

## Teacher's Guide – History of Agriculture and Pulses in Manitoba and Canada lesson

Grade level: Grade 4

Curriculum Connections:

- Science – Habitats and Communities Unit
  - 4-1-05 Investigate alternate explanations of plant or animal adaptations based on traditional knowledge from a variety of cultures.
  - 4-1-09 Recognize that plant and animal populations interact within a community.
  - 4-1-17 Recognize and appreciate how traditional knowledge contributes to our understanding of plant and animal populations and interactions.
- Social Studies – Cluster 3 Living in Manitoba: Environmental Stewardship and Sustainability.
  - 4-K-024 Give examples of Aboriginal peoples' traditional relationships with the land.

Student materials included:

- History of Agriculture in Manitoba and a History of Pulses in Canada reading sheet
- Kid Bean Checks Your Understanding worksheet

Lesson suggestions:

Vocabulary to introduce before the lesson:

Agriculture  
Archaeological  
Economy

Sources:

1. Manitoba History: Manitoba's First Farmers, by Catherine Flynn, Parks Canada and E. Leigh Syms, Manitoba Museum of Man and Nature  
[http://www.mhs.mb.ca/docs/mb\\_history/31/firstfarmers.shtml](http://www.mhs.mb.ca/docs/mb_history/31/firstfarmers.shtml)
2. Manitoba Government <https://www.gov.mb.ca/chc/hrb/>
3. Probable Source: "The Native American story of the Three Sisters varies from tribe to tribe. This version of the story most likely stems from an oral account by Lois Thomas of Cornwall Island, compiled by students at Centennial College and found in Indian Legends of Eastern Canada." For more information see <http://www.birdclan.org/threesisters.htm>

Fig. 1 - Manitoba Government [www.gov.mb.ca/chc/hrb/plaques/plaq0377.html](http://www.gov.mb.ca/chc/hrb/plaques/plaq0377.html)

Fig. 2 - Manitoba History: Manitoba's First Farmers, by Catherine Flynn, Parks Canada and E. Leigh Syms, Manitoba Museum of Man and Nature  
[http://www.mhs.mb.ca/docs/mb\\_history/31/firstfarmers.shtml](http://www.mhs.mb.ca/docs/mb_history/31/firstfarmers.shtml)

Fig. 3 – Pulse Canada <http://www.pulsecanada.com/food-health/what-is-a-pulse>

Agriculture in Manitoba has always been an important industry. For most early European settlers agriculture was their way of life and source of food and they introduced and farmed many different crops and animals. But the very first people to use agriculture in Manitoba were the Indigenous Natives of Manitoba.

Most Manitoba tribes were nomadic – which means they were constantly on the move with no permanent home. This was so they could follow their main food source, the herds of buffalo and other animals that migrated with the seasons. There is evidence however, that some of the early tribes in Manitoba did practice some agriculture in the early 1400s. That is 400 years before the arrival of the Selkirk settlers.<sup>1</sup>



## History of Agriculture in Manitoba

### First Farmers in the Red River Valley

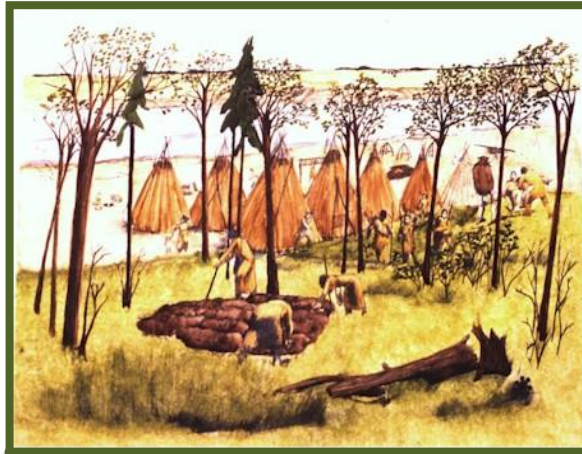


Fig. 1—Artists view of life in the early 1400s at Kenosewun Park, PTH 44, Lockport

Archaeological investigations done on this Lockport, MB site in the 1980s found charred corn kernels, hoes made from the shoulder blades of bison, underground storage pits (some of which were up to 2m deep), and pottery styles that come from the Native farming cultures of the upper Mississippi and Missouri river valleys. This find is the earliest known evidence of farming in Manitoba making the Aboriginal people living on this site in the early 1400s the earliest farmers in Manitoba.<sup>2</sup>

Trade between tribes historically was a very important part of First Nations life. It is believed that over many hundreds of years corn seeds moved from Mexico in the southern part of North America into the Canadian prairies through trading among neighboring tribes.

Can you imagine being part of a trading party and bringing back a new food to your community? It must have been very exciting to watch a new seed develop into a new food.

When Europeans made contact with the tribes of Manitoba, they introduced new products and technology to the First Nation tribes. In return, the First Nations exchanged their products and knowledge about farming in the Prairie environment. These early starts had a huge impact on the culture, economy and lifestyle of Manitobans.



Fig. 2-The spread of corn from Mexico through North America between A.D. 200 – A.D. 1,000.

## History of Pulses in Canada

Although we have no direct evidence that the first Aboriginal farmers in Manitoba were planting beans, we do know that the tribes to the south were planting beans as well as tobacco, sunflowers, potatoes and other native plants. Since Aboriginal people in Manitoba traded with these tribes it is possible that these crops were grown in Manitoba as well.

As you can see from Fig. 2, corn seed spread into areas which are now southern Ontario and Quebec, the traditional home to the Iroquois First Nations. This area has a milder climate which was better suited to farming. The Iroquois were mainly farmers who also did some hunting, fishing and gathering to obtain food. Their most important crops were corn, squash and beans – hey that's me, Kid Bean. Pulses, like beans, have had a long history in Canada. You can read all about it in the Iroquois legend 'The Story of the Three Sisters'. I play the part of the little sister.



Today, we are growing more pulses, including beans, lentils, peas and chickpeas, than ever before in Canada. Plant breeding science has developed pulse crops that mature more quickly so they can be successfully grown in more areas including the Prairies where the growing season is shorter.

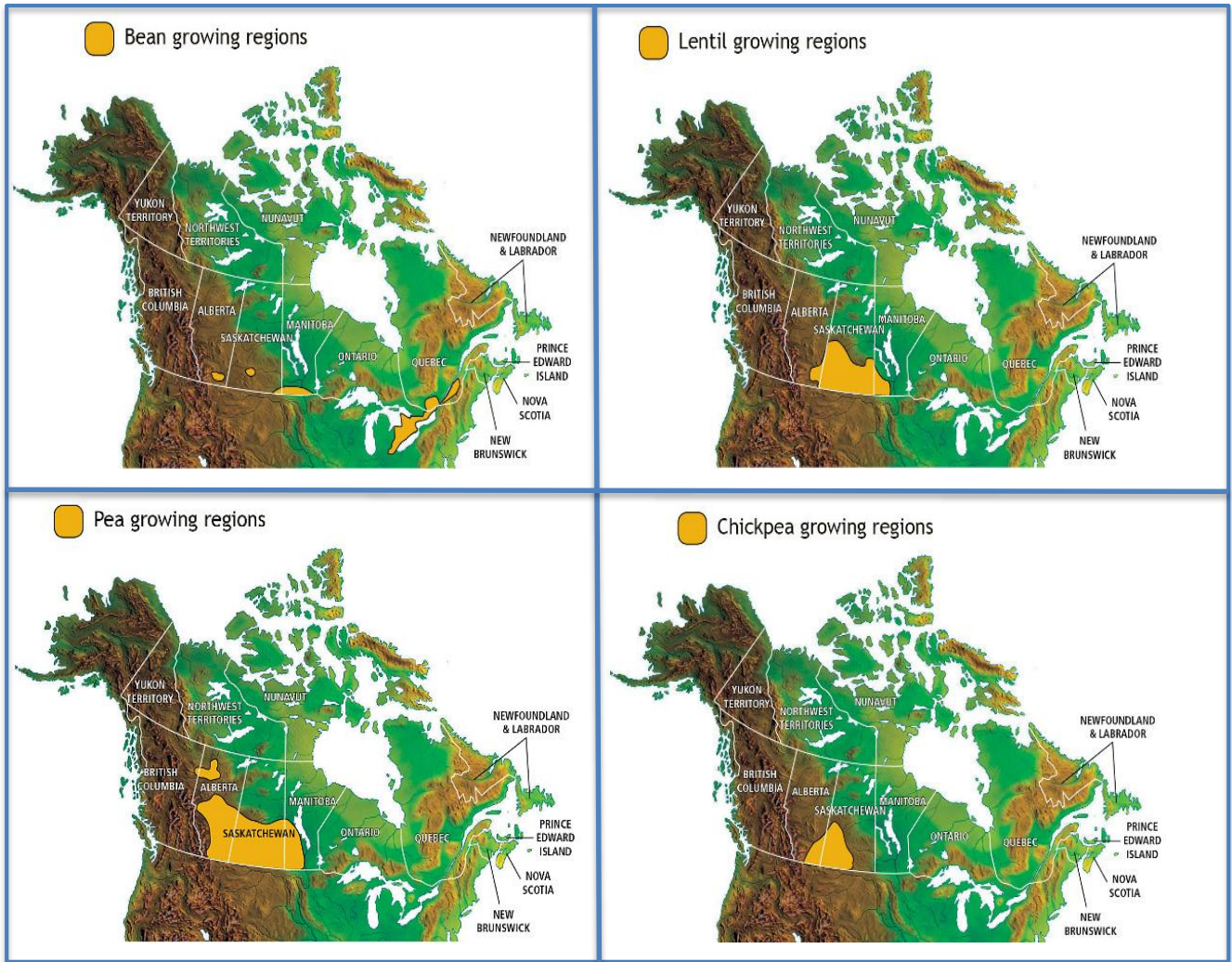


Fig. 3 – Pulse growing areas in Canada today.

In fact, Canada is now the world's largest exporter of lentils to the global marketplace, selling to over 100 countries each year. 99% of Canada's lentils are grown in Saskatchewan, with the remainder coming from southern Alberta and Manitoba.

## Kid Bean Checks Your Understanding



1. According to evidence who are the first known farmers in Manitoba and in what year were they farming?

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2. What is the evidence used to identify the first known farmers and where was this evidence found?

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3. What was the main source of food for the tribes in Manitoba and how did they get it?

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4. What was the main source of food for the Iroquois and how did they get it?

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5. Why was the traditional home of the Iroquois better suited to farming?

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6. Why is it that today we are able to grow more pulse crops in more areas of the Prairies?

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### **The Story of the Three Sisters<sup>3</sup>**

Once upon a time there were three sisters who lived together in a field. These sisters were quite different from one another in their size, shape and way of dressing. One of the three was a little sister, so young that she could only crawl at first, and if she wanted to stand up she had to twine herself around her eldest sister. The little sister wore velvet green with delicate tendril ribbons. The second of the three sisters, wore a frock of bright yellow and had a way of running off across the field when the sun shone and the soft wind blew in her face. The third sister was the eldest. She was always standing very straight and tall above the other sisters trying to guard them. There was only one way in which the three sisters were alike. They loved one another very much and were never separated. They were sure that they wouldn't be able to live apart.

After a while, a stranger came to the sisters' field. It was a little Iroquois boy. He was as straight as an arrow and as fearless as the eagle that circled his head far above in the sky. He knew the way of talking to the birds and the small brothers of the earth, the mouse, the groundhog, the chipmunk, squirrel and fox. The three sisters were very interested in this little Iroquois boy. They watched him fit his arrow in his bow, saw him carve a bowl with his knife and wondered where he went at night.

Late that summer, the youngest sister in green velvet who couldn't stand up without the help of her big sister, disappeared. Her sisters mourned for her until the fall, but she did not return.

Once again the little Iroquois boy came to the three sisters' field. He came to gather reeds at the edge of the nearby stream to make arrow shafts. The two sisters who were left watched him and gazed at him with wonder at the prints of his moccasins marking his trail to the field.

That night the second of the sisters disappeared. This time it was the sister who dressed in brilliant yellow and always wanted to run off across the field. She left no mark of her going but it may have been that she set her feet in the moccasin tracks of the little Iroquois boy.

Now there was only one sister left. Tall and straight she stood in the field not once bowing her head with sorrow, but it seemed to her that she could not bear to live in her field alone. The days grew shorter and the nights grew colder. Her green shawl faded and grew thin and old. Her hair once long and golden was now brown and tangled by the wind. Day and night she sighed for her sisters to return to her, but they did not hear her. Her voice when she tried to call them was low and sad like the wind.

But one day when it was the season of the final harvest, the little Iroquois boy heard the crying of the third sister. He felt sorry for her so he took her in his arms and carried her to the lodge of his father and mother. Oh what a surprise awaited her! Her two lost sisters were there in the lodge of the little Iroquois boy, safe and very glad to see her. They had been curious about the boy and they had gone home with him to see how and where he lived. They had liked his warm longhouse so well that they decided to stay there for the cold winter. And they were doing all they could to be useful.

The little sister in green, now quite grown up, was helping to keep the dinner pot full. The sister in yellow sat on the shelf drying herself for she planned to fill the dinner pot later. The third sister joined them, ready to grind some meal for the Iroquois family's bread.

Ever since then the three sisters spend their spring and summer in the field together, and their winter in the longhouse, helping to feed the family of the little Iroquois boy. And the three have never been separated since.

Every child of today should know these three sisters and need them just as much as the little Iroquois boy did. The little sister is the bean who needs the eldest sister to keep her from crawling along the ground. The second sister is the squash, who has bright yellow flowers and tends to run away across the field. The eldest sister is the corn. Her kernels can be dried and ground up to make flour for bread. When the corn, beans and squash are eaten, they provide a very nutritious meal with everything a person needs to be healthy.

### **Understanding the agriculture science in this story:**

This is a story about companion plants. Companion plants are plants that help each other. The Three Sisters are companion plants. The corn provides a pole for the beans to grow up. The squash leaves shade the ground to keep it cool and moist. The shade also slows down the growth of weeds. The bean plant is a pulse which is part of the legume family. Legumes can take nitrogen from the air and fix it in the soil next to the roots of the corn plant which needs lots of nitrogen to grow. And when the bean plants are old and die, they release more nitrogen into the soil and restore the nutrients that the corn and squash took from the soil during the summer. This enriches the soil so it is ready for next year's crop.

1) Draw or paint pictures of the Three Sisters' story.