

*A Ten Year Study*

# FARM MANAGEMENT PROGRAM NORTHEASTERN MINNESOTA

Iron Range Resources and Rehabilitation  
Commission

in Cooperation with

Minnesota Department of Education  
Vocational Division

and

University of Minnesota  
Institute of Agriculture

and

Area Vocational-Technical School  
Duluth, Minnesota

September, 1966

STATE OF MINNESOTA  
Department of  
IRON RANGE RESOURCES AND REHABILITATION  
60 State Office Building  
St. Paul, Minnesota

--- FOREWORD ---

This report is a summary of a ten year period, 1956 - 1965, for the Farm Management Program in Northeastern Minnesota. It is a cooperative effort between the Iron Range Resources and Rehabilitation; Minnesota Department of Education, Vocational Division; University of Minnesota, Institute of Agriculture; and the Duluth Area Institute of Technology.

It is our hope that a study such as this will assist farmers in the area to improve their present operations by increasing production and raising labor earnings. Also, the trends indicated in this ten year study may point out to some individual cooperating farmer that certain livestock or crop enterprises for his farm should be altered due to consistent lower-than-average participation in the past.

The value of this service to farmers is in the continuous operation of the program over a period of years. Certainly then, we have reached a milestone as the program has now been in operation for its tenth year. With increased importance placed on good records these days it would seem imperative that the Annual Report as we know it be continued and further summary studies such as this one be encouraged.

We wish to commend Robert G. Anderson, Vocational Agriculture Coordinator for the Duluth Area Institute of Technology and Record Analyst, for his interest in this project. This work demands extra time and effort on his part. Also, the success of this report is made possible by the excellent cooperation he has received from the cooperating farmers, by teachers of vocational agriculture, by instructors in the Manpower Development and Training Farm Management classes and by county agents in the area.

This report is offered with the best wishes of this department and with the hope that it will be of some help to farmers and teachers in the area toward a more efficient, successful and prosperous agriculture program.

Copies of this report will be available to anyone interested at no charge.

  
A.M. DeLoannes, Commissioner

## 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 Farm Management Program for Northeastern Minnesota. This report is a summary of the first ten years of the program.

The main purposes of this ten year study are: (1.) To indicate trends in the area that may point up the success or failure of certain crop or livestock enterprises over the years. (2.) To help individual cooperating farmers and others interpret their operations in relation to the averages. (3.) To encourage more farmers in the area to participate in a complete record keeping and analysis program.

This ten year study was completed under the direction of Robert G. Anderson, Area Vo Ag Program Coordinator and record analyst for the Duluth Area Institute of Technology. Clerical assistance was provided by Mrs. Sandra Wrenfrow and Mrs. Ruth Nordstrom. Financial assistance was provided by the Iron Range Resources and Rehabilitation Commission.

Directing locally in a supervisory capacity were: Dr. L.V. Rasmussen, Superintendent of the Duluth Public Schools and Mr. Harold D. Hill, Director of Vocational and Adult Education for the Area Institute of Technology in Duluth.

Cooperating agencies were represented by: Mr. G.R. Cochran, Mr. S.K. Wick and Mr. Robert Van Tries of the State Department of Education, Vocational Division; Dr. Milo Peterson, Dr. Edgar Persons and Dr. Paul Marvin of the University of Minnesota Ag Education Department and Dr. Truman Nodland of the University's Ag Economics Department.

We are sincerely grateful to Mr. A.M. DeYoannes, Commissioner of the Iron Range Resources

and Rehabilitation Commission, and the Commission as a whole for their interest and financial assistance in the Farm Management Program in Northeastern Minnesota. We are especially thankful this year when additional funds were made available to complete this ten year study. Their cooperation has been excellent.

Special thanks are also extended to Mr. Art Vieira, printing instructor for the Duluth Public Schools, and to his class for their wonderful work in the publishing of this report.

Many things are changing in the agricultural production field. In farm accounting and analysis we have moved from the "hand" method of computing the analysis to electronic data processing procedures. We have used the new method now for two years and are excited about what we can look forward to in the future. It appears that this process holds great potential for our program, giving more accuracy, saving much time and enlarging our outreach far beyond what we are now doing.

This report deals with farmers enrolled in farm management classes in fifteen (15) counties as shown on the Minnesota outline map on the inside cover of this report. These counties and the number of cooperating farmers over the ten year period are as follows:

Becker	20	Koochiching	23
Beltrami	3	Lake O' Woods	7
Carlton	20	Ottertail	6
Cass	30	Pine	14
Clearwater	6	St. Louis	21
Crow Wing	1	Todd	85
Hubbard	34	Wadena	30
Itasca	7		

Many of the above are no longer on the program for various reasons. Two cooperators, Walter Reyer, Staples, and L.R. Johnson, Meadowlands, have been enrolled every year for the past ten years. Twenty nine (29) cooperators have been enrolled for from 5 - 10 years some not currently enrolled, however.



Introduction continued:

Vocational Agriculture teachers and County Agents in the area are the key to any success that has been achieved in this program. Those who have been cooperating over the years are as follows:

Vo Ag Teachers  
Robert G. Anderson  
Kenneth Ostlund  
Robert P. Johnson  
Dalton Seeling  
Elmer Fragott  
Ed Takala  
Gerhard Erickson  
Sulo Ojakangas  
Richard Mitton  
Wilho Kemp  
Leo Wilenius  
Sherrill Robinson  
Clayton Bray  
Robert Underwood  
Martin Klingenberg  
C.V. Williams  
William Guelker  
Erwin Prachar  
Ray Collen  
Anthony Grebenc  
Don Gustafson  
Raymond White  
Delbert Harrington  
Einard Waisanen  
Donald Larsen  
Lennen Naley  
Don Ericson  
Donald Barstad  
Chris Back  
Paul Jourdan  
Earl Koeberl  
Wil Meierhofer  
Rodger Palmer  
David Skorseth

County Agents  
Sig Restad  
Arnold Heikkala  
John Eix  
Art Frick  
Robert Asheman  
J.O. Jacobson  
David Radford  
George Saksa  
Otto Lee  
Kenneth Hallbach  
Glen Smith  
Miles Rowe  
\*\*\*\*

Special tribute is due to Leo Keskinen, the first Vo Ag Coordinator in the Duluth area, for his diligent work in getting the program started in Northeastern Minnesota. He served as coordinator and record analyst until 1963, when Robert G. Anderson, present coordinator assumed the position. Also, Nellie Hopper, clerical assistant for Leo for many years, is due much credit for her contribution to the program. Leo is now serving as Director of the Area Vocational School in Grand Rapids.

Mr. Gust Neubauer, deceased, served as field man for the program for several years in its infancy and was instrumental in helping the program move along when the going was difficult.

Note is made here of the year 1965 in regard to the Study. During this year there were enrolled about seventy lower income families under the MDTA Farmer-General program. It will be noticed that that this enrollment influenced various parts of the report and this factor should be borne in mind when the study is reviewed.

## THIS PUBLICATION IS DEDICATED TO:



**Mr. and Mrs. Walter Reyer — Staples, Minnesota**

These two farm couples have been on the N. E. Farm Management Program every year since its beginning in 1956. They have been excellent cooperators and have given unselfishly of their time and record information so that others may be helped. For many years the Reyer operation was used as an instructional tool for Vocational Agriculture students in various area high schools



**Mr. and Mrs. L. R. Johnson — Meadowlands, Minn.**

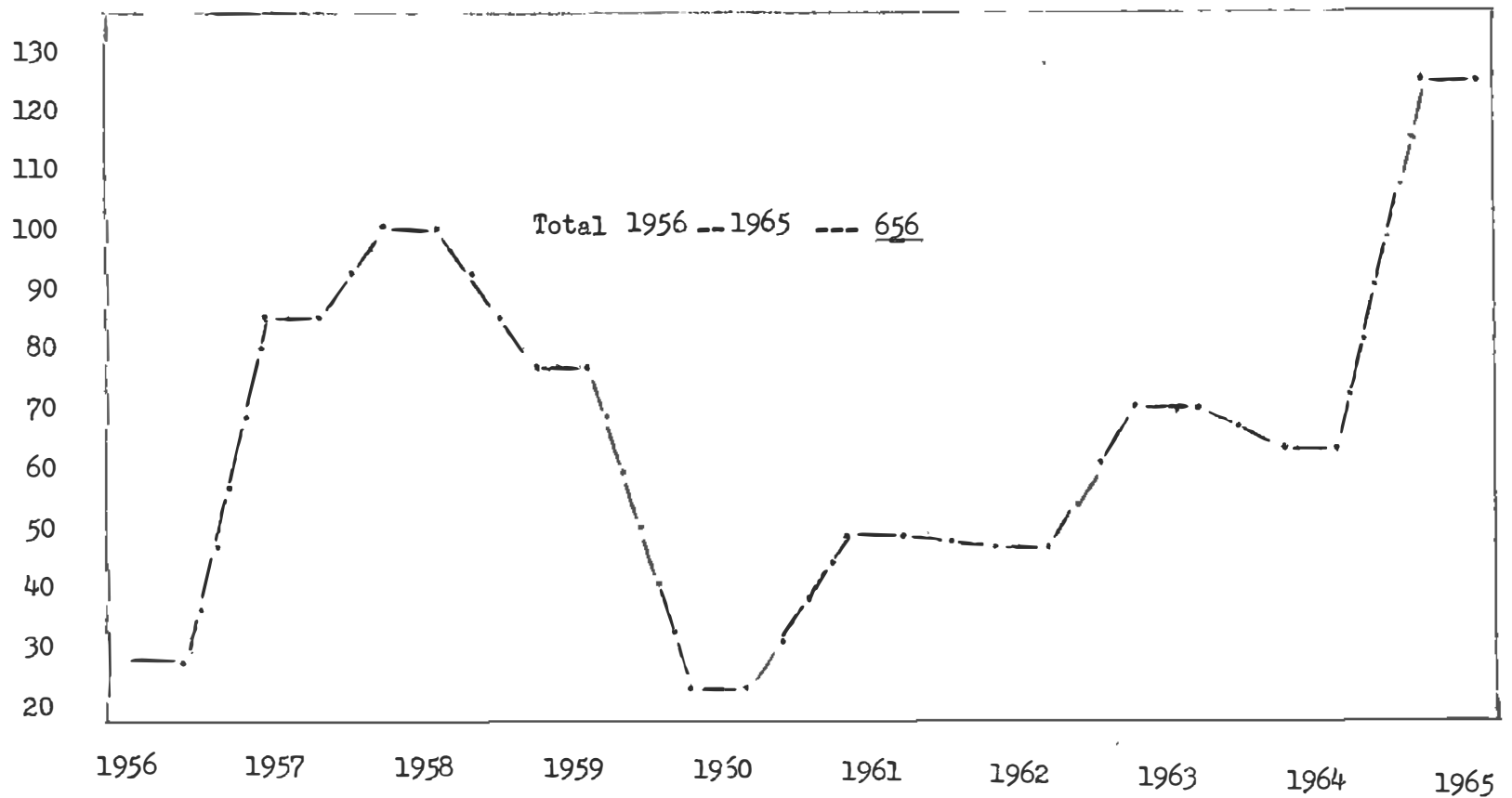
where the fundamentals of account book keeping and analysis data were learned. Currently, the Johnson farm is being used for a similar purpose.

Mr. and Mrs. Reyer, Mr. and Mrs. Johnson— we salute you and hope that you have gained as much from the program as you have contributed. We all say “thanks”!!

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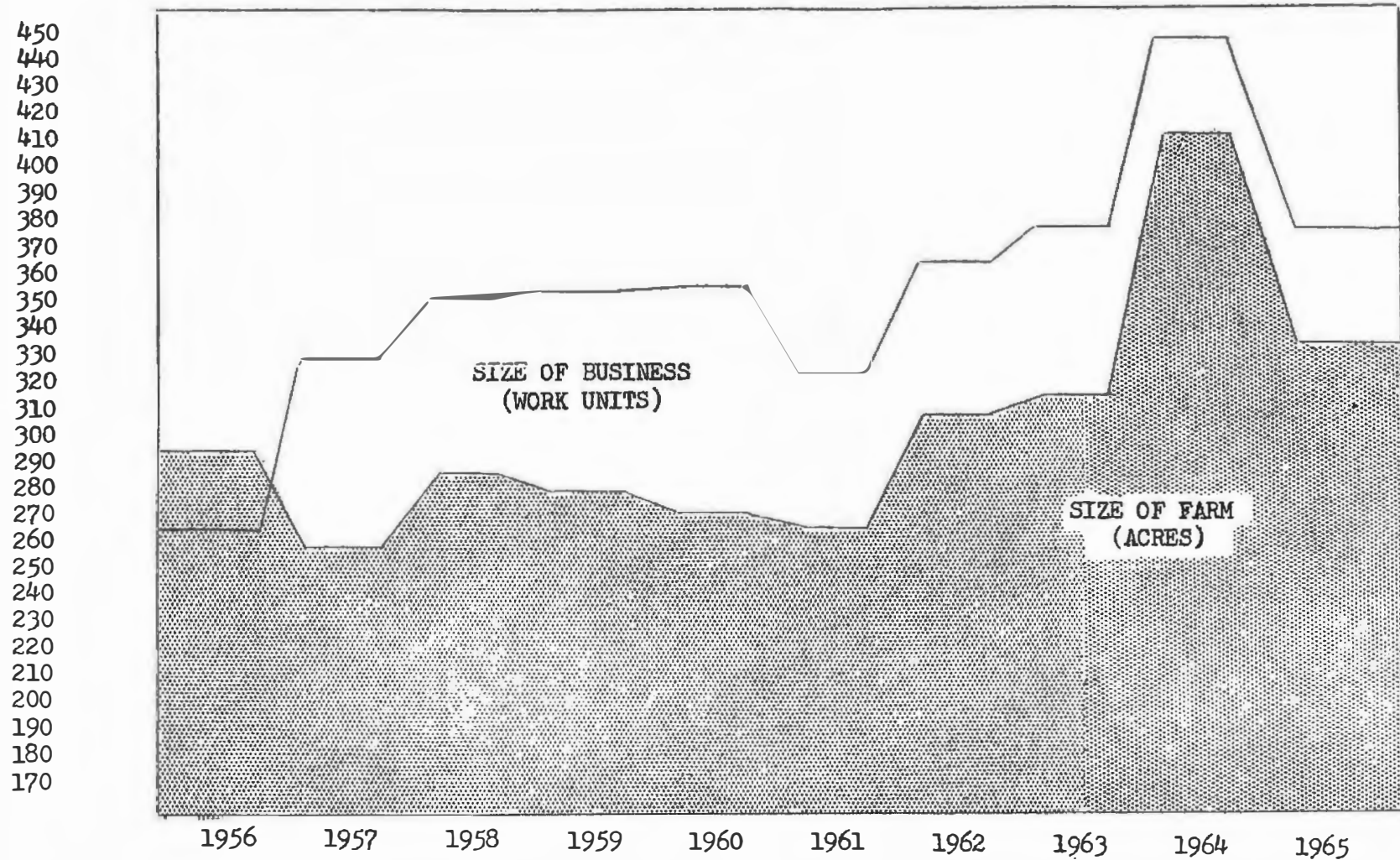
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# NUMBER OF COOPERATING FARMERS



\* Average number cooperators for the 10 year period --- 66  
 Low in 1960 partly due to IRRRC funds were not available  
 High in 1965 in part due to additional Manpower Development & Training Cooperators

SIZE OF FARM (ACRES)  
AND  
SIZE OF BUSINESS (WORK UNITS)\*



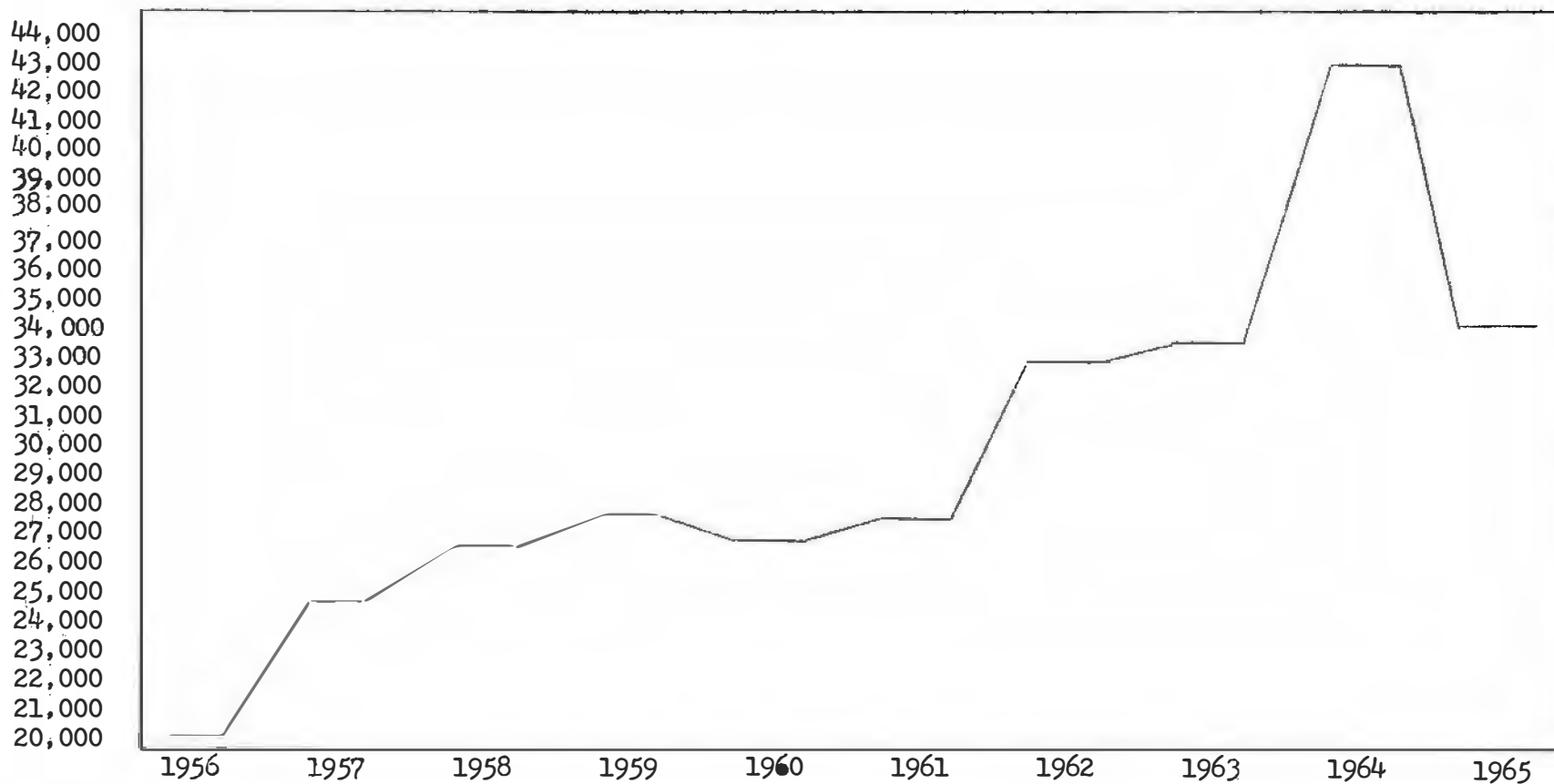
\*Work Unit - A normal 10 hour day put in by an average worker.  
(Total determined by assigning a specific number of work units to various classes of livestock and crops.)



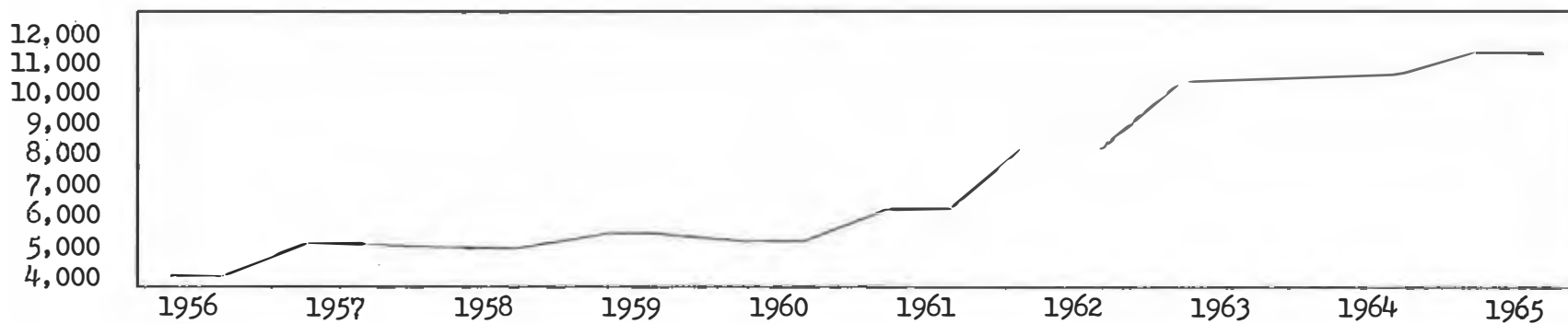
# FARM CAPITAL AND NET WORTH



### AVERAGE ASSETS



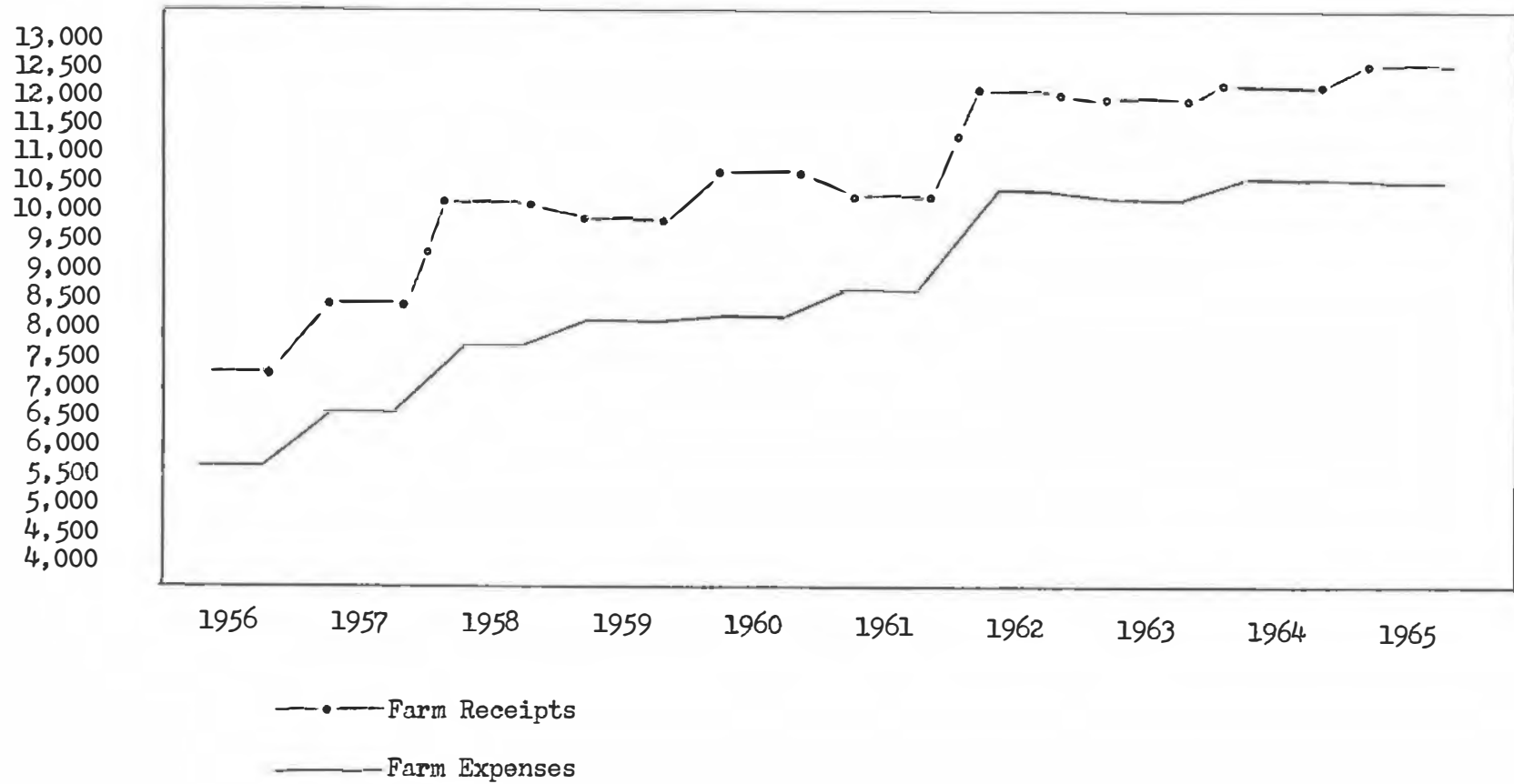
### AVERAGE LIABILITIES



Ratio of Assets  
to Liabilities

Year	Ratio of Assets to Liabilities
1956	5.0:1
1957	4.9:1
1958	5.3:1
1959	5.1:1
1960	5.4:1
1961	4.6:1
1962	4.1:1
1963	3.3:1
1964	4.1:1
1965	2.9:1

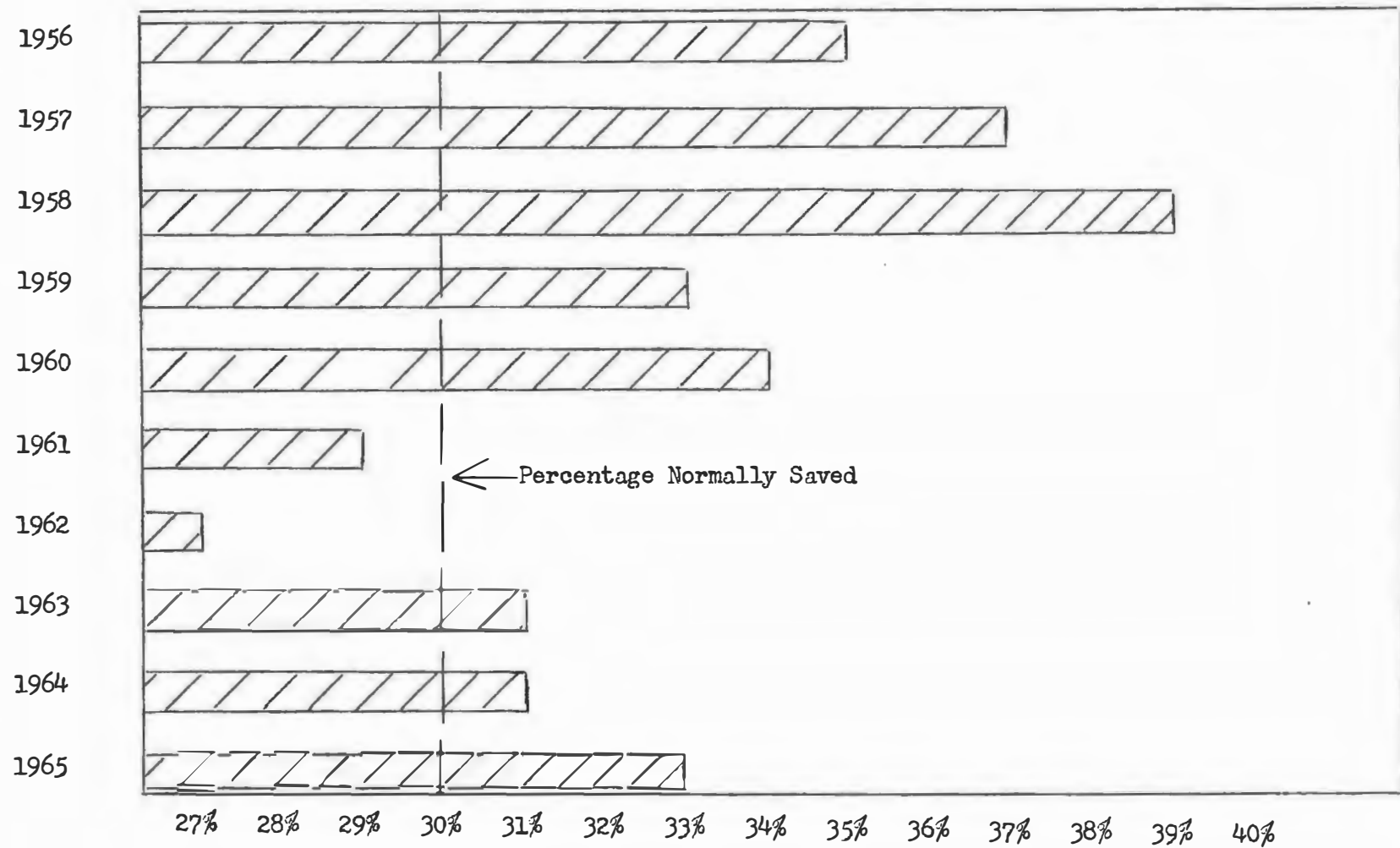
# FARM RECEIPTS AND EXPENSES



LABOR EARNINGS  
AND  
RETURN TO CAPITAL AND FAMILY LABOR



PERCENT OF GROSS RECEIPTS SAVED AS RETURN TO CAPITAL AND LABOR





ESTIMATED RETURN PER HOUR -- OPERATOR



# LABOR EARNINGS CORRELATED WITH EXCELLED FACTORS\*

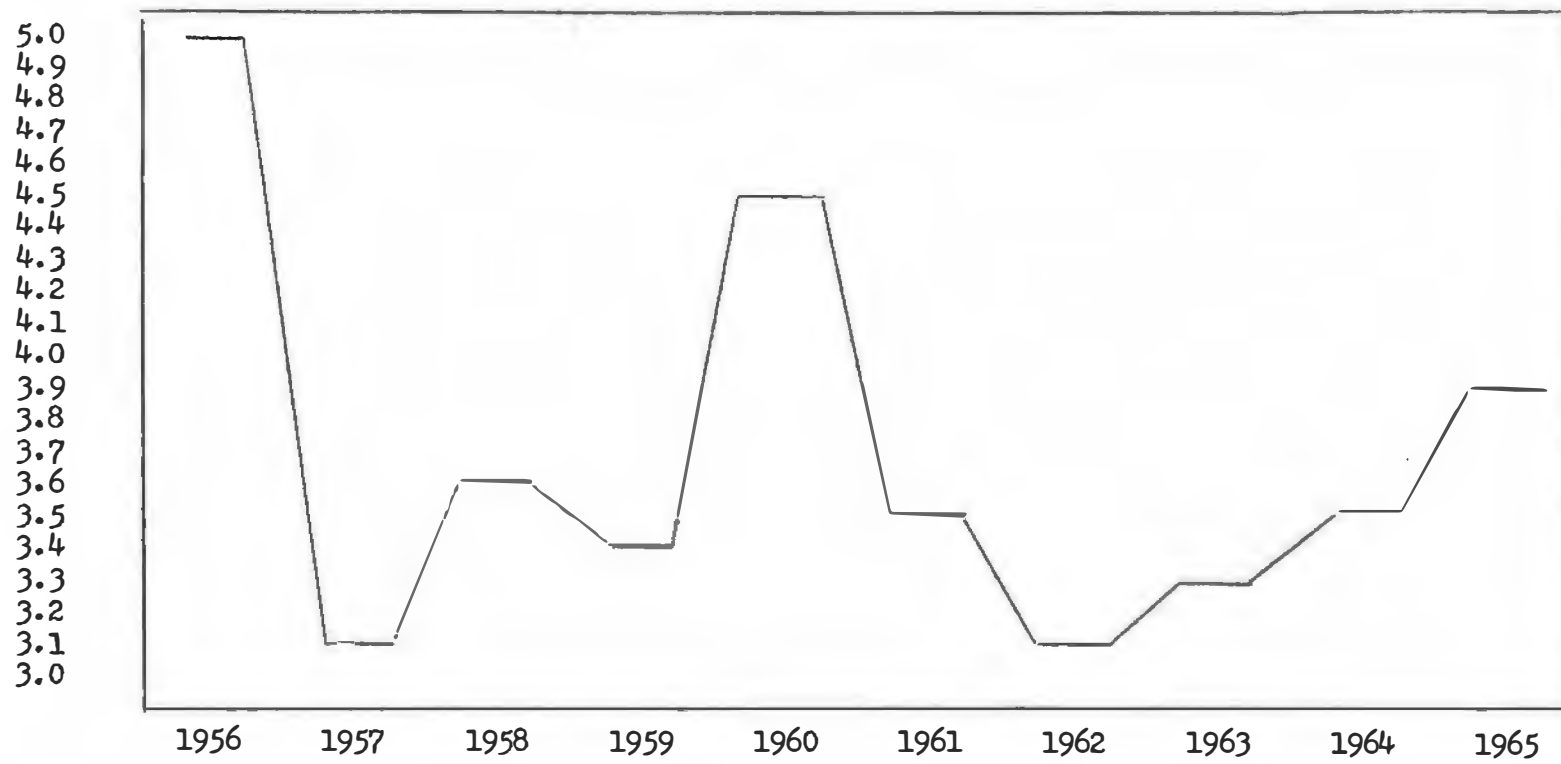
AVERAGE 1958-1965

This graph draws attention to the fact that farmers who exceed the average in one or more of the seven efficiency factors also report higher labor earnings.

No. of factors in which farmers excelled	Average No. of Farms	AVERAGE LABOR EARNINGS				
		0	1000	2000	3000	4000
0 or 1	12	\$513				
2 or 3	24	\$1,507				
4 or 5	25	\$2,482				
6 or 7	8	\$3,625				

- \*1. Crop Yields
- 2. Choice of Crops
- 3. Returns From Livestock
- 4. Amount of Livestock
- 5. Size of Business
- 6. Work Units Per Worker
- 7. Control Over Expenses

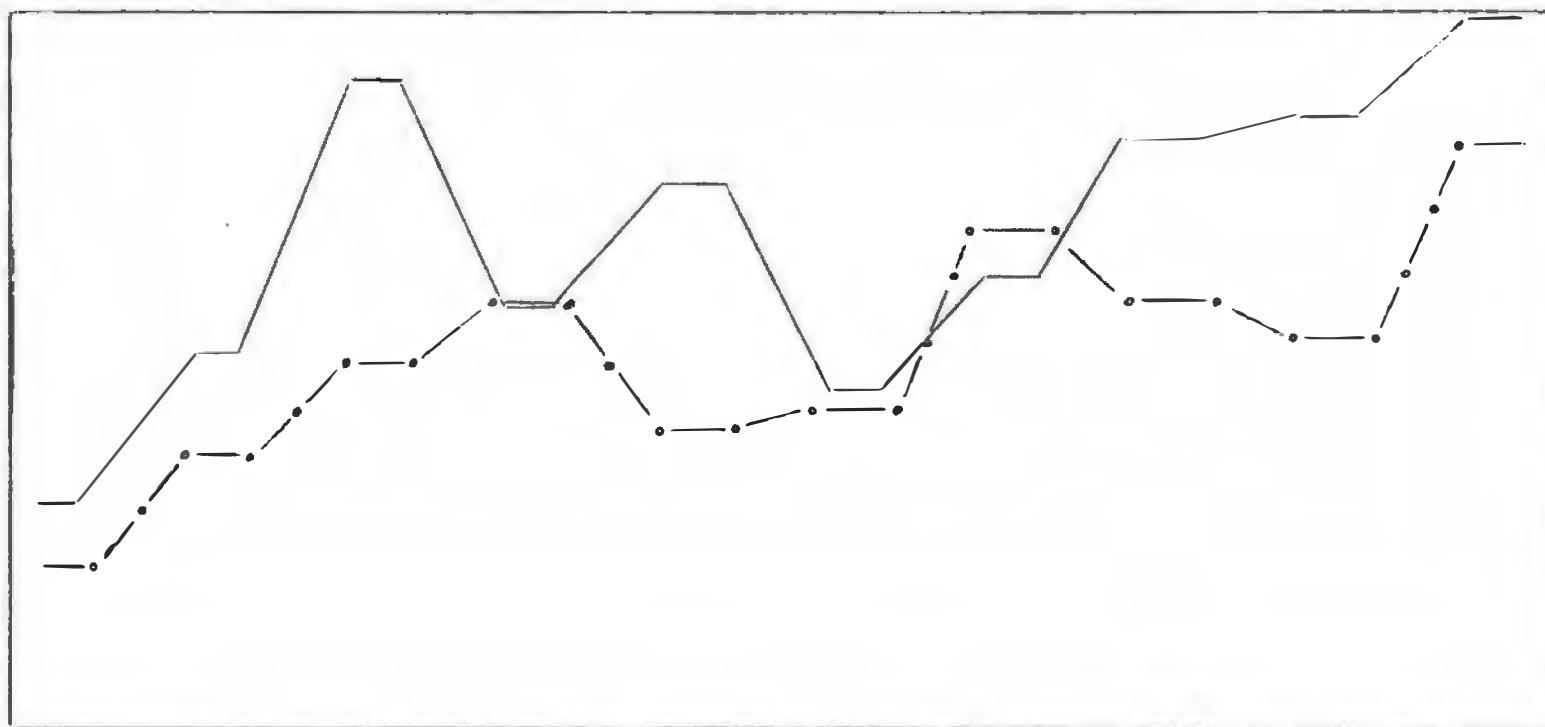
AVERAGE NUMBER OF ORGANIZATION AND EFFICIENCY FACTORS



# HOUSEHOLD AND PERSONAL EXPENSE COMPARED WITH RETURN TO CAPITAL AND LABOR

Dollars

4,100  
4,000  
3,900  
3,800  
3,700  
3,600  
3,500  
3,400  
3,300  
3,200  
3,100  
3,000  
2,900  
2,800  
2,700  
2,600  
2,500  
2,400  
2,300  
2,200  
2,100  
2,000



— . — Total Cash Expense and Perquisites

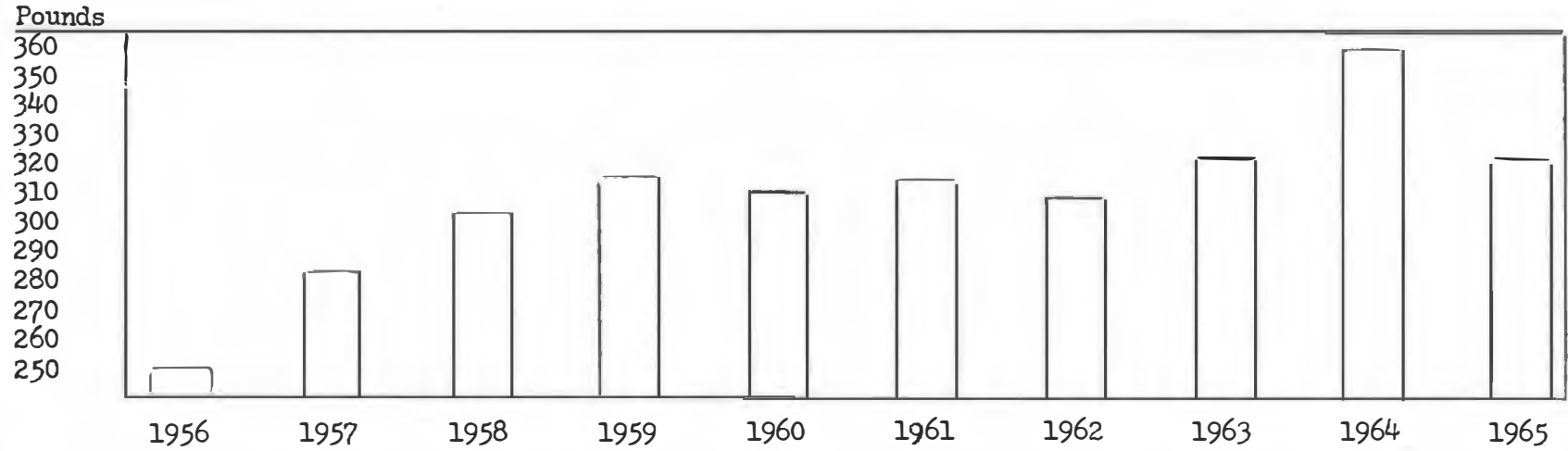
—— Return to Capital and Labor

FACTORS RELATED TO THE DAIRY ENTERPRISE

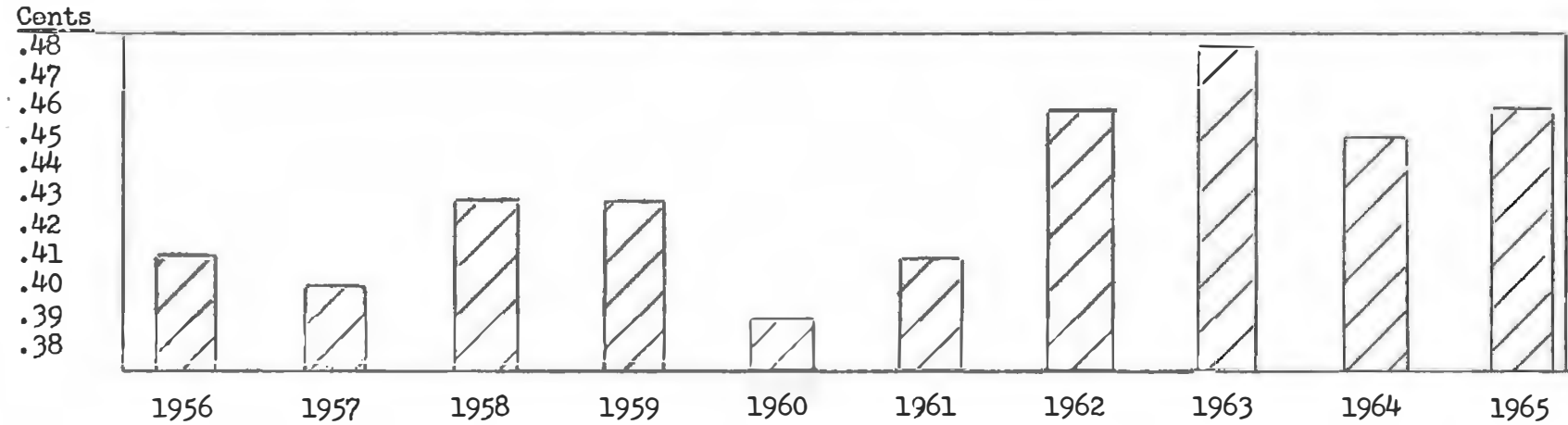
	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>
No. of Head	17.5	17.9	18.3	19.5	21.2	18.8	20.4	23.3	24.7	23.4
Lbs. BF Per Cow	251	283	306	315	311	315	310	323	360	322
Lbs. of Milk Per Cow	--	--	--	8482	7964	8309	8267	8997	9621	8819
Feed Cost Per Cow	\$ 97.63	113.74	129.04	135.55	120.53	130.42	139.80	153.18	162.64	150.03
Total Value Produced	\$213.97	271.05	297.62	293.78	272.32	287.96	279.97	286.82	342.36	290.87
Return Over Feed	\$116.34	157.31	168.58	158.23	151.79	157.54	140.17	133.64	179.72	140.84
Return For \$100 of Feed	\$235.00	263.00	241.00	217.00	227.00	221.00	200.00	187.00	210.50	193.80
Feed Cost Per Lb. BF	\$ .41	.40	.43	.43	.39	.41	.46	.48	.45	.46
Total Sales, Dairy Products	\$3250.00	4470.00	4830.53	5106.00	4361.00	5068.00	4794.00	5201.00	6031.00	5622.00
Livestock Sales, Dairy	\$698.00	971.00	1369.54	1322.00	1077.00	977.00	1173.00	1162.00	1008.00	1404.00
No. of Cooperating Farmers in the Dairy Enterprise	22	71	89	71	17	39	32	49	38	88



# POUNDS OF BUTTERFAT PER COW



# FEED COST PER POUND BUTTERFAT



Market Price  
Butterfat

83¢

91¢

91¢

90¢

84¢

90¢

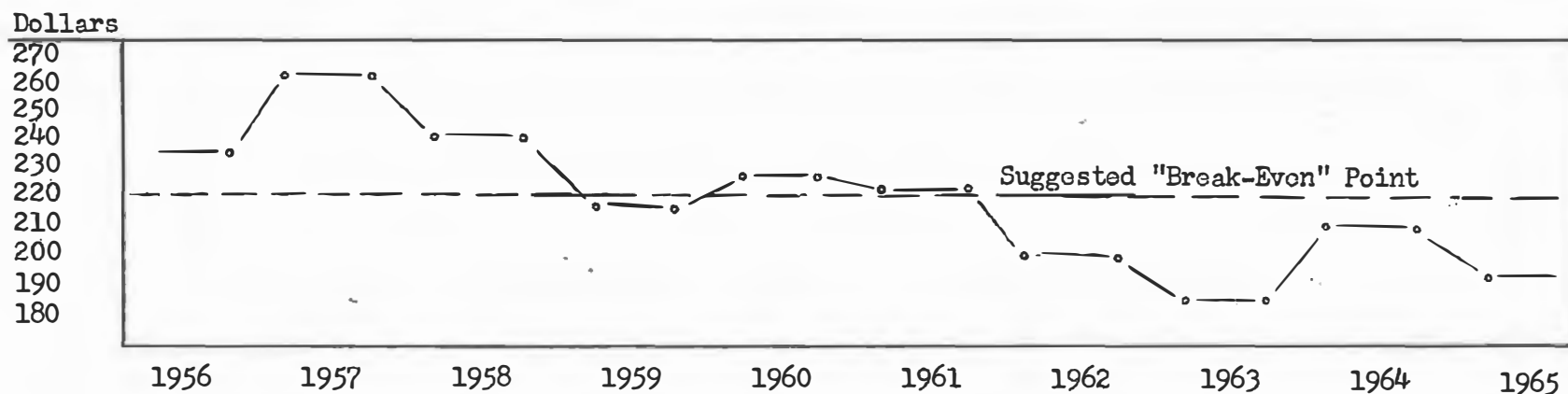
90¢

91¢

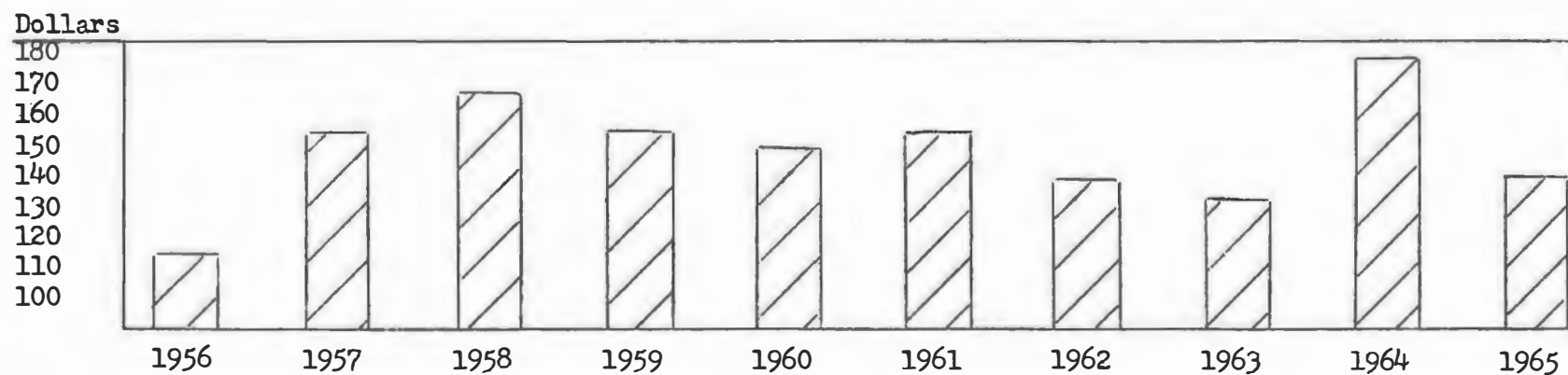
96¢

93¢

# RETURN FOR \$100 OF FEED FED TO DAIRY



## RETURNS OVER FEED COSTS PER DAIRY COW



Market Price  
# Butterfat

83¢	91¢	91¢	90¢	84¢	90¢	90¢	91¢	96¢	93¢
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

\*Break-Even Point -- A Return for \$100 feed that will cover all costs including labor.

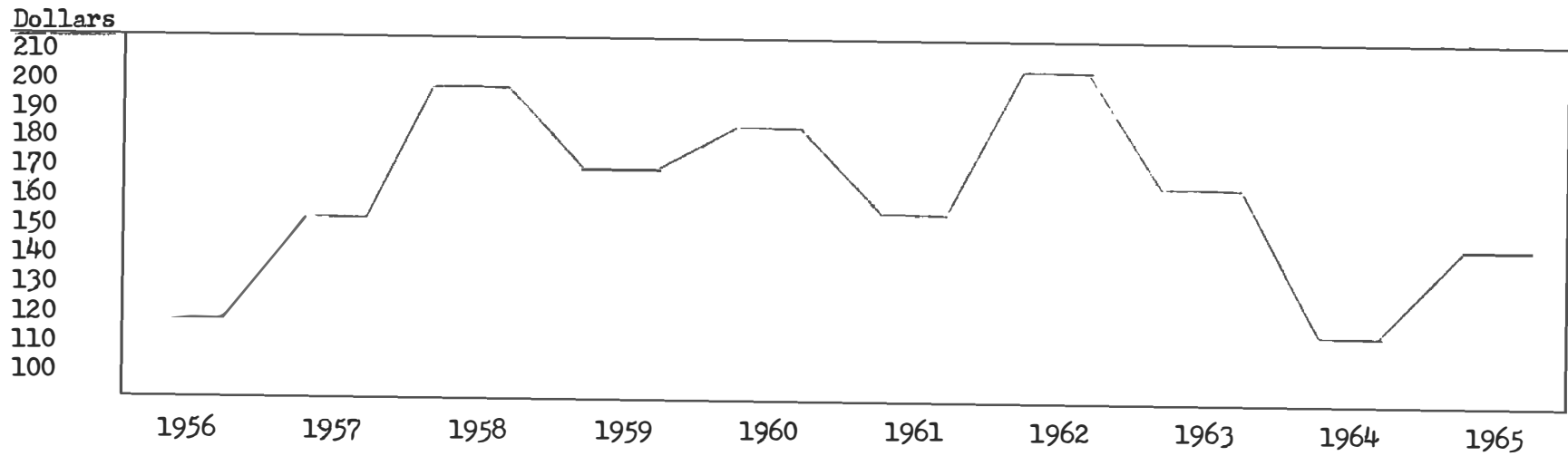
# FACTORS RELATED TO THE OTHER DAIRY ENTERPRISE

	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>
Net Inc. in Value	\$ 48.09	55.75	78.26	77.59	79.18	75.36	87.71	73.83	49.97	66.98
Total Feed Costs	\$ 43.79	40.27	44.03	45.27	46.60	47.74	42.67	44.19	43.07	45.33
Returns Above Feed Costs	\$ 4.30	15.48	34.23	32.32	32.58	27.62	45.04	29.64	6.90	21.65
Returns for \$100 of Feed	\$120.00	154.00	199.00	171.00	188.00	158.00	206.00	167.00	116.02	147.76
No. of Head	19.9	18.5	18.9	20.5	21.3	20.8	25.1	25.8	29.7	27.2
No. of Cooperating Farmers in the Other Dairy Enterprise	22	71	91	74	17	39	32	49	39	85

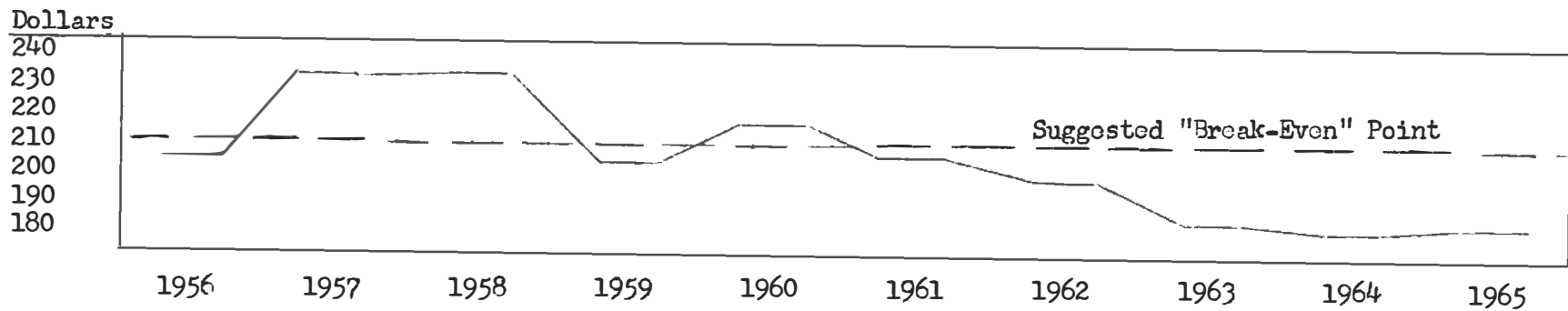
# FACTORS RELATED TO THE ALL DAIRY ENTERPRISE

Value of Produce	\$161.57	211.51	248.47	240.91	229.57	236.65	372.01	231.53	248.07	222.19
Total Feed Costs	\$ 82.17	95.76	111.50	116.16	106.13	113.68	186.17	125.10	137.10	151.99
Returns over Feed Costs	\$ 79.40	115.75	136.97	124.75	123.44	122.97	185.85	106.43	110.97	70.20
Returns for \$100 of Feed	\$207.00	234.00	235.00	207.00	219.00	208.00	200.00	185.00	180.94	146.19
Animal Units of Cattle	27.6	27.4	27.6	29.8	32.0	28.9	32.9	36.4	38.8	31.9
No. of Cooperating Farmers in the All Dairy Enterprises	22	71	90	72	17	39	32	49	39	88

RETURN FOR \$100 OF FEED FED TO OTHER DAIRY



RETURN FOR \$100 OF FEED FED TO ALL DAIRY

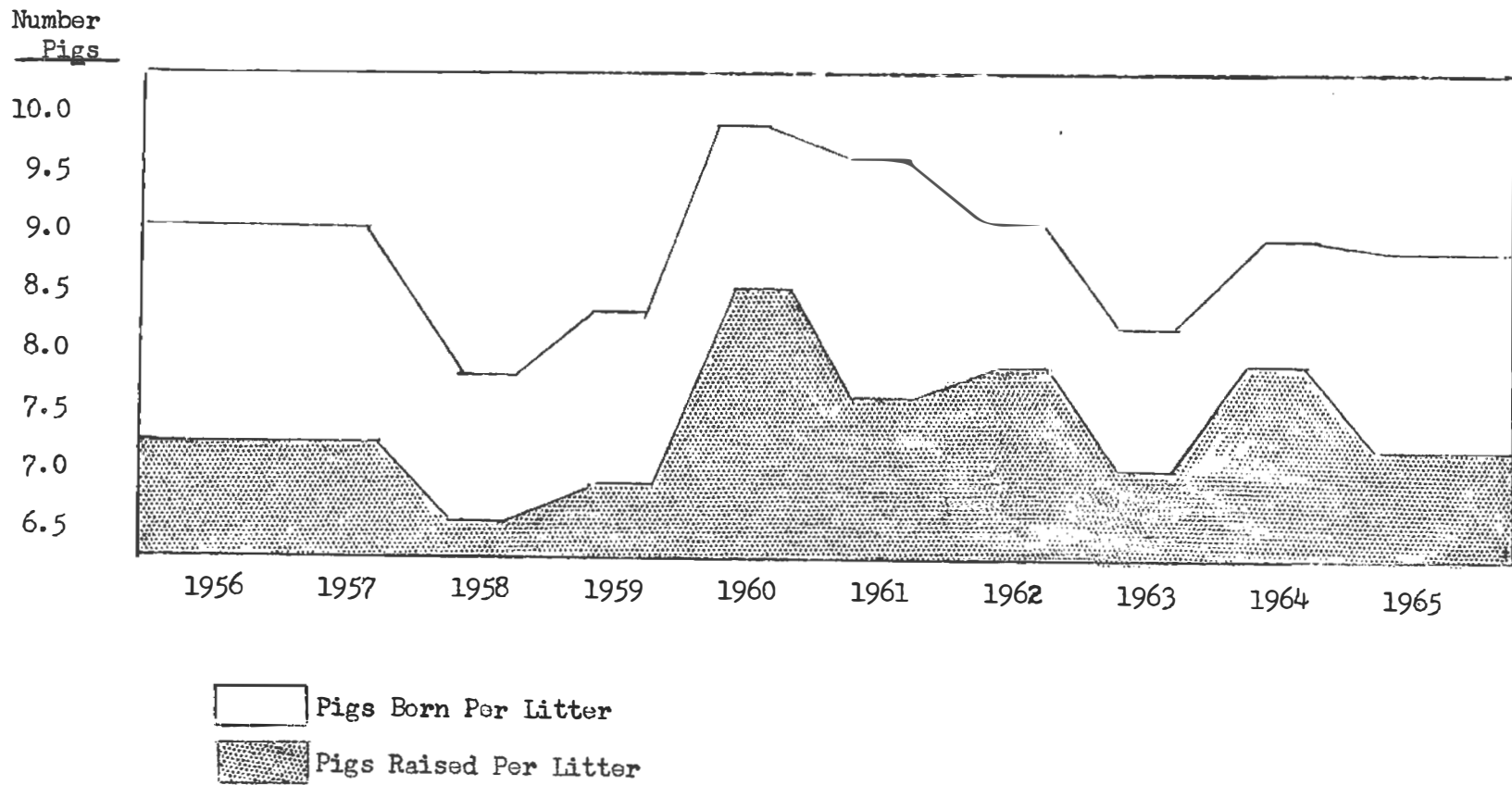


FACTORS RELATED TO THE HOG ENTERPRISE

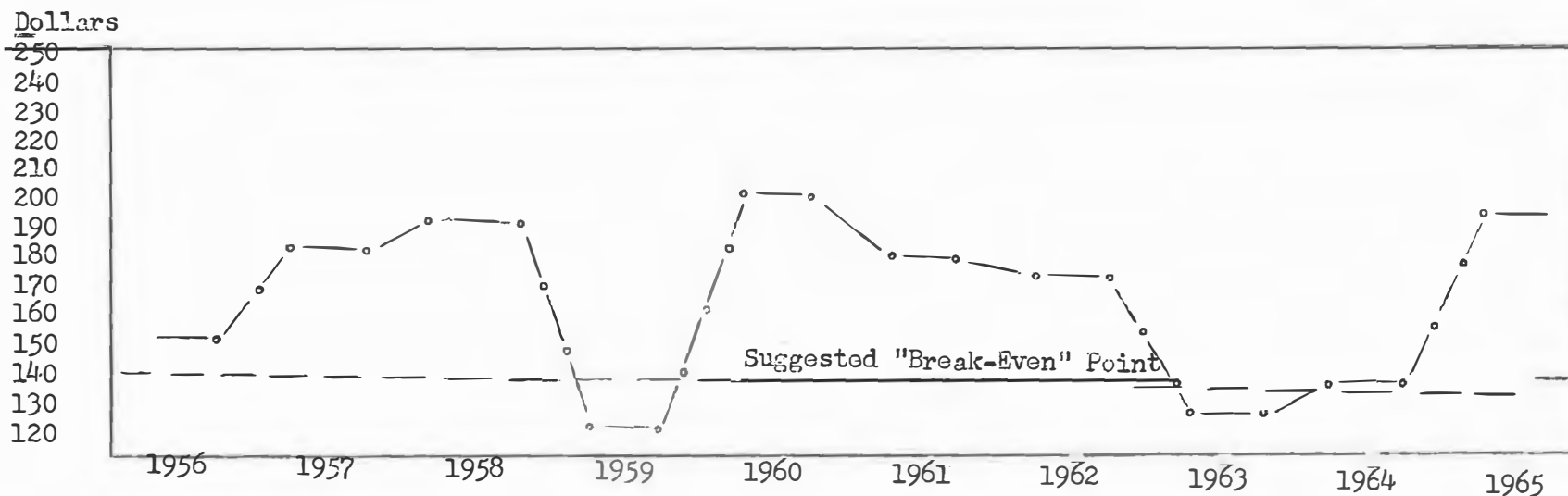
	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>
Feed Cost per Cwt.	\$ 13.78	13.62	12.94	1507	12.60	15.06	12.41	14.68	14.10	14.32
Net Inc.-Dec. in Value Per Cwt.	\$ 17.24	21.50	23.27	19.38	25.19	28.15	22.40	19.31	20.46	34.97
Ret. Over Feed Costs per Cwt.	\$ 3.71	7.88	10.33	4.31	12.59	13.09	9.99	4.63	6.36	20.65
Ret. for \$100 Feed	\$156.00	154.00	197.00	123.00	208.00	186.00	180.00	132.00	145.11	244.20
Price Rec. per Cwt.	15.51	22.92	24.97	16.76	26.88	23.03	22.93	21.00	19.85	32.20
Total Value, Hogs Sold	\$581.00	495.00	1118.00	941.00	1117.00	1673.00	1313.00	739.00	511.00	797.00
No. of Litters Raised	2.8	11.2	13.0	16.0	22.0	24.9	23.9	18.8	20.0	25.0
Pigs Born per Litter	9.0	9.0	7.7	8.2	10.0	9.5	9.3	8.1	8.9	8.8
Pigs Raised per Litter	7.3	7.3	6.5	6.8	8.5	7.5	7.8	7.0	7.8	7.3
Pounds of Pork Produced	5718	6530	9929	13468	11186	12402	13300	8685	12709	10896
No. of Cooperating Farmers in Hog Enter.	10	26	40	35	10	23	18	29	10	17



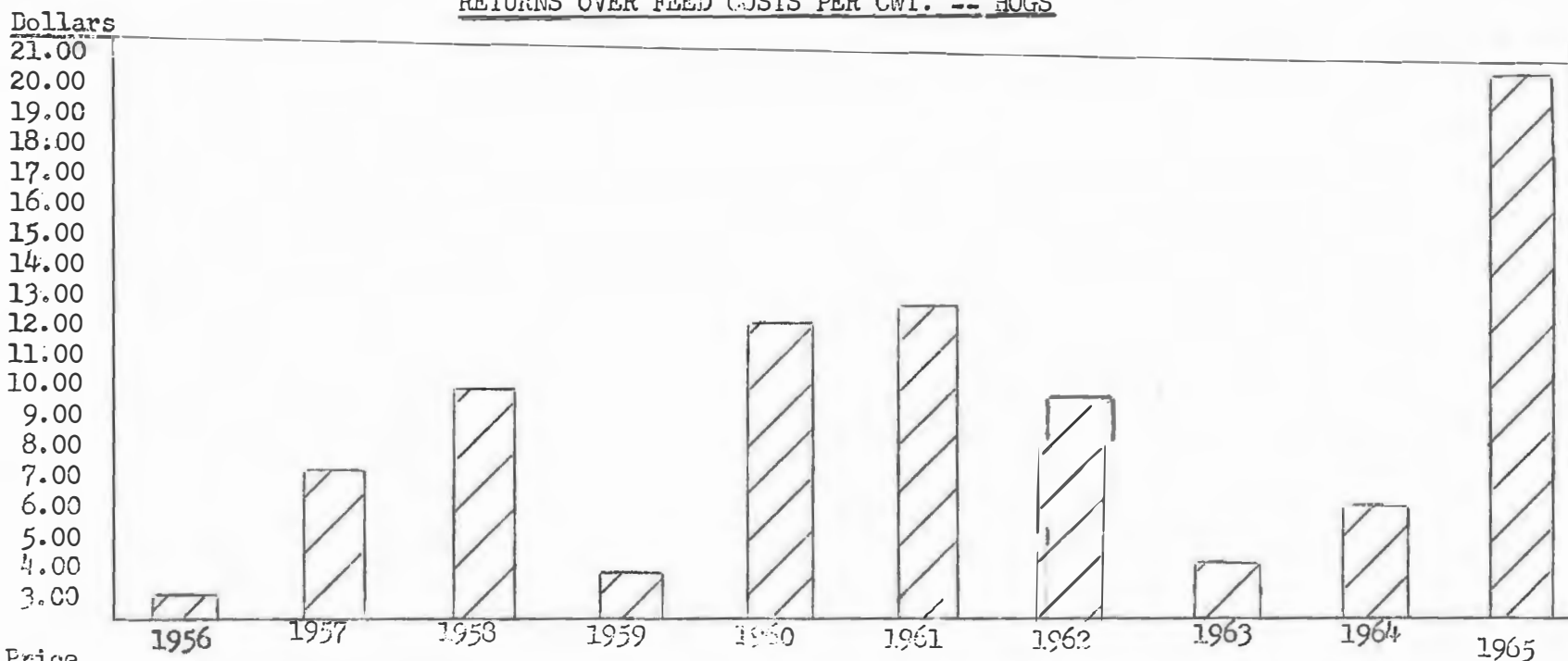
PIGS BORN PER LITTER  
AND  
PIGS RAISED PER LITTER



# RETURN FOR \$100 OF FEED FED TO HOGS



## RETURNS OVER FEED COSTS PER CWT. -- HOGS



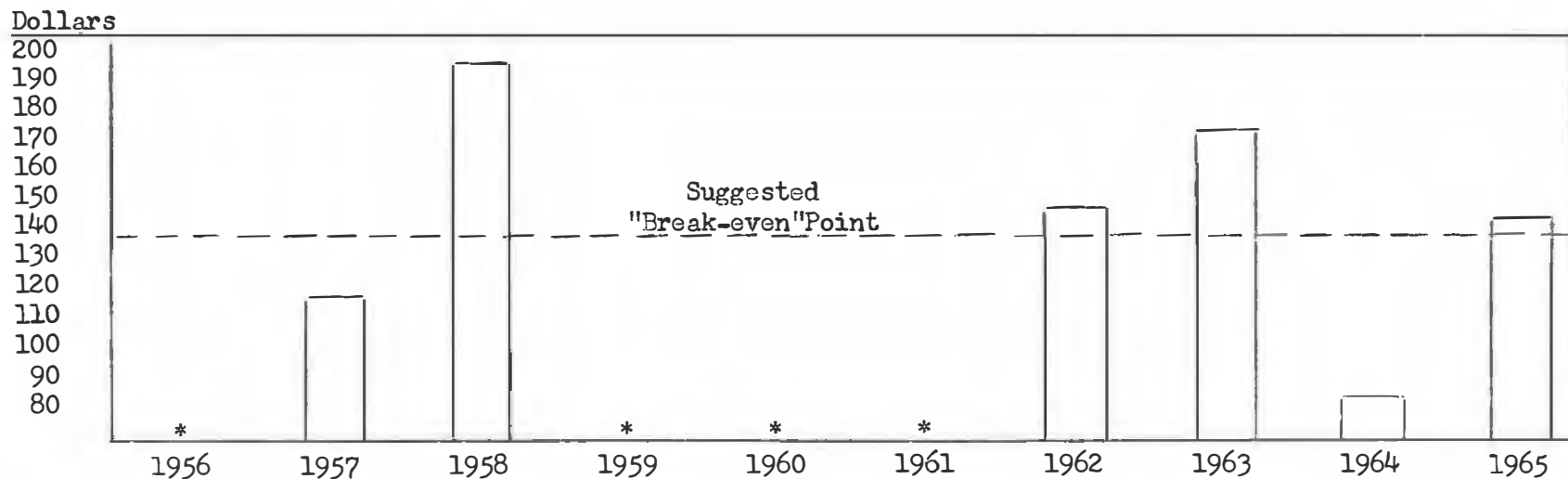
Market Price  
(Includes sale  
of feeder pigs)

Year	Market Price
1956	16.00
1957	23.00
1958	25.00
1959	17.00
1960	27.00
1961	23.00
1962	23.00
1963	21.00
1964	20.00
1965	32.00

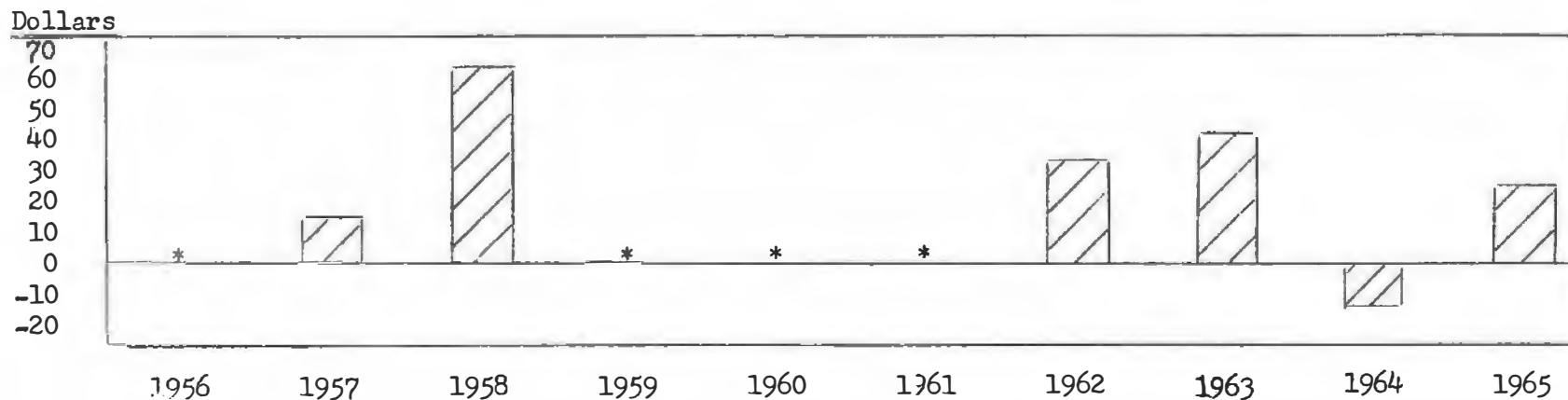
FACTORS RELATED TO THE BEEF ENTERPRISE

<u>Beef Breeding Herd</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>
Feed Costs Per Animal Unit	--	\$111.30	75.53	--	--	--	71.34	58.63	67.74	64.01
Net Inc. in Value of Animals	--	\$121.94	142.58	--	--	--	105.32	100.93	55.95	90.72
Rets. Above Feed Cost Per A/U	--	\$ 10.64	67.05	--	--	--	33.98	42.30	(-11.79)	26.71
Return for \$100 Feed	--	\$116.00	196.00	--	--	--	147.00	172.00	82.57	141.68
No. of Cows & Bulls	--	--	--	--	--	--	--	36.3	82.8	47.3
No. of Animal Units	--	14.4	13.4	--	--	--	33.7	38.4	70.9	52.3
Pounds of Beef Produced	--	--	--	--	--	--	--	--	25660	23067
All Beef Sales (Incl. Feeders)	--	\$88.00	234.36	65.00	135.00	79.00	1060.00	718.00	943.00	559.00
No. of Cooperating Farmers in the Beef Breeding Enterprise	-	4	9	--	--	--	6	11	6	16
<u>Feeder Cattle</u>										
Feed Costs Per Cwt.								\$ 10.21	9.51	11.20
Net Inc. in Value of Animals	No Beef Feeders Reported 1956-1962							\$ 14.16	18.76	18.41
Rets. Above Feed Cost Per Cwt.								\$ 3.95	9.25	7.21
Return for \$100 of Feed								\$139.00	197.15	164.40
Price Paid Cwt. Beef Bought								\$ 22.80	--	3.59
Price Received for Beef Sold								\$ 18.59	17.87	18.34
Average Cwts.								66.9	31.7	23.6
Pounds of Beef Produced								63455	21447	15550
Cooperating Farmers in Feeders								5	4	8

# RETURN FOR \$100 OF FEED BEEF BREEDING

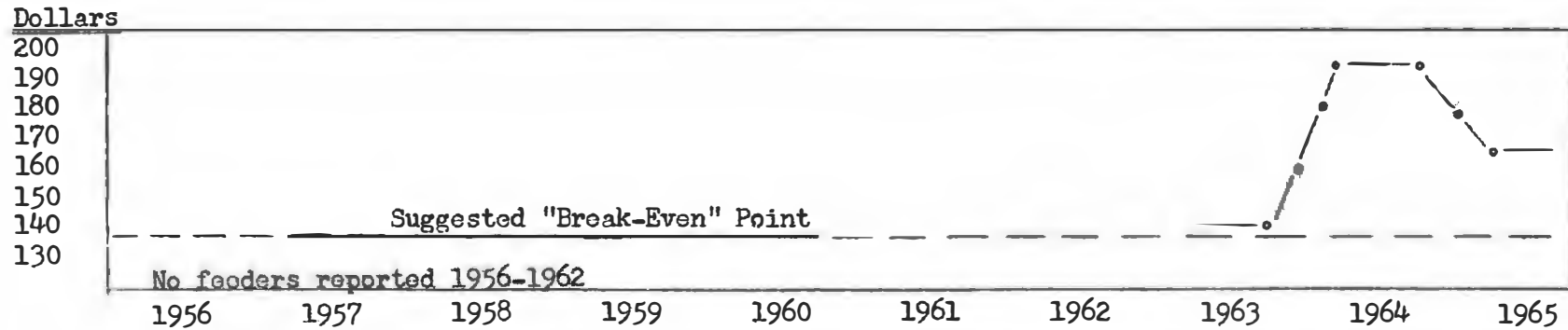


## RETURNS OVER FEED COSTS BEEF BREEDING

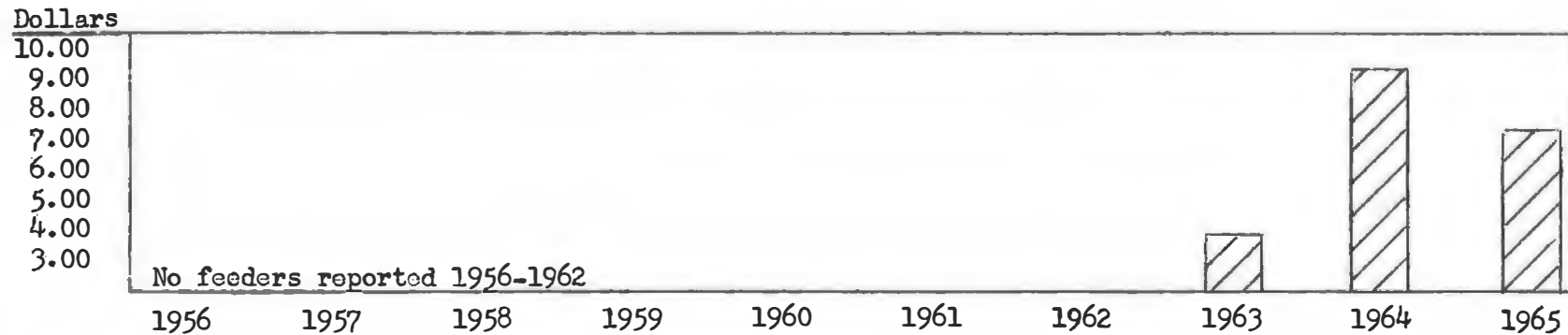


\*No Beef Reported

# RETURN FOR \$100 OF FEED FEEDER CATTLE



# RETURN OVER FEED COSTS FEEDER CATTLE





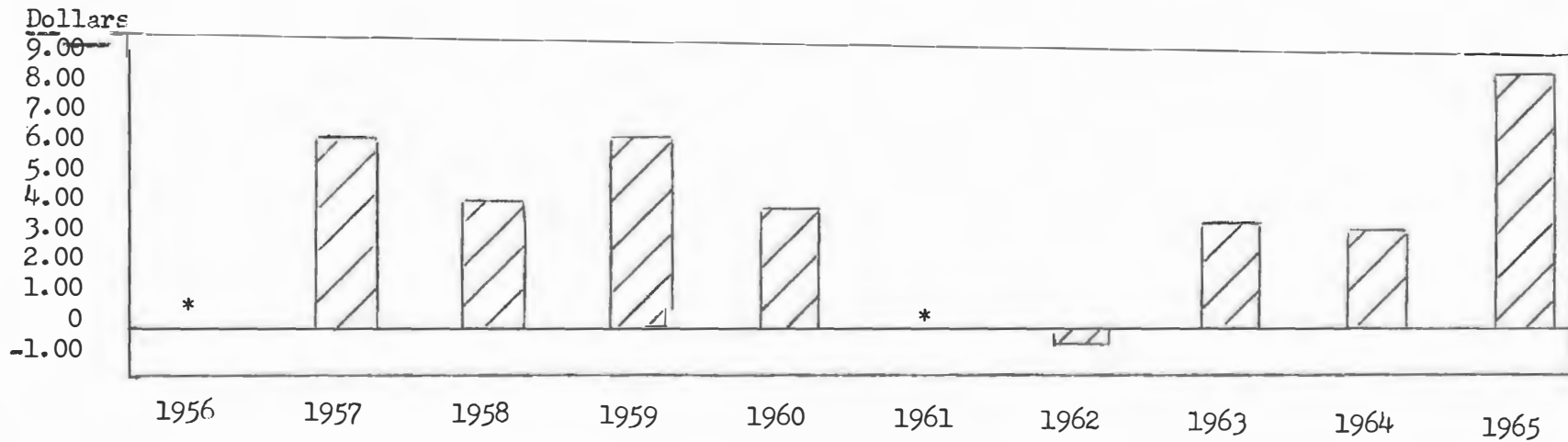
FACTORS RELATED TO THE SHEEP ENTERPRISE

	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>
Feed Costs Per Ewe	--	\$ 10.41	9.42	6.95	9.90	--	11.71	9.61	10.46	8.34
Total Value Produced	--	\$ 16.81	13.78	13.38	13.92	--	11.23	13.31	14.12	16.92
Rets. Above Feed Cost Per Head	--	\$ 6.40	4.35	6.43	4.02	--	(-.48)	3.70	3.66	8.58
Return for \$100 of Feed	--	\$181.00	179.00	193.00	143.00	--	96.00	138.00	134.97	203.00
Price Per Cwt. Lamb Sold	--	--	--	--	--	--	--	--	\$ 19.32	18.05
Price Per Lb. wool Sold	--	--	--	--	--	--	--	--	\$ .66	.59
Pounds of Wool Per Sheep Sheared--	--	--	--	--	--	--	--	--	7.4	7.2
No. Ewes Kept for Lambing	--	--	--	--	--	--	--	--	35.2	50.7
Percent Lamb Crop	--	--	--	--	--	--	--	--	118.2	117.0
Percent Death Loss	--	--	--	--	--	--	--	--	29.6	26.9
Average No. of Ewes	--	45.8	56.4	67.8	54.8	--	48.0	40.3	36.9	55.9
Sheep and Wool Sales	\$ 39.00	69.00	89.56	123.00	120.00	84.00	70.00	100.00	97.00	123.00
No. of Cooperating Farmers in the Sheep Enterprise	--	6	12	10	3	--	4	9	6	12

# RETURN FOR \$100 OF FEED SHEEP



# RETURN OVER FEED COSTS SHEEP



\*No Sheep Reported

FACTORS RELATED TO THE CHICKEN ENTERPRISE

	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>
Total Feed Cost Per Hen	\$ 4.28	3.75	4.30	3.24	--	--	4.18	4.41	--	2.38
Total Value Produced	\$ 4.75	7.66	6.26	3.28	--	--	5.60	4.48	--	2.63
Ret. Over Feed Cost Per Hen	\$ .57	3.91	1.96	.04	--	--	1.42	.47	--	.25
Return for \$100 of Feed	\$127.00	215.00	190.00	101.00	--	--	134.00	110.00	--	110.50
Price Per Dozen Eggs Sold	\$ .32	.32	.33	.25	--	--	.30	.30	--	.26
Eggs Laid Per Hen	137	112	170	123	--	--	181	126	--	102
Average No. Hens	74	71	69	125	--	--	114	105	--	225
Percent Death Loss	--	--	--	--	--	--	--	--	--	10.6%
Chicken Sales	\$ 18.00	10.00	16.48	12.00	6.00	3.00	5.00	6.00	20.00	8.00
No. of Cooperating Farmers in the Chicken Enterprise	9	18	16	11	--	--	3	5	--	4

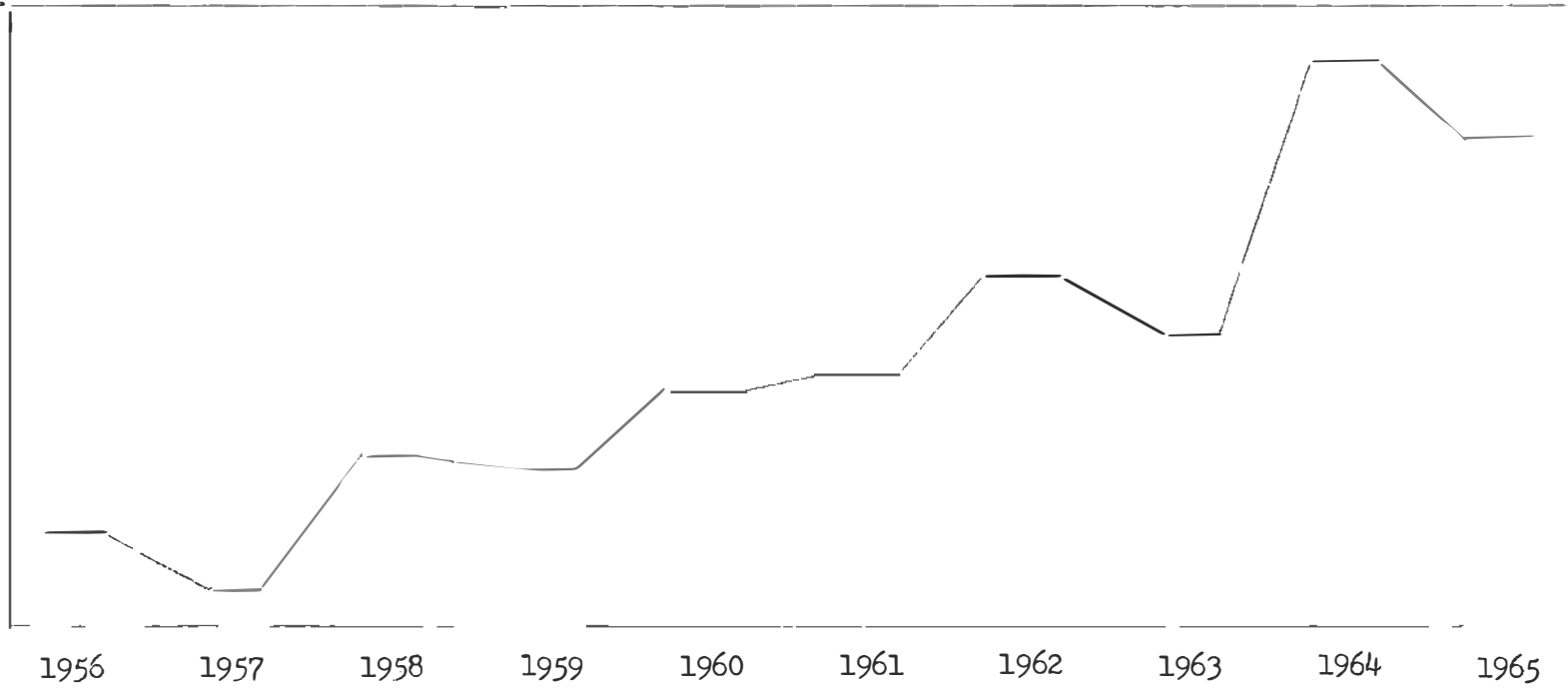
CROPPING HISTORY

	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>
<u>Corn</u>										
Acreage	12.2	15.5	13.1	17.7	6.5	10.0	11.4	12.9	9.9	6.1
Yield Per A. (Bu.)	50.0	35.3	25.5	35.6	52.6	53.2	39.2	53.2	44.7	26.1
<u>Corn Silage</u>										
Acreage	6.7	7.7	11.8	8.6	12.4	11.2	14.5	15.0	18.6	24.2
Yield Per A. (Ton)	6.0	6.6	4.7	6.0	6.2	6.7	6.8	8.6	6.1	5.1
<u>Oats</u>										
Acreage	17.8	19.5	22.5	23.0	21.2	16.1	22.6	23.4	24.6	23.0
Yield Per A. (Bu.)	33.0	36.4	50.4	43.6	46.4	30.8	37.2	37.7	39.7	35.6
<u>Alfalfa Hay</u>										
Acreage	14.4	27.2	28.7	26.2	22.4	31.1	37.0	39.5	33.1	29.5
Yield Per A. (Ton)	1.2	1.7	1.7	1.9	1.7	1.3	2.0	1.6	1.7	2.1
<u>Other Leg. &amp; Mixes</u>										
Acreage	21.2	8.4	15.8	25.0	20.2	29.3	26.3	16.2	56.8	26.0
Yield Per A. (Ton)	1.8	1.8	1.4	1.3	1.6	1.3	1.6	1.5	1.2	1.4
<u>Annual Hay</u>										
Acreage	11.5	17.9	12.5	7.4	6.8	13.1	3.9	3.7	--	5.4
Yield Per A. (Ton)	1.1	1.5	1.2	1.3	.9	.4	1.0	1.6	--	1.2
<u>Legume/Grass Seed</u>										
Acreage	.8	2.2	1.9	1.8	3.2	--	1.3	3.8	9.7	7.1
Yield Per A. (Lbs.)	75.0	88.7	139.4	241.2	207.5	--	116.9	206.3	70.6	333.5
<u>Fertilizer (\$)</u>	174	137	225	211	267	274	334	297	467	412
<u>Power, Mach, Equip., Bldg. Exp. Per W/U (\$)</u>	7.86	8.33	9.25	9.04	9.31	10.15	9.18	8.81	7.94	7.58

# FERTILIZER BOUGHT

Dollars

470  
450  
430  
410  
390  
370  
350  
330  
310  
290  
270  
250  
230  
210  
190  
170  
150  
130



SUMMARY OF AVERAGES

	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>
Size of Farm (Acres)	296	259	289	280	271	265	309	316	409	332
Total Farm Capital	\$ 16514	19626	21489	22413	22470	21878	26622	30092	35261	29197
Total Farm Receipts	\$ 7402	8481	10193	9866	10656	10397	12095	12086	12175	12582
Total Farm Expenses	\$ 5669	6577	7774	8146	8309	8768	10440	10212	10568	10540
Labor Earnings	\$ 1733	1904	2419	1720	2347	1629	1655	1874	1607	2042
Return to Capital & Labor	\$ 2619	3099	3340	3237	3609	2981	3310	3767	3809	4125
Percent Tillable Land in HRC	23.9%	33.5%	35.8%	37.9%	38.7%	43.2%	48.7%	47.7%	43.1%	48.1%
Productive Livestock Units per 100 Acres	14.2	19.4	18.6	21.5	24.7	22.6	23.1	21.9	20.3	17.3
Size of Business (Work Units)	271	329	351	354	356	323	364	378	449	376
Work Units Per Worker	203	226	245	247	243	235	250	261	251	237
Power, Mach, Eq. & Bldg. Exp. per Work Unit	\$ 7.86	8.33	9.25	9.04	9.31	10.15	9.18	8.81	7.94	7.58
Averages (Acres):										
Small Grains	18.4	23.7	29.0	30.4	29.0	23.9	29.6	32.3	38.4	29.9
Cultivated Crops	24.1	25.2	27.1	26.8	19.8	21.7	25.9	28.1	35.4	33.1
Till. land in Hay	53.4	64.0	66.5	63.8	68.3	76.2	71.3	69.9	99.6	68.0
Tillable Pasture	19.9	9.9	15.6	15.5	18.1	14.7	19.4	19.6	24.7	20.6
Percent of Land Tillable	49.0%	47.6%	51.5%	52.0%	52.3%	57.3%	54.4%	54.1%	53.7%	50.7%

1956-1965 IN A CAPSULE

	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>
Farm Size (Acres)	296	259	289	280	271	265	309	316	409	332
Size of Business (Work Units)*	267	329	351	354	356	323	364	378	449	377
Return To Capital & Family Labor	\$2068	2958	3940	3237	3609	2981	3310	2681	3443	3366
Labor Earnings	1733	1904	2419	1720	2347	1629	1655	1874	1607	2042
Net Worth (Avg. Jan.1 & Dec.31)	16024	19693	21601	22219	22537	21691	24859	23302	32780	22404
Ratio of Assets to Liabilities	4.98:1	4.87:1	5.32:1	5.14:1	5.38:1	4.56:1	4.07:1	3.26:1	4.10:1	2.94:1
Expenses Per Dollar Income	.77	.78	.76	.83	.78	.84	.86	.85	.87	.84
Return Per Dollar Invested	.11	.10	.11	.08	.11	.08	.06	.09	.10	.07
% of Gross Receipts Saved As Return to Capital & Family Labor	28%	35%	39%	33%	34%	29%	27%	22%	28%	27%
<u>Source of Income</u>										
Income From Livestock	87%	83%	86%	86%	86%	88%	86%	84%	77%	83%
Income From Crops	5%	7%	4%	7%	7%	5%	6%	8%	11%	11%
Miscellaneous Income	8%	10%	10%	7%	7%	7%	8%	8%	12%	6%

\*One work unit equals one 10 hour working day.