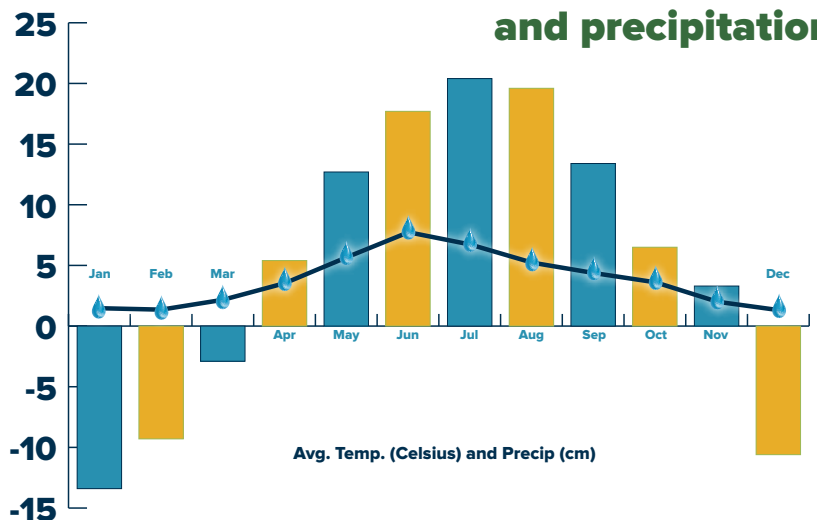


ABOUT NORTH DAKOTA

- ◆ North Dakota has a population of 720,000.
- ◆ Fargo is the largest city with a population of 105,000, however, the entire Fargo/Moorhead population is closer to 200,000, followed by Grand Forks at 66,000 and Bismarck at 61,000. Bismarck is the state capital.
- ◆ North Dakota became the 39th state in the U.S. on November 2, 1889.
- ◆ Major industries in North Dakota include agriculture, manufacturing, coal mining and oil and gas exploration, extracting and refining.
- ◆ North Dakota is home to 11 colleges and universities. The bulk of the agricultural research is done at North Dakota State University (NDSU) in Fargo. NDSU is home to the hard red spring, durum, hard red winter and white wheat breeding and quality programs.
- ◆ The landscape in North Dakota varies, from the flat, fertile fields of the Red River Valley in the east to the rugged hills of the Badlands in the west.
- ◆ The yearly average temperature in the state is about 40° F (4° C) with average annual precipitation of 18 inches (46 cm).
 - December and January are the coldest months and July and August are the warmest.
 - Precipitation ranges from 20 inches (51 cm) in the southeast part of the state to less than 16 inches (40 cm) in the northwest.



Average monthly temperatures and precipitation



TOP REASONS TO BUY NORTH DAKOTA WHEAT

- 1. ND WHEAT IS AT THE TOP OF THE WORLD QUALITY SPECTRUM FOR PROTEIN AND FUNCTIONAL TRAITS.**
- 2. ND PRODUCERS ARE COMMITTED TO PRODUCING CONSISTENT QUALITY WHEAT AND THE SUSTAINABLE MANAGEMENT OF RESOURCES.**
- 3. ND HAS A WORLD CLASS GRAIN MARKETING AND HANDLING SYSTEM TO ENSURE QUALITY, LOW HANDLING COSTS AND TIMELY DELIVERY.**
- 4. ND WHEAT IS AVAILABLE YEAR ROUND PROVIDING A RELIABLE, STABLE SOURCE OF SUPPLY.**
- 5. ND WHEAT MAKES THE BEST BREAD AND PREMIUM PASTA.**



**NORTH DAKOTA
WHEAT COMMISSION**

Building Bigger Better Markets

**NORTH DAKOTA WHEAT COMMISSION
2401 46TH AVE. SE, SUITE 104
MANDAN, ND 58554
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FAX: 701-663-5787
EMAIL: NDWHEAT@NDWHEAT.COM
WWW.NDWHEAT.COM**



NORTH DAKOTA'S GOLDEN CROP



NORTH DAKOTA
WHEAT COMMISSION
Building Bigger Better Markets

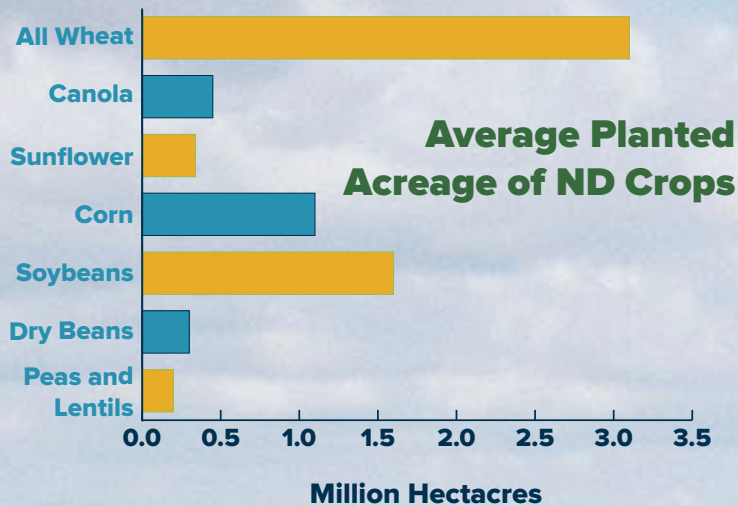
WORLD'S FINEST WHEAT

BRINGING WHEAT **TO THE WORLD**

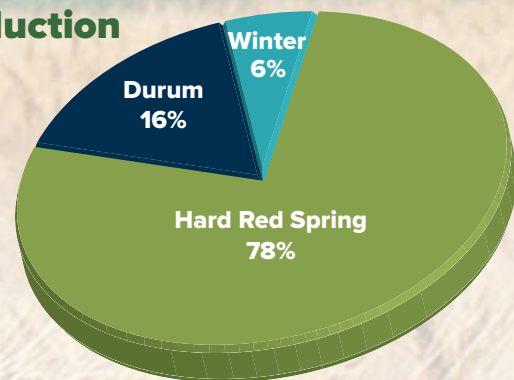
COMMITTED TO EXCEEDING CUSTOMER EXPECTATIONS

NORTH DAKOTA AGRICULTURE

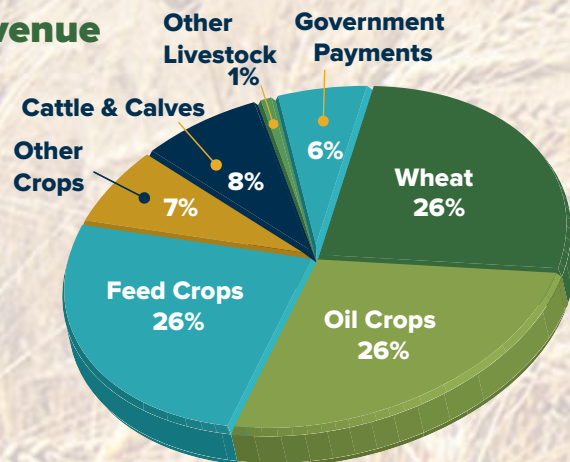
- ◆ Agriculture is the state's largest industry with a \$20-25 billion economic impact.
- ◆ About 90 percent of the state's land area is used for crop farming and cattle ranching, with approximately 23 million acres (9.5 million hectares) of cropland.
- ◆ There are about 30,000 farms in the state with the average farm size being 1,250 acres (500 hectares). Some farms are 3,000 hectares or larger in size.
- ◆ North Dakota produces a large diversity of crops and ranks number one nationally in hard red spring wheat, durum, barley, dry edible beans, canola, flax, honey, dry edible peas, and sunflower. Significant quantities of corn, soybeans, potatoes, oats and sugar beets are also grown.
- ◆ Wheat is the top crop in the state, covering one-fourth of the total land area and total farm revenue.
- ◆ The average wheat yield in North Dakota is 38 bushels/acre (2.55 tons/hectare) with average production of 320 million bushels (8.7 million tons).
- ◆ Producers in North Dakota grow hard red spring wheat, durum, hard red winter wheat and a small portion of white wheat.
- ◆ Producers generally sell their crop to one of the more than 300 local elevators in the state, who then market the crop domestically or for export.
- ◆ Major export shipping points include the Pacific Northwest, Great Lakes or the Gulf.
- ◆ There are 4 wheat mills in the state, 3 durum mills and 3 pasta plants.
- ◆ Off-farm storage capacity in the state is 350 million bushels (9.5 million tons) and on-farm storage capacity is 920 million bushels (25 million tons).



North Dakota Wheat Production by Class

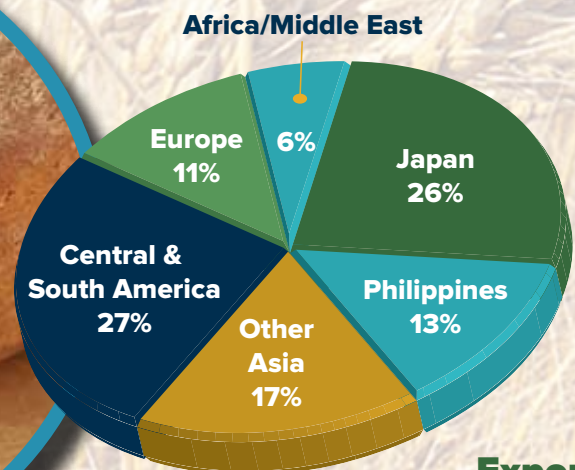


North Dakota Farm Revenue



HARD RED SPRING WHEAT

- ◆ North Dakota leads the country in the production of hard red spring wheat, accounting for nearly one-half of the total crop. Montana, South Dakota, Minnesota, Idaho and Washington also grow spring wheat.
- ◆ Spring wheat is planted in April and May and harvested in late-July through early September.
- ◆ Average U.S. production is 500 million bushels (13.6 million tons) with an average of 11.2 million acres (4.5 million hectares) each year.
- ◆ Hard red spring wheat is a specialty wheat known for its high protein content (13 to 16 percent) and strong gluten characteristics. It is used in making some of the world's finest yeast breads, hard rolls, bagels and more. A major customer demand for hard red spring wheat is for blending with lower protein, weaker gluten wheat sources to improve the dough and bread quality characteristics.
- ◆ The hard red spring wheat breeding program at NDSU is largest public breeding program in the United States. It receives funding from federal and state tax monies as well as from producers.
- ◆ The majority of varieties planted by producers are publicly developed lines. Private companies like Monsanto, Syngenta and others are increasing their involvement in wheat research and breeding.
- ◆ Varieties developed at NDSU must pass through an in-depth quality evaluation prior to release.
- ◆ The ND Wheat Commission funds a significant share of the quality evaluation program to ensure that our varieties have a balance of yield, disease resistance and functional quality.
- ◆ One-half of the hard red spring wheat produced in the U.S. is exported. Asia is the largest export region, followed by Central and South American, Europe and Africa.
- ◆ Pricing – The Minneapolis Grain Exchange is the universally used futures trading market for HRS.



**Export
Destinations**

DURUM

- ◆ North Dakota is the largest durum producing state in the U.S., accounting for about 55 percent of total production. Production in Montana accounts for another 20 percent, with the remainder coming from Desert Durum production in California and Arizona.
- ◆ Producers in North Dakota plant durum on an average of 1.2 million acres (526,000 hectares), with total production of 45 million bushels (1.2 million tons).
- ◆ On average, the U.S. produces 80 million bushels (2.2 million tons) of durum.
- ◆ Durum production is concentrated in the northwest quarter of the state due to less disease pressure and a more arid climate that limits quality loss during harvest.
- ◆ Hard red spring wheat and durum compete for acreage in North Dakota. Producers choose crops based on yield, price and rotation considerations. Typically producers need a premium to plant durum because of the agronomic challenges and market risk. Durum is subject to greater quality discounts and adverse harvest weather can greatly affect the final price a producer receives.
- ◆ NDSU is the largest public breeding program in the U.S. Current breeding efforts are focused on improved disease resistance, better color and low cadmium.
- ◆ Quality strengths of ND durum include bright yellow semolina, high protein, high semolina extraction and strong gluten.
- ◆ Durum is primarily used for pasta in the U.S. In international markets it is also used for couscous and to a limited extent for bread.
- ◆ Two-thirds of U.S. durum production is used

domestically while the other third is exported to more than 20 countries throughout the world.

- ◆ Pricing in durum is less transparent than for other classes of wheat due to no futures market, more concentrated production and a consolidated industry.



Export Destinations

