

Field Peas in Nebraska: Potential for Profit

In Nebraska, farmers need to be nimble, flexible and creative in order to sustain their operations. That's why crop producers in the state are always looking for new ways to increase efficiency by implementing new practices into their operations.

One specialty crop that is considered an option to improve overall crop production in some areas of Nebraska, is field peas, most notably yellow peas. Peas provide significant benefits due to efficient water use, crop rotation advantages, nitrogen replacement, and in some cases, disease and insect resistance.

Farmers deciding to grow field peas, are faced with many of the same volatile weather challenges as growing corn, soybeans, wheat and other crops. They also must overcome constant changes in price and yield production, limited pea processing facilities to market their peas, and limited variety selection.

There are farmers in the state working to rise above these challenges. Here are a few of their stories.



Positive on Peas

One producer referred to Alliance farmer Mark Watson as the “godfather of peas” in Nebraska. Watson is one of the first adaptors of pea production in the state and has weathered the ups and downs of growing the crop.

It was in 1992 that Watson decided to try his hand at growing field peas. His first crop did well, but not so much after that.

“The mistake we made was we planted our own pea seed,” said Watson. “It turns out that wasn’t the best thing to do. The seeds are hard to handle, and you have to be setup properly to handle them.”

After a ten-year absence, and following the 2002 drought, Watson switched back to including peas in his crop rotation, and he hasn’t looked back.

“We use a pretty basic three-year rotation of dryland wheat, followed by corn, and then field peas and back to wheat,” said Watson. “We found out we were raising a healthier wheat crop than when we were going from wheat to summer fallow.”

That’s because peas regenerate the soil with natural nitrogen. Also, by planting a crop into what had been idle ground, Watson was getting potential income he would not have gotten otherwise.

“In my opinion, there is a huge

opportunity for peas because there are about a million acres of summer fallow ground in Nebraska,” said Watson. “We just get a more dynamic wheat crop with the three-year rotation. Our yield goals for wheat following peas is now 60 bushels an acre.”

He added that in some of the irrigated acres, he uses a four-year rotation that includes a forage crop and pinto beans with his peas, corn and wheat.

For the past few decades, Watson has promoted field peas to producers primarily throughout the Panhandle where peas have the best growing environment.

Optimism for field peas remains strong as Nebraska farmers look to increase the crop’s potential for profit.

Riding the Pea Roller Coaster

Looking for a legume crop that could diversify his farming operation, Steve Tucker who farms near Venango, started planting yellow peas in the 1990s.

“What we liked about them is that we could utilize them in the spring when we typically get more moisture,” said Tucker. “Peas looked like a perfect fit, so that first year we planted two fields and had a tremendous crop.”



Alliance farmer Mark Watson with grandson

However, due to difficulty in harvesting the peas, and trying to find a suitable market, Tucker set aside the idea for a few years. When the market opened back up in 2012, and Tucker found he could harvest the peas with a stripper-header, he went back to planting peas.

“Being able to plant peas in March and then harvesting them in July was a big advantage by utilizing them in what had been fallow wheat acres,” said Tucker. “And then in 2013, we found a buyer out of Kansas City that wanted to buy our peas to market them to petfood manufacturers.”

About that time, pea acres were expanding in the Nebraska Panhandle, which opened another opportunity for Tucker. He and partner Jeff Olsen started Agriforce Seed which offered pea seed to its customers.



Steven Tucker produces field peas for seed and processing at his farm near Vanango.

Tucker remains cautiously optimistic with the possibility of the field pea market expanding as the demand for non-meat protein increases. There is a need for more local processing facilities in the future to provide a cost-effective avenue to market peas in the Panhandle.

He also is encouraged by the research being done in western Nebraska that can aid in providing more production advantages to growing peas.

The Pea Outlier

There are only a few farmers in the southeastern portion of Nebraska growing field peas. One of them is Eric Thalken.

Thalken found his opportunity to grow peas in 2016, shortly after his farm, located near Dorchester, transitioned to organic production.

"We had a lot of cattle at that time, and as a result, we had a lot of grazing in our rotation," said Thalken, "Since the peas come off

in early July, we were able to rotate with a forage crop and would have a good yield by the end of August. That grazing opportunity helped us out during the transition to organic farming."

Being able to plant field peas in late February or early March, allows Thalken to concentrate on taking care of his organic corn and soybean fields which require a lot more attention.

"Organic peas are fairly simple most of the time," he said. "It's basically till, drill and harvest. We might put some irrigation water on them during flowering, but it's a small amount."

Thalken also rotates peas with corn on hilly fields because the peas offer better weed control than soybeans in organic operations. Corn also gets a yield boost from peas due to the natural nitrogen peas add to the soil.

With an increasing demand for organic protein, Thalken has been able to find a consistent buyer for his peas in south-central Iowa.

"They break down the peas so there's a protein and a starch," said Thalken. "A lot of it is used in food products such as protein shakes."

Going forth, Thalken said his

decision on how many acres to plant into peas depends a lot on price.

"Recently there has been a pretty big spread on price when peas are compared to soybeans," said Thalken. "It really depends on pricing so we can make sure we are profitable."

With the demand for non-GMO protein expected to continue increasing, Thalken says the price for peas can go up as well.

Producers Promoting Growing Peas in Nebraska

To give farmers a boost to grow peas in Nebraska, State Senator Dan Hughes of Venango introduced legislation in 2020 to form the Nebraska Pea and Lentil Commission. Following the passing of LB803, Governor Pete Ricketts appointed producers in the state to the Commission to lead the effort to promote growing peas in Nebraska.

One of those producers, Roland Rushman, who farms near Gurley, was voted as the initial chair of the Commission.

"There were several people who got the idea for a commission," said Rushman. "After the bill passed, I started making calls to find people who were willing to serve."

Commission members include Ben Goding from Sidney, Tyler Hughes from Venango, Eric



Gurley farmer Roland Rushman serves as chair for the Nebraska Pea and Lentil Commission.

Thalken from Dorchester, Roland Rushman from Gurley, and Logan Govier from Broken Bow.

The members of the Commission immediately started taking steps they felt would benefit pea growers in Nebraska.

“Our initial thought was we needed to become members of the USA Dry Pea and Lentil Council since they are in control of Revenue Crop Insurance,” said Rushman. “Since revenue is based on when prices are set, it offers producers better protection, and I think it’s a big deal.”

With the procedures set down by the Council completed, Nebraska pea producers will have the option to purchase Revenue Crop Insurance for field peas beginning in 2023.

The next steps for the Commission are to find more marketing opportunities for its producers and provide grant money for additional research.

Research to improve pea production is already underway in Nebraska.

Enthusiastic about Peas

Dr. Dipak Santra, conducts agronomic research with the best interests of Nebraska farmers in mind. In recent years, one of his passions has been to find ways to improve the profitability for farmers growing peas in the state.

“I know that peas agronomically are a very good fit for Nebraska, especially in the western half of the state,” said Santra. “And with the recent trend of plant-based protein demand increasing, the market could become huge.”

Based at the Panhandle Research and Extension Center in Scottsbluff, Santra networks with the farmers who grow the most peas in Nebraska. He discovered in 2013 one of the early challenges for growers was having a diverse selection of pea varieties.

“At that time, farmers only had three varieties from two companies to choose from,” said Santra. “That made it difficult to mitigate some of their biggest agronomic

challenges: heat, drought and disease.”

Santra focused his early research on developing additional pea varieties to provide more selection diversity. As a result of his efforts, there are now ten varieties from four different companies that can fit into rotation plans for Nebraska farmers.

While developing those varieties, Santra put a special emphasis on finding peas that would best tolerate heat and lack of water.

“This is the number one issue for Nebraska pea growers,” said Santra. “In other pea-growing regions, researchers have not been focusing on pea varieties that can better tolerate heat and drought. I think that will give us an advantage to do so here.”

Developing varieties with higher protein is another focus of Santra’s research. Quite simply, peas with a higher protein content typically demand a higher price.

“Even in poor producing years, having a product with higher quality protein content can provide better profitability opportunities,” said Santra. “I think this will encourage more of our Nebraska farmers to grow peas and expand our overall acres for the crop.” Other new pea varieties that could increase profitability for Nebraska pea producers, are ones that could survive cold temperatures and be planted in the fall.

"I have been conducting research to find winter pea varieties that can tolerate Nebraska winters," said Santra. "This would give Nebraska farmers another rotation option since winter peas are more resistant to disease than some other crops."

He added that winter peas could also break up the sawfly insect problem that has plagued many Kansas and Nebraska wheat growers.

Santra continues to be positive about pea production in Nebraska and feels his research will result in developing varieties that provide benefits for producers both agronomically and economically.

The potential for profitability, along with the advantages of including field peas in a crop rotation, have many producers continuing to consider including peas in their farming operations.

Companies that have processed Nebraska field peas for producers mentioned in this article are listed below.

- **New Alliance**
2371 HWY-2, Alliance, NE 69301;
John Sperl: (308)762-8014
- **Columbia Grain, LLC**
4935 E J St, Hastings, NE 68901;
Marvin Fast: (402)204-5916
- **Puris Grain**
4301 World Food Ave, Oskaloosa, IA 52577-9313;
Brent Reck: (641)799-4758;
breck@purisfoods.com
- **Redwood Group LLC**
6920 Nall Avenue, Suite #400, Mission, KS
66208; (844)449-6430

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Dr. Dipak Santra gives an update on Nebraska field pea production at a field day event.