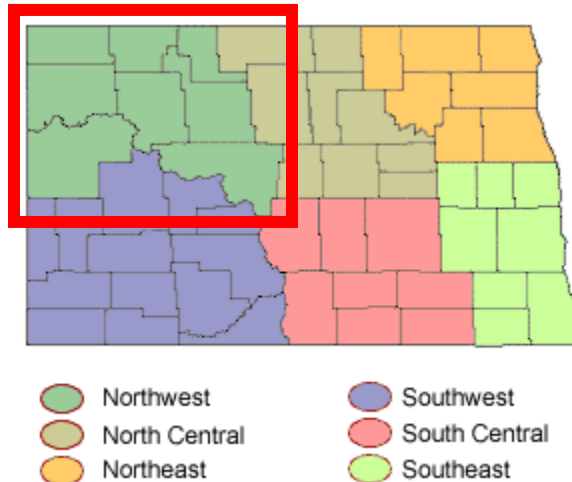


Northwestern Quadrant of North Dakota



In 2016, two farm partners in the Northwestern Quadrant of North Dakota grew 34 different varieties of vegetables, herbs, and flowers for sale at a Farmers Market. Having attempted to start their own plants in past years, the farmers decided that it was best to custom hire a professional greenhouse grower to start certain transplants using their choice seed and varieties. Seeds and transplants costs were over 20% of the farmers' total expenses for the operation, but the farmers felt they had better plants and yields throughout the year due to that choice.

All crops were grown in traditional rows, with no season extenders or wind protection. Because of its rural location, deer and other wildlife and rodents were a cause of damage to this garden. Weeds were controlled with a garden tiller and hand wheel hoe. One farmer noted that the wheel hoe worked better and more efficiently than the gas powered tiller. Due to personal commitments the farmers needed to hire a laborer to work for a short time during the season for a total cost of \$640. All other labor was done by the 2 partner farmers.

The summer of 2016 was very dry. With no easy way to irrigate the 1 acre leased plot, the farmers had to purchase a \$500 water tank and transport water to the garden area.

The farmers in the past had struggled with trying to have too many different kinds of items to bring to the farmers market. In 2016 they decided to drop the most time consuming crops, such as green beans. This freed up their time to focus more on their higher dollar crops, such as tomatoes, potatoes, beets and onions. They were pleased with the choice, pointing out that

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while customers appreciate green beans, they take too much time to pick, resulting in higher labor expenses and a lower net value.

Also in 2016 the farmers sought to fix some past plant issues with a fertilizer application. Five tons of compost were added to the garlic and onion beds, at a cost of \$1,200. The ground mellowed out noticeable and the plants responded favorably, but the farmers felt unsure whether the cost was worth the gain. To prepare for 2017, they took soil tests in the fall, with the intent of using the results to guide their fertilization strategy.

Problem weeds, like thistles, were controlled with glyphosphate.



Wheel Hoe with Hiller Attachment



Advice

“Everyone should have a wheel hoe w/ hiller attachment.”

“Use locally grown plants so they are already on hand to combat spring weather.”

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2016 Planting and Harvest Schedule

PLANT AND HARVEST CHART	April	May	May	June	June	June	July	July	July	July	August	August	August	August	Aug / Sept	Sept	Sept	Sept	Sept	Oct	Oct	Oct	Oct
	3rd week	1st week	4th week	1st week	2nd week	3rd week	1st week	2nd week	3rd week	4th week	1st week	2nd week	3rd week	4th week	5th week/ 1st week	2nd week	3rd week	4th week	5th week	1st week	2nd week	3rd week	4th week
Tomatoes			P							H	H	H	H	H	H	H	H	H	H				
Carrots		P		P		P											H	H	H	H	H	H	H
Pepper				P						H	H	H	H	H	H	H	H	H	H				
Summer Squash					P		H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
Beets	P	P		P		P		H	H	H	H	H	H	H	H	H	H	H	H				
Cucumbers			P					H	H	H	H	H	H	H	H	H	H	H	H				
Radishes				P	P		H	H															

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2016 Data Cont.

Revenue				
Total Sales by Month		Top 3 crops by Sales (% of total sales)		
July	\$ 3,091.37	Tomatoes	25%	
August	\$ 8,600.54	Potatoes	13%	
September	\$ 6,236.81	Beets	9%	
October	\$ 1,033.56			
Total 2016 Sales	\$ 18,962.28			
Expenses				
Total Expenses	\$ 5,479.26			
Marketing Channel				
Farmers Market	100%			
Plant and Harvest Schedule				
Outdoor Planting Began	17 April	<i>beets</i>		
Outdoor Harvest Began	3 July	<i>summer squash</i>		
Outdoor Harvest Ended	22 Oct			
Outdoor Harvest Period Lasted	16 weeks			

Notes:

Producer ran out of onions in the middle of August. Anticipates they could have sold 4 times the amount they did.

2016 was a drought year: tender transplants like cucumbers suffered the from lack of water at transplanting time; many didn't survive.

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