



MAJOR CROPS AND LIVESTOCK OF NORTH DAKOTA



Harvesting wheat

WHEAT

One of the world's most important food grains, wheat is North Dakota's number one crop both in acreage and total value. Grown on approximately 8.5 million acres, it accounts for a quarter of our total land area and half of all crop acres. This production is spread across the state – all but one of North Dakota's 53 counties typically grows at least one million bushels of wheat annually.

The value of North Dakota's wheat production was almost \$3 billion in 2008.

North Dakota leads the nation in the production of spring wheat and durum wheat. Winter wheat is of lesser, but growing importance.

Hard red spring wheat

The "aristocrat of wheat," hard red spring is prized by flour millers for its gluten strength. They blend it with lower protein wheats to improve the quality of bread flours. One bushel of wheat makes 42 (1.5-pound) loaves of bread.

Durum

The name "durum" comes from the Latin word for hard, and durum is indeed the hardest of wheats. This variety with its large, amber kernels is the choice for making spaghetti, lasagna and at least 350 other pasta shapes. One bushel of durum makes 210 servings of pasta.

PULSE CROPS

Pulse crops – dry peas, lentils and chickpeas – are among the oldest cultivated plants, going back some 10,000 years. North Dakota leads the nation in lentil and dry pea production.

Pulses are a food staple in many parts of the world. They are rich in protein, folate and dietary fiber. Pulses are also excellent animal feed, high in energy and protein.

Members of the legume family, pulses are an excellent rotational crop since they fix nitrogen in the soil for future plantings.



Dry peas

SUGARBEETS

Warm days and cool nights in North Dakota's Red River Valley provide ideal conditions for raising sugarbeets. This root crop grows from a seed the size of a grain of rice to a plant with a taproot six to eight feet in length. The average sugarbeet yields one pound of sugar.

During processing, sugarbeets are cleaned and then sliced into long, noodle-like strips. Juice is extracted from these strips, cleaned, filtered and then boiled. Most of the sugar is processed into granulated sugar, but some is made into brown sugar, powdered sugar and sugar cubes. The used strips are dried and used for livestock feed.



Sugarbeets

SUNFLOWERS

The most easily recognizable North Dakota crop, sunflowers were raised here by American Indians. In the 18th century, the plant was taken to Russia where modern commercial varieties were developed.



Sunflowers

Today, North Dakota leads the nation in sunflower production, growing about half the nation's total. North Dakota farmers grow two types of sunflowers: the large striped-shelled varieties used for snacks and food ingredients, and the smaller, black-shelled varieties used to make oil and for birdseed.

Sunflower oil is used for cooking around the world. Most sunflower oil produced in the U.S. is the NuSun variety, which provides optimal health benefits, better taste and superior performance, and is trans fat free.

DRY BEANS

A half century ago, a handful of farmers grew beans in North Dakota. Today, there are thousands. These producers lead the nation in growing all dry beans and in two specific varieties: navy and pinto beans.

Members of two food groups – vegetable/fruit and protein/meat – beans are a staple in many cultures, and are enjoying a renewed popularity in the U.S. for their versatility, taste and nutritional benefits. They are high in protein, phosphorous, iron, Vitamin B and fiber. They are low in fat, calories and sodium and have no cholesterol.

Beans were grown centuries ago in North Dakota by the Mandan Indians.



Dry beans



Flowering flax

FLAX

Seen from a distance, a field of flowering, blue flax can look like a shimmering lake.

An ancient crop, flax is the source of numerous products, including paint and wood finishings, linoleum, and high quality paper and linen.

It is also a highly nutritious food, recognized for its healthful benefits.

North Dakota grows more than 90 percent of the U.S. flax crop. It is often grown in rotation with small grains, such as wheat and barley.

HONEY

Those stacks of boxes often seen in North Dakota fields are apiaries – honeybee colonies. North Dakota is the number one honey-producing state. North Dakota beekeepers with five or more colonies produced 34.7 million pounds of honey in 2009.

Long summer days, plenty of alfalfa and sweet clover, and a favorable summer climate all contribute to the state's prominence in the honey industry.

Many beekeepers are migratory – they overwinter their bees in California, Florida and other, warmer states, where the insects are valuable for pollinating fruit and nut trees.

SOYBEANS

Known as the "miracle bean" because of its many uses, soybeans are a legume, related to clover, peas and alfalfa. Native to Asia, they first arrived in the United States as ballast on a sailing ship.

The only beans with complete protein, soybeans are used in food products, animal feed and hundreds of industrial applications. Soybean products include vegetable oil, margarine, inks, paints, biodiesel fuel, solvents and hydraulic fluids.

Soybeans are an increasingly important commodity in North Dakota, ranking second behind spring wheat as the state's top cash crop. The state ranks 11th in U.S. soybean production. Cass County in eastern North Dakota is the number one soybean growing county in the nation.



Soybeans ready to harvest



Honeybee colonies



Canola

CANOLA

Twenty years ago, canola was virtually unknown in North Dakota. Today, the state leads the nation in canola production. The distinctive, bright yellow fields can be seen across the state.

After harvest, the canola seeds are delivered to a processing plant where they are crushed and the oil is removed from them. The leftover seed material is used for livestock feed.

Canola is used to make shortening, margarine and salad oil, as well as cosmetics, hydraulic fluids and suntan oil. Of the food oils, it is the lowest in saturated fats, highest in monosaturated fat and is a rich source of Vitamin E and essential fatty acids.

BARLEY

Perhaps the oldest domesticated grain, barley has been cultivated for at least 10,000 years. Today, it is grown in about 100 countries around the world.

Two grades of barley are produced in North Dakota. The lower grade is used for high quality livestock feed for dairy and beef cattle and pigs. The higher grade malting barley is for human consumption, mainly for brewing beer. The barley is processed into malt, the same ingredient used in malted milk shakes. A 48-pound bushel of barley will produce about 525 12-ounce bottles of beer.

Pearled or hulled barley is an increasingly popular ingredient in cereals, soups, salads and desserts.

North Dakota leads the nation in barley production.



Harvesting barley

POTATOES

Potatoes are one of America's favorite vegetables – the average consumer eats 142 pounds each year! North Dakota is one of the few places where potatoes are grown for all four of the industry's main uses: fresh (table stock), processed (French fries, potato rounds and hash browns), chips and seed.

North Dakota potatoes are shipped throughout North America, South America, the Pacific Rim and Asia.

Potato production, long centered in Red River Valley, has expanded into central North Dakota where potatoes are grown under irrigation for processing.



Corn

CORN

Once mostly confined to the southeastern counties of North Dakota, corn is now grown almost everywhere in the state. This surge in production is the result of new higher-yielding, early maturing varieties, the need for crop diversification and the growth of the state's ethanol industry.

In addition to ethanol, North Dakota corn is also used to make corn sweetener and as cattle feed. Technology continues to find and develop new uses for corn, including biodegradable products, fabrics, tires, cleaning products, resins and solvents.

Corn is believed to be the first agricultural crop grown in North Dakota. More than 300 years ago, the women of agricultural tribes of Native Americans (Mandan, Arikara, and Hidatsa) raised corn in their gardens in the Upper Missouri Valley.



Irrigated potatoes



Simmental cattle

LIVESTOCK

Cattle outnumber people in North Dakota almost three to one. The beef cattle industry contributes about \$600 million annually to the state's annual agricultural income. North Dakota cattle production is principally commercial cow-calf operations. Popular breeds include Black Angus, Red Angus, Hereford, Simmental, Charolais and Gelbvieh.

The total number of hogs in the state is about 180,000, while sheep and lambs total about 88,000.

Dairy production is about 420 million gallons of milk annually.

Most dairy cattle in North Dakota are Holsteins.

North Dakota raises about 2 million turkeys annually.

Other livestock raised in North Dakota include horses, bison, farmed elk, goats and non-traditional livestock such as white-tail and fallow deer and furbearers.



Agriculture is North Dakota's Number One Industry

- Nearly 24 percent of North Dakota's people are employed directly by production agriculture or in agriculture-related industries.
- With cash receipts of more than \$4.1 billion, agricultural production and manufacturing is North Dakota's largest industry.
- North Dakota has approximately 30,000 family farms and ranches. The average North Dakota farm is 1,300 acres.
- More than 39 million acres – nearly 90 percent of the state's total land area – is in farms and ranches. The majority of those acres are planted in wheat, soybeans, barley, sunflowers, canola and corn.
- Farms and ranches provide food and habitat for 75 percent of North Dakota's wildlife.

North Dakota is Number One

Rank	Crop	Percent of US total
1st	Spring wheat	50
1st	Durum wheat	56
1st	Sunflowers	43
1st	Barley	35
1st	All dry edible beans	34
1st	Navy beans	38
1st	Pinto beans	56
1st	Canola	90
1st	Flaxseed	95
1st	Dry edible peas	67
1st	Lentils	44
1st	Honey	24

Source: National Agricultural Statistics Service - 2009



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