASSETS SOLD		1289	551	532
GAS TAX REFUND	509	229	227	233
OTHER FARM INCOME	753	1017	1202	1464
TOTAL FARM SALES	36425	37995	40207	48144
INCREASE IN FARM CAPITAL	9998	6018	5712	7823
FAMILY LIVING FROM THE FARM	371	343	379	395
TOTAL FARM RECEIPTS	\$46794	\$44356	\$46298	\$56362
<u>PURCHASE OF LIVESTOCK</u>				
DAIRY CATTLE	\$ 529	\$ 588	\$ 480	\$ 532
BEEF CATTLE	3141	2914	3214	4438
HOGS	1738	1545	1432	1585
SHEEP	2	6	18	16
POULTRY (INCL. TURKEYS)	119	107	25	93
MISCELLANEOUS LIVESTOCK EXPENSE	767	855	962	1076
FEED BOUGHT	5464	4906	5376	6385
FERTILIZER	1949	2420	2314	2263
OTHER CROP EXPENSE	1645	2002	2123	2524
CUSTOM WORK HIRED	983	1235	1327	1475
REPAIR & UPKEEP OF LIVESTOCK EQUIPMENT	207	194	225	287
REPAIR & UPKEEP OF FARM REAL ESTATE	441	392	423	568
GAS, OIL, GREASE BOUGHT (FARM SHARE)	1216	1202	1224	1357
REPAIR&OPER OF MACH,TRACTOR,TRUCK,AUTO (F.S.)	1319	1264	1259	1602
WAGES OF HIRED LABOR	589	546	657	758
PERSONAL PROPERTY & REAL ESTATE TAXES	1488	1546	1257	1523
GENERAL FARM EXPENSE	468	410	476	519
TELEPHONE EXPENSE (FARM SHARE)		86	89	103
ELECTRICITY EXPENSE (FARM SHARE)	351	376	419	454
TOTAL CASH OPERATING EXPENSE	\$22416	\$22594	\$23300	\$27558
POWER, CROP & GENERAL MACH BOUGHT (F.S.)	\$ 4231	\$ 4407	\$ 3412	\$ 5115
LIVESTOCK EQUIPMENT BOUGHT	830	814	692	752
NEW REAL ESTATE & IMPROVEMENT	3888	5431	4114	3301
TOTAL FARM PURCHASES	\$31365	\$33246	\$31518	\$36726
DECREASE IN FARM CAPITAL	--	--	--	--
INTEREST ON FARM CAPITAL	4707	4900	5481	7508
UNPAID FAMILY LABOR AND/OR PARTNER	842	948	988	1193
BOARD FURNISHED HIRED LABOR	92	73	71	73
TOTAL FARM EXPENSE	\$37006	\$39167	\$38058	\$45500
LABOR EARNINGS (WHOLE FARM)	\$ 9788	\$ 5189	\$ 8240	\$10862

Area Coordinators

Thief River Falls.....Ed Sisler
 Duluth.....Rodger Palmer
 St. Cloud.....Ed O'Connell
 Mankato.....Del Hodgkins
 Austin.....Charles Painter
 Winona.....Donald Walker
 Staples.....William Guelker
 Willmar.....John Thell
 Jackson.....John Murray



COOPERATING VOC. AG. DEPARTMENTS in Austin Area

Adams
 Alden
 Austin
 Blooming Prairie
 Byron
 Elkton
 Faribault
 Freeborn
 Hayfield

Kenyon
 New Richland
 Northfield
 Owatonna
 Spring Valley
 Stewartville
 Wanamingo
 West Concord
 Zumbrota