

*1969 Annual Report*

# **FARM MANAGEMENT PROGRAM NORTHEASTERN MINNESOTA**

**In Cooperation with**

**Minnesota Department of Education  
Vocational Division**

**and**

**Agricultural Education Department  
University of Minnesota  
Institute of Agriculture**

**and**

**Duluth Area Institute of Technology  
Duluth, Minnesota**

**April, 1970**



1969 REPORT OF THE VOCATIONAL AGRICULTURE FARM MANAGEMENT  
PROGRAM IN NORTHEASTERN MINNESOTA

Rodger Palmer -- Vocational Agriculture Program Coordinator

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## INTRODUCTION

The Duluth Area Institute of Technology, in cooperation with the University of Minnesota and the Vocational Division of the Minnesota State Department of Education, is charged with the responsibility for operation and maintenance of the Vocational Agriculture Farm Management Program in Northeastern Minnesota. This 1969 report represents the fourteenth annual report for this area.

The main purpose of the program of farm record analysis are; (1) To aid individual farmers in the study of their farm business through analysis reports; (2) To provide case study materials that can be used by farmers and farm groups in the study of farm management problems; (3) To provide information related to the adaptability and success of various farm enterprises in the area; (4) To provide a basis for determining the possibilities of encouraging or discouraging new agricultural enterprises for the area; (5) To secure information on farm management practices that tend to increase farm income; and (6) To provide a profile of agricultural production and income in the area.

The report and analysis of records were completed under the direction of Rodger Palmer, Area Vo Ag Coordinator at the Duluth Area Institute of Technology. Clerical assistance was provided by Pat Meierhofer, Barbara Floodstrom, and Dair Nichols, and his clerical class.

Directing locally in a supervisory capacity were: Dr. Donald H. Peckenpaugh, Superintendent of Duluth Public School and Mr. Robert Bergstrom, Director of the Duluth Area Institute of Technology, and Dr. James Flis, Assistant Director, Adult Education.

Cooperating agencies were represented by: Mr. Odell Barduson and Mr. Robert Van Tries of the Vocational Division, State Department of Education, and Dr. Milo J. Peterson and Dr. Edgar Persons of the Agricultural Education Department of the University of Minnesota. Special acknowledgement is made of the excellent professional assistance rendered by Dr. Truman Nodland of the University Agricultural Economics Department.

We wish to express also, our appreciation to Mr. Arthur Vieira, Printing Instructor, Duluth Public Schools and to his class for their help in the publishing of this report.

Special thanks are also extended to William Guelker, Vo Ag Coordinator from Staples. Preliminary analysis work was done at Staples again this year on account books from the Staples area.

This report deals with farmers enrolled in adult programs of schools and county agent programs shown below. Eighty-one (81) records were submitted for analysis with averages of seventy-four (74) included in this report. Several books came in too late for an analysis.

1969 Records for analysis were received from:

No. of		School	
Farmers		Instructors	
12	Ken Ostlund	12	Leo Fenske (MDTA Instructor)
14	Otto Lee (County agent), Robert Borchardt	14	Bill Ladwig
2	Baudette	2	Ed Takala
15	Bagley Bend	16	Al Hanson
2	Embarrass	13	Lennen Naley, Wayne Haglin, Tom Kafer
16	Pine City	7	John Grenier
13	Staples		
	Wadena		

The cooperating centers submitted records from nine (9) counties for analysis with some centers having participating farmers in more than one county. The number of farm records submitted from each county is shown below:

Beltrami	14	Ottertail	2
Cass	4	Pine	16
Clearwater	12	St. Louis	2
Lake of Woods	2	Todd	26
		Wadena	3
Total	81		

Records this year, for the 6th year, were analyzed by electronic data processing with the work being done by Agriculture Records Cooperative at Madison, Wisconsin.

Little change was made in the analysis form this year. The electronic processing is near perfect. The two main sources of errors in arriving at an analysis for a farmers account book fall in these areas; (1) Improper copying at the record center from the book to the computer work sheets, and (2) Improper information or missing information in the account book.

The records submitted included farm inventories, cash receipts, and expenses. Also included were feed consumed by various classes of livestock, family living from the farm, household and personal expenses and receipts, and the operators liabilities and assets other than farm capital.

## FARM INVENTORIES

The average capital investment per farm varied from \$6,000 to \$173,000. The average investment for all farms included in this report and for the high and low groups operators labor earnings is shown in Table 1.

## FARM EARNINGS

Operators earnings are a measure of relative financial success of a farmer as compared with other farmers and represents the returns above all farm expenses and a charge for the use of farm capital and family labor.

There are two methods of computing labor earnings. Tables 2A and 2B show the earnings statement on a cash basis while Table 3 shows the earnings on an enterprise or accrual basis. The principal difference in the two statements is in the method of handling the net increase or decrease in farm capital. In the cash statement, the net increase or decrease in farm capital is entered as one item. In the enterprise statement the net change in the inventory has been included in each enterprise in order to compute "total returns and net increases" or "total expenses and net decreases" by enterprises.

## NON-FARM INCOME

Numerous Northeastern Minnesota farmers, in addition to their regular farm income, are earning additional income in full or part-time work not related to farming. Records submitted for this report cannot be considered as completely reliable in respect to non-farm income as this entry can be frequently omitted from the farm account books. However 50 farms in the report showed outside income ranging from a low of \$9 to a high of \$17,531 per farm involved. Non-farm income is not included in this report as a part of farm labor earnings.





Table 1 - continued		14 High	14 Low		
1	Size of Farm - Total Acres	415.1	263.9		
2	- Tillable Acres	234.8	136.5		
3	Work units - Crops	104.4	49.6		
4	- Livestock	283.7	124.9		
5	- Other	4.2	7.9		
6	TOTAL FARM BUSINESS IN WORK UNITS	392.3	182.5		
7	Number of Workers	1.4	1.2		
7A	Farm Capital Investment per Worker	50109	22772		
		Jan 1	Dec 31	Jan 1	Dec 31
8	PRODUCTIVE LIVESTOCK				
9	Dairy Cows	7635	10090	3524	4644
10	Other Dairy Cattle	3438	5341	1780	1695
11	Beef Breeding Cattle	2466	2646	350	455
12	Beef Feeder Cattle	518			54
13	Hogs	113	388	244	225
14	Sheep (incl. feeders)			261	284
15	Poultry (incl. turkeys)			1	15
16	Other Productive Livestock			99	112
17	TOTAL PRODUCTIVE LIVESTOCK	\$ 14170	18465	\$ 6259	7484
18	Drug, Feed and Feed	6512	7484	2125	2162
19	Trucks, Buses and Equipment				
20	Auto and Truck (farm share)	1510	1377	491	448
21	Tractor and Machinery	8181	8461	3766	4078
22	Harrow and Equipment	2642	2680	1193	1543
23	TOTAL TRUCKS, MACHINERY & EQUIPMENT	\$ 12313	12518	5450	6069
24	Land	19908	23196	6864	7076
25	Gas, Fuel, Oil, etc.	8268	9406	5245	6399
26	TOTAL FARM CAPITAL	\$ 61171	71069	25943	29190

TABLE 2A WHOLE FARM SUMMARY OF CASH RECEIPTS - 1969			
Average of 74 Farms	High	Low	
14	14	14	
1 SALE OF LIVESTOCK AND LIVESTOCK PRODUCTS			
2	2238	844	Dairy Cows
3	16789	6441	Dairy Products
4	1721	860	Other Dairy Cattle
5	742	132	Beef Breeding Cattle
6	1006		Beef Feeder Cattle
7A	29	58	Hogs Complete
7B	6	5	Hogs Finishing
7C	722	360	Hogs Producing Weaning Pigs
8A	87	337	Sheep and Wool, Farm Flock
8B	4		Sheep and Wool, Feeder Lambs
9	4	5	Chickens (Incl. Hens and Broilers)
10			Turkeys
11	26	1	Eggs
12	2	2	Other Productive Livestock
12A	\$16101	9045	TOTAL SALES OF PRODUCTIVE LIVESTOCK
13	41	15	SALE OF CROPS
14	62	15	Corn
15	43		Soybeans, Flax, Sunflowers
16	424	241	Wheat, Oats, Barley, Rye
17			Potatoes, Sugar Beets, Canning & Other Crops A&B
18	590	105	Hay, Silage and Other Crops
19	266	117	Diverted Acre Payment
19A	1385	478	Total Sales From Crops
20	464	36	Capital Assets Sold
21	72	43	Gas Tax Refund
22	394	205	Income From Work Off The Farm
23	101	44	Patronage Refunds
24	202	128	Miscellaneous Farm Income
25	\$18719	9977	TOTAL FARM SALES
26	4554	3341	Increase In Farm Capital
27	405	230	Family Living From The Farm
28	\$23678	13548	TOTAL FARM RECEIPTS (25)+(26)+(27)

TABLE 22 - AVERAGE FARM SUMMARY OF CASH EXPENSES - 1969		Average of 74 Farms	14 High	14 Low
1	PURCHASE OF LIVESTOCK			
2	Dairy Cows	\$ 694	1140	1451
3	Other Dairy Cattle	317	690	226
4	Beef Breeding Cattle	47	85	101
5	Beef Feeder Cattle			
6A	Hogs Complete	1		4
6B	Hogs Finishing	2		
6C	Hogs Producing Weaning Pigs	41	104	10
7A	Sheep, Farm Flock	21		105
7B	Sheep, Feeder Lambs			
8	Chickens (incl. hens and broilers)	10		5
9	Turkeys			
10	Other Productive Livestock	4		10
11	Miscellaneous Livestock Expense	742	1083	482
12	Feed Bought	2437	3317	1435
13	Fertilizer	648	1009	432
14	Chemicals	127	225	115
15	Other Crop Expense	344	429	210
16	Custom Work Hired	957	1282	514
17	Repair + Upkeep of Livestock Equip.	137	130	105
18	Repair + Upkeep of Farm Real Estate	199	169	117
19	Gas, Oil, Grease Bought (farm share)	732	973	536
20	Repair + Oper of Mach, Tractor, Truck, Auto (F.S.)	838	1160	596
21	Wages of Hired Labor	341	334	234
22	Personal Property + Real Estate Taxes	397	574	255
23	General Farm Expense	258	378	155
24	Telephone Expense (Farm Share)	65	82	54
25	Electricity Expense (Farm Share)	271	356	205
26	Total Cash Operating Expense	\$ 9630	13520	7357
27	Power, Crop and General Mach Bought (Farm Share)	2197	2072	1768
28	Livestock Equipment Bought	496	466	680
29	New Real Estate + Improvement	2876	4610	2264
30	Total Farm Purchases (26) Thru (29)	\$ 15199	20663	12069
31	Decrease in Farm Capital	324		94
32	Interest On Farm Capital	2705	3967	1654
33	Unpaid Family Labor	685	528	411
34	Labor Charge For Partners + Other Operators	273	714	36
35	Board Furnished Hired Labor	33	29	49
36	Total Farm Expense (30) Thru (35)	\$ 19219	25906	14363
37	Labor Earnings (Whole Farm) (2A/28)-(36)	\$ 4458	11660	(-816)
38	Number of Operators	1	1	1

TABLE 2 - SUMMARY STATEMENTS - 1969

Average of 74 Farms	14	Low
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
13	13	13
14	14	14
15	15	15
16	16	16
17	17	17
18	18	18
19	19	19
20	20	20
21	21	21
22	22	22
23	23	23
24	24	24
25	25	25
26	26	26
27	27	27
28	28	28
29	29	29
30	30	30
31	31	31
32	32	32
33	33	33
34	34	34
35	35	35
36	36	36
37	37	37
38	38	38
39	39	39
40	40	40
41	41	41
42	42	42
43	43	43
44	44	44
45	45	45
46	46	46
47	47	47
48	48	48
49	49	49
50	50	50
51	51	51
52	52	52
53	53	53
54	54	54
55	55	55
56	56	56
57	57	57
58	58	58
59	59	59
60	60	60
61	61	61
62	62	62
63	63	63
64	64	64
65	65	65
66	66	66
67	67	67
68	68	68
69	69	69
70	70	70
71	71	71
72	72	72
73	73	73
74	74	74
75	75	75
76	76	76
77	77	77
78	78	78
79	79	79
80	80	80
81	81	81
82	82	82
83	83	83
84	84	84
85	85	85
86	86	86
87	87	87
88	88	88
89	89	89
90	90	90
91	91	91
92	92	92
93	93	93
94	94	94
95	95	95
96	96	96
97	97	97
98	98	98
99	99	99
100	100	100

TABLE 4 - HOUSEHOLD EXPENSES - 1964		Average of 54 Farms	12 High	11 Low
1.	Number of Persons - Family	6	6	5
2.	Number of Adult Equivalent - Family	4.0	4.1	3.2
3.	Church and Welfare	\$ 164	191	187
4.	Medical Care and Health Insurance	587	836	458
5.	Food and Meals Bought	1123	1077	896
6.	Operating Expense and Supplies	269	219	171
7.	Furnishings and Equipment	341	350	155
8.	Clothing and Clothing Materials	325	289	231
9.	Personal Care, Personal Spending	95	79	83
10.	Education	99	25	29
11.	Recreation	113	155	67
12.	Gifts and Special Events	144	97	93
13.	Pers. Share Truck and Auto Exp.	210	133	188
14.	Oper. Share Upkeep on Dwelling	127	122	248
15.	Pers. Share Tel. and Elect. Exp.	157	175	137
16.	TOTAL CASH LIVING EXPENSES	\$ 3754	3748	2943
17.	Pers. Share New Truck and Auto	180	96	7
18.	New Dwelling Bought	517	33	
19.	Taxes and Other Deductions	410	412	198
20.	Life Insurance and Other Savings and Investments	531	318	154
21.	TOTAL NON-CASH AND PERSONAL (16)-(20)	\$ 5392	4607	3302
22.	TOTAL FAMILY LIVING FROM THE FARM (33)	436	474	309
23.	TOTAL CASH AND NON-CASH EXPENSES (21)+(22)	\$ 5828	5081	3611
24.	FAMILY LIVING FROM THE FARM			
		\$	OPR. SHARE	OPR. SHARE
25.				OPR. SHARE
26.	Milk and Cream	151	189	100
27.	Beef	206	253	157
28.	Pork	19	23	7
29.	Lamb			
30.	Poultry	2		
31.	Eggs	2		
32.	Veg., Fruit, Spruce, and Fuel-Also Other Produce	56	8	45
33.	TOTAL FAMILY LIVING FROM THE FARM	436	473	309

TABLE 5 - NET WORTH STATEMENT - OPERATOR - 1969

Ave. of 72 Farms		14 High		14 Low	
Jan. 1	Dec. 31	Jan. 1	Dec. 31	Jan. 1	Dec. 31
1. Total Livestock	\$ 10727	15280	18899	7898	9087
2. Crop, Seed & Feed	4319	4284	7693	2666	2484
3. Total Power, Machinery	8600	9363	11378	6490	7047
4. Land	12384	13651	18089	7971	8093
5. Buildings, Fences, etc.	6835	7919	7659	5834	6932
6. TOTAL FARM CAPITAL	\$ 42865	47597	59283	30859	33643
7. Non-Farm Assets	5933	6601	4823	6033	6157
8. Dwelling	3537	3787	4538	2320	2373
9. TOTAL ASSETS	\$ 52335	57985	68644	39212	42173
10. Real Estate Mortgages	10625	11866	14786	9891	10397
11. Chattel Mortgages	5898	6943	7890	5532	6726
12. Notes	1209	1100	1175	1340	2044
13. Accounts Payable	775	846	801	643	574
14. TOTAL LIABILITIES	\$ 18507	20755	24652	17406	19741
15. FARMERS NET WORTH	\$ 33828	37230	43992	21806	22432
16. GAIN, OR (LOSS) IN NET WORTH	\$ 3402			\$ 7726	

## 17. SUPPLEMENTARY MANAGEMENT INFORMATION

18. Operators Labor Earnings	4558	12404	15406	(-948)	816
19. Ret. to Capital & Family Labor	6978				
20. Non-Farm Income	98	63		261	
21. Outside Investment Income				2210	
22. Other Personal Income	1397	364		2471	
23. TOTAL NON-FARM INCOME	1495	427			
24. Total Money Borrowed	5840	9865		4840	
25. Total Paid on Debt (Principal)	3720	5829		2336	
26. Total Household & Pers. Expense	4607	4474		2914	
27. Ratio Farm Exp. to Farm Receipts	.808	.687		1.060	
28. Ratio Assets to Liabilities	2.828	2.794	2.785	2.253	2.136
29. Ratio Non-Real Est. Assets-					
Non-Real Est. Liabilities	3.75	3.67	3.89	4.13	3.07
30. Ratio Real Estate Assets to					
Real Estate Liabilities	2.14	2.14	2.05	1.99	1.63
31. Ratio Net Worth to Total Liab.	1.83	1.79	1.78	1.25	1.14
32. *Ratio Cash Operating Exp. to					
Adj. Total Farm Sales		.59		.54	.79

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

TABLE 6A OPERATOR'S SHARE OF FARM RECEIPTS-1969		Average of 74 Farms	14 High	14 Low
1	SALE OF LIVESTOCK AND LIVESTOCK PRODUCTS			
2	Dairy Cows	1499	2211	1108
3	Dairy Products	11663	17387	8395
4	Other Dairy Cattle	1183	1875	1230
5	Beef Breeding Cattle	309	748	
6	Beef Feeder Cattle	527	1006	
7A	Hogs Complete	12		58
7B	Hogs Finishing	6	29	
7C	Hogs Producing Weaning Pigs	722	564	360
8A	Sheep and Wool, Farm Flock	87		337
8B	Sheep and Wool, Feeder Lambs	4		
9	Chickens (Incl. Hens and Broilers)	4		
10	Turkeys			
11	Eggs	26		1
12	Other Productive Livestock	2		2
12A	TOTAL SALES OF PRODUCTIVE LIVESTOCK	\$ 16044	23820	11491
13	SALE OF CROPS			
14	Corn	58	17	5
15	Soybeans, Flax, Sunflowers	38	43	15
16	Wheat, Oats, Barley, Rye	386	1209	183
17	Potatoes, Sugar Beets, Canning, Other Crops A+B			
18	Hay, Silage and Other Crops	937	1857	41
19	Diverted Acre Payment	266	325	117
19A	TOTAL SALES FROM CROPS	\$ 1285	3451	361
20	Capital Assets Sold	53	49	36
21	Gas Tax Refund	92	117	45
22	Income From Work Off the Farm	394	187	158
23	Patronage Refunds	101	78	107
24	Miscellaneous Farm Income	202	274	173
25	TOTAL FARM SALES	\$ 18196	27976	12371
26	Increase in Farm Capital	4923	11201	3206
27	Family Living From the Farm	404	454	262
28	TOTAL FARM RECEIPTS (25)+(26)+(27)	\$ 23483	39631	15839
29	Adjusted Total Farm Sales (25)-(20)	18098	27927	12335
30	Total Cash Farm Operating Expense	10745	15200	9720
31	Net Cash Operating Income	\$ 7353	12727	2615

TABLE 6B - CASH EXPENDITURES OF FARMERS, 1969  
Average of 14 Farms High Low

1	2	3	4	5	6A	6B	6C	7A	7B	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	37	38	39	40
PURCHASE OF LIVESTOCK	Dairy cows	Other dairy cattle	Beef breeding cattle	Beef feeder cattle	Hogs Complete	Hogs Finishing	Hogs Producing Weaning Pigs	Sheep, Farm flock	Sheep, Feeder lambs	Chickens	Turkeys	Other productive livestock	Miscellaneous livestock expense	Feed bought	Fertilizer	Chemicals	Other crop expense	Custom work hired	Repair and upkeep of livestock equipment	Repair and upkeep of farm real estate	Gas, Oil, grease bought (farm share)	Repair & Oper. of Tractor, Truck, Auto (F.S.)	Wages of hired labor	Personal property and real estate taxes	Cash rent	General farm expense	Telephone expense (farm share)	Electricity expense (farm share)	Interest expense	MOBILITY OF OPERATING EXPENSES	Power, crop and general (each bought (farm share)	Livestock equipment bought	New real estate and improvements	MOBILITY OF INVESTMENTS (28 thru 31)	Decrease in farm capital	Interest on farm capital	Unpaid family labor	Board furnished hired labor	MOBILITY OF INVESTMENTS (32 thru 37)	Labor furnished (operator's share) (6A/28-38)	Return to capital and family labor
	\$ 1,551	275	90					10	105			10	633	1,844	549	138	250	624	133	173	596	728	256	273	140	182	58	228	876	\$ 9,722	1,829	685	2,316	\$14,552	423	1,059	705	49	\$16,788	\$12,404	\$ 816
	948	372	85				88						1,130	3,476	1,044	243	407	1,479	137	199	725	837	341	392	177	256	65	93	357	1,389	\$15,202	1,620	592	\$24,183	2,504	2,504	498	42	\$27,227	\$15,406	\$15,406
	677	317	47			1	2	41	21	10		4	737	2,428	648	127	344	954	137	199	725	837	341	392	177	256	65	93	357	1,389	\$10,745	2,197	492	\$16,310	230	1,699	685	33	\$18,957	\$ 4,526	\$ 6,910



# EXPLANATION OF WORK UNITS

The total "work units" for any one farm is a measure of the size of that farm business. A work unit as used in this report is the average accomplishment of a farm worker, in a ten hour day, working on crops and productive livestock at an average efficiency, or ten hours of work off the farm for pay. The work units values in Table 7 below were changed in 1968 to make this a more realistic measure.

TABLE 7 WORK UNITS FOR CROPS, LIVESTOCK, AND WORK OFF THE FARM\*

Item	No. of Work Units	Item	No. of Work Units/Acre
Dairy Cows	7.0/cow	Barley, Wheat, Oats, Rye	.30/acre
Other Dairy Cattle	1.2/head	Canning Peas	.30/acre
Beef Breeding Cows	1.5/head	Cat Silage	.40/acre
Beef Feeders	.12/cwt.	Canning Corn	.40/acre
Hogs-Complete	.12/cwt.	Corn for Grain	.55/acre
Hogs-Finishing	.06/cwt.	Soybeans	.45/acre
Hogs-Wean. Pigs	1.4/litter	Corn & Cane Silage	.80/acre
Sheep, Farm Flock	.60/ewe	Alfalfa Hay	.60/acre
Lambs, Feeders	.30/cwt.	O. Leg. & Mix. Hay	.40/acre
Chickens, Lay. Flock	5.0/100	Tame Grass Hay	.20/acre
Broilers	.20/cwt.	Annual Hay	.30/acre
Turkeys, Lay. Flock	25.0/100	Leg. & Grass Silage	.40/acre
Turkey Poults	.12/cwt.	Legume & Grass Seed	.40/acre
Labor Off the Farm	1.0/\$20	Summer Fallow Tilled	.40/acre
Diverted Acres	.20/acre	Wild Hay	.20/acre

\* See Page 14 for explanation of change in work unit values.

## AVERAGE PRICES OF FEED AND OTHER PRICES USED IN 1969 REPORT

### SMALL GRAIN & CORN

Corn	\$1.05/Bu.
Oats	.60/Bu.
Soybeans	2.40/Bu.
Wheat	1.45/Bu.
Rye	1.00/Bu.
Barley	.85/Bu.
Flaxseed	2.85/Bu.

### PASTURE PER HEAD PER MONTH

Dairy cows, Beef cows	\$1.75
Other dairy & beef	1.00
Hogs	.20
Pigs	.10
Sheep	.25
Lambs	.12

### ROUGHAGES

Alf. Hay	12.00
O. Leg. & Mix	12.00
Annual & Tame	14.00
Wild Hay	10.00
Corn Silage	7.00
Oats Silage	5.00
Leg. & Grass Sil.	6.00

### PRODUCTS USED IN THE HOME

Whole milk	\$ .09/qt.
Cream	.70/qt.
Whole milk fed	4.00/cwt.
Skimmilk fed	.80/cwt.

### UNPAID FAMILY LABOR

Per Day	\$10.00
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LAND COST used on Table 10 was considered to be the rental value of land on each farm. While this figure varied from farm to farm the normal range was \$7.00 to \$10.00 per acre.

# APPENDIX 1

## PHYSICAL DATA AND PHYSICAL PROPERTIES

12.76	15.26	4.12	4.12
5.15	1.85	2.17	2.17
1.94	1.40	1.13	1.13
1.28	.35	.10	.10
5.30	5.25	1.12	1.12
14.47	20.2	1.12	1.12

8.0	4.2	1.12	1.12
124.9	283.0	1.12	1.12
49.7	104.4	1.12	1.12

26.9	6.70	1.12	1.12
143		1.12	1.12

106		100	100
		100	100
75	124	100	100
86	114	100	100
80	130	100	100
86	109	100	100
60	114	100	100

22772	50109	22803	22803
29.67	16.05	12.73	12.73
142.4	298.0	1.12	1.12
182.5	392.3	1.12	1.12
14.8	24.9	1.12	1.12
83	115	1.12	1.12
28.41	46.44	1.12	1.12
40.4	51.2	1.12	1.12
85	119	1.12	1.12
(-816)	11660	1.12	1.12

LOW	HIGH	LOW	HIGH
14	14	14	14

## MEASURES OF MECHANIZATION AND EFFICIENCY

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

1. LABOR EARNINGS - The basis for comparing the relationship between selected farm management factors and farm profit. "Labor Earnings" represents that share of the total farm income that is credited to the operator's labor and management. It is a whole farm figure taking into account all income and expense, cash and non-cash, including a charge for the use of farm capital. Tables 2B and 3 show two methods of determining labor earnings. The operator's share of labor earnings is shown on Table 6B and may be different from Whole Farm Labor Earnings.
2. CROP YIELD INDEX - A measure of the crop yield level for all crops produced. It is expressed as a percentage of the average; the average being 100%.
3. PERCENT OF TILLABLE LAND IN HIGH RETURN CROPS - A measure of crop selection based on a rating of individual crops. Ratings are on Table 9.
4. GROSS RETURN per ACRE - Reflects both crop selection and crop yield.
5. RETURN per \$100 FEED FED TO PRODUCTIVE LIVESTOCK - A measure of the general level of efficiency for all livestock. It is expressed as a percentage with 100% representing average efficiency.
6. LIVESTOCK UNITS per 100 ACRES - A measure of livestock density or population, particularly important for farms with limited cropland.
7. SIZE OR BUSINESS - WORK UNITS\*\* - A measure of the total work load. A Work Unit represents the average accomplishment of a worker in one 10-hour day. Work Unit values are assigned to each class of livestock, each crop, and to other tasks utilizing farm labor.
8. WORK UNITS per WORKER - A measure of labor efficiency. It is determined by dividing the work units by the total number of workers.
9. POWER, MACHINERY, EQUIPMENT AND BUILDING EXPENSE per WORK UNIT\*\* - A measure of expense control. It is the total cost of items 24 through 28 in Table 3 divided by the number of Work Units.
10. FARM CAPITAL INVESTMENT per WORKER - Another indication of size of business. Useful in relating farm businesses to other industries.

\*\* WORK UNIT values were changed in 1968 based on a study by the Department of Agricultural Economics, University of Minnesota. This study was undertaken because of increased mechanization in farming. As an example it reduced the Dairy Cow Work Units from 10 to 7 per cow. In attempting to compare data from this and last years report where Work Units are involved, to reports from prior years, this change in Work Units should be remembered.



20,000

18,000

16,000

14,000

12,000

10,000

8,000

6,000

4,000

2,000

0

2,000

4,000

6,000

High 25%

Mid 25%

Figure 1 shows a wide variation in earnings in a given year. The range of earnings of farmers ranking in the lower one fourth of the range according to earnings in 1934 is \$11175 between the highest and lowest of the groups. Some of the factors affecting earnings, such as weather, are beyond the control of the individual farmer, but many are within his control. The following are some of the factors affecting earnings

\$4737

Low 25%

A-223

Each line represents the earnings of a group of farmers with a total of 78 farms in 1934.



TABLE 9 - CROF PRODUCTION - 1969....74 FARMS

	Crop Rating	Number Growing	Acres	Yield Per Acre
1 Oats and Mixtures	C	31	36.1	45.8 Bu.
2 Oats Silage	B	1	.2	5.0 T.
3 Canning Peas				
4 Wheat	C	18	2.9	20.7 Bu.
5 Barley	C	4	1.0	24.0 Bu.
6 Flax	C			
7 Rye				
8 TOTAL SMALL GRAIN AND PEAS			40.2	
9 Canning Corn				
10 Corn Grain and Seed Corn	B/D	16	11.2	53.3 Bu.
11 Soybeans-Grain	C	3	1.5	6.0 Bu.
12 Corn and Cane Silage	B	22	20.1	8.4 T.
13 Corn and Cane Fodder				
14 Potatoes				
15 Sugar Beets				
16 Sunflowers				
17 Other Cultivated Crops - A				
18 Other Cultivated Crops - B				
19 TOTAL CULTIVATED CROPS			36.1	
20 Alfalfa Hay	A	25	36.8	2.5 T.
21 Other Legume Hay and Mixtures	B	23	23.8	1.6 T.
22 Tame Grass Hay	C	6	1.7	1.2 T.
23 Annual Hay	D	3	1.0	1.0 T.
24 Legume and Grass Silage		2	.9	6.7 T.
25 Legume Seed	D	5	3.0	
26 Grass Seed	D	2	4.6	504.8 Lbs.
27 TOTAL HAY			71.8	
28 Alfalfa and Mixed Pasture			1.1	
29 Other Legume Pasture			.4	
30 Other Tillable Pasture			17.2	
31 TOTAL TILLABLE PASTURE			18.7	
32 Diverted Acres Income	A	27	10.3	26.89
33 Summer Fallow - Tilled			5.6	
34 Other Tillable Land Idle			2.6	
35 TOTAL TILLABLE LAND			185.3	
36 Wild Hay			4.6	.43
37 Non-Tillable Pasture			78.0	
38 Timber			49.4	1.42
39 Roads and Waste			19.5	
40 Farmstead			6.1	
41 TOTAL ACRES IN FARM			342.9	
42 SUPPLEMENTARY MANAGEMENT INFORMATION				
43 Percent Land Tillable				54.0
44 Percent in High Return Crops				49.1
45 *Fertilizer Cost Per Acre				3.89
46 *Crop Chemicals Per Acre				.76
47 *Seed and Other Costs Per Acre				2.07
48 *Gas, Oil, Grease Bought Per Acre				2.97
49 *Tillable Land Minus Pasture				

TABLE 9 (Continued)

Crop	14 High in		14 Low in	
	Labor Earnings	Acres Average Yield	Labor Earnings	Acres Average Yield

1 Oats and Mixtures	C	50.5	54.6 Bu.	26.5	48.9 Bu.
2 Oats Silage	B	1.2	3.3 T.		
3 Canning Peas					
4 Wheat	C	2.7	34.4 Bu.	.7	4.3 Bu.
5 Barley	C				
6 Flax	C				
7 Rye	C				
8 TOTAL SMALL GRAIN & PEAS		55.0		28.3	
9 Canning Corn					
10 Corn Grain and Seed Corn	B/D	12.2	50.7 Bu.	7.2	45.1 Bu.
11 Soybeans-grain	C	4.0	5.8 Bu.		
12 Corn and Cane Silage	B	32.9	9.2 T.	15.1	5.9 T.
13 Corn and Cane Fodder	D				
14 Potatoes					
15 Sugar Beets					
16 Sunflowers					
17 other Cultivated Crops - A					
18 other Cultivated Crops - B					
19 TOTAL CULTIVATED CROPS		56.0		22.3	
20 Alfalfa Hay	A	39.5	2.8 T.	17.1	2.3 T.
21 other Legume Hay & Mixtures	B	11.2	2.6 T.	26.3	1.4 T.
22 Tame Grass Hay	C	2.1	1.4 T.	2.9	.7 T.
23 Annual Hay	D	3.5	1.1 T.	1.4	1.4 T.
24 Legume and Grass Silage	D	1.9	7.9 T.	2.6	6.2 T.
25 Legume Seed	D	6.4			
26 Grass Seed	D	18.1			
27 TOTAL HAY		82.7	611.7 lbs.	50.3	
28 Alfalfa and Mixed Pasture		.5			
29 other Legume Pasture		2.0			
30 other Tillable Pasture		15.8		17.8	
31 TOTAL TILLABLE PASTURE		18.3		17.8	
32 Diverted Acres Income		10.5		4.3	
33 Summer Fallow - Filled		11.8		1.9	
34 other Tillable Land Idle		.4		11.4	
35 TOTAL TILLABLE LAND		234.7		136.3	
36 Wild Hay		10.7	1.03	3.1	
37 Non-Tillable Pasture		90.0		64.6	
38 Timber		38.5	3.64	41.9	2.32
39 Roads and waste		32.2		13.2	
40 Farmstead		8.8		4.6	
41 TOTAL ACRES IN FARM		414.9		263.7	
42 Supplementary Management Information					
43 Percent Land Tillable		56.6		51.7	
44 Percent in High Return Crops		47.6		40.2	
45 *Fertilizer Cost Per Acre		4.66		3.64	
46 *Crop Chemicals Per Acre		1.04		.97	
47 *Seed and Other Costs Per Acre		1.98		1.77	
48 *Gas, Oil, Grease Bought Per Acre, Crop Mach.		3.11		3.05	
49 *Tillable Land Minus Pasture					



TABLE 10 - CROP DATA FOR CORN FOR GRAIN - 1969 ----- 32 FARMS

	CORN AND POTATOES - 66 FARMS	TOTAL	PER ACRE
1 Acres		41.3	
2 Yield/Acre			46.2
3 Value/Unit			.62
4 Gross Return		1137.38	27.21
5 SUPPLEMENTAL COSTS			
6 Fertilizer			1.84
7 Chemicals			.07
8 Seed and Other			2.13
9 Hired Labor			
10 Custom work			.62
11 TOTAL SUPPLEMENTAL COSTS		194.79	4.66
12 RETURN OVER SUPPLEMENTAL COSTS		942.59	22.55
13 ALLOCATED COSTS			
14 Power and Crop Machinery Expense			8.79
15 Land Cost			7.42
16 Miscellaneous Costs			
17 TOTAL ALLOCATED COSTS		677.58	16.21
18 TOTAL COSTS	Per Unit .45	872.37	20.87
19 RETURN OVER TOTAL COSTS		265.01	6.34

TABLE 10 - CROP DATA FOR CORN FOR GRAIN - 1969 ----- 32 FARMS

1 Acres		25.9	
2 Yield/Acre			53.3
3 Value/Unit			1.07
4 Gross Return		1518.26	58.62
5 SUPPLEMENTAL COSTS			
6 Fertilizer			11.08
7 Chemicals			3.47
8 Seed and Other			4.09
9 Hired Labor			
10 Custom Work			1.78
11 TOTAL SUPPLEMENTAL COSTS		528.88	20.42
12 RETURN OVER SUPPLEMENTAL COSTS		989.38	38.20
13 ALLOCATED COSTS			
14 Power and Crop Machinery Expense			16.12
15 Land Cost			10.08
16 Miscellaneous Costs			
17 TOTAL ALLOCATED COSTS		678.58	26.20
18 TOTAL COSTS	Per Unit .87	1207.46	46.62
19 RETURN OVER TOTAL COSTS		310.80	12.00



UNITED STATES DEPARTMENT OF AGRICULTURE - 1969 - - - 23 Farms

	TOTAL	PER ACRE
1. Seed	76.5	1.6
2. Fertilizer		17.09
3. Pesticides	2368.44	30.96
4. Irrigation		
5. Labor		1.28
6. Fuel		.08
7. Repairs		1.25
8. Depreciation		.01
9. Interest	200.43	2.62
10. Other	2168.01	28.34
11. Total Variable Costs		
12. Fixed Costs		
13. Total Costs		
14. Per Unit		
15. Total Variable Costs	1424.43	18.62
16. Fixed Costs		
17. Total Costs	1524.86	21.24
18. Per Unit	743.58	9.72

UNITED STATES DEPARTMENT OF AGRICULTURE - 1969 - - - 27 Farms

	TOTAL	PER ACRE
1. Seed	28.2	26.88
2. Fertilizer		1.00
3. Pesticides	815.83	28.93
4. Irrigation		
5. Labor		.11
6. Fuel		
7. Repairs		
8. Depreciation		
9. Interest	3.10	.11
10. Other	812.73	28.82
11. Total Variable Costs		
12. Fixed Costs		
13. Total Costs		
14. Per Unit		
15. Total Variable Costs	397.90	14.11
16. Fixed Costs		
17. Total Costs	401.00	14.22
18. Per Unit	414.83	14.71

TABLE 10 CROP DATA FOR TAMS GRASS MAY-1969--- 6 Farms

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	
Acres	Yield/Acre	Value/Unit	Gross Return	SUPPLEMENTAL COSTS	Fertilizer	Chemicals	Seed and Other	Hired Labor	Custom Work	TOTAL SUPPLEMENTAL COSTS	RETURN OVER SUPPLEMENTAL COSTS	ALLOCATED COSTS	Power and Crop Machinery Expense	Land Cost	Miscellaneous Costs	TOTAL ALLOCATED COSTS	PER UNIT	TOTAL LISTED COSTS	RETURN OVER TOTAL LISTED COSTS
21.1	1.0	11.33	18.87							31.02	367.14					325.57	16.21	356.59	41.57
TOTAL	PER ACRE																		

TABLE 10 CROP DATA FOR WHEAT-1969--- 10 Farms

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	
Acres	Yield/Unit	Value/Unit	Gross Return	SUPPLEMENTAL COSTS	Fertilizer	Chemicals	Seed and Other	Hired Labor	Custom Work	TOTAL SUPPLEMENTAL COSTS	RETURN OVER SUPPLEMENTAL COSTS	ALLOCATED COSTS	Power and Crop Machinery Expense	Land Cost	Miscellaneous Costs	TOTAL ALLOCATED COSTS	PER UNIT	TOTAL LISTED COSTS	RETURN OVER TOTAL LISTED COSTS
21.6	20.6	1.62	29.91							168.05	478.01					346.90	1.16	514.95	131.11



TABLE 11C - COSTS AND RETURNS FROM PRODUCING WEANING PIGS - 1969

Average 13 Farms				4 High				4 Low			
Herd Per				Herd Per				Herd Per			
Total Litter				Total Litter				Total Litter			
24				32				20			
2				2				2			
Number of Litters Farrowed				Total Value Produced				Total Value Produced			
\$ 4493				187.21				\$ 5424			
169.50				\$ 2925				146.25			
3				Pounds of Feed Fed				3			
4				Corn				4			
5				Small Grain				5			
6				Protein, Salt and Mineral				6			
7				Complete Ration				7			
8				TOTAL CONCENTRATES				8			
9				Forages				9			
10				Feed Cost				10			
11				Concentrates and Forages				11			
12				Pasture				12			
13				TOTAL FEED COSTS				13			
14				RETURN OVER FEED COST				14			
15				Supplemental Costs				15			
16				Miscellaneous Livestock Expense				16			
17				Veterinary Expense				17			
18				Custom Work				18			
19				TOTAL SUPPLEMENTAL COSTS				19			
20				RETURN OVER FEED AND SUPPLE-				20			
21				SUPPLEMENTARY MANAGEMENT INFORMATION				21			
22				Return for \$100 Feed Fed \$ 243.26				22			
23				Average Price Rec. Per \$ 23.46				23			
24				Pig Sold				24			
25				Number of Pigs Produced				25			
26				Litter				26			
27				Number of Pigs Weaned Per				27			
28				Litter				28			
29				Per Cent Death Loss				29			
30				Price Per Cwt. Concentrate\$ 2.45				30			
31				Feed				31			
32				Feed and Suppl. Costs Per \$ 11.13				32			
33				Pig Produced				33			

TABLE 12 - DAIRY COWS - 1969		Average of 58 Farms	19 Farms High in Return Above Feed	19 Farms Low in Return Above Feed
		Per Cow	Per Cow	Per Cow
1	Average Number of Cows	29.6	41.8	20.8
2	Pounds of Milk	10854	11767	9166
3	Pounds of Butterfat	397.6	431.8	327.2
4	Per Cent of Butterfat in Milk	3.7	3.7	3.6
5	<u>Value of Produce</u>			
6	Dairy Products Sold	498.94	561.44	383.85
7	Dairy Products Used in Home	4.9	3.71	5.72
8	Milk Fed to Livestock	5.55	6.70	10.10
9	Net Increases in Value of Cows	(-1.89)	(-1.82)	(-14.28)
10	TOTAL VALUE PRODUCED	\$504.50	\$570.03	\$385.39
11	<u>Pounds of Feed Fed</u>			
12	Corn	1438.3	1800.4	592.7
13	Small Grain & Complete Dairy Ration	2656.4	2431.8	3652.3
14	Protein, Salt & Mineral	401.2	485.9	104.6
15	TOTAL CONCENTRATES	4495.9	4718.1	4349.6
16	Legume Hay	5509.0	4750.7	6648.8
17	Other Hay and Dry Roughage	296.8		759.1
18	Silage	10092.6	13633.9	4800.1
19	<u>Feed Costs</u>			
20	Concentrates	115.71	122.27	105.43
21	Roughages	86.42	88.44	81.78
22	Pasture	4.76	2.78	7.21
23	TOTAL FEED COSTS	\$206.89	\$213.49	\$194.42
24	RETURN OVER FEED COST	\$297.89	\$356.54	\$190.97
25	<u>Supplemental Costs</u>			
26	Miscellaneous Livestock Expense	20.84	25.72	12.31
27	Veterinary Expense	7.53	9.55	5.05
28	Custom Work	24.32	26.84	21.30
29	TOTAL SUPPLEMENTAL COSTS	\$52.59	\$62.11	\$38.66
30	RETURN OVER FEED AND SUPPLEMENTAL COSTS	244.92	\$294.43	\$152.31
31	<u>SUPPLEMENTARY MANAGEMENT INFORMATION</u>			
32	Return for \$100 Feed Fed	\$243.84	\$267.00	\$198.22
33	Feed Cost Per Cwt. Milk	\$ 1.91	\$ 1.81	\$ 2.12
34	Feed Cost Per Pounds of Butterfat	\$ .520	\$ .494	\$ .594
35	Pounds of Milk Per Pound of Concentrate	2.414	2.494	2.107
36	Average Price Per Cwt. Milk Sold	\$ 4.68	\$ 4.88	\$ 4.37
37	Average Price Per Pound of Butterfat	\$ 1.28	\$ 1.33	\$ 1.23





TABLE 13 - OTHER DAIRY CATTLE - 1969		Average of 57 Farms	19 Farms High in Return Above Feed	19 Farms Low in Return Above Feed
		Per cow	Per cow	Per cow
1	Number of Head	38.8	51.8	32.0
2	Net Inc. in Value	\$ 111.49	139.63	79.75
3	<u>Pounds of Feed Fed</u>			
4	Concentrates	623.9	655.2	630.2
5	Hay and Roughage	2468.1	1859.4	3493.4
6	Silage	2857.7	3318.4	3361.8
7	Milk	165.7	120.6	277.3
8	<u>Feed Cost</u>			
9	Concentrates	17.27	19.46	16.75
10	Roughages	30.77	28.78	38.34
11	Milk	6.57	4.83	11.34
12	Pasture	2.47	2.18	2.44
13	TOTAL FEED COSTS	\$ 57.08	55.25	69.37
14	RETURN OVER FEED COST	\$ 54.41	84.38	10.38
15	<u>Supplement Costs</u>			
16	Miscellaneous Livestock Expense	.59	.95	.13
17	Veterinary Expense	.82	1.10	.31
18	Custom Work	1.11	.81	1.81
19	TOTAL SUPPLEMENTAL COSTS	\$ 2.52	2.86	2.25
20	RETURN OVER FEED AND SUPPLEMENTAL COSTS	\$ 51.89	81.52	8.13
21	SUPPLEMENTARY MANAGEMENT INFORMATION			
22	Return for \$100 Feed Fed	\$ 195.30	252.73	114.96
23	Per Cent Death Loss	6.9	6.3	6.3

TABLE 14 - ALL DAIRY AND MEAT - U.S. CATTLE	Average of 58 Farms	19 Farms	19 Farms
		High in Return	Low in Return
		Above feed	Above feed

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Average Number of Cows	Value of Dairy Products	Net Inc. in Value	TOTAL VALUE PRODUCED	Pounds of Feed Fed	Concentrates	Hay and Dry Roughage	Stlage	Feed Cost	Concentrates	Roughage	Pasture Costs	TOTAL FEED COSTS	RETURN OVER FEED COST	Supplemental Cost	Miscellaneous Livestock Expense	Veterinary Expense	Custom Work	TOTAL SUPPLEMENTAL COSTS	RETURN OVER FEED AND SUPPLEMENTAL COSTS	SUPPLEMENTARY MANAGEMENT INFORMATION	Return for \$100 Feed Fed
29.6	506.39	142.57	648.96	5328.2	8992.2	13773.9	18744.5	5814.5	7706.0	7204.5	5299.7	11155.8	6561.5	41.0	574.41	176.32	750.73	126.32	97.02	508.70	411.63
41.0	574.41	176.32	750.73	5814.5	7706.0	18744.5	5299.7	11155.8	6561.5	136.11	119.52	9.61	265.44	247.27	26.95	10.37	28.02	65.34	590.61	201.67	\$191.65
										157.34	131.68	5.76	294.78	455.95	26.95	26.95	28.02	65.34	590.61	201.67	\$191.65
										146.66	126.11	7.94	280.71	368.25	21.59	8.58	25.78	55.95	312.30	312.30	\$231.18

TABLE 15A - BEEF BREEDING CATTLE - 1969		Average of 6 Farms	5 Farms High in Return Above Feed	3 Farms Low in Return Above Feed
1	Average Number of Beef Cows	39.3	33.9	22.5
2	Average Number of Other Beef Animals and Bulls	26.9	33.4	13.8
3	Pounds of Beef Produced	16195	21325	8265
4	Net Increase in Value	121.70	121.28	95.51
5	<u>Pounds of Feed Fed</u>			
6	Grain	158.1	233.3	50.3
7	Protein, Salt and Mineral	28.3	34.1	39.4
8	Legume Hay	5070.0	4597.7	3970.4
9	Other Hay and Dry Roughage	2474.6	3163.7	2963.0
10	Silage	1446.9	711.5	
11	<u>Feed Cost</u>	4.05	5.65	2.58
12	Concentrates	59.16	52.10	59.24
13	Foughages	9.90	9.11	13.78
14	Pasture	73.11	66.86	75.60
15	TOTAL FEED COSTS			
16	RETURN OVER FEED COSTS	48.59	54.42	19.91
17	<u>Supplemental Costs</u>			
18	Miscellaneous Livestock Expense	.58	.46	.49
19	Veterinary Expense	.45	.20	1.51
20	Custom Work	1.53	1.48	1.07
21	TOTAL SUPPLEMENTAL COSTS	2.34	2.14	3.07
22	RETURN OVER FEED AND SUPPLEMENTAL COSTS	46.25	52.28	16.84
23	SUPPLEMENTARY MANAGEMENT INFORMATION			
24	Return for \$100 Feed Fed	160.43	181.39	126.34
25	Price Per Cwt. Sold	7.03	26.44	28.44
26	Average Weight Per Head Sold	545	713	442
27	Percent Death Loss	4.3	3.9	7.4
28	Percent Calf Crop			

2 Farms	Low in	Return	Above Feed
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1	average of 1000	40.7	35.9	28.8
2	rounds of 1000			
3	rounds of 1000			
4	value of 1000			
5	total	2.57	2.60	3.72
6	Net Income from 1000	1.79	20.50	13.75
7	total 1000	11.62	23.10	17.47
8	rounds of 1000			
9	total	100.8	164.8	108.9
10	protein, 1000	1.6	2.1	
11	protein 1000	98.6	660.3	416.7
12	other 1000	407.2	476.8	555.6
13	total			
14	feed 1000	3.4	4.40	2.05
15	protein 1000			
16	protein 1000	6.2	1.92	8.33
17	protein 1000	1.37	1.1	1.53
18	total 1000	14.76	16.32	11.91
19	return 1000	6.93	7.28	5.56
20	total 1000			
21	protein 1000	1.25	.19	
22	protein 1000	1.33	1.33	1.32
23	protein 1000	1.67	1.80	1.32
24	total 1000	2.92	3.32	1.32
25	return 1000	4.13	4.06	4.24
26	total 1000			
27	return 1000	146.99	146.93	146.65
28	total 1000	25.73	25.34	27.69
29	protein 1000	6.5	6.5	7.9
30	protein 1000	6.5	98	27
31	protein 1000	13	124	104
32	protein 1000	7.4	21.0	27.5

# 1965-1969

	1965	1966	1967	1968	1969
1. Cash	\$ 1464	1750	1979	2827	2739
2. Accounts Receivable	5622	7054	8650	12420	11663
3. Inventory	559	484	894	609	836
4. Prepaid Expenses	747	901	840	696	740
5. Other Assets	123	104	173	70	91
6. Total Assets	--	--	--	--	--
7. Accounts Payable	8	30	6	19	4
8. Notes Payable	19	83	35	128	26
9. Other Liabilities	--	--	1	--	2
10. Total Liabilities	23	41	49	37	62
11. Equity	106	258	431	860	467
12. Total Liabilities & Equity	3-4	309	126	134	266
13. Cash	650	631	658	652	590
14. Accounts Receivable	190	141	238	159	536
15. Inventory	202	259	405	333	394
16. Prepaid Expenses	209	186	300	124	303
17. Total Assets	\$ 10256	12191	14785	19068	18719
18. Accounts Payable	1949	4108	3229	3427	4554
19. Notes Payable	377	415	345	380	405
20. Total Liabilities	\$ 12582	16714	18359	22875	23678
21. Cash	417	753	677	360	1011
22. Accounts Receivable	92	74	94	189	47
23. Inventory	20	84	15	30	44
24. Prepaid Expenses	33	3	13	9	21
25. Other Assets	--	--	--	--	--
26. Total Assets	6	24	5	16	10
27. Accounts Payable	--	--	2	--	4
28. Notes Payable	501	385	481	727	742
29. Other Liabilities	1593	2004	2284	3049	2437
30. Total Liabilities	412	339	611	800	648
31. Equity	355	431	508	579	471
32. Total Liabilities & Equity	514	560	712	903	957
33. Cash	634	654	740	835	732
34. Accounts Receivable	594	650	636	902	838
35. Inventory	91	119	149	186	199
36. Prepaid Expenses	68	70	83	101	137
37. Other Assets	199	202	301	451	341
38. Total Assets	193	214	227	268	271
39. Accounts Payable	453	494	537	381	397
40. Notes Payable	176	215	236	333	323
41. Other Liabilities	\$ 6151	7325	8341	10119	9630
42. Equity	1197	1548	2039	2131	2197
43. Total Liabilities & Equity	162	405	409	626	496
44. Cash	913	1081	1473	1346	2876
45. Accounts Receivable	\$ 8423	10359	12262	14222	15199
46. Inventory	--	--	425	325	324
47. Prepaid Expenses	1411	1563	1822	2311	2705
48. Other Assets	672	615	498	613	685
49. Total Assets	--	--	127	98	273
50. Accounts Payable	34	31	40	44	33
51. Notes Payable	\$ 10540	12568	15174	17613	19219
52. Other Liabilities	\$ 2042	4146	3186	5262	4458

1965-1966-1967-1968-1969 IN A CAPSULE

1965	1966	1967	1968	1969
332	295	332	383	343
337	368	408	352	313
3366	5356	4536	6953	6910
2042	4146	3186	5350	4458
22404	23246	25139	37044	35529
2.94:1	2.60:1	2.47:1	3.02:1	2.81:1
.84	.75	.83	.77	.81
.07	.13	.09	.12	.10
27.0%	32.1%	24.8%	31.1%	36.9%
83%	85%	85%	87.9%	84.4%
11%	10%	8.6%	8.8%	13.0%
6%	5%	6.4%	3.3%	3.6%

PHYSIOLOGY  
OF LABOR

... 10 hour working day.