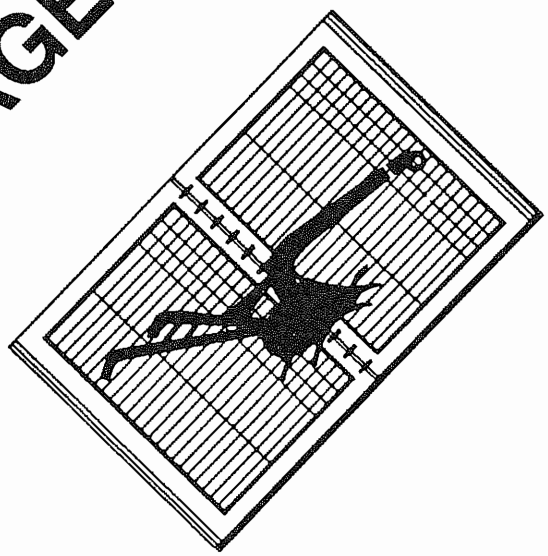
FARM BUSINESS MANAGEMENT



1994 ANNUAL REPORT
NORTHWESTERN MINNESOTA

Report No. 40

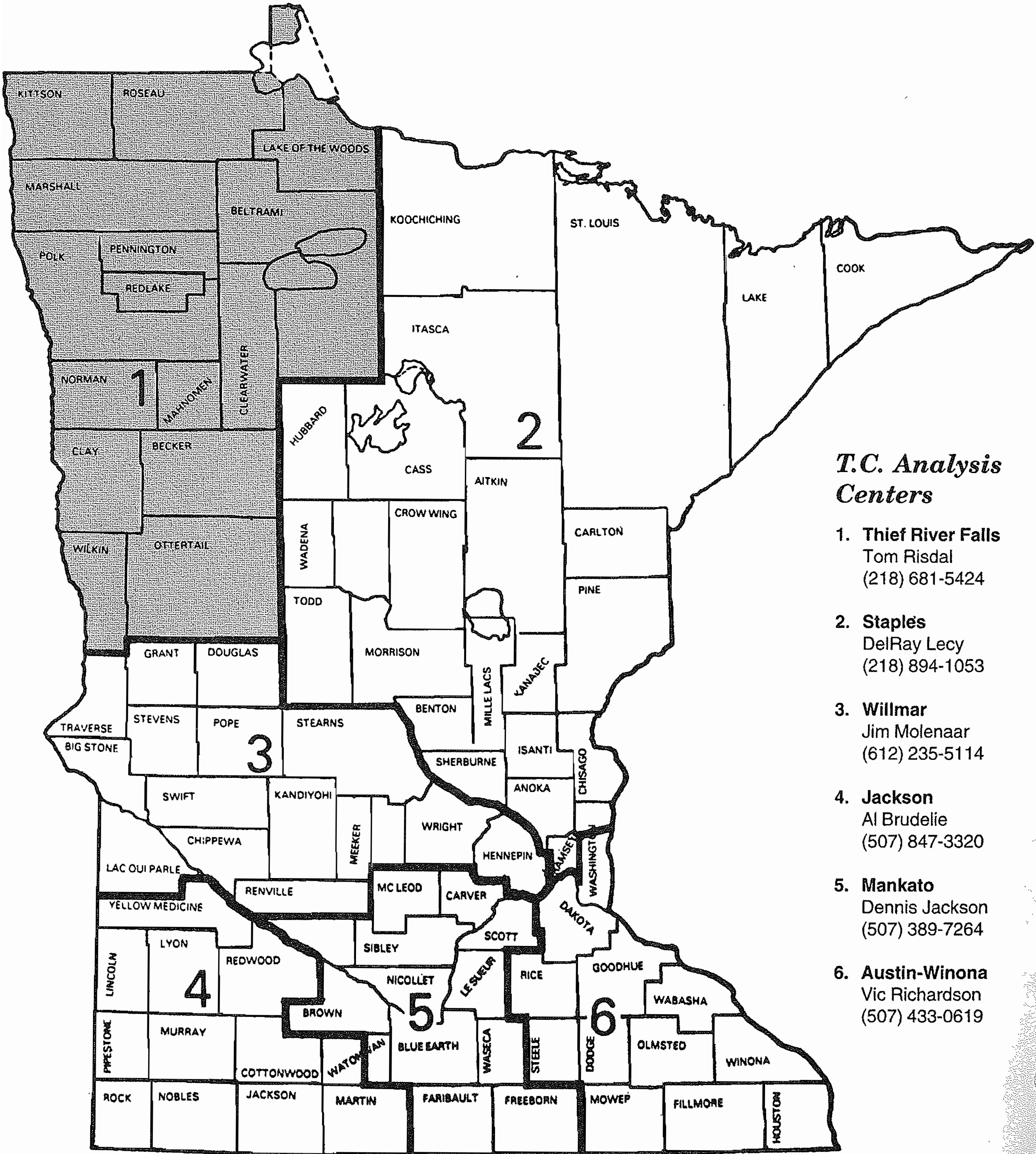
April 1995

AN ADULT EDUCATION PROGRAM

Northwest Technical College — Thief River Falls

Price $5.00

FARM MANAGEMENT AREA



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NORTHWESTERN MINNESOTA FARM FINANCIAL HIGHLIGHTS OF 1993 & 1994

	1994	1993
Net Cash Farm Income	$33,218	$51,824
Net Profit or Loss	27,900	33,617
Expenses per Dollar of Income	.82	.93
Change in Net Worth	11,484	9,085
Average Net Worth	280,383	307,471
Rate of Return on Capital	6.3%	6.0%
Rate of Return on Equity	5.8%	4.7%
Asset Turnover Rate	36.2%	49%
Percent in Debt	40%	41%
Total Investment	454,937	458,674

SUMMARY OF 1994 FARM ANALYSIS FOR NORTHWESTERN MINNESOTA

The analysis of income and expenditures for farms enrolled in Management Education Programs showed operator's net profit averaged $27,900 in 1994. This was down considerably from the record high in 1992 of $59,420 and the average of $33,617 in 1993. When viewing Northwestern Minnesota as a whole, there was a wide range of profitability due to the wide range of weather conditions that affected the area.

The net cash income resulted in a depletion of much of the inventory during the year to meet family living and other needs. Family living, on the average, was down over $7,000 from 1993 at $34,830.

Yields of crops were down in 1994 compared to 1993 with some fields not harvested. Row crops, on the average, yielded better and had a better net return than small grains. The records reveal the following:

	1994 (Owned Land)		1993	
	Yield	Net/A	Yield	Net/A
Spring Wheat	28 bu.	$ 5	26 bu.	$ 10
Barley	50	2	54	11
Oil Sunflowers	15.7	43	9.4	(-8)
Sugar Beets	20.3	257	14.9	70
Corn	105	50	44.9	(-26.51)
Soybeans	34	40	18.8	(-14.43)

With regards to the livestock tables, the number of dairy cows was up considerably and production was down slightly. The balance of the livestock enterprise showed a lower return over costs this year than last.

A comparison of prices received for livestock and production for the past two years is as follows:

	1994	1993
Milk, Cwt.	$ 12.98	$ 12.81
Beef Feeders, Cwt.	78.14	97.86
Finished Beef, Cwt.	66.38	73.19
Finished Hogs, Cwt.	43.20	50.81
Beef Cows, Cwt., Calves	77.86	88.81

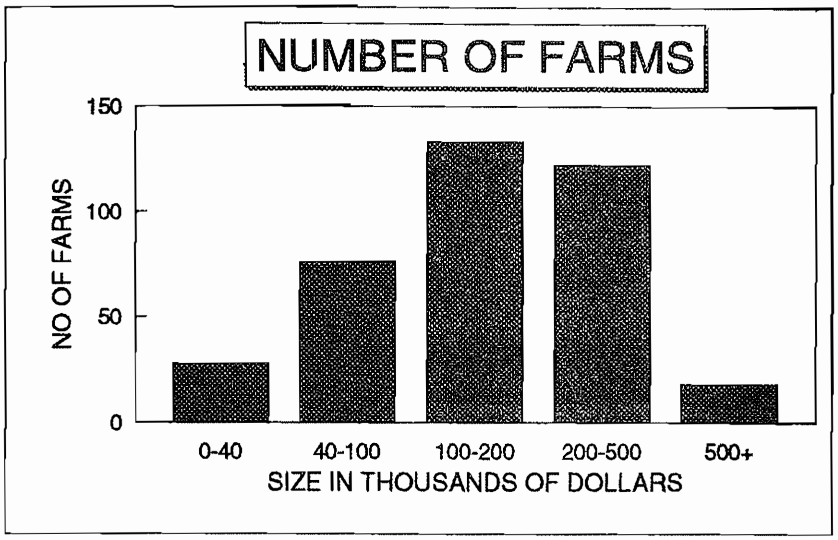
The size of farms decreased slightly over 1993. Tillable acres went from 922 in 1993 to 849 in 1994. The average age of the operator is 40.7 years old and has been farming 17.7 years

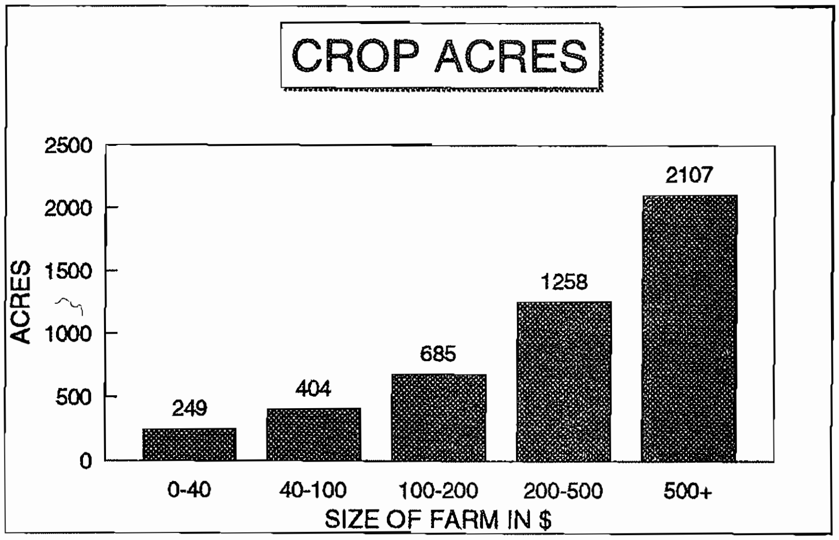
There are 3 reports added to the front of this booklet. The reports are sorts by age of operator, size of farm, and type of farm. These reports will provide a different view of the farming operation.

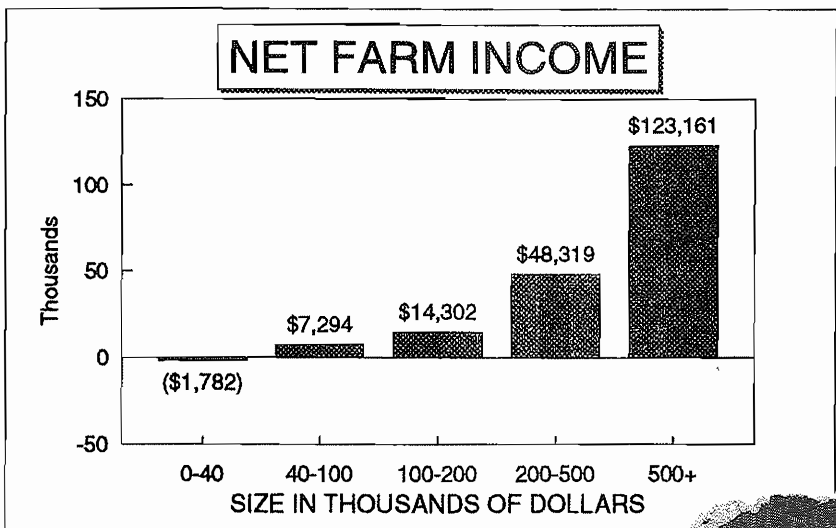
The report represents 377 farms enrolled in Farm Business Management Education throughout a fifteen county area of Northwestern Minnesota. Data in the report is not intended to be inclusive of all farms in the region.

Size Of Farm Report, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms Sorted By Gross Cash Farm Income)

	Average For All Farms	0 - 40,000	40,001 - 100,000	100,001 - 200,000	200,001 - 500,000	500,001 +
Number of farms	377	28	76	133	122	18
Income Statement						
Gross cash farm income	201277	25655	70927	144732	310006	705700
Total cash farm expense	168059	29963	61520	123405	256226	565078
Net cash farm income	33218	-4308	9407	21327	53780	140622
Inventory change	3819	4409	3401	1669	6260	4002
Depreciation and capital adjustment	-9136	-1883	-5513	-8694	-11721	-21463
Net farm income	27900	-1782	7294	14302	48319	123161
Profitability (cost)						
Labor and management earnings	17227	-8049	1083	6373	33851	80097
Rate of return on assets	6 %	-8 %	-0 %	3 %	9 %	10 %
Rate of return on equity	6 %	-19 %	-7 %	-0 %	10 %	13 %
Operating profit margin	13 %	-38 %	-0 %	7 %	15 %	22 %
Asset turnover rate	50 %	21 %	37 %	47 %	59 %	45 %
Liquidity						
Term debt coverage ratio	106 %	107 %	99 %	68 %	119 %	140 %
Expense as a percent of income	82 %	100 %	83 %	85 %	81 %	80 %
Interest as a percent of income	7 %	13 %	10 %	8 %	6 %	8 %
Solvency (cost)						
Number of sole proprietors	285	25	64	101	85	10
Ending farm assets	343825	145482	207653	313291	445120	712078
Ending farm liabilities	188361	69864	107560	171903	240974	443167
Ending total assets	406178	190594	252242	367182	527669	795329
Ending total liabilities	198819	74408	114995	181048	256326	451883
Ending net worth	207359	116185	137248	186135	271343	343447
Net worth change	8517	2303	6356	-2696	15322	53470
Ending farm debt to asset ratio	55 %	48 %	52 %	55 %	54 %	62 %
Beg total debt to asset ratio	46 %	34 %	43 %	45 %	47 %	57 %
End total debt to asset ratio	49 %	39 %	46 %	49 %	49 %	57 %
Nonfarm Information						
Farms reporting living expenses	121	12	31	37	36	-
Total family living expense	23845	15321	15544	24064	33077	-
Total living, invest, & capital purch	36767	25051	21721	30442	58066	-
Net nonfarm income	10790	21480	13110	10203	8805	2141
Crop Acres						
Total acres owned	455	297	345	380	581	871
Total crop acres	849	249	404	685	1258	2107
Total crop acres owned	298	170	197	276	371	600
Total crop acres cash rented	495	75	187	356	812	1338
Total crop acres share rented	56	4	19	53	76	168

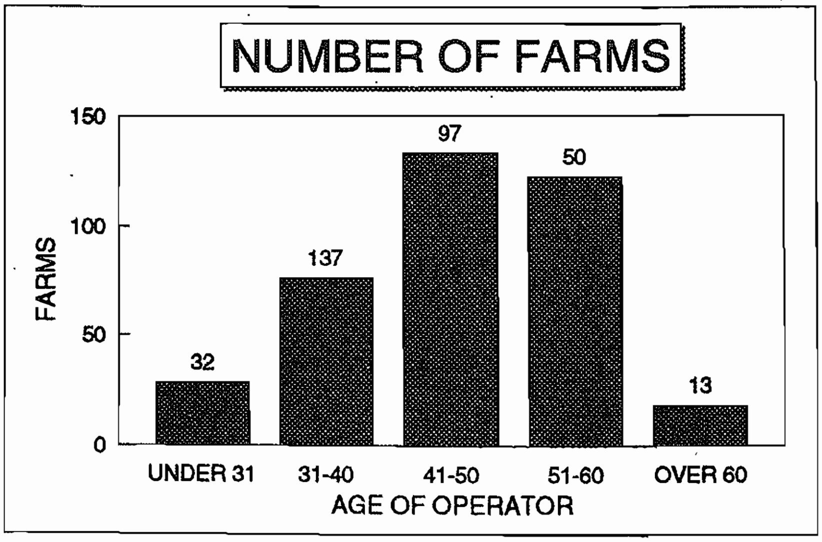

NUMBER OF FARMS
NO OF FARMS
150
100
50
0
0-40
40-100
100-200
200-500
500+
SIZE IN THOUSANDS OF DOLLARS

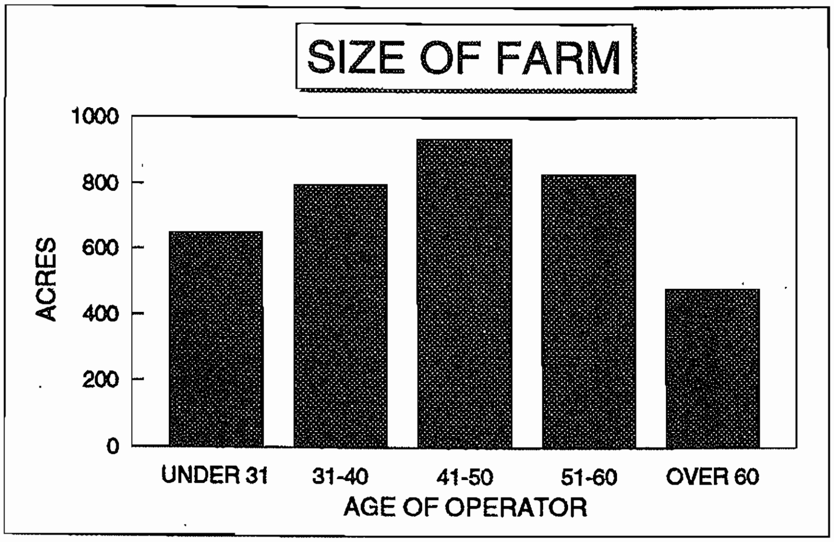

CROP ACRES
ACRES
2500
2000
1500
1000
500
0
249
404
685
1258
2107
0-40
40-100
100-200
200-500
500+
SIZE OF FARM IN $

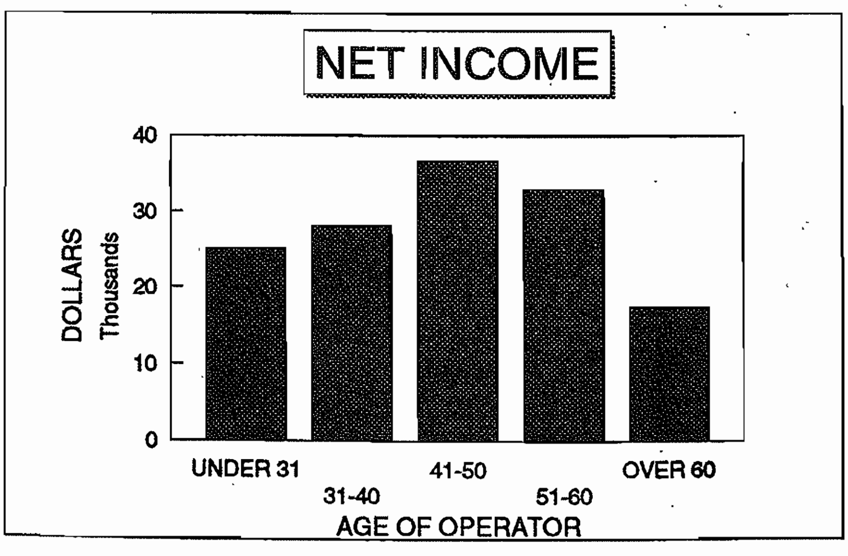

NET FARM INCOME
Thousands
150
100
50
0
-50
($1,782)
$7,294
$14,302
$48,319
$123,161
0-40
40-100
100-200
200-500
500+
SIZE IN THOUSANDS OF DOLLARS

Age Of Operator Report, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT

	Average For All Farms	Under 31	31 - 40	41 - 50	51 - 60	Over 60
Number of farms	329	32	137	97	50	13
Income Statement						
Gross cash farm income	200814	184162	197540	225527	201894	87772
Total cash farm expense	167176	150660	165646	194962	152226	74127
Net cash farm income	33639	33502	31893	30565	49669	13646
Inventory change	6528	-242	5608	15273	-5282	13066
Depreciation and capital adjustment	-9526	-8094	-9380	-9241	-11452	-9307
Net farm income	30641	25166	28122	36598	32934	17404
Profitability (cost)						
Labor and management earnings	19358	25348	18072	24137	16084	1895
Rate of return on assets	7 %	9 %	7 %	7 %	6 %	2 %
Rate of return on equity	7 %	12 %	6 %	8 %	5 %	1 %
Operating profit margin	14 %	15 %	13 %	15 %	16 %	7 %
Asset turnover rate	48 %	62 %	53 %	49 %	36 %	30 %
Liquidity						
Term debt coverage ratio	118 %	112 %	100 %	129 %	157 %	164 %
Expense as a percent of income	81 %	82 %	82 %	81 %	77 %	74 %
Interest as a percent of income	7 %	7 %	8 %	7 %	7 %	5 %
Solvency (cost)						
Number of sole proprietors	251	22	112	64	41	12
Ending farm assets	349500	235329	340404	417424	337741	285296
Ending farm liabilities	188157	149437	205193	218720	142108	76534
Ending total assets	417161	267008	404190	500251	395499	403786
Ending total liabilities	198851	157915	220867	229062	144149	76880
Ending net worth	218310	109093	183323	271189	251350	326906
Net worth change	10722	14049	8728	17050	6010	991
Ending farm debt to asset ratio	54 %	64 %	60 %	52 %	42 %	27 %
Beg total debt to asset ratio	45 %	54 %	52 %	43 %	36 %	16 %
End total debt to asset ratio	48 %	59 %	55 %	46 %	36 %	19 %
Nonfarm Information						
Farms reporting living expenses	112	10	51	29	17	-
Total family living expense	23708	19725	22740	30034	21235	-
Total living, invest, & capital purch	37570	29739	39178	45396	28561	-
Net nonfarm income	10787	7249	10711	13720	7202	12185
Crop Acres						
Total acres owned	481	889	295	523	633	540
Total crop acres	816	648	798	936	830	478
Total crop acres owned	306	163	206	386	515	306
Total crop acres cash rented	467	471	545	517	252	82
Total crop acres share rented	44	14	48	32	63	90


NUMBER OF FARMS
150
100
50
0
FARMS
32
137
97
50
13
UNDER 31
31-40
41-50
51-60
OVER 60
AGE OF OPERATOR


SIZE OF FARM
1000
800
600
400
200
0
ACRES
UNDER 31
31-40
41-50
51-60
OVER 60
AGE OF OPERATOR


NET INCOME
40
30
20
10
0
DOLLARS
Thousands
UNDER 31
31-40
41-50
51-60
OVER 60
AGE OF OPERATOR

Type Of Farm Report, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT

	Average For All Farms	Crop	Dairy	Beef	Crop and Dairy	Crop and Hog	Crop and Beef	Other
Number of farms	377	134	64	20	16	7	20	115
Income Statement								
Gross cash farm income	201277	255193	157348	101966	204293	269063	131546	188522
Total cash farm expense	168059	215671	122379	78567	152067	223616	121498	160895
Net cash farm income	33218	39522	34970	23399	52227	45446	10048	27627
Inventory change	3819	16907	-1937	-10897	-10372	14625	4627	-4253
Depreciation and capital adjustment	-9136	-6667	-10489	-14686	-5277	-25910	-11521	-9509
Net farm income	27900	49762	22544	-2184	36578	34161	3154	13865
Profitability (cost)								
Labor and management earnings	17227	37229	15395	-16111	31807	19061	-10387	3396
Rate of return on assets	6 %	10 %	6 %	-2 %	9 %	7 %	-1 %	3 %
Rate of return on equity	6 %	13 %	6 %	-8 %	9 %	8 %	-6 %	-1 %
Operating profit margin	13 %	18 %	13 %	-12 %	16 %	19 %	-2 %	5 %
Asset turnover rate	50 %	55 %	46 %	19 %	54 %	37 %	36 %	50 %
Liquidity								
Term debt coverage ratio	106 %	124 %	158 %	213 %	109 %	94 %	33 %	60 %
Expense as a percent of income	82 %	79 %	79 %	86 %	79 %	79 %	90 %	88 %
Interest as a percent of income	7 %	7 %	7 %	11 %	7 %	9 %	7 %	8 %
Solvency (cost)								
Number of sole proprietors	285	104	46	17	9	6	14	88
Ending farm assets	343825	429069	241065	265719	313535	342741	354259	313827
Ending farm liabilities	188361	251046	126735	108378	152997	232493	152210	168169
Ending total assets	406178	512224	281004	328319	354181	361210	393474	372652
Ending total liabilities	198819	268823	129399	109511	153570	239477	155422	178357
Ending net worth	207359	243401	151605	218807	200611	121733	238052	194294
Net worth change	8517	21575	16037	-12370	-993	10698	-11458	-2718
Ending farm debt to asset ratio	55 %	59 %	53 %	41 %	49 %	68 %	43 %	54 %
Beg total debt to asset ratio	46 %	50 %	48 %	32 %	36 %	65 %	34 %	44 %
End total debt to asset ratio	49 %	52 %	46 %	33 %	43 %	66 %	39 %	48 %
Nonfarm Information								
Farms reporting living expenses	121	47	22	8	8	-	6	28
Total family living expense	23845	30114	21451	13755	27870	-	10874	19360
Total living, invest, & capital purch	36767	48413	26037	18691	33286	-	14760	35401
Net nonfarm income	10790	12622	6730	13146	3703	4153	11975	11767
Crop Acres								
Total acres owned	455	466	358	606	493	469	698	427
Total crop acres	849	1099	276	323	796	997	774	988
Total crop acres owned	298	276	198	242	449	419	371	351
Total crop acres cash rented	495	751	67	56	221	551	385	571
Total crop acres share rented	56	72	11	25	126	27	18	66

FARM INCOME STATEMENT, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of Farms	377	75	75
CASH FARM INCOME			
Barley	12756	13234	18117
Dark Red Kidney Beans	439	1400	440
Navy Beans	1132	1141	2951
Pinto Beans	1262	2773	2058
Canola	1101	1301	1200
Cordwood	87	-	436
Corn	3400	6717	5660
Flax	84	216	118
Kentucky Blue Grass Seed	631	1585	110
Timothy Grass Seed	232	218	133
Alfalfa Hay	768	886	917
Mixed Alfalfa/Grass Hay	91	181	-
Oats	251	472	118
Potatoes	2153	411	8933
Seed Potatoes	749	963	993
Wild Rice	167	-	-
Soybeans	7807	7085	9316
Sugar Beets	33520	535	121564
Sunflowers	10309	12763	11931
Confectionary Sunflowers	2581	1101	5685
Durum Wheat	288	329	793
Spring Wheat	31866	28848	56617
Winter Wheat	151	74	625
Rented Out	136	-	682
Other crops	1508	-	7088
Miscellaneous crop income	572	570	785
Beef Calves	4345	7707	1852
Background Beef	2658	4246	244
Finish Yrlg Steers	1695	8264	-
Milk	28115	14944	30500
Dairy Calves	733	471	739
Dairy Heifers (for sale)	270	39	108
Dairy Replacement Heifers	697	1997	-
Dairy Steers	1884	513	1578
Raised Hogs	1896	3003	5511
Feeder Pigs	142	56	-
Finish Feeder Pigs	104	48	-
Turkeys	758	-	-
Finish Cull Cows	136	-	-
Cull breeding livestock	2643	2306	2317
Misc. livestock income	326	162	713
Deficiency payments	12523	13504	20272
CRP payments	862	1099	907
Other government payments	6192	8185	8536
Custom work income	2056	1701	4331
Patronage dividends, cash	1150	440	2986
Insurance income	13745	12745	20384
Cash from hedging accts	142	211	251
Other farm income	4164	4600	10425
Gross Cash Farm Income	201277	169039	368923

FARM INCOME STATEMENT, 1994 (Continued)
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of Farms	377	75	75
CASH FARM EXPENSE			
Seed	10101	10062	18466
Fertilizer	19872	18903	34275
Crop chemicals	15137	13371	30754
Crop insurance	4891	4952	8161
Drying fuel	490	477	486
Irrigation energy	29	-	113
Crop marketing	1504	1677	633
Crop miscellaneous	2378	2602	5224
Feeder livestock purchase	4118	7807	981
Purchased feed	11493	11306	9916
Breeding fees	307	145	279
Veterinary	1293	1400	933
Livestock supplies	1899	1268	1992
Livestock leases	413	789	-
Grazing fees	21	-	-
Livestock marketing	1018	814	833
Interest	13898	14111	21564
Fuel & oil	8204	8238	13454
Repairs	15118	13870	24638
Custom hire	4209	3062	8488
Hired labor	9112	6260	23161
Land rent	26261	21142	52169
Machinery & bldg leases	3099	3406	6439
Real estate taxes	2598	2104	5175
Personal property taxes	45	45	152
Farm insurance	2480	2341	5164
Utilities	3069	2749	4294
Dues & professional fees	969	533	2198
Hedging account deposits	389	464	874
Miscellaneous	3645	2811	5807
Total cash expense	168059	156711	286624
Net cash farm income	33218	12328	82299
INVENTORY CHANGES			
Crops and feed	5745	-11991	32902
Market livestock	723	-3732	609
Accounts receivable	183	-5718	6541
Prepaid expenses and supplies	388	-515	951
Accounts payable	-3219	-6689	-1811
Total inventory change	3819	-28644	39192
Net operating profit	37037	-16317	121491
DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS			
Breeding livestock	-499	-2192	-29
Machinery and equipment	-9160	-9352	-15318
Buildings and improvements	-1506	-1507	-1919
Other farm capital	2028	-935	9101
Total depr. and other capital adj	-9136	-13985	-8165
Net farm income	27900	-30301	113326

STATEMENT OF CASH FLOWS, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted by Net Farm Income)

		Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of Farms		377	75	75
(a) Beginning cash balance (farm & nonfarm)		11581	5413	18708
CASH FROM OPERATING ACTIVITIES				
Gross cash farm income		201277	169039	368923
Net nonfarm income	(+)	10790	12153	8710
Total cash farm expense	(-)	168059	156711	286624
Apparent family living expense	(-)	27448	19367	44226
Income and social security tax	(-)	4759	1849	13350
(b) Cash from operations	(=)	11802	3271	33434
CASH FROM INVESTING ACTIVITIES				
Sale of breeding livestock		1209	1025	525
Sale of machinery & equipment	(+)	1503	1618	2624
Sale of farm land	(+)	979	435	2709
Sale of farm buildings	(+)	129	-	649
Sale of other farm assets	(+)	1018	50	3363
Sale of nonfarm assets	(+)	764	955	1087
Purchase of breeding livestock	(-)	2720	5577	2128
Purchase of machinery & equip.	(-)	18877	14217	39130
Purchase of farm land	(-)	9163	2662	21638
Purchase of farm buildings	(-)	3519	7214	3865
Purchase of other farm assets	(-)	9097	727	27028
Purchase of nonfarm assets	(-)	5107	4017	7763
(c) Cash from investing activities	(=)	-42882	-30333	-90596
CASH FROM FINANCING ACTIVITIES				
Money borrowed		121883	111957	214849
Cash gifts and inheritances	(+)	1214	1460	556
Principal payments	(-)	93623	84807	162852
Dividends paid	(-)	1	7	-
Gifts given	(-)	41	-	4
(d) Cash from financing activities	(=)	29431	28604	52549
(e) Net change in cash balance	(b+c+d)	-1650	1542	-4612
Ending cash balance calculated	(a+e)	9931	6955	14096

BALANCE SHEET AT COST VALUES, 1994
NORTHWEST TECHNICAL COLLEGE
(Farms sorted by Net Farm Income)

	Average Of All Farms		Average Of Low 20 %		Average Of High 20 %	
Number of Farms	285		53		52	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
ASSETS						
Current Farm Assets						
Cash and checking balance	9541	6911	3148	3755	16754	8430
Prepaid expenses & supplies	9583	10770	3849	4156	24252	29078
Growing crops	109	58	15	23	198	134
Accounts receivable	7572	7025	13158	6247	11374	11437
Hedging accounts	604	207	1684	377	760	359
Crops held for sale or feed	56140	64118	45524	31772	115994	157554
Crops under government loan	3687	3503	5604	5738	3062	4179
Market livestock held for sale	9762	10190	17195	13727	3751	3177
Other current assets	1248	1026	298	244	620	1196
Total current farm assets	98245	103808	90476	66040	176765	215543
Intermediate Farm Assets						
Breeding livestock	20659	21292	19530	19592	13535	14259
Machinery and equipment	70797	79600	57624	59997	123717	147492
Other intermediate assets	22180	31727	4558	2826	66374	100354
Total intermediate farm assets	113637	132619	81712	82415	203626	262106
Long-Term Farm Assets						
Farm land	124947	135172	115808	119283	200209	229012
Buildings and improvements	22218	22841	15385	14325	33987	35085
Other long-term assets	4240	4879	3950	4079	6475	8184
Total long-term farm assets	151405	162892	135142	137687	240671	272281
Total Farm Assets	363287	399319	307330	286142	621062	749930
Total Nonfarm Assets	66041	72417	46986	50011	143242	153333
Total Assets	429328	471736	354316	336153	764304	903263
LIABILITIES						
Current Farm Liabilities						
Accrued interest	2098	3131	2185	3904	2374	3256
Accounts payable	5142	7038	4581	10939	10932	11593
Current notes	37353	47965	33840	40634	81637	107852
Government crop loans	980	1751	2967	3835	464	2234
Principal due on term debt	11613	12428	10372	9676	21302	22141
Total current farm liabilities	57186	72314	53947	68989	116708	147077
Intermediate Farm Liabilities	49554	61650	45540	52433	79751	106249
Long-term Farm Liabilities	80072	84798	94104	94038	92721	107040
Total Farm Liabilities	186812	218763	193590	215460	289180	360365
Total Nonfarm Liabilities	11580	12146	8374	8370	24722	24463
Total Liabilities	198392	230909	201964	223830	313903	384829
Net Worth (farm and nonfarm)	230936	240827	152351	112323	450401	518434
Net Worth Change		9891		-40028		68033
RATIO ANALYSIS						
Current Farm Liabilities / Assets	58 %	70 %	60 %	104 %	66 %	68 %
Curr. & Interm Farm Liab / Assets	50 %	57 %	58 %	82 %	52 %	53 %
Long Term Farm Liab. / Assets	53 %	52 %	70 %	68 %	39 %	39 %
Total Liabilities / Assets	46 %	49 %	57 %	67 %	41 %	43 %

BALANCE SHEET AT MARKET VALUES, 1994
NORTHWEST TECHNICAL COLLEGE
(Farms sorted by Net Farm Income)

	Average Of All Farms		Average Of Low 20 %		Average Of High 20 %	
Number of Farms	324		65		55	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
ASSETS						
Current Farm Assets						
Cash and checking balance	8752	6673	3491	4405	15236	8243
Prepaid expenses & supplies	8664	9687	3780	3604	23122	27696
Growing crops	111	51	12	18	187	126
Accounts receivable	7170	6772	11336	5798	11117	10813
Hedging accounts	545	203	1373	314	719	339
Crops held for sale or feed	53333	60433	44182	31483	111683	152625
Crops under government loan	3739	3815	4847	5098	3083	3951
Market livestock held for sale	9793	10393	17888	13768	3421	3321
Other current assets	1098	931	243	199	586	1131
Total current farm assets	93206	98959	87154	64687	169155	208246
Intermediate Farm Assets						
Breeding livestock	26030	26921	24770	26526	16532	17431
Machinery and equipment	99239	112247	91262	100970	188177	219051
Other intermediate assets	36652	45850	5514	4051	131619	168022
Total intermediate farm assets	161921	185019	121545	131547	336328	404504
Long-Term Farm Assets						
Farm land	158015	167639	151962	156354	256957	278191
Buildings and improvements	24825	27298	15691	23101	41930	43697
Other long-term assets	8322	9294	4435	4871	23995	25854
Total long-term farm assets	191163	204231	172088	184326	322882	347742
Total Farm Assets	446290	488209	380787	380560	828365	960492
Total Nonfarm Assets	66506	71766	46945	48778	144676	155851
Total Assets	512796	559975	427733	429338	973040	1116342
LIABILITIES						
Current Farm Liabilities						
Accrued interest	2213	3475	2745	4766	2502	3321
Accounts payable	5561	7393	4571	9720	11135	11211
Current notes	37902	47711	34951	41708	79509	104205
Government crop loans	1148	2002	2419	3127	439	2112
Principal due on term debt	13042	13867	11564	10750	21399	22291
Total current farm liabilities	59867	74456	56251	70072	114984	143141
Intermediate Farm Liabilities	50903	63929	48919	64972	79640	102741
Long-term Farm Liabilities	81575	87104	91957	97650	96563	105442
Total Farm Liabilities	192345	225489	197128	232694	291188	351323
Total Nonfarm Liabilities	10892	11183	7717	7493	23240	23283
Total Deferred Liabilities	139	82	446	185	-	-
Total Liabilities	203376	236755	205291	240371	314428	374606
Net Worth (farm and nonfarm)	309420	323219	222441	188966	658613	741736
Net Worth Change		13800		-33475		83123
RATIO ANALYSIS						
Current Farm Liabilities / Assets	64 %	75 %	65 %	108 %	68 %	69 %
Curr. & Interm Farm Liab. / Assets	43 %	49 %	50 %	69 %	39 %	40 %
Long Term Farm Liabilities / Assets	43 %	43 %	53 %	53 %	30 %	30 %
Total Liabilities / Assets	40 %	42 %	48 %	56 %	32 %	34 %

FINANCIAL GUIDELINES MEASURES, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted by Net Farm Income)

	Average For All Farms		Average For Low 20 %		Average For High 20 %	
Number of Farms	377		75		75	
LIQUIDITY	Beginning	Ending	Beginning	Ending	Beginning	Ending
Current ratio	1.73	1.47	1.45	0.85	1.85	1.80
Working capital	46308	36941	26651	-11759	102342	114770
SOLVENCY (Market)	Beginning	Ending	Beginning	Ending	Beginning	Ending
Farm debt to asset ratio	40 %	43 %	52 %	60 %	31 %	32 %
Farm equity to asset ratio	60 %	57 %	48 %	40 %	69 %	68 %
Farm debt to equity ratio	67 %	74 %	109 %	153 %	44 %	47 %
PROFITABILITY	Cost	Market	Cost	Market	Cost	Market
Rate of return on farm assets	6.3 %	6.2 %	-10.3 %	-4.9 %	14.4 %	12.4 %
Rate of return on farm equity	5.8 %	5.8 %	-51.9 %	-20.5 %	19.8 %	15.0 %
Operating profit margin	13.9 %	17.1 %	-26.1 %	-15.5 %	28.8 %	33.0 %
Net farm income	30710	35325	-31276	-21195	116559	131350
REPAYMENT CAPACITY	Cash	Accrual	Cash	Accrual	Cash	Accrual
Term debt coverage ratio	89 %	106 %	58 %	-71 %	121 %	222 %
Capital replacement margin	-2523	1296	-9219	-37863	7950	47142
EFFICIENCY						
Asset turnover rate (market)	36.2 %		31.6 %		37.6 %	
Operating expense ratio	74.9 %		100.0 %		64.8 %	
Depreciation expense ratio	4.4 %		9.5 %		2.0 %	
Interest expense ratio	7.3 %		11.0 %		5.5 %	
Net farm income ratio	13.0 %		-17.2 %		27.0 %	

LABOR ANALYSIS

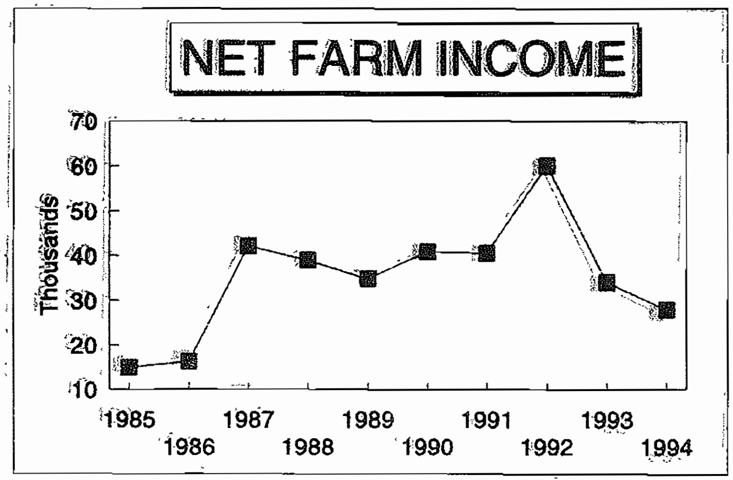
	Average For All Farms	Average For Low 20 %	Average For High 20 %
Number of Farms	290	54	64
Total unpaid labor hours	2472	2221	2689
Total hired labor hours	1183	896	2873
Total labor hours per farm	3655	3116	5561
Value of farm production / hour	62.01	44.61	81.43
Net farm income / unpaid hour	14.18	-15.91	48.10

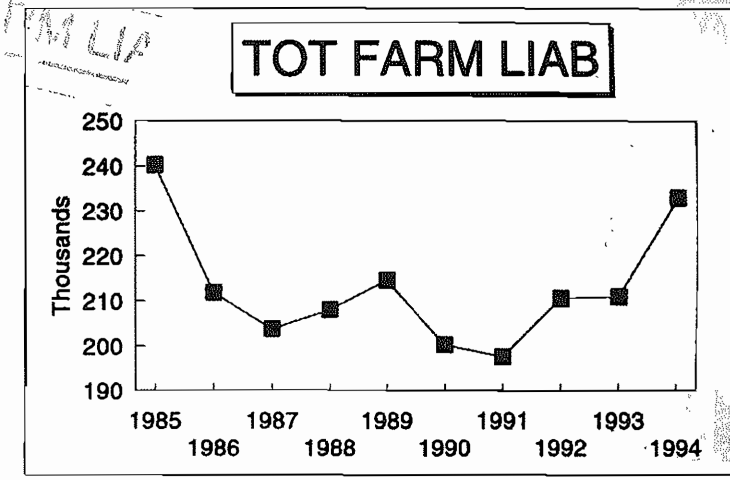
PROFITABILITY AND LIQUIDITY ANALYSIS, 1994
NORTHWEST TECHNICAL COLLEGE
(Farms sorted by Net Farm Income)

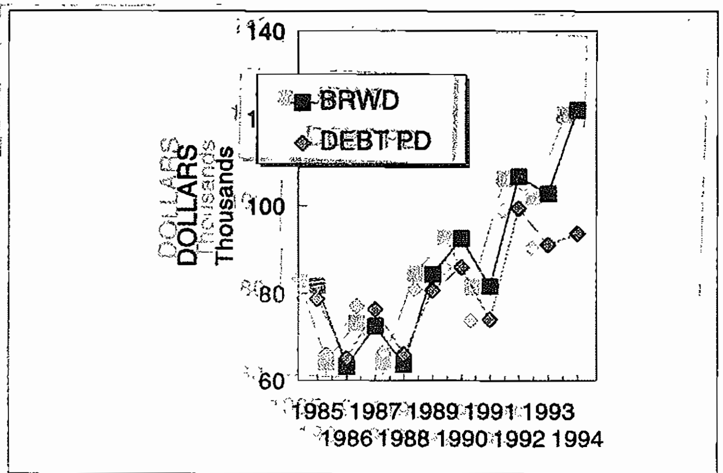
	Avg. Of All Farms	Avg. Of Low 20 %	Avg. Of High 20 %	Avg. Of All Farms	Avg. Of Low 20 %	Avg. Of High 20 %
Number of Farms	331	61	71	372	75	74
PROFITABILITY	Cost			Market		
Net farm income	30710	-31276	116559	35201	-20936	131252
Labor and management earnings	17227	-37854	87859	16333	-31601	87378
Rate of return on assets	6.3 %	-10.3 %	14.4 %	6.2 %	-4.9 %	12.4 %
Rate of return on equity	5.8 %	-51.9 %	19.8 %	5.8 %	-20.5 %	15.0 %
Operating profit margin	13.9 %	-26.1 %	28.8 %	17.1 %	-15.5 %	33.0 %
Asset turnover rate	45.5 %	39.3 %	50.1 %	36.2 %	31.6 %	37.6 %
Interest on farm net worth	13483	6578	28700	18868	10665	43875
Farm interest expense	14916	16015	22932	15128	16254	22297
Value of operator lbr and mgmt.	18069	16869	21813	17204	14933	21348
Return on farm assets	27558	-32130	117677	33125	-19616	132202
Average farm assets	436667	312881	814468	534344	400218	1065351
Return on farm equity	12642	-48145	94746	17997	-35869	109904
Average farm equity	218802	92769	477346	312897	174796	731244
Value of farm production	198584	123062	408219	193242	126295	400530

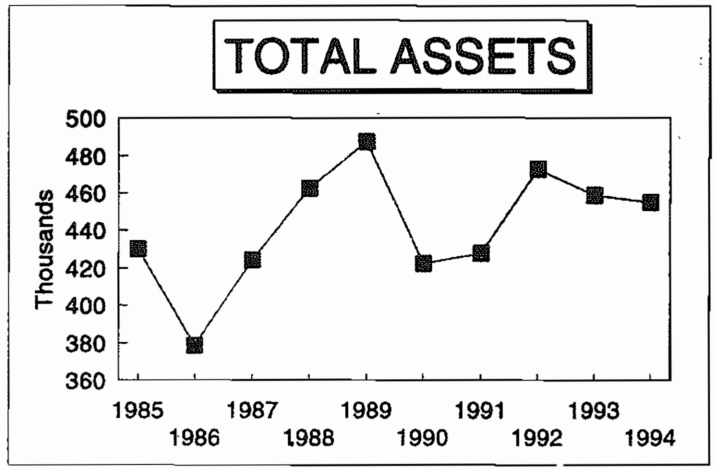
	Average Of All Farms	Average Of Low 20 %	Average Of High 20 %
Number of Farms	377	75	75
LIQUIDITY (Cash)			
Net cash farm income	33218	12328	82299
Net nonfarm income	10790	12153	8710
Family living and taxes	32207	21216	57576
Real estate principal payments	4918	4026	8764
Cash available for interm. debt	6883	-762	24670
Average intermediate debt	67938	67408	101430
Years to turnover interm. debt	9.9	**	4.1
Expense as a % of income	83 %	93 %	78 %
Interest as a % of income	7 %	8 %	6 %
LIQUIDITY (Accrual)			
Total accrual farm income	207927	147599	408975
Total accrual farm expense	170891	163916	287484
Net accrual operating income	37037	-16317	121491
Net nonfarm income	10790	12153	8710
Family living and taxes	32207	21216	57576
Real estate principal payments	4918	4026	8764
Available for intermediate debt	10702	-29406	63862
Average intermediate debt	67938	67408	101430
Years to turnover interm. debt	6.3	**	1.6
Expense as a % of income	82 %	111 %	70 %
Interest as a % of income	7 %	11 %	5 %

** Income insufficiant to meet debt servicing requirements


NET FARM INCOME
Thousands
70
60
50
40
30
20
10
1985 1986 1987 1988 1989 1990 1991 1992 1993 1994


TOT FARM LIAB
Thousands
250
240
230
220
210
200
190
1985 1986 1987 1988 1989 1990 1991 1992 1993 1994


BRWD
DEBT PD
DOLLARS
Thousands
140
100
80
60
1985 1986 1987 1988 1989 1990 1991 1992 1993 1994


TOTAL ASSETS
Thousands
500
480
460
440
420
400
380
360
1985 1986 1987 1988 1989 1990 1991 1992 1993 1994

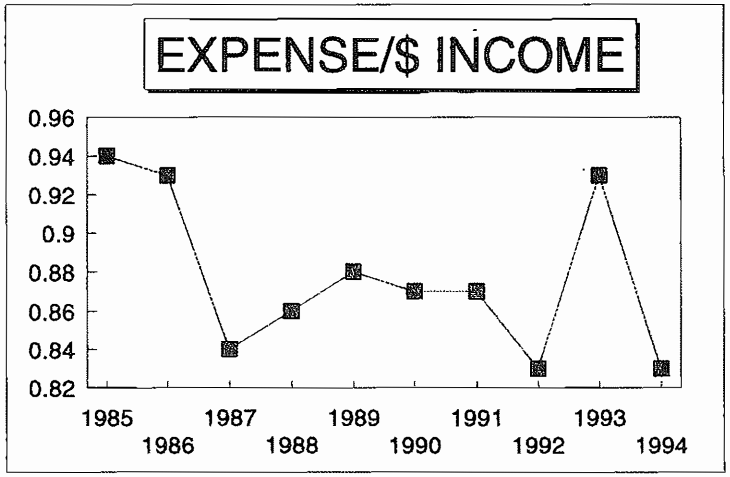
HOUSEHOLD AND PERSONAL EXPENSES, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted by Net Farm Income)

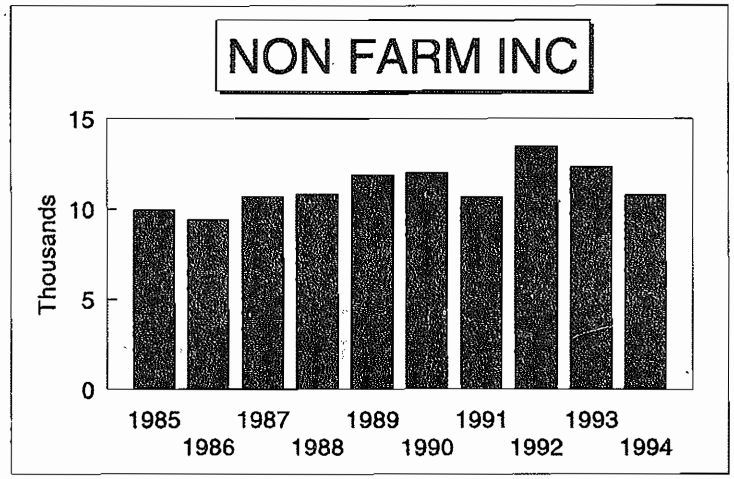
	Average For All Farms	Average For Low 20%	Average For High 20%
Number of Sole Proprietors	87	15	20
Average family size	3.1	2.8	3.8
FAMILY LIVING EXPENSES			
Food and meals expense	4001	3565	3865
Medical care and health insurance	3053	2746	4333
Cash donations	828	831	1825
Household supplies	2571	2510	3779
Clothing	1375	992	2032
Personal care	2807	3227	3018
Child / Dependent care	512	488	262
Gifts	728	492	1033
Education	389	314	455
Recreation	1205	604	1975
Utilities (household share)	818	929	793
Nonfarm vehicle operating expense	1075	1653	1145
Household real estate taxes	244	58	288
Dwelling rent	26	-	82
Household repairs	863	804	1056
Nonfarm interest	510	558	748
Life insurance payments	1123	1092	2399
Total cash family living expense	22128	20863	29088
Family living from the farm	394	289	258
Total family living	22521	21152	29345
OTHER NONFARM EXPENDITURES			
Income taxes	5892	3919	13407
Furnishing & appliance purchases	262	129	535
Nonfarm vehicle purchases	939	1700	811
Nonfarm real estate purchases	1599	550	1444
Other nonfarm capital purchases	1891	7699	-
Nonfarm savings & investments	2120	714	4387
Total other nonfarm expenditures	12702	14711	20584
Total cash family living, investment & nonfarm capital purch	34830	35574	49672
PARTNERSHIPS			
Number of partnerships	10		
Number of operators per partnership	1.8		
Average owner withdrawals per farm	28541		
Average withdrawals per operator	15856		

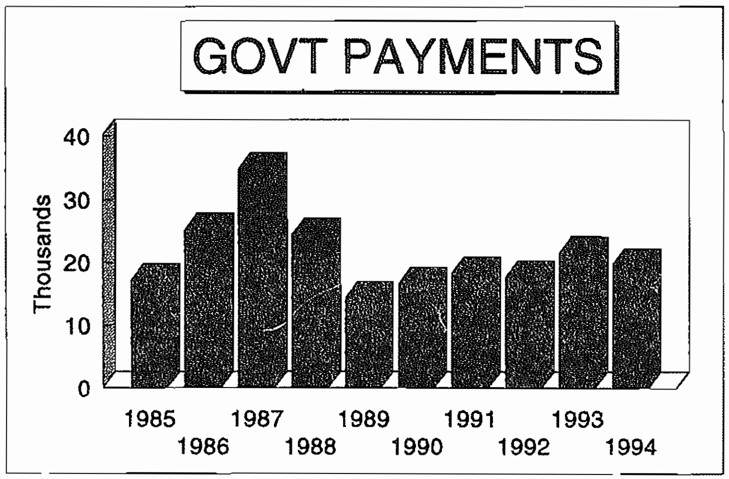
OPERATOR INFORMATION & NONFARM SUMMARY, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted by Net Farm Income)

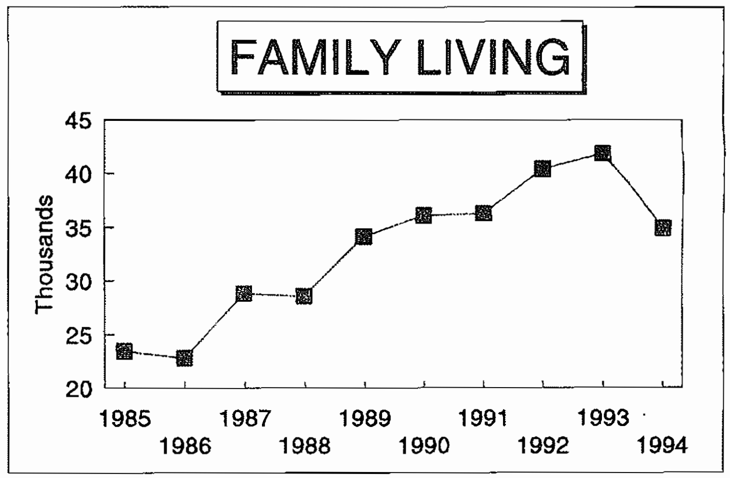
	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of Farms	377	75	75
OPERATOR INFORMATION			
Average number of operators	1.4	1.1	2.7
Average age of operators	40.7	42.9	42.9
Average number of years farming	17.7	18.9	20.7
NONFARM INCOME			
Nonfarm wages & salary	7392	8078	6496
Nonfarm business income	1194	1621	664
Nonfarm rental income	189	187	539
Nonfarm interest income	311	246	445
Nonfarm cash dividends	53	19	128
Tax refunds	350	522	110
Other nonfarm income	1322	1479	327
Total nonfarm income	10811	12153	8710

	Average For All Farms	
	Beginning	Ending
NONFARM ASSETS (Mkt)		
Checking & savings	2697	2682
Stocks & bonds	4693	4596
Other current assets	646	633
Furniture & appliances	8252	8663
Nonfarm vehicles	5312	5817
Cash value of life ins.	3329	3783
Retirement accounts	9174	9806
Other intermediate assets	2175	2651
Nonfarm real estate	24404	26375
Other long term assets	3311	3493
Total nonfarm assets	63991	68899


EXPENSE/$ INCOME
0.96
0.94
0.92
0.9
0.88
0.86
0.84
0.82
1985 1986 1987 1988 1989 1990 1991 1992 1993 1994

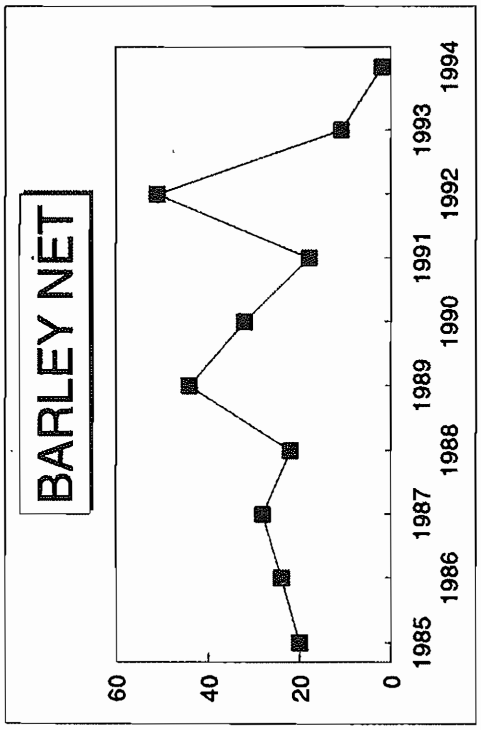

NON FARM INC
Thousands
15
10
5
0
1985 1986 1987 1988 1989 1990 1991 1992 1993 1994

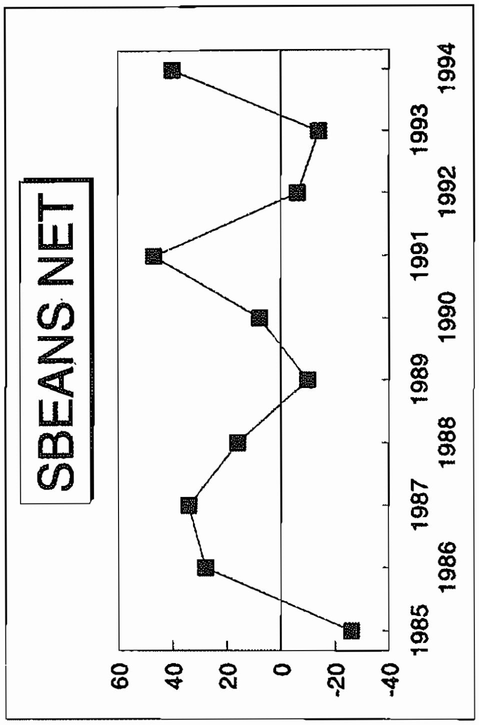

GOVT PAYMENTS
Thousands
40
30
20
10
0
1985 1986 1987 1988 1989 1990 1991 1992 1993 1994

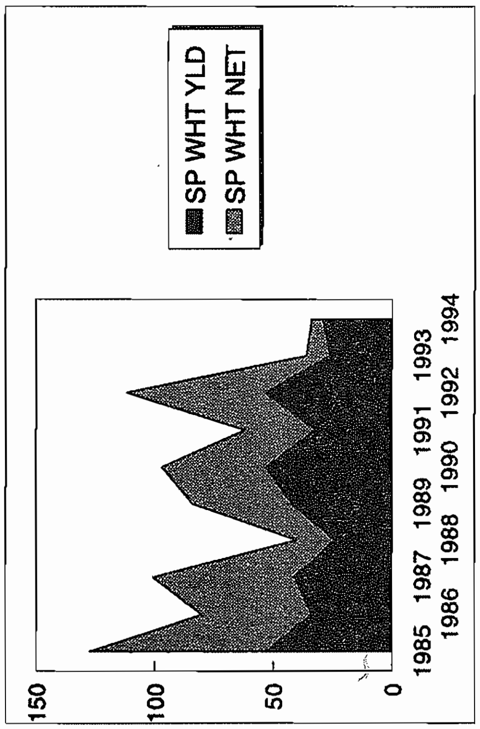

FAMILY LIVING
Thousands
45
40
35
30
25
20
1985 1986 1987 1988 1989 1990 1991 1992 1993 1994

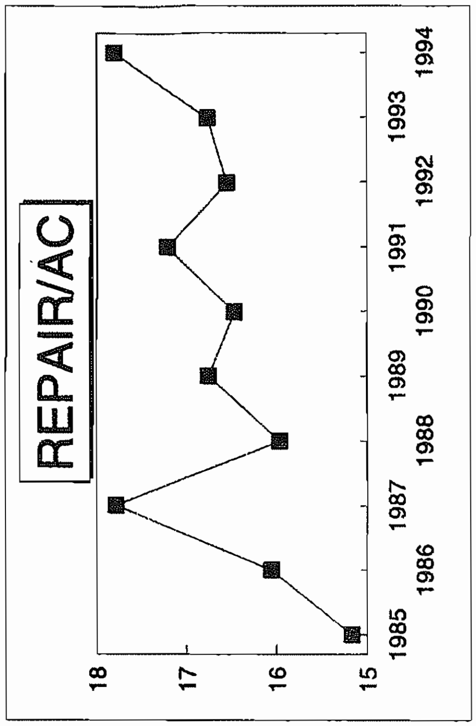
CROP PRODUCTION AND MARKETING SUMMARY, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of Farms	377	75	75
ACREAGE SUMMARY			
Total Acres Owned	455	388	501
Total Crop Acres	849	910	1250
Crop Acres Owned	298	317	391
Crop Acres Cash Rented	495	491	827
Crop Acres Share Rented	56	102	33
Total Pasture Acres	20	22	7
AVERAGE PRICE RECEIVED (Cash Sales Only)			
Wheat, Spring per bu.	3.27	3.17	3.28
Barley per bu.	1.72	1.66	1.71
Canola per lb.	0.10	-	-
Soybeans per bu.	5.75	5.18	5.88
Corn per bu.	2.28	2.25	2.48
Sugar Beets per ton	36.23	-	36.69
Sunflowers per cwt.	11.77	10.82	11.87
Grass Seed, Timothy per lb.	0.28	-	-
Grass Seed, Kentucky Blue per lb.	0.88	-	-
Potatoes per cwt.	5.51	-	-
AVERAGE YIELD PER ACRE			
Wheat, Spring (bu.)	28.67	25.69	30.98
Barley (bu.)	53.66	47.26	61.82
Sunflowers (cwt.)	17.67	13.28	18.62
Soybeans (bu.)	32.52	27.93	35.62
Sugar Beets (ton)	20.20	-	20.90
Hay, Alfalfa (ton)	2.64	2.30	3.04
Corn (bu.)	103.26	105.02	108.59
Hay, Mixed (ton)	1.95	1.82	-
Sunflowers, Confectionary (cwt.)	10.31	7.84	14.02
CRP ($)	33.79	43.63	-


BARLEY NET
60
40
20
0
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994


SBEANS NET
60
40
20
0
-20
-40
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994


SP WHT YLD
SP WHT NET
150
100
50
0
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994


REPAIR/AC
18
17
16
15
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994

Crop Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted according to Return to Overhead per Acre)

BARLEY ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	141	29	25
Number of farms	125	25	25
Acres	88.31	75.30	86.84
Yield per acre (bushel)	49.62	35.06	62.09
Operators share of yield %	100.00	100.00	100.00
Value per bushel	1.63	1.30	1.73
Crop product return per acre	80.99	45.65	107.61
Miscellaneous income per acre	35.94	16.56	49.47
Gross return per acre	116.93	62.22	157.08
Direct costs per acre			
Seed	8.32	8.69	8.42
Fertilizer	22.00	20.78	22.11
Crop chemicals	12.16	12.01	12.77
Crop insurance	5.07	5.20	5.22
Drying fuel	0.10	0.08	0.08
Fuel & oil	6.77	8.31	5.52
Repairs	11.48	14.59	7.32
Custom hire	1.22	1.90	0.82
Hired labor	0.04	0.00	0.03
Machinery & bldg leases	0.07	0.00	0.00
Utilities	0.00	0.00	0.00
Marketing	0.01	0.00	0.00
Operating interest	3.16	5.95	1.59
Miscellaneous	0.17	0.11	0.17
Total direct costs per acre	70.57	77.63	64.05
Return to overhead per acre	46.36	-15.42	93.03
Overhead costs per acre			
Hired labor	3.88	3.94	3.80
Machinery & bldg leases	1.22	1.01	2.62
RE & pers. property taxes	7.49	4.78	10.80
Farm insurance	2.40	2.53	3.04
Utilities	1.78	2.47	1.25
Dues & professional fees	0.56	0.48	0.68
Interest	16.07	8.36	22.07
Mach & bldg depreciation	8.30	9.01	7.06
Miscellaneous	2.66	3.08	2.07
Total overhead costs per acre	44.36	35.66	53.39
Total listed costs per acre	114.92	113.29	117.44
Net return per acre	2.01	-51.08	39.64
Total direct costs per bushel	1.42	2.21	1.03
Total listed costs per bushel	2.32	3.23	1.89
Net return per bushel	0.04	-1.46	0.64
Breakeven yield per acre	48.39	74.29	39.21
Est. labor hours per acre	1.61	2.32	1.19
Net return including govt. payments	2.10	-50.66	39.64
Lbr & mgt charge per acre	13.36	18.95	9.01
Net return over lbr & mgt	-11.27	-69.61	30.63

Crop Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted according to Return to Overhead per Acre)

BARLEY ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	160	35	29
Number of farms	138	28	28
Acres	123.97	150.56	104.97
Yield per acre (bushel)	54.19	45.86	65.23
Operators share of yield %	100.00	100.00	100.00
Value per bushel	1.71	1.57	1.90
Crop product return per acre	92.62	72.18	123.70
Miscellaneous income per acre	33.29	28.10	41.41
Gross return per acre	125.91	100.28	165.11
Direct costs per acre			
Seed	8.45	9.25	8.76
Fertilizer	22.23	25.15	21.94
Crop chemicals	13.44	12.41	12.91
Crop insurance	5.48	5.95	4.50
Drying fuel	0.14	0.00	0.30
Fuel & oil	5.81	5.44	6.21
Repairs	10.19	13.19	9.21
Custom hire	1.78	0.77	2.84
Hired labor	0.10	0.18	0.03
Land rent	43.55	54.39	26.81
Machinery & bldg leases	0.62	0.12	1.87
Utilities	0.02	0.00	0.09
Marketing	0.01	0.00	0.00
Operating interest	3.52	5.95	1.56
Miscellaneous	0.27	0.28	0.38
Total direct costs per acre	115.61	133.09	97.41
Return to overhead per acre	10.30	-32.81	67.70
Overhead costs per acre			
Hired labor	3.23	3.37	3.15
Machinery & bldg leases	1.94	1.92	2.12
RE & pers. property taxes	0.09	0.35	0.00
Farm insurance	2.05	2.59	2.50
Utilities	1.20	1.48	1.35
Dues & professional fees	0.54	0.52	0.62
Interest	2.60	3.31	1.11
Mach & bldg depreciation	6.42	6.75	8.94
Miscellaneous	2.22	2.27	2.84
Total overhead costs per acre	20.29	22.56	22.64
Total listed costs per acre	135.90	155.64	120.06
Net return per acre	-9.98	-55.36	45.06
Total direct costs per bushel	2.13	2.90	1.49
Total listed costs per bushel	2.51	3.39	1.84
Net return per bushel	-0.18	-1.21	0.69
Breakeven yield per acre	60.03	81.04	41.47
Est. labor hours per acre	1.42	1.66	1.26
Net return including govt. payments	-9.98	-55.34	45.06
Lbr & mgt charge per acre	10.39	8.96	12.41
Net return over lbr & mgt	-20.37	-64.30	32.64

Crop Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted according to Return to Overhead per Acre)

BARLEY ON SHARE RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	30	5	5
Number of farms	24	5	5
Acres	94.12	110.26	165.16
Yield per acre (bushel)	62.85	54.96	74.48
Operators share of yield %	69.03	71.55	67.72
Value per bushel	1.47	0.21	1.65
Crop product return per acre	63.74	7.70	84.56
Miscellaneous income per acre	19.68	10.91	26.99
Gross return per acre	83.41	18.61	111.55
Direct costs per acre			
Seed	5.87	2.23	6.04
Fertilizer	15.86	6.82	15.82
Crop chemicals	8.73	2.82	8.45
Crop insurance	3.12	0.83	4.48
Drying fuel	0.16	0.00	0.04
Fuel & oil	8.15	10.57	7.18
Repairs	12.28	14.72	11.38
Custom hire	1.08	2.91	0.95
Hired labor	0.36	0.00	1.24
Machinery & bldg leases	0.61	0.00	1.60
Marketing	0.04	0.00	0.14
Operating interest	2.24	3.24	0.88
Miscellaneous	0.11	0.00	0.05
Total direct costs per acre	58.62	44.13	58.25
Return to overhead per acre	24.79	-25.52	53.30
Overhead costs per acre			
Hired labor	2.94	0.37	2.13
Machinery & bldg leases	1.10	0.97	0.01
RE & pers. property taxes	0.06	0.00	0.15
Farm insurance	2.81	1.01	5.02
Utilities	1.92	1.69	2.78
Dues & professional fees	0.43	0.07	0.02
Interest	3.54	0.72	8.25
Mach & bldg depreciation	57.80	5.84	177.64
Miscellaneous	3.01	0.95	6.33
Total overhead costs per acre	73.61	11.62	202.34
Total listed costs per acre	132.23	55.74	260.59
Net return per acre	-48.82	-37.14	-149.04
Total direct costs per bushel	0.93	0.80	0.78
Total listed costs per bushel	2.10	1.01	3.50
Net return per bushel	-0.78	-0.68	-2.00
Breakeven yield per acre	111.02	304.71	208.53
Est. labor hours per acre	1.65	1.81	0.24
Lbr & mgt charge per acre	12.41	21.14	6.89
Net return over lbr & mgt	-61.23	-58.27	-155.93

Crop Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Average of all farms reporting)

CANOLA ON OWNED LAND

	Average For All Farms
Number of fields	20
Number of farms	16
Acres	81.61
Yield per acre (lb)	1598.15
Operators share of yield %	100.00
Value per lb	0.10
Crop product return per acre	165.46
Miscellaneous income per acre	1.44
Gross return per acre	166.90
Direct costs per acre	
Seed	17.47
Fertilizer	28.87
Crop chemicals	15.03
Crop insurance	1.05
Drying fuel	0.42
Fuel & oil	5.81
Repairs	9.32
Custom hire	6.49
Machinery & bldg leases	0.57
Marketing	0.44
Operating interest	1.09
Miscellaneous	0.34
Total direct costs per acre	86.89
Return to overhead per acre	80.01
Overhead costs per acre	
Hired labor	3.68
Machinery & bldg leases	0.55
RE & pers. property taxes	4.99
Farm insurance	1.73
Utilities	1.30
Dues & professional fees	0.31
Interest	11.67
Mach & bldg depreciation	6.30
Miscellaneous	0.57
Total overhead costs per acre	31.10
Total listed costs per acre	118.00
Net return per acre	48.90
Total direct costs per lb	0.05
Total listed costs per lb	0.07
Net return per lb	0.03
Breakeven yield per acre	1125.81
Est. labor hours per acre	1.72
Lbr & mgt charge per acre	13.85
Net return over lbr & mgt	35.05

Crop Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted according to Return to Overhead per Acre)

OATS ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	45	9	9
Number of farms	45	9	9
Acres	41.22	50.22	46.69
Yield per acre (bushel)	58.66	46.08	82.07
Operators share of yield %	100.00	100.00	100.00
Value per bushel	1.04	0.66	1.19
Crop product return per acre	61.21	30.53	97.55
Miscellaneous income per acre	13.14	5.54	29.74
Gross return per acre	74.35	36.06	127.29
Direct costs per acre			
Seed	7.05	10.03	5.37
Fertilizer	14.47	18.75	13.74
Crop chemicals	3.01	4.48	1.92
Crop insurance	2.51	3.31	2.80
Drying fuel	0.02	0.00	0.00
Irrigation energy	0.02	0.07	0.00
Fuel & oil	7.41	7.51	7.01
Repairs	13.34	17.62	12.56
Custom hire	1.82	1.47	2.46
Hired labor	0.21	0.00	0.36
Utilities	0.00	0.00	0.00
Operating interest	2.34	5.51	1.73
Miscellaneous	0.39	1.13	0.00
Total direct costs per acre	52.58	69.88	47.95
Return to overhead per acre	21.77	-33.82	79.34
Overhead costs per acre			
Hired labor	3.05	2.00	0.73
Machinery & bldg leases	0.23	0.38	0.37
RE & pers. property taxes	4.10	3.71	4.25
Farm insurance	1.40	1.12	1.08
Utilities	1.54	2.16	1.09
Dues & professional fees	0.39	0.70	0.16
Interest	8.68	3.41	7.38
Mach & bldg depreciation	13.35	10.63	13.25
Miscellaneous	1.58	3.31	1.51
Total overhead costs per acre	34.32	27.42	29.80
Total listed costs per acre	86.91	97.30	77.76
Net return per acre	-12.56	-61.23	49.54
Total direct costs per bushel	0.90	1.52	0.58
Total listed costs per bushel	1.48	2.11	0.95
Net return per bushel	-0.21	-1.33	0.60
Breakeven yield per acre	70.69	138.50	40.39
Est. labor hours per acre	2.09	2.30	1.64
Lbr & mgt charge per acre	11.93	15.98	6.92
Net return over lbr & mgt	-24.49	-77.21	42.61

Crop Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted according to Return to Overhead per Acre)

SPRING WHEAT ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	215	56	40
Number of farms	160	32	32
Acres	144.51	139.52	106.50
Yield per acre (bushel)	28.20	22.90	31.52
Operators share of yield %	100.00	100.00	100.00
Value per bushel	3.31	2.88	3.51
Crop product return per acre	93.29	65.87	110.62
Miscellaneous income per acre	48.69	24.06	76.33
Gross return per acre	141.98	89.93	186.94
Direct costs per acre			
Seed	10.76	9.39	11.06
Fertilizer	24.49	26.98	23.42
Crop chemicals	15.60	15.74	15.48
Crop insurance	6.25	5.24	4.88
Drying fuel	0.27	0.29	0.23
Irrigation energy	0.00	0.00	0.00
Fuel & oil	7.45	8.96	7.44
Repairs	12.60	16.28	13.48
Custom hire	3.42	3.98	1.13
Hired labor	0.11	0.00	0.08
Machinery & bldg leases	0.20	0.46	0.06
Utilities	0.01	0.00	0.00
Marketing	0.00	0.00	0.00
Operating interest	4.36	6.17	2.73
Miscellaneous	0.27	0.14	0.21
Total direct costs per acre	85.80	93.63	80.19
Return to overhead per acre	56.18	-3.70	106.75
Overhead costs per acre			
Hired labor	4.23	5.06	4.92
Machinery & bldg leases	1.00	0.62	0.96
RE & pers. property taxes	8.26	6.57	10.86
Farm insurance	2.56	2.65	4.09
Utilities	2.05	2.40	1.94
Dues & professional fees	0.72	0.45	0.76
Interest	17.97	19.21	15.87
Mach & bldg depreciation	11.15	10.64	16.17
Miscellaneous	2.88	2.52	5.25
Total overhead costs per acre	50.80	50.12	60.82
Total listed costs per acre	136.60	143.75	141.02
Net return per acre	5.38	-53.82	45.93
Total direct costs per bushel	3.04	4.09	2.54
Total listed costs per bushel	4.84	6.28	4.47
Net return per bushel	0.19	-2.35	1.46
Breakeven yield per acre	26.58	41.61	18.44
Est. labor hours per acre	1.84	2.09	1.71
Net return including govt. payments	5.47	-53.42	45.93
Lbr & mgt charge per acre	14.98	20.45	12.71
Net return over lbr & mgt	-9.50	-73.87	33.22

Crop Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted according to Return to Overhead per Acre)

SPRING WHEAT ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	309	75	63
Number of farms	194	39	39
Acres	201.82	184.42	181.23
Yield per acre (bushel)	28.54	27.48	27.91
Operators share of yield %	100.00	100.00	100.00
Value per bushel	3.33	3.12	3.49
Crop product return per acre	95.04	85.70	97.45
Miscellaneous income per acre	52.59	32.74	92.07
Gross return per acre	147.63	118.44	189.51
Direct costs per acre			
Seed	11.29	12.90	10.46
Fertilizer	24.36	28.30	24.13
Crop chemicals	15.28	16.40	15.82
Crop insurance	6.34	6.66	5.92
Drying fuel	0.32	0.38	0.42
Irrigation energy	0.00	0.00	0.01
Fuel & oil	6.02	5.93	6.09
Repairs	10.11	11.03	10.69
Custom hire	2.70	6.21	1.77
Hired labor	0.21	0.43	0.03
Land rent	44.47	50.87	32.56
Machinery & bldg leases	0.68	0.71	2.06
Utilities	0.03	0.00	0.09
Marketing	0.04	0.18	0.00
Operating interest	3.53	5.66	3.95
Miscellaneous	0.22	0.16	0.17
Total direct costs per acre	125.62	145.83	114.19
Return to overhead per acre	22.02	-27.39	75.32
Overhead costs per acre			
Hired labor	3.19	3.38	3.32
Machinery & bldg leases	2.08	1.65	2.61
RE & pers. property taxes	0.04	0.12	0.01
Farm insurance	2.57	2.78	3.95
Utilities	1.42	1.42	1.83
Dues & professional fees	0.65	0.88	0.50
Interest	2.69	3.00	2.07
Mach & bldg depreciation	7.63	6.75	12.62
Miscellaneous	2.36	2.04	3.36
Total overhead costs per acre	22.62	22.01	30.26
Total listed costs per acre	148.23	167.84	144.45
Net return per acre	-0.60	-49.40	45.07
Total direct costs per bushel	4.40	5.31	4.09
Total listed costs per bushel	5.19	6.11	5.18
Net return per bushel	-0.02	-1.80	1.61
Breakeven yield per acre	28.72	43.32	15.00
Est. labor hours per acre	1.57	2.01	1.23
Net return including govt. payments	-0.54	-49.40	45.07
Lbr & mgt charge per acre	12.01	10.82	13.41
Net return over lbr & mgt	-12.56	-60.22	31.66

Crop Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted according to Return to Overhead per Acre)

SPRING WHEAT ON SHARE RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	47	8	7
Number of farms	37	7	7
Acres	166.72	238.59	268.48
Yield per acre (bushel)	30.13	19.17	39.89
Operators share of yield %	69.06	71.39	69.05
Value per bushel	3.20	2.46	3.65
Crop product return per acre	67.26	34.26	102.41
Miscellaneous income per acre	35.52	27.17	25.65
Gross return per acre	102.78	61.43	128.06
Direct costs per acre			
Seed	9.08	8.95	7.37
Fertilizer	19.50	19.49	18.62
Crop chemicals	11.62	9.78	11.43
Crop insurance	4.48	4.68	2.95
Drying fuel	0.21	0.13	0.32
Fuel & oil	7.46	6.48	6.72
Repairs	12.11	9.80	13.77
Custom hire	1.58	4.42	0.00
Hired labor	0.83	2.54	1.06
Machinery & bldg leases	0.49	0.00	1.38
Marketing	0.01	0.00	0.00
Operating interest	2.56	3.20	3.48
Miscellaneous	0.11	0.00	0.00
Total direct costs per acre	70.04	69.47	67.10
Return to overhead per acre	32.74	-8.04	60.95
Overhead costs per acre			
Hired labor	2.82	0.28	3.07
Machinery & bldg leases	0.68	0.26	0.31
RE & pers. property taxes	0.05	0.00	0.16
Farm insurance	3.20	0.82	4.60
Utilities	1.90	1.20	1.90
Dues & professional fees	0.61	0.98	0.15
Interest	3.97	1.64	3.37
Mach & bldg depreciation	48.57	4.01	41.95
Miscellaneous	3.07	2.55	2.87
Total overhead costs per acre	64.86	11.73	58.39
Total listed costs per acre	134.90	81.19	125.49
Net return per acre	-32.12	-19.77	2.57
Total direct costs per bushel	2.32	3.62	1.68
Total listed costs per bushel	4.48	4.24	3.15
Net return per bushel	-1.07	-1.03	0.06
Breakeven yield per acre	44.99	30.74	39.65
Est. labor hours per acre	1.55	1.98	1.08
Net return including govt. payments	-32.11	-19.77	2.57
Lbr & mgt charge per acre	11.95	15.56	5.04
Net return over lbr & mgt	-44.06	-35.33	-2.47

Crop Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted according to Return to Overhead per Acre)

CORN ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	85	23	15
Number of farms	75	15	15
Acres	60.77	46.61	93.84
Yield per acre (bushel)	105.13	73.30	127.34
Operators share of yield %	100.00	100.00	100.00
Value per bushel	1.92	1.35	2.01
Crop product return per acre	202.35	99.17	256.54
Miscellaneous income per acre	31.02	13.46	49.52
Gross return per acre	233.36	112.63	306.06
Direct costs per acre			
Seed	21.88	20.40	24.38
Fertilizer	25.61	27.72	25.55
Crop chemicals	20.01	42.23	15.52
Crop insurance	5.33	7.63	4.46
Drying fuel	5.03	4.92	6.60
Irrigation energy	0.08	0.00	0.19
Fuel & oil	10.27	13.49	7.85
Repairs	21.98	30.32	16.44
Custom hire	2.58	4.13	1.93
Hired labor	0.08	0.00	0.14
Machinery & bldg leases	0.05	0.00	0.00
Utilities	0.01	0.00	0.00
Marketing	0.02	0.00	0.00
Operating interest	6.70	14.93	6.31
Miscellaneous	0.23	0.49	0.01
Total direct costs per acre	119.86	166.26	109.38
Return to overhead per acre	113.50	-53.64	196.68
Overhead costs per acre			
Hired labor	5.89	11.01	3.07
Machinery & bldg leases	2.56	0.99	4.17
RE & pers. property taxes	6.19	4.78	7.88
Farm insurance	1.88	1.07	2.23
Utilities	2.82	2.00	3.77
Dues & professional fees	0.58	0.65	0.58
Interest	23.17	17.50	28.12
Mach & bldg depreciation	16.98	10.77	15.60
Miscellaneous	3.39	3.07	3.68
Total overhead costs per acre	63.44	51.86	69.10
Total listed costs per acre	183.30	218.12	178.48
Net return per acre	50.06	-105.49	127.58
Total direct costs per bushel	1.14	2.27	0.86
Total listed costs per bushel	1.74	2.98	1.40
Net return per bushel	0.48	-1.44	1.00
Breakeven yield per acre	79.12	151.28	64.01
Est. labor hours per acre	2.70	2.79	2.67
Net return including govt. payments	50.31	-104.06	127.58
Lbr & mgt charge per acre	17.81	19.73	20.62
Net return over lbr & mgt	32.51	-123.79	106.96

Crop Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted according to Return to Overhead per Acre)

CORN ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	76	18	14
Number of farms	64	13	13
Acres	76.69	80.00	77.21
Yield per acre (bushel)	100.67	65.71	118.04
Operators share of yield %	100.00	100.00	100.00
Value per bushel	1.94	1.88	2.03
Crop product return per acre	195.50	123.37	240.15
Miscellaneous income per acre	31.56	27.77	65.09
Gross return per acre	227.06	151.14	305.24
Direct costs per acre			
Seed	22.84	20.49	24.49
Fertilizer	28.32	26.66	31.40
Crop chemicals	23.84	45.78	13.69
Crop insurance	6.72	11.66	4.05
Drying fuel	4.49	3.86	5.19
Irrigation energy	0.09	0.00	0.38
Fuel & oil	9.72	11.02	8.55
Repairs	18.24	31.51	13.43
Custom hire	3.04	1.96	2.31
Hired labor	0.10	0.09	0.00
Land rent	38.57	38.26	44.12
Machinery & bldg leases	0.02	0.00	0.00
Utilities	0.02	0.12	0.00
Marketing	0.72	0.00	0.00
Operating interest	8.07	7.13	8.15
Miscellaneous	0.09	0.44	0.03
Total direct costs per acre	164.90	198.98	155.79
Return to overhead per acre	62.16	-47.84	149.45
Overhead costs per acre			
Hired labor	4.32	4.89	3.96
Machinery & bldg leases	3.12	2.15	4.91
RE & pers. property taxes	0.05	0.00	0.00
Farm insurance	1.75	2.33	1.78
Utilities	1.95	1.69	2.61
Dues & professional fees	1.23	0.44	0.72
Interest	5.36	5.18	7.34
Mach & bldg depreciation	12.05	17.26	11.46
Miscellaneous	4.42	3.68	8.30
Total overhead costs per acre	34.25	37.62	41.07
Total listed costs per acre	199.15	236.60	196.86
Net return per acre	27.91	-85.46	108.38
Total direct costs per bushel	1.64	3.03	1.32
Total listed costs per bushel	1.98	3.60	1.67
Net return per bushel	0.28	-1.30	0.92
Breakeven yield per acre	86.30	111.22	64.77
Est. labor hours per acre	2.21	1.18	3.03
Net return including govt. payments	28.33	-85.46	109.48
Lbr & mgt charge per acre	13.81	11.52	22.10
Net return over lbr & mgt	14.52	-96.98	87.38

Crop Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Average of all farms reporting)

POTATOES ON CASH RENTED LAND

	Average For All Farms
Number of fields	11
Number of farms	6
Acres	103.35
Yield per acre (cwt)	68.05
Operators share of yield %	100.00
Value per cwt	3.71
Crop product return per acre	252.46
Miscellaneous income per acre	521.63
Gross return per acre	774.08
Direct costs per acre	
Seed	140.73
Fertilizer	53.60
Crop chemicals	69.25
Crop insurance	25.83
Fuel & oil	42.31
Repairs	49.56
Custom hire	11.29
Hired labor	2.96
Land rent	50.45
Utilities	1.71
Operating interest	23.86
Miscellaneous	1.18
Total direct costs per acre	472.73
Return to overhead per acre	301.36
Overhead costs per acre	
Hired labor	59.04
Machinery & bldg leases	17.02
Farm insurance	6.77
Utilities	23.01
Dues & professional fees	3.38
Interest	12.81
Mach & bldg depreciation	63.17
Miscellaneous	18.12
Total overhead costs per acre	203.34
Total listed costs per acre	676.06
Net return per acre	98.02
Total direct costs per cwt	6.95
Total listed costs per cwt	9.94
Net return per cwt	1.44
Breakeven yield per acre	41.63
Est. labor hours per acre	13.93
Lbr & mgt charge per acre	52.65
Net return over lbr & mgt	45.37

Crop Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted according to Return to Overhead per Acre)

SOYBEANS ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	60	9	9
Number of farms	47	9	9
Acres	76.22	71.11	79.10
Yield per acre (bushel)	34.43	29.28	44.71
Operators share of yield %	100.00	100.00	100.00
Value per bushel	4.92	2.96	5.04
Crop product return per acre	169.35	86.68	225.40
Miscellaneous income per acre	4.08	4.41	6.81
Gross return per acre	173.43	91.09	232.21
Direct costs per acre			
Seed	13.62	12.14	11.37
Fertilizer	4.78	8.53	4.56
Crop chemicals	23.53	21.46	15.73
Crop insurance	6.55	4.45	8.64
Drying fuel	0.01	0.00	0.00
Irrigation energy	0.05	0.07	0.00
Fuel & oil	6.58	9.76	6.38
Repairs	11.05	10.55	13.21
Custom hire	1.74	5.06	0.55
Hired labor	0.09	0.11	0.00
Machinery & bldg leases	0.07	0.00	0.00
Marketing	0.01	0.06	0.00
Operating interest	6.56	20.30	6.01
Miscellaneous	0.65	1.11	0.00
Total direct costs per acre	75.30	93.60	66.44
Return to overhead per acre	98.13	-2.51	165.77
Overhead costs per acre			
Hired labor	2.69	9.09	2.77
Machinery & bldg leases	1.57	1.62	0.44
RE & pers. property taxes	8.54	4.83	12.54
Farm insurance	2.02	2.92	2.82
Utilities	2.29	1.27	2.52
Dues & professional fees	0.83	1.30	1.42
Interest	28.35	8.36	53.48
Mach & bldg depreciation	8.85	14.61	13.89
Miscellaneous	2.52	1.48	2.12
Total overhead costs per acre	57.67	45.48	92.01
Total listed costs per acre	132.97	139.08	158.45
Net return per acre	40.46	-47.99	73.76
Total direct costs per bushel	2.19	3.20	1.49
Total listed costs per bushel	3.86	4.75	3.54
Net return per bushel	1.18	-1.64	1.65
Breakeven yield per acre	26.21	45.50	30.08
Est. labor hours per acre	2.12	3.20	2.31
Lbr & mgt charge per acre	20.59	26.87	17.66
Net return over lbr & mgt	19.87	-74.86	56.10

Crop Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted according to Return to Overhead per Acre)

SOYBEANS ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	121	33	20
Number of farms	90	18	18
Acres	112.28	120.80	81.22
Yield per acre (bushel)	32.10	23.63	42.18
Operators share of yield %	100.00	100.00	100.00
Value per bushel	5.13	5.07	5.07
Crop product return per acre	164.72	119.76	213.93
Miscellaneous income per acre	5.64	4.05	0.85
Gross return per acre	170.36	123.81	214.78
Direct costs per acre			
Seed	13.82	12.64	15.27
Fertilizer	4.88	7.82	7.65
Crop chemicals	22.08	26.35	18.16
Crop insurance	7.09	7.88	5.64
Drying fuel	0.01	0.00	0.00
Irrigation energy	0.01	0.00	0.05
Fuel & oil	7.20	8.08	5.95
Repairs	10.72	11.06	8.72
Custom hire	1.81	2.54	1.55
Hired labor	0.38	0.21	1.26
Land rent	51.31	53.38	47.43
Machinery & bldg leases	0.01	0.00	0.00
Marketing	0.03	0.00	0.00
Operating interest	4.71	5.79	3.21
Miscellaneous	0.37	0.40	0.22
Total direct costs per acre	124.42	136.14	115.10
Return to overhead per acre	45.94	-12.34	99.67
Overhead costs per acre			
Hired labor	3.48	6.88	2.95
Machinery & bldg leases	2.32	1.22	0.90
RE & pers. property taxes	0.10	0.00	0.27
Farm insurance	2.11	3.19	1.97
Utilities	1.59	2.02	1.44
Dues & professional fees	0.85	0.69	0.98
Interest	3.11	3.80	2.42
Mach & bldg depreciation	8.01	10.50	7.09
Miscellaneous	2.22	1.67	1.36
Total overhead costs per acre	23.78	29.97	19.38
Total listed costs per acre	148.20	166.11	134.49
Net return per acre	22.16	-42.30	80.29
Total direct costs per bushel	3.88	5.76	2.73
Total listed costs per bushel	4.62	7.03	3.19
Net return per bushel	0.69	-1.79	1.90
Breakeven yield per acre	27.78	31.97	26.35
Est. labor hours per acre	2.21	2.02	2.07
Lbr & mgt charge per acre	15.73	12.71	13.87
Net return over lbr & mgt	6.43	-55.01	66.43

Crop Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted according to Return to Overhead per Acre)

SUNFLOWERS ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	71	17	13
Number of farms	65	13	13
Acres	104.99	85.36	83.48
Yield per acre (cwt)	15.67	6.30	36.83
Operators share of yield %	100.00	100.00	100.00
Value per cwt	9.91	7.48	10.13
Crop product return per acre	155.26	47.09	373.31
Miscellaneous income per acre	25.93	8.99	4.14
Gross return per acre	181.19	56.08	377.46
Direct costs per acre			
Seed	13.67	14.96	13.55
Fertilizer	20.98	17.98	15.37
Crop chemicals	12.96	15.98	11.55
Crop insurance	5.93	4.51	4.21
Drying fuel	0.51	0.00	0.92
Irrigation energy	0.04	0.00	0.23
Fuel & oil	8.44	6.85	7.73
Repairs	16.17	15.42	14.11
Custom hire	3.13	2.91	5.40
Hired labor	0.01	0.00	0.06
Machinery & bldg leases	0.04	0.00	0.00
Utilities	0.01	0.00	0.00
Operating interest	6.69	3.72	8.82
Miscellaneous	0.16	0.00	0.56
Total direct costs per acre	89.65	88.35	82.51
Return to overhead per acre	91.54	-32.27	294.95
Overhead costs per acre			
Hired labor	3.20	0.67	3.44
Machinery & bldg leases	1.83	0.00	3.42
RE & pers. property taxes	6.85	3.61	9.76
Farm insurance	2.30	1.18	4.43
Utilities	2.47	2.98	2.04
Dues & professional fees	0.68	0.60	1.14
Interest	17.41	7.85	29.72
Mach & bldg depreciation	12.24	7.14	7.67
Miscellaneous	3.56	1.82	2.77
Total overhead costs per acre	48.41	11.60	64.38
Total listed costs per acre	138.06	99.96	146.89
Net return per acre	43.13	-43.87	230.57
Total direct costs per cwt	5.72	14.03	2.24
Total listed costs per cwt	8.81	15.88	3.99
Net return per cwt	2.75	-6.97	6.26
Breakeven yield per acre	11.31	12.16	14.08
Est. labor hours per acre	2.12	2.01	2.22
Lbr & mgt charge per acre	19.78	20.89	18.12
Net return over lbr & mgt	23.35	-64.76	212.45

Crop Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted according to Return to Overhead per Acre)

SUNFLOWERS ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	127	26	24
Number of farms	92	18	18
Acres	116.84	97.94	88.80
Yield per acre (cwt)	18.91	9.01	54.81
Operators share of yield %	100.00	100.00	100.00
Value per cwt	10.23	9.85	10.04
Crop product return per acre	193.40	88.66	550.00
Miscellaneous income per acre	19.24	10.37	16.71
Gross return per acre	212.64	99.03	566.71
Direct costs per acre			
Seed	12.85	12.95	12.30
Fertilizer	20.49	25.98	21.04
Crop chemicals	13.57	16.54	13.40
Crop insurance	7.14	7.65	4.94
Drying fuel	0.41	1.11	0.33
Fuel & oil	8.19	9.48	8.32
Repairs	14.24	16.65	13.30
Custom hire	4.10	5.21	2.96
Hired labor	0.04	0.20	0.05
Land rent	40.93	37.72	47.27
Machinery & bldg leases	1.82	0.00	0.00
Utilities	0.03	0.00	0.00
Marketing	0.00	0.02	0.00
Operating interest	4.39	3.41	4.27
Miscellaneous	0.45	0.06	0.04
Total direct costs per acre	128.65	136.99	128.22
Return to overhead per acre	83.99	-37.96	438.49
Overhead costs per acre			
Hired labor	4.30	3.87	2.06
Machinery & bldg leases	3.16	4.03	1.60
RE & pers. property taxes	0.01	0.02	0.00
Farm insurance	2.13	1.83	1.18
Utilities	1.91	2.38	1.59
Dues & professional fees	0.58	0.71	0.73
Interest	3.66	5.68	1.65
Mach & bldg depreciation	17.84	57.59	13.95
Miscellaneous	3.06	3.05	3.60
Total overhead costs per acre	36.64	79.17	26.37
Total listed costs per acre	165.30	216.16	154.58
Net return per acre	47.35	-117.13	412.12
Total direct costs per cwt	6.80	15.21	2.34
Total listed costs per cwt	8.74	24.00	2.82
Net return per cwt	2.50	-13.01	7.52
Breakeven yield per acre	14.28	20.90	13.74
Est. labor hours per acre	1.61	1.65	2.35
Lbr & mgt charge per acre	15.58	15.99	20.25
Net return over lbr & mgt	31.77	-133.12	391.87

Crop Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Average of all farms reporting)

SUNFLOWERS ON SHARE RENTED LAND

	Average For All Farms
Number of fields	21
Number of farms	14
Acres	126.88
Yield per acre (cwt)	15.26
Operators share of yield %	66.50
Value per cwt	11.03
Crop product return per acre	111.03
Miscellaneous income per acre	6.45
Gross return per acre	117.48
Direct costs per acre	
Seed	11.34
Fertilizer	21.85
Crop chemicals	11.52
Crop insurance	3.89
Drying fuel	0.37
Irrigation energy	0.02
Fuel & oil	10.27
Repairs	16.87
Custom hire	2.81
Hired labor	0.92
Operating interest	6.46
Miscellaneous	0.02
Total direct costs per acre	86.33
Return to overhead per acre	31.15
Overhead costs per acre	
Hired labor	4.40
Machinery & bldg leases	0.75
RE & pers. property taxes	0.09
Farm insurance	3.73
Utilities	2.97
Dues & professional fees	0.44
Interest	7.72
Mach & bldg depreciation	73.95
Miscellaneous	4.93
Total overhead costs per acre	98.97
Total listed costs per acre	185.30
Net return per acre	-67.83
Total direct costs per cwt	5.66
Total listed costs per cwt	12.14
Net return per cwt	-4.44
Breakeven yield per acre	24.37
Est. labor hours per acre	1.84
Lbr & mgt charge per acre	13.94
Net return over lbr & mgt	-81.76

Crop Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted according to Return to Overhead per Acre)

CONFECTIONARY SUNFLOWERS ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	31	5	8
Number of farms	24	5	5
Acres	119.90	55.66	170.92
Yield per acre (cwt)	10.14	8.13	16.55
Operators share of yield %	100.00	100.00	100.00
Value per cwt	13.99	13.32	14.33
Crop product return per acre	141.90	108.36	237.15
Miscellaneous income per acre	30.96	30.18	12.31
Gross return per acre	172.87	138.54	249.46
Direct costs per acre			
Seed	17.99	27.18	15.32
Fertilizer	22.61	30.28	21.83
Crop chemicals	14.94	8.12	14.93
Crop insurance	8.06	7.77	6.11
Drying fuel	0.76	0.00	2.51
Fuel & oil	7.88	11.37	9.49
Repairs	13.29	20.70	15.85
Custom hire	2.27	0.00	4.37
Hired labor	0.42	0.00	1.81
Land rent	46.14	48.75	44.58
Machinery & bldg leases	0.22	0.00	0.00
Operating interest	6.17	3.54	16.48
Total direct costs per acre	140.73	157.70	153.28
Return to overhead per acre	32.13	-19.16	96.17
Overhead costs per acre			
Hired labor	3.18	10.42	4.05
Machinery & bldg leases	1.38	4.21	0.02
RE & pers. property taxes	0.01	0.00	0.03
Farm insurance	1.50	2.50	1.66
Utilities	2.24	2.54	3.05
Dues & professional fees	0.82	0.35	1.52
Interest	3.15	0.83	0.93
Mach & bldg depreciation	9.56	18.70	10.65
Miscellaneous	2.82	5.16	5.54
Total overhead costs per acre	24.65	44.72	27.45
Total listed costs per acre	165.39	202.43	180.73
Net return per acre	7.48	-63.88	68.72
Total direct costs per cwt	13.88	19.39	9.26
Total listed costs per cwt	16.31	24.89	10.92
Net return per cwt	0.74	-7.86	4.15
Breakeven yield per acre	9.61	12.93	11.75
Est. labor hours per acre	2.07	0.13	3.71
Lbr & mgt charge per acre	14.25	15.75	17.96
Net return over lbr & mgt	-6.77	-79.64	50.77

Crop Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted according to Return to Overhead per Acre)

SUGAR BEETS ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	31	6	8
Number of farms	26	5	5
Acres	126.51	81.25	116.50
Yield per acre (ton)	20.29	17.95	24.36
Operators share of yield %	100.00	100.00	100.00
Value per ton	38.12	24.03	41.96
Crop product return per acre	773.48	431.28	1022.16
Miscellaneous income per acre	11.78	10.80	10.74
Gross return per acre	785.27	442.08	1032.91
Direct costs per acre			
Seed	33.67	31.03	37.98
Fertilizer	24.92	27.36	21.43
Crop chemicals	73.09	57.56	77.56
Crop insurance	14.81	12.28	9.14
Fuel & oil	23.42	29.74	24.16
Repairs	56.44	51.13	53.15
Custom hire	11.05	18.42	14.05
Hired labor	34.39	32.05	43.89
Machinery & bldg leases	1.22	2.04	0.00
Marketing	63.83	37.33	45.59
Operating interest	19.61	11.72	7.85
Miscellaneous	4.74	1.05	3.22
Total direct costs per acre	361.18	311.71	338.03
Return to overhead per acre	424.09	130.37	694.87
Overhead costs per acre			
Hired labor	25.87	24.97	37.03
Machinery & bldg leases	12.05	1.55	34.17
RE & pers. property taxes	15.16	4.96	16.70
Farm insurance	3.97	2.31	5.30
Utilities	7.47	5.32	9.76
Dues & professional fees	5.15	2.67	9.38
Interest	41.19	16.27	31.12
Mach & bldg depreciation	47.53	44.12	44.12
Miscellaneous	8.82	15.01	16.46
Total overhead costs per acre	167.21	117.18	204.03
Total listed costs per acre	528.38	428.88	542.07
Net return per acre	256.89	13.19	490.84
Total direct costs per ton	17.80	17.37	13.88
Total listed costs per ton	26.04	23.89	22.25
Net return per ton	12.66	0.74	20.15
Breakeven yield per acre	13.55	17.40	12.66
Est. labor hours per acre	9.63	4.54	11.76
Lbr & mgt charge per acre	42.63	29.35	46.29
Net return over lbr & mgt	214.26	-16.16	444.56

Crop Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted according to Return to Overhead per Acre)

SUGAR BEETS ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	87	22	16
Number of farms	61	12	12
Acres	145.77	200.44	111.74
Yield per acre (ton)	20.09	18.12	22.15
Operators share of yield %	100.00	100.00	100.00
Value per ton	39.40	36.48	42.93
Crop product return per acre	791.81	660.94	951.15
Miscellaneous income per acre	11.34	19.21	5.99
Gross return per acre	803.15	680.15	957.13
Direct costs per acre			
Seed	34.49	32.25	34.05
Fertilizer	25.97	29.72	20.95
Crop chemicals	72.04	67.01	68.07
Crop insurance	12.37	11.59	11.18
Fuel & oil	27.01	27.26	24.06
Repairs	49.89	36.10	59.69
Custom hire	20.80	27.14	19.09
Hired labor	41.69	41.70	35.30
Land rent	78.74	108.59	61.88
Machinery & bldg leases	2.69	6.62	0.00
Marketing	85.67	144.99	53.52
Operating interest	23.33	34.84	9.72
Miscellaneous	2.39	0.45	3.99
Total direct costs per acre	477.08	568.27	401.50
Return to overhead per acre	326.07	111.88	555.63
Overhead costs per acre			
Hired labor	19.16	8.47	5.09
Machinery & bldg leases	14.59	12.46	28.82
RE & pers. property taxes	0.59	0.09	0.00
Farm insurance	3.39	2.64	2.67
Utilities	5.93	6.04	5.98
Dues & professional fees	5.29	2.63	3.97
Interest	22.86	28.69	17.19
Mach & bldg depreciation	34.32	26.26	35.86
Miscellaneous	13.16	12.44	13.68
Total overhead costs per acre	119.29	99.71	113.26
Total listed costs per acre	596.37	667.98	514.77
Net return per acre	206.78	12.17	442.37
Total direct costs per ton	23.74	31.36	18.12
Total listed costs per ton	29.68	36.87	23.24
Net return per ton	10.29	0.67	19.97
Breakeven yield per acre	14.85	17.79	11.85
Est. labor hours per acre	10.65	9.04	8.94
Lbr & mgt charge per acre	47.14	38.61	59.92
Net return over lbr & mgt	159.64	-26.44	382.45

Crop Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Average of all farms reporting)

PINTO BEANS ON CASH RENTED LAND

	Average For All Farms
Number of fields	14
Number of farms	13
Acres	209.64
Yield per acre (cwt)	7.40
Operators share of yield %	100.00
Value per cwt	15.17
Crop product return per acre	112.19
Miscellaneous income per acre	42.06
Gross return per acre	154.25
Direct costs per acre	
Seed	28.08
Fertilizer	9.28
Crop chemicals	20.54
Crop insurance	12.45
Fuel & oil	8.24
Repairs	12.21
Custom hire	3.56
Hired labor	0.71
Land rent	37.56
Machinery & bldg leases	2.17
Operating interest	8.39
Miscellaneous	0.28
Total direct costs per acre	143.46
Return to overhead per acre	10.78
Overhead costs per acre	
Hired labor	6.82
Machinery & bldg leases	6.66
Farm insurance	2.20
Utilities	2.95
Dues & professional fees	0.81
Interest	4.02
Mach & bldg depreciation	16.79
Miscellaneous	1.64
Total overhead costs per acre	41.89
Total listed costs per acre	185.35
Net return per acre	-31.10
Total direct costs per cwt	19.40
Total listed costs per cwt	25.06
Net return per cwt	-4.21
Breakeven yield per acre	9.45
Est. labor hours per acre	1.27
Lbr & mgt charge per acre	16.79
Net return over lbr & mgt	-47.89

Crop Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Average of all farms reporting)

NAVY BEANS ON CASH RENTED LAND

	Average For All Farms
Number of fields	15
Number of farms	13
Acres	101.85
Yield per acre (cwt)	13.87
Operators share of yield %	100.00
Value per cwt	22.50
Crop product return per acre	312.12
Miscellaneous income per acre	45.33
Gross return per acre	357.45
Direct costs per acre	
Seed	32.02
Fertilizer	19.04
Crop chemicals	35.74
Crop insurance	17.40
Fuel & oil	7.40
Repairs	9.73
Custom hire	5.05
Hired labor	1.27
Land rent	56.40
Operating interest	6.35
Total direct costs per acre	190.41
Return to overhead per acre	167.04
Overhead costs per acre	
Hired labor	6.08
Machinery & bldg leases	3.62
Farm insurance	3.30
Utilities	1.98
Dues & professional fees	1.41
Interest	4.38
Mach & bldg depreciation	9.17
Miscellaneous	2.71
Total overhead costs per acre	32.65
Total listed costs per acre	223.06
Net return per acre	134.39
Total direct costs per cwt	13.72
Total listed costs per cwt	16.08
Net return per cwt	9.69
Breakeven yield per acre	7.90
Est. labor hours per acre	2.52
Lbr & mgt charge per acre	13.24
Net return over lbr & mgt	121.14

Crop Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted according to Return to Overhead per Acre)

SET ASIDE ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	34	7	7
Number of farms	31	6	6
Acres	58.97	59.29	52.41
Yield per acre	0.00	0.00	0.00
Operators share of yield %	100.00	100.00	100.00
Value per unit	0.00	0.00	0.00
Crop product return per acre	0.00	0.00	0.00
Miscellaneous income per acre	1.29	0.00	7.05
Gross return per acre	1.29	0.00	7.05
Direct costs per acre			
Seed	1.34	6.02	0.00
Fertilizer	0.22	1.08	0.00
Crop chemicals	1.07	0.42	0.00
Irrigation energy	0.00	0.01	0.00
Fuel & oil	5.11	6.49	2.96
Repairs	6.57	10.58	4.95
Custom hire	0.91	0.00	0.00
Operating interest	0.49	1.45	0.81
Total direct costs per acre	15.72	26.05	8.71
Return to overhead per acre	-14.43	-26.05	-1.66
Overhead costs per acre			
Hired labor	2.56	7.50	0.11
Machinery & bldg leases	1.03	0.08	0.01
RE & pers. property taxes	4.76	5.00	4.68
Farm insurance	1.84	2.43	1.54
Utilities	0.86	0.85	1.39
Dues & professional fees	0.27	0.19	0.23
Interest	7.82	5.29	15.23
Mach & bldg depreciation	6.49	6.11	4.12
Miscellaneous	0.80	0.81	0.50
Total overhead costs per acre	26.44	28.25	27.80
Total listed costs per acre	42.15	54.30	36.51
Net return per acre	-40.86	-54.30	-29.46
Total direct costs per unit	31512.96	0.00	0.00
Total listed costs per unit	84516.06	0.00	0.00
Net return per unit	-81929.14	0.00	0.00
Breakeven yield per acre	0.00	0.00	0.00
Est. labor hours per acre	1.01	1.63	0.93
Lbr & mgt charge per acre	10.53	9.24	15.75
Net return over lbr & mgt	-51.40	-63.54	-45.21

Crop Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted according to Return to Overhead per Acre)

CRP ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	34	7	8
Number of farms	33	7	7
Acres	169.18	97.63	103.01
Yield per acre	27.11	13.95	29.33
Operators share of yield %	100.00	100.00	100.00
Value per unit	1.24	0.46	1.55
Crop product return per acre	33.53	6.37	45.60
Miscellaneous income per acre	10.54	22.36	29.22
Gross return per acre	44.07	28.73	74.82
Direct costs per acre			
Crop chemicals	0.22	0.71	0.00
Irrigation energy	0.01	0.00	0.00
Fuel & oil	3.26	5.47	3.46
Repairs	5.85	14.19	5.20
Custom hire	0.14	0.85	0.00
Operating interest	1.19	4.22	0.80
Total direct costs per acre	10.67	25.44	9.45
Return to overhead per acre	33.40	3.29	65.36
Overhead costs per acre			
Hired labor	0.46	0.19	0.73
Machinery & bldg leases	0.38	0.00	0.25
RE & pers. property taxes	3.97	3.05	5.23
Farm insurance	1.25	2.15	2.46
Utilities	1.39	2.95	1.01
Dues & professional fees	0.18	0.15	0.03
Interest	12.32	7.71	16.51
Mach & bldg depreciation	8.26	3.61	6.53
Miscellaneous	1.62	5.35	1.12
Total overhead costs per acre	29.84	25.15	33.88
Total listed costs per acre	40.51	50.59	43.33
Net return per acre	3.55	-21.86	31.48
Total direct costs per unit	0.39	1.82	0.32
Total listed costs per unit	1.49	3.63	1.48
Net return per unit	0.13	-1.57	1.07
Breakeven yield per acre	24.24	61.79	9.08
Est. labor hours per acre	0.48	0.06	0.66
Lbr & mgt charge per acre	8.87	17.87	5.06
Net return over lbr & mgt	-5.31	-39.73	26.42

Crop Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Average of all farms reporting)

KENTUCKY BLUE GRASS SEED ON OWNED LAND

	Average For All Farms
Number of fields	7
Number of farms	7
Acres	79.43
Yield per acre (lb)	128.59
Operators share of yield %	100.00
Value per lb	0.63
Crop product return per acre	80.89
Miscellaneous income per acre	4.34
Gross return per acre	85.23
Direct costs per acre	
Seed	0.25
Fertilizer	29.47
Crop chemicals	13.27
Crop insurance	2.00
Fuel & oil	3.51
Repairs	5.48
Custom hire	4.76
Operating interest	0.26
Miscellaneous	1.21
Total direct costs per acre	60.21
Return to overhead per acre	25.02
Overhead costs per acre	
Hired labor	1.47
RE & pers. property taxes	4.36
Farm insurance	1.53
Utilities	0.77
Dues & professional fees	0.31
Interest	9.23
Mach & bldg depreciation	3.88
Miscellaneous	0.23
Total overhead costs per acre	21.79
Total listed costs per acre	82.01
Net return per acre	3.22
Total direct costs per lb	0.47
Total listed costs per lb	0.64
Net return per lb	0.03
Breakeven yield per acre	123.46
Est. labor hours per acre	1.14
Lbr & mgt charge per acre	10.73
Net return over lbr & mgt	-7.50

Crop Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Average of all farms reporting)

TIMOTHY GRASS SEED ON OWNED LAND

	Average For All Farms
Number of fields	14
Number of farms	11
Acres	59.86
Yield per acre (lb)	274.26
Operators share of yield %	100.00
Value per lb	0.25
Crop product return per acre	68.42
Miscellaneous income per acre	6.05
Gross return per acre	74.47
Direct costs per acre	
Seed	0.43
Fertilizer	18.08
Crop chemicals	2.75
Crop insurance	0.14
Fuel & oil	4.54
Repairs	6.46
Custom hire	2.18
Operating interest	0.71
Miscellaneous	0.05
Total direct costs per acre	35.34
Return to overhead per acre	39.13
Overhead costs per acre	
Hired labor	1.68
Machinery & bldg leases	0.12
RE & pers. property taxes	4.05
Farm insurance	1.35
Utilities	1.14
Dues & professional fees	0.12
Interest	17.95
Mach & bldg depreciation	5.09
Miscellaneous	0.36
Total overhead costs per acre	31.85
Total listed costs per acre	67.19
Net return per acre	7.28
Total direct costs per lb	0.13
Total listed costs per lb	0.24
Net return per lb	0.03
Breakeven yield per acre	245.09
Est. labor hours per acre	1.20
Lbr & mgt charge per acre	13.39
Net return over lbr & mgt	-6.12

Crop Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted according to Return to Overhead per Acre)

CORN SILAGE ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	73	14	14
Number of farms	69	14	14
Acres	41.21	52.38	45.82
Yield per acre (ton)	10.45	5.80	15.29
Operators share of yield %	100.00	100.00	100.00
Value per ton	16.16	13.80	16.97
Crop product return per acre	168.86	80.10	259.54
Miscellaneous income per acre	6.65	2.80	15.28
Gross return per acre	175.51	82.90	274.82
Direct costs per acre			
Seed	16.10	20.83	12.04
Fertilizer	21.57	25.23	20.22
Crop chemicals	13.99	12.83	9.39
Crop insurance	4.78	6.58	2.58
Irrigation energy	0.04	0.00	0.00
Fuel & oil	13.95	13.23	13.22
Repairs	27.27	24.09	31.27
Custom hire	2.12	2.24	0.40
Hired labor	0.05	0.00	0.00
Machinery & bldg leases	0.04	0.00	0.00
Utilities	0.00	0.00	0.00
Operating interest	5.27	6.66	5.94
Miscellaneous	0.93	0.13	0.00
Total direct costs per acre	106.11	111.80	95.06
Return to overhead per acre	69.40	-28.90	179.76
Overhead costs per acre			
Hired labor	12.74	18.90	13.93
Machinery & bldg leases	0.55	0.39	0.09
RE & pers. property taxes	4.17	3.53	4.34
Farm insurance	1.73	1.16	2.34
Utilities	2.38	2.60	2.61
Dues & professional fees	0.37	0.17	0.52
Interest	14.91	8.69	11.90
Mach & bldg depreciation	22.35	22.78	24.07
Miscellaneous	4.94	3.15	3.64
Total overhead costs per acre	64.15	61.36	63.44
Total listed costs per acre	170.25	173.16	158.50
Net return per acre	5.25	-90.26	116.32
Total direct costs per ton	10.16	19.27	6.22
Total listed costs per ton	16.30	29.84	10.37
Net return per ton	0.50	-15.56	7.61
Breakeven yield per acre	10.12	12.34	8.44
Est. labor hours per acre	4.36	4.78	2.92
Net return including govt. payments	5.87	-87.74	116.32
Lbr & mgt charge per acre	20.42	20.77	18.67
Net return over lbr & mgt	-14.55	-108.51	97.65

Crop Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted according to Return to Overhead per Acre)

ALFALFA HAY ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	117	26	21
Number of farms	103	21	21
Acres	77.49	100.01	75.01
Yield per acre (ton)	2.72	1.65	4.03
Operators share of yield %	100.00	100.00	100.00
Value per ton	55.66	34.95	66.56
Crop product return per acre	151.37	57.84	268.53
Miscellaneous income per acre	1.81	4.05	0.00
Gross return per acre	153.17	61.89	268.53
Direct costs per acre			
Seed	4.27	8.42	4.79
Fertilizer	13.51	17.57	11.44
Crop chemicals	0.55	1.20	0.28
Crop insurance	0.01	0.00	0.00
Irrigation energy	0.02	0.05	0.00
Fuel & oil	12.90	12.54	13.16
Repairs	28.68	28.38	26.87
Custom hire	1.26	1.59	1.68
Hired labor	0.15	0.33	0.00
Utilities	0.00	0.00	0.00
Operating interest	4.78	6.89	5.88
Miscellaneous	1.98	2.24	2.01
Total direct costs per acre	68.10	79.21	66.11
Return to overhead per acre	85.07	-17.32	202.43
Overhead costs per acre			
Hired labor	8.70	8.15	10.21
Machinery & bldg leases	0.96	0.58	1.88
RE & pers. property taxes	4.46	4.22	3.88
Farm insurance	1.89	1.51	2.01
Utilities	2.93	2.26	4.29
Dues & professional fees	0.52	0.47	0.43
Interest	15.21	9.94	14.22
Mach & bldg depreciation	-11.69	-116.22	19.64
Miscellaneous	3.24	2.02	4.50
Total overhead costs per acre	26.22	-87.07	61.07
Total listed costs per acre	94.32	-7.86	127.17
Net return per acre	58.85	69.75	141.36
Total direct costs per ton	25.04	47.87	16.39
Total listed costs per ton	34.68	-4.75	31.52
Net return per ton	21.64	42.15	35.04
Breakeven yield per acre	1.66	-0.34	1.91
Est. labor hours per acre	3.49	3.30	4.45
Lbr & mgt charge per acre	19.69	16.94	21.00
Net return over lbr & mgt	39.16	52.80	120.36

Crop Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted according to Return to Overhead per Acre)

ALFALFA HAY ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	65	12	12
Number of farms	56	11	11
Acres	57.07	63.08	61.33
Yield per acre (ton)	2.38	1.20	3.29
Operators share of yield %	100.00	100.00	100.00
Value per ton	54.77	46.48	73.66
Crop product return per acre	130.19	55.88	242.00
Miscellaneous income per acre	2.53	8.01	0.14
Gross return per acre	132.72	63.89	242.14
Direct costs per acre			
Seed	4.51	10.58	2.70
Fertilizer	10.63	10.61	10.34
Crop chemicals	0.53	2.06	0.03
Irrigation energy	0.01	0.00	0.00
Fuel & oil	12.36	11.89	12.87
Repairs	23.73	24.50	26.11
Custom hire	2.12	1.15	0.13
Hired labor	0.18	0.00	0.00
Land rent	27.13	44.61	22.30
Operating interest	3.85	3.24	6.42
Miscellaneous	0.97	0.41	1.21
Total direct costs per acre	85.99	109.05	82.11
Return to overhead per acre	46.72	-45.17	160.03
Overhead costs per acre			
Hired labor	6.56	2.64	9.75
Machinery & bldg leases	1.34	1.07	3.56
Farm insurance	1.55	0.83	2.06
Utilities	1.79	1.96	1.99
Dues & professional fees	0.69	0.89	1.18
Interest	5.74	6.25	9.22
Mach & bldg depreciation	18.86	15.98	14.83
Miscellaneous	2.26	5.37	2.29
Total overhead costs per acre	38.79	34.98	44.88
Total listed costs per acre	124.78	144.04	126.99
Net return per acre	7.93	-80.15	115.15
Total direct costs per ton	36.18	90.71	24.99
Total listed costs per ton	52.50	119.81	38.65
Net return per ton	3.34	-66.67	35.05
Breakeven yield per acre	2.23	2.93	1.72
Est. labor hours per acre	3.00	2.64	1.33
Lbr & mgt charge per acre	18.21	23.13	10.31
Net return over lbr & mgt	-10.28	-103.28	104.85

Crop Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted according to Return to Overhead per Acre)

MIXED HAY ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	32	6	6
Number of farms	32	6	6
Acres	129.74	140.82	110.00
Yield per acre (ton)	2.01	1.92	2.79
Operators share of yield %	100.00	100.00	100.00
Value per ton	32.67	22.59	45.71
Crop product return per acre	65.77	43.38	127.48
Miscellaneous income per acre	0.84	1.18	0.00
Gross return per acre	66.60	44.56	127.48
Direct costs per acre			
Seed	1.14	4.23	0.81
Fertilizer	9.84	19.52	2.97
Crop chemicals	0.22	0.87	0.00
Irrigation energy	0.02	0.00	0.12
Fuel & oil	8.89	10.74	10.61
Repairs	16.85	16.96	25.01
Custom hire	0.10	0.00	-0.00
Operating interest	1.83	6.72	0.14
Miscellaneous	1.74	1.35	1.40
Total direct costs per acre	40.62	60.38	41.05
Return to overhead per acre	25.98	-15.82	86.42
Overhead costs per acre			
Hired labor	6.01	3.77	16.57
Machinery & bldg leases	0.25	0.08	0.28
RE & pers. property taxes	3.69	3.33	3.73
Farm insurance	1.09	0.30	1.21
Utilities	1.75	1.65	1.81
Dues & professional fees	0.25	0.00	0.09
Interest	6.45	4.35	3.50
Mach & bldg depreciation	15.70	6.15	22.70
Miscellaneous	1.24	1.90	1.79
Total overhead costs per acre	36.42	21.54	51.69
Total listed costs per acre	77.04	81.92	92.75
Net return per acre	-10.43	-37.36	34.73
Total direct costs per ton	20.18	31.45	14.72
Total listed costs per ton	38.27	42.67	33.26
Net return per ton	-5.18	-19.46	12.45
Breakeven yield per acre	2.33	3.57	2.03
Est. labor hours per acre	3.57	4.04	3.99
Lbr & mgt charge per acre	16.30	17.90	12.63
Net return over lbr & mgt	-26.73	-55.26	22.11

Livestock Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted according to Return to Overhead per unit produced)

Beef Cow-Calf -- Average per Cow

	Average For All Farms		Average For Low 20%		Average For High 20%	
Number of farms	73		15		15	
	Quantity	Value	Quantity	Value	Quantity	Value
Beef Calves sold (lb)	359.90	280.21	244.78	183.20	260.32	218.22
Transferred out (lb)	99.07	75.11	133.05	103.67	84.44	65.04
Cull sales (lb)	144.33	79.68	220.77	101.79	70.58	59.07
Butchered (lb)	6.93	4.04	9.29	4.91	8.66	5.53
Less purchased (lb)	-109.58	-77.68	-252.80	-198.55	-121.69	-61.21
Less transferred in (lb)	-16.60	-12.44	-15.22	-8.52	-6.83	-6.83
Inventory change (lb)	132.53	54.76	122.21	46.02	218.60	182.25
Total production (lb)	616.58	403.68	462.08	232.53	514.07	462.07
Other income		0.24		0.00		0.00
Gross return		403.93		232.53		462.07
Direct costs						
Barley (bu.)	2.11	3.52	1.87	2.84	0.93	1.78
Corn (bu.)	1.92	4.12	1.70	5.22	0.81	1.71
Corn Silage (lb.)	2755.81	19.77	1846.12	13.85	2228.48	16.78
Hay, Alfalfa (lb.)	1203.70	23.25	1687.12	41.64	1280.05	28.49
Hay, Grass & Other (lb.)	6782.41	104.82	6935.64	143.22	3875.68	54.74
Haylage, Alfalfa (lb.)	1206.60	12.62	0.00	0.00	2971.31	21.23
Haylage, Grass & Other (lb.)	0.48	0.07	0.00	0.00	0.00	0.00
Oatlage (lb.)	158.49	1.27	0.00	0.00	683.06	5.12
Oats (bu.)	2.92	3.42	2.90	3.13	1.03	1.21
Pasture (aum)	1.57	25.99	0.46	15.09	1.61	16.78
Stover (lb.)	29.46	0.24	19.42	0.24	17.08	0.18
Wheat, Spring (bu.)	0.52	0.76	0.00	0.00	0.00	0.00
Complete Ration (lb.)	283.14	14.02	209.72	20.89	166.89	14.49
Milk Replacer (lb.)	0.08	0.06	0.00	0.00	0.00	0.00
Protein Vit Minerals (lb.)	623.83	17.65	73.24	10.70	338.57	14.03
Other feed stuffs		0.09		0.63		0.00
Breeding fees		1.50		0.32		2.73
Veterinary		21.73		17.83		20.96
Livestock supplies		6.87		7.65		7.44
Fuel & oil		5.96		7.78		2.76
Repairs		12.40		12.54		11.92
Custom hire		2.15		1.86		3.58
Hired labor		0.41		1.90		0.00
Livestock leases		3.90		18.67		0.00
Utilities		0.22		1.27		0.15
Marketing		4.65		5.40		1.51
Operating interest		7.87		18.02		0.59
Miscellaneous		0.10		0.36		0.22
Total direct costs		299.43		351.06		228.40
Return to overhead		104.50		-118.53		233.67
Overhead costs						
Hired labor		6.43		1.95		2.82
Machinery & bldg leases		0.54		0.23		0.20
RE & pers. property taxes		3.92		4.74		3.51
Farm insurance		4.06		5.68		3.77
Utilities		8.58		12.98		8.03
Dues & professional fees		0.71		0.52		1.20
Interest		19.25		25.74		24.73
Mach & bldg depreciation		22.50		30.52		28.28
Miscellaneous		3.71		5.02		2.89
Total overhead costs		69.71		87.39		75.43
Total listed costs		369.14		438.44		303.83
Net return		34.79		-205.91		158.25
Est. labor hours per unit		9.24		8.71		7.80
Labor & management charge		52.17		54.32		49.49
Net return over lbr & mgt		-17.38		-260.23		108.75
Other Information						
Number of cows		74.1		52.6		78.1
Pregnancy percentage		97.9		98.0		97.5
Pregnancy loss percentage		1.3		1.8		1.2
Culling percentage		14.1		20.3		9.9
Calving percentage		96.6		96.2		96.3
Weaning percentage		90.2		86.8		93.2
Calves sold per cow		0.71		0.68		0.55
Calf death loss percent		7.2		13.9		4.3
Average weaning weight		539		472		515
Lbs weaned/exposed female		486		409		480
Feed cost per cow		231.67		257.45		176.54
Avg wgt/Beef Calf sold		651		581		631
Avg price / cwt		77.86		74.84		83.83

Livestock Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT

All Beef Backgrounding -- Average per cwt produced

	Average For All Farms	
Number of farms	10	
	Quantity	Value
Backgnd Strs sold (lb)	275.63	215.38
Transferred out (lb)	11.57	7.91
Butchered (lb)	1.21	0.86
Less purchased (lb)	-210.59	-159.77
Less transferred in (lb)	-94.25	-72.55
Inventory change (lb)	116.43	75.93
Total production (lb)	100.00	67.77
Other income		0.00
Gross return		67.77
Direct costs		
Barley (bu.)	0.57	0.91
Corn (bu.)	1.57	3.36
Corn Silage (lb.)	458.33	3.47
Hay, Alfalfa (lb.)	8.32	0.17
Hay, Grass & Other (lb.)	773.54	15.66
Haylage, Alfalfa (lb.)	2.61	0.04
Oats (bu.)	1.18	1.40
Pasture (aum)	0.00	2.52
Wheat, Spring (bu.)	0.01	0.02
Complete Ration (lb.)	236.57	10.93
Protein Vit Minerals (lb.)	43.93	6.15
Other feed stuffs		1.48
Breeding fees		1.15
Veterinary		4.58
Livestock supplies		3.07
Fuel & oil		0.97
Repairs		1.95
Custom hire		0.41
Hired labor		0.84
Utilities		0.51
Marketing		4.26
Operating interest		3.62
Miscellaneous		0.08
Total direct costs		67.54
Return to overhead		0.23
Overhead costs		
Hired labor		1.03
RE & pers. property taxes		0.29
Farm insurance		1.00
Utilities		0.73
Dues & professional fees		0.08
Interest		1.62
Mach & bldg depreciation		1.29
Miscellaneous		1.28
Total overhead costs		7.32
Total listed costs		74.86
Net return		-7.09
Est. labor hours per unit		0.35
Labor & management charge		4.76
Net return over lbr & mgt		-11.85
Other Information		
No. purchased or trans in		168
Number sold or trans out		113
Percentage death loss		0.7
Avg. daily gain (lbs)		0.71
Lbs of conc / lb of gain		5.53
Lbs of feed / lb of gain		14.89
Feed cost per cwt of gain		46.12
Feed cost/head sold+trans		125.13
Average purchase weight		580
Average sales weight		797
Avg purch price / cwt		75.87
Avg sales price / cwt		78.14

Livestock Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT

All Beef Finish Calves -- Average per cwt produced

	Average For All Farms	
Number of farms		6
	Quantity	Value
Fin Str Calf sold (lb)	259.59	172.31
Transferred out (lb)	6.26	3.75
Butchered (lb)	1.22	0.77
Less purchased (lb)	-98.27	-71.60
Less transferred in (lb)	-66.45	-49.35
Inventory change (lb)	-2.35	-12.92
Total production (lb)	100.00	42.96
Other income		0.00
Gross return		42.96
Direct costs		
Barley (bu.)	2.75	4.85
Corn (bu.)	7.88	14.38
Corn Silage (lb.)	425.48	3.19
Hay, Alfalfa (lb.)	75.08	0.75
Hay, Grass & Other (lb.)	300.34	5.38
Haylage, Alfalfa (lb.)	300.34	7.51
Oats (bu.)	0.13	0.17
Pasture (aum)	0.50	3.75
Complete Ration (lb.)	63.20	6.18
Protein Vit Minerals (lb.)	38.29	5.85
Veterinary		3.52
Livestock supplies		0.22
Fuel & oil		0.41
Repairs		1.20
Custom hire		0.11
Marketing		4.85
Operating interest		0.09
Total direct costs		62.43
Return to overhead		-19.47
Overhead costs		
Hired labor		0.24
RE & pers. property taxes		0.27
Farm insurance		0.45
Utilities		0.32
Interest		4.02
Mach & bldg depreciation		2.51
Miscellaneous		0.14
Total overhead costs		7.96
Total listed costs		70.38
Net return		-27.43
Est. labor hours per unit		0.92
Labor & management charge		4.79
Net return over lbr & mgt		-32.22
Other Information		
No. purchased or trans in		74
Number sold or trans out		76
Percentage death loss		2.0
Avg. daily gain (lbs)		1.34
Lbs of conc / lb of gain		6.79
Lbs of feed / lb of gain		13.47
Feed cost per cwt of gain		52.02
Feed cost/head sold+trans		182.73
Average purchase weight		536
Average sales weight		932
Avg purch price / cwt		72.87
Avg sales price / cwt		66.38

Livestock Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT

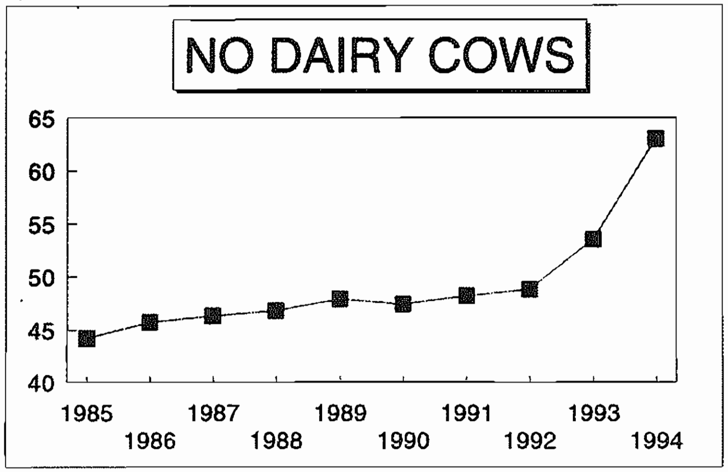
Dairy Steers -- Average per cwt produced

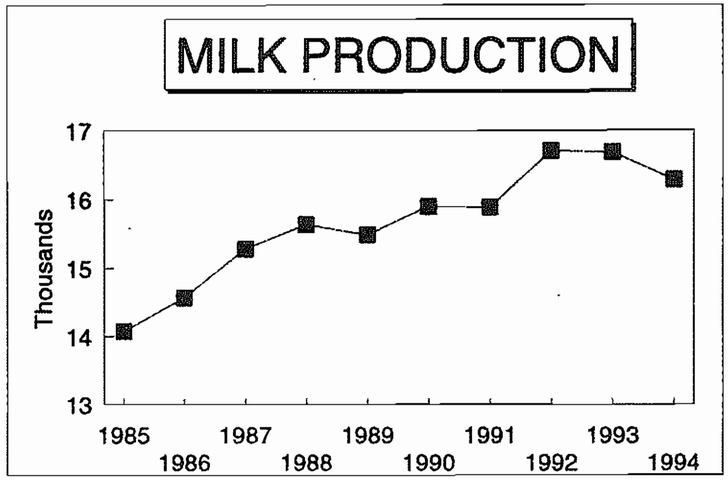
	Average For All Farms	
Number of farms	14	
	Quantity	Value
Dairy Steers sold (lb)	130.83	85.30
Butchered (lb)	1.85	1.16
Less purchased (lb)	-97.86	-76.70
Less transferred in (lb)	-3.57	-3.57
Inventory change (lb)	68.75	39.82
Total production (lb)	100.00	46.01
Other income		0.00
Gross return		46.01
Direct costs		
Barley (bu.)	0.76	1.39
Corn (bu.)	4.05	9.16
Corn Silage (lb.)	61.96	0.51
Hay, Alfalfa (lb.)	41.45	1.29
Hay, Grass & Other (lb.)	227.90	4.74
Oats (bu.)	0.59	0.70
Pasture (aum)	0.03	0.13
Complete Ration (lb.)	239.47	7.98
Milk Replacer (lb.)	0.76	0.52
Protein Vit Minerals (lb.)	26.93	3.75
Other feed stuffs		0.06
Breeding fees		0.08
Veterinary		1.10
Livestock supplies		0.99
Fuel & oil		1.06
Repairs		2.14
Custom hire		1.04
Hired labor		0.11
Machinery & bldg leases		0.07
Livestock leases		1.03
Utilities		0.27
Marketing		0.69
Operating interest		0.82
Total direct costs		39.63
Return to overhead		6.38
Overhead costs		
Hired labor		0.63
Machinery & bldg leases		0.08
RE & pers. property taxes		0.22
Farm insurance		0.36
Utilities		1.80
Dues & professional fees		0.06
Interest		1.86
Mach & bldg depreciation		1.65
Miscellaneous		0.99
Total overhead costs		7.66
Total listed costs		47.29
Net return		-1.29
Est. labor hours per unit		0.20
Labor & management charge		2.50
Net return over lbr & mgt		-3.78
Other Information		
No. purchased or trans in		86
Number sold or trans out		52
Percentage death loss		5.2
Avg. daily gain (lbs)		1.42
Lbs of conc / lb of gain		5.49
Lbs of feed / lb of gain		8.42
Feed cost per cwt of gain		30.24
Feed cost/head sold+trans		161.20
Average purchase weight		361
Average sales weight		697
Avg purch price / head		282.68
Avg sales price / cwt		65.20

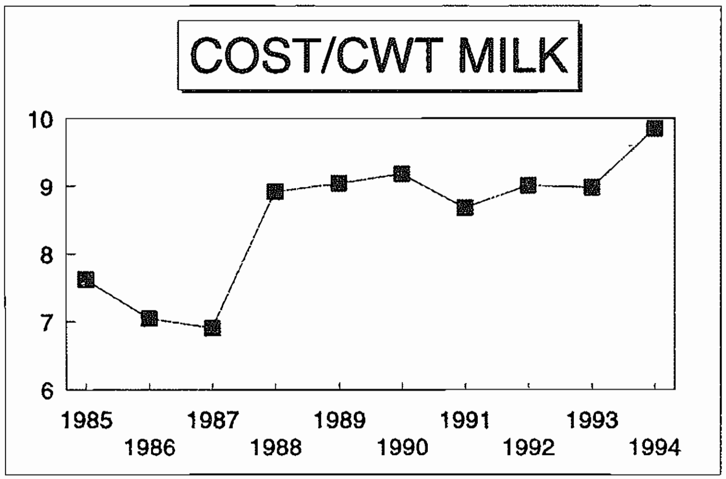
Livestock Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted according to Return to Overhead per head)

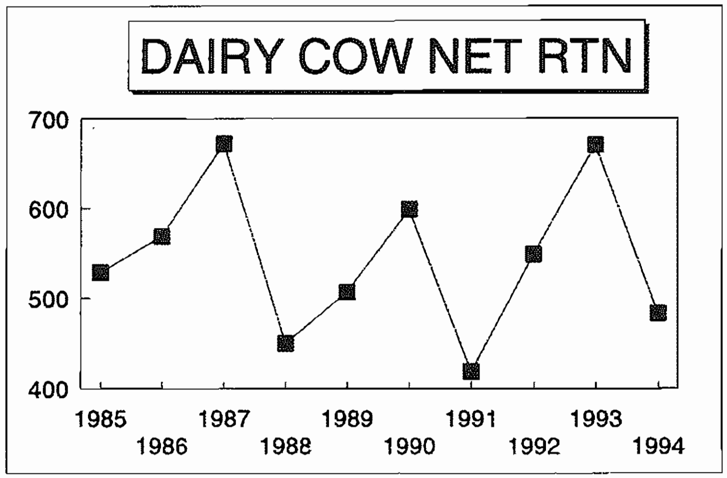
Dairy -- Average per Cow

	Average For All Farms		Average For Low 20%		Average For High 20%	
Number of farms	82		16		16	
	Quantity	Value	Quantity	Value	Quantity	Value
Milk sold (lb)	16070.02	2087.18	14066.76	1807.85	18317.62	2400.73
Milk used in home (lb)	51.82	6.12	41.16	5.01	92.50	9.37
Milk fed to animals (lb)	169.47	11.44	151.39	12.38	256.87	12.12
Dairy Calves sold (hd)	0.12	26.04	0.11	19.61	0.09	24.46
Transferred out (hd)	0.54	77.10	0.38	39.82	0.67	90.19
Cull sales (hd)	0.28	148.38	0.27	143.80	0.31	181.56
Butchered (hd)	0.01	4.80	0.01	3.51	0.01	6.26
Less purchased (hd)	-0.10	-107.48	-0.26	-309.02	-0.01	-5.71
Less transferred in (hd)	-0.27	-215.37	-0.21	-197.33	-0.31	-244.75
Inventory change (hd)	0.07	67.10	0.16	165.52	-0.03	15.16
Total production		2105.30		1691.15		2489.39
Other income		1.52		0.89		3.27
Gross return		2106.82		1692.03		2492.66
Direct costs						
Barley (bu.)	13.70	24.15	16.03	26.22	14.96	29.35
Corn (bu.)	46.22	102.40	28.30	59.89	51.96	113.84
Corn Silage (lb.)	7623.72	58.23	10071.63	75.46	6220.92	45.12
Hay, Alfalfa (lb.)	2228.74	52.90	1659.46	45.08	2257.03	49.34
Hay, Grass & Other (lb.)	4209.50	116.68	4353.59	115.13	3462.41	104.46
Haylage, Alfalfa (lb.)	4594.76	83.14	4828.19	89.87	6523.31	124.47
Haylage, Grass & Other (lb.)	18.32	0.32	0.00	0.00	0.00	0.00
Oats (bu.)	8.32	9.60	8.57	9.41	3.55	4.67
Pasture (aum)	0.11	4.52	0.04	1.54	0.00	1.13
Stover (lb.)	17.71	0.89	0.00	0.00	0.00	0.86
Wheat, Spring (bu.)	0.21	0.67	0.00	0.00	0.75	2.40
Complete Ration (lb.)	2308.08	198.48	3134.22	281.24	1125.75	96.17
Protein Vit Minerals (lb.)	1221.08	188.08	844.48	164.16	1799.70	242.53
Other feed stuffs		1.12		0.43		0.00
Breeding fees		19.17		20.95		23.60
Veterinary		55.60		67.33		59.36
Livestock supplies		113.54		97.91		133.30
Fuel & oil		19.20		27.88		19.15
Repairs		64.21		69.99		63.65
Custom hire		40.07		32.56		40.30
Hired labor		4.24		1.03		8.03
Machinery & bldg leases		2.44		9.40		0.00
Livestock leases		20.47		65.68		4.20
Utilities		4.47		5.98		2.97
Marketing		43.10		53.15		29.07
Operating interest		16.33		30.74		3.72
Miscellaneous		1.62		0.00		0.54
Total direct costs		1245.63		1351.02		1202.24
Return to overhead		861.20		341.01		1290.42
Overhead costs						
Hired labor		85.64		76.91		126.89
Machinery & bldg leases		24.89		35.33		8.21
RE & pers. property taxes		6.58		6.80		7.54
Farm insurance		16.33		18.82		15.49
Utilities		53.55		56.52		64.66
Dues & professional fees		4.59		4.34		2.49
Interest		73.04		75.08		52.32
Mach & bldg depreciation		71.13		81.06		70.00
Miscellaneous		29.73		23.05		24.21
Total overhead costs		365.48		377.90		371.82
Total listed costs		1611.10		1728.92		1574.05
Net return		495.72		-36.89		918.60
Est. labor hours per unit		28.75		45.28		32.48
Labor & management charge		128.72		162.23		133.46
Net return over lbr & mgt		367.00		-199.12		785.14
Other Information						
Avg. number of Cows		59.9		56.9		74.4
Milk produced per Cow		16291		14259		18667
Percent butterfat in milk		3.2		2.8		3.3
Culling percentage		27.7		26.9		31.3
Lbs. milk/lb grain & conc.		2.3		2.2		2.8
Feed cost per cwt of milk		5.16		6.09		4.36
Feed cost per Cow		841.19		868.44		814.36
Avg. milk price per cwt.		12.99		12.85		13.11


NO DAIRY COWS
65
60
55
50
45
40
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994


MILK PRODUCTION
Thousands
17
16
15
14
13
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994


COST/CWT MILK
10
9
8
7
6
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994


DAIRY COW NET RTN
700
600
500
400
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994

Livestock Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted according to Return to Overhead per head)

Dairy and Repl Heifers -- Average per Cow

	Average For All Farms		Average For Low 20%		Average For High 20%	
Number of farms	64		13		13	
	Quantity	Value	Quantity	Value	Quantity	Value
Milk sold (lb)	15940.42	2069.01	14164.16	1798.78	18086.89	2371.22
Milk used in home (lb)	58.95	6.91	40.00	4.46	100.97	10.35
Milk fed to animals (lb)	206.04	13.57	217.32	18.16	271.83	19.25
Dairy Calves sold (hd)	0.43	113.87	0.35	78.67	0.45	137.22
Transferred out (hd)	1.02	329.95	1.14	341.86	1.02	378.22
Cull sales (hd)	0.28	156.57	0.33	174.51	0.29	161.51
Butchered (hd)	0.02	9.42	0.02	14.46	0.02	10.62
Less purchased (hd)	-0.06	-52.74	-0.03	-21.17	-0.00	-3.37
Less transferred in (hd)	-0.95	-315.51	-1.08	-327.80	-0.94	-364.34
Inventory change (hd)	0.06	55.95	0.03	-42.92	0.10	137.99
Total production		2386.99		2039.02		2858.68
Other income		1.57		0.00		3.97
Gross return		2388.56		2039.02		2862.64
Direct costs						
Barley (bu.)	16.26	28.62	10.80	18.55	16.12	29.42
Corn (bu.)	45.29	99.04	35.70	71.63	53.13	115.35
Corn Silage (lb.)	11849.58	92.60	15259.71	128.33	13781.77	109.47
Hay, Alfalfa (lb.)	3427.46	69.53	1609.80	45.31	5606.82	114.79
Hay, Grass & Other (lb.)	5712.62	147.64	8568.10	222.64	5132.18	126.82
Haylage, Alfalfa (lb.)	5880.21	104.68	4457.32	71.90	6395.84	125.50
Oats (bu.)	10.99	12.32	15.98	18.42	0.43	0.48
Pasture (aum)	0.22	9.35	0.34	5.88	0.00	2.90
Stover (lb.)	35.57	0.52	0.00	0.00	0.00	0.00
Wheat, Spring (bu.)	0.27	0.87	0.00	0.00	0.91	2.92
Complete Ration (lb.)	2985.05	258.59	5081.35	362.14	1649.89	148.02
Milk (lb.)	58.48	6.50	49.41	5.86	104.39	11.77
Protein Vit Minerals (lb.)	1370.84	207.45	558.41	119.57	2274.27	303.39
Other feed stuffs		0.84		0.00		1.07
Breeding fees		22.43		21.39		26.47
Veterinary		59.33		67.13		62.64
Livestock supplies		123.29		100.78		137.67
Fuel & oil		20.85		26.72		22.40
Repairs		64.83		86.68		66.33
Custom hire		54.32		33.60		36.23
Hired labor		6.23		0.52		9.96
Machinery & bldg leases		0.95		0.00		0.32
Livestock leases		24.72		98.27		10.00
Utilities		5.36		0.00		7.48
Marketing		32.97		42.28		31.85
Operating interest		16.18		29.70		5.57
Miscellaneous		1.93		0.00		0.00
Total direct costs		1471.92		1577.28		1508.83
Return to overhead		916.64		461.74		1353.82
Overhead costs						
Hired labor		76.34		87.47		110.21
Machinery & bldg leases		8.99		37.74		1.04
RE & pers. property taxes		7.17		7.14		8.29
Farm insurance		18.80		18.86		19.51
Utilities		58.65		60.69		69.38
Dues & professional fees		3.13		5.26		5.99
Interest		68.61		71.25		54.02
Mach & bldg depreciation		69.22		51.92		75.82
Miscellaneous		32.76		26.26		27.73
Total overhead costs		343.68		366.59		372.00
Total listed costs		1815.60		1943.88		1880.83
Net return		572.96		95.14		981.82
Est. labor hours per unit		35.48		35.46		30.53
Labor & management charge		168.90		205.17		175.25
Net return over lbr & mgt		404.07		-110.02		806.57
Other Information						
Avg. number of Cows		59.3		55.2		75.4
Milk produced per Cow		16205		14421		18460
Percent butterfat in milk		3.2		3.1		3.3
Culling percentage		28.3		33.0		28.7
Lbs. milk/lb grain & conc.		2.0		1.7		2.4
Feed cost per cwt of milk		6.41		7.42		5.92
Feed cost per Cow		1038.55		1070.22		1091.91
Avg. milk price per cwt.		12.98		12.70		13.11

Livestock Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT
(Farms sorted according to Return to Overhead per head)

Dairy Replacement Heifers -- Average per head sold/trans

	Average For All Farms		Average For Low 20%		Average For High 20%	
Number of farms	65		13		13	
	Quantity	Value	Quantity	Value	Quantity	Value
Replacements sold (hd)	0.56	157.82	0.45	79.79	0.50	260.41
Transferred out (hd)	0.44	331.25	0.55	269.45	0.50	393.37
Cull sales (hd)	0.00	2.94	0.00	0.00	0.02	18.12
Butchered (hd)	0.01	8.08	0.01	7.95	0.03	27.58
Less purchased (hd)	-0.06	-47.22	-0.06	-69.15	-0.16	-122.11
Less transferred in (hd)	-0.82	-90.17	-0.91	-96.91	-0.69	-72.08
Inventory change (hd)	0.07	54.96	-0.11	-60.97	0.36	303.23
Total production (hd)	0.00	417.66	0.00	130.15	0.00	808.52
Other income		0.00		0.00		0.00
Gross return		417.66		130.15		808.52
Direct costs						
Barley (bu.)	5.63	9.53	3.24	5.44	8.96	15.13
Corn (bu.)	9.57	21.52	16.04	35.95	10.32	20.00
Corn Silage (lb.)	5694.88	44.79	7059.57	53.30	6694.74	60.44
Corn, Ear (lb.)	51.19	0.05	0.00	0.00	315.79	0.29
Hay, Alfalfa (lb.)	1444.37	25.81	961.70	25.35	2414.74	46.20
Hay, Grass & Other (lb.)	3100.68	72.90	3965.96	96.96	2694.74	63.67
Haylage, Alfalfa (lb.)	927.92	16.86	1400.00	25.45	1408.00	22.41
Oats (bu.)	3.69	4.15	3.42	3.95	3.26	3.80
Pasture (aum)	0.10	4.53	0.03	4.69	0.03	2.53
Pasture, Intensive (aum)	0.05	0.36	0.00	0.00	0.32	2.21
Stover (lb.)	16.38	0.17	0.00	0.00	0.00	0.00
Complete Ration (lb.)	784.56	69.49	520.43	50.81	705.77	81.75
Milk (lb.)	75.76	8.41	100.82	10.41	162.92	18.77
Milk Replacer (lb.)	0.22	0.09	0.00	0.00	0.00	0.00
Protein Vit Minerals (lb.)	236.38	41.55	239.65	46.45	376.72	61.41
Breeding fees		2.89		1.54		3.09
Veterinary		11.50		8.79		8.90
Livestock supplies		13.26		9.23		20.62
Fuel & oil		3.91		4.00		5.40
Repairs		12.82		13.79		18.02
Custom hire		3.31		5.63		2.40
Hired labor		1.08		0.00		1.00
Machinery & bldg leases		0.04		0.00		0.23
Livestock leases		1.64		0.00		0.00
Utilities		0.90		0.00		1.35
Marketing		4.16		0.27		1.04
Operating interest		2.94		7.13		2.13
Total direct costs		378.65		409.14		462.77
Return to overhead		39.01		-278.99		345.74
Overhead costs						
Hired labor		16.04		11.94		26.81
Machinery & bldg leases		1.61		0.67		0.42
RE & pers. property taxes		1.40		1.51		1.77
Farm insurance		3.40		2.91		4.85
Utilities		11.61		11.71		18.49
Dues & professional fees		0.54		0.04		1.06
Interest		12.01		10.57		20.35
Mach & bldg depreciation		13.54		20.45		17.56
Miscellaneous		6.31		3.84		7.89
Total overhead costs		66.46		63.65		99.19
Total listed costs		445.11		472.79		561.97
Net return		-27.45		-342.64		246.55
Est. labor hours per unit		6.95		8.52		11.66
Labor & management charge		31.74		40.35		48.51
Net return over lbr & mgt		-59.19		-382.99		198.04
Other Information						
No. purchased or trans in		40		35		31
Number sold or trans out		45		36		37
Percentage death loss		3.6		5.3		0.5
Feed cost/head sold+trans		320.21		358.77		398.60
Avg. purchase weight		350		242		750
Avg. sales weight		104		13		323
Avg. purch price / head		735.86		1083.33		743.59
Avg. sales price / head		280.58		176.90		517.55

Livestock Enterprise Analysis, 1994
NORTHWEST TECHNICAL COLLEGE
FARM BUSINESS MANAGEMENT

Hogs, Farrow To Finish -- Average per cwt produced

	Average For All Farms	
Number of farms	7	
	Quantity	Value
Raised Hogs sold (lb)	95.28	41.16
Transferred out (lb)	0.06	0.02
Cull sales (lb)	2.26	0.47
Butchered (lb)	0.73	0.27
Less purchased (lb)	-1.44	-1.16
Inventory change (lb)	3.11	-4.98
Total production (lb)	100.00	35.78
Other income		0.00
Gross return		35.78
Direct costs		
Barley (bu.)	0.62	1.20
Corn (bu.)	1.83	4.88
Oats (bu.)	0.06	0.07
Complete Ration (lb.)	56.76	7.23
Protein Vit Minerals (lb.)	21.53	9.16
Veterinary		1.18
Livestock supplies		0.93
Fuel & oil		0.66
Repairs		1.57
Custom hire		0.21
Hired labor		1.72
Utilities		0.19
Marketing		0.02
Operating interest		2.30
Total direct costs		31.31
Return to overhead		4.47
Overhead costs		
Hired labor		1.84
Machinery & bldg leases		0.04
RE & pers. property taxes		0.37
Farm insurance		0.31
Utilities		0.77
Dues & professional fees		0.11
Interest		1.25
Mach & bldg depreciation		1.39
Miscellaneous		0.57
Total overhead costs		6.64
Total listed costs		37.95
Net return		-2.17
Est. labor hours per unit		0.52
Labor & management charge		1.84
Net return over lbr & mgt		-4.01
Other Information		
Average number of sows		58.4
Litters farrowed		110
Litters per sow		1.89
Litters per crate		8.14
Pigs born per litter		9.96
Pigs weaned per litter		8.77
Pigs weaned per sow		16.78
Number sold per litter		7.99
Lbs of feed / lb of gain		2.13
Feed cost / cwt. of gain		22.53
Feed cost per litter		370.80
Avg wgt/Raised Hog sold		196
Avg price / cwt		43.20

**MONEY SPENT BY THE AVERAGE
NORTHWESTERN MINNESOTA FARMER**

SUMMARY BY YEARS

	1990	1991	1992	1993	1994
TO OTHER FARMERS, for livestock and custom work	$17092	$ 8217	$10622	$ 13205	$ 8761
TO THE AGRIBUSINNESS COMMUNITY for fertilizer, chemicals, feed, seed, fuel, repairs and supplies	86620	85471	99785	103359	100698
FOR EXTRA LABOR	6338	7240	9209	9514	9112
FOR SUPPORT OF LOCAL GOVERNMENT property taxes	2669	2426	2717	2877	2643
FOR UTILITIES telephone, electricity, water	2303	2422	2689	3009	3588
FOR USE OF OTHER PEOPLES CAPITAL interest and cash rent	38161	41834	44478	43424	43258
FOR FARM EQUIPMENT farm power and machinery	17096	14283	15465	24794	18877
FOR REAL ESTATE purchases and improvements	9275	9237	11480	11763	12682
TOTAL FARM PURCHASES	**$179554**	**$171130**	**$196445**	**$211945**	**$199619**
HOUSEHOLD AND PERSONAL EXPENSE for food, clothing, furnishings, education, contributions, medical, gifts, recreation and investments	36117	36217	40397	41844	34380
TOTAL MONEY SPENT BY AN AVERAGE FARMER WITHIN THE COMMUNITY OR SERVICE AREA	**$215671**	**$207347**	**$236842**	**$253789**	**$233999**

PROGRAM INFORMATION

Farm Business Management education has been a part of agriculture education programs in Minnesota since 1952. From the early cooperative efforts of the State Department of Agriculture Education (University of Minnesota), the program has expanded to serve over 6000 farm families each year in six farm management areas. Programs are now administered and managed by the Minnesota Technical College System through Technical Colleges and local school districts.

The Farm Business Management Program is an educational program that is designed to help farm families achieve their farm business and family goals. This is done through improved management organization and efficiency of their farm operations. This purpose has not changed over the years.

To accomplish these purposes, programs has been organized to conform to the following guidelines:

1. *Farm families enroll in a specific management course.*
2. *Each course has a specific objective and units of instruction to meet the objective.*
3. *Courses are offered in sequence and farmers are expected to enroll in the first of the sequence of courses.*
4. *There is continuity to each course. Each leads to the next course in the sequence.*
5. *Instruction occurs both in the classroom and on the farm with the farm family.*

Programs organize their curriculum around the same central theme. They are:

1. *Level 1 - Introduction to Farm System Management*
2. *Level 2 - Farm System Analysis and Evaluation*
3. *Level 3 - Interpreting and Modifying Farm System Management Plans*
4. *Level 4 - Farm System Trends and Projections*
5. *Level 5 - Integrating Current Information into Farm System Plans*
6. *Level 6 - Examining the Context of Farm System Management Plans*

The programs became course/credit based in FY92. Each individual enrollee completes a needs assessment with the instructor, after which the enrollee registers for classes and course work to meet these needs. A typical farm business enrollee registers for 15 credits per year. The purpose of this effort is to more adequately address the needs of the individual farmer, making enrollment even more beneficial.

Like most educational programs, members benefit from the instruction in relation to how much effort they put into study. Some farmers have benefitted more and

some less, depending upon how seriously they studied the results of their business analysis and the kind of decisions they made as a result of their analysis.

The farm business and enterprise analysis format allocates all specific and general farm expenses to each farm enterprise. A set of tables, the Table 200 series, has been integrated to provide a more uniform Profit & Loss format which separates cash and accrual transactions, and easier to understand measures of Profitability, Liquidity and Solvency. The allocation of all costs and the introduction of the new tables makes the analysis a useful report to be used for long range planning, short term cash purchase planning and cash flow projections.

SCHOOLS/COLLEGES PARTICIPATING

This report deals with farmers enrolled at 16 school/college sites in Northwestern Minnesota. A list of cooperating institutions and instructors follows:

School/College	Instructor
Barnesville	Ron Salber
Baudette	Gerald Ausmus
NTC - Bemidji	Jim Sackett
	Steve Ziegler
NTC - Detroit Lakes	Mark Berg
NTC - Detroit Lakes (Frazee)	Paul Ramsey
NTC - East Grand Forks	Ron Dvergsten
Fergus Falls	Lance Brower
NTC - Fertile	Carol Kleppe
Fosston	Doug Fjerstad
Hawley	Dennis Olsen
NTC - Karlstad, Greenbush	Lynn Carlson
Mahnomen, Ulen	Mike Lockhart
NTC - Moorhead	Rick Morgan
	Greg Tullis
Red Lake Falls	Greg Kalinoski
Roseau	Duane Jaenicke
NTC - Thief River Falls	Bob Bollesen
	Danie Packard

The analysis of records and preparation of this report is done under the direction of Tom Risdal, Regional Dean of Management Education at NTC-Thief River Falls. Directing in a supervisory capacity are: Dr. Ray Cross, CEO; Dr. Orley Gunderson, Campus President, Thief River Falls; John Murray, Program Manager, Minnesota Technical College Systems and Dr. Edgar Persons, Chairman, Ag. Education Division, University of Minnesota. The FINPACK computer program from the Center for Farm Financial Management at the University of Minnesota in St. Paul was used for data processing. 548 farm records were processed; 377 farms are included in the averages.

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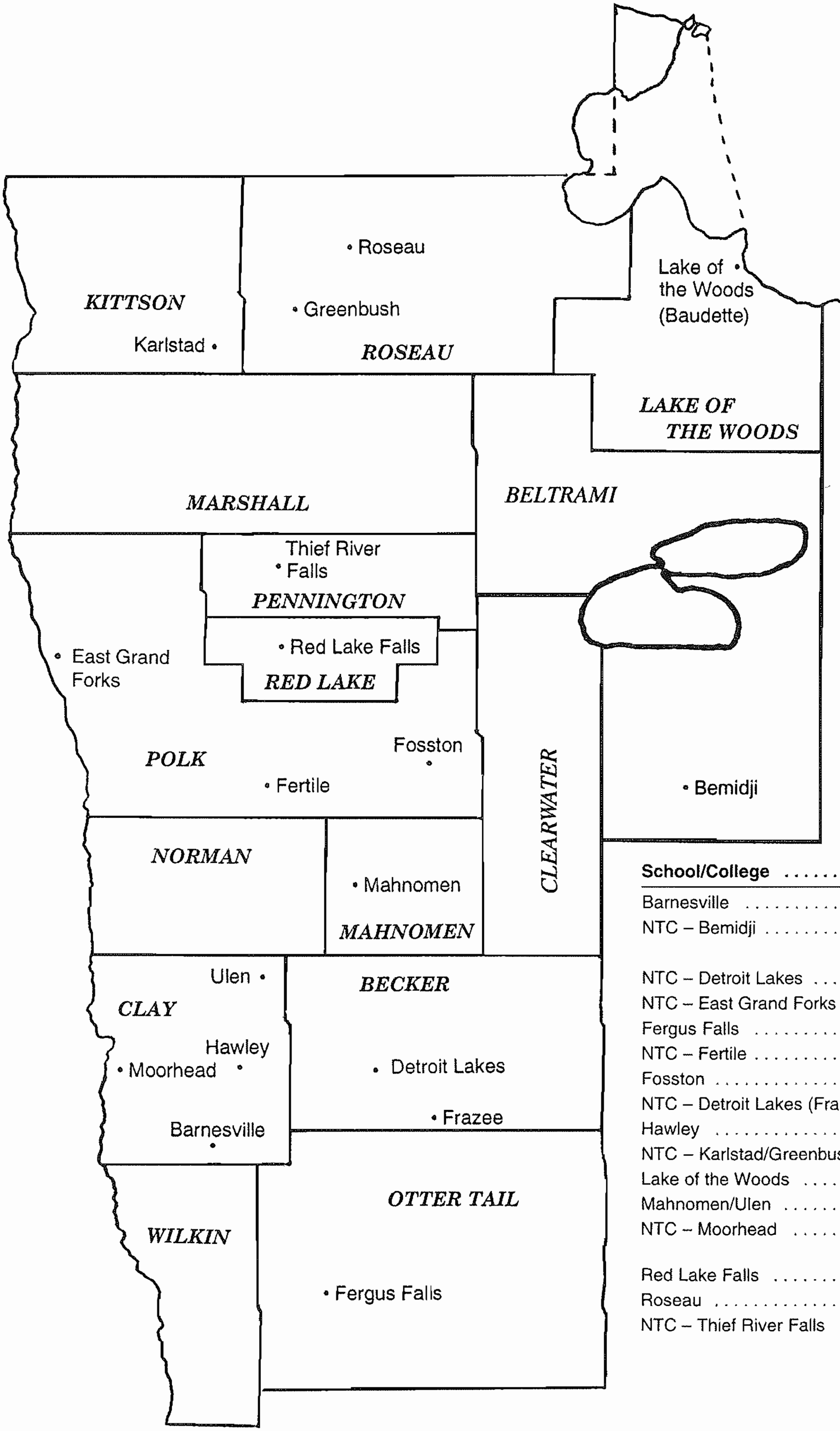
LOOK TO

TECHNICAL EDUCATION

FOR YOUR FUTURE IN

MINNESOTA



FARM BUSINESS MANAGEMENT PROGRAMS

Northwestern Minnesota

School/College	Instructor
Barnesville	Ron Salber
NTC – Bemidji	Jim Sackett Steve Ziegler
NTC – Detroit Lakes	Mark Berg
NTC – East Grand Forks	Ron Dvergsten
Fergus Falls	Lance Brower
NTC – Fertile	Carol Kleppe
Fosston	Doug Fjerstad
NTC – Detroit Lakes (Frazee)	Paul Ramsey
Hawley	Dennis Olsen
NTC – Karlstad/Greenbush/Lancaster	Lynn Carlson
Lake of the Woods	Gerald Ausmus
Mahnomen/Ulen	Mike Lockhart
NTC – Moorhead	Rick Morgan Greg Tullis
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