

HISTORY

Raising pigs for food began in China over 2,000 years ago. Until the 1950s, many farms in North America grew a bit of everything, and most included a few sows with several litters of piglets every spring and fall. Pigs were generally raised as a sideline to grain, beef, or dairy. They were primarily raised outdoors and in small shelters with straw bedding. This method worked well when there were only a few pigs per farm, but the pigs were vulnerable to predators, disease, parasites, and weather. Productivity was low: only 15 to 17 piglets per sow were born each year and mortality rates were high.

During and after the 1950s, advancements in technology and growth in farm size brought in a period of specialization. The largest pig barn of that era housed between 50 and 100 sows. Today's farms house 500 sows or more. Moving animals indoors to a healthier and more comfortable environment enabled farmers to provide individualized care, monitor breeding and farrowing, and improve animal health.

Today, Manitoba is Canada's largest exporter of pigs. In fact, in 2021 we were responsible for over 51 per cent of Canada's pig exports. That's 3.38 million live pigs, exported to 13 different countries, generating nearly \$272 million. Manitoba also exports pork to about two dozen countries around the world. In short, Manitoba's hog sector is a key economic driver!

A DAY IN THE LIFE OF A PORK PRODUCER

Hog farming is a 365 day-per-year job – and hard work! Pigs require daily care to ensure they have ample fresh water and access to nutritious feed.

Farmers and barn staff routinely walk the pens to check on their pigs. If a pig is unwell or has been injured by another animal,

they are moved to *hospital pens* in the barn to receive special care and treatment until they recover.

Government-approved medications are used to treat sick pigs only as needed. And, like your pets, pigs get routine vaccinations!

PRODUCTION

Hog farms vary in size and type:

- Most of the hog farms in Manitoba, about 43 per cent, are **grow-finish operations** that raise growing pigs to market weight.
- Nearly 20 per cent are **farrow-to-wean operations** and roughly 12 per cent are nurseries, in which newly weaned pigs stay until they reach the grow-finish stage.
- About 16 per cent of Manitoba hog farms are **farrow-to-finish operations**, which means they have breeding stock and raise pigs from birth until they reach market weight.
- Some farms in Manitoba raise specific purebred breeds for their genetics, which are sold to other pork-producing customers in Manitoba and around the world. Manitoba is an important player in **swine genetics**.

Pigs are raised in clean, temperature-controlled barns with good lighting, ventilation, and safe penning. Sanitation is critical to keeping pigs healthy and reducing the spread of diseases. Before pigs are moved to a new area in the barn, rooms are thoroughly pressure washed, disinfected, and left to dry.

It's a misconception that pigs are dirty animals. Pigs instinctively select clean, dry areas for sleeping, resting, and feeding. They poop away from these areas, in places where manure and liquids can drop through slatted floors to a *manure pit* under the barn. This keeps the penning and the pigs cleaner.



Some viruses and germs can spread easily from humans, birds or wildlife to pigs. Staff working in barns must shower in at the farm before they enter the barn or have any contact with the animals. As well, trucks or delivery vehicles that transport pigs to market must be washed and disinfected thoroughly before returning to the farm to prevent carrying disease back home. This is called *biosecurity*.

BREEDING CYCLE

Gilts are female pigs that have not given birth. They are ready for breeding at about six to seven months of age. A sow is pregnant for about 115 days (three months, three weeks, and three days) and will have an average of 2.4 litters per year. The average litter has about 12 piglets, meaning that a sow will wean 25 to 30 piglets every year.

During pregnancy, farmers work particularly hard to reduce the sows' stress. This involves managing the sows in a way that minimizes fighting between them. Sows are housed in either individual or group maternity pens.

Farrowing is the name of the process for when pigs give birth. Farrowing pens are used to house sows and their litters during farrowing and lactation. The pens are designed to provide *creep areas* for piglets to retreat to, while rails along the sides of the pen allow the sow to move or lay down without causing injury to the piglets. Heating mats or lamps are also used to keep the piglets warm and comfortable. The pens also allow farrowing technicians to help the sow during delivery, dry the newborn piglets, clear fluids from piglets' mouths and nostrils, and examine each piglet for signs of illness or injury.

Boars (adult male pigs) are housed separately from sows. If the farm uses natural breeding, there will be one boar for every 20 to 25 sows. Nowadays, most farmers breed female pigs by

DID YOU KNOW?

Pigs don't sweat! Storybook pigs are often shown in the mud as they try to keep cool and out of the sun, but real pigs prefer to keep clean.

artificial insemination, a technique that does not require nearly as many boars on the farm. This technique is also much easier on the sow.

Piglets are weaned at about three to four weeks of age and moved to nursery barns with other piglets of the same size and age. The barn is kept at a comfortable temperature to keep the piglets warm. In the nursery, they begin to eat grain-based food.

When *weanlings* reach about 25 to 30 kgs (in 5 to 7 weeks), they are moved to a grow-finish barn to be raised to market weights of 120 to 130 kilograms, which takes three to four months.

DIET

On the Canadian prairies, pigs eat a blend of corn, canola, barley, wheat, soybeans, and important vitamins and minerals. Swine nutrition is an important aspect of production, and researchers are always working to formulate diets for pigs based on the food sources available in various regions. If a region grows a lot of corn, for instance, the pigs will eat mostly corn.

FARMER PROFILE



HENRIK Roblin, Manitoba

"I take pride in the health and wellbeing of my pigs. Watching them grow and thrive is the reward for giving the animals excellent care and practicing good biosecurity. It's an honour to provide safe, nutritious food for the world and for Manitoba families just like my own."



Pig diets are specifically formulated for every stage of growth. Commercially raised pigs are never fed food scraps and farmers never add growth hormones to pigs' feed – in fact, it's illegal in Canada.

ANIMAL CARE

Farmers know that responsible and humane care is important to the well-being of pigs and that quality care is essential to raising healthy animals.

Producers follow very high standards of care:

- They follow the *Code of Practice for the Care and Handling of Farm Animals-Pigs*, a comprehensive set of guidelines that promote optimal animal care on the farm and during transport.
- The hog sector actively participates in reviews and updates to these national codes.
- All Canadian farms that market pigs to federally inspected processing plants must be certified under the third-party audited *Canadian Quality Assurance (CQA®)* and the new *Canadian Pork Excellence (CPE)* programs.
- Farms must be inspected annually by veterinarians who use a checklist to assess the farm's cleanliness and the safety and health of the animals.
- Anyone responsible for transporting animals to federal processing plants are required to be trained and certified under the *Transport Quality Assurance (TQA™)* program.

Manitoba's hog farmers adopt best practices and new technologies on their farms to ensure safe food production. Everyone involved in raising pigs must maintain a high standard of animal care. A skilled and well-trained workforce is essential in animal agriculture.

Good biosecurity practices on farms are another important component of responsible animal care that maintains healthy

herds. Disease prevention ensures healthy animals don't need veterinary intervention or medications. Calm and healthy animals also produce better pork!

TECHNOLOGY

Technology has made a huge difference in hog farming over the past 20 years:

- **Automated feeding and watering systems** in some of the newer and larger barns allow the farmer to feed many animals at one time.
- Feeders can be equipped with **RFID (radio frequency identification) technology** to collect data and track the exact amount of food each animal receives and how often they go to the feeder.
- Newer farms have equipment that allows them to **auto sort** large pens of pigs according to size and weight.
- **Sensors** alert barn staff when feed/water levels are low.
- Some farms have **feed mills** programmed to produce specialized feed formulations and auger the food directly to the barn.
- **Automated climate control** in the barn lets farmers monitor lighting, temperature, humidity and ventilation on a computer or smart phone.

NUTRITION

Lean Canadian pork is nutrient-dense. Every bite provides high-quality protein, energy and key vitamins and minerals, including 12 that are essential. Pork is also naturally low in sodium and saturated fat. Healthy amounts of both animal and plant proteins improve diet quality and have complementary benefits when eaten together.

Pigs also provide us with popular processed pork products like hot dogs, ham and bacon!



INDUSTRY IN MANITOBA

Production: 5.2 million hogs (2021)

Producers: 614 hog farms

Value to Economy: About \$1.7 billion in 2021



INDUSTRY IN CANADA

Production: 13.9 million pigs (2020)

Producers: 7,650 hog farms (2020)

Value to Economy: \$5.1 billion in farm cash receipts (2020)



ENVIRONMENT

Hog farmers understand the importance of protecting natural resources. After all, they want a healthy place to raise their families and their livestock. Many Canadian farms follow *environmental farm plans* that help them address environmental concerns and set goals for more sustainable operations. Hog farmers work with highly trained professionals who assist them in making decisions regarding their environmental impacts.

Hog manure is a valuable organic fertilizer that contains nitrogen, phosphorus, and potassium. Nitrogen makes plants green and healthy, and phosphorus and potassium build roots and the body of the plant. With the help of professional *agrologists*, hog farmers prepare a manure management plan each year.

Hog manure can be applied to many different crops like wheat, barley, and canola to increase yields. It also builds up soil with organic matter, which helps to hold water and nutrients.

BY-PRODUCTS

Pigs provide us with more than meat. Virtually every part of the pig can be used. For instance, *gelatin* is a pig by-product used in cottage cheese, marshmallows, ice cream, yogurt, and Jell-O. Buttons, bone china, wood glue, lipstick, and crayons also come from pigs. Pigs are a source of insulin, which is used to treat diabetes.

There are many other by-products of pigs, including:

- **Pig skin** – used to treat burns and other injuries in humans
- **Pig hair** – used to make paint brushes and hair brushes
- **Dried pig ears** – a dog's favourite treat
- **Pig heart valves** – used in medicine to replace human heart valves

CAREERS

» Swine technician (farrowing/nursery/breeding/finishing)

» Production supervisor

» Herdsperson

» Livestock transporter

» Research technician

» IT specialist/software developer

» Agrologist

» Pork production worker

» Swine nutritionist

» Swine geneticist

» Farm maintenance worker

» Human resource specialist

» Veterinarian/veterinary assistant

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