## Foundations of MANITOBA AGRICULTURE



## HISTORY

Turkeys are the only fowl that originated in the Americas. When the Spanish Conquistadors landed in Mexico in 1519, they discovered that turkeys were already domesticated. Archeological information indicates that the turkey was domesticated around 200 BC in the Tehuacan area of Mexico. The Spanish, on their return home, introduced them to Europe.

In about 1625, the turkey was reintroduced to eastern North America from England by the Pilgrims. They bred with the indigenous wild turkey of that area to produce the bronzecoloured bird that became the ancestor of the modern turkey.

In the eighteenth and early nineteenth centuries, many famers in Canada kept small flocks, mostly cared for by farm women, to make extra money.

During the Second World War, the demand for turkey increased as part of the war effort: Canadian turkey production increased from 1.9 million turkeys in 1927 to 3.4 million turkeys in 1945.

By the 1960s, electrification, better barns, lighting, feed, and ventilation systems raised turkey production to new levels. These innovations caused overproduction, which created chaotic markets and instability in the system. In 1974, the Canadian Turkey Marketing Agency was created to bring stability to producers and consumers through *supply management*, a quota system that matches the amount of turkey produced to the amount of turkey consumers want to buy. Supply management remains in place today, although some import concessions were made during both the Trans-Pacific Partnership and the Canada-United States-Mexico Trade Agreements. Today, due to constant innovation, research, marketing, and promotion, Canadian turkey production has grown to 18.5 million turkeys (2021) – which includes 1.4 million turkeys raised in Manitoba.

## A DAY IN THE LIFE OF A TURKEY FARMER

The day starts early when the turkey farmer goes to the barn to check on their birds.

Before going into the barn, the farmer puts on clean, barnspecific boots. Using these boots are a way for farmers to make sure they aren't bringing anything harmful into the barn from the outside, and vice versa. This is part of *bio-security*.

The farmer confirms if their birds are comfortable and healthy and removes any birds that may be sick. The farmer comes back to the barn at least one more time later in the day to check on their birds.

There are many technologies in a turkey barn that help the farmer with their daily chores:

- Automatic feeders and waterers give turkeys constant access to food and water. The farmer checks that these are working properly. The water must be clean and have the correct pH balance for the turkeys, as that has a big effect on their health.
- **Computers** in the barn control temperature and humidity. The farmer makes sure the temperatures are at the ideal level. *Poults* (young turkeys, typically less than four weeks old) require a warmer temperature (25 to 32°C) than grown birds (18 to 24°C).
- Electronic security systems in the barn will send a notification to the farmer's cellphone if anything goes wrong (ie. lighting, humidity, feed lines, water lines, temperature) so they can address the problem anytime day or night.



## PRODUCTION

Each producer decides on the size and sex of birds to be raised on their farm. Producers begin with a large flock of *poults*. The poults will be grown and sold into one of three categories:

- **Broilers** are female turkeys that weigh less than six kilograms. They will stay in a barn for 10 to 12 weeks.
- **Hens** are female turkeys that weigh between 6 and 10 kilograms. They will stay in the barn for 13 to 15 weeks.
- **Toms** are male turkeys that weigh more than 10 kilograms and stay in the barn for 10 to 18 weeks.

In Manitoba, flocks are mostly raised as broilers or hens. An average sized flock contains 7,000 birds. Sometimes, a producer will sell part of their flock as broilers and raise the rest of the flock as hens while other producers will move their flock to a larger barn as the turkeys grow in size.

Producers purchase poults from a *hatchery*. The hatchery has very strict biosecurity measures to ensure that no diseases are passed on to newborn turkeys. On the first day after they hatch, the birds are delivered to the turkey farm to be raised by a producer. Usually, several thousands of poults are delivered on the same day.

## DIET

All turkeys are fed healthy diets of Canadian-grown grains, plus minerals, and vitamins.

Poults are fed a diet specifically formulated for young birds, called *starter feed*. As they grow, their dietary needs change, and the feed is often adjusted to include the proper balance of protein, energy, fibre, fat, and other elements such as calcium, phosphorous, magnesium, and vitamins.

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In Canada, turkeys are NOT given hormones or steroids. These have been illegal for over 30 years. Scientific advancements such as selective breeding, better feed formulation and modem management practices have resulted in the larger, healthier turkeys produced today.

Turkeys are fed nutritionally balanced diets of mixed grains and oilseeds, which may include corn, soy, wheat, barley, and canola, for optimal health and development.

Turkeys have access to feed 24 hours a day, which means they can help themselves to food or water at any time.

## NUTRITION

Turkey meat is a good source of nutrition any time of year. At Christmas and holidays or large family gatherings, whole turkeys are often stuffed and roasted. For smaller meals, turkey parts or ground turkey are often cooked into our favourite recipes, such as tacos and stir-fries.

Turkey white (breast) meat contains only three grams of fat and 135 calories per 90 gram serving, while dark (thigh) meat and ground meat contains only six grams of fat and 168 calories. Turkey meat is rich in protein and many vitamins and minerals, such as vitamin  $B_6$ , vitamin  $B_{12}$ , niacin, selenium, and zinc – which explains why turkey meat is a favourite among athletes. Not only is turkey meat nutritious – it's delicious, too.

## FARMER PROFILE



## CAMERON CHARISON Teulon, Manitoba

"My family owns and operates a company that includes a turkey breeder farm, a hatchery, and a commercial farm. We're part of every step of the process, from growing the toms and hens to maturity and hatching the poults to marketing our turkeys to our commercial farm customers, who then grow the birds for food. The best part of being a turkey farmer in Manitoba is that I'm a member of a team that works every day to provide nutritious food for people in our local communities."

## INDUSTRY IN MANITOBA

Production: 1.4 million turkeys
Producers: 51 turkey farmers
Value to Economy: \$21 million in farm cash receipts

## **ENVIRONMENT**

Turkey farmers depend on healthy soil, air, and water for the livelihood of their families, and for the health of the turkeys they raise.

Organizations like Manitoba Turkey Producers and Turkey Farmers of Canada work together to help farmers run sustainable farms that ensure the health of the birds while reducing waste and using resources more efficiently.

For instance, used bedding and other turkey barn waste, which is rich in nitrogen from bird droppings, can be composted and reapplied to fields as fertilizer.

## ANIMAL WELFARE

Consumers demand that birds be cared for in the most humane way possible, and Manitoba producers share their concerns.

Turkeys are raised year-round in large, modern barns and never raised in cages. Turkey barns allow birds to grow free run in a clean, protected environment where all their nutritional and

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## **INDUSTRY IN CANADA**

Production: 158 million kg (2020)
Producers: 515 turkey farmers (2020)
Value to Economy: \$336.5 million in farm cash receipts (2020)

developmental needs are met. Living in a barn helps prevent stress on the birds.

Turkey barns are designed to provide birds with ample room to move about, with easy access to water and feed, and natural and/or artificial light.

The barn protects turkeys from our extreme Canadian weather (heat, rain, cold, snow, wind). Most barns are insulated to help maintain a constant temperature. Ample and controllable ventilation provides turkeys with cooling or warmth when required.

Barns protect turkeys from predators such as weasels, foxes and coyotes. The barn also protects the turkeys from diseases and viruses transmitted by wild birds, rodents, flies, and other animals.

The barns are cleaned and sanitized, and the farmer lays down fresh litter (bedding) before each new flock of poults arrives. Proper cleaning prevents infections and the spread of disease from one flock to another.