

## **REPORT OF ROTATION AND TILLAGE TRIALS**

**1956**

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### **THE SEASON OF 1956**

Excepting for September, when 1.53 inches of rain fell, the fall and winter of 1955 - 56 was dry and although sufficient soil moisture was present for germination and early growth of the crop, there was practically no reserve moisture present in the spring of 1956. Weather for April was very favorable for getting the crop seeded, but the total rainfall for the month was only .22 inches which did nothing to augment the dwindling moisture reserve. The month of May was cool and rainy, and was generally favorable for crop growth. However, for the most part, grain crops were a week to ten days behind normal development. Drought and high temperatures in June combined to damage the grain crops, hay and pastures considerably, and it was the adverse weather for this month that was largely responsible for reducing yields. Precipitation in July and August came too late to benefit small grain crops but were beneficial to corn, hay and pastures.

A low temperature of 32<sup>o</sup>F was recorded at the Dickinson Experiment Station Weather Station on August 20<sup>th</sup>. Ordinarily this would not be considered a killing frost, but corn and other relatively tender vegetation in low spots, draws and areas that apparently do not have satisfactory air drainage was severely damaged, and silage cutting was begun 10 days ahead of schedule.

Grasshoppers were present in sufficient numbers to cause some damage, and some spraying to kill them was done on new grass seedings, flax and other fields where spot protection was necessary.

Diseases of cereal grains were of no consequence in this area in 1956.

### [Daily Precipitation & Climatic Data Summary Tables](#)

## **ROTATION AND TILLAGE TRIALS - 1956**

Harvest of the 1956 trials marked the completion of 50 years of study in dry land farming at the Dickinson Experiment Station.

In the following [summary tables](#), 1956 yields for the 4 principal crops; wheat, oats, barley and corn included in these trials are compared with annual averages for the past five years and with the 45 year average for the more important cultural methods under investigation.

### [Rotation and Tillage Trial Summary Table](#)

## **ROTATION - FERTILIZER SERIES**

Yields from the Continuously Fertilized Corn - Wheat Rotation-Fertilizer Series are Summarized Below:

### [Yield Tables - 1956](#)

Wheat yields on cornland fertilized at the rate of 125 lbs. per acre of 16 - 20-0 commercial fertilizer have averaged 15.6 bushels per acre as compared with 10.0 bushels per acre from unfertilized cornland for the 2 year period 1955-56. However, corn yields have not been increased by the application of 100 lbs. per acre of 8 - 32 - 0 commercial fertilizer applied in the drill row at seeding time.

This trial is scheduled to be continued for several years to aid in determining the effect fertilizer will have on yields when used continuously on the same land.

Table 11 - Comparing wheat yields on stubble land tilled in the spring in preparation for seeding with the moldboard plow, double disk and one-way disk.
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Tillage implement used	Yield - Bu. per acre-1955					Yield - bu. per acre-1956					2 yr. av. 1955-56
	1	2	3	4	Av.	1	2	3	4	Av.	
Moldboard plow	20.2	18.0	26.8	22.0	22.0	5.7	7.1	4.9	7.5	6.3	14.2
One-way disk	15.2	11.3	18.3	25.5	17.6	4.3	4.3	5.3	7.5	5.4	11.5
Double disk	12.5	8.8	18.5	18.2	14.5	2.5	3.7	2.0	7.8	4.0	9.3

In this trial in 1955 production on spring plowed land was 34% better than on double disked land and 20% better than land worked with the one-way disk. In 1956 spring plowing produced 36% more than double disking and 14% more than land worked with the one-way disk.

This is a new trial, begun in 1955, and is scheduled to be continued for several years.

Land which has been seeded to crested wheat grass for many years was broken this summer in preparation for trials which will be started in 1957 to compare the relative effectiveness of narrow, intermediate and wide sweeps for fallowing land. This is the only new trial proposed in the rotation and tillage work for 1957.

[Summary Sheets - Rotation and Tillage Experiments - Main Field - 1956](#)

[Summary Sheets - Rotation and Tillage Experiments - Field N - 1956](#)

[Rotation Sheets - Rotation and Tillage Experiments - Main Field - 1956](#)

[Rotation Sheets - Rotation and Tillage Experiments - Field N - 1956](#)

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**Table 1 - Daily Precipitation - 1956**

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	T	0	0	T	T	0	.01	0	T	0	0	0
2	0	0	0	T	.31	0	.04	0	T	0	0	0
3	0	0	0	.04	T	.04	.67	T	T	0	.45	T
4	0	0	.01	0	0	0	.37	.06	0	0	.05	T
5	0	0	0	.05	0	0	0	0	.10	0	T	T
6	0	0	T	T	.08	T	.04	T	.02	0	0	T
7	0	T	0	T	0	0	.48	0	0	0	T	T
8	0	0	0	0	0	0	.51	.05	0	0	0	0
9	0	0	0	0	.17	0	T	0	0	0	0	0
10	0	0	.12	0	.23	0	0	.29	0	0	0	.01
11	0	0	T	0	.20	0	0	T	0	0	0	.01
12	0	.01	0	0	0	0	.01	.03	0	0	0	T
13	0	T	T	0	0	.10	T	0	.54	0	0	T
14	.12	T	0	0	.23	.08	0	0	T	.28	T	.01
15	T	.01	.01	0	T	.07	T	0	0	0	T	T
16	T	.05	.03	0	0	.01	.01	0	0	0	0	0
17	0	T	0	0	0	0	.13	T	0	0	0	T
18	0	0	0	0	0	0	.04	.11	0	0	T	0

19	0	0	0	0	0	T	T	T	0	0	T	0
20	T	0	0	0	0	0	0	0	0	0	T	0
21	0	T	0	0	0	0	0	0	0	0	T	0
22	T	.03	T	0	0	.20	0	0	0	0	T	T
23	.02	.01	.01	0	0	T	0	0	0	0	T	0
24	T	0	T	0	0	T	T	0	0	0	0	T
25	0	0	0	T	0	T	T	.17	0	.15	0	0
26	0	.01	0	T	0	0	0	.19	0	T	0	0
27	.10	0	.20	.04	0	0	0	.69	0	0	0	0
28	.20	0	.18	.05	.82	0	.45	.04	.08	T	T	T
29	T	0	.01	.03	.82	T	.01	.02	.02	0	0	0
30	0		0	.01	.04	.67	24	.02	0	0	0	0
31	T		0		T		0	.88				0

**Table 2 Climatic Data Summary - 1956**

Climatic Data	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total Amount	Mean Seasonal
<b>Precipitation:</b>														
1956	.44	.12	.57	.22	2.90	1.17	3.01	2.55	.76	.43	.50	.03	12.70	7.30
61 Year Average	.47	.43	.77	1.24	2.21	3.48	2.19	1.74	1.19	.87	.54	.44	15.57	9.12
<b>Mean Temperature - degrees Fahrenheit</b>														
1956	5.4	9.0	22.9	31.2	50.0	64.2	63.5	62.3	50.4	39.1				
40 Year														

45 Year Average	10.2	13.2	24.9	41.8	52.2	61.6	68.1	66.2	56.0	43.7	28.1	16.2		
<b>Wind Velocity - Miles per hour</b>														
1956				4.3	5.5	5.5	4.0	3.9	4.1					
34 Year Average				6.7	6.7	5.6	4.7	4.9	5.2					
<b>Last Killing Frost in the Spring</b>							<b>First Killing Frost in the Fall</b>							
1956	May 4						1956	August 19						
45 Year Average	May 18						45 Year Average	September 15						
Frost Free Season for 1956 - 107 days - 45 year average frost free season - 117 days.														

**Table 3 Summary - Wheat Yields - 1956 Rotation and Tillage Trials**

Cultural Method	No. Plots <sup>1</sup>	1951	1952	1953	1954	1955	1956	45 year Average	Relative Yields % - 45 year Av.
Fallow	4	23.9	10.7	22.2	9.2	23.6	8.9	20.7	100
Green Manure	3	23.7	8.9	24.3	12.0	24.9	9.4	18.8	91
Disked Cornland	9	21.4	9.8	20.7	9.4	20.5	1.7	18.2	88
S.P. Stubble	1	13.5	7.5	18.7	8.7	17.2	3.4	13.4	65
F.P. Stubble	2	15.6	9.0	18.7	10.3	15.1	1.4	14.8	71
Continuous:									
Spring Plowing	1	13.7	7.5	15.8	9.0	21.5	2.1	11.5	56
Fall Plowing	1	13.0	9.2	14.6	4.5	12.2	0.0	11.0	53
Alternate Wheat and Fallow	1	22.2	8.2	21.2	10.3	20.7	7.2	19.6	95

<sup>1</sup>May vary slightly from year to year. Figures given are for 1956.

**Table 4 - Summary - Oat Yields - 1956 Rotation and Tillage Trials**

Cultural Method	No. Plots <sup>2</sup>	1951	1952	1953	1954	1955	1956	45 yr. Ave.	Relative Yields % - 45 Yr. Ave.
Fallow	2	62.2	27.3	59.5	32.1	61.1	16.1	46.8	100

Green Manure	3	54.6	24.6	65.1	38.0	64.2	19.2	45.2	97
Disked Cornland	5	54.2	22.1	48.9	26.6	43.6	2.2	37.2	80
S.P. Stubble	4	35.6	22.5	58.7	33.0	55.9	5.5	36.1-	77
F.P. Stubble	5	37.1	26.3	50.0	19.1	38.5	0.0	32.1	69
Sod	3	44.9	26.5	48.2	22.3	52.0	2.7	33.8	72
Continuous:									
Spring Plowing	1	42.5	16.9	37.8	25.3	35.9	3.1	26.6	57
Fall Plowing	1	33.8	20.0	31.6	13.1	28.8	0.0	24.6	53
Alternate wheat and fallow	1	60.6	29.4	50.3	32.2	57.5	20.3	45.5	97
2May vary slightly from year to year. Figures given are for 1956.									

<b>Table 5 - Summary Barley Yields - 1956 Rotation and Tillage Trials</b>									
Cultural Method	No. Plots	1951	1952	1953	1954	1955	1956	45 yr. Ave.	Relative Yields % - 45 Yr. Ave.
Disked Cornland	1	35.2	15.9	29.3	15.5	23.3	0.0	21.2	87
S.P. Stubble	1	22.7	12.4	29.0	18.4	20.4	5.3	16.2	67
Continuous:									
Spring Plowing	1	28.1	16.9	27.1	15.9	20.8	0.0	16.0	66
Fall Plowing	1	29.2	20.0	23.7	6.5	15.6	0.0	14.8	61

Alternate Barley and fallow	1	38.5	29.4	32.4	15.5	25.4	16.0	24.2	100
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**Table 6 - Summary - Corn Grain Yields - 1956 Rotation and Tillage Trials**

Cultural Method	No. Plots <sup>3</sup>	1951	1952	1953	1954	1955	1956	45 yr. Av.	Relative Yields % - 45 yr. Av.
Spring Plowing	18	23.2	16.0	50.0	14.9	16.6	10.4	17.6	100
Fall Plowing	4	25.5	18.1	30.0	4.7	9.6	6.2	16.2	92
Continuous:									
Spring Plowing	1	29.1	14.9	22.9	4.2	17.9	9.4	19.0	108
Fall Plowing	1	34.4	17.6	14.3	3.3	21.4	6.7	18.9	107
Alternate corn and fallow	1	29.1	32.9	14.3	12.0	35.0	44.8	20.9	119

<sup>3</sup>May vary slightly from year to year. Figures given are for 1956.

**Table 7 - Summary Corn Silage Yields - 1956 Rotation and Tillage Trials**

Cultural Method	No. Plots	1951 <sup>4</sup>	1952	1953	1954	1955	1956	45 yr. Av.	Relative Yields % - 45 yr. Av.
Spring Plowing	18	3.96	2.78	6.6	5.71	3.43	3.35	3.58	100
Fall plowing	4	4.36	2.73	5.09	3.73	2.07	2.65	3.13	88

Continuous:

Spring Plowing	1	4.09	1.35	4.45	2.60	2.40	3.15	3.19	89
Fall Plowing	1	4.76	2.30	3.55	3.90	1.78	3.15	3.06	85
Alternate corn and fallow	1	3.90	3.50	4.80	5.55	3.36	5.60	3.45	96

4Silage yields for 1951 figured on basis of air dry corn fodder yield calculated as 50% of silage weight.

**Table 8 Wheat Yields - Rotation-Fertilizer Series - 1956**

Wheat Yields on:	Yield - Bu. per acre					2 yr. av. yield 1955-1956
	Rep 1	Rep 2	Rep 3	Av.	1955	
1. DD Cornland, fertilized	2.3	3.2	4.4	3.3	27.8	15.6
2. DD Cornland, the corn fertilized the previous year.	3.4	1.5	4.4	3.1	25.5	14.3
3. DD Cornland, check	2.1	3.6	2.5	2.7	17.2	10.0

**Table 9 - Corn Grain Yields - Rotation-Fertilizer Series - 1956**

Corn Grain Yields on:	Yield - Bu. per acre					2 yr. av. Yield 1955 -1956
	Rep 1	Rep 2	Rep 3	Av.	1955	
1. SP Wheat stubble, fertilized	5.5	2.8	18.1	8.8	23.1	16.0
2. SP Wheat stubble, wheat fertilized the previous year	7.1	11.0	16.1	11.4	26.0	18.7
3. SP Wheat stubble, check	7.1	5.9	15.7	9.6	24.6	17.1

**Table 10 - Corn Silage Yields - Rotation-Fertilizer Series - 1956**

Corn Silage Yields on:	Yield – Tons per acre					2 yr. av. Yield
	Rep 1	Rep 2	Rep 3	Av.	1955	
1. Sp wheat stubble,						

fertilized	2.92	3.12	3.38	3.14	2.98	3.06
2. Sp wheat stubble, wheat fertilized the previous year.	2.70	3.78	4.00	3.49	2.96	3.23
3. Sp wheat stubble, check	2.78	3.60	3.28	3.22	2.89	3.05

Crop - Wheat - Main Field		Station - Dickinson, North Dakota							Year - 1956	
Rotation Number	Previous Crop	Cultural Method							Sum	Average
		DD	DD FER	SP	FP	F	GM		BPA	BPA
1	Corn	0.0								
10	Corn	3.5								
11	Corn	0.0								
12	Corn	0.0								
14	Corn	5.8								
16	Corn	3.8								
31	Corn	0.0								
42	Corn	0.0								
19B	Corn	2.5								
245	Corn	2.1								
49	Corn	3.6						DD after corn (11)	21.0	1.91
18D	Corn		6.7							
19D	Corn		4.3							
78	Corn		3.2							

79	Corn		1.5							
40	Corn		2.3							
242	Corn		3.4					DD after corn and fert. (6)	21.4	3.57
2	Corn			3.0				SP after corn (1)	3.0	3.00
3	Corn				0.0					
62	Corn				0.0			FP after corn (2)	0.0	0.0
9	Oats			3.4				SP after oats (1)	3.4	3.4
4	Oats				2.7					
8	Oats				0.0			FP after oats (2)	2.7	1.4
5	Fallow					8.2				
MC-D	Fallow					7.2				
61	Fallow					11.5				
63	Fallow					8.5		After Fallow (4)	35.4	8.85

15	S. Clover						10.5			
17	C. Clover						10.5			
32	S. Clover						7.2	GM after clover (3)	28.2	9.40
MCA	Wheat			2.1				SP Continuous	2.1	2.1
MCB	Wheat				0.0			FP Continuous	0.0	0.0
415	Potatoes	7.2						DD after potatoes (1)	7.2	7.2

Crop - Oats -Main Field		Station - Dickinson, North Dakota							Year - 1956	
Rotation Number	Previous Crop	Tillage Method							Sum	Average
		DD	SP	FP	GM	SOD	F			
4	Corn	2.7								
15	Corn	0.0								
17	Corn	0.0								
28A	Corn	7.6								
32	Corn	0.0						DD after corn (5)	10.3	2.10

7	Corn		0.0							
9	Corn		3.8					SP after corn (2)	3.8	1.90
2	Wheat		7.5							
61	Wheat		9.1							
62	Wheat		0.0							
63	Wheat		9.8					SP after wheat (4)	26.4	6.60
1	Wheat			0.0						
3	Wheat			0.0						
5	Wheat			0.0				FP after wheat (3)	0.0	0.0
6	Barley			0.0				FP after barley (1)	0.0	0.0
14	S. Clover				29.4					
16	S. Clover				13.6					
	S. Clover							GM after		

31	S. Clover				14.4			clover (3)	57.4	19.13
42	Alfalfa					1.7				
10	Cr. Wheat					6.3				
11	S. Clover					3.0				
12	Cr. Wheat					0.0		After sod (4)	11.0	2.75
MCD	Fallow						20.3			
8	Fallow						11.9	After fallow (2)	32.2	16.2
MCA	Oats		3.1					SP continuous	3.1	3.1
MCB	Oats			0.0				FP continuous	0.0	0.0

**Crop - Barley - Main Field**  
**Station - Dickinson, North Dakota**  
**Year - 1956**

Rotation	Previous	Tillage Method
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Number	Crop	DD	SP	FP	F
6	Corn	0.0			
7	Oats		5.3		
MCA	Barley		0.0		
MCB	Barley			0.0	
MCD	Fallow				16.0

Crop - Corn - Main Field				Station - Dickinson, ND				Year - 1956			
Rotation Number	Previous Crop	SP		FP		F		Summary		Average	
		Grain	Silage	Grain	Silage	Grain	Silage	Grain	Silage	Grain	Silage
2	Oats	4.7	1.75								
10	Oats	3.9	3.31								
11	Oats	3.1	3.44								
12	Oats	3.9	2.84								
14	Oats	31.0	3.88								
16	Oats	19.6	3.50								

18B	Oats	25.1	3.47								
31	Oats	14.1	4.19								
42	Oats	3.9	3.56								
62	Oats	18.1	4.39								
SP after oats (10)								127.4	34.33	12.7	3.43
1	Oats			7.9	2.31						
3	Oats			5.1	3.03						
6	Oats			2.8	2.28						
FP after oats (3)								15.8	7.62	5.3	2.54
9	Wheat	3.9	1.81								
15	Wheat	9.0	3.97								
17	Wheat	5.9	3.63								
32	Wheat	6.2	3.72								
SP after wheat (4)								25.0	13.13	6.3	3.28
4	Wheat			9.0	2.59						
FP after wheat (1)								9.0	2.59	9.0	2.59
19A	Wheat	15.7	3.25								

49	Wheat	5.9	1.63								
245	Wheat	7.1	3.44								
SP after wheat (ck)								28.7	8.32	9.6	2.77
196	Wheat	16.1	2.50								
40	Wheat	7.1	3.00								
78	Wheat	11.0	4.00								
SP after Fert. Wheat (3)								34.1	9.50	11.4	3.17
186	Wheat	18.1	3.16								
79	Wheat	2.8	2.53								
242	Wheat	5.5	2.91								
SP after wheat & fert. (3)								26.4	8.6	8.8	2.87
7	Barley	4.3	2.63								
SP after barley (1)								4.3	2.63	4.3	2.63
MCA	Corn	9.4	3.03								
SP continuous (1)								9.4	3.03	9.4	3.03
MCB	Corn			6.7	3.03						

						FP continuous (1)	6.7	3.03	6.7	3.03
MCD	Corn					44.8	5.38			
						Fallow	44.8	5.38	44.8	5.38

**Crop - Crested Wheat Grass  
Station - Dickinson, North Dakota  
Year - 1956**

Rotation Number	Previous Crop	Yield Lbs. Per Acre
10C		280
10D		320
12A		250
12B		330
12C		350
Sum		1530

Plots		5
Average		306

**Crop - Alfalfa  
Station - Dickinson, North Dakota  
Year - 1956**

Rotation Number	Previous Crop	Yield lbs. per acre
42F		0.0
42A		450

**Crop - Sweet Clover  
Station - Dickinson, ND  
Year - 1956**

Rotation Number	Previous Crop	Yield lbs. per acre
11C		250
11D		200

Sum		450
Plots		2
Average		225

<b>Crop - Potatoes</b> <b>Station - Dickinson, ND</b> <b>Year - 1956</b>		
Rotation Number	Previous Crop	Yield per acre
		U.S. #1
414	Fallow	63.3 Bushels
415	Wheat	50.8 Bushels

# SUMMARY SHEETS

## ROTATION AND TILLAGE EXPERIMENTS

### FIELD N - 1956

Crop - Wheat Field N		Station - Dickinson, North Dakota					Year - 1956	
Rotation Number	Previous Crop	Tillage Method					Sum	Average
		SP	DD	OW	F			
18B	Wheat	7.1						
19B	Wheat	5.7						
700B	Wheat	4.9						
710B	Wheat	7.5				SP after wheat (4)	25.2	6.3
18A	Wheat		3.7					
19A	Wheat		2.2					
700A	Wheat		2.0					
710A	Wheat		7.8			DD after wheat (4)	15.7	3.9
18C	Wheat			4.3				
19C	Wheat			4.3				
700C	Wheat			5.3				

710C	Wheat			7.5		OW after wheat (4)	21.4	5.4
101	Oats-Peas	2.7						
102	Oats-Peas	1.8						
103	Oats-Peas	7.8				SP after Oats-Peas (3)	12.3	4.1
104	Corn	6.2						
105	Corn	4.3						
106	Corn	2.7				SP after corn (3)	13.2	4.4
569A	Wheat		3.5			DD after wheat (1)	3.5	3.5
71	Corn		2.2					
68	Corn		1.2			DD after corn (2)	3.4	1.7
72	Fallow				8.2			
225	Fallow				5.6			
226	Fallow				9.7			
227	Fallow				5.2			
228	Fallow				5.9			

569	Fallow				11.7	after fallow (6)	46.3	7.7
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Crop - Oats				
Station - Dickinson, North Dakota				
Year - 1956				
Rotation Number	Previous Crop	Tillage Method		
		DD	F	FP
579C	Oats	7.9		
72	Corn	3.1		
71	Fallow		15.6	
579B			26.7	
68	Wheat			1.9
Sum		11.0	42.3	1.9
Plots		2	2	
Average		5.5	21.2	

Crop - Oats - Pea Silage		
Station - Dickinson, North Dakota		
Year - 1956		
Rotation Number	Previous Crop	Tillage Method
		SP
101	Wheat	1500 lbs green wt at 47.8% moisture
102	Wheat	1150 lbs green wt at 47.8% moisture
103	Wheat	1750 lbs green wt at 47.8% moisture

Crop - Corn			
Station - Dickinson, North Dakota			
Year - 1956			
Rotation Number	Previous Crop	SP	
		Grain	Silage
		BPA	Tons
71	Oats	11.4	2.88
72	Wheat	8.6	3.47
104	Wheat	8.1	2.53

105	Wheat	4.3	2.72
106	Wheat	8.2	4.39
68	Oats manured	6.6	3.13
Sum		44.2	19.12
Plots		6	6
Average		7.4	3.19

**ROTATION SHEETS**  
**ROTATION AND TILLAGE EXPERIMENTS**  
**Field N - 1956**

**Project - Rotation and Tillage Trials**

Rotation - 71 Field N			Year - 1956	
	A	B	C	D
Crop	Corn, SP	Wheat, DC	Fallow Manured	Oats, F
Variety	Nodak 301	Selkirk	---	Gopher
Plowing date	5 - 22 - 56	---	---	---
Plowing depth	4 - 5 inches	---	---	---
Tillage before seeding	---	DD 4 - 16 - 56	---	DF 4 - 16 - 56
Seeding date	5 - 23 - 56	4 - 17 - 56	---	4 - 17 - 56
Seeding rate	8 lbs/ acre	1 bpa	---	1 ½ bpa
Seeding, manner	Drilled	DD press drill	---	DD press drill
Tillage after seeding	Necessary cultivation to control weeds.	---	---	---
Harvest date	9 - 10 - 56	8 - 10 - 56	---	8 - 1 - 56
Total pounds	2.88 tons silage	---	---	---
Straw, pounds	---	---	---	---
Grain, pounds	16.0	13.0	---	50.0
Yields per acre	11.4 bpa shelled corn	2.2 bpa	---	15.6
Grade	Good	55.0 lbs per bu.	---	34.5 lbs per bu.

Rotation - 72 Field N			Year - 1956	
	A	B	C	D
Crop	Corn, SP	Oats, DC	Fallow Manured	Wheat, F
Variety	Nodak 301	Gopher	---	Selkirk
Plowing date	4 - 22 - 56	---	---	---
Plowing depth	4 - 5 inches	---	---	---
Tillage before seeding	---	DD 4 - 16 - 56	---	DF 4 - 16 - 56
Seeding date	5 - 23 - 56	4 - 17 - 56	---	4 - 17 - 56
Seeding rate	8 lbs/acre	1 ½ bpa	---	1 bpa
Seeding, manner	Drilled	DD press drill	---	DD press drill
Tillage after seeding	Necessary cultivation to control weeds	---	---	---
Harvest date	9 - 10 - 56	8 - 1 - 56	---	8 - 10 - 56
Total pounds	3.47 Tons silage	---	---	---
Straw, pounds	---	---	---	---
Grain, pounds	12.0	10.0	00.0	49.5
Yields per acre	8.6 bpa shelled corn	3.1 bpa	---	8.2 bpa
Grade	Good	33.0 lbs per bu.	---	57.5 lbs per bu..

Rotation - 18 Field N

Year - 1956

	A	B	C
Crop	Wheat, DD	Wheat, SP	Wheat OW
Variety	Selkirk	Selkirk	Selkirk
Plowing date	---	4 - 16 - 56	---
Plowing depth	---	4 - 5 inches	---
Tillage before seeding	DD 4 - 16 - 56	---	OW 4 - 17 - 56
Seeding date	4 - 17 - 56	4 - 17 - 56	4 - 17 - 56
Seeding rate	1 bpa	1 bpa	1 bpa
Seeding manner	DD press drill	DD press drill	DD press drill
Tillage after seeding	---	---	---
Harvest date	8 - 10 - 56	8 - 10 - 56	8 - 10 - 56
Total pounds	---	---	---
Straw, pounds	---	---	---
Grain, pounds	22.0	42.5	26.0
Yields per acre	3.7 bpa	7.1 bpa	4.3 bpa
Grade	55.5 lbs per bu.	56.5 lbs. per bu.	55.0 lbs. per bu.

<b>Rotation - 19 Field N</b>			<b>Year - 1956</b>
	A	B	C
Crop	Wheat, DD	Wheat, SP	Wheat, OW
Variety	Selkirk	Selkirk	Selkirk

Plowing date	---	4 - 16 - 56	---
Plowing depth	---	4 - 5 inches	---
Tillage before seeding	DD 4 - 16 - 56	---	OW 4 - 17 - 56
Seeding date	4 - 17 -56	4 - 17 - 56	4 - 17 - 56
Seeding rate	1 bpa	1 bpa	1 bpa
Seeding manner	DD press drill	DD press drill	DD press drill
Tillage after seeding	---	---	---
Harvest date	8 - 10 - 56	8 - 10 - 56	8 - 10 - 56
Total pounds	---	---	---
Straw, pounds	---	---	---
Grain, pounds	13.0	34.5	26.0
Yields per acre	2.2 bpa	5.7 bpa	4.3 bpa
Grade	53.0 lbs per bu.	53.0 lbs per bu.	54.0 lbs per bu.

<b>Rotation - 700 Field N</b>			<b>Year - 1956</b>
	A	B	C
Crop	Wheat, DD	Wheat SP	Wheat OW
Variety	Selkirk	Selkirk	Selkirk
Plowing date	---	4 - 16 - 56	---
Plowing depth	---	4 - 5 inches	---

Tillage before seeding	DD 4 - 16 - 56	---	OW 4 - 17 - 56
Seeding date	4 - 17 - 56	4 - 17 - 56	4 - 17 - 56
Seeding rate	1 bpa	1 bpa	1 bpa
Seeding manner	DD press drill	DD press drill	DD press drill
Tillage after seeding	---	---	---
Harvest date	8 - 10 - 56	8 - 10 - 56	8 - 10 - 56
Total pounds	---	---	---
Straw, pounds	---	---	---
Grain, pounds	12.0 bpa	29.5 bpa	32.0
Yields per acre	2.0 bpa	4.9 bpa	5.3 bpa
Grade	54.5 lbs per bu.	55.0 lbs per bu.	55.0 lbs per bu.

<b>Rotation - 710 Field N</b>			<b>Year - 1956</b>
	A	B	C
Crop	Wheat, DD	Wheat, SP	Wheat, OW
Variety	Selkirk	Selkirk	Selkirk
Plowing date	---	4 - 16 - 56	---
Plowing depth	---	4 - 5 inches	---
Tillage before seeding	DD 4 - 16 - 56	---	OW 4 - 17 - 56
Seeding date	4 - 17 - 56	4 - 17 - 56	4 - 17 - 56

Seeding rate	1 bpa	1 bpa	1 bpa
Seeding, manner	DD press drill	DD press drill	DD press drill
Tillage after seeding	---	---	---
Harvest date	8 - 10 - 56	8 - 10 - 56	8 - 10 - 56
Total pounds	---	---	---
Straw, pounds	---	---	---
Grain, pounds	47.0	45.0	45.0
Yields per acre	7.8 bpa	7.5 bpa	7.5 bpa
Grade	55.0 lbs per bu.	58.0 lbs per bu.	55.5 lbs per bu.

Rotation - 68 Field N			Year - 1956
	A	B	C
Crop	Oats, FP	Corn, SP manured	Wheat, DC
Variety	Gopher	Nodak 301	Selkirk
Plowing date	9 - 28 - 55	5 - 22 - 56	---
Plowing depth	4 - 5 inches	4 - 5 inches	---
Tillage before seeding	DD 4 - 16 - 56	---	DD 4 - 16 - 56
Seeding date	4 - 17 - 56	5 - 23 - 56	4 - 17 - 56
Seeding rate	1 ½ bpa	8 lbs/acre	1 bpa
Seeding manner	DD press drill	Drilled	DD press drill

Tillage after seeding	---	Necessary cultivation to control weeds.	---
Harvest date	8 - 1 - 56	9 - 10 - 56	8 - 1 - 56
Total pounds	---	3.13 tons silage	---
Straw, pounds	---	---	---
Grain, pounds	6.0	6.6	7.5
Yields per acre	1.9 bpa	4.7 bpa shelled corn	1.2 bpa
Grade	32.0 lbs per bu.	Good	56.5 lbs per bu.

Rotation - 569 Field N			Year - 1956
	A	B	C
Crop	Wheat, DD	Fallow	Wheat, F
Variety	Selkirk	---	Selkirk
Plowing date	---	---	---
Plowing depth	---	---	---
Tillage before seeding	DD 4 - 16 - 56	---	DF 4 - 16 - 56
Seeding date	4 - 17 - 56	---	4 - 17 - 56
Seeding rate	1 bpa	---	1 bpa
Seeding manner	DD press drill	---	DD press drill
Tillage after seeding	---	---	---

Harvest date	8 - 10 - 56	---	8 - 10 - 56
Total pounds	---	---	---
Straw, pounds	---	---	---
Grain, pounds	21.0	---	70.5
Yields per acre	3.5 bpa	---	11.7 bpa
Grade	54.0 lbs per bu.	---	57.0 lbs per bu.

<b>Rotation - 579 Field 9</b>			<b>Year - 1956</b>
	A	B	C
Crop	Fallow	Oats, F	Oats, DD
Variety	---	Gopher	Gopher
Plowing date	---	---	---
Plowing depth	---	---	---
Tillage before seeding	---	DF 4 - 16 - 56	DD 4 - 16 - 56
Seeding date	---	4 - 17 - 56	4 - 17 - 56
Seeding rate	---	1 ½ bpa	1 ½ bpa
Seeding manner	---	DD press drill	DD press drill
Tillage after seeding	---	---	---
Harvest date	---	8 - 1 - 56	8 - 1 - 56
Total pounds	---	---	---

Straw, pounds	---	---	---
Grain, pounds	---	85.5	25.5
Yields per acre	---	26.7 bpa	7.9 bpa
Grade	---	36.0 lbs per bu.	34.0 lbs per bu.

Rotation - 101 Field N		Year - 1956
	A	B
Crop	Wheat, SP	Oats & Peas SP
Variety	Selkirk	Gopher - Canadian peas
Plowing date	4 - 16 - 56	4 - 16 - 56
Plowing depth	4 - 5 inches	4 - 5 inches
Tillage before seeding	---	---
Seeding date	4 - 17 - 56	4 - 17 - 56
Seeding rate	1 bpa	1 ½ bpa oats 40 lbs peas
Seeding manner	DD press drill	DD press drill
Tillage after seeding	---	---
Harvest date	8 - 10 - 56	7 - 16 - 56
Total pounds	---	150
Straw, pounds	---	---
Grain, pounds	16.0	---

Yields per acre	2.7 bpa	1500 lbs green wt. @ 47.8% moisture
Grade	50.5 lbs per bu.	Fair*
There were practically no peas in the mixture because of droughty weather conditions which the peas did not survive.		

Rotation - 102 Field N		Year - 1956
	A	B
Crop	Wheat, SP	Oats & Peas, SP
Variety	Selkirk	Gopher- Canadian peas
Plowing date	4 - 16 - 56	4 - 16 - 56
Plowing depth	4 - 5 inches	4 - 5 inches
Tillage before seeding	---	---
Seeding date	4 - 17 - 56	4 - 17 - 56
Seeding rate	1 bpa	1 ½ bpa Oats 40 lbs/peas
Seeding manner	DD press drill	DD press drill
Tillage after seeding	---	---
Harvest date	8 - 10 - 56	7 - 16 - 56
Total pounds	---	115
Straw, pounds	---	---

Grain, pounds	11.0	—
Yields per acre	1.8 bpa	1150 lbs green wt. @ 47.8 % moisture
Grade	50.5 lbs per bu.	Fair

Rotation - 103 Field N		Year - 1956
	A	B
Crop	Wheat, SP	Oats & Peas, SP
Variety	Selkirk	Gopher- Canadian Peas
Plowing date	4 - 16 - 56	4 - 16 - 56
Plowing depth	4 - 5 inches	4 - 5 inches
Tillage before seeding	---	---
Seeding date	4 - 17 - 56	4 - 17 - 56
Seeding rate	1 bpa	1 ½ bpa Oats 40 lbs peas
Seeding manner	DD press drill	DD press drill
Tillage after seeding	---	---
Harvest date	8 - 10 - 56	7 - 16 - 56
Total pounds	---	175
Straw, pounds	---	---
Grain, pounds	47.0	---

Yields per acre	7.8 bpa	1750 lbs green wt. @ 47.8% moisture
Grade	56.5 lbs per bu.	Fair

Rotation - 104 Field N		Year - 1956
	A	B
Crop	Corn SP	Wheat, SP
Variety	Nodak 301	Selkirk
Plowing date	5 - 22 - 56	4 - 16 - 56
Plowing depth	4 - 5 inches	4 - 5 inches
Tillage before seeding	---	---
Seeding date	5 - 23 - 56	4 - 17 - 56
Seeding rate	8 lbs/acre	1 bpa
Seeding manner	Drilled	DD press drill
Tillage after seeding	Necessary cultivation to control weeds	---
Harvest date	9 - 10 - 56	8 - 10 - 56
Total pounds	2.53 tons silage	---
Straw, pounds	---	---
Grain, pounds	7.1	37.0

Yields per acre	5.1 bpa shelled corn	6.2 bpa
Grade	Good	56.5 lbs per bu.

Rotation - 105 Field N		Year - 1956
	A	B
Crop	Corn, SP	Wheat, SP
Variety	Nodak 301	Selkirk
Plowing date	5 - 22 - 56	4 - 16 - 56
Plowing depth	4 - 5 inches	4 - 5 inches
Tillage before seeding	---	---
Seeding date	5 - 23 - 56	4 - 17 - 56
Seeding rate	8 lbs/acre	1 bpa
Seeding manner	drilled	DD press drill
Tillage after seeding	Necessary cultivation to control weeds.	---
Harvest date	9 - 10 - 56	8 - 10 - 56
Total pounds	2.72 tons silage	---
Straw, pounds	---	---
Grain, pounds	6.0	26.0
Yields per acre	4.3 bpa shelled corn	4.3 bpa

Grade	Good	56.0 lbs per bu.
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Rotation - 106 Field N		Year - 1956
	A	B
Crop	Corn, SP	Wheat,SP
Variety	Nodak 301	Selkirk
Plowing date	5-22-26	4-16-56
Plowing depth	4 - 5 inches	4 - 5 inches
Tillage before seeding	---	---
Seeding date	5 - 23 - 56	4 - 17 - 56
Seeding rate	8 lbs/acre	1 bpa
Seeding manner	Drilled	DD press drill
Tillage after seeding	Necessary cultivation to control weeds.	---
Harvest date	9 - 10 - 56	8 - 10 - 56
Total pounds	4.39 tons silage	---
Straw, pounds	---	---
Grain, pounds	11.5	16.5
Yields per acre	8.2 bpa shelled corn	2.7 bpa
Grade	Good	57.0 lbs per bu.

Rotation - 225 Field N		Year - 1956
	A	B
Crop	Wheat, F	Fallow, P-5 - 1
Variety	Selkirk	---
Plowing date	---	---
Plowing depth	---	---
Tillage before seeding	DF 4 - 16 - 56	---
Seeding date	4 - 17 - 56	---
Seeding rate	1 bpa	—
Seeding manner	DD press drill	---
Tillage after seeding	---	---
Harvest date	8 - 10 - 56	---
Total pounds	---	---
Straw, pounds	---	---
Grain, pounds	33.5	---
Yields per acre	5.6 bpa	—
Grade	51.5 lbs per bu.	---

Rotation - 226 Field N		Year - 1956
	A	B
Crop	Wheat, F	Fallow DF 5 - 15
Variety	Selkirk	---
Plowing date	---	---
Plowing depth	---	---
Tillage before seeding	DF 4 - 16 - 56	---
Seeding date	4 - 17 - 56	---
Seeding rate	1 bpa	---
Seeding manner	DD press drill	---
Tillage after seeding	---	---
Harvest date	8 - 10 - 56	---
Total pounds	---	---
Straw, pounds	---	---
Grain, pounds	58.0	---
Yields per acre	9.7 bpa	---
Grade	55.0 lbs per bu.	---

Rotation - 227 Field N		Year - 1956
	A	B

Crop	Wheat, F	Fallow, P 5 - 15
Variety	Selkirk	---
Plowing date	---	---
Plowing depth	---	---
Tillage before seeding	4 - 16 - 56	---
Seeding date	4 - 17 - 56	---
Seeding rate	1 bpa	---
Seeding manner	DD press drill	---
Tillage after seeding	---	---
Harvest date	8 - 10 - 56	---
Total pounds	---	---
Straw, pounds	31.0	---
Grain, pounds	5.2 bpa	---
Yields per acre	56.5 lbs per bu.	---
Grade		

<b>Rotation - 228 Field N</b>		<b>Year - 1956</b>
	A	B
Crop	Wheat, F	Fallow, DF 6 - 1
Variety	Selkirk	---

Plowing date	---	
Plowing depth	---	
Tillage before seeding	4 - 16 -56	
Seeding date	4 - 17 - 56	
Seeding rate	1 bpa	
Seeding manner	DD press drill	
Tillage after seeding	---	
Harvest date	8 - 10 - 56	
Total pounds	---	
Straw, pounds	---	
Grain, pounds	35.5	
Yields per acre	5.9 bpa	
Grade	52.5 lbs per bu.	

ROTATION SHEETS  
ROTATION AND TILLAGE EXPERIMENTS  
MAIN FIELD - 1956

Project - Rotation and Tillage Trials

Rotation - 1- Main Field		Year - 1956	
	A	B	C
Crop	Corn, FP	Wheat, DC	Oats, FP
Variety	Nodak 301	Selkirk	Gopher
Plowing date	9 - 27 - 55	---	9 - 27 - 55
Plowing depth	4 - 5 inches	---	4 - 5 inches
Tillage before seeding	DD 5 - 22 - 56	DD 4 - 12 - 56	DD 4 - 12 - 56
Seeding date	5 - 23 - 56	4 - 13 - 56	4 - 13 - 56
Seeding rate	8 lbs/ acre	1 BPA	1 ½ BPA
Seeding manner	Drilled	DD press drill	DD press drill
Tillage after seeding	Necessary cultivation to control weeds	---	---
Harvest date	9 - 10 - 56	---	---
Total pounds	2.31 Tons Silage	---	---
Straw, pounds	---	---	---
Grain, pounds	11.0	0.0	0.0
Yields per acre	7.9 BPA Shelled Corn	0.0	0.0
Grade	Good	---	—

All grain plots, except where legumes were seeded, were sprayed with 3/4 pt. amme

formulation of 2.4D for broadleaved weed control.

<b>Rotation - 2 Main Field</b>		<b>Year - 1956</b>	
	A	B	C
Crop	Corn, SP	Wheat, SP	Oats, SP
Variety	Nodak 301	Selkirk	Gopher
Plowing date	5 - 22 - 56	4 - 12 - 56	4 - 12 - 56
Plowing depth	4 - 5 inches	4 - 5 inches	4 - 5 inches
Tillage before seeding	---	---	---
Seeding date	5 - 23 - 56	4 - 13 - 56	4 - 13 - 56
Seeding rate	8 lbs./ acre	1 bpa	1 ½ bpa
Seeding manner	Drilled	DD press drill	DD press drill
Tillage after seeding	Necessary cultivation to control weeds	---	---
Harvest date	9 - 10 - 56	8 - 10 - 56	8 - 1 - 56
Total pounds	1.75 Tons Silage	---	---
Straw, pounds	---	---	---
Grain, pounds	6.6	18.0	24.0
Yields per acre	4.7 bpa shelled corn	3.0 bpa	7.5 bpa
Grade	Good	53.0 lbs. per bu.	33.0 lbs per bu.

<b>Rotation - 3 Main Field</b>		<b>Year - 1956</b>	

	A	B	C
Crop	Corn, SP	Wheat, FP	Oats, FP
Variety	Nodak 301	Selkirk	Gopher
Plowing date	9 - 27 - 55	9 - 27 - 55	9 - 27 - 55
Plowing depth	4 - 5 inches	4 - 5 inches	4 - 5 inches
Tillage before seeding	DD - 5 - 22 - 56	DD 4 - 12 - 56	DD 4 - 12 - 56
Seeding date	5 - 23 - 56	4 - 13 - 56	4 - 13 - 56
Seeding rate	8 lbs/acre	1 bpa	1 ½ bpa
Seeding manner	Drilled	DD press drill	DD press drill
Tillage after seeding	Necessary cultivation to control weeds	---	---
Harvest date	9 - 10 - 56	---	---
Total pounds	3.03 tons silage	---	---
Straw, pounds	---	---	---
Grain, pounds	7.1	0.0	0.0
Yields per acre	5.1 bpa shelled corn	0.0	0.0
Grade	Good	---	---

<b>Rotation - 4 Main Field</b>		<b>Year - 1956</b>	
	A	B	C
Crop	Corn ,FP	Oats, DC	Wheat, FP
Variety	Nodak 301	Gopher	Selkirk
Plowing date	9 - 27 - 55	---	9 - 27 - 55

Plowing depth	4 - 5 inches	---	4 - 5 inches
Tillage before seeding	DD 5 - 22 - 56	DD 4 - 12 - 56	DD 4 - 12 - 56
Seeding date	5 - 23 - 56	4 - 13 - 56	4 - 13 - 56
Seeding rate	8 lbs/ acre	1 ½ bpa	1 bpa
Seeding manner	Drilled	DD press drill	DD press drill
Tillage after seeding	Necessary cultivation to control weeds	---	---
Harvest date	9 - 10 - 56	8 - 1 - 56	8 - 10 - 56
Total pounds	2.59 tons Silage	---	---
Straw, pounds	---	---	---
Grain, pounds	12.6	10.5	16.5
Yields per acre	9.0 bpa shelled corn	3.3 bpa	2.7 bpa
Grade	Good	32.0 lbs. per bu.	54.0 lbs. per buls.

Rotation - 5 Main Field	Year - 1956		
	A	B	C
Crop	Fallow	Wheat, F	Oats, FP
Variety	---	Selkirk	Gopher
Plowing date	---	---	9 - 27 - 55
Plowing depth	---	---	4 - 5 inches
Tillage before seeding	---	DF 4 - 12 - 56	DD 4 - 12 - 56
Seeding date	---	4 - 13 - 56	4 - 13 - 56
Seeding rate	---	1 b p a	1 ½ b p a

Seeding manner	---	DD press drill	DD press drill
Tillage after seeding	---	---	---
Harvest date	---	8 - 10 - 56	---
Total pounds	---	---	---
Straw, pounds	---	---	---
Grain, pounds	---	49.5	0.0
Yields per acre	---	8.2 b p a	0.0
Grade	---	56.0 lbs. per bu.	---

Rotation - 6 Main Field		Year - 1956	
	A	B	C
Crop	Corn, FP	Barley, DC	Oats, FP
Variety	Nodak 301	T regal	Gopher
Plowing date	9 - 27 - 55	---	9 - 27 - 55
Plowing depth	4 - 5 inches	---	4 - 5 inches
Tillage before seeding	DD 5 - 22 - 56	DD 4 - 12 - 56	DD 4 - 12 - 56
Seeding date	5 - 23 - 56	4 - 13 - 56	4 - 13 - 56
Seeding rate	8 lbs/ acre	5 pecks/ acre	1 ½ bpa
Seeding manner	Drilled	DD press drill	DD press drill
Tillage after seeding	Necessary cultivation to control weeds.	---	---
Harvest date	9 - 10 - 56	---	---

Total pounds	2.28 tons silage	---	---
Straw, pounds	---	---	---
Grain, pounds	3.9	0.0	0.0
Yields per acre	2.8 bpa shelled corn	0.0	0.0
Grade	Good	---	---

Rotation - 7 Main Field	Year - 1956		
	A	B	C
Crop	Corn, SP	Oats, SP	Barley, SP
Variety	Nodak 301	Gopher	Tregal
Plowing date	5 - 22 -56	4 - 12 - 56	4 - 12 - 56
Plowing depth	4 - 5 inches	4 - 5 inches	4 - 5 inches
Tillage before seeding	---	---	---
Seeding date	5 - 23 - 56	4 - 13 - 56	4 - 13 - 56
Seeding rate	8 lbs / acre	1 ½ bpa	5 pecks / acre
Seeding manner	Drilled	DD press drill	DD press drill
Tillage after seeding	Necessary cultivation to control weeds.	---	---
Harvest date	9 - 10 - 56	---	8 - 10 - 56
Total pounds	2.63 tons silage	---	---
Straw, pounds	---	---	---
Grain, pounds	6.0	0.0	25.5
Yields per acre	4.3 bpa shelled corn	0.0	5.3 bpa

Grade	Good	---	45.5 lbs per bu.
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Rotation - 8 Main Field		Year - 1956	
	A	B	C
Crop	Fallow	Oats, F	Wheat, FP
Variety	---	Gopher	Selkirk
Plowing date	---	---	9 - 27 - 56
Plowing depth	---	---	4 - 5 inches
Tillage before seeding	---	DF 4 - 12 - 56	DD 4 - 12 -56
Seeding date	---	4 - 13 - 56	4 - 13 - 56
Seeding rate	---	1 ½ bpa	1 bpa
Seeding manner	---	DD press drill	DD press drill
Tillage after seeding	---	---	---
Harvest date	---	8 - 1 - 56	8 - 10 - 56
Total pounds	---	---	---
Straw, pounds	---	---	---
Grain, pounds	---	38.0	0.0
Yields per acre	---	11.9 bpa	0.0
Grade	---	36.0 lbs per bu.	---

Rotation - 9 Main Field		Year - 1956	

	A	B	C
Crop	Corn, SP	Oats, SP	Wheat, SP
Variety	Nodak 301	Gopher	Selkirk
Plowing date	5 - 22 - 56	4 - 12 - 56	4 - 12 - 56
Plowing depth	4 - 5 inches	4 - 5 inches	4 - 5 inches
Tillage before seeding	---	---	---
Seeding date	5 - 23 - 56	4 - 13 - 56	4 - 13 - 56
Seeding rate	8 lbs / acre	1 ½ bpa	1 bpa
Seeding manner	Drilled	DD press drill	DD press drill
Tillage after seeding	Necessary cultivation to control weeds	---	---
Harvest date	9 - 10 - 56	8 - 1 - 56	8 - 10 - 56
Total pounds	1.81 tons silage	---	---
Straw, pounds	---	---	---
Grain, pounds	5.5	12.0	20.5
Yields per acre	3.9 bpa shelled corn	3.8 bpa	3.4 bpa
Grade	Good	34.0 lbs per bu.	55.0 lbs. per bu.

Rotation - 10 Main Field			Year - 1956		
	A	B	C	D	E
Crop	Corn, SP	Wheat, DC Cr. Wheat	Cr. Wheat	Cr. Wheat	Oats, FP
Variety	Nodak 301	Selkirk Standard	Standard	Standard	Gopher

Plowing date	5 - 22 - 56	---	---	---	7 - 27 - 55
Plowing depth	4 - 5 inches	---	---	---	4 - 5 inches
Tillage before seeding	---	DD 4 - 12 - 56	---	---	DD 4 - 12 - 56
Seeding date	5 - 23 - 56	4 - 13 - 56	1955	1955	4 - 13 - 56
Seeding rate	8 lbs / acre	1 bpa 10 lbs/acre	10 lbs/acre	10 lbs/acre	1 ½ bpa
Seeding manner	Drilled	DD Press Drill	DD Press Drill	DD Press Drill	DD Press Drill
Tillage after seeding	Necessary cultivation to control weeds.	---	---	---	---
Harvest date	9 - 10 - 56	8 - 10 - 56	6 - 28 - 56	6 - 28 - 56	8 - 1 - 56
Total pounds	3.31 tons silage	---	28	32	---
Straw, pounds	---	---	---	---	---
Grain, pounds	5.5	21.0	---	---	20.0
Yields per acre	3.9 bpa shelled corn	3.5 bpa	280 lbs.	320 lbs.	6.3 bpa
Grade	Good	55.0 lbs. per bu.	Good	Good	32.0 lbs per bu.

Rotation - 11 Main Field			Year - 1956		
	A	B	C	D	E
Crop	Corn, SP	Wheat, DC	S. Clover DD	S. Clover	Oats, SP
Variety	Nodak 301	Selkirk	Y.B.	Y.B.	Gopher

Plowing date	5 - 22 - 56	---	---	---	4 - 12 - 56
Plowing depth	4 - 5 inches	---	---	---	4 - 5 inches
Tillage before seeding	---	DD 4 - 12 - 56	DD 5 - 10 - 56	---	---
Seeding date	5 - 23 - 56	4 - 13 - 56	5 - 10 - 56	1955	4 - 13 - 56
Seeding rate	8 lbs/acre	1 bpa	8 lbs/acre	1 ½ bpa	
Seeding manner	Drilled	DD Press Drill	DD Press Drill	DD Press Drill	DD Press Drill
Tillage after seeding	Necessary cultivation to control weeds.	---	---	---	---
Harvest date	9 - 10 - 56	---	---	6 - 28 - 56	8 - 1 - 56
Total pounds	3.44 tons silage	---	25	20	---
Straw, pounds	---	---	---	---	---
Grain, pounds	4.3	0.0	---	---	9.5
Yields per acre	3.1 bpa shelled corn	0.0	250 lbs.	200 lbs.	3.0 bpa
Grade	Good	---	Good	Good	34.0 lbs per bu.

Rotation - 12 Main Field				Year - 1956		
	A	B	C	D	E	F
Crop	Cr. Wheat	Cr. Wheat	Cr. Wheat	Oats, FP	Corn, SP	Wheat DC Cr. Wheat
Variety	Standard	Standard	Standard	Gopher	Nodak 301	Selkirk Standard
Plowing date	---	---	---	9 - 27 - 56	5 - 22 - 56	---

Plowing depth	---	---	---	4 - 5 inches	4 - 5 inches	---
Tillage before seeding	---	---	---	DD 4 - 12 - 56	---	DD 4 - 12 - 56
Seeding date	1953	1954	1955	4 - 13 - 56	5 - 23 - 56	4 - 13 - 56
Seeding rate	10 lbs/acre	10 lbs/acre	10 lbs/acre	1 ½ bpa	8 lbs/acre	1 bpa 10 lba/acre
Seeding manner	DD Press Drill	DD Press Drill	DD Press Drill	DD Press Drill	Drilled	DD Press Drill
Tillage after seeding	---	---	---	---	Necessary Cultivation to control weeds.	---
Harvest date	6 - 28 - 56	6 - 28 - 56	6 - 28 - 56	---	9 - 10 - 56	---
Total pounds	25	33	35	---	2.84 tons silage	---
Straw, pounds	---	---	---	---	---	---
Grain, pounds	---	---	---	0.0	5.5	0.0
Yields per acre	250 lbs.	330 lbs.	350 lbs.	0.0	3.9 bpa shelled corn	0.0
Grade	Good	Good	Good	---	Good	---

Rotation - 14 Main Field			Year - 1956	
	A	B	C	D
Crop	S. Clover, GM	Oats, GM	Corn, SP	Wheat DC S. Clover
Variety	Y.B.	Gopher	Nodak 301	Selkirk Y.B.
Plowing date	---	---	5 - 22 - 56	---
Plowing depth	---	---	4 - 5 inches	---
Tillage before seeding	---	DD 4 - 12 - 56	---	DD 4 - 12 - 56

Seeding date	1955	4 - 13 - 56	5 - 23 - 56	4 - 13 - 56
Seeding rate	8 lbs/acre	1 ½ bpa	8 lbs / acre	1 bpa 8 lbs / acre
Seeding, manner	DD press drill	DD press drill	Drilled	DD Press Drill
Tillage after seeding	---	---	Necessary Cultivation to control weeds.	---
Harvest date	---	8 - 1 - 56	9 - 10 - 56	8 - 10 - 56
Total pounds	---	---	3.88 tons silage	---
Straw, pounds	---	---	---	---
Grain, pounds	---	94.0	43.4	33.0
Yields per acre	---	29.4 bpa	31.0 bpa shelled corn	5.5 bpa
Grade	---	35.0 lbs per bu.	Good	52.5 lbs per bu.
Rotation - 15 Main Field			Year - 1956	
	A	B	C	D
Crop	S. Clover, GM	Wheat, GM	Corn, SP	Oats, DC S. Clover
Variety	Y. B.	Selkirk	Nodak 301	Gopher Y. B.
Plowing date	---	---	5 - 22 - 56	---
Plowing depth	---	---	4 - 5 inches	---
Tillage before seeding	---	DD 4 - 12 - 56	---	DD 4 - 12 - 56
Seeding date	1955	4 - 13 - 56	5 - 23 - 56	4 - 13 - 56
Seeding rate	8 lbs/ acre	1 bpa	8 lbs/acre	1 ½ bpa 8 lbs/acre

Seeding, manner	DD press drill	DD press drill	Drilled	DD press drill
Tillage after seeding	---	---	Necessary Cultivation to control weeds	---
Harvest date	---	8 - 10 - 56	9 - 10 - 56	---
Total pounds	---	---	3.97 tons silage	---
Straw, pounds	---	---	---	---
Grain, pounds	---	63.0	12.6	0.0
Yields per acre	---	10.5 bpa	9.0 bpa shelled corn	0.0
Grade	---	56.0 lbs per bu.	Good	---

Rotation - 16 Main Field			Year - 1956	
	A	B	C	D
Crop	S. Clover, GM	Oats, GM	Corn, SP	Wheat, DC S. Clover
Variety	Y. B.	Gopher	Nodak 301	Selkirk Y.B.
Plowing date	---	---	5 - 22 - 56	---
Plowing depth	---	---	4 - 5 inches	---
Tillage before seeding	---	DD 4 - 12 - 56	---	DD 4 - 12 - 56
Seeding date	1955	4 - 13 - 56	5 - 23 - 56	4 - 13 - 56
Seeding rate	8 lbs/ acre	1 ½ bpa	8 lbs/acre	1 ½ bpa 8 lbs/ acre
Seeding				

Seeding, manner	DD press drill	DD press drill	Drilled	DD press drill
Tillage after seeding	---	---	necessary cultivation to control weeds.	---
Harvest date	---	8 - 1 - 56	9 - 10 - 56	8 - 10 - 56
Total pounds	---	---	3.50 tons sil.	---
Straw, pounds	---	---	---	---
Grain, pounds	---	43.5	27.4	23.0
Yields per acre	---	13.6 bpa	19.6 bpa shelled corn	3.8 bpa
Grade	---	35.5 lbs per bu.	Good	54.4 lbs per bu.

Rotation - 17 Main Field			Year - 1956	
	A	B	C	D
Crop	S. Clover, GM	Wheat GM	Corn, SP	Oats, DC S. Clover
Variety	Y. B.	Selkirk	Nodak 301	Gopher Y. B.
Plowing date	---	---	5 - 22 - 56	---
Plowing depth	---	---	4 - 5 inches	---
Tillage before seeding	---	DD 4 - 12 - 56	---	DD 4 - 12 - 56
Seeding date	1955	4 - 13 - 56	5 - 23 - 56	4 - 13 - 56
Seeding rate	8 lbs/acre	1 bpa	8 lbs/acre	1 ½ bpa 8 lbs/acre
Seeding, manner	DD press drill	DD press dr.	Drilled	DD press drill

Tillage after seeding	---	---	necessary cultivation to control weeds	---
Harvest date	---	8 - 10 - 56	9 - 10 - 56	---
Total pounds	---	---	3.63 t. silage	---
Straw, pounds	---	---	---	---
Grain, pounds	---	63.0	8.3	0.0
Yields per acre	---	10.5 bpa	5.9 bpa shelled corn	0.0
Grade	---	56.0 lbs per bu.	Good	---

<b>Rotation - Main Field</b>		<b>Year - 1956</b>
	A	B
Crop	Oats, DC	Corn, SP
Variety	Gopher	Nodak 301
Plowing date	---	5 - 22 - 56
Plowing depth	---	4 - 5 inches
Tillage before seeding	DD 4 - 12 - 56	---
Seeding date	4 - 13 - 56	5 - 23 - 56
Seeding rate	1 ½ bpa	8 lbs / acre
Seeding manner	DD press drill	Drilled
Tillage after seeding	---	necessary cultivation to control weeds
Harvest date	8 - 1 - 56	9 - 10 - 56
Total pounds	---	3.47 tons silage

Straw, pounds	---	---
Grain, pounds	24.5	35.1
Yields per acre	7.6 bpa	25.1 bpa shelled corn
Grade	34.0 lbs per bu.	Good

<b>Rotation - 18 Main Field</b>		<b>Year - 1956</b>
	A	B
Crop	Corn, SPF	Wheat, DCF
Variety	Nodak 301	Selkirk
Plowing date	5 - 22 - 56	---
Plowing depth	4 - 5 inches	---
Tillage before seeding	---	DD 4 - 12 - 56
Seeding date	5 - 23 - 56	4 - 13 - 56
Seeding rate	8 lbs/ acre	1 bpa
Seeding manner	Drilled	DD press drill
Tillage after seeding	Necessary cultivation to control weeds	---
Harvest date	9 - 10 - 56	8 - 10 - 56
Total pounds	3.16 tons silage	---
Straw, pounds	---	---
Grain, pounds	25.3	40.0
Yields per acre	18.1 bpa shelled corn	6.7 bpa

Grade	Good	55.5 lbs per bu.
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Rotation - 19 Main Field		Year - 1956
	A	B
Crop	Corn, SP, CK	Wheat, DC, CK
Variety	Nodak 301	Selkirk
Plowing date	5 - 22 - 56	---
Plowing depth	4 - 5 inches	---
Tillage before seeding	---	DD 4 - 12 - 56
Seeding date	5 - 23 - 56	4 - 13 - 56
Seeding rate	8 lbs/ acre	1 bpa
Seeding manner	Drilled	DD press drill
Tillage after seeding	necessary cultivation to control weeds.	---
Harvest date	9 - 10 - 56	8 - 10 - 56
Total pounds	3.25 tons silage	---
Straw, pounds	---	---
Grain, pounds	22.0	15.0
Yields per acre	15.7 bpa shelled corn-	2.5 bpa
Grade	Good	53.5 lbs. per bu.

Rotation - Main Field	Year - 1956
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	C	D
Crop	Corn, SP	Wheat, DCF
Variety	Nodak 301	Selkirk
Plowing date	5 - 21 - 56	---
Plowing depth	4 - 5 inches	---
Tillage before seeding	---	DD 4 - 12 - 56
Seeding date	5 - 23 - 56	4 - 13 - 56
Seeding rate	8 lbs / acre	1 bpa
Seeding manner	Drilled	DD press drill
Tillage after seeding	necessary cultivation to control weeds	---
Harvest date	9 - 10 - 56	8 - 10 - 56
Total pounds	2.50 tons silage	---
Straw, pounds	---	---
Grain, pounds	22.5	26.0
Yields per acre	16.1 bpa shelled corn	4.3 bpa
Grade	Good	54.5 lbs. per bu.

Rotation - 31 Main Field			Year - 1956	
	A	B	C	D
Crop	S. Clover, GM	Oats, GM	Corn, SP	Wheat, DC S. Clover

Variety	Y. B.	Gopher	Nodak 301	Selkirk Y.B.
Plowing date	---	---	5 - 22 - 56	---
Plowing depth	---	---	4 - 5 inches	---
Tillage before seeding	---	DD 4 - 12 - 56	---	DD 4 - 12 - 56
Seeding date	1955	4 - 13 - 56	5 - 23 - 56	4 - 13 - 56
Seeding rate	8 lbs/acre	1 ½ bpa	8 lbs / acre	1 bpa 8 lbs / acre
Seeding, manner	DD press drill	DD press drill	Drilled	DD press Drill
Tillage after seeding	---	---	necessary cultivation to control weeds.	---
Harvest date	---	8 - 1 - 56	9 - 10 - 56	---
Total pounds	---	---	4.19 T. silage	---
Straw, pounds	---	---	---	---
Grain, pounds	---	46.0	19.7	0.0
Yields per acre	---	14.4 bpa	14.1 bpa shelled corn	0.0
Grade	---	34.5 lbs per bu.	Good	---

Rotation - 32 Main Field		Year - 1956		
	A	B	C	D
Crop	S. Clover, GM	Wheat, GM	Corn, SP	Oats DC S. Clover

Variety	Y. B.	Selkirk	Nodak 301	Gopher Y.B.
Plowing date	---	---	5 - 22 - 56	---
Plowing depth	---	---	4 - 5 inches	---
Tillage before seeding	---	DD 4 - 12 - 56	---	DD 4 - 12 - 56
Seeding date	1955	4 - 13 - 56	5 - 23 - 56	4 - 13 - 56
Seeding rate	8 lbs/ acre	1 bpa	8 lbs / acre	1 ½ bpa 8 lbs / acre
Seeding, manner	DD press drill	DD press drill	Drilled	DD press drill
Tillage after seeding	---	---	necessary cultivation to control weeds.	---
Harvest date	---	8 - 10 - 56	9-10-56	---
Total pounds	---	---	2.72 T. Silage	---
Straw, pounds	---	---	---	---
Grain, pounds	---	43.0	8.7	0.0
Yields per acre	---	7.2 bpa	6.2 bpa shelled corn	0.0
Grade	---	55.0 lbs per bu.	Good	---

Rotation - 42 Main Field				Year - 1956		
	A	B	C	D	E	F
Crop	Alfalfa	Oats, SP	Corn, SP	Wheat, DC	Alfalfa, DD	Alfalfa
Variety	Ladak	Gopher	Nodak 301	Selkirk	Ladak	Ladak
Plowing date	---	9 - 27 - 55	5-22-56	---	---	---

Plowing depth	---	4 - 5 in.	---	---	---	---
Tillage before seeding	---	DD 4-12-56	---	DD 4-12-56	DD 5-10-56	---
Seeding date	1954	4-13-56	5-23-56	4-13-56	5-10-56	1955
Seeding rate	8 lbs/acre	1 ½ bpa	8 lbs/acre	1 bpa	8 lbs/acre	8 lbs/acre
Seeding manner	DD press dr.	DD press dr.	Drilled	DD press dr.	DD press dr.	DD press dr.
Tillage after seeding	---	---	necessary cultivation to control weeds.	---	---	---
Harvest date	6-28-56	8-1-56	9-10-56	---	---	6-29-56
Total pounds	45	---	3.56 T. Silage	---	---	---
Straw, pounds	---	---	---	---	---	---
Grain, pounds	---	5.5	5.0	0.0	---	---
Yields per acre	450 lbs.	1.7 bpa	3.9 bpa shelled corn	0.0	0.0	0.0
Grade	Good	31.5 lbs. per bu.	Good	---	---	---

Rotation - 61 Main Field			Year - 1956
	A	B	C
Crop	Wheat, F	Oats, SP	Fallow
Variety	Selkirk	Gopher	---
Plowing date	---	4 - 12 - 56	---
Plowing depth	---	4 - 5 inches	---
Tillage before seeding	DF 4 - 12 - 56	---	---
Seeding date	4 - 13 - 56	4 - 13 - 56	---
Seeding rate	1 bpa	1 ½ bpa	---

Seeding manner	DD Press drill	DD press drill	---
Tillage after seeding	---	---	---
Harvest date	8 - 10 - 56	8 - 1 - 56	---
Total pounds	---	---	---
Straw, pounds	---	---	---
Grain, pounds	69.0	28.0	---
Yields per acre	11.5 bpa	9.1 bpa	—
Grade	55.5 lbs. per bu.	32.5 lbs per bu.	---

Rotation - 62 Main Field			Year - 1956
	A	B	C
Crop	Wheat, FP	Oats, SP	Corn, SP Manured
Variety	Selkirk	Gopher	Nodak 301
Plowing date	9 - 27 - 55	4 - 12 - 56	5 - 22 - 56
Plowing depth	4 - 5 inches	4 - 5 inches	4 - 5 inches
Tillage before seeding	DD 4 - 12 - 56	---	---
Seeding date	4 - 13 - 56	4 - 13- 56	5 - 23 - 56
Seeding rate	1 bpa	1 ½ bpa	8 lbs/ acre
Seeding manner	DD press drill	DD press drill	Drilled
Tillage after seeding	---	---	necessary cultivation to control weeds.
Harvest date	---	---	9 - 10 - 56

Total pounds	---	---	4.39 tons silage
Straw, pounds	---	---	---
Grain, pounds	0.0	0.0	25.3
Yields per acre	0.0	0.0	18.1 bpa shelled corn
Grade	---	---	Good

Rotation - 63 Main Field			Year - 1956
	A	B	C
Crop	Wheat, F	Oats, SP	Fallow
Variety	Selkirk	Gopher	---
Plowing date	---	4 - 12 - 56	---
Plowing depth	---	4 - 5 inches	---
Tillage before seeding	DF 4 - 12 - 56	---	---
Seeding date	4 - 13 - 56	4 - 13 - 56	---
Seeding rate	1 bpa	1 ½ bpa	---
Seeding manner	DD press drill	DD press drill	---
Tillage after seeding	---	---	---
Harvest date	8 - 10 - 56	8 - 1 - 56	---
Total pounds	---	---	---
Straw, pounds	---	---	---
Grain, pounds	51.0	31.5	---
Yields per acre	8.5 bpa	9.8 bpa	---

Grade	5.5 lbs. per bu.	34.0 lbs per bu.	---
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Rotation - 40 Main Field		Year - 1956
	A	B
Crop	Corn, SP	Wheat, DCF
Variety	Nodak 301	Selkirk
Plowing date	5 - 22 - 56	---
Plowing depth	4 - 5 inches	---
Tillage before seeding	---	DD 4 - 12 - 56
Seeding date	5 - 23 - 56	4 - 13 - 56
Seeding rate	8 lbs/acre	1 bpa
Seeding manner	Drilled	DD press drill
Tillage after seeding	Necessary cultivation to control weeds.	---
Harvest date	9 - 10 - 56	8 - 10 - 56
Total pounds	3.00 tons silage	---
Straw, pounds	---	---
Grain, pounds	9.9	14.0
Yields per acre	7.1 bpa shelled corn	2.3 bpa
Grade	Good	52.0 lbs. per bu.

Rotation - 49 Main Field		Year - 1956
	A	B
Crop	Corn, SP, Ck	Wheat, DC, Ck
Variety	Nodak 301	Selkirk
Plowing date	5 - 22 - 56	---
Plowing depth	4 - 5 inches	---
Tillage before seeding	---	DD 4 - 12 - 56
Seeding date	5 - 23 - 56	4 - 13 - 56
Seeding rate	8 lbs/ acre	1 bpa
Seeding manner	Drilled	DD press drill
Tillage after seeding	Necessary cultivation to control weeds.	---
Harvest date	9 - 10 - 56	8 - 10 - 56
Total pounds	1.63 tons silage	---
Straw, pounds	---	---
Grain, pounds	8.3	21.5
Yields per acre	5.9 bpa shelled corn	3.6 bpa
Grade	Good	53.0 lbs. per bu.

Rotation - 78 Main Field		Year - 1956
	A	B
Crop	Corn, SP	Wheat, DCF

Variety	Nodak 301	Selkirk
Plowing date	5 - 22 - 56	---
Plowing depth	4 - 5 inches	---
Tillage before seeding	---	DD 4 - 12 - 56
Seeding date	5 - 23 - 56	4 - 13 - 56
Seeding rate	8 lbs/ acre	1 bpa
Seeding manner	Drilled	DD press drill
Tillage after seeding	Necessary cultivation to control weeds.	---
Harvest date	9 - 10 - 56	8 - 10 - 56
Total pounds	4.00 tons silage	---
Straw, pounds	---	---
Grain, pounds	15.4	19.0
Yields per acre	11.0 bpa shelled corn	3.2 bpa
Grade	Good	50.5 lbs. per bu.

Rotation - 79 Main Field		Year - 1956
	A	B
Crop	Corn, SPF	Wheat, DCF
Variety	Nodak 301	Selkirk
Plowing date	5 - 22 - 56	---
Plowing depth	4 - 5 inches	---
Tillage before		

Tillage before seeding	---	DD 4 - 12 - 56
Seeding date	5 - 23 - 56	4 - 13 - 56
Seeding rate	8 lbs/ acre	1 bpa
Seeding manner	Drilled	DD press drill
Tillage after seeding	Necessary cultivation to control weeds.	---
Harvest date	9 - 10 - 56	4 - 13 - 56
Total pounds	2.53 tons silage	---
Straw, pounds	---	---
Grain, pounds	3.9	9.0
Yields per acre	2.75 bpa shelled corn	1.5 bpa
Grade	Good	50.5 lbs. per bu.

<b>Rotation - 242 Main Field</b>		<b>Year - 1956</b>
	A	B
Crop	Corn, SPF	Wheat, DCF
Variety	Nodak 301	Selkirk
Plowing date	5 - 22 - 56	---
Plowing depth	4 - 5 inches	---
Tillage before seeding	---	DD 4 - 12 - 56
Seeding date	5 - 23 - 56	4 - 13 - 56
Seeding rate	8 lbs/ acre	1 bpa

Seeding manner	Drilled	DD press drill
Tillage after seeding	Necessary cultivation to control weeds.	---
Harvest date	9 - 10 - 56	8 - 10 - 56
Total pounds	2.91 tons silage	---
Straw, pounds	---	---
Grain, pounds	7.7	20.5
Yields per acre	5.5 bpa shelled corn	3.4 bpa
Grade	Good	54.0 lbs per bu.

<b>Rotation - 245 Main Field</b>	<b>Year - 1956</b>	
	A	B
Crop	Corn, Sp, Ck	Wheat, DC Ck.
Variety	Nodak 301	Selkirk
Plowing date	5 - 22 - 56	---
Plowing depth	4 - 5 inches	---
Tillage before seeding	---	DD 4 - 12 - 56
Seeding date	5 -23 - 56	4 - 13 - 56
Seeding rate	8 lbs/acre	1 bpa
Seeding manner	Drilled	DD press drill
Tillage after seeding	necessary cultivation to control weeds	---

Harvest date	9 - 10 - 56	8 - 10 - 56
Total pounds	3.44 tons silage	---
Straw, pounds	---	---
Grain, pounds	9.9	12.5
Yields per acre	7.1 bpa shelled corn	w.1 bpa
Grade	Good	535 lbs. per bu.

Rotation - 414		Year - 1956
	A	B
Crop	Potatoes, F	Fallow
Variety	Cobbler	---
Plowing date	---	---
Plowing depth	---	---
Tillage before seeding	DD 5 - 7 - 56	---
Seeding date	5 - 7 - 56	---
Seeding rate	10 bpa	---
Seeding manner	Hand planted	---
Tillage after seeding	Necessary cultivation to Control weeds.	---
Harvest date	9 - 15 - 56	---
Total pounds	110 lbs culls	---
Straw, pounds	---	---
Grain, pounds	---	---

Yields per acre	culls 18.3 bpa U.S. #1 63.3 bpa Total 81.6 bpa	—
Grade	---	—

Rotation - 415		Year - 1956
	A	B
Crop	Potatoes, SP	Wheat, DD
Variety	Cobbler	Selkirk
Plowing date	5 - 7 - 56	---
Plowing depth	4 - 5 inches	---
Tillage before seeding	---	---
Seeding date	5 - 7 - 56	4 - 13 - 56
Seeding rate	10 bpa	1 bpa
Seeding manner	Hand planted	DD press drill
Tillage after seeding	Necessary cultivation to control weeds.	---
Harvest date	9 - 15 - 56	8 - 10 - 56
Total pounds	105 lbs culls 305 lbs US #1	---
Straw, pounds	---	---
Grain, pounds	---	43.0
Yields per acre	culls 17.5 bpa US #1 50.8 bpa	7.2 bpa

	Total 68.3 bpa	
Grade	---	54.4 lbs per bu.

Rotation - Continuous Wheat			Year - 1956	
	A	B	C	D
Crop	Wheat, SP	Wheat, FP	Fallow	Wheat F
Variety	Selkirk	Selkirk	---	Selkirk
Plowing date	4 - 12 - 56	9 - 27 - 56	---	---
Plowing depth	4 - 5 inches	4 - 5 inches	---	---
Tillage before seeding	---	DD 4 - 12 - 56	---	DF 4 - 12 - 56
Seeding date	4 - 13 - 56	4 - 13 - 56	---	4 - 13 - 56
Seeding rate	1 bpa	1 bpa	---	1 bpa
Seeding, manner	DD press drill	DD press drill	---	DD press drill
Tillage after seeding	---	---	---	---
Harvest date	8 - 10 - 56	---	---	8 - 10 - 56
Total pounds	---	---	---	---
Straw, pounds	---	---	---	---
Grain, pounds	12.5	0.0	---	43.0
Yields per acre	2.1 bpa	0.0	---	7.2 bpa
Grade	54.0 lbs per bu.	---	---	56.5 lbs per bu.

Rotation - Continuous Oats			Year - 1956	
	A	B	C	D
Crop	Oats, SP	Oats, FP	Fallow	Oats, F
Variety	Gopher Gopher	Gopher	---	Gopher
Plowing date	4-12-56	9-27-55	---	---
Plowing depth	4 - 5 inches	4 - 5 inches	---	---
Tillage before seeding	---	DD 4 - 12 - 56	---	DF 4 - 12 - 56
Seeding date	4 - 13 - 56	4 - 13 - 56	---	4 - 13 - 56
Seeding rate	1 ½ bpa	1 ½ bpa	---	1 ½ bpa
Seeding, manner	DD press drill	DD press drill	---	DD press drill
Tillage after seeding	---	---	---	---
Harvest date	8 - 1 - 56	---	---	8 - 1 - 56
Total pounds	---	---	---	---
Straw, pounds	---	---	---	---
Grain, pounds	10.0	0.0	---	65.0
Yields per acre	3.1 bpa	0.0	---	20.3 bpa
Grade	34.0 lbs per bu.	---	---	35.0 lbs per bu.

Rotation - Continuous			Year - 1956	
	A	B	C	D
Crop	Barley, SP	Barley, FP	Fallow	Barley, F

Variety	Tregal	Tregal	---	Tregal
Plowing date	4 - 12 - 56	9 - 27 - 56	---	---
Plowing depth	4 - 5 inches	4 - 5 inches	---	---
Tillage before seeding	---	DD 4 - 12 - 56	---	DF 4 - 12 - 56
Seeding date	4 - 13 - 56	4-13-56	---	4 - 13 - 56
Seeding rate	5 pecks /acre	5 pecks/acre	---	5 pecks/acre
Seeding, manner	DD press drill	DD press drill	---	DD press drill
Tillage after seeding	---	---	---	---
Harvest date	---	---	---	8 - 10 - 56
Total pounds	---	---	---	---
Straw, pounds	---	---	---	---
Grain, pounds	0.0	0.0	---	77.0
Yields per acre	0.0	0.0	---	16.0 bpa
Grade	---	---	---	48.0 lbs per bu.

Rotation - Continuous Corn			Year - 1956	
	A	B	C	D
Crop	Corn, SP	Corn, FP	Fallow	Corn, F
Variety	Nodak 301	Nodak 301	---	Nodak 301
Plowing date	5 - 22 - 56	9 - 27 - 56	---	---
Plowing depth	4 - 5 inches	4 - 5 inches	---	---

Tillage before seeding	---	DD 5 - 22 - 56	---	DF 4 - 12 - 56
Seeding date	5 - 23 -56	5 - 23 - 56	---	5 - 23 - 56
Seeding rate	8 lbs/acre	8 lbs/ acre	---	8 lbs/ acre
Seeding, manner	Drilled	Drilled	---	Drilled
Tillage after seeding	Necessary cultivation to control weeds	necessary cultivation to control weeds	---	necessary cultivation to control weeds
Harvest date	9 -10 - 56	9 - 10 - 56	---	9 - 10 - 56
Total pounds	3.03 tons silage	3.03 tons silage	---	5.38 tons silage
Straw, pounds	---	---	---	---
Grain, pounds	13.2	9.4	---	62.7
Yields per acre	9.4 bpa shelled corn	6.7 bpa shelled corn	---	44.8 bpa shelled corn
Grade	Good	Good	---	Good