Grains of Saskatchewan

Student will learn how the integration of other grains into the prairie farming economy has benefited Saskatchewan’s culture and economy.

Outcomes:
RW4.2 Investigate the importance of agriculture to the economy and culture of Saskatchewan.

Indicators:
RW4.2 e Identify agricultural products used in daily life in Saskatchewan.

Questions to Guide Inquiry:
1. What other crops besides wheat are important to the Saskatchewan economy?
2. What daily products are made from Saskatchewan grains?
3. What is some important vocabulary to know and be able to use when discussing Saskatchewan crops?

Teacher Background

The grain industry is very important to the Saskatchewan and Canadian economy. Saskatchewan farmers grow a variety of cereal grains including wheat, barley, oats, canaryseed, rye, and triticale. Cereal grains are an excellent source of carbohydrates and protein. Whole grain products provide fibre.

“Pulse” is the term for the edible seeds of legumes (plants with a pod), which include dry peas, beans, lentils, and chickpeas. Saskatchewan is the heart of Canada’s pulse industry. It produces:
- 99% of the Canadian lentil crop.
- 80% of the Canadian pea crop.
- 88% of the Canadian chickpea crop.

Canada is the world’s leading lentil, pea, and chickpea exporter. There are over one hundred special crop processors in Saskatchewan. The Crop Development Centre at the University of Saskatchewan is recognized worldwide as a leader in pulse research.
Oilseeds grown in Saskatchewan include canola, flax, mustard, and sunflowers. Oilseeds are grown primarily for their oil, which is used for human consumption and industrial purposes. Canola was developed from rapeseed thirty years ago and today canola is the second largest crop grown in Saskatchewan. Canada’s canola industry adds 13.8 billion dollars in economic activity to the Canadian economy. More than 52,000 Canadian farmers grow canola and depend on it to generate between one third and one half of their revenues.

More information is found in Student Handout 11.1

**Before Activity**

Bring a number of grains into the classroom and pass them around. Have students handle them. Ask students which (if any) they can identify. (The responses will vary according to the student demographic).

**During Activity**

**Activity One**

Distribute “Saskatchewan Grains Story” (Handout 11.1) to students. Invite students to read the passage. When they are finished they are to complete the chart which appears at the end. Students will compare their chart with a partner, making any changes he/she believes necessary. Have students hand in the charts.

**Activity Two**

With their partner, students are instructed to visit www.agriculture.gov.sk.ca/crops. Instruct students that there are two tasks associated with the visit to the website.

1. Study the pictures of barley, oats, and canola.
2. Find the answers for the following three questions. (The answers are found in the paragraph beside each picture).
   a. Why is Saskatchewan a good location to grow barley?
   b. What industry in the United States imports a lot of Saskatchewan oats?
   c. Canola did not exist thirty years ago. True or False?

**After Activity**

A number of words appear in italics in the reading “Saskatchewan Grains Story” (Handout 11.1). Invite students to use each in an original sentence. Instruct them that their sentence should clearly show the meaning of the word. The definitions are discussed with their partner and then each student submits the sentences.

The words are: crop, import, diversify, malt, livestock, weed, edible, export, and varieties.
Assessment

Teacher Checklist
- Could students find the appropriate information to complete the chart?
- Could students find correct answers to the three questions about barley, oats, and canola?
- Were students able to generate significant questions?
- Were students able to respond to others’ questions?
- Could students use vocabulary meaningfully?

Lesson Resources

The Ministry of Agriculture site contains information on the agriculture industry in Saskatchewan. www.agriculture.gov.sk.ca/crops

Cross Curricular Connections

ELA
Use the vocabulary in sentences.

Further Investigation

Students will be directed to the crop name word search at Kids’ Korner. (See www.agriculture.gov.sk.ca/types_of_crops_ws)

Complete activities in the AITC Learning Kit: Crops in Saskatchewan Kit and By-Products Game.

Science
Label the different plants and their parts.

Arts Education
Create an illustration of a crop on a seed package. Display the packages in the classroom.
Saskatchewan Grains Story

Wheat is no longer the major crop grown on the Prairies. One reason is that many countries that used to import wheat from Canada are now growing their own wheat crops, so they do not buy as much from Canada as they once did. Farmers now look for other crops besides wheat to plant. They need to diversify. They need to choose some other crops to grow and sell.

Barley is a crop that is grown for livestock feed or malting (making beer). Although farmers make much more money selling their barley for malt, only the best quality barley is accepted. The rest of the barley is sold to feed livestock.

Oats is another crop that is grown for both humans and livestock. Oats are very nutritious and many people eat oats in cereals and granola bars. Similar to barley, the poorer quality oats is used to feed livestock, not people.

Rapeseed was once considered to be a weed. The seed from the rapeseed plant came across the ocean mixed in with the precious seeds of wheat. It was discovered that it did have a use though. The seed produced oil that could be used in steam engines; however, the oil could not be used in the newer diesel engines. Also, it was not edible oil. It could not be eaten by humans or livestock. It looked like
rapeseed was going to be treated like a weed once again. Then scientists worked on removing some of the bad characteristics of rapeseed. A new plant, canola, was the result.

Canola really started to take over the fields in the 1980s. It is one of the best edible oil products in the entire world. Doctors want people to use it because it is healthier for people than many other oil products. Many think it is one of the healthiest oils in the entire world. It is a crop that is in high demand. Saskatchewan farmers grow and export a great deal of canola. The testing and further improvement of canola continues today.

Many farmers are planting other crops as well to make their farms more valuable. Some of these crops include: peas, lentils, flax, canary seed, mustards, sunflowers, chickpeas, wild rice, and even some specialty crops like coriander and corn. Agricultural research and science has made this possible by inventing crop varieties that can survive the tough growing conditions on the Canadian Prairies.
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<tr>
<th>Grain</th>
<th>Uses</th>
<th>Any Other Information?</th>
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<tbody>
<tr>
<td>Barley</td>
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<td>Oats</td>
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<td>Canola</td>
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