

Follow the Hog Farmers Video

TEACHER GUIDE (Grade 4)

GOALS:

Students will:

- Explore Manitoba hog farms to discover where their food comes from and how is produced.
- Identify all the components of an animal habitat and how the farmers provide those components for their hogs.
- Discover how technology is being used to constantly innovate and improve pork production in Manitoba.
- Identify some of the careers involved in producing sustainable, safe, and nutritious pork for Manitobans and people around the world.



DID YOU KNOW?

It is estimated that in the last 50 years, the total of all natural resources used by pigs has decreased by about 50% per kilogram of pork.

For every kilogram of pork produced today, farmers emit 35% less GHGs, use about 40% less water, 33% less feed, and as much as 59% less land compared to 50 years ago.

CURRICULUM CONNECTIONS

Grade 4 Science	
B4	Identify the components of an animal habitat. Include: food, water, living space, cover/shelter.
4-0-2a	Access information using a variety of sources. Examples: school libraries, videos, traditional knowledge, CD-ROMs, Internet...
4-1-02	Recognize that each plant and animal depends on a specific habitat to meet its needs.
4-1-03	Identify the components of an animal habitat. Include: food, water, living space, cover/shelter.

BACKGROUND INFORMATION:

The Manitoba pork industry works hard to be sustainable.

ECONOMICALLY:

The hog sector is responsible for over 14,000 jobs across the province. This sector employs swine technicians, construction workers, electricians, veterinarians, food production workers, transport drivers, and many other quality professions.

At a Glance

- Exporting to about two dozen countries, Manitoba is the second-largest exporter of pork in Canada.
- 14,000 Manitobans, in Winnipeg and rural Manitoba, depend on the hog sector to make their living.
- The sector contributes over \$1.7 billion to the provincial economy annually.
- Over the next decade, about \$2 billion will be invested by Manitoba hog farmers and meat processing companies.
- Pork is one of Manitoba's top exports and is recognized as a world-class product.

ENVIRONMENTALLY:

Over the past five decades, significant progress has been made to further reduce the environmental impact of hog farming and Manitoba farmers follow some of the strictest environmental regulations in North America.

At a Glance

- Carbon footprint international benchmark shows Canadian pork has the third-lowest CO² per kilogram in the world.
- Injectable hog manure is used as a high value, organic fertilizer by grain farmers.
- To eliminate run-off into waterways, manure is injected directly into the soil where the plant roots can absorb the nutrients.
- New technologies are greatly reducing odour from hog operations.

SOCIALLY:

Manitoba pork producers are proud to provide consumers at home and abroad with some of the best tasting and highest quality pork in the world. The sector is focused on making a positive contribution to our communities, and to the lives of Manitobans, and a meaningful social impact by supporting sustainable food security.

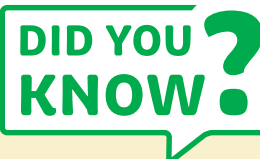
At a Glance

- Manitoba is a world leader in producing healthy, safe, nutritious, and affordable pork.
- All retailed Canadian pork is raised without added growth hormones.
- Pork is a complete, high-quality protein and a good source of 12 essential vitamins and minerals.
- Our sector is one of the few that continues to help rural communities, such as Brandon, Neepawa, Roblin, Killarney, and Notre Dame de Lourdes, flourish.
- Hog farmers are important and significant contributors to the rural communities in which they live.
- Every year, Manitoba pork producers donate more than two tonnes of pork products to those in need.

Pork is a Powerhouse of Nutrition!

- Excellent source of **protein**, pork contains all nine essential amino acids
- High in **vitamins**, including important **B** vitamins like **B1** (thiamin), **B2** (riboflavin), **B6** (pyridoxine), and **B12** (cobalamin)
- High in **minerals**, especially **selenium**, as well as **iron**, **magnesium**, and **phosphorus**.

Learn more [here](#).



Materials Needed:

1. Follow the Hog Farmers video - use either:
 - o Option 1 – [video only](#)
 - o Option 2 – [Livestream event recording with video and Q&A with Andrea Elias and Craig Sawatzky](#)



OUR MANITOBA FARMERS!

Angela Elias manages a swine farm near Rosetown, Manitoba that breeds and grows breeding stock for other farms.

Craig Sawatzky runs the hog operation on a 4th generation family farm, Blue Ribbon Swine, near Pansy, Manitoba in partnership with his brothers and cousin.

Lesson Plan

➔ Activate

BEFORE SHOWING THE VIDEO

- Discuss and/or review with your students what a **habitat** is.
- Ask students to:
 - o Describe what they think a habitat for pigs would be like.
 - o Make a list of all the things pigs would need in their habitat to survive and thrive.
 - o Answer the question: Since pigs are domestic animals and not wild animals, who is responsible for providing a habitat for the pigs that meets all their needs?

A **habitat** is where the animal or plant lives and is able to meet its basic needs.

Domestic animals are animals that:

- Have been selectively bred by humans over many generations
- Are genetically distinct from their wild ancestors
- Depend on humans for food, water, and shelter

Examples include: cows, pigs, sheep, chickens, dogs, cats

➔ Acquire

DURING THE VIDEO

- Have the students watch for all the components or things that Andrea and Craig provide for their pigs so that they stay healthy and comfortable in their farm habitat.

AFTER THE VIDEO

- Revisit the class's list of things pigs would need, made during the 'Activate' portion of the lesson plan. Add any additional things that Andrea and Craig provide or use in the pigs' habitat to meet the pigs' needs and keep them healthy and comfortable.

➔ Assess

Assessment ideas:

- Students can write a paragraph about what they have learned about pig farming. Suggested topics include:
 - o Describe all the things that pig farmers do to keep their pigs healthy and comfortable.
 - o Five interesting things I learned about pig farming.
 - o Identify some of the technology used on a pig farm and describe what each technology is used for.
 - o It takes many people doing many different jobs to raise pigs and keep them healthy and comfortable. Name 3-5 of those jobs and describe how the people doing those jobs help.

EXTEND THE LEARNING WITH THESE COMPANION RESOURCES

MANITOBA PORK EDUCATIONAL VIDEOS

These six, short, 2-minute videos deal with environmental, social, and economic aspects of sustainably farming pigs, as well as animal welfare practices and the use of technology on a pig farm. The six videos are:

Environmental Stewardship *GPS Technology on the Farm*
Give Me Shelter *Nutrient Cycle*
Barn Life *Waste Not. Want Not.*



EXPLORING SUSTAINABILITY OF THE MANITOBA PORK INDUSTRY

Students can use the Video Analysis Sheet to help them gather and critically think about the information shared in the Manitoba Pork Educational videos. Then, using the Share the Knowledge worksheet, students can choose to present it, write it, draw it, or gamify it to inform others about what they have learned. [View the resource here.](#)