



## Agriculture in Saskatchewan

This lesson is a continuation of Lesson One. Students will gain a deeper understanding of Saskatchewan agriculture and will identify some of the major products grown in Saskatchewan.

### Outcome:

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

### Indicators:

- RW4.2 a. Identify and locate various types of farms in Saskatchewan.
- RW4.2 b. Research production practices of various types of crop and livestock farms.
- RW4.2 d. Compile an inventory of Saskatchewan agricultural food and by-products.
- RW4.2 e. Identify agricultural products used in daily life in Saskatchewan.

### Questions to Guide Inquiry:

1. What do we grow/raise in this province?
2. What products do you use in your daily lives that originate on a farm?
3. How does farming have an effect on the economy?











About  
45 minutes

## Teacher Background

The economy of Saskatchewan is driven by agriculture. The major crops and livestock produced in Saskatchewan are wheat, barley, oats, peas, lentils, canola, flax, mustard, beef cattle, chickens, pigs, sheep, and dairy.

Agriculture is more than farming. It includes all industries that directly assist the farmer to grow crops and raise livestock. There are many people that support the farmer including:

-  Agronomists (to give advice on when to seed and what to spray)
-  Veterinarians
-  Equipment manufacturers and retailers
-  Mechanics
-  Accountants
-  Marketing agents (to assist the farmers to get the best price for their grain and livestock)
-  Truck drivers
-  Many more!

### MATERIALS NEEDED:

- \* research material  
(paper, pencils,  
post-its, etc)
- \* Handouts 2.1 and  
2.2



## Before Activity

Review the last activity (Lesson 1: What is Farming?) with students. Discuss their webs and definitions of farming.

## During Activity

Divide students into pairs and provide each pair with a copy of Handout 2.1 and 2.2. Instruct them to complete handout 2.2.

When a pair is finished, they are to compare their answers to those of another pair. If there are differences, they are to go back to Handout 2.1 to determine the correct answer.

**If computer lab time is available you may have your students complete this activity using the Ministry of Agriculture website [www.agriculture.gov.sk.ca](http://www.agriculture.gov.sk.ca). Please note that the Ministry changes their website frequently and the answers for handout 2.2 may not be easily found.**

*Farmers need to make decisions that will ensure both economic and environmental sustainability. Education is becoming increasingly important and more farmers are getting a university degree than ever before!*

## After Activity

Pairs of students will create at least five more questions from information on the site. These questions will be exchanged with another pair to answer.

Ask students if there are questions they still have about their research today.

Pose the reflective questions below.

### Reflective Questions

1. Why does Saskatchewan grow/raise the products it does?
2. What information surprised you in your research today?



## Assessment

Collect the questionnaires as well as students' additional five questions.

### Teacher Checklist

- ✓ Did students successfully complete questionnaires?
- ✓ Did students compose five sound questions?
- ✓ Were students able to explain why Saskatchewan grows/raises the products it does?

*Did you know some  
shampoos and skin  
care products  
contain oats?*

## Lesson Resources

Use the websites: [www.agriculture.gov.sk.ca](http://www.agriculture.gov.sk.ca) or [www.aitc.sk.ca](http://www.aitc.sk.ca) (Foundations of Saskatchewan Agriculture in the teacher resources section).

These are sites the students will use if you choose to do this activity on the computer instead of using handout 2.1.

## Further Investigation

Kid's Korner on [www.agriculture.gov.sk.ca](http://www.agriculture.gov.sk.ca) has crossword puzzles on the crops and foods we eat as well as word searches on types of livestock or types of crops in Saskatchewan.

Ask students to brainstorm all of the different careers involved in producing different products such as a granola bar or hamburger. Remind them to consider all the different people involved in the research, growing, marketing, processing, and retail.



## Farming in Saskatchewan Answer Key

### Word Bank:

bees	mustard	flax	sheep	lentils	wheat
poultry	dairy	chickpeas	canola	pigs	barley
oats	beef cattle				

	Answer
1. This crop is one of the world's most important spice crops.	1. mustard
2. This crop produces healthy oil for cooking.	2. canola
3. This crop is good for your health as well as your skin.	3. oats
4. This is the number one crop grown in Saskatchewan and is an important source of carbohydrates.	4. wheat
5. This crop is used to make beer and feed cows.	5. barley
6. Saskatchewan is the largest exporter and second largest producer of this crop.	6. lentils
7. This crop was first grown over 7000 years ago.	7. flax
8. This crop is high in protein and a favourite for vegetarians (people who don't eat meat).	8. chickpeas
9. Close to 30% of Saskatchewan farms raise this livestock.	9. beef cattle
10. This industry provides us with both meat and eggs.	10. poultry
11. These animals are called nature's weed eaters.	11. sheep
12. Manure from these animals helps farmers grow crops.	12. pigs
13. 200 farmers in Saskatchewan have this type of farm.	13. dairy
14. Most of the product this industry produces is sold to the United States and Europe.	14. bees





## Saskatchewan Livestock

### Pigs (Pork)

Canadian pork products are currently exported to over 107 countries.

Saskatchewan has approximately 190 farms that raise pigs.

After breeding it takes a sow about 3 months, 3 weeks and 3 days to give birth.

Pig manure is very valuable to farmers as it is a natural fertilizer for crops.

### Poultry

The poultry industry in Saskatchewan includes:

- 🐔 Egg producing chickens (laying hens)
- 🐔 Broiler meat chickens
- 🦃 Turkeys
- 🦆 Ducks and geese

Egg production in the province is growing, and in 2009, Saskatchewan produced 24.6 million dozen eggs valued at over \$39 million.<sup>1</sup>

Each year there are about 30 million chickens (for meat) produced in Saskatchewan.

There are 17 turkey producers in the province and each year they raise close to 750 000 turkeys.

Ducks and geese are raised for both meat and down (feathers).



These piglets will be ready for market in about 7 months



We grow big hogs here!



Chicken farm



Baby ducks from a farm near Biggar, SK.



## **Dairy**

In Saskatchewan there are approximately 200 dairy farms with herd sizes ranging from 600 milking cows to as small as 30 milking cows.

The average size dairy farm is 148 milking cows.

Cows today give more milk than they did 50 years ago because of improved genetics and better feed, nutrition, and management.

Milk is a natural source of 15 essential nutrients.

## **Beef Cattle**

Saskatchewan is home to approximately 33% of the total Canadian cow herd.

Of the 44,329 total farms in Saskatchewan, 27.6% are beef cattle operations.<sup>2</sup>

The average beef cow herd size in Canada is 61.

Cattle are often raised on land that is not good for producing grain crops because they can eat grasses that people cannot digest.

Beef gelatin is used in many products such as Jell-O, marshmallows, soap, crayons, piano keys, glue, and baseballs.



Almost all Saskatchewan dairy cows are Holsteins.



Technology has improved dairy farming significantly.



Dairy Calf



Big bull!





## Bees

Saskatchewan has over 1,100 beekeepers which tend 100,000 colonies.

The value of honey production is about \$27 million annually.

The majority of the honey produced in Saskatchewan is exported to the United States and Europe.<sup>3</sup>

Each bee colony will have many worker and drone bees but only one Queen.



Collecting nectar



Making honey

## Sheep

There are approximately 1,000 sheep producers in Saskatchewan.<sup>4</sup>

Saskatchewan producers raise sheep for their meat, wool, and milk.

There are more than 300 breeds of sheep, but not all are raised in the province.

Sheep are nature's weed eaters and help control problem weeds in pasture land.



Farming in Saskatchewan is a family affair



Sheep



## Saskatchewan Crops: Oilseeds

Oilseeds are grown for the oil that is contained in the seed. Saskatchewan farmers grow canola, mustard, flax, and sunflowers.

### Mustard

Mustard is an Oilseed and one of the world's most important spice crops.

Saskatchewan grows brown, yellow, and oriental mustard.

Saskatchewan grows over 75% of Canada's mustard.<sup>5</sup>

Yellow mustard is often eaten on hot dogs.

### Flax

Flax has been cultivated for more than 7,000 years in the Middle East as a source of linen fiber and for its oil.<sup>6</sup>

In 2009/10 Saskatchewan produced 76% of western Canada's flaxseed.<sup>7</sup>

Flax flowers are blue and bloom longer when the weather is cloudy.

The omega-3 fatty acid and fiber in flax are important nutrients and many people eat flax in bread, energy bars, cereal, and crackers.

Flax oil is used in products such as linoleum, car paint, and paper products.



Seeds!



Sunflowers



Mustard crop



Flax





## Canola

Canola is the second largest crop grown in Saskatchewan.

Over 25 000 farmers in Saskatchewan grow Canola.<sup>8</sup>

Canola blooms yellow and the canola seed is black.

Canola seeds are about 40% oil and 60% meal.

Canola oil is a healthy choice because it is very low in saturated fats and has no trans fats.

Canola is used to make food products such as margarine and cooking oil and many non-food products like suntan lotion, animal feed, and bio-diesel.



Canola crop in full bloom

*Canola was developed just over 30 years ago by Canadian researchers.*

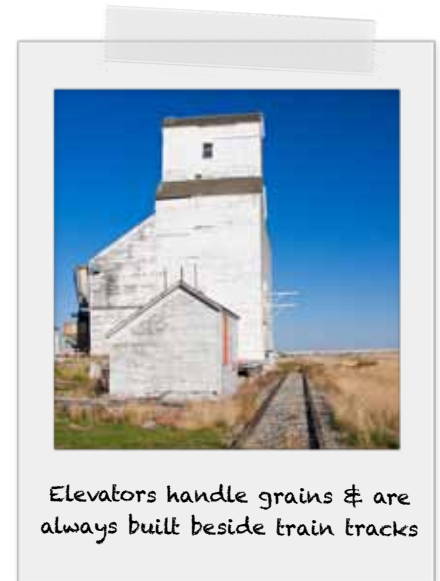
## Cereal Crops

Cereal crops were introduced to the prairies in the mid-1700s as trading posts became established in western Canada. Saskatchewan farmers grow a variety of grains including wheat, barley, oats, canary seed, rye, and triticale. Grains give us many essential nutrients. Canada Food Guide recommends we eat several servings of grain products daily.

### Wheat

Saskatchewan currently accounts for roughly 60% of the wheat grown in western Canada.

Wheat is classified into winter wheat and spring wheat.



Elevators handle grains & are always built beside train tracks



There are three main types of spring wheat:

- durum which is used to make pastas
- hard wheat used to make breads
- soft wheat used to make cakes, cookies, crackers and pastries

Whole grain wheat is a major source of complex carbohydrates (starches), fibre, iron, and B vitamins.

Wheat is also used in products such as animal feed, concrete, paper products, cosmetics, soaps, and plastic film.

One bushel of wheat weighs approximately 60 pounds and could make approximately 42 one-and-a-half pound loaves of bread, which have 24 slices each. <sup>9</sup>

## Oats

Oats is the third most widely grown cereal crop in Canada, behind wheat and barley.

Oats has many health benefits and is found in many breakfast cereals.

Oats is a high quality livestock feed and the straw makes good bedding for livestock.

Oats can have a soothing effect on skin and is used in some cosmetics.



Wheat



Wheat products



A lot of oats are grown in the Yorkton area



### Barley

Barley is the second most widely grown cereal crop in Canada after wheat.

Barley contributes significantly to the world supply of livestock feed, malt (beer) products, and human food.

Most of the barley grown in the world is used to feed animals. However, barley is a staple food for many people in less developed countries.

Barley is high in fiber, carbohydrates, and B group vitamins.



Barley



Barley is processed for malt in Biggar, SK and is exported

### Legumes (Pulse Crops)

Pulses are the edible seeds of legumes. Pulse crops include pea, bean, lentil, chickpea, and faba bean. They comprise a small, but very important part of the 1800 species in the legume family. Pulse crops are good for soil because they put nitrogen (an important nutrient) into the soil.

### Lentils

Saskatchewan produces over 98% of all the lentils grown in Canada each year.<sup>10</sup>

The two main lentil market classes in Saskatchewan are red and green.



Lentils come in many colours.



Saskatchewan has become the world's largest exporter of green lentils and the world's second largest producer.

Lentils are very nutritious and high in fibre. They are also full of carbohydrates.

### Peas

Saskatchewan produces approximately 77% of all peas grown in Canada.

Saskatchewan is the world's largest exporter of dry peas.

There are two main types of peas: yellow peas and green peas.

Peas are rich in carbohydrates, B group vitamins, fibre, and Vitamin C.

### Chickpeas

In 2009, Saskatchewan produced about 76% of Canada's chickpea crop.<sup>11</sup>

Chickpeas are high in protein and a good meat alternative.

Chickpeas are the most commonly eaten pulses as they are often found in salad bars in restaurants.

Historic photos accessed from <http://olc.spsd.sk.ca/DE/Sask100gallery/index.htm> and to be reproduced for educational purposes only.



### References:

1. Sask Egg Producers
2. 2006 Census of Agriculture
3. [www.agriculture.gov.sk.ca/Honey-Factsheet](http://www.agriculture.gov.sk.ca/Honey-Factsheet)
4. Saskatchewan Sheep Development Board
5. [www.saskmustard.ca](http://www.saskmustard.ca)
6. [www.innvista.com/health/herbs/flax.htm](http://www.innvista.com/health/herbs/flax.htm)
7. Saskatchewan Flax Commission
8. [www.saskcanola.ca](http://www.saskcanola.ca)
9. [www.ag.ndsu.edu/pubs/yf/foods/fn560w.htm](http://www.ag.ndsu.edu/pubs/yf/foods/fn560w.htm)
10. Saskatchewan Pulse Growers
11. Ministry of Agriculture Crop Specialist



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