

# North Dakota Agriculture BY THE NUMBERS

- 24% - People employed directly by production agriculture or agriculture-related industries
- \$8.6 Billion - Cash receipts of North Dakota's largest industry
- 30,000 - Number of farms and ranches
- 1,307 acres - Average farm size
- 90% - Approximate land area in farms and ranches
- 39.2 Million - Acres of farm and ranch land



Harvesting wheat

## WHEAT

One of the world's most important food grains, wheat leads North Dakota's crops in acreage and is tied with corn in total value. Grown on approximately 8 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 of North Dakota's 53 counties typically grow at least one million bushels of wheat annually.

The value of North Dakota's wheat production was \$1.79 billion in 2015.

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

### Hard red spring wheat

Flour millers prize the "aristocrat of wheat," for its gluten strength. They blend it with lower protein wheats to improve the quality of bread flours. One bushel of wheat makes about 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 hundreds of other pasta shapes. One bushel of durum makes about 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.

Pulses are a food staple in many parts of the world. Rich in protein, folate and dietary fiber, pulses are also excellent animal feed; providing 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 and Yellowstone River Valleys are ideal for raising sugarbeets.



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.

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

## 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

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.

North Dakota traditionally leads the nation in sunflower production.

## DRY BEANS

A half century ago, few farmers grew beans in North Dakota. Today, there are thousands. These producers lead the nation in growing all dry beans and in one specific variety – pinto beans.



Dry 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 what is now North Dakota by the Mandan Indians.



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 over 42 million pounds of honey in 2014.

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 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 in ships.

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 third behind spring wheat as the state's top cash crop. Cass County in eastern North Dakota is the number one soybean growing county in the nation.



Soybeans ready to harvest



Honeybee colonies



## CANOLA

Twenty-five 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, canola seeds are delivered to a processing plant where they are crushed, and the oil extracted. 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.

## 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.

## BARLEY

Perhaps the oldest domesticated grain, barley has been cultivated for at least 10,000 years. Now 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. 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.

## SPECIALTY CROPS

North Dakota soil ranges from thick black loam in the Red River Valley, some of the richest agricultural soil in the world located in the eastern portion of the state, to more porous, sandy soils in the west. This environment is ideal for growing an immense variety of crops. North Dakota farmers also grow buckwheat, oats, rye, millet, garbanzo beans, white wheat, black beans, Great Northern beans (native to ND), crambe, safflower, sorghum, mustard, niger, vegetables and fruits such as grapes, strawberries, raspberries and chokecherries.

## LIVESTOCK

Cattle outnumber people in North Dakota almost three to one. The beef cattle industry contributes more than \$600 million annually to the state's agricultural income.

North Dakota beef cattle production is principally commercial cow-calf operations.

Popular breeds include Black Angus, Red Angus, Hereford, Simmental, Charolais and Gelbvieh.

The total number of swine in the state is about 140,000, while sheep and lambs total 73,000.

North Dakota's dairy cows produce about 332 million pounds of milk each year. Most dairy cattle in North Dakota are Holsteins.

North Dakota raises about one million turkeys every year.

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.

## CORN

Corn production in North Dakota was once concentrated in the southeastern corner of the state, but is now statewide. 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.

Most corn grown in the state is corn for grain, also known as "field corn," used for livestock feed, sweetener and ethanol.

Researchers continue to find and develop new uses for corn, such as fabrics, tires, cleaning products, resins and solvents.

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



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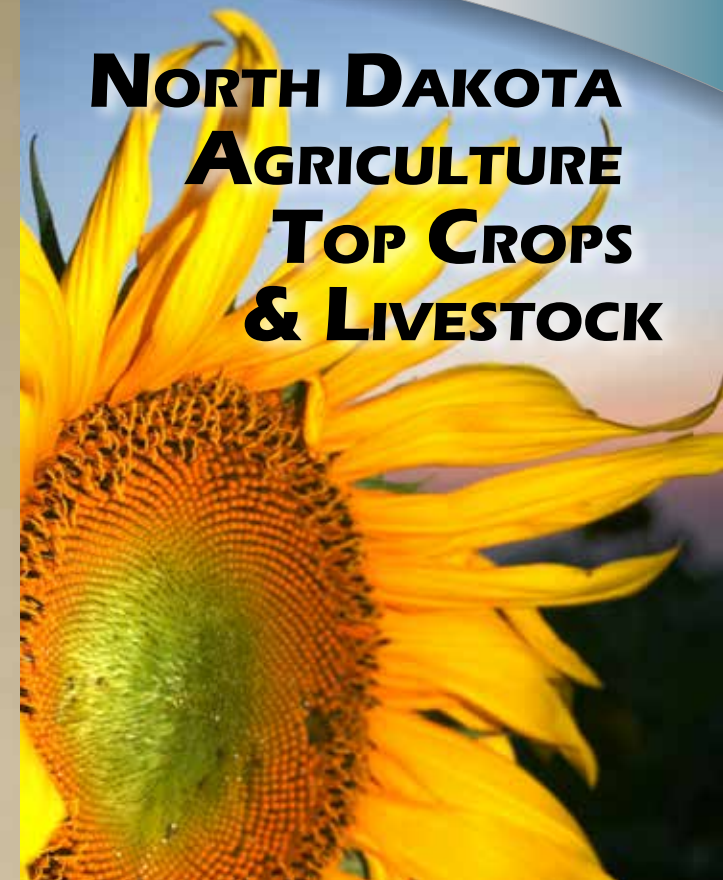
## THE AG FOUNDATION

### MEMBER ORGANIZATIONS:

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North Dakota Wheat Commission

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# NORTH DAKOTA AGRICULTURE TOP CROPS & LIVESTOCK



**North Dakota farmers & ranchers  
annually produce enough...**



**Wheat for 11.6 billion loaves of bread**  
**Potatoes for 2.6 billion servings of French fries**