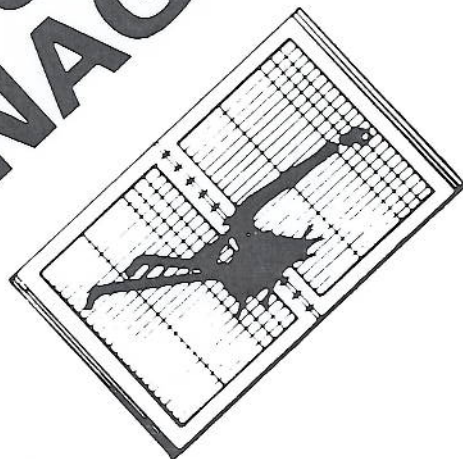


FARM BUSINESS MANAGEMENT



1989

Education Program Annual Report

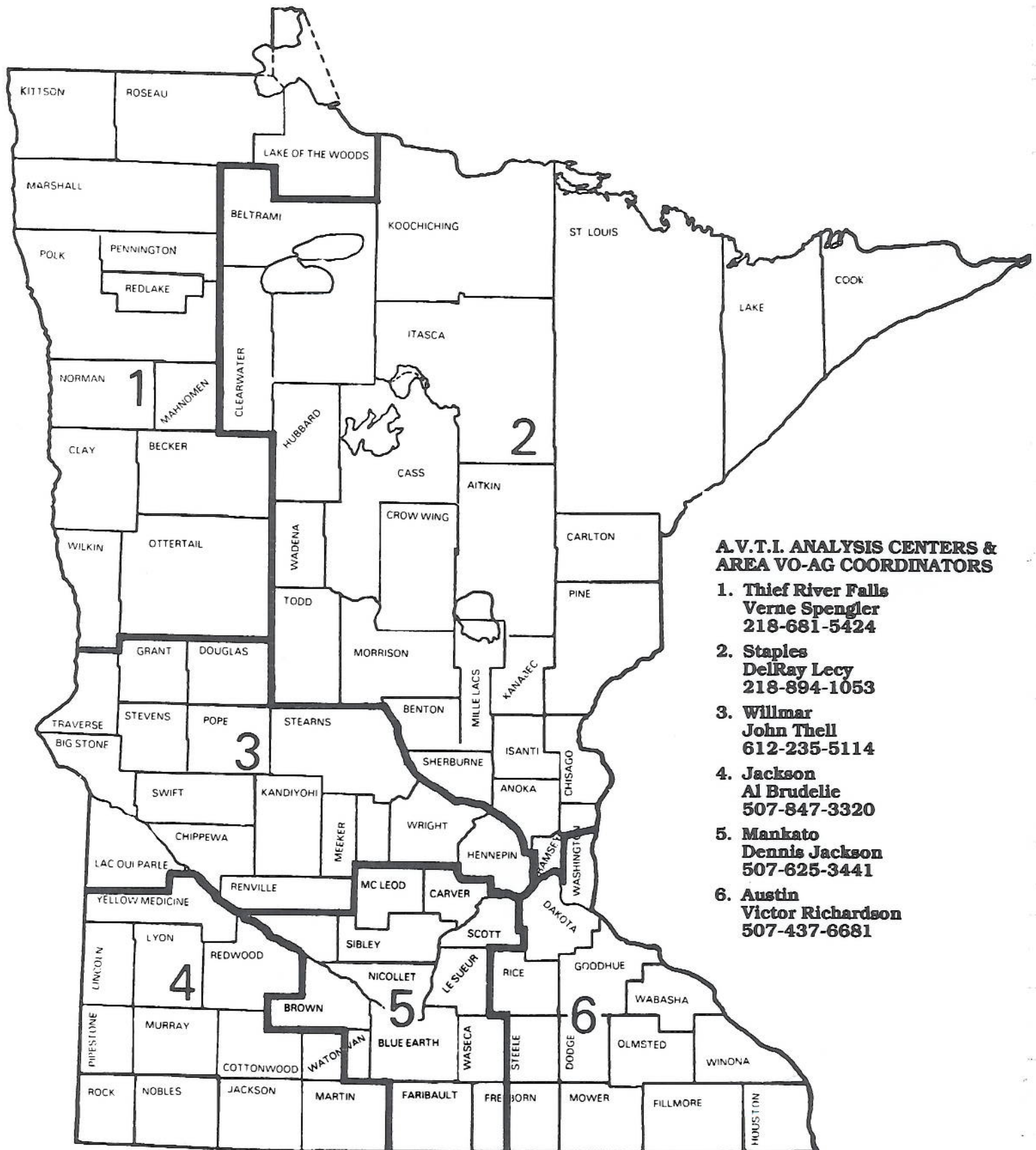
Willmar Area Central Minnesota

April 1990

Cooperating Agencies
Minn. State Board of
Vocational-Technical Education
University of Minn. Agriculture Education Div.
Willmar Technical College

**A VOCATIONAL
EDUCATION
PROGRAM**

VO-AG FARM MANAGEMENT AREAS



A.V.T.I. ANALYSIS CENTERS & AREA VO-AG COORDINATORS

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SUMMARY OF MANAGEMENT INFORMATION
 " IN A NUTSHELL "
 AVERAGE OF 554 FARMS

FARM SIZE

Total Acres Operated	510.4
Total acres Owned	238.2
Tillable Acres Operated	460.27
Tillable Acres Owned	197.2
Total Work Units	511.5
Total Full Time Equivalent Workers	1.56

PROFIT & LOSS ANALYSIS

Return to Labor & Management - Whole Farm	\$ 28988
Full Time Operator Equivalent	1.12
Return to Capital, Farm Labor, & Management	
Operators Share	\$ 38151
Ratio: Cash Oper. Exp. to Total Farm Oper. Exp.	.84
Ratio: Cash Oper. Exp. to Total Farm Oper.. Inc.	.77
Ratio: Cash Oper.. Exp. to Total Exp.	.80
Ratio: Capital Turnover: Av Cap to Recpts: W.F.	2.62
Ratio: Capital Turnover: Av.Cap to Recpts: O.S.	1.80
Net Cash Operating Income	\$ 36069
Interest Payable Per Work Unit	27.94
Interest Payable/Dollar of Farm Oper. Income	.09

BALANCE SHEET ANALYSIS

Change in Total Assets	\$ 23445
Change in Total Liabilities	3976
Change in Equity	19469
Current Ratio: End of Year	3.90
Working Ratio: End of Year	2.37
Fixed Ratio: End of Year	1.95
Net Capital Ratio: End of Year	2.14
Total Assets - Operator	\$ 379156
Total Liabilities - Operator	\$ 177039

FAMILY INFORMATION

Total Non-Farm Income	10213.00
Total Cash & Non Cash Fam. Living Expense	29810.00
Total Dollars Avail. to Save or Lower Debt.	20662.00

1989 REPORT OF THE AGRICULTURE EDUCATION
FARM MANAGEMENT EDUCATION PROGRAM
CENTRAL MINNESOTA AREA

April 1990

John Thell - Area Agriculture Program Coordinator

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The analysis of these records and preparation of this report is done under the direction of Mr. John Thell, Area Agriculture Program Coordinator at the Willmar Technical College. Directing in a supervisory capacity is Mr. Ronald Erpelding, Technical College Director; Mr. Orlo Almlie, Superintendent of Willmar Schools; Mr. John Murray, State Board for Vocational-Technical Education; and Dr. Edgar Persons, Head, Agriculture Education Division, University of Minnesota.

Clerical work was done by Celeste Thell. Data processing was done by Specialized Data Systems Inc., Madison, Wisconsin

Listed is the schools and instructors responsible for the instruction of the Farm Business Management Programs offered through the Technical Colleges or Public High Schools in Central Minnesota.

<u>School</u>	<u>Instructor(s)</u>
Appleton	David Backlund
Alexandria Technical College	Jerry Kalinowski
Alexandria Technical College	Jan Dobbert
Alexandria Technical College	Norman Skarstad
Benson	Richard Bonde
Brooten-Belgrade-Elrosa	Larry Putz
Buffalo (Wright County)	Stan Vander Kooi
Buffalo lake	Kenneth Anderson
Cold Spring ROCORI	David Acheson
Dawson-Boyd	Curt Schoephoerster
Elbow Lake (Westland)	David Willard
Glenwood	Ronald Nelsen
Litchfield	Charles Stranberg
Madison	Ralph Butterfield
Maple Lake	Patrick Kerney
Melrose	Mike Foley
Montevideo	Tim Radermacher
Montevideo	Steve Hotzler
Morris	Dan Perkins
Olivia-Bird Island	Steve Zenk
Ortonville	Tim Holtquist
Paynesville	Wallace Payne
St. Cloud Technical College	Dennis Lehto
St. Cloud Technical College	Howard Pennertz
St. Cloud Technical College	Ronald Novotony
Willmar Technical College	Dale Steussy
Willmar Technical College	Richard Allen
Willmar Tech. Coll. Farm Opr. Prog.	Floyd Boeder

TABLE 1 - FARM INVENTORIES - 1989

AVERAGE OF 554 FARMS

ITEMS		
MEASURES OF FARM SIZE		
2	ACRES TOTAL	510.4
3	TILLABLE	460.2
4	WORK UNITS - CROPS	220.6
5	LIVESTOCK	269.8
6	OTHER	21.1
7	TOTAL	511.5
8	WORKERS- OPERATOR YR. EQUIV.	1.12
9	HIRED	.30
10	CUSTOM	.03
11	UNPAID FAMILY	.11
12	TOTAL	1.56
13	CAPITAL INVEST. / WORKER \$	303543
14	CAPITAL INVEST. / WORK UNIT \$	926

WHOLE FARM INVENTORIES

	<u>JAN 1</u>	<u>DEC 31</u>
22. FEEDER CATTLE	7977	9261
23 MARKET HOGS	5054	5336
24 FEEDER LAMBS	30	45
25 POULTRY-(All Types)	183	250
26 OTHER LVSTK-INC OT. DY.	9159	10127
27 CROPS HELD FOR SALE & FEED	39133	49802
28 SUPPLIES/PREPAIDS; FUELS ETC.	3519	3562
29 ACCT. RECEIVABLE & HEDGING EQ.	3385	1374
30 DAIRY COWS	19750	20566
31 OTHER DAIRY	3188	3463
32 BEEF BREEDING	1393	1348
33 SWINE BREEDING	2420	2619
34 SHEEP BREEDING	98	88
35 OTHER BRREEDING LVSTK.	13	2
36 AUTO-TRUCK F.S.	4568	5576
37 POWER & MACHINERY	43733	46635
38 LIVESTOCK EQUIPMENT	7265	8175
39 CUSTOM EQUIPMENT	50	68
40 IRRIGATION EQUIPMENT	1198	1372
50 BARE LAND	267396	269379
51 LAND IMPROVEMENTS-TILE	1810	1777
52 BUILDINGS & FENCES	42799	42107
TOTAL FARM CAPITAL	\$ 464121	482932
NET CHANGE IN FARM CAPITAL	\$	+18811

MACHINERY, EQUIPMENT, AND BUILDINGS REFLECT COST LESS DEPRECIATION. LAND IS VALUED AT A CONSERVATIVE MARKET VALUE.

MARKET LIVESTOCK, CROPS FOR SALE OR FEED ARE VALUED AT MARKET PRICE AT TIME THE INVENTORY WAS TAKEN. PURCHASED AND RAISED BREEDING STOCK IS VALUED AT THE TIME PUT INTO USEFUL PRODUCTION AND CARRY THAT SAME VALUE FOR THEIR USEFUL LIFE.

WORK UNITS PROVIDE A MEASURE OF WORK LOAD AND SIZE OF BUSINESS.

TABLE 1 - FARM INVENTORIES - 1989

HIGH AND LOW PROFIT FARMS
110 HIGH 110 LOW
PROFIT FARMS PROFIT FARMS

ITEMS

MEASURES OF FARM SIZE			
2	ACRES TOTAL	742.4	515.2
3	TILLABLE	697.6	463.3
4	WORK UNITS - CROPS	361.0	202.5
5	LIVESTOCK	307.6	195.2
6	OTHER	46.5	17.5
7	TOTAL	715.1	415.2
8	WORKERS- OPERATOR YR. EQUIV.	1.27	1.12
9	HIRED	.45	.27
10	CUSTOM	.03	.02
11	UNPAID FAMILY	.09	.08
12	TOTAL	1.84	1.49
13	CAPITAL INVEST. / WORKER \$	373525	324016
14	CAPITAL INVEST. / WORK UNIT \$	961.0	1163.0

WHOLE FARM INVENTORIES

	<u>JAN 1</u>	<u>DEC 31</u>	<u>JAN 1</u>	<u>DEC 31</u>
22	FEEDER CATTLE	4429	5317	18175
23	MARKET HOGS	8373	9155	21256
24	FEEDER LAMBSG CATTLE	19	63	6877
25	POULTRY-(All Types)			6387
26	OTHER LVSTK-INC OT. DY.			61
27	CROPS HELD FOR SALE & FEED	11620	13141	65
28	SUPP./PREPAIDS; FUELS ETC.	65236	96076	75
29	ACCT. RECEVBLE & HEDG.EQ.	6028	6389	5097
		2316	1742	5287
			5706	37971
				39526
30	DAIRY COWS	22276	23752	3954
31	OTHER DAIRY	3180	3105	4171
32	BEEF BREEDING	1470	1687	5706
33	SWINE BREEDING	3634	3859	10104
34	SHEEP BREEDING	19	20	10007
35	OTHER BRREEDING LVSTK.			1136
36	AUTO-TRUCK F.S.	6351	7481	1148
37	POWER & MACHINERY	60345	66614	2914
38	LIVESTOCK EQUIPMENT	9632	10566	3349
39	CUSTOM EQUIPMENT			312
40	IRRIGATION EQUIPMENT	870	840	263
				3409
				3698
50	BARE LAND	404783	408880	277299
51	LAND IMPROVEMENTS-TILE	2251	2162	278909
52	BUILDINGS & FENCES	50326	50528	2727
60	TOTAL FARM CAPITAL \$	663194	711377	2727
	NET CHANGE IN FARM CAPITAL \$		+48183	2647
				38676
				481202
				484367
				+3165

MACHINERY, EQUIPMENT, AND BUILDINGS REFLECT COST LESS DEPRECIATION.
LAND IS VALUED AT A CONSERVATIVE MARKET VALUE.

MARKET LIVESTOCK, CROPS FOR SALE OR FEED ARE VALUED AT MARKET PRICE
AT TIME THE INVENTORY WAS TAKEN. PURCHASED AND RAISED BREEDING STOCK IS
VALUED AT THE TIME PUT INTO USEFUL PRODUCTION AND CARRY THAT SAME VALUE
FOR THEIR USEFUL LIFE.

WORK UNITS PROVIDE A MEASURE OF WORK LOAD AND SIZE OF BUSINESS.

TABLE 2A - 6A CASH RECEIPTS , WHOLE FARM & OPERATOR - 1989 AVERAGE
AVERAGE - 554 FARMS

	2A	6A
	WHOLE FARM	OPER. SHARE
SALE OF LIVESTOCK & LIVESTOCK PROD.		
2 DAIRY COWS	4813	4647
3 DAIRY PRODUCTS	49899	49005
4 OTHER DAIRY CATTLE	3176	3100
5 BEEF BREEDING CATTLE	426	412
6 BEEF FEEDER CATTLE	11882	11789
7 HOGS COMPLETE & MIXED	7893	7543
8 HOGS FINISHING	7807	7679
9 HOGS-PRODUCING FEEDER PIGS	2845	2725
10 SHEEP, GOATS, WOOL-BREEDING	111	110
11 SHEEP, WOOL-FEEDERS		
12 POULTRY (All Fowl)	634	634
13 EGGS	515	515
14 CUSTOM CONT. FEEDING		
15 OTHER PROD. LIVESTOCK	144	144
16 MISC. LIVESTOCK INCOME	45	45
17 TOTAL SALES-PRODUCTIVE LIVESTOCK \$	90190	88375
SALE OF CROPS:		
21 WHEAT	5518	5387
22 DURUM	23	23
23 OTHER SMALL GRAIN	935	916
24 CORN	16777	16132
25 SOYBEANS	18293	17813
26 SUNFLOWERS		
27 OTHER ROW CROPS	4340	4340
28 LEGUMES & OTHER FORAGES	797	770
29 GRASS SEED		
30 FRUITS & NUTS	69	69
31 VEG.-ROADSIDE MARKET & SPECIALTY	45	45
32 NURSERY, TIMBER & OTHER		
33 SALE/CROPS.SUPP BOT FOR RESALE	3353	3353
34 TOTAL SALES-CROPS & SUPPLIES \$	50150	48845
40 GOVERNMENT PAYMENTS-SET ASIDE	12000	11851
41 GAS TAX REFUND	45	45
42 INCOME FROM WORK OFF FARM	2528	2528
43 CUSTOM WORK ENTERPRISE	58	58
44A COOP REFUNDS (Cash)	579	570
44B COOP REFUNDS (Equity)	937	928
45 MISCELLANEOUS FARM INCOME	2524	2524
46 TOTAL OTHER FARM INCOME \$	18673	18504
47 TOTAL FARM OPERATING INCOME \$	159012	155724
50 AUTO-TRUCK-MACHINERY SOLD	678	678
51 IRRIG. EQUIPMENT SOLD		
52 CUSTOM WORK EQUIP SOLD.		
53 LIVESTOCK EQUIP SOLD	101	101
54 BUILDING & IMPROV'MNTS SOLD	274	120
55 LAND & LAND IMP. SOLD	1166	338
56 FARM CAPITAL LEASE INCOME	412	345
57 TOTAL FARM CAPITAL SALES \$	2631	1583
58 TOTAL FARM SALES \$	161643	157307
60 INCREASE IN FARM CAPITAL	18811	20044
61 FAMILY LIVING FROM FARM	610	595
62 TOTAL FARM RECEIPTS (58+60+61) \$	181064	177946
70 TOTAL FARM OPERATING INCOME (L47)		155724
71 TOT.CASH FARM OPER. EXP.(Exp L43)		119655
72 NET CASH OPERATING INCOME \$		36069

TABLE 2A-6A WHOLE FARM & OPERATOR'S CASH RECEIPTS - 1989 110 HIGH RETURN AND 110 LOW RETURN FARMS

	2B (HIGH RETURN) 6B		2B (LO RETURN) 6B	
	WHOLE FARM	OPER. SHARE	WHOLE FARM	OPER. SHARE
SALE OF LIVESTOCK & LIVESTOCK PROD.				
2 DAIRY COWS	5742	5447	2480	2469
3 DAIRY PRODUCTS	58171	55572	22286	22191
4 OTHER DAIRY CATTLE	3179	2978	1729	1729
5 BEEF BREEDING CATTLE	289	289	730	682
6 BEEF FEEDER CATTLE	6977	6977	25349	25084
7 HOGS COMPLETE & MIXED	12910	11770	9259	9007
8 HOGS FINISHING	13974	13863	9700	9165
9 HOGS-PRODUCING FEEDER PIGS	3853	3479	3958	3879
10 SHEEP, GOATS, WOOL-BREEDING	48	45	276	276
11 SHEEP, WOOL-FEEDERS			97	97
12 POULTRY (All Fowl)			514	514
13 EGGS				
14 CUSTOM CONT. FEEDING				
15 OTHER PROD. LIVESTOCK	252	252		
16 MISC. LIVESTOCK INCOME	41	41	5	5
17 TOTAL SALES-PRODUCTIVE LIVESTOCK \$	105436	100711	76385	75099
SALE OF CROPS:				
21 WHEAT	9843	9369	4617	4614
22 DURUM			113	113
23 OTHER SMALL GRAIN	935	884	1488	1466
24 CORN	33603	31855	13616	13162
25 SOYBEANS	33194	31710	17543	17277
26 SUNFLOWERS				
27 OTHER ROW CROPS	19173	19173		
28 LEGUMES & OTHER FORAGES	665	657	1608	1538
29 GRASS SEED				
30 FRUITS & NUTS				
31 VEG.-ROADSIDE MARKET & SPECIALTY				
32 NURSERY, TIMBER & OTHER				
33 SALE/CROPS, SHIPP. NOT FOR RESALE	5077	5077	5358	5358
34 TOTAL SALES-CROPS & SUPPLIES \$	102494	98725	44344	43528
40 GOVERNMENT PAYMENTS-SET ASIDE	18352	17837	12814	12791
41 GAS TAX REFUND	29	29	40	40
42 INCOME FROM WORK OFF FARM	4743	4741	2824	2824
43 CUSTOM WORK ENTERPRISE				
44A COOP REFUNDS (Cash)	823	795	326	326
44B COOP REFUNDS (Equity)	1341	1341	588	588
45 MISCELLANEOUS FARM INCOME	5078	5078	1660	1660
46 TOTAL OTHER FARM INCOME \$	30367	29822	18253	18229
47 TOTAL FARM OPERATING INCOME \$	238297	229259	138981	136856
50 AUTO-TRUCK-MACHINERY SOLD	853	853	773	773
51 IRRIG. EQUIPMENT SOLD				
52 CUSTOM WORK EQUIP SOLD.				
53 LIVESTOCK EQUIP SOLD	43	43	48	48
54 BUILDING & IMPROVEMENTS SOLD			3	3
55 LAND & LAND IMP. SOLD	284	40	3054	1144
56 FARM CAPITAL LEASE INCOME	949	829	541	326
57 TOTAL FARM CAPITAL SALES \$	2129	1765	4419	2293
58 TOTAL FARM SALES \$	240427	231024	143400	139150
60 INCREASE IN FARM CAPITAL	48183	48280	3165	6345
61 FAMILY LIVING FROM FARM	630	590	497	496
62 TOTAL FARM RECEIPTS (58+60+61) \$	289240	279894	147062	145991
70 TOTAL FARM OPERATING INCOME (L47)		229259		136856
71 TOT. CASH FARM OPER. EXP. (Exp L43)		167255		117220
72 NET CASH OPERATING INCOME \$		62004		19636

TABLE 2B-6B CASH EXPENSES WHOLE FARM & OPERATOR - 1989
AVERAGE 554 FARMS

	2B WHOLE FARM	6B OPER. SHARE
<u>PURCHASE OF LIVESTOCK:</u>		
5 DAIRY COWS	759	747
6 OTHER DAIRY CATTLE	535	487
7 BEEF BREEDING CATTLE	138	135
8 BEEF FEEDER CATTLE	5727	5716
9 HOGS COMPLETE AND MIXED	371	357
10 HOGS FINISHING	1740	1740
11 HOGS, PROD. WEANING PIGS	362	359
12 SHEEP AND GOATS	28	28
13 SHEEP AND FEEDER LAMBS		
14 POULTRY (All Fowl)	206	206
15 CUSTOM, CONTRACT FEEDING		
16 OTHER PROD. LIVESTOCK	11	11
17 <u>TOTAL LIVESTOCK PURCHASES \$</u>	<u>9876</u>	<u>9785</u>
20 VET. BREEDING, MISC LVSTK EXP.	5587	5504
21 PURCH-CROPS, SUPPL.FOR RESALE	3129	3129
22 FEED BOUGHT	24328	24019
23 FERTILIZER	7711	7574
24 CHEMICALS	6197	6097
25 OTHER CROP EXPENSE	8329	8244
26 IRRIG. OPERATING COSTS	215	194
27 CUSTOM WORK ENT. EXPENSES	6	6
28 CUSTOM WORK HIRED	3338	3313
29 GAS, DIESEL, LUBRICANTS	4667	4622
30 REPAIR LIVESTOCK EQUIP.	1580	1573
31 REPAIR-UPKEEP FARM REAL EST.	1257	1242
32 REPAIR, MACH., TRUCK & CAR	7757	7693
33 REPAIR, IRRIG. EQUIPMENT	112	112
34 REPAIRS, CUSTOM WORK ENT.	9	9
35 <u>TOTAL ALL REPAIRS \$</u>	<u>10714</u>	<u>10629</u>
36 WAGES FOR HIRED LABOR	3927	3876
37 PERSONAL & REAL EST. TAXES	1873	1560
38 GENERAL FARM EXPENSES	3036	3016
39 UTILITIES	2951	2916
40 FARM CAPITAL LEASE PYMN'TS.	1642	10883
41 TOTAL INTEREST PAYABLE THIS YEAR	XXX	14290
42 OPERATOR'S INTEREST ACTUALLY PAID	XXX	14178
43 <u>TOTAL CASH OPERATING EXP.\$</u>	<u>97526</u>	<u>119655</u>
50 AUTO, TRUCK MACH. BOUGHT (FS)	12068	11997
51 IRRIG. EQUIPMENT BOUGHT	309	309
52 CUSTOM WORK EQUIP BOUGHT	27	27
53 LIVESTOCK EQUIP. BOUGHT	2242	2200
54 LAND-BLDGS. BOUGHT	2721	2713
55 NEW LAND-LAND IMP. BOUGHT	3256	3256
57 <u>TOTAL CAPITAL PURCHASES \$</u>	<u>20623</u>	<u>20502</u>
58 <u>TOTAL FARM PURCHASES \$</u>	<u>118149</u>	<u>140157</u>
60 DECREASE IN FARM CAPITAL		
61 INT. ON FARM CAP.(7% charge)	33147	7741
62 VALUE UNPAID FAMILY LABOR	740	740
63 BOARD FURNISHED HIRED LABOR	40	40
64 <u>TOTAL FARM EXPENSES \$</u>	<u>152076</u>	<u>148678</u>
70 RET. TO OPER. LABOR & MGN'T	28988	29268
71 NUMBER OF OPERATORS	1	XXX
72 FULL TIME OPER. EQUIVALENT	1.12	XXX
73 RET. OPERATOR LABOR & MGN'T.	25882	XXX
74 RET. CAP. & FAM.LABOR & MGN'T.	XXX	38151

TABLE 2B - 6B WHOLE FARM & OPERATORS CASH EXPENSES HIGH & LOW RETURN FARMS - 1989 110 FARMS

	2B (HIGH RETURN 6B		2B (LOW RETURN) 6B	
	WHOLE FARM	OPER. SHARE	WHOLE FARM	OPER. SHARE
PURCHASE OF LIVESTOCK:				
5 DAIRY COWS	547	538	655	655
6 OTHER DAIRY CATTLE	382	318	1095	1004
7 BEEF BREEDING CATTLE	71	71	291	275
8 BEEF FEEDER CATTLE	1417	1417	12973	12919
9 HOGS COMPLETE AND MIXED	545	489	655	648
10 HOGS FINISHING	3940	3940	1966	1966
11 HOGS, PROD. WEANING PIGS	449	449	468	459
12 SHEEP AND GOATS	67	67	21	21
13 SHEEP AND FEEDER LAMBS				
14 POULTRY (All Fowl)			50	50
15 CUSTOM, CONTRACT FEEDING				
16 OTHER PROD. LIVESTOCK			6	6
17 TOTAL LIVESTOCK PURCHASES \$	7418	7289	18180	18003
20 VET. BREEDING, MISC LVSTK EXP.	6284	6075	4097	4064
21 PURCH-CROPS, SUPPL.FOR RESALE	5722	5722	3358	3358
22 FEED BOUGHT	28531	27574	22424	22321
23 FERTILIZER	12608	12359	7731	7613
24 CHEMICALS	10327	10147	6096	6044
25 OTHER CROP EXPENSE	13648	13379	7739	7708
26 IRRIG. OPERATING COSTS	191	139	509	457
27 CUSTOM WORK ENT. EXPENSES				
28 CUSTOM WORK HIRED	4692	4659	2721	2700
29 GAS, DIESEL, LUBRICANTS	6381	6274	4553	4542
30 REPAIR LIVESTOCK EQUIP.	1882	1862	1103	1103
31 REPAIR-UPKEEP FARM REAL EST.	1476	1449	1147	1121
32 REPAIR, MACH., TRUCK & CAR	11216	11022	7697	7690
33 REPAIR, IRRIG. EQUIPMENT	50	50	293	293
34 REPAIRS, CUSTOM WORK ENT.				
35 TOTAL ALL REPAIRS \$	14623	14382	10240	10207
36 WAGES FOR HIRED LABOR	5919	5809	2920	2920
37 PERSONAL & REAL EST. TAXES	2831	2239	1972	1678
38 GENERAL FARM EXPENSES	3977	3910	3286	3286
39 UTILITIES	3421	3290	2627	2612
40 FARM CAPITAL LEASE PYMN'TS.	3015	23835	1318	6913
41 TOTAL INT. PAYABLE THIS YEAR	XXX	20174	XXX	12798
42 OPER. INTEREST ACTUALLY PAID	XXX	(19972)	XXX	(12676)
43 TOTAL CASH OPERATING EXP.\$	129588	167255	99771	117220
50 AUTO, TRUCK MACH. BOUGHT (FS)	17980	17709	12874	12874
51 IRRIG. EQUIPMENT BOUGHT			635	635
52 CUSTOM WORK EQUIP BOUGHT				
53 LIVESTOCK EQUIP. BOUGHT	2550	2348	1590	1590
54 LAND-BLDGS. BOUGHT	4143	4106	2219	2219
55 NEW LAND-LAND IMP. BOUGHT	4593	4593	4657	4657
57 TOTAL CAPITAL PURCHASES \$	29194	28756	21975	21975
58 TOTAL FARM PURCHASES \$	158782	196011	121746	1391957
60 INCREASE IN FARM CAPITAL				
61 INT. ON FARM CAP.(7% charge)	48110	9737	33975	10735
62 VALUE UNPAID FAMILY LABOR	705	705	480	480
63 BOARD FURNISHED HIRED LABOR	64	64	33	33
64 TOTAL FARM EXPENSES \$	207661	206517	156054	150433
70 RET. TO OPER. LABOR & MGN'T(6A/62)-(64)	81579	73377	(-8992)	(-4452)
71 NUMBER OF OPERATORS	1	XXX	1	XXX
72 FULL TIME OPER. EQUIVALENT	1.27	XXX	1.12	XXX
73 RET. OPERATOR LABOR & MGN'T.(70/72)	64235	XXX	(-8029)	XXX
74 RET. CAP. & FAM.LABOR & MGN'T.	XXX	83928	XXX	7168

TABLE 3 - ENTERPRISE STATEMENT OF THE FARM BUSINESS - 1989

ITEMS	AVERAGE OF 554 FARMS	HIGH 110 FARMS	LOW 110 FARMS
<u>RETURNS & NET INCREASES</u>			
3 PRODUCTIVE LIVESTOCK			
5 NET LIVESTOCK LEASE INCOME	-15	-54	-24
6 DAIRY COWS CATTLE	48029	56455	21086
7 OTHER DAIRY CATTLE	11985	14651	4945
8 BEEF BREEDING	846	1125	1262
9 BEEF FEEDERS	6329	5023	13163
10 HOGS, COMPLETE-MIXED	7636	13250	8032
11 HOGS-FINISHING	5128	8447	6447
12 HOGS-FEEDER PIG PROD.	3863	5182	5119
13 SHEEP & GOATS-WOOL	90	25	215
14 SHEEP & GOATS-FEEDERS			
15 POULTRY-(All Fowl)	1038		512
16 CONTRACT LIVESTOCK			
17 OTHER PROD. LIVESTOCK	143	252	-31
18 TOTAL ALL LIVESTOCK \$	85017	104357	60726
19 VALUE FEED FED LIVESTOCK \$	44604	52781	39432
20 RET. OVER FED LIVST'K.\$	40467	51576	21294
21 CROP, FEED, SEED	77431	151990	57403
22 FERT., CHEM, SEED, OTHER	22401	36382	21857
23 RET./DIRECT COSTS (Crops)	55029	115608	35546
24 NET., CROPS BOT FOR RESALE	223	-645	2000
25 COOP PATRONAGE REFUNDS	1516	2165	914
26 MISC. FARM INCOME/ACCTS REC.	501	4338	-2353
27 CUSTOM WORK ENTERPRISE	37		
28 GOV'T. PAYMENTS-SET ASIDE	12000	18352	12814
29 TOTAL RET.& NET INCREASES \$	109774	191395	70216
<u>EXPENSES & NET DECREASES</u>			
31 TRUCK & AUTO F.S.	4807	5664	4627
32 TRACTOR & DROP MACHINERY	17412	25557	18518
33 IRRIGATION EQUIPMENT	291	164	639
34 UTILITIES	2951	3421	2627
35 LIVESTOCK EQUIPMENT	3138	3705	2685
36 BUILDINGS & FENCES	4691	6231	4193
37 LAND IMPROVEMENT & TILE	355	494	472
38 LAND	-205	-392	-292
39 VET.-MISC LVSTK. EXPENSE	5587	6284	4097
40 ALL LABOR COSTS	3700	3768	2585
41 PROPERTY TAX	1873	2831	1972
42 GENERAL FARM EXPENSE	3036	3977	3286
43 INT. ON FARM CAPITAL AT 7%	33147	48110	33795
44 TOTAL EXPENSE & NET DECREASES \$	80783	109814	79204
45 RET.TO FARM OPERATOR & MGN'T. \$	28991	81581	-8988
46 NO. FARM OPERATORS	1	1	1
47 FULL TIME OPER. EQUIVALENT	1.12	1.27	1.12
48 RET.TO OPER LABOR & MGN'T. \$	25885	64237	-8025

TABLE 4 - NON FARM INCOME & EXPENSE - 1989

ITEMS	254	50	50
	AVE. RET.	HI. RET.	LO RET.
4 NUMBER OF PERSONS-FAMILY	4	5	4
5. NO. ADULT EQUIV-FAMILY	3.4	3.7	3.0
6 NON FARM INCOME			
7 OUTSIDE INVESTMENT INCOME	763	813	294
8 OTHER PERS. INCOME TAX REF.	8499	6594	12581
9. SALE OF PERSONAL CAPITAL	47	16	135
10 NET CASH FROM NON FARM BUSNS.	904	4296	336
11 TOTAL NON FARM INCOME	\$ 10213	11719	13344
HOUSEHOLD EXPENSE			
13 FAMILY DRAW			
14 CHURCH & CHARITY	922	1101	902
15 MEDICAL CARE & HEALTH INS.	3230	3143	2875
16 FOOD & MEALS BOUGHT	4822	5587	4303
17 OPER. EXPENSE & SUPPLIES	1711	1868	1592
18 FURNISHING & EQUIPMENT	1301	1547	896
19 CLOTHING & MATERIALS	1578	1869	1233
20 PERSONAL CARE-SPENDING	1881	2851	1261
21 EDUCATION	493	710	531
22 RECREATION	1083	1541	1462
23 GIFTS-SPECIAL EVENTS	1009	1164	902
24 PERSONAL INTEREST PAID	221	211	308
25 TOTAL CASH HOUSEHOLD EXP. \$	18251	21592	16266
26 TRUCK & AUTO EXP. (Personal)	1236	1480	1343
27 DWELLING UPKEEP (Personal)	553	1060	177
28 CASH RENT (Personal)	18		
29 PHONE & ELEC. EXP. (Personal)	1093	1202	965
30 GENERAL FARM EXP. (Personal)	96	98	135
31 TOTAL CASH LIVING & OPER. \$	21247	25432	18886
32 NEW TRUCK-AUTO PURCH. (Pers)	1095	1120	1328
33 NEW DWELLING, BLDGS, LAND (Pers)	1364	2270	953
34 TAXES & OTHER DEDUCTIONS	2678	4349	2660
35 LIFE INSURANCE	764	878	640
36 PAID ON PERS. DEBT	528	904	475
37 SAVINGS & INVEST LESS INS.	1580	2873	1627
38 TOTAL NON CASH EXPENSES \$	29255	37826	26570
39 TOTAL NON FARM EXPENSES	19043	26107	13225
40 TOT. FAM. LIVING FROM FARM \$	554	524	326
41 TOT. CASH/NON CASH EXP. \$	29810	38350	26896
SUPPLEMENTARY INFORMATION			
43 FAMILY LIVING FROM THE FARM		VALUE	
44 MILK & CREAM	117	105	42
45 BEEF & BUFFALO	360	325	199
46 PORK (lbs)	75	94	79
47 LAMB, MUTTON, GOAT	1		7
48 POULTRY, All Fowl	1		
51 TOTAL FAM. LIVING FROM FARM \$	554	524	326
CALCULATED LIVING EXPENSE			
53 TOTAL FAMILY INCOME	48364	95647	20512
54 MINUS CHANGE IN NET WORK	19469	53439	-1734
55 APPARENT FAMILY LIVING	28895	42208	22246
56 TOT. FAM. LIVING/WU CALC.	57.19	52.90	63.99
57 NET FAMILY LIVING/WORK UNIT	37.23	36.51	31.85

EXPLANATION OF TABLE 5.2 RATIO'S

32. THE CURRENT WORKING RATIO This is a measure of liquidity. It indicates the shortrun ability of the business to service debt. It demonstrates the adequacy of the current assets, if liquidated, to pay off annual debts as they come due. Usually current assets have a life of 1 year or less. It is calculated by dividing current assets by current liabilities.
33. INTERMEDIATE RATIO Intermediate assets and liabilities are those where the finances used are converted into product in a period usually from one to ten years. Examples may be breeding livestock, machinery and equipment. The increase in the ratio over a period of time is a favorable sign. It is calculated by dividing intermediate assets by intermediate liabilities.
34. WORKING RATIO The desired trend for this ratio is to increase over time. It is also desirable for this ratio to be larger than the fixed ratio and net capital ratio. The farm business needs to have sufficient liquid assets and retain management flexibility to absorb price decreases and other factors negatively affecting current and intermediate asset values. The ratio is calculated by dividing current assets and intermediate assets by current and intermediate liabilities.
35. FIXED RATIO This ratio should be in excess of 1 but it is also important for this ratio to be increasing over time. This ratio should not be increasing at the expense of a safe working ratio. It is calculated by dividing long term assets by long term liabilities.
36. NET CAPITAL RATIO Net capital ratio is one of three measures of solvency; how much value remains if all assets are converted to cash at inventoried value and the total debt is paid. This ratio reflects the risk-bearing capacity of the farm business by showing the percentage that assets could decline and still cover liabilities. The higher the ratio number, the better the risk. A ratio of less than 1.0 = insolvent, a ration of 1.0 = a net worth of zero. A ratio of 2.0 is considered a safe ratio. This would allow a 50% reduction in asset value or a 100% increase in liabilities before becoming insolvent. This ratio is calculated by dividing total assets by total liabilities.

37. EQUITY/ASSET RATIO This ratio shows the portion of the total assets paid for and owned by the operator clear of financial claims. A ratio of .80 shows that the operator owns 80% of all total assets as a ratio of .44 shows the operator owns only 44% of all total assets. Therefore this ratio should be increasing over time. It is calculated by dividing total equity by total assets.
38. DEBT/EQUITY RATIO This is another overall measure of solvency. It shows the relationship between debt and equity. A ratio of 1.00 indicates that the equity and debt are equal. That would be equivalent to a net capital ratio of 2.00 to 1.00 and an asset equity/asset ratio of .50 to 1.00. All measures of solvency use the same three measures of financial position. They all express relationships between assets, liabilities and net worth (or equity). Leaders prefer a debt-equity ratio of less than 1.0. It is calculated by dividing total liabilities by total equity.
39. CURRENT DEBT The lower the current debt structure ratio is, the more liquid the business. A ratio of .10 means only one dollar (\$ 1.00) out of every \$ 10.00 debt must be paid within the next year. A ratio of .50 means one-half of the total debt must be paid in the next year. This total is calculated by dividing current liabilities by total liabilities.

TABLE 5.1 OPERATOR'S FINANCIAL POSITION - 1989 AVE 554 FARMS

CURRENT ASSETS:		JAN 1	DEC. 31
4	CASH, CHECKING & SAVINGS. (Pers)	558	1083
5	CASH, CHECKING & SAVINGS. (Farm)	5030	4589
6	HEDGING ACCOUNT EQUITY	60	71
7	NOTES-ACCTS. RECEIVABLE (Pers)	163	137
8	NOTES-ACCTS. RECEIVABLE (Farm)	3325	1302
9	CROPS HELD FOR SALE	20269	25539
10	LIVESTOCK FEED	18450	23765
11	SUPPLIES/PREPAIDS	3494	3546
12	FEEDER CATTLE-MARKET OTHER DY.	16791	19001
13	MARKET HOGS	4910	5253
14	FEEDER LAMBS & GOATS	30	45
15	POULTRY-ALL TYPES	183	250
16	OTHER LIVESTOCK	47	60
	TOTAL CURRENT ASSETS	\$ 73309	84641
INTERMEDIATE ASSETS:			
19	DAIRY COWS	19287	20158
20	OTHER DAIRY	3130	3401
21	BEEF BREEDING CATTLE	1341	1297
22	BREEDING HOGS	2316	2527
23	BREEDING SHEEP/GOATS	98	88
24	OTHER PROD. LIVESTOCK	13	2
25	AUTO-TRUCK, Pers Share	1817	2288
26	AUTO-TRUCK, Farm Share	4545	5538
27	POWER, MACH., EQUIPMENT	42546	45570
28	LIVESTOCK EQUIPMENT	6981	7877
29	CUSTOM WORK EQUIPMENT	50	68
30	IRRIGATION EQUIPMENT	1023	1204
31	STOCKS, BONDS, COOP EQUITY Farm	6061	6808
32	STOCKS-BONDS, COOP EQ. Personal	1254	1615
35	OTHER HOUSEHOLD PERSONAL	7495	7730
36	RETIREMENT ACCTS., LIFE INS.	3695	4257
	TOTAL INTERMEDIATE ASSETS	\$ 101651	110427
LONG TERM ASSETS:			
39	BUILDINGS & FENCES	36907	36550
40	LAND & LAND IMPROVEMENTS	118906	121632
41	DWELLING	23208	24127
42	REAL ESTATE IMPROVEMENTS	1729	1778
	TOTAL LONG TERM ASSETS	\$ 180750	184088
44	TOTAL ASSETS	\$ 355711	379156
45	TOTAL PERS. ASSETS	\$ 45980	49824
46	TOTAL FARM ASSETS	\$ 309730	329333

The operator's financial statement presents a picture of the financial structure of the farm business at the beginning and the end of the year. The CHANGE IN EQUITY, shown on Table 5.2 - Line 24 is a dollar measure of progress. This statement, when accurately kept over a period of years, is one of the best measures of financial progress.

TABLE 5.1 OPERATOR'S FINANCIAL POSITION - 1989

110 HIGH AND LOW RETURN FARMS

		HI RETURN		LO RETURN	
		JAN 1	DEC. 31	JAN 1	DEC 31
CURRENT ASSETS:					
4	CASH, CHECKING & SAVINGS. (Pers)	1132	2185	955	828
5	CASH, CHECKING & SAVINGS. (Farm)	4920	6694	5683	4156
6	IRIDGING ACCOUNT EQUITY		166	129	53
7	NOTES-ACCTS. RECEIVABLE (Pers)	317	346	233	192
8	NOTES-ACCTS. RECEIVABLE (Farm)	2316	1575	5576	1563
9	CROPS HELD FOR SALE	36527	51878	17093	17127
10	LIVESTOCK FEED	27522	42603	20627	22400
11	SUPPLILS/PREPAIDS	5901	6309	3954	4171
12	FEEDER CATTLE-MARKET OTHER DY.	15473	17831	22926	26136
13	MARKET HOGS	8007	8883	6637	6366
14	FEEDER LAMBS & GOATS	19	63	61	65
15	POULTRY-ALL TYPES			125	75
16	OTHER LIVESTOCK			145	121
TOTAL CURRENT ASSETS \$		102134	138534	84144	83255
INTERMEDIATE ASSETS:					
19	DAIRY COWS	21185	22826	10095	9998
20	OTHER DAIRY	3159	3074	1136	1148
21	BEEF BREEDING CATTLE	1470	1687	2676	1904
22	BREEDING HOGS	3431	3637	3130	3446
23	BREEDING SHEEP/GOATS	19	20	312	263
24	OTHER PROD. LIVESTOCK				
25	AUTO-TRUCK, Pers Share	1978	2107	1803	2467
26	AUTO-TRUCK, Farm Share	6245	7294	4362	5754
27	POWER, MACH., EQUIPMENT	58031	64432	50199	51652
28	LIVESTOCK EQUIPMENT	9286	10069	6220	6574
29	CUSTOM WORK EQUIPMENT				
30	IRRIGATION EQUIPMENT	459	435	2982	3294
31	STOCKS, BONDS, COOP EQUITY Farm	11726	13513	6515	7342
32	STOCKS BONDS, COOP EQU. Personal	975	1187	1319	1444
35	OTHER HOUSEHOLD PERSONAL	8431	8792	8166	8296
36	RETIREMENT ACCTS., LIFE INS.	3090	3602	3385	4000
TOTAL INTILRMEDIATE ASSETS \$		129485	142676	102300	107581
LONG TERM ASSETS:					
39	BUILDINGS & FENCES	44088	44382	34092	33392
40	LAND & LAND IMPROVEMENTS	160017	164270	140528	143850
41	DWELLING	28196	29356	24866	25695
42	REAL ESTATE IMPROVEMENTS	2207	2243	2714	2693
TOTAL LONG TERM ASSETS \$		234508	240251	202201	205630
44	TOTAL ASSETS \$	466127	521461	388645	396466
45	TOTAL PERS. ASSETS \$	58052	63332	49955	52958
46	TOTAL FARM ASSETS \$	408075	458129	388690	343508

The operator's financial statement presents a picture of the financial structure of the farm business at the beginning and the end of the year. The CHANGE IN EQUITY, shown on Table 5.2 - Line 24 is a dollar measure of progress. This statement, when accurately kept over a period of years, is one of the best measures of financial progress.

TABLE 5.2 OPERATOR'S FINANCIAL POSITION - DEBTS 1989

ITEMS		AVERAGE OF 554 FARMS	
		JAN 1	DEC 31
CURRENT LIABILITIES			
4	ACCOUNTS PAYABLE (Pers)	103	100
5	ACCOUNTS PAYABLE (Farm)	2848	2888
6	CURR. PORT.-INTERM & LONG TRM DBT.	8943	8925
6A	CURR. PORT. NOTES & LINE OF CREDIT	6158	9025
7	DELINQUENT INTEREST	413	519
8	RENTS-LEASE PYMN'TS PAST DUE	131	265
	TOTAL CURRENT LIABILITIES \$	18595	21722
INTERMEDIATE LIABILITIES			
11	NOTES PAYABLE (Pers)	466	549
12	NOTES PAYABLE (Farm)	6251	7916
13	CHattel MORTGAGES(Pers)	479	547
14	CHattel MORTGAGES(Farm)	50820	51698
	TOTAL INTERMEDIATE DEBTS \$	58016	60710
LONG TERM LIABILITIES			
18	REAL ESTATE & CONTRACTS(Pers)	1615	1659
19	REAL ESTATE & CONTRACTS(Farm)	94837	92948
	TOTAL LONG TERM DEBTS \$	96452	94607
22	TOTAL LIABILITIES \$	173063	177039
23	EQUITY \$	182648	202117
24	CHANGE IN EQUITY \$		+19469
FINANCIAL RATIOS:			
32	CURRENT RATIO (T5.1 L17/T5.2 L9) (CURRENT ASSETS/ INTERM. DEBT)	3.94	3.90
33	INTERMED.RATIO (T5.1 L37/T5.2 L16) (C.ASSETS+I.ASSETS/C.DEBT+I.DEBT)	1.75	1.82
34	WORKING RATIO (T5.1 L17+L37/T5.2 L9+L16) (C.ASSETS+I.ASSETS/C.DEBT+I.DEBT)	2.28	2.37
35	FIXED RATIO (T5.1 L43/T5.2 L22) LONG TERM ASSETS/LONG TERM DEBT	1.87	1.95
36	NET CAPITAL DEBT (T5.1 L44/T5.2 L22)	2.06	2.14
37	EQUITY/ASSET RATIO (T5.1 L44/T5.2 L21) TOTAL EQUITY/TOTAL ASSETS	.51	.53
38	DEBT/EQUITY RATIO (T5.2 L23/T5.2 L23) TOTAL LIABILITIES/TOTAL EQUITY	.95	.88
39	CURRENT DEBT RATIO (T5.2 L9/T5.2 L22) CURRENT LIABILITIES/TOTAL DEBT	.11	.12
51	RET. TO CAPITAL, FAM. LABOR & MGMN'T.	\$ 38151	
52	TOTAL INCOME FROM NON FARM SOURCE	10213	
53	TOTAL FAMILY INCOME	48364	
54	TOT. FAMILY CASH-NON CASH EXPENSE	29810	
55	TOTAL MONEY BORROWED	55797	
56	TOTAL PAID ON DEBT	52160	

TABIE 5.2 OPERATOR'S FINANCIAL POSITION - DEBTS - 1989

ITEMS	110 HIGH RETURN FARMS		110 LOW RETURN FARMS	
	JAN 1	DEC 31	JAN 1	DEC 31
CURRENT LIABILITIES				
4 ACCOUNTS PAYABLE (Pers)	6	31	98	93
5 ACCOUNTS PAYABLE (Farm)	4268	3452	2303	3015
6 CURR. PORT:-INTERM & LONG TRM DBT.	12727	11832	8883	8941
6A CURR. PORT: NOTES & LINE OF CREDIT	11107	17344	4344	7476
7 DELINQUENT INTEREST	531	737	191	313
8 RENTS-LEASE PYMN'TS PAST DUE	241	866	222	271
TOTAL CURRENT LIABILITIES \$	28880	34262	16040	20109
INTERMEDIATE LIABILITIES				
11 NOTES PAYABLE (Pers)	603	598	316	204
12 NOTES PAYABLE (Farm)	4684	8588	7350	8425
13 CHATTEL MORTGAGES(Pers)	324	314	232	548
14 CHATTEL MORTGAGES(Farm)	63408	61307	42956	47832
TOTAL INTERMEDIATE DEBTS \$	69020	70808	50854	56830
LONG TERM LIABILITIES				
18 REAL ESTATE & CONTRACTS(Pers)	741	932	1830	1747
19 REAL ESTATE & CONTRACTS(Farm)	134683	129216	95955	95549
TOTAL LONG TERM DEBTS \$	135424	130148	97786	97296
22 TOTAL LIABILITIES \$	233323	235218	164679	174234
23 EQUITY \$	232804	286243	223966	222231
24 CHANGE IN EQUITY \$		+53439		(-1734)
FINANCIAL RATIOS:				
	BEG. YR.	END YR.	BEG. YR.	END YR.
32 CURRENT RATIO (T5.1 L17/T5.2 L9) (CURRENT ASSETS/ INTERM. DEBT)	3.54	4.04	5.25	4.14
33 INTERMED. RATIO (T5.1 L37/T5.2 L16) (C.ASSETS+I.ASSETS/C.DEBT+I.DEBT)	1.88	2.01	2.01	1.89
34 WORKING RATIO (T5.1 L17+L37/T5.2 L9+L16) (C.ASSETS+I.ASSETS/C.DEBT+I.DEBT)	2.37	2.68	2.79	2.48
35 FIXED RATIO (T5.1 L43/T5.2 L22) LONG TERM ASSETS/LONG TERM DEBT	1.73	1.85	2.07	2.11
36 NET CAPITAL DEBT (T5.1 L44/T5.2 L22)	2.00	2.22	2.36	2.28
37 EQUITY/ASSET RATIO (T5.1 L44/T5.2 L21) TOTAL EQUITY/TOTAL ASSETS	.50	.55	.58	.56
38 DEBT/EQUITY RATIO (T5.2 L23/T5.2 L23) TOTAL LIABILITIES/TOTAL EQUITY	1.00	.82	.74	.78
39 CURRENT DEBT RATIO (T5.2 L9/T5.2 L22) CURRENT LIABILITIES/TOTAL DEBT	.12	.15	.10	.12
51 RET. TO CAPITAL, FAM. LABOR & MGMT.		83928		7168
52 TOTAL INCOME FROM NON FARM SOURCE		11719		13344
53 TOTAL FAMILY INCOME		95647		20512
54 TOT. FAMILY CASH-NON CASH EXPENSE		38350		26896
55 TOTAL MONEY BORROWED		76654		58719
56 TOTAL PAID ON DEBT		75062		49752

MEASURES OF FARM ORGANIZATION AND MANAGEMENT EFFICIENCY

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

1. RET. TO LABOR & MGMT. A measure of the relative financial return for the operators labor, taking into account all income and expense, cash and non-cash, including a charge for the use of farm capital. This is based on the whole farm business and is found also in Table 2 and Table 3.
2. CROP YIELD INDEX A measure of the crop yield level for all crops produced expressed as a percentage of the average; the average being 100%.
3. RET. OVER LISTED COST PER TILLABLE ACRE (excluding pasture) This is the net return per tillable crop acre after all variable and allocated costs have been paid.
4. GROSS RETURN PER ACRE An additional measure of crop selection based on total production times an average price for the crops, plus other crop expense.
5. RETURN PER \$100 FEED FED TO PRODUCTIVE LIVESTOCK Measures the general level of efficiency for all livestock. It is expressed as a percentage of the average and combines the individual livestock indexes into one figure.
6. LIVESTOCK UNITS PER 100 ACRES A measure of livestock density or population. Unit values are assigned to the various classes of livestock. Unit values are found in Table 7.
7. SIZE OF BUSINESS - WORK UNITS A measure of the total work load. A Work Unit represents the average accomplishment of a worker in one ten hour day. Work Unit values are assigned to each class of livestock, each crop, and to other tasks utilizing farm labor.
8. WORK UNITS PER WORKER Measures labor efficiency. It is the total work units divided by the number of workers on the farm including the operator, hired labor and family labor.
9. POWER, MACHINERY, EQUIPMENT AND BUILDING EXPENSE PER WORK UNIT A measure of expense control. It is the total of items 31 through 36 in Table 3 divided by the number of work units.

Other items listed on Table 8 are related to the above measures as serve to further define and describe the efficiency level of the farm business. Items listed in Table 8 and the thermometer chart are to be considered in the light of the farm and arm 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. This inter-relationship of factor varies from farm to farm.

TABLE 8 MEASURES OF FARM ORGANIZATION AND MANAGEMENT EFFICIENCY 1989

		<u>Labor Earnings</u>		
		554	110 High	110 low
2. <u>ITEMS</u>		<u>Average</u>	<u>Return</u>	<u>Return</u>
3. Return Operator's Labor & Mgnt.	\$	28988	81579	-8992
4. Crop Yield Index		100.0	102.1	91.5
5. Retrn. Over All Listed Cost/Till. A.		46.96	61.07	27.06
6. Gross Return per Tillable Acre		218.58	228.72	181.90
7. Index Return / \$ 100 Feed Fed		100.0	110.1	89.8
8. Livestock Units / 100 Acres *		19.10	13.20	19.14
9. Size of Business in Work Units		511.5	715.1	415.2
10. Work Units per Worker		327.9	388.6	278.6
11. Power, Mach., Equip., Bldg. Exp / W.U.		65.08	62.57	80.18
30. <u>Number of Animal Units</u>				
31. <u>Work Units:</u>				
32. Crops		220.6	361.0	202.5
33. Productive Livestock		269.8	307.6	195.2
34. Other Productive Units		21.1	46.5	17.5
35. <u>Expenses Per Work Unit:</u>				
36. Tractor & Crop Machinery		34.61	35.97	46.14
37. Auto & Truck: Farm Share		9.40	7.92	11.14
38. Electricity, Farm Share		4.92	4.23	5.22
39. Livestock Equipment		6.13	5.18	6.47
40. Building, Fence & Tiling		9.17	8.71	10.10
41. <u>Other Expense Per Total Work Units :</u>				
42. Gen. Farm, Phone & Other Utilities		6.78	6.11	9.02
43. Wages for Hired Labor		7.68	8.28	7.03
44. <u>Trac., Crop Mach. Expense/Crop Acre**</u>	\$	37.92	36.41	40.57
45. Farm Powr & Mach. Cost Alloc. to Lvstk	\$	3006	3617	2395
46. Farm Power & Mach. Cost Alloc. to Crops	\$	16812	24931	20287
47. Bldg. Fenc, Tile Cost Alloc. to Lvstk.	\$	2575	2865	1791
48. Bldg. Fene, Tile Cost Alloc. to Crops	\$	2658	3718	2674
49. * Acres Include All Tillable Land, Non Tillable Hay and Pasture.				
50. ** Acres Include All Tillable Land Plus Acres In Non Tillable Hay.				
51. <u>Supplementary Operator's Management Information</u>				
52. Oper. Return to Capital & Fam. Labor	\$	38151	83928	7168
53. <u>Operator's Depreciation:</u>				
54. Farm Power & Crop Machinery		7302	9406	9256
55. Irrigation Equipment		128	24	323
56. Custom Work Equipment		9		
57. Livestock Equipment		1203	1522	1188
58. Buildings and Fences		2950	3812	2916
59. Land Improvements & Tile		355	494	472
59. <u>Total Operator's Depreciation</u>	\$	11947	15258	14155

THERMOMETER CHART

Using the figures from Table 8 locate your standing with respect to the various measures of farm organization and management efficiency. The averages for the farms included in this summary are located along the bold line through the center of the chart on this page.

	RET. LABOR & MGNT.	CROP YIELD INDEX	RET. / COST / TILL. A.	GROSS RET. / TILL. A.	INDEX RET. / \$ 100 FEED	LVSTK UNITS / 100 A.	SIZE BUS. WORK UNITS	W. U. / WORKER	MACH, EQUIP, COST / W. U.
\$ 90000	++	++	++	++	++	++	++	++	++
	130	130	35	270	130	50	640	420	\$ 35
\$ 70000									
	120	120	23	245	120	40	600	390	\$ 45
\$ 50000									
	110	110	15	220	110	30	560	360	\$ 55
\$ 29000	--	--	--	--	--	--	--	--	--
	100	100	\$ 47	218	100	19	511	327	\$ 65
\$ 10000									
	90	90	-15	175	90	10	470	300	\$ 75
\$ -(10000)									
	80	80	-25	150	80	5	420	270	\$ 85
\$ -(30000)	++	++	++	++	++	++	++	++	++
	70	70	-35	125	70	0	370	240	\$ 95

TABLE 9 CROP ACRES AND YIELDS - 1989

	AVERAGE OF 554 FARMS	110 HIGH PROFIT FARMS	110 LOW PROFIT FARMS
A TOTAL SMALL GRAIN & CANNING PEAS	81.4	112.8	93.0
B TOTAL ROW CROP	270.7	463.4	267.4
C TOTAL LEGUMES INC. SEED	43.6	48.4	30.1
D TOTAL OTHER HAY	4.8	3.1	2.6
E TOTAL SILAGE & FODDER	26.2	25.9	18.8
F TOTAL TILLABLE PASTURE	.6	1.3	.5
H TOTAL COMM. FRUITS AND NUTS	.0	.0	.0
I TOTAL COMM. VEGETABLES	.0	.0	.0
J TOTAL ROADSIDE MARKET/SEPC. CROPS	.1		
K TOTAL FALLOW & SET ASIDE	29.8	45.5	43.0
L TOTAL TILLABLE LAND & RECROPPED A.	457.4	700.4	455.5
M TOTAL NON-TILLABLE HAY/PASTURE	6.6	2.1	7.9
1998 LAND RENTED OUT-NON TILLABLE	.3		1.2
9985 WILD HAY NOT HARVESTED	1.7	2.1	2.5
9986 PASTURE NOT HARVESTED	13.9	7.5	15.2
9987 TIMBER NOT HARVESTED	3.9	2.1	4.1
9988 ROADS AND WASTE	17.5	19.7	17.2
9989 FARMSTEAD	9.1	11.3	9.0
O TOTAL LAND NOT HARVESTED	39.9	42.7	49.2
P TOTAL NON-TILLABLE LAND	46.4	44.9	57.2
Q TOTAL LAND IN FARM OR RANCH	510.4	742.1	515.2

SUPPLEMENTAL MANAGEMENT INFORMATION

PERCENT LAND TILLABLE	89.6	94.3	88.4
FERTILIZER COST PER ACRE	\$ 17.43	18.26	17.46
CROP CHEMICAL COST PER ACRE	\$ 14.60	16.32	14.83
SEED & OTHER COST PER ACRE	\$ 20.42	21.38	20.20
FUEL & LUBRICANTS USED/ACRE	\$ 10.76	9.65	10.77
REPAIR & MAINTENANCE COST/ACRE	\$ 19.28	17.90	19.72

* TOTAL ACRES CROPPED 426.91 653.56 411.91

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

TABLE 10 - INDIVIDUAL CROP ENTERPRISE ANALYSIS

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

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

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

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

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

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

Table 7 - WORK UNITS FOR CROPS, LIVESTOCK AND WORK OFF THE FARM

<u>ITEM</u>	<u># WORK UNITS</u>	<u>ITEM</u>	<u># WORK UNITS</u>
Dairy Cow	7.0/head	Oats, Wheat, SmGr.	.30/acre
Other Dairy	1.2/head	Canning Peas	.40/acre
Beef Cows	1.5/head	Canning Corn	.50/acre
Beef Feeders	.12/cwt	Pinto Beans	.50/acre
Hogs; Farrow-Finish	.12/cwt	Soybeans	.45/acre
Finishing pigs	.06/cwt	Corn for Grain	.55/acre
Weaning pigs	1.4/litter	Sugarbeets	2.00/acre
Sheep-farm flock	.30/head	Corn Silage	.60/acre
Chickens-Egg Prod.	5.0/100	Leg. Grass Silage	.40/acre
Broilers	.20/cwt	Alfalfa Hay	.60/acre
Turkey, Egg Prod.	25.0/100	Other Legume Hay	.40/acre
Turkey Pullets	.12/cwt	Tame Grass Hay	.20/acre
Off Farm Labor	1.0/\$20	Annual Hay, Wild Hay	.20/acre
Idle Acres	.05/acre	Summer Fallow	.20/acre
Sunflowers	.40/acre	Potatoes	2.00/acre

TABLE 10 - CROP DATA FOR BARLEY - 1989

ITEMS		38 AVERAGE FARMS	12 HIGH RETURN FARMS	12 LOW RETURN FARMS
3. ACRES		19.9	21.6	16.5
4. YIELD		52.4	77.3	23.8
5. VALUE PER UNIT		2.00	2.01	2.01
6. CROP PRODUCT RETURN	\$	104.47	155.65	47.82
7. OTHER CROP INCOME		16.48	21.90	20.61
8. TOTAL CROP RETURN	\$	120.95	177.55	68.43
VARIABLE COSTS:				
10. FERTILIZER		14.07	13.84	11.58
11. CHEMICALS		3.92	3.06	1.21
12. SEED		8.99	10.32	7.33
13. CROP DRYING				
14. CROP INSURANCE		.75	.42	.67
15. OTHER EXPENSES		.60	.60	.91
16. SPECIAL HIRED LABOR			.09	
17. CUST. WORK & LEASE EXP.		5.08	9.12	2.48
18. IRRIGATION OPERATION				
19. ASSIGNED INTEREST				
20. TOTAL VARIABLE COSTS	\$	33.42	37.45	24.18
21. RET. OVER VARIABLE COSTS	\$	87.53	140.10	44.25
ALLOCATED COSTS (Variable & Fixed)				
31. FARM POWER (Ownership)		6.68	8.52	6.73
32. FARM POWER (Operation)		17.04	18.38	11.88
33. BUILDING & FENCE COSTS		2.16	1.44	3.15
34. IRRIG. OWNERSHIP COSTS				
37. LAND COST (Ownership or Rent)		39.04	43.98	29.42
38. UTILITIES & GEN. FARM EXP.		4.07	3.38	4.12
39. HIRED LABOR		1.66	2.13	.61
41. ACTUAL NON R.E. INT. ALLOC.		5.78	5.51	4.12
42. TOTAL ALLOCATED COSTS	\$	76.43	83.34	60.03
43. TOTAL LISTED COSTS	\$	109.85	120.79	84.24
44. RETURN OVER LISTED COSTS	\$	11.10	56.76	-15.81
+++++SUPPLEMENTARY MANAGEMENT INFORMATION+++++				
50. LAND OPPORT. OWNERSHIP COST		46.62	55.29	38.54
51. TOTAL COST ADJ. TO A MIN.7% INT.		117.44	133.56	93.94
52. WORK UNITS ASSIGNED PER ACRE.		.30	.30	.30
53. POWER COST ALLOCATION FACTOR.		.99	1.00	.94
54. TOT. LIST.COST PER UNIT OF PROD.		2.10	1.56	3.54
55. TOT. ADJ. COST PER UNIT OF PROD.		2.24	1.73	3.95
56. CASH VAR. COST PER UNIT OF PROD.		1.18	.86	1.89
57. RET. OVER LISTED COSTS PER UNIT.		.21	.73	-.66
58. BREAKEVEN YIELD PER UNIT OF PROD.		54.9	60.1	41.9
59. TOTAL ACRE-INCH(s) WATER APPLIED.				
60. COST OF IRRIGATION PER ACRE.				
61. AVE. PRICE REC. PER UNIT SOLD.		2.32	2.45	2.59

TABLE 10 - CROP DATA FOR OATS - 1989

ITEMS		394 AVERAGE FARMS	78 HIGH RETURN FARMS	78 LOW RETURN FARMS
3.	ACRES	29.9	32.7	24.5
4.	YIELD	49.2	75.3	21.6
5.	VALUE PER UNIT	1.42	1.43	1.41
6.	CROP PRODUCT RETURN	\$ 69.90	107.43	30.49
7.	OTHER CROP INCOME	20.60	20.43	26.16
8.	TOTAL CROP RETURN	\$ 90.50	127.86	56.65
VARIABLE COSTS:				
10.	FERTILIZER	9.67	7.83	9.84
11.	CHEMICALS	2.34	1.90	1.22
12.	SEED	9.46	9.97	9.67
13.	CROP DRYING			
14.	CROP INSURANCE	1.61	.98	2.49
15.	OTHER EXPENSES	.54	.64	.41
16.	SPECIAL HIRED LABOR	.13	.28	.08
17.	CUST. WORK & LEASE EXP.	3.61	3.94	2.82
18.	IRRIGATION OPERATION			
19.	ASSIGNED INTEREST			
20.	TOTAL VARIABLE COSTS	\$ 27.36	25.54	26.53
21.	RET. OVER VARIABLE COSTS	\$ 63.14	102.32	30.12
ALLOCATED COSTS (Variable & Fixed)				
31.	FARM POWER (Ownership)	8.70	10.64	6.04
32.	FARM POWER (Operation)	17.66	17.22	17.55
33.	BUILDING & FENCE COSTS	4.28	3.76	2.69
34.	IRRIG. OWNERSHIP COSTS			
37.	LAND COST (Ownership or Rent)	33.56	35.91	22.33
38.	UTILITIES & GEN. FARM EXP.	3.88	3.98	3.22
39.	HIRED LABOR	1.84	2.23	1.84
41.	ACTUAL NON R.E. INT. ALLOC.	6.59	6.85	6.00
42.	TOTAL ALLOCATED COSTS	\$ 76.51	80.59	59.67
43.	TOTAL LISTED COSTS	\$ 103.85	106.12	86.20
44.	RETURN OVER LISTED COSTS	\$ -13.35	21.74	-29.55
+++++SUPPLEMENTARY MANAGEMENT INFORMATION+++++				
50.	LAND OPPORT. OWNERSHIP COST	47.40	55.46	36.88
51.	TOTAL COST ADJ. TO A MIN.7% INT.	117.39	124.83	100.73
52.	WORK UNITS ASSIGNED PER ACRE.	.30	.30	.30
53.	POWER COST ALLOCATION FACTOR.	.99	1.00	.98
54.	TOT. LIST.COST PER UNIT OF PROD.	2.11	1.41	3.99
55.	TOT. ADJ. COST PER UNIT OF PROD.	2.39	1.66	4.67
56.	CASH VAR. COST PER UNIT OF PROD.	1.17	.74	2.55
57.	RET. OVER LISTED COSTS PER UNIT.	-.27	.29	-1.37
58.	BREAKEVEN YIELD PER UNIT OF PROD.	73.1	74.2	61.1
59.	TOTAL ACRE-INCH(s) WATER APPLIED.			
60.	COST OF IRRIGATION PER ACRE.			
61.	AVE. PRICE REC. PER UNIT SOLD.	1.64	1.67	1.99

TABLE 10 - CROP DATA FOR RYE - 1989

ITEMS		AVERAGE RETURNS 23 FARMS
3.	ACRES	33.1
4.	YIELD	29.1
5.	VALUE PER UNIT	<u>1.93</u>
6.	CROP PRODUCT RETURN \$	56.07
7.	OTHER CROP INCOME	<u>25.80</u>
8.	TOTAL CROP RETURN \$	81.87
VARIABLE COSTS:		
10.	FERTILIZER	6.77
11.	CHEMICALS	.09
12.	SEED	4.74
13.	CROP DRYING	.06
14.	CROP INSURANCE	.45
15.	OTHER EXPENSES	1.33
16.	SPECIAL HIRED LABOR	
17.	CUST. WORK & LEASE EXP.	1.39
18.	IRRIGATION OPERATION	
19.	ASSIGNED INTEREST	
20.	TOTAL VARIABLE COSTS \$	<u>14.83</u>
21.	RET. OVER VARIABLE COSTS \$	<u>67.04</u>
ALLOCATED COSTS (Variable & Fixed)		
31.	FARM POWER (Ownership)	10.42
32.	FARM POWER (Operation)	16.25
33.	BUILDING & FENCE COSTS	2.51
34.	IRRIG. OWNERSHIP COSTS	
37.	LAND COST (Ownership or Rent)	26.07
38.	UTILITIES & GEN. FARM EXP.	3.38
39.	HIRED LABOR	1.21
41.	ACTUAL NON R.E. INT. ALLOC.	<u>5.29</u>
42.	TOTAL ALLOCATED COSTS \$	65.13
43.	TOTAL LISTED COSTS \$	79.97
44.	RETURN OVER LISTED COSTS \$	<u>1.90</u>
+++++SUPPLEMENTARY MANAGEMENT INFORMATION+++++		
50.	LAND OPPORT. OWNERSHIP COST	37.42
51.	TOTAL COST ADJ. TO A MIN.7% INT.	93.14
52.	WORK UNITS ASSIGNED PER ACRE.	.30
53.	POWER COST ALLOCATION FACTOR.	1.00
54.	TOT. LISTED COST PER UNIT OF PROD.	2.75
55.	TOT. ADJ. COST PER UNIT OF PROD.	3.20
56.	CASH VAR. COST PER UNIT OF PROD.	1.41
57.	RET. OVER LISTED COSTS PER UNIT.	.07
58.	BREAKEVEN YIELD PER UNIT OF PROD.	41.4
59.	TOTAL ACRE-INCH(s) WATER APPLIED.	
60.	COST OF IRRIGATION PER ACRE.	
61.	AVE. PRICE REC. PER UNIT SOLD.	1.85

TABLE 10 - CROP DATA FOR WHEAT - 1989

ITEMS		404 AVERAGE FARMS	80 HIGH RETURN FARMS	80 LOW RETURN FARMS
3.	ACRES	74.5	93.8	50.3
4.	YIELD	33.2	45.0	20.4
5.	VALUE PER UNIT	3.75	3.77	3.74
6.	CROP PRODUCT RETURN	\$ 124.48	169.65	76.26
7.	OTHER CROP INCOME	7.34	10.32	11.97
8.	TOTAL CROP RETURN	\$ 131.82	179.97	88.23
VARIABLE COSTS:				
10.	FERTILIZER	20.07	20.27	19.54
11.	CHEMICALS	7.38	9.86	9.38
12.	SEED	9.77	10.17	10.24
13.	CROP DRYING	.01	.05	
14.	CROP INSURANCE	1.76	2.17	2.31
15.	OTHER EXPENSES	1.18	.58	1.95
16.	SPECIAL HIRED LABOR	.31	.11	.24
17.	CUST. WORK & LEASE EXP.	2.04	3.11	2.09
18.	IRRIGATION OPERATION			
19.	ASSIGNED INTEREST			
20.	TOTAL VARIABLE COSTS	\$ 42.52	46.32	45.75
21.	RET. OVER VARIABLE COSTS	\$ 89.30	133.65	42.48
ALLOCATED COSTS (Variable & Fixed)				
31.	FARM POWER (Ownership)	7.96	7.54	7.16
32.	FARM POWER (Operation)	14.93	15.76	15.01
33.	BUILDING & FENCE COSTS	2.35	2.31	2.21
34.	IRRIG. OWNERSHIP COSTS			
37.	LAND COST (Ownership or Rent)	44.68	45.58	36.33
38.	UTILITIES & GEN. FARM EXP.	3.69	3.84	3.04
39.	HIRED LABOR	1.30	2.81	.87
41.	ACTUAL NON R.E. INT. ALLOC.	6.62	5.69	6.48
42.	TOTAL ALLOCATED COSTS	\$ 81.53	83.53	71.10
43.	TOTAL LISTED COSTS	\$ 124.05	129.85	116.86
44.	RETURN OVER LISTED COSTS	\$ 7.77	50.12	-28.63
+++++SUPPLEMENTARY MANAGEMENT INFORMATION+++++				
50.	LAND OPPORT. OWNERSHIP COST	51.30	54.96	41.66
51.	TOTAL COST ADJ. TO A MIN.7% INT.	130.09	138.73	121.79
52.	WORK UNITS ASSIGNED PER ACRE.	.30	.30	.30
53.	POWER COST ALLOCATION FACTOR.	1.04	1.00	1.00
54.	TOT. LIST.COST PER UNIT OF PROD.	3.74	2.89	5.73
55.	TOT. ADJ. COST PER UNIT OF PROD.	3.92	3.08	5.98
56.	CASH VAR. COST PER UNIT OF PROD.	2.08	1.65	3.49
57.	RET. OVER LISTED COSTS PER UNIT.	.23	1.11	-1.40
58.	BREAKEVEN YIELD PER UNIT OF PROD.	33.1	34.4	31.2
59.	TOTAL ACRE-INCH(s) WATER APPLIED.			
60.	COST OF IRRIGATION PER ACRE.			
61.	AVE. PRICE REC. PER UNIT SOLD.	3.77	3.78	3.71

TABLE 10 - CROP DATA FOR EDIBLE BEANS & CANNING CORN -1989

ITEMS	EDIBLE BEANS 8 FARMS	CANNING CORN 5 FARMS
3. ACRES	37.4	40.2
4. YIELD	14.2	6.6
5. VALUE PER UNIT	22.64	41.06
6. CROP PRODUCT RETURN	\$ 320.86	269.63
7. OTHER CROP INCOME	6.71	
8. TOTAL CROP RETURN	\$ 327.57	269.63
VARIABLE COSTS:		
10. FERTILIZER	13.24	55.25
11. CHEMICALS	16.36	27.81
12. SEED	32.19	
13. CROP DRYING		
14. CROP INSURANCE	9.95	3.71
15. OTHER EXPENSES	.29	
16. SPECIAL HIRED LABOR	2.03	1.19
17. CUST. WORK & LEASE EXP.	14.03	
18. IRRIGATION OPERATION		
19. ASSIGNED INTEREST		
20. TOTAL VARIABLE COSTS	\$ 88.37	87.96
21. RET. OVER VARIABLE COSTS	\$ 239.20	181.67
ALLOCATED COSTS (Variable & Fixed)		
31. FARM POWER (Ownership)	14.52	16.22
32. FARM POWER (Operation)	19.65	26.29
33. BUILDING & FENCE COSTS	4.20	1.74
34. IRRIG. OWNERSHIP COSTS		
37. LAND COST (Ownership or Rent)	54.07	81.68
38. UTILITIES & GEN. FARM EXP.	6.44	6.92
39. HIRED LABOR	.43	.59
41. ACTUAL NON R.E. INT. ALLOC.	9.47	8.38
42. TOTAL ALLOCATED COSTS	\$ 108.78	141.23
43. TOTAL LISTED COSTS	\$ 197.14	229.19
44. RETURN OVER LISTED COSTS	\$ 130.43	40.44
+++++SUPPLEMENTARY MANAGEMENT INFORMATION+++++		
50. LAND OPPORT. OWNERSHIP COST	39.30	69.65
51. TOTAL COST ADJ. TO A MIN.7% INT.	193.61	229.45
52. WORK UNITS ASSIGNED PER ACRE.	.50	.50
53. POWER COST ALLOCATION FACTOR.	1.00	1.00
54. TOT. LISTED COST PER UNIT OF PROD.	13.88	34.72
55. TOT. ADJ. COST PER UNIT OF PROD.	13.66	34.94
56. CASH VAR. COST PER UNIT OF PROD.	8.76	23.93
57. RET. OVER LISTED COSTS PER UNIT.	9.19	6.08
58. BREAK-EVEN YIELD PER UNIT OF PROD.	8.7	6.2

TABLE 10 - CROP DATA FOR CORN-GRAIN - 1989

ITEMS		275 AVERAGE FARMS	275 HIGH RETURN FARMS	275 LOW RETURN FARMS
3. ACRES		84.9	103.9	41.1
4. YIELD		104.0	135.3	47.5
5. VALUE PER UNIT		2.12	2.11	2.11
6. CROP PRODUCT RETURN	\$	220.00	285.95	99.95
7. OTHER CROP INCOME		23.65	16.92	45.60
8. TOTAL CROP RETURN	\$	243.65	302.87	145.55
VARIABLE COSTS:				
10. FERTILIZER		31.06	34.09	22.92
11. CHEMICALS		18.36	18.83	18.37
12. SEED		20.05	19.52	17.13
13. CROP DRYING		3.07	3.56	1.82
14. CROP INSURANCE		4.72	3.83	7.25
15. OTHER EXPENSES		1.32	2.03	.44
16. SPECIAL HIRED LABOR		.64	.71	.12
17. CUST. WORK & LEASE EXP.		2.99	2.49	3.75
18. IRRIGATION OPERATION				
19. ASSIGNED INTEREST				
20. TOTAL VARIABLE COSTS	\$	82.29	85.20	71.80
21. RET. OVER VARIABLE COSTS	\$	161.36	217.67	73.75
ALLOCATED COSTS (Variable & Fixed)				
31. FARM POWER (Ownership)		14.03	17.48	19.00
32. FARM POWER (Operation)		29.41	27.35	28.05
33. BUILDING & FENCE COSTS		6.28	9.69	5.43
34. IRRIG. OWNERSHIP COSTS				
37. LAND COST (Ownership or Rent)		47.57	49.23	28.04
38. UTILITIES & GEN. FARM EXP.		6.62	6.66	6.33
39. HIRED LABOR		2.71	1.79	2.77
41. ACTUAL NON R.E. INT. ALLOC.		12.70	13.50	11.82
42. TOTAL ALLOCATED COSTS	\$	119.38	125.74	101.44
43. TOTAL LISTED COSTS	\$	201.66	210.94	173.24
44. RETURN OVER LISTED COSTS	\$	41.99	91.93	-27.69
+++++SUPPLEMENTARY MANAGEMENT INFORMATION+++++				
50. LAND OPPORT. OWNERSHIP COST		51.64	56.74	42.79
51. TOTAL COST ADJ. TO A MIN.7% INT.		204.42	218.39	188.91
52. WORK UNITS ASSIGNED PER ACRE.		.55	.55	.55
53. POWER COST ALLOCATION FACTOR.		.99	1.00	.98
54. TOT. LIST.COST PER UNIT OF PROD.		1.94	1.56	3.65
55. TOT. ADJ. COST PER UNIT OF PROD.		1.97	1.61	3.98
56. CASH VAR. COST PER UNIT OF PROD.		1.29	.99	2.54
57. RET. OVER LISTED COSTS PER UNIT.		.40	.68	-.58
58. BREAKEVEN YIELD PER UNIT OF PROD.		95.1	100.0	82.1
59. TOTAL ACRE-INCH(es) WATER APPLIED.				
60. COST OF IRRIGATION PER ACRE.		.13	.17	
61. AVE. PRICE REC. PER UNIT SOLD.		2.12	2.10	2.04

TABLE 10 - CROP DATA FOR SOYBEANS - 1989

ITEMS	614 AVERAGE FARMS	122 HIGH RETURN FARMS	122 LOW RETURN FARMS
3. ACRES	109.9	114.9	62.5
4. YIELD	34.9	42.6	23.2
5. VALUE PER UNIT	5.30	5.30	5.33
6. CROP PRODUCT RETURN \$	185.02	225.89	123.78
7. OTHER CROP INCOME	1.78	1.17	2.69
8. TOTAL CROP RETURN \$	186.80	227.06	126.47
VARIABLE COSTS:			
10. FERTILIZER	2.07	1.56	2.38
11. CHEMICALS	18.10	18.10	19.71
12. SEED	11.11	11.42	11.15
13. CROP DRYING	.03		.21
14. CROP INSURANCE	4.53	4.53	4.26
15. OTHER EXPENSES	1.25	.96	.51
16. SPECIAL HIRED LABOR	1.50	1.64	1.04
17. CUST. WORK & LEASE EXP.	2.27	1.86	3.30
18. IRRIGATION OPERATION	.03	.13	
19. ASSIGNED INTEREST			
20. TOTAL VARIABLE COSTS \$	40.89	40.21	42.56
21. RET. OVER VARIABLE COSTS \$	145.91	186.85	83.91
ALLOCATED COSTS (Variable & Fixed)			
31. FARM POWER (Ownership)	12.17	14.67	12.11
32. FARM POWER (Operation)	21.42	20.71	23.17
33. BUILDING & FENCE COSTS	4.42	7.28	3.68
34. IRRIG. OWNERSHIP COSTS			
37. LAND COST (Ownership or Rent)	50.80	49.79	40.60
38. UTILITIES & GEN. FARM EXP.	5.53	5.67	5.33
39. HIRED LABOR	1.95	2.21	1.90
41. ACTUAL NON R.E. INT. ALLOC.	10.15	10.82	10.88
42. TOTAL ALLOCATED COSTS \$	106.47	111.29	97.67
43. TOTAL LISTED COSTS \$	147.35	151.50	140.24
44. RETURN OVER LISTED COSTS \$	39.45	75.56	-13.77
+++++SUPPLEMENTARY MANAGEMENT INFORMATION+++++			
50. LAND OPPORT. OWNERSHIP COST	52.39	51.47	48.85
51. TOTAL COST ADJ. TO A MIN.7% INT.	148.02	153.13	146.42
52. WORK UNITS ASSIGNED PER ACRE.	.45	.45	.45
53. POWER COST ALLOCATION FACTOR.	.99	1.00	.99
54. TOT. LIST.COST PER UNIT OF PROD.	4.22	3.56	6.04
55. TOT. ADJ. COST PER UNIT OF PROD.	4.24	3.59	6.30
56. CASH VAR. COST PER UNIT OF PROD.	2.29	1.87	3.61
57. RET. OVER LISTED COSTS PER UNIT.	1.13	1.77	-.59
58. BREAKEVEN YIELD PER UNIT OF PROD.	27.8	28.6	26.3
59. TOTAL ACRE-INCH(s) WATER APPLIED.			
60. COST OF IRRIGATION PER ACRE.	.06	.27	
61. AVE. PRICE REC. PER UNIT SOLD.	5.92	6.22	5.87

TABLE 10 - CROP DATA FOR SUGAR BEETS - 1989

ITEMS	AVERAGE RETURNS 25 FARMS	
3. ACRES		135.4
4. YIELD		21.4
5. VALUE PER UNIT		41.73
6. CROP PRODUCT RETURN	\$	894.01
7. OTHER CROP INCOME		.68
8. TOTAL CROP RETURN	\$	894.69
VARIABLE COSTS:		
10. FERTILIZER		25.86
11. CHEMICALS		72.53
12. SEED		29.33
13. CROP DRYING		
14. CROP INSURANCE		8.88
15. OTHER EXPENSES		5.61
16. SPECIAL HIRED LABOR		34.34
17. CUST. WORK & LEASE EXP.		33.01
18. IRRIGATION OPERATION		
19. ASSIGNED INTEREST		
20. TOTAL VARIABLE COSTS	\$	209.56
21. RET. OVER VARIABLE COSTS	\$	685.13
ALLOCATED COSTS (Variable & Fixed)		
31. FARM POWER (Ownership)		46.34
32. FARM POWER (Operation)		92.76
33. BUILDING & FENCE COSTS		10.58
34. IRRIG. OWNERSHIP COSTS		
37. LAND COST (Ownership or Rent)		72.55
38. UTILITIES & GEN. FARM EXP.		21.03
39. HIRED LABOR		6.10
41. ACTUAL NON R.E. INT. ALLOC.		17.34
42. TOTAL ALLOCATED COSTS	\$	266.70
43. TOTAL LISTED COSTS	\$	476.26
44. RETURN OVER LISTED COSTS	\$	418.43
+++++SUPPLEMENTARY MANAGEMENT INFORMATION+++++		
50. LAND OPPORT. OWNERSHIP COST		79.98
51. TOTAL COST ADJ. TO A MIN.7% INT.		486.29
52. WORK UNITS ASSIGNED PER ACRE.		2.00
53. POWER COST ALLOCATION FACTOR.		1.00
54. TOT. LISTED COST PER UNIT OF PROD.		22.26
55. TOT. ADJ. COST PER UNIT OF PROD.		22.70
56. CASH VAR. COST PER UNIT OF PROD.		16.21
57. RET. OVER LISTED COSTS PER UNIT.		19.55
58. BREAK EVEN YIELD PER UNIT OF PROD.		11.4
59. TOTAL ACRE-INCH(s) WATER APPLIED.		
60. COST OF IRRIGATION PER ACRE.		
61. AVE. PRICE REC. PER UNIT SOLD.		42.90

TABLE 10 - CROP DATA FOR ALFALFA HAY - 1989

ITEMS		HIGH		LOW
		AVERAGE 553 FARMS	RETURN 110 FARMS	RETURN 110 FARMS
3. ACRES		41.8	47.2	42.1
4. YIELD		2.2	3.5	1.1
5. VALUE PER UNIT		86.09	86.14	86.28
6. CROP PRODUCT RETURN	\$	193.59	304.77	96.32
7. OTHER CROP INCOME		3.85	1.04	12.33
8. TOTAL CROP RETURN	\$	197.44	305.81	108.65
VARIABLE COSTS:				
10. FERTILIZER		13.78	16.40	10.97
11. CHEMICALS		2.66	4.28	1.09
12. SEED		10.48	11.59	7.48
13. CROP DRYING				
14. CROP INSURANCE		.05	.06	
15. OTHER EXPENSES		2.25	2.56	1.66
16. SPECIAL HIRED LABOR		.38	.28	.10
17. CUST. WORK & LEASE EXP.		1.63	1.61	1.00
18. IRRIGATION OPERATION				
19. ASSIGNED INTEREST				
20. TOTAL VARIABLE COSTS	\$	31.39	36.93	22.30
21. RET. OVER VARIABLE COSTS	\$	166.05	268.88	86.35
ALLOCATED COSTS (Variable & Fixed)				
31. FARM POWER (Ownership)		19.38	19.68	17.32
32. FARM POWER (Operation)		34.67	35.25	34.99
33. BUILDING & FENCE COSTS		7.06	7.37	6.70
34. IRRIG. OWNERSHIP COSTS				
37. LAND COST (Ownership or Rent)		35.04	34.80	30.64
38. UTILITIES & GEN. FARM EXP.		7.30	8.31	6.06
39. HIRED LABOR		4.16	5.11	3.28
41. ACTUAL NON R.E. INT. ALLOC.		13.30	13.94	12.52
42. TOTAL ALLOCATED COSTS	\$	120.91	124.46	111.51
43. TOTAL LISTED COSTS	\$	152.30	161.40	133.80
44. RETURN OVER LISTED COSTS	\$	45.14	144.41	-25.15
+++++SUPPLEMENTARY MANAGEMENT INFORMATION+++++				
50. LAND OPPORT. OWNERSHIP COST		46.88	53.47	39.91
51. TOTAL COST ADJ. TO A MIN.7% INT.		163.37	178.18	143.61
52. WORK UNITS ASSIGNED PER ACRE.		.60	.60	.60
53. POWER COST ALLOCATION FACTOR.		.97	1.00	.94
54. TOT. LIST.COST PER UNIT OF PROD.		69.23	46.11	121.64
55. TOT. ADJ. COST PER UNIT OF PROD.		72.65	50.36	128.64
56. CASH VAR. COST PER UNIT OF PROD.		41.28	28.44	71.95
57. RET. OVER LISTED COSTS PER UNIT.		20.52	41.26	-22.86
58. BREAKEVEN YIELD PER UNIT OF PROD.		1.8	1.9	1.6
59. TOTAL ACRE-INCH(s) WATER APPLIED.				
60. COST OF IRRIGATION PER ACRE.				
61. AVE. PRICE REC. PER UNIT SOLD.		70.67	84.55	46.00

TABLE 10 - CROP DATA FOR OAT SILAGE - 1989

ITEMS		AVERAGE 65 FARMS	HIGH RETURN 13 FARMS	LOW RETURN 13 FARMS
3.	ACRES	23.1	19.0	24.7
4.	YIELD	3.7	8.1	1.4
5.	VALUE PER UNIT	18.61	18.00	20.77
6.	CROP PRODUCT RETURN	\$ 68.48	144.95	29.43
7.	OTHER CROP INCOME	16.23	31.42	26.07
8.	TOTAL CROP RETURN	\$ 84.71	176.37	55.50
VARIABLE COSTS:				
10.	FERTILIZER	8.44	2.47	8.34
11.	CHEMICALS	.48	.05	.57
12.	SEED	10.48	11.05	8.50
13.	CROP DRYING			
14.	CROP INSURANCE	.91	.84	1.30
15.	OTHER EXPENSES	.91	.58	.53
16.	SPECIAL HIRED LABOR	.09		
17.	CUST. WORK & LEASE EXP.	2.29	7.21	
18.	IRRIGATION OPERATION			
19.	ASSIGNED INTEREST			
20.	TOTAL VARIABLE COSTS	\$ 23.72	22.21	19.23
21.	RET. OVER VARIABLE COSTS	\$ 60.99	154.16	36.27
ALLOCATED COSTS (Variable & Fixed)				
31.	FARM POWER (Ownership)	12.51	12.63	12.71
32.	FARM POWER (Operation)	24.46	26.84	28.54
33.	BUILDING & FENCE COSTS	5.93	3.32	7.49
34.	IRRIG. OWNERSHIP COSTS			
37.	LAND COST (Ownership or Rent)	33.80	37.84	39.36
38.	UTILITIES & GEN. FARM EXP.	5.11	5.21	4.78
39.	HIRED LABOR	3.38	1.79	4.21
41.	ACTUAL NON R.E. INT. ALLOC.	8.61	10.32	8.18
42.	TOTAL ALLOCATED COSTS	\$ 93.80	97.95	105.27
43.	TOTAL LISTED COSTS	\$ 117.53	120.16	124.49
44.	RETURN OVER LISTED COSTS	\$ -32.82	56.21	-68.99
+++++SUPPLEMENTARY MANAGEMENT INFORMATION+++++				
50.	LAND OPPORT. OWNERSHIP COST	54.66	59.29	70.27
51.	TOTAL COST ADJ. TO A MIN.7% INT.	137.58	137.26	154.70
52.	WORK UNITS ASSIGNED PER ACRE.	.40	.40	.40
53.	POWER COST ALLOCATION FACTOR.	.98	.98	1.00
54.	TOT. LIST.COST PER UNIT OF PROD.	31.76	14.83	88.92
55.	TOT. ADJ. COST PER UNIT OF PROD.	37.39	17.05	109.17
56.	CASH VAR. COST PER UNIT OF PROD.	17.64	8.19	46.39
57.	RET. OVER LISTED COSTS PER UNIT.	-8.87	6.94	-49.28
58.	BREAKEVEN YIELD PER UNIT OF PROD.	6.3	6.7	6.0

TABLE 10 - CROP DATA FOR CORN SILAGE - 1989

ITEMS	AVERAGE 375 FARMS	75 HIGH RETURN FARMS	75 LOW RETURN 75 FARMS
3. ACRES	32.1	25.3	38.3
4. YIELD	10.8	18.3	5.5
5. VALUE PER UNIT	18.05	18.00	17.89
6. CROP PRODUCT RETURN	\$ 195.70	329.45	98.07
7. OTHER CROP INCOME	40.53	20.43	57.75
8. TOTAL CROP RETURN	\$ 236.23	349.88	155.82
VARIABLE COSTS:			
10. FERTILIZER	23.80	30.79	19.82
11. CHEMICALS	17.32	20.08	14.18
12. SEED	17.07	19.64	15.59
13. CROP DRYING			
14. CROP INSURANCE	6.48	6.28	6.27
15. OTHER EXPENSES	.87	1.46	.50
16. SPECIAL HIRED LABOR	.16	.79	
17. CUST. WORK & LEASE EXP.	3.24	4.23	1.59
18. IRRIGATION OPERATION			
19. ASSIGNED INTEREST			
20. TOTAL VARIABLE COSTS	\$ 69.35	83.48	58.75
21. RET. OVER VARIABLE COSTS	\$ 166.88	266.40	97.07
ALLOCATED COSTS (Variable & Fixed)			
31. FARM POWER (Ownership)	19.60	22.45	20.37
32. FARM POWER (Operation)	35.95	37.23	35.46
33. BUILDING & FENCE COSTS	6.57	7.35	8.36
34. IRRIG. OWNERSHIP COSTS			
37. LAND COST (Ownership or Rent)	32.68	39.81	23.49
38. UTILITIES & GEN. FARM EXP.	6.95	7.75	6.48
39. HIRED LABOR	4.30	3.48	3.97
41. ACTUAL NON R.E. INT. ALLOC.	14.14	14.98	14.13
42. TOTAL ALLOCATED COSTS	\$ 120.19	133.05	112.26
43. TOTAL LISTED COSTS	\$ 189.53	216.52	170.99
44. RETURN OVER LISTED COSTS	\$ 46.70	133.36	-15.17
+++++SUPPLEMENTARY MANAGEMENT INFORMATION+++++			
50. LAND OPPORT. OWNERSHIP COST	43.91	55.06	38.38
51. TOTAL COST ADJ. TO A MIN.7% INT.	199.00	230.47	184.88
52. WORK UNITS ASSIGNED PER ACRE.	.60	.60	.60
53. POWER COST ALLOCATION FACTOR.	.99	1.00	.97
54. TOT. LIST.COST PER UNIT OF PROD.	17.55	11.83	31.09
55. TOT. ADJ. COST PER UNIT OF PROD.	18.36	12.59	33.72
56. CASH VAR. COST PER UNIT OF PROD.	12.10	8.03	21.60
57. RET. OVER LISTED COSTS PER UNIT.	4.32	7.29	-2.76
58. BREAKEVEN YIELD PER UNIT OF PROD.	10.5	12.0	9.6
59. TOTAL ACRE-INCH(s) WATER APPLIED.			
60. COST OF IRRIGATION PER ACRE.			
61. AVE. PRICE REC. PER UNIT SOLD.	12.00	13.69	2.00

TABLE 10 - CROP DATA FOR IRRIGATED CORN GRAIN - 1989

ITEMS		51 AVERAGE FARMS	10 HIGH RETURN FARMS	10 LOW RETURN FARMS
3.	ACRES	78.2	162.1	52.7
4.	YIELD	139.3	164.9	84.5
5.	VALUE PER UNIT	2.10	2.10	2.12
6.	CROP PRODUCT RETURN	\$ 292.80	346.20	179.51
7.	OTHER CROP INCOME	39.17	46.35	24.97
8.	TOTAL CROP RETURN	\$ 331.97	392.55	204.48
VARIABLE COSTS:				
10.	FERTILIZER	39.92	45.50	24.06
11.	CHEMICALS	19.13	17.46	19.30
12.	SEED	22.63	23.49	20.78
13.	CROP DRYING	3.15	4.16	1.33
14.	CROP INSURANCE	5.28	7.19	2.77
15.	OTHER EXPENSES	.86	1.04	.15
16.	SPECIAL HIRED LABOR	.23		
17.	CUST. WORK & LEASE EXP.	3.29	2.16	10.76
18.	IRRIGATION OPERATION	23.29	29.30	19.18
19.	ASSIGNED INTEREST			
20.	TOTAL VARIABLE COSTS	\$ 117.77	130.30	98.33
21.	RET. OVER VARIABLE COSTS	\$ 214.20	262.25	106.15
ALLOCATED COSTS (Variable & Fixed)				
31.	FARM POWER (Ownership)	21.74	17.01	30.51
32.	FARM POWER (Operation)	33.79	33.17	40.13
33.	BUILDING & FENCE COSTS	6.45	6.61	7.08
34.	IRRIG. OWNERSHIP COSTS	7.62	1.70	20.81
37.	LAND COST (Ownership or Rent)	31.57	29.75	21.67
38.	UTILITIES & GEN. FARM EXP.	9.26	11.22	7.25
39.	HIRED LABOR	5.36	7.13	6.76
41.	ACTUAL NON R.E. INT. ALLOC.	16.79	15.26	13.74
42.	TOTAL ALLOCATED COSTS	\$ 132.58	121.85	147.95
43.	TOTAL LISTED COSTS	\$ 250.35	252.14	246.28
44.	RETURN OVER LISTED COSTS	\$ 81.62	140.41	-41.80
+++++SUPPLEMENTARY MANAGEMENT INFORMATION+++++				
50.	LAND OPPORT. OWNERSHIP COST	44.34	45.61	32.26
51.	TOTAL COST ADJ. TO A MIN.7% INT.	262.30	268.12	261.75
52.	WORK UNITS ASSIGNED PER ACRE.	.65	.65	.65
53.	POWER COST ALLOCATION FACTOR.	.99	1.00	.96
54.	TOT. LIST.COST PER UNIT OF PROD.	1.80	1.53	2.91
55.	TOT. ADJ. COST PER UNIT OF PROD.	1.88	1.63	3.10
56.	CASH VAR. COST PER UNIT OF PROD.	1.31	1.20	1.97
57.	RET. OVER LISTED COSTS PER UNIT.	.59	.85	-.49
58.	BREAKEVEN YIELD PER UNIT OF PROD.	119.2	120.1	116.2
59.	TOTAL ACRE-INCH(s) WATER APPLIED.	9.22	11.60	7.80
60.	COST OF IRRIGATION PER ACRE.	30.91	31.00	39.99
61.	AVE. PRICE REC. PER UNIT SOLD.	2.16	2.09	2.09

TABLE 10 - CROP DATA FOR IRRIGATED SOYBEANS - 1989

ITEMS		18 AVERAGE FARMS	9 HIGH RETURN FARMS	9 LOW RETURN FARMS
3. ACRES		75.2	88.4	62.0
4. YIELD		40.5	47.0	31.1
5. VALUE PER UNIT		5.30	5.31	5.27
6. CROP PRODUCT RETURN	\$	214.35	249.71	163.94
7. OTHER CROP INCOME		.61	1.03	
8. TOTAL CROP RETURN	\$	214.96	250.74	163.94
VARIABLE COSTS:				
10. FERTILIZER		11.30	10.32	12.73
11. CHEMICALS		22.23	20.00	25.42
12. SEED		10.55	8.10	14.02
13. CROP DRYING		.25	.43	
14. CROP INSURANCE		8.34	11.62	3.66
15. OTHER EXPENSES		.33	.53	.03
16. SPECIAL HIRED LABOR		.21	.36	
17. CUST. WORK & LEASE EXP.		4.56	.79	9.94
18. IRRIGATION OPERATION		16.04	20.16	10.16
19. ASSIGNED INTEREST				
20. TOTAL VARIABLE COSTS	\$	73.82	72.31	75.95
21. RET. OVER VARIABLE COSTS	\$	141.14	178.43	87.99
ALLOCATED COSTS (Variable & Fixed)				
31. FARM POWER (Ownership)		13.82	6.45	24.32
32. FARM POWER (Operation)		20.88	20.76	21.05
33. BUILDING & FENCE COSTS		5.88	3.11	9.82
34. IRRIG. OWNERSHIP COSTS		8.43	1.66	18.08
37. LAND COST (Ownership or Rent)		37.50	44.92	26.92
38. UTILITIES & GEN. FARM EXP.		10.17	11.87	7.74
39. HIRED LABOR		7.01	7.21	6.74
41. ACTUAL NON R.E. INT. ALLOC.		14.35	19.02	7.69
42. TOTAL ALLOCATED COSTS	\$	118.04	115.00	122.36
43. TOTAL LISTED COSTS	\$	191.84	187.29	198.32
44. RETURN OVER LISTED COSTS	\$	23.12	63.45	-34.38
+++++SUPPLEMENTARY MANAGEMENT INFORMATION+++++				
50. LAND OPPORT. OWNERSHIP COST		44.16	43.61	45.36
51. TOTAL COST ADJ. TO A MIN.7% INT.		195.77	180.90	219.23
52. WORK UNITS ASSIGNED PER ACRE.		.55	.55	.55
53. POWER COST ALLOCATION FACTOR.		.95	1.00	.89
54. TOT. LIST.COST PER UNIT OF PROD.		4.74	3.98	6.38
55. TOT. ADJ. COST PER UNIT OF PROD.		4.84	3.85	7.05
56. CASH VAR. COST PER UNIT OF PROD.		3.12	2.79	3.83
57. RET. OVER LISTED COSTS PER UNIT.		.57	1.35	-1.11
58. BREAKEVEN YIELD PER UNIT OF PROD.		36.2	35.3	37.6
59. TOTAL ACRE-INCH(es) WATER APPLIED.		8.83	9.89	7.78
60. COST OF IRRIGATION PER ACRE.		24.47	21.82	28.24
61. AVE. PRICE REC. PER UNIT SOLD.		5.72	5.32	6.46

TABLE 10 - CROP DATA FOR IRRIGATED ALFALFA HAY - 1989

ITEMS		29 AVERAGE FARMS	14 HIGH RETURN FARMS	14 LOW RETURN FARMS
3.	ACRES	41.8	41.6	47.1
4.	YIELD	3.5	4.7	2.3
5.	VALUE PER UNIT	87.39	86.55	88.26
6.	CROP PRODUCT RETURN	\$ 309.43	409.88	198.64
7.	OTHER CROP INCOME	9.11	1.56	25.86
8.	TOTAL CROP RETURN	\$ 318.54	411.44	224.50
VARIABLE COSTS:				
10.	FERTILIZER	18.64	20.75	16.28
11.	CHEMICALS	1.67	1.15	1.91
12.	SEED	10.50	9.86	10.96
13.	CROP DRYING			
14.	CROP INSURANCE			
15.	OTHER EXPENSES	3.80	4.30	3.38
16.	SPECIAL HIRED LABOR	.19	.38	.02
17.	CUST. WORK & LEASE EXP.	1.79	1.44	2.04
18.	IRRIGATION OPERATION	19.64	21.27	20.40
19.	ASSIGNED INTEREST			
20.	TOTAL VARIABLE COSTS	\$ 56.24	59.16	54.99
21.	RET. OVER VARIABLE COSTS	\$ 262.30	352.28	169.51
ALLOCATED COSTS (Variable & Fixed)				
31.	FARM POWER (Ownership)	24.19	30.22	17.18
32.	FARM POWER (Operation)	55.31	61.49	50.38
33.	BUILDING & FENCE COSTS	8.30	6.23	9.55
34.	IRRIG. OWNERSHIP COSTS	14.08	8.80	20.34
37.	LAND COST (Ownership or Rent)	28.01	26.36	29.44
38.	UTILITIES & GEN. FARM EXP.	9.71	9.76	9.55
39.	HIRED LABOR	4.76	3.85	5.37
41.	ACTUAL NON R.E. INT. ALLOC.	24.07	31.85	17.35
42.	TOTAL ALLOCATED COSTS	\$ 168.43	178.56	159.16
43.	TOTAL LISTED COSTS	\$ 224.67	237.69	214.14
44.	RETURN OVER LISTED COSTS	\$ 93.87	173.75	10.36
+++++SUPPLEMENTARY MANAGEMENT INFORMATION+++++				
50.	LAND OPPORT. OWNERSHIP COST	38.13	38.86	35.64
51.	TOTAL COST ADJ. TO A MIN.7% INT.	229.93	239.09	219.43
52.	WORK UNITS ASSIGNED PER ACRE.	.80	.80	.80
53.	POWER COST ALLOCATION FACTOR.	.99	1.00	.99
54.	TOT. LIST.COST PER UNIT OF PROD.	64.19	50.57	93.10
55.	TOT. ADJ. COST PER UNIT OF PROD.	64.94	50.49	97.50
56.	CASH VAR. COST PER UNIT OF PROD.	42.88	35.34	59.84
57.	RET. OVER LISTED COSTS PER UNIT.	26.82	36.97	4.50
58.	BREAKEVEN YIELD PER UNIT OF PROD.	2.6	2.7	2.4
59.	TOTAL ACRE-INCH(s) WATER APPLIED.	10.00	10.36	9.50
60.	COST OF IRRIGATION PER ACRE.	33.72	30.07	40.74
61.	AVE. PRICE REC. PER UNIT SOLD.	70.53	70.94	

TABLE 10 - CROP DATA FOR IRRIGATED CORN SILAGE - 1989

ITEMS		17 AVERAGE FARMS	8 HIGH RETURN FARMS	8 LOW RETURN FARMS
3.	ACRES	27.8	26.1	29.1
4.	YIELD	16.3	20.5	12.7
5.	VALUE PER UNIT	17.92	17.79	18.12
6.	CROP PRODUCT RETURN	\$ 292.63	364.71	230.96
7.	OTHER CROP INCOME	28.92	32.87	29.21
8.	TOTAL CROP RETURN	\$ 321.55	397.58	260.17
VARIABLE COSTS:				
10.	FERTILIZER	30.65	36.40	26.32
11.	CHEMICALS	16.44	16.17	16.60
12.	SEED	20.11	23.33	17.63
13.	CROP DRYING			
14.	CROP INSURANCE	3.60	2.18	5.33
15.	OTHER EXPENSES	.61	1.38	
16.	SPECIAL HIRED LABOR			
17.	CUST. WORK & LEASE EXP.	3.02	3.26	3.23
18.	IRRIGATION OPERATION	31.37	43.52	17.90
19.	ASSIGNED INTEREST			
20.	TOTAL VARIABLE COSTS	\$ 105.79	126.25	87.01
21.	RET. OVER VARIABLE COSTS	\$ 215.76	271.33	173.16
ALLOCATED COSTS (Variable & Fixed)				
31.	FARM POWER (Ownership)	28.35	27.70	30.10
32.	FARM POWER (Operation)	64.89	82.45	51.99
33.	BUILDING & FENCE COSTS	10.32	6.93	14.19
34.	IRRIG. OWNERSHIP COSTS	15.38	10.31	19.41
37.	LAND COST (Ownership or Rent)	34.87	19.96	50.14
38.	UTILITIES & GEN. FARM EXP.	10.68	11.57	10.34
39.	HIRED LABOR	4.93	2.68	7.18
41.	ACTUAL NON R.E. INT. ALLOC.	24.35	33.03	18.97
42.	TOTAL ALLOCATED COSTS	\$ 193.77	194.63	202.32
43.	TOTAL LISTED COSTS	\$ 299.57	320.88	289.35
44.	RETURN OVER LISTED COSTS	\$ 21.98	76.70	-29.18
+++++SUPPLEMENTARY MANAGEMENT INFORMATION+++++				
50.	LAND OPPORT. OWNERSHIP COST	48.59	44.54	62.86
51.	TOTAL COST ADJ. TO A MIN.7% INT.	305.94	332.68	296.98
52.	WORK UNITS ASSIGNED PER ACRE.	.80	.80	.80
53.	POWER COST ALLOCATION FACTOR.	1.00	1.00	1.00
54.	TOT. LIST.COST PER UNIT OF PROD.	18.38	15.65	22.78
55.	TOT. ADJ. COST PER UNIT OF PROD.	18.73	16.23	23.29
56.	CASH VAR. COST PER UNIT OF PROD.	12.92	12.49	13.82
57.	RET. OVER LISTED COSTS PER UNIT.	1.35	3.74	-2.30
58.	BREAKEVEN YIELD PER UNIT OF PROD.	16.7	18.0	16.0
59.	TOTAL ACRE-INCH(es) WATER APPLIED.	9.12	10.63	7.75
60.	COST OF IRRIGATION PER ACRE.	46.75	53.83	37.31

COSTS AND RETURNS FROM LIVESTOCK ENTERPRISES

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

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

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

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

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

TABLE 11A - HOGS, FARROW TO FINISH - 1989

AVERAGE OF 68 FARMS

		TOTAL	PER CWT.	/LITTER
1	PRODUCTION	149201		1676
2	NET INCREASE IN VALUE	\$ 67382	45.16	757.10
3	OTHER MISCELLANEOUS INCOME	\$		
4	TOTAL VALUE PRODUCED	\$	45.16	757.10
	FEED FED: QUANTITY & COST	LBS/CWT		
6	CORN	277.11	10.94	183.43
7	OTHER GRAIN	11.28	.42	7.03
8	COMPLETE RATION	79.00	6.51	109.08
9	PROT. SALT, MIN.	50.99	10.80	181.01
10	TOTAL GRAIN MIX	418.38	28.67	480.55
11	FORAGES	.34	.02	.26
12	PASTURE		.05	.80
13.	TOTAL FEED COSTS	\$	28.74	481.61
14	RETURN OVER FEED COSTS	\$	16.42	275.49
	OTHER DIRECT COSTS;			
16	VETERINARY		.85	14.29
17	BREEDING		.05	.76
18	MISCELLANEOUS		1.06	17.72
19	CUSTOM WORK & LEASE		.59	9.81
20	SPECIAL HIRED LABOR		.03	.54
21	ASSIGNED INTEREST			
22	TOTAL OTHER DIRECT COSTS	\$	2.58	43.12
23	TOTAL DIR COSTS INC. FEED	\$	31.32	524.73
24	RET. OVER ALL DIRECT COSTS	\$	13.84	232.37
	ALLOCATED COSTS;			
26	ACTUAL INT.PD LESS INT.-L21		1.80	30.19
28	GENERAL HIRED LABOR		.53	8.91
29	UTILITIES & MISCELLANEOUS		1.58	26.43
30	POWER & MACHINERY		.98	16.39
31	LIVESTOCK EQUIPMENT		1.66	27.77
32	BUILDING & FENCES		1.55	26.00
33	TOTAL ALLOCATED COSTS	\$	8.10	135.69
34	TOTAL ALLOCATED COSTS	\$	39.42	660.42
35	RETURN OVER ALL COSTS	\$	5.74	96.68
+++++SUPPLEMENTARY INFORMATION +++++				
36	TOTAL COSTS ADJ TO 7% MIN INT.		40.27	675.02
37	RET./LIST & 7% OPP. INT COST		4.89	82.08
HERD TOTAL				
40	RETURN OVER \$ 100 FEED FED	157.20		
41	AVE. WT./MKT. HOG SOLD	229		
42	PRICE REC'D/ CWT MKT HOG	45.85		
43	TOTAL NUMBER LITTERS FARROWED	89		
44	LITTERS/SOW/YEAR	1.31		
45	NO. PIGS BORN/LITTER	9.15		
46	NO. PIGS WEANED/LITTER	7.84		
47	NO. PIGS PROD./SOW/YEAR	9.63		
48	LITTERS/CRATE/YEAR	5.93		
49.	PIGS WEANED/CRATE/YEAR	46.53		
50	MKT. ANML. DEATH LOSS % OF TOTAL	14.69		
51	BREEDING HERD DEATH LOSS	12.57		
52	PRICE/CWT GRAIN MIX FED	6.85		
53	PRICE/CWT PROT.MIN., SALT	21.16		
54	TOTAL DEATH LOSS PERCENT	13.95		

TABLE 11A - HOGS, FARROW TO FINISH - 1989

14 HIGH & 14 LOW RETURN FARMS

ITEMS	HIGHEST IN RETURN		LOWEST IN RETURN	
	TOTAL 137390		TOTAL 120809	
	PER CWT.	/LITTER	PER CWT.	/LITTER
1 PRODUCTION				
2 NET INCREASE IN VALUE \$	50.20	841.10	39.56	692.58
3 OTHER MISCELLANEOUS INCOME \$				
4 TOTAL VALUE PRODUCED \$	50.20	841.10	39.56	692.58
FEED FED: QUANTITY & COST	LBS/CWT.		LBS/CWT.	
6 CORN	255.56	10.05	206.19	8.23
7 OTHER GRAIN	6.62	.29	7.61	.38
8 COMPLETE RATION	10.59	1.41	218.47	17.35
9 PROT. SALT, MIN.	48.35	8.97	30.95	8.57
10 TOTAL GRAIN MIX	321.12	20.72	463.22	34.53
11 FORAGES	.58	.02		
12 PASTURE				
13. TOTAL FEED COSTS \$	20.74	347.34	34.53	604.60
14 RETURN OVER FEED COSTS \$	29.46	493.76	5.03	87.98
OTHER DIRECT COSTS:				
16 VETERINARY	1.53	25.56	1.13	19.87
17 BREEDING				
18 MISCELLANEOUS	.94	15.72	1.26	22.04
19 CUSTOM WORK & LEASE	.24	4.06	1.21	21.23
20 SPECIAL HIRED LABOR	.01	.09	.05	.83
21 ASSIGNED INTEREST				
22 TOTAL OTHER DIRECT COSTS \$	2.72	45.43	3.65	63.97
23 TOTAL DIR COSTS INC. FEED \$	23.46	392.77	38.18	668.57
24 RET. OVER ALL DIRECT COSTS \$	26.74	448.33	1.38	24.01
ALLOCATED COSTS:				
27 ACTUAL INT. PD LESS INT. - L21	2.75	46.06	1.54	26.88
28 GENERAL HIRED LABOR	.75	12.65	.09	1.49
29 UTILITIES & MISCELLANEOUS	2.36	39.60	1.09	19.01
30 POWER & MACHINERY	1.42	23.72	.66	11.48
31 LIVESTOCK EQUIPMENT	1.41	23.65	1.39	24.35
32 BUILDING & FENCES	2.26	37.92	1.90	33.29
33 TOTAL ALLOCATED COSTS \$	10.95	183.60	6.67	116.50
34 TOTAL ACTUAL LISTED COSTS \$	34.41	576.37	44.85	785.07
35 RETURN OVER ALL COSTS \$	15.79	264.73	-5.29	-92.49
+++++SUPPLEMENTARY INFORMATION+++++				
36 TOTAL COSTS ADJ TO 7% MIN INT.	34.98	586.04	45.52	797.01
38 RET./LIST & 7% OPPOR. INT. COST	15.22	255.06	-5.96	-104.43
HERD TOTAL:				
40 RETURN OVER \$ 100 FEED FED	242.15		114.55	
41 AVE. WT./HKT. HOG SOLD	234		215	
42 PRICE REC'D/ CWT MKT HOG	52.93		46.98	
43 TOTAL NUMBER LITTERS FALLOWED	82		69	
44 LITTERS/SOW/YEAR	1.22		1.00	
45 NO. PIGS BORN/LITTER	9.39		9.23	
46 NO. PIGS WEANED/LITTER	8.46		7.43	
47 NO. PIGS PROD./SOW/YEAR	9.10		6.97	
48 LITTERS/CRAVE/YEAR	6.31		5.31	
49 PIGS WEANED/CRAVE/YEAR	53.38		39.46	
50 MKL. ANML. DEATH LOSS % OF TOTAL	38.83		3.27	
51 BREEDING HERD DEATH LOSS	33.71		9.71	
52 PRICE/CWT GRAIN MIX FED	6.45		7.45	
53 PRICE/CWT PROT. MIN., SALT	18.55		27.51	
54 TOTAL DEATH LOSS PERCENT	15.80		14.83	

TABLE 11D - HOGS, MIXED SYSTEMS - 1989

		AVERAGE 23 FARMS	
		TOTAL	/LITTER
		53777	960
1	PRODUCTION		
2	NET INCREASE IN VALUE: HOGS	PER CWT.	
3	OTHER MISCELLANEOUS INCOME	51.05	490.20
TOTAL VALUE PRODUCED		\$ 51.05	490.20
FED	FED : QUANTITY & COST	LBS/CWT	
6	CORN	274.44	11.39
7	OTHER GRAIN	25.22	1.08
8	COMPLETE RATION	122.34	7.69
9	PROT. SALT, MIN.	69.25	10.79
	TOTAL GRAIN MIX	491.25	30.95
11	FORAGES	3.54	.17
12	PASTURE		
TOTAL FEED COSTS		\$ 31.12	298.97
RETURN OVER FEED COST		\$ 19.93	191.23
OTHER DIRECT COSTS			
16	VETERINARY	1.11	10.70
17	BREEDING		
18	MISCELLANEOUS	2.20	21.11
19	CUSTOM WORK & LEASE EXP.	.29	2.77
20	SPECIAL HIRED LABOR	.01	.13
21	ASSIGNED INTEREST		
TOTAL OTHER DIR. COSTS		\$ 3.61	34.71
TOT. OTHER DIR. COST INC FEED		\$ 34.73	333.68
RET. OVER ALL DIRECT COSTS		\$ 16.32	156.52
ALLOCATED COSTS			
27	ACT INT PD LESS ASSGND - L21	1.91	18.32
28	GENERAL HIRED LABOR	.80	7.71
29	UTILITIES & MISCELLANEOUS	1.42	13.63
30	POWER & MACHINERY	1.07	10.24
31	LIVESTOCK EQUIPMENT	1.82	17.46
32	BUILDINGS & FENCES	1.11	10.70
TOTAL ALLOCATED COSTS		\$ 8.13	78.06
TOTAL ACTUAL LISTED COST		\$ 42.86	411.74
RET. OVER ACTUAL LISTED COST		\$ 8.19	78.46
SUPPLEMENTARY MANAGEMENT INFORMATION ++++			
36	TOTAL COSTS ADJ TO 7% MIN INT.	44.30	425.40
37	RETURN OVER LISTED & 7% OPPORTUNITY	6.75	64.80
HERD TOTAL			
40	RETURN OVER \$ 100 FEED FED	\$ 163.96	
41	AVE WT./MKT HOG SOLD	130	
42	PRICE REC./CWT. MKT HOGS SOLD	48.27	
43	TOTAL NUMBER LITTERS FARROWED	56	
44	LITTERS/SOW/YEAR	1.27	
45	NO. PIGS BORN/LITTER	8.96	
46	NO. PIGS WEANED/LITTER	8.14	
47	NO. PIGS PROD./SOW/YEAR	9.39	
48	LITTERS/CRATE/YEAR	5.09	
49	PIGS WEANED/CRATE/YEAR	41.45	
50	MKT. ANIM.DEATH LOSS-% OF TOTAL	11.36	
51	BREEDING HERD DEATH LOSS	5.41	
52	PRICE/CWT. GRAIN MIX FED	6.30	
53	PRICE/CWT. PROT.,MI.,SALT	15.58	
54	TOTAL PERCENT DEATH LOSS	11.81	

TABLE 11A - HOGS, MIXED SYSTEMS - 1989

HIGH 12 AND LOW 12 FARMS - NET RETURNS

1 PRODUCTION	TOTAL		/LITTER	
	65282		946	
2 NET INCREASE IN VALUE: HOGS	PER CWT.		PER CWT.	
	57.03		539.54	
3 OTHER MISCELLANEOUS INCOME	TOTAL VALUE PRODUCED \$		TOTAL	
	57.03		41227	
4 FEED FED : QUANTITY & COST	LBS/CWT		LBS/CWT.	
	221.06		366.64	
6 CORN	221.06	9.07	85.76	151.05
7 OTHER GRAIN	35.36	1.52	14.38	3.21
8 COMPLETE RATION	77.59	7.40	70.01	80.52
9 PROT. SALT, MIN.	61.93	9.11	86.14	134.52
TOTAL GRAIN MIX	395.94	27.10	256.39	369.30
11 FORAGES	5.59	.28	2.62	
12 PASTURE				
TOTAL FEED COSTS	\$	27.38	259.01	37.62
RETURN OVER FEED COST	\$	29.65	280.53	3.09
OTHER DIRECT COSTS				
16 VETERINARY		1.04	9.84	12.19
17 BREEDING				
18 MISCELLANEOUS		2.01	19.01	24.74
19 CUSTOM WORK & TRASE EXP.		.28	2.64	3.02
20 SPECIAL HIRED LABOR		.02	.20	
21 ASSIGNED INTEREST				
TOTAL OTHER DIR. COSTS	\$	3.35	31.69	4.07
TOT. OTHER DIR. COST INC FEED	\$	30.73	290.70	41.69
RET. OVER ALL DIRECT COSTS	\$	26.30	248.84	-9.61
ALLOCATED COSTS				
27 ACT INT PD LESS ASSGND - L21		1.58	14.94	24.31
28 GENERAL HIRED LABOR		1.07	10.13	3.38
29 UTILITIES & MISCELLANEOUS		1.25	11.78	16.90
30 POWER & MACHINERY		1.13	10.70	9.36
31 LIVESTOCK EQUIPMENT		1.33	12.54	26.19
32 BUILDINGS & FENCES		1.07	10.13	11.67
TOTAL ALLOCATED COSTS	\$	7.43	70.22	91.81
TOTAL ACTUAL LISTED COST	\$	38.16	360.92	51.04
RET. OVER ACTUAL LISTED COST	\$	18.87	178.62	-101.42
SUPPLEMENTARY MANAGEMENT INFORMATION ++++				
36 TOTAL COSTS ADJ TO 7% MIN INT.		39.72	375.75	52.25
37 RET. OVER LIST & 7% OPP. & INT.		17.31	163.79	-113.31
HERD TOTAL				
40 RETURN OVER \$ 100 FEED FED	\$	208.30	108.21	
41 AVE WT./MKT HOG SOLD		126	138	
42 PRICE REC./CWT. MKT HOGS SOLD		49.48	45.79	
43 TOTAL NUMBER LITTERS FARROWED		69	42	
44 LITTERS/SOW/YEAR		1.44	1.05	
45 NO. PIGS BORN/LITTER		9.13	8.62	
46 NO. PIGS WEANED/LITTER		8.16	8.05	
47 NO. PIGS PROD./SOW/YEAR		11.10	7.05	
48 LITTERS/CRATE/YEAR		5.75	4.67	
49 PIGS WEANED/CRATE/YEAR		46.92	37.56	
50 MKT. ANIM. DEATH LOSS-% OF TOTAL		10.53	11.25	
51 BREEDING HERD DEATH LOSS		2.37	9.58	
52 PRICE/CWT. GRAIN MIX FED		6.84	5.74	
53 PRICE/CWT. PROT., MIN., SALT		14.70	16.74	
54 TOTAL PERCENT DEATH LOSS		11.16	12.72	

TABLE 11B - HOGS, FINISHING - 1989

AVERAGE OF 84 FARMS

1	PRODUCTION		TOTAL 103677	/HD PROD. 191.6
2	NET INCREASE IN VALUE	\$	PER CWT. 35.87	68.74
3	OTHER MISCELLANEOUS INCOME	\$		
4	TOTAL VALUE PRODUCED	\$	35.87	68.74
6	FEED FED: QUANTITY & COST	LBS/CWT		
6	CORN	261.7	10.90	20.89
7	OTHER GRAIN	4.7	.22	.41
8	COMPLETE RATION	90.7	2.95	5.66
9	PROT. SALT, MIN.	67.2	10.21	19.56
10	TOTAL GRAIN MIX	424.3	24.28	46.52
11	FORAGES	.5	.01	.01
12	PASTURE			
13.	TOTAL FEED COSTS	\$	24.29	46.53
14	RETURN OVER FEED COSTS	\$	11.58	22.21
	OTHER DIRECT COSTS;			
16	VETERINARY		.45	.87
17	MISCELLANEOUS		.48	.92
18	CUSTOM WORK & LEASE		.41	.79
19	SPECIAL HIRED LABOR			
20	ASSIGNED INTEREST			
21	TOTAL OTHER DIRECT COSTS \$		1.34	2.58
22	TOTAL DIR COSTS INC. FEEDS \$		25.63	49.11
23	RET. OVER ALL DIRECT COSTS \$		10.24	19.63
	ALLOCATED COSTS;			
26	ACTUAL INT.PD LESS INT.-L21		1.09	2.09
27	GENERAL HIRED LABOR		.18	.34
28	UTILITIES & MISCELLANEOUS		.71	1.36
29	POWER & MACHINERY		.47	.91
30	LIVESTOCK EQUIPMENT		.64	1.23
31	BUILDING & FENCES		.67	1.29
32	TOTAL ALLOCATED COSTS \$		3.76	7.22
33	TOTAL ALLOCATED COSTS \$		29.39	56.33
34	RETURN OVER ALL COSTS \$		6.48	12.41
+++++SUPPLEMENTARY INFORMATION +++++				
35	TOTAL COSTS ADJ TO 7% MIN INT.		31.16	59.71
36	RET.OVER LIST & 7% OPP. INT.		4.71	9.03
HERD TOTAL				
39	RETURN OVER \$ 100 FEED FED		147.74	
40	AVE. WT./MKT. HOG SOLD		236.83	
41	PRICE REC'D/ CWT MKT HOG		43.91	
42	AVE. WEIGHT/PIG PURCHASED		48.44	
43	AVE.PRICE PIG PURCHASED		39.72	
44	NO. PIGS PURCHASED		321	
45	NO. PIGS TRANS OUT/IN		243	
46	LBS PORK PURCHASED		15550	
47	AVE. NO. PIGS ON HAND		224.5	
48	PER CENT DEATH LOSS		2.74	
49	EFFECTIVE DAILY GAIN		1.27	
50	PRICE/CWT. GRAIN MIX FED		5.72	
51	PRICE/CWT. PRO. SALT, MIN.		15.19	
52	NO. PIGS PRODUCED		541	

TABLE 11B - HOGS, FINISHING - 1989

17 HIGH & 17 LOW RETURN FARMS

ITEMS		HIGHEST IN RETURN		LOWEST IN RETURN	
		TOTAL	/ HD PROD.	TOTAL	/ HD PROD.
1	PRODUCTION (POUNDS)	83462	179.1	52485	217.8
		PER CWT.		PER CWT	
2	NET INCREASE IN VALUE \$	40.53	72.58	32.21	70.15
3	OTHER MISCELLANEOUS INCOME \$				
4	TOTAL VALUE PRODUCED \$	40.53	72.58	32.21	70.15
FEED FED: QUANTITY & COST		LBS/CWT		LBS/CWT	
6	CORN	215.6	8.93	310.5	12.99
7	OTHER GRAIN	4.0	.22	16.3	.72
8	COMPLETE RATION	22.0	1.71	578.8	5.96
9	PROT. SALT, MIN.	95.5	9.82	49.6	10.13
10	TOTAL GRAIN MIX	337.1	20.68	955.2	29.80
11	FORAGELS				64.90
12	PASTURE				
13.	TOTAL FEED COSTS \$	20.68	37.04	29.80	64.90
14	RETURN OVER FEED COSTS \$	19.85	35.54	2.41	5.25
OTHER DIRECT COSTS;					
16	VETERINARY	.35	.62	.61	1.33
17	MISCELLANEOUS	.73	1.32	.76	1.65
18	CUSTOM WORK & LEASE	.75	1.34	.64	1.39
19	SPECIAL HIRED LABOR	.01	.01		
20	ASSIGNED INTEREST				
21	TOTAL OTHER DIRECT COSTS \$	1.84	3.29	2.01	4.37
22	TOTAL DIR COSTS INC. FEED\$	22.52	40.33	31.81	69.27
23	RET. OVER ALL DIRECT COSTS \$	18.01	32.25	.40	.88
ALLOCATED COSTS;					
26	ACTUAL INT. PD LESS INT.-L21	1.06	1.89	1.21	2.64
27	GENERAL HIRED LABOR	.39	.70	.35	.76
28	UTILITIES & MISCELLANEOUS	.82	1.48	.79	1.72
29	POWER & MACHINERY	.46	.82	.45	.98
30	LIVESTOCK EQUIPMENT	1.03	1.85	1.27	2.77
31	BUILDING & FENCES	.73	1.31	1.20	2.62
32	TOTAL ALLOCATED COSTS \$	4.49	8.05	5.27	11.49
33	TOTAL ACTUAL LISTED COSTS \$	27.01	48.38	37.08	80.76
34	RETURN OVER ALL COSTS \$	13.52	24.20	-4.87	-10.61
*****SUPPLEMENTARY MANAGEMENT INFORMATION*****					
35	TOTAL COSTS ADJ TO 7% MIN INT.	28.74	51.47	39.04	85.02
36	RET./ LIST 7% OPPO. INT.	11.79	21.11	-6.83	-14.87
HERD TOTAL					
39	RETURN OVER \$ 100 FEED FED	195.92		108.10	
40	AVE. WT./MKT. HOG SOLD	235.68		236.25	
41	PRICE REC'D/ CWT MKT HOG	45.53		43.27	
42	AVE. WEIGHT/PIG PURCHASED	49.54		49.31	
43	AVE. PRICE/PIG PURCHASED	38.19		42.31	
44	NO. PIGS PURCHASED	188		108	
45	NO. PIGS TRANSFERRED IN/OUT	289		133	
46	POUNDS OF PORK PURCHASED	9313		5326	
47	AVE NO OF PIGS ON HAND	169.5		134.5	
48	PERCENT DEATH LOSS	1.52		3.65	
49	EFFECTIVE DAILY GAIN	1.35		1.07	
50	PRICE/CWT. GRAIN IX FED	6.14		3.12	
51	PRICE/CWT PROT. MIN., SALT	10.29		20.42	
52	NUMBER PIGS PRODUCED	466		241	

TABLE 11C - HOGS, WEANING PIG PROD. - 1989

AVERAGES OF 57 FARMS

	TOTAL	PER HEAD	/LITTER
1 PRODUCTION	57702	1259	120
2 NET INCREASE IN VALUE-HOGS	\$ 39201	31.14	326.68
3 OTHER MISCELLANEOUS INCOME			
4 TOTAL VALUE PRODUCED	\$ 39201	31.14	326.68
5 FEED FED: QUANT. & COST	LBS/CWT		
6 CORN	1335.87	5.31	55.76
7 OTHER GRAIN	76.25	.38	3.98
8 COMPLETE RATION	2084.38	4.70	49.33
9 PROT., SALT, MIN.	452.60	8.26	86.69
10 TOTAL GRAIN MIX	3949.10	18.65	195.76
11 FORAGES	.79	.03	.36
12 PASTURE			
13 TOTAL FEED COST		18.68	196.12
14 RETURN OVER FEED COSTS		12.46	130.56
OTHER DIRECT COSTS			
16 VETERINARY		1.12	11.78
17 BREEDING		.02	.23
18 MISCELLANEOUS		1.25	13.17
19 CUSTOM WORK & LEASE		.25	2.66
20 SPECIAL HIRED LABOR		.06	.59
21 ASSIGNED INTEREST			
22 TOTAL DIRECT COSTS	\$	2.70	28.43
23 TOTAL DIR. COSTS INC FEED	\$	21.38	224.55
24 RET. OVER ALL DIRECT COSTS	\$	9.76	102.13
ALLOCATED COSTS			
27 INT. PD LESS ASSND INT-L21		1.54	16.13
28 GENERAL HIRED LABOR		.56	5.92
29 UTILITIES & MISC. EXPENSE		1.55	16.30
30 POWER & MACHINERY		1.04	10.93
31 LIVESTOCK EQUIPMENT		1.18	12.33
32 BUILDINGS & FENCES		1.33	13.92
33 TOTAL ALLOCATED COSTS	\$	7.20	75.53
34 TOTAL ACTUAL LISTEDS COSTS	\$	28.58	300.08
35 RET. OVER ACTUAL LIST COSTS	\$	2.56	26.60
+++++SUPPLEMENTARY MANAGEMENT INFORMATION ++++++			
36 TOTAL COSTS ADJ. TO 7% MIN INT.		29.18	306.11
37 RET OVER LIST. & 7% OPPORT. INT. COSTS		1.96	20.57
HERD TOTAL			
40 RETURN/ \$100 FEED FED	166.57		
41 AVE WT./PIG SOLD OR TRANS.	57		
42 PRICE RECD/PIG SOLD	38.94		
43 LITTERS/SOW/YEAR	1.5		
44 NUMBER PIGS BORN/LITTER	10		
45 NO. PIGS WEANED/LITTER	8.4		
46 PIGS PRODUCED/SOW/YEAR	15.5		
47 LITTERS/CRATE/YEAR	7.5		
48 PIGS WEANED/CRATE/YEAR	62.75		
49 FDR PIG DEATHS AS % OF TOTAL	98.0		
50 BREEDING DEATH AS % OF TOTAL	2.0		
51 PRICE/CWT. GRAIN MIX FED	4.96		
52 PRICE/CWT. PROT, SALT, MIN	19.15		

TABLE 11C - HOGS, WEANING PIG PRODUCTION - 1989

HIGH-LOW RETURN FARMS

	TOTAL	11 HIGH PER HEAD	RETURN FARMS PLR LITTER	TOTAL	11 LOW PER HEAD	RETURN FARMS PER LITTER
1 PRODUCTION	56595	956	111	26843	412	59
2 NET INCREASE IN VALUE-HOGS	\$ 42096	44.03	379.24	16472	39.98	279.19
3 OTHER MISC. HOG INCOME	\$					
TOTAL VALUE PRODUCED	\$ 42096	44.03	379.24	16472	39.98	279.19
5 FEED FED: QUANT. & COST	<u>LBS/CWT</u>			<u>LBS/CWT</u>		
6 CORN	757.22	3.72	32.05	2059.58	13.09	91.42
7 OTHER GRAIN	131.06	.85	7.34	219.56	1.51	10.56
8 COMPLETE RATION	9759.38	7.94	68.35	477.97	5.48	38.24
9 PROT., SALT, MIN.	355.65	7.39	63.61	594.07	17.47	121.97
10 TOTAL GRAIN MIX	11003.31	19.90	171.35	3351.18	37.55	262.19
11 FORAGFS	1.45	.17	1.48	2.71	.08	.56
12 PASTURE						
13 TOTAL FEED COST		20.07	172.83		37.63	262.75
14 RETURN OVER FEED COSTS		23.96	206.41		2.35	16.44
OTHER DIRECT COSTS						
16 VETERINARY		1.28	10.98		2.01	14.02
17 BREEDING						
18 MISCELLANEOUS		1.28	11.05		1.84	12.88
19 CUSTOM WORK & LEASE		.44	3.81		.77	5.41
20 SPECIAL HIRED LABOR		.15	1.32			
21 ASSIGNED INTEREST						
22 TOTAL DIRECT COSTS	\$	3.15	27.16		4.62	32.31
23 TOTAL DIR. COSTS INC FEED	\$	23.22	199.99		42.25	295.06
24 RET. OVER ALL DIRECT COSTS	\$	20.81	179.25		-2.27	-15.87
ALLOCATED COSTS						
27 INT. PD LESS ASSMD INT-L21		1.37	11.80		1.85	12.92
28 GENERAL HIRED LABOR		.55	4.73		.45	3.15
29 UTILITIES & MISC. EXPENSE		2.28	19.62		2.09	14.59
30 POWER & MACHINERY		1.42	12.24		1.40	9.76
31 LIVESTOCK EQUIPMENT		1.38	11.85		2.47	17.22
32 BUILDINGS & FENCES		1.61	13.89		2.81	19.60
33 TOTAL ALLOCATED COSTS	\$	8.61	74.13		11.07	77.24
34 TOTAL ACTUAL LISTED COSTS	\$	31.83	274.12		53.32	372.30
35 RET. OVER ACTUAL LIST COSTS	\$	12.20	105.12		-13.34	-93.11
+++++SUPPLEMENTARY MANAGEMENT INFORMATION+++++						
36 TOTAL COSTS ADJ. TO 7% MIN INT.		33.65	289.81		55.26	385.89
37 RET OVER LIST. & 7% OPPORT. INTEREST COST		10.38	89.43		-15.28	-106.70
IFRD TOTAL						
40 RETURN/ \$100 FEED FED		219.42			106.26	
41 AVE WT./PIG SOLD OR TRANS.		59			57	
42 PRICE RECD/PIG SOLD		43.09			40.38	
43 LITTERS/SOW/YEAR		1.4			1.3	
44 NUMBER PIGS BORN/LITTER		10			9	
45 NO. PIGS WEANED/LITTER		8.9			7.6	
46 PIGS PRODUCED/SOW/YEAR		11.8			9.0	
47 LITTERS/CRAVE/YEAR		5.3			5.9	
48 PIGS WEANED/CRAVE/YEAR		47.24			44.60	
49 FDR PIG DEATHS AS % OF TOTAL		98.1			98.4	
50 BREEDING DEATH AS % OF TOTAL		1.9			1.6	
51 PRICE/CWT. GRAIN MIX FED		1.56			7.82	
52 PRICE/CWT. PROT, SALT, MIN		17.89			20.53	

TABLE 12 - DAIRY COWS 1989

AVERAGE OF 291 FARMS

1. AVERAGE NUMBER OF COWS		49.2	
2. POUNDS MILK		PER COW	CWT. MILK
3. POUNDS BUTTERFAT		15997	
4. PERCENT BUTTERFAT IN MILK		576	
5. VALUE OF PRODUCE:		3.60	
6. DAIRY PRODUCTS SOLD		2062.97	
7. DAIRY PROD. USED IN HOME		5.47	
8. MILK FED TO LIVESTOCK		12.97	
9. NET INCREASE IN VALUE OF COW		-96.99	
10. OTHER MISCELLANEOUS INCOME		.33	
11. TOTAL VALUE PRODUCED	\$	1984.75	12.41
12. FEED FED-QUANT:& COST			
	LBS/COW		
13. CORN	3923	153.35	.96
14. SM GRAIN	270	13.09	.08
15. COMPLETE RATN.	2111	112.80	.71
16. PRO. SALT, MIN.	1133	194.39	1.22
17. TOTAL GRAIN MIX;	7437	473.63	2.97
18. LEGUME HAY	6200	284.72	1.78
19. OTR DRY RHGE.	324	7.74	.05
20. HAYLAGE	1141	23.39	.15
21. SILAGE	10459	96.22	.60
22. PASTURE		2.01	.01
23. TOTAL FEED COSTS	\$	887.71	5.56
24. RETURN OVER FEED COSTS	\$	1097.04	6.85
OTHER DIRECT COSTS			
26. VETERINARY		44.43	.28
27. BREEDING		22.91	.14
28. MISCELLANEOUS		108.41	.68
29. CUST WORK OR LEASE EXPENSE		57.54	.36
30. SPECIAL HIRED LABOR		4.04	.03
31. ASSIGNED INTEREST			
32. TOTAL OTHER DIRECT COSTS	\$	237.33	1.49
33. TOTAL DIRECT COSTS INC. FEED	\$	1125.04	7.05
34. RETURN OVER ALL DIRECT COSTS	\$	859.71	5.36
ALLOCATED COSTS:			
37. ACT INT.PD MINUS ASSGND. INT (L31)		82.74	.52
38. GENERAL HIRED LABOR		55.53	.35
39. UTILITIES & MISC.		83.52	.52
40. POWER & MACHINERY		61.37	.38
41. LIVESTOCK EQUIPMENT		70.98	.44
42. BUILDINGS & FENCES		83.70	.52
43. TOTAL ALLOCATED COSTS	\$	437.84	2.73
44. TOTAL ACTUAL LISTED COSTS	\$	1562.88	9.78
45. RET.OVER ACTUAL LISTED COSTS	\$	421.87	2.63
++ SUPPLEMENTARY MANAGEMENT INFORMATION ++			
46. TOTAL COSTS ADJ.TO 7% MIN INT.	\$	1591.79	9.95
47. RET./LISTED & 7% OPPORT.INT. COSTS	\$	392.96	2.46
HERD TOTAL			
50. RETURN OVER \$ 100 FEED FED.		223.58	
51. POUNDS MILK/POUND GRAIN MIX.		2.15	
52. AVERAGE PRICE/CWT. MILK SOLD		13.02	
53. DAIRY COW TURNOVER PERCENTAGE		38.62	
54. APPROX. DRY MATTER CONSUMED/COW		44	

TABLE 12 - DAIRY COWS - 1989

-48 - (HIGH & LOW RETURN)

		HIGH RETURN		LOW RETURN	
		58 FARMS		58 FARMS	
1. AVERAGE NUMBER OF COWS		52.1	CWT.	44.1	CWT.
		PER COW	MILK	PER COW	MILK
2. POUNDS MILK		18225		13121	
3. POUNDS BUTTERFAT		605		498	
4. PERCENT BUTTERFAT IN MILK		3.32		3.79	
5. VALUE OF PRODUCE:					
6. DAIRY PRODUCTS SOLD		2405.05		1657.80	
7. DAIRY PROD. USED IN HOME		7.16		4.63	
8. MILK FED TO LIVESTOCK		11.84		10.93	
9. NET INCREASE IN VALUE OF COW		-54.41		-118.12	
10. OTHER MISCELLANEOUS INCOME		1.31		.11	
11. TOTAL VALUE PRODUCED	\$	2370.95	13.01	1555.35	11.85
12. FEED FED-QUANT. & COST	LBS/COW				
13. CORN	4358	174.91	.96	2630	.83
14. SM. GRAIN	288	13.74	.08	254	.10
15. COMPLETE RATION	4988	86.05	.47	2228	1.62
16. PRO. SALT, MIN.	1260	218.16	1.20	739	1.08
17. TOTAL GRAIN MIX	10894	492.86	2.71	5851	3.63
18. LEGUME HAY	5433	241.46	1.32	6332	2.31
19. DRY RUGG.	397	9.21	.05	293	.06
20. HAYLAGE	1945	41.55	.23	1449	.21
21. SILAGE	9733	92.34	.51	11170	.77
22. PASTURE		.52		3.58	.03
23. TOTAL FEED COSTS	\$	877.94	4.82	918.31	7.01
24. RETURN OVER FEED COSTS	\$	1493.01	8.19	637.04	4.84
OTHER DIRECT COSTS					
26. VETERINARY		60.21	.33	33.20	.25
27. BREEDING		32.88	.18	14.78	.11
28. MISCELLANEOUS		132.38	.73	98.14	.75
29. CUST. WORK OR LEASE EXPENSE		65.85	.36	45.33	.35
30. SPECIAL HIRED LABOR		15.93	.09	.73	.01
31. ASSIGNED INTEREST					
32. TOTAL OTHER DIRECT COSTS	\$	307.25	1.69	192.18	1.47
33. TOTAL DIRECT COSTS INC. FEED	\$	1185.19	6.51	1110.49	8.48
34. RETURN OVER ALL DIRECT COSTS	\$	1185.76	6.50	444.86	3.37
ALLOCATED COSTS:					
37. ACT. INT. PD. MINUS ASSGND. INT. (L31)		77.75	.43	103.90	.79
38. GENERAL HIRED LABOR		70.81	.39	33.27	.25
39. UTILITIES & MISC.		93.95	.52	71.36	.54
40. POWER & MACHINERY		68.04	.37	56.87	.43
41. LIVESTOCK EQUIPMENT		88.05	.48	47.05	.36
42. BUILDINGS & FENCES		105.54	.58	47.54	.36
43. TOTAL ALLOCATED COSTS	\$	504.14	2.77	359.99	2.73
44. TOTAL ACTUAL LISTED COSTS	\$	1689.33	9.28	1470.48	11.21
45. RETURN OVER ACTUAL LISTED COSTS	\$	681.62	3.73	84.87	.64
SUPPLEMENTARY MANAGEMENT INFORMATION ++++++					
46. TOTAL COSTS ADJUSTED TO 7% MIN. INTEREST	\$	1741.20	9.55	1466.11	11.17
47. RET. OVER LISTED & 7% OPPORTUNITY INT. COST	\$	629.75	3.46	89.24	.68
50. RETURN OVER \$100 FEED FED.		270.06		169.37	
51. POUNDS MILK/POUND GRAIN MIX.		1.67		2.24	
52. AVERAGE PRICE/CWT. MILK SOLD		13.29		12.77	
53. DAIRY COW TURNOVER PERCENTAGE		40.31		36.28	
54. APPROX. DRY MATTER CONSUMED/COW		51		42	

TABLE 13 - OTHER DAIRY CATTLE, COMMERCIAL REPLACEMENT - 1989

	AVERAGE OF 291 FARMS		58 HIGH RET.	58 LOW RET.
1 AVE. NUMBER OF HEAD (TOTAL)	57.7		45.6	61.5
2 NET INCREASE IN VALUE:	PER HEAD		PER HEAD	PER HEAD
3 OTHER MISC. INCOME	410.57		604.45	280.65
4 TOTAL VALUE PRODUCED \$	410.64		604.64	280.65
FEED FED: QUANT & COST				
	LBS/HEAD		LBS/HEAD	LBS/HEAD
6 CORN	791	32.53	548	22.24
7 SMALL GRAIN	130	6.38	140	6.47
8 COMPLETE RAT'N	181	11.46	287	18.33
9 PRO. SALT-MIN.L	390	39.31	1403	36.21
10 TOTAL GRAIN MIX	1492	89.68	2378	83.25
11 IFGOME HAY	1387	58.37	1177	51.97
12 OTHER HAY & ROUGH.	840	20.43	951	22.54
13 HAYLAGE	191	4.18	37	.75
14 SILAGE	6208	54.92	5315	48.25
15 MILK	92	10.10	73	10.59
16 PASTURE		1.92		1.86
17 TOTAL FEED COSTS \$	239.60		219.21	275.20
18 RETURN OVER FEED COST \$	171.04		385.24	5.45
OTHER DIRECT COSTS				
20 VETERINARY	5.36		5.66	6.55
21 BRIDING	3.31		5.75	1.77
22 MISCELLANEOUS	8.75		10.39	6.21
23 CUSTOM WORK & LEASE EXP.	3.19		4.25	2.55
24 SPECIAL HIRED LABOR	.36		1.16	.18
25 ASSIGNED INTEREST				
26 TOTAL OTHER DIRECT COST \$	20.97		27.21	17.26
27 TOTAL DIR COST INC FEED \$	260.57		246.42	292.46
28 RET. OVER ALL DIR. COSTS\$	150.07		358.03	-11.81
ALLOCATED COSTS:				
30 INT. PAID IFSS ASSIGNED - L25	14.40		16.45	15.53
32 GENERAL HIRED LABOR	9.72		11.03	9.87
33 UTILITIES & MISCELLANEOUS	14.49		14.58	14.75
34 POWER & MACHINERY	10.63		10.64	9.86
35 LIVESTOCK EQUIPMENT	12.45		14.12	12.53
36 BUILDINGS & FENCES	13.39		15.94	7.72
37 TOTAL ALLOCATED COSTS \$	75.08		82.76	70.26
38 TOTAL ACTUAL LISTED COSTS	335.65		329.18	362.72
39 RET. OVER ACTUAL LIST COSTS\$	74.99		275.27	-82.07
40 TOTAL COSTS ADJ. TO 7% MIN INT.	375.85		375.31	400.28
42 RET./LIST. & 7% OPP. INT. COSTS	34.79		229.14	-119.63
44 RETURN PER \$ 100 FEED FED	171.39		275.74	101.98
45 PERCENT CALF DEATH LOSS	11.02		8.64	12.14

TABLE 14 - ALL DAIRY & DUAL PURPOSE - 1989

1 AVE NUMBER OF HEAD		AVERAGE OF 291 FARMS 49.6 PER COW PER CWT MILK	
2	POUNDS OF MILK	16007.45	
3	LBS. OF BUTTERFAT	576.14	
4	BUTTERFAT PERCENT	3.60	
VALUE OF PRODUCE			
6	DAIRY PROD. SOLD	2064.38	
7	PROD. USED IN HOME	5.49	
8	FED TO LIVESTOCK	13.07	
9	NET INC. IN VALUE	387.52	
10	OTHER MISC. INCOME	.63	
TOTAL VALUE PRODUCED \$		2471.09	15.44
FEED FED: QUANTITY & VALUE; LBS/COW			
13	CORN 4825	190.83	1.19
14	SMALL GRAIN 425	20.71	.13
15	COMPLETE RATION 2318	126.36	.79
16	PROT., SALT, MIN. 1588	251.94	1.57
TOTAL GRAIN MIX 9166		589.84	3.68
18	LEGUME HAY 7793	351.74	2.20
19	OTHER HAY & ROUGHAGE 1336	32.65	.20
20	HAYLAGE 1397	29.11	.18
21	SILAGE 17867	162.10	1.01
22	PASTURE	4.18	.03
TOTAL FEED COSTS \$		1169.62	7.30
RETURN OVER FEED \$		1301.47	8.14
OTHER DIRECT COSTS:			
26	VETERINARY	50.20	.31
27	BREEDING	26.85	.17
28	MISCELLANEOUS	119.17	.74
29	CUSTOM WORK & LEASE EXP.	61.37	.38
30	SPECIAL HIRED LABOR	4.42	.03
31	ASSIGNED INTEREST		
TOTAL OTHER DIR. COST \$		262.01	1.63
TOT. DIRECT COST INC. FEED \$		1431.63	8.93
RETURN OVER ALL DIR. COST		1039.46	6.51
ALLOCATED COSTS:			
37	INT. PD. LESS ASSIGNED-L31	99.29	.62
38	GENERAL HIRED LABOR	67.03	.42
39	UTLITIES - MISCELLANEOUS	100.38	.63
40	POWER & MACHINERY	73.70	.46
41	LIVESTOCK EQUIPMENT	85.49	.53
42	BUILDINGS & FENCES	100.98	.63
TOTAL ALLOCATED COST \$		526.87	3.29
TOTAL ACTUAL LISTED COSTS \$		1958.50	12.22
RET/ACTUAL LISTED COSTS \$		512.59	3.22
+++++SUPPLEMENTARY MANAGEMENT INFORMATION +++++			
46	TOTAL COST ADJ. TO 7% INTEREST	9537.03	59.58
47	RET/LISTED 7% OPPORTY COST	-7065.94	-44.14
HERD TOTAL			
50	RETURN/ \$ 100 FEED FED	211.00	
51	LBS OF MILK/LBS GRAIN MIX	1.75	
52	AVE. PRICE / CWT. SOLD	13.02	
53	DAIRY COW TURNOVER %	38.38	
54	APPROX DRY MATTER/COW	61	
55	PERCENT CALF DEATH LOSS	10.87	
56	TOTAL INVEST. PER COW	7279.72	
57	TOTAL DEB PER COW	3101.39	

TABLE 14 - ALL DAIRY & DUAL PURPOSE - 1989

		58 HIGH RETURN FARMS		58 LOW RETURN FARMS	
1	AVE NUMBER OF HEAD	51.4		49.9	
		PER COW	PER CWT.	PER COW	PER CWT.
2	POUNDS OF MILK	18016.21		13359.38	
3	LBS. OF BUTTERFAT	601.40		532.83	
4	BUTTERFAT PERCENT	3.34		3.99	
VALUE OF PRODUCE					
6	DAIRY PROD. SOLD	2379.22		1681.74	
7	PROD. USED IN HOME	7.08		5.27	
8	FEED TO LIVESTOCK	11.09		10.42	
9	NET INC. IN VALUE	517.65		248.12	
10	OTHER MISC. INCOME	1.32		.10	
TOTAL VALUE PRODUCED \$		2916.36	16.19	1945.65	14.56
FEED FED: QUANTITY & VALU; LBS/COW				LBS/COW	
13	CORN	5360	217.90	3662	149.96
14	SMALL GRAIN	501	24.71	328	15.79
15	COMPLETE RATION	5241	90.21	1791	186.11
16	PROT., SALT, MIN.	1524	277.76	1008	199.06
TOTAL GRAIN MIX		12626	610.58	6789	550.92
18	LEGUME HAY	6764	301.48	7728	357.13
19	OTHER HAY & ROUGHAGE	1375	32.76	1053	28.72
20	HAYLAGE	2166	48.44	1921	37.05
21	SILAGE	17598	153.99	18606	164.57
22	PASTURE		2.22		5.77
TOTAL FEED COSTS \$		1149.47	6.37	1144.16	8.55
RETURN OVER FEED \$		1766.89	9.82	801.46	6.01
OTHER DIRECT COSTS:					
26	VETERINARY	61.23	.34	39.06	.29
27	BREEDING	37.08	.21	16.83	.13
28	MISCELLANEOUS	143.02	.79	101.08	.76
29	CUSTOM WORK & LEASE EXP.	69.94	.39	58.28	.44
30	SPECIAL HIRED LABOR	17.49	.10	.64	
31	ASSIGNED INTEREST				
TOTAL OTHER DIR. COST \$		328.76	1.83	215.89	1.62
TOT. DIRECT COST INC. FEED \$		1478.23	8.20	1360.05	10.17
RETURN OVER ALL DIR. COST		1438.13	7.99	585.60	4.39
ALLOCATED COSTS:					
37	INT. PD. LESS ASSIGNED-L31	88.87	.49	105.41	.79
38	GENERAL HIRED LABOR	99.16	.55	41.52	.31
39	UTILITIES - MISCELLANEOUS	107.68	.60	85.21	.64
40	POWER & MACHINERY	82.22	.46	62.11	.46
41	LIVESTOCK EQUIPMENT	116.47	.65	60.76	.45
42	BUILDINGS & FENCES	136.52	.76	58.41	.44
TOTAL ALLOCATED COST \$		630.92	3.51	413.42	3.09
TOTAL ACTUAL LISTED COSTS \$		2109.15	11.71	1773.47	13.26
RET/ACTUAL LISTED COSTS \$		807.21	4.48	172.18	1.30
+++++SUPPLEMENTARY MANAGEMENT INFORMATION+++++					
46	TOTAL COST ADJ. TO 7% INTEREST	3487.84	19.36	3642.95	27.27
47	RET/LISTED 7% OPPORTY COST	-571.48	-3.17	-1697.30	-12.71
HERD TOTAL					
50	RETURN/ \$ 100 FEED FED	254.00		170.00	
51	LBS OF MILK/LBS GRAIN MIX	1.43		1.97	
52	AVL. PRICE / CWT. SOLD	13.30		12.72	
53	DAIRY COW TURNOVER %	42.80		36.07	
54	APPROX DRY MATTER/COW	68		56	
55	PERCENT CALF DEATH LOSS	7.93		14.61	
56	TOTAL INVEST. PER COW	7781.67		6099.10	
57	TOTAL DEB PER COW	2814.47		3178.42	

TABLE 15A - BEEF BREEDING CATTLE - 1989

AVERAGE OF 11 FARMS

	TOTAL	PER COW
1 AVERAGE NUMBER OF BEEF COWS	29.2	
2 AVE. NO. OTHER BEEF ANIMALS	17.3	
3 POUNDS OF BEEF PRODUCED	14354	
4 NET INCREASE VALUE: BEEF	11239	384.90
5 OTHER MISCELLANEOUS INCOME		
6 TOTAL VALUE PRODUCED \$	11239	384.90
FEEB FED: QUANTITY & COST	LBS/COW	
8 GRAINS	879.5	43.77
9 PRO. SALT-MINERAL	33.1	7.09
10 LEGUME HAY	2212.9	80.79
11 OTHER HAY & DRY ROUGHAGE	2001.2	30.27
12 SILAGE	7249.1	57.67
13 HAYLAGE		
14 PASTURE		18.39
16 TOTAL FEED COSTS: \$		237.98
RETURN OVER FEED COSTS \$		146.92
OTHER DIRECT COSTS:		
18 VETERINARY		9.14
19 BREEDING		
20 MISCELLANEOUS		6.75
21 CUSTOM WORK-LEASE EXP.		19.73
22 SPECIAL HIRED LABOR		
23 ASSIGNED INTEREST		
24 TOTAL OTHER DIR. COSTS \$		35.62
25 TOTAL DIR. COSTS INC. FEED \$		273.60
26 RETURN OVER ALL DIR. COSTS \$		111.30
ALLOCATED COSTS;		
29 ACTUAL INT. PAID LESS ASSGN INT L23		33.25
30 GENERAL HIRED LABOR		4.35
31 UTILITIES & MISCELLANEOUS		11.44
32 POWER & MACHINERY		11.09
33 LIVESTOCK EQUIPMENT		12.24
34 BUILDINGS & EQUIPMENT		2.03
35 TOTAL ALLOCATED COSTS \$		74.40
36 TOTAL ACTUAL LISTED COSTS \$		348.00
37 RET. OVER ACTUAL LIST COST \$		36.90
SUPPLEMENTARY MANAGEMENT INFORMATION		
38 TOT. COST ADJ. TO 7% MIN. INT.	10913	373.72
40 RET./LISTED & 7% OPPORTUNITY INTEREST	326	11.18
42 RETURN FOR \$ 100 FEEB FED \$	161.74	
43 \$/CWT BREEDING ANM. SOLD \$	51.08	
44 AVE. WEIGHT ANIMAL BOUGHT \$	643.11	
45 NUMBER OF HEAD BOUGHT	4	
46 PERCENT DEATH LOSS	4.35	
47 PRICE/CWT CALF SOLD OR TRANS.	86.27	
48 AVE WEIGHT CALF SOLD/TRANS.	539	
49 PERCENT CALF CROP BORN	107.69	
50 PERCENT CALF CROP WEANED	103.85	
51 PERCENT CALF DEATH LOSS .	7.14	
52 CULL INC./BREEDING COW	38.80	
53 HAY EQUIVALENT/COW	3.32	
54 CORN EQUIVALENT/COW	15.71	

TABLE 15B - BEEF FEEDERS, FEEDLOT 1989

AVE OF 108 FARMS

		TOTAL	PER CWT.	PER HEAD
1	AVERAGE NUMBER OF ANIMALS	70.3		
2	POUNDS OF ANIMAL PRODUCED	52215		
3	NET INCREASE IN VALUE: \$	32087	61.45	456.43
4	OTHER MISCELLANEOUS INCOME			
5	TOTAL VALUE PRODUCED \$	32087	61.45	456.43
FEED FED QUANTITY AND VALUE LBS/CWT				
7	CORN	486.8	19.93	148.05
8	SMALL GRAINS	9.2	.42	3.13
9	COMPLETE RATIONS	38.6	2.14	15.90
10	PROT. SALT, MINERAL	49.6	7.20	53.44
11	LEGUME HAY	82.0	3.03	22.49
12	OTHER HAY-ROUGHAGE	33.5	.66	4.91
13	SILAGE	688.8	6.24	46.37
14	HAYLAGE	26.4	.78	5.79
15	PASTURE		.13	.97
	TOTAL FEED COST \$		40.53	301.05
	RETURN OVER FEED COSTS \$		20.92	155.38
OTHER DIRECT COSTS				
19	VETERINARY		1.56	11.55
20	MISCELLANEOUS		1.05	7.78
21	CUSTOM WORK-LEASE EXP.		1.87	13.87
22	SPECIAL HIRED LABOR			.01
23	ASSIGNED INTEREST		.40	3.00
	TOTAL OTHER DIRECT COSTS \$		4.88	36.21
	TOTAL DIRECT COST INC. FEED \$		45.41	337.26
	RET. OVER ALL DIRECT COSTS \$		16.04	119.17
27 ALLOCATED COSTS				
29	ACT. INT. PAID LESS ASSGN L23		3.64	27.01
30	GENERAL HIRED LABOR		.70	5.21
31	UTILITIES & MISCELLANEOUS		1.37	10.14
32	POWER & MACHINERY		1.08	8.03
33	LIVESTOCK EQUIPMENT		1.83	13.62
34	BUILDINGS & FENCES		1.13	8.40
35	TOTAL ALLOCATED COSTS \$		9.75	72.41
36	TOTAL ACTUAL LISTED COSTS \$		55.16	409.67
37	RET. OVER ACTUAL LISTED COST \$		6.29	46.76
SUPPLEMENTARY INFORMATION ++++++				
38	TOTAL COSTS ADJ TO 7% MIN. INT.	30777	58.94	437.80
39	RET. / LISTED & 7% OPPOR. INT CST	1310	2.51	18.63
42	RETURN FOR \$ 100 FEED FED	151.61		
43	PRICE / CWT. SOLD	70.77		
44	AVE. WEIGHT ALL CATTLE SOLD	1088		
45	PRICE / CWT. BOUGHT	84.91		
46	AVE. WEIGHT CATTLE BOUGHT	492		
47	NUMBER HEAD BOUGHT	72		
48	PERCENT DEATH LOSS	2.83		
49	EFF. DAILY GAIN- LB./HEAD/DAY	2.03		
50	PRICE TO COVER PUR. PR. + LIST	112.75		
51	HAY EQUIVALENT/CWT.	.18		
52	CORN EQUIVALENT/CWT.	8.86		

TABLE 15B - BEEF FEEDERS, FEEDLOT 1989

		22 HIGH RETURN FARMS			22 LOW RETURN FARMS		
		TOTALS	PER CWT.	PER HEAD	TOTALS	PER CWT.	PER HEAD
1	AVERAGE NUMBER OF ANIMALS	50.5			79.5		
2	POUNDS OF ANIMAL PRODUCED	33873			53960		
3	NET INCREASE IN VALUE: ANIMALS \$	28970	85.53	573.66	32009	59.32	402.63
4	OTHER MISCELLANEOUS INCOME						
5	TOTAL VALUE PRODUCED \$	28970	85.53	573.66	32009	59.32	402.63
FEED FED QUANTITY AND VALUE		LBS/CWT			LBS/CWT.		
7	CORN	569.1	21.89	146.81	564.2	24.02	163.03
8	SMALL GRAINS	4.5	.20	1.35	17.0	.81	5.47
9	COMPLETE RATIONS	4.1	.60	4.00	7.6	.11	.75
10	PROT. SALT, MINERAL	41.1	6.90	46.28	68.6	8.31	56.43
11	LEGUME HAY	55.3	1.74	11.70	133.3	4.89	33.18
12	OTHER HAY-ROUGHAGE	6.7	.15	1.01	71.6	1.16	7.86
13	Silage	592.8	5.63	37.78	873.2	7.92	53.75
14	HAYLAGE				51.2	1.79	12.16
15	PASTURE					.34	2.34
16	TOTAL FEED COST \$		37.11	248.93	26631	49.35	334.97
17	RETURN OVER FEED COSTS \$		48.42	324.73	-17	9.97	67.66
OTHER DIRECT COSTS							
19	VETERINARY		1.45	9.72		1.93	13.09
20	MISCELLANEOUS		1.43	9.58		.67	4.52
21	CUSTOM WORK-LEASE EXP.		1.42	9.50		1.29	8.78
22	SPECIAL HIRED LABOR						
23	ASSIGNED INTEREST						
	TOTAL OTHER DIRECT COSTS \$		4.30	28.80		3.89	26.39
	TOTAL DIRECT COST INC. FEED \$		41.41	277.73		53.24	361.36
	RET. OVER ALL DIRECT COSTS \$		44.12	295.93		6.08	41.27
ALLOCATED COSTS							
29	ACT. INT. PAID LESS ASSGN INT L23		3.55	23.80		5.02	34.08
30	GENERAL HIRED LABOR		.59	3.94		.64	4.35
31	UTILITIES & MISCELLANEOUS		1.29	8.65		1.70	11.55
32	POWER & MACHINERY		1.01	6.77		1.11	7.51
33	LIVESTOCK EQUIPMENT		2.05	13.74		2.85	19.38
34	BUILDINGS & FENCES		1.31	8.77		1.13	7.65
	TOTAL ALLOCATED COSTS \$		9.80	65.67		12.45	84.52
	TOTAL ACTUAL LISTED COSTS \$		51.21	343.40		65.69	445.88
	RET. OVER ACTUAL LISTED COST \$		34.32	230.26		6.37	-43.25
SUPPLEMENTARY INFORMATION ++++++							
38	TOTAL COSTS ADJ TO 7% MIN. INT.	18923	55.86	374.71	37844	70.13	476.03
39	RET./LIST & 7% OPP. INT COST.	10047	29.67	198.95	-5835	-10.81	-73.40
42	RETURN FOR \$ 100 FEED FED \$	230.45			120.20		
43	PRICE / CWT. SOLD	79.39			69.02		
44	AVE. WEIGHT ALL CATTLE SOLD	990			1082		
45	PRICE / CWT. BOUGHT	79.71			83.67		
46	AVE. WEIGHT CATTLE BOUGHT	431			574		
47	HUMBER HEAD BOUGHT	34			96		
48	PERCENT DEATH LOSS	2.44			2.01		
49	FEED DAILY GAIN LB./HEAD/DAY	1.84			1.86		
50	PRICE TO COV. PURCH. PR. + LISTED	85.66			151.07		
51	HAY EQUIVALENT/CWT.	.13			.26		
52	CORN EQUIVALENT/CWT.	10.24			10.38		

TABLE 16A - SHEEP, FARM COMMERCIAL

		AVERAGE OF 15 FARMS	
		FLOCK TOTAL	PER EWE
1	AVERAGE NUMBER OF EWES	50.1	
2	POUNDS LAMB, MUTTON PRODUCED	6612	
3	POUNDS WOOL PRODUCED	424	
4	VALUE OF PRODUCE		
5	WOOL		8.98
6	NET INCREASE IN VALUE		56.73
7	OTHER MISCELLANEOUS INCOME		.30
	TOTAL VALUE PRODUCED	\$	66.01
FEED FED: QUANTITY & COST		LBS/EWE	
10	CORN	480.4	22.79
11	PROT. SALT, MIN.	83.3	16.95
12	LEGUME HAY	1010.2	38.80
13	OTHER HAY & ROUGHAGE	184.2	2.32
14	SILAGE	26.6	.24
15	HAYLAGE		
16	PASTURE		2.28
	TOTAL FEED COST	\$	83.38
	RETURN OVER FEED COST	\$	-17.37
OTHER DIRECT COSTS:			
20	VETERINARY		2.79
21	BREEDING		.18
22	MISCELLANEOUS		5.63
23	CUSTOM WORK		3.41
24	LEASE EXPENSE		
25	SPECIAL HIRED LABOR		.46
26	ASSIGNED INTEREST		
	TOTAL OTHER DIRECT COST	\$	12.47
	TOT. OTHER DIR. COST INC. FEED	\$	95.85
	RETURN OVER ALL DIRECT COSTS	\$	-29.84
ALLOCATED COSTS:			
32	ACT INT PD LESS ASSGND INT-L26		13.51
33	GENERAL HIRED LABOR		.42
34	UTILITIES & MISCELLANEOUS		6.17
35	POWER & EQUIPMENT		4.43
36	LIVESTOCK EQUIPMENT		6.83
37	BUILDINGS & FENCES		8.46
	TOTAL ALLOCATED COSTS	\$	39.82
	TOTAL ACTUAL LISTED COST	\$	135.67
	RET. OVER ACTUAL LISTED COST	\$	-69.66
+++++MISCELLANEOUS MANAGEMENT INFORMATION +++++			
41	TOTAL COSTS ADJ. TO 7% MIN. INT.		133.23
42	RET./LISTED & 7% OPP. INT COST		-67.22
FLOCK TOTAL			
45	RETURN/ \$ 100 FEED FED	79.17	
46	PRICE/CWT LAMB SOLD OR TRANS.	58.86	
47	AVE WEIGHT LAMB SOLD OR TRANS	106	
48	LBS WOOL/SHEEP SHEARED	10.1	
49	NUMBER EWES EXPOSED	55	
50	NUMBER EWES LAMBING	49	
51	CONCEPTION RATE	89.1	
52	NUMBER LAMBS BORN	80	
53	PERCENT BORN/EWE EXPOSED	145.5	
54	PERCENT BORN/EWE LAMBING	163.3	
55	PERCENT WEANED/EWE LAMBING	142.9	
56	PERCENT EWE LOSS: % DEATH LOSS	3.5	
57	PERCENT LAMB LOSS: % DEATH LOSS	5.0	

HOW AND WHERE THE AVERAGE FARM FAMILY SPEND THEIR MONEY *

ITEM	YEAR				
	1985	1986	1987	1988	1989
OTHER FARMERS FOR LVSTK, CUSTOM WORK	1100	9503	10652	10855	9785
AGRI-BUSINESS for; feed, chem, seed fuel, fertilizer	53867	50976	55988	61942	73331
EXTRA HIRED LABOR	4122	4157	4099	6447	3876
TAXES (real estate)	1969	1545	1405	1389	1560
UTILITIES: (farm share)	2718	2903	2821	2953	2916
CASH INTEREST; operator	19775	15259	14866	13942	14290
CASH RENT	9025	8337	9218	10562	10883
EQUIP. PURCHASE	6988	8491	11109	10877	14533
REAL ESTATE and BUILDINGS PURCH.	3393	5089	3342	5510	5956
HOUSEHOLD (cash)	15363	16200	18016	19436	21247
MISCELLANEOUS	2420	2424	2623	2799	3016
TOTAL EXPENSES \$	130740	125882	134139	143973	161406

* Note that the average farm family unit spends this money, (\$ 161,406.00) in some community. If one estimates the number of these units in a particular community the total dollars spent by the total farm operations in a given area is tremendous. Note that the amount spent for equipment replacement has increased the past three years. The total dollars spent with the Agri-Business people in a given community has continually increase each year.

SETTING FARM AND FAMILY GOALS

One of the primary aims of a farm business management education program is to assist farm families in reaching their farm and family goals. Clarifying their ideas as to what they really want is a very important step in improving the farm business and, as a result, improve family living.

Sitting down as a family and putting down these wants in writing is done in one of the early classes in a farm business management course.

Planning obtainable goals isn't easy. All members of a family may not always agree on which goals are most important. Not all goals are related to the farm business. Some vary important goals for a family may be in the area of social, community, church and educational activities.

Setting up goals in a systematic way lets the family fit the wants and desires of all members of the family into a plan. There are no right or wrong goals. Remember goals must be set up with some degree of flexibility to be an asset to the family.

Listed below is a suggested form for writing down the family goals for this year and future years. After the entire family has written down their goals you can rank them in order of importance.

GOALS FOR FARM AND FAMILY

THIS YEAR

FUTURE YEARS

For A Profitable Farm Business;

- 1.
- 2.
- 3.
- 4.

For A Satisfying Living;

- 1.
- 2.
- 3.
- 4.

Development Of Family Members;

- 1.
- 2.
- 3.
- 4.

Long-Term Financial Security;

- 1.
- 2.
- 3.