

# North Dakota at a Glance

A publication featuring North Dakota Agriculture with the 2022 Census of Agriculture

October 2024

Agriculture is the leading industry sector in North Dakota and points clearly to the extraordinarily important role North Dakota plays in raising crops and livestock to feed the world's growing population and meet increasing demands for renewable energy and life science applications.

In 2023, North Dakota led the nation in the production of all dry edible beans, pinto beans, pink beans, canola, flaxseed, honey, oats, rye, all sunflowers, non-oil sunflowers, oil sunflowers, all wheat, Durum wheat, and spring wheat. North Dakota also ranked second in the production of small red beans, lentils, and dry edible peas.

Non-agricultural industry has become an increasingly important part of North Dakota's economy. In fact, the fastest growing sector is natural resources led by oil production, gas production, and coal mining. This sector is now North Dakota's second strongest industry.

Due to the increased production of ND oil and gas from the Bakken and Three Forks formations in the western part of the state, North Dakota ranks 3<sup>rd</sup> in the nation in both crude oil reserves and production. North Dakota has almost 2% of the U.S.

natural gas reserves and in 2023, the state accounted for slightly more than 2% of the U.S. total natural gas gross withdrawals.

North Dakota contains the world's largest known deposit of lignite and is the 5<sup>th</sup> largest coal producing state, accounting for 5% of the U.S. total coal production. In 2023, coal-fired power plants provided 55% of North Dakota's electricity.

The development of renewable energy, including wind, biomass, and biofuels, has been growing in recent years. Biodiesel is an alternative fuel produced from renewable resources like soybeans and canola. There currently is a canola-based biodiesel facility at Velva that is capable of producing 85 million gallons per year. Corn-based ethanol is also a growing industry in North Dakota. Ethanol plants currently in operation produce nearly 547 million gallons per year, which is about 3.5% of the nation's ethanol output.

North Dakota is nationally recognized as having the greatest potential of any state in its capacity to produce energy through wind power. In 2023, wind energy in North Dakota accounted for 37% of its total electricity, which was the 4<sup>th</sup> highest share of wind power for any state.

## Historic Dates – North Dakota

Lewis and Clark Expedition .....	1804-1805
First settlement at Pembina .....	1812
Established as "Dakota Territory" with South Dakota .....	March 2, 1861
First railroad to Fargo .....	June 8, 1872
Constitution approved.....	October 1, 1889
Admitted to the Union (39 <sup>th</sup> State).....	November 2, 1889
Oil discovered at Tioga.....	April 5, 1951
Garrison Dam first produced electric power.....	1956

## Profile of North Dakota

Population (2023) <sup>1</sup> .....	783,926
Latitude (approx.) .....	North border 49° N, South border 45°-57' N
Longitude (approx.) .....	West border 104°W, East border 97°-14' W
Total area <sup>2</sup> .....	70,698 square miles
Water area <sup>2</sup> .....	1,702.8 square miles
Land area <sup>2</sup> .....	68,976.5 square miles
.....	44,161,773 acres
Land in farms <sup>3</sup> .....	38,537,022 acres
Rank in size.....	7
Density per square mile of land area <sup>2</sup> .....	11.3 people
Number of Counties .....	53
North to South.....	212 miles
Extreme East to West.....	360 miles
Average East to West.....	335 miles
Elevation:	
Lowest point.....	Red River, Pembina County, 750 feet
Highest point .....	White Butte, Slope County, 3,506 feet
Largest County.....	McKenzie, 2,735 square miles
Smallest County .....	Eddy, 635 square miles

<sup>1</sup> Population Division, U.S. Census Bureau. <sup>2</sup> U.S. Census Bureau, 2020 Census. <sup>3</sup> 2022 Census of Agriculture

## North Dakota Farms

Year	Farms (number)	Average size (acres)
1992.....	31,123	1,267
1997.....	32,348	1,227
2002.....	30,619	1,283
2007.....	31,970	1,241
2012.....	30,961	1,268
2017.....	26,364	1,492
2022.....	25,068	1,537

Census of Agriculture.



**Geographic Center of North America – Rugby**

**State Bird – Meadowlark**

**State Flower – Wild Prairie Rose**

**State Tree – American Elm**

**State Nicknames – Peace Garden State, Flickertail State and Roughrider State**

## 2022 Census of Agriculture with Comparisons – North Dakota

County	Number of farms		Land in farms				Land area		Value of land and buildings			
			Total acres		Average size		Acres	Percent in farms	Average per farm		Average per acre	
	2017	2022	2017	2022	2017	2022			2022	2022	2017	2022
	(number)		(acres)		(acres)		(acres)	(percent)		(1,000 dollars)		(dollars per acre)
Adams.....	380	340	599,579	593,005	1,578	1,744	632,086	93.8	1,682,952	2,706,133	1,067	1,552
Barnes.....	749	739	952,048	899,654	1,271	1,217	954,595	94.2	2,937,290	3,482,577	2,311	2,861
Benson.....	473	369	750,870	640,303	1,587	1,735	888,732	72.0	2,172,369	2,626,866	1,368	1,514
Billings.....	204	170	734,722	730,876	3,602	4,299	735,258	99.4	3,308,786	5,016,366	919	1,167
Bottineau.....	684	719	958,377	962,403	1,401	1,339	1,067,791	90.1	2,166,705	2,792,631	1,546	2,086
Bowman.....	341	307	711,385	740,954	2,086	2,414	743,616	99.6	2,144,932	3,096,440	1,028	1,283
Burke.....	356	422	519,380	617,662	1,459	1,464	706,293	87.5	1,537,171	2,114,992	1,054	1,445
Burleigh.....	785	709	824,199	782,183	1,050	1,103	1,044,820	74.9	1,994,601	2,196,020	1,900	1,991
Cass.....	784	801	1,126,085	941,171	1,436	1,175	1,129,546	83.3	5,339,580	4,829,692	3,718	4,110
Cavalier.....	523	527	928,239	874,459	1,775	1,659	952,801	91.8	3,691,559	4,159,678	2,080	2,507
Dickey.....	419	423	678,927	610,307	1,620	1,443	724,141	84.3	3,849,791	4,671,232	2,375	3,238
Divide.....	416	418	704,197	613,694	1,693	1,468	806,877	76.1	1,808,767	2,022,772	1,069	1,378
Dunn.....	524	500	1,016,961	1,118,382	1,941	2,237	1,285,414	87.0	2,225,966	3,390,854	1,147	1,516
Eddy.....	291	263	377,145	381,638	1,296	1,451	403,309	94.6	1,886,332	3,029,575	1,455	2,088
Emmons.....	516	510	811,583	961,340	1,573	1,885	966,678	99.4	2,493,059	3,710,160	1,585	1,968
Foster.....	230	235	393,909	362,426	1,713	1,542	406,689	89.1	3,438,653	4,081,280	2,008	2,646
Golden Valley....	287	249	626,343	638,147	2,182	2,563	640,965	99.6	2,296,429	3,181,999	1,052	1,242
Grand Forks.....	889	956	798,480	761,755	898	797	919,266	82.9	3,064,078	2,843,131	3,411	3,568
Grant.....	412	450	959,467	1,057,984	2,329	2,351	1,061,857	99.6	2,494,937	3,248,991	1,071	1,382
Griggs.....	393	347	453,644	386,215	1,154	1,113	453,643	85.1	2,051,720	2,357,264	1,777	2,118
Hettinger.....	482	437	704,881	651,019	1,462	1,490	724,615	89.8	2,055,386	2,400,324	1,405	1,611
Kidder.....	476	356	748,445	764,998	1,572	2,149	864,748	88.5	1,978,460	4,049,395	1,258	1,884
LaMoure.....	571	543	726,731	697,530	1,273	1,285	733,403	95.1	3,230,939	4,024,050	2,539	3,133
Logan.....	351	285	631,778	482,603	1,800	1,693	635,389	76.0	2,144,519	3,110,092	1,191	1,837
McHenry.....	750	664	1,040,198	1,126,626	1,387	1,697	1,199,339	93.9	1,510,122	2,601,692	1,089	1,533
McIntosh.....	363	291	487,665	456,957	1,343	1,570	623,829	73.3	1,832,362	2,799,528	1,364	1,783
McKenzie.....	539	576	1,119,275	1,359,174	2,077	2,360	1,766,692	76.9	2,130,024	3,189,304	1,026	1,352
McLean.....	762	742	1,045,419	1,049,482	1,372	1,414	1,350,784	77.7	2,448,520	3,615,346	1,785	2,556
Mercer.....	317	296	518,195	451,663	1,635	1,526	667,490	67.7	2,236,333	1,949,173	1,368	1,277
Morton.....	781	688	1,225,934	1,228,831	1,570	1,786	1,232,717	99.7	2,203,330	3,330,460	1,404	1,865
Mountrail.....	584	512	1,081,383	1,165,469	1,852	2,276	1,168,183	99.8	2,367,371	3,288,419	1,278	1,445
Nelson.....	489	459	552,853	557,763	1,131	1,215	628,337	88.8	1,537,488	2,488,131	1,360	2,048
Oliver.....	234	215	313,542	419,606	1,340	1,952	462,408	90.7	1,932,910	3,475,400	1,443	1,781
Pembina.....	481	482	691,493	616,835	1,438	1,280	715,965	86.2	3,962,790	5,010,772	2,757	3,915
Pierce.....	446	350	540,395	471,211	1,212	1,346	651,812	72.3	1,707,184	2,376,142	1,409	1,765
Ramsey.....	515	512	696,611	618,109	1,353	1,207	759,645	81.4	2,446,528	2,275,130	1,809	1,885
Ransom.....	507	502	549,074	522,982	1,083	1,042	551,908	94.8	2,179,084	2,928,879	2,012	2,811
Renville.....	269	253	554,267	507,942	2,060	2,008	561,314	90.5	3,306,195	4,685,157	1,605	2,334
Richland.....	846	894	875,444	795,490	1,035	890	918,888	86.6	3,300,158	3,932,149	3,189	4,419
Rolette.....	453	422	512,172	470,525	1,131	1,115	577,968	81.4	1,447,711	1,851,667	1,280	1,661
Sargent.....	501	470	548,088	469,900	1,094	1,000	549,446	85.5	3,049,460	3,452,961	2,787	3,454
Sheridan.....	260	275	551,381	542,192	2,121	1,972	622,325	87.1	2,328,439	3,441,710	1,098	1,746
Sioux.....	187	153	588,162	697,019	3,145	4,556	700,220	99.5	3,909,369	6,226,310	1,243	1,367
Slope.....	215	197	727,694	757,635	3,385	3,846	777,528	97.4	3,579,166	5,737,575	1,057	1,492
Stark.....	678	615	735,504	723,041	1,085	1,176	854,243	84.6	1,444,094	1,941,535	1,331	1,651
Steele.....	358	293	421,219	384,113	1,177	1,311	455,814	84.3	2,584,785	3,882,427	2,197	2,962
Stutsman.....	939	829	1,315,703	1,201,132	1,401	1,449	1,421,919	84.5	2,808,671	3,958,237	2,005	2,732
Towner.....	454	377	630,795	554,730	1,389	1,471	655,717	84.6	1,923,869	2,837,765	1,385	1,929
Traill.....	415	465	538,836	530,509	1,298	1,141	551,647	96.2	4,004,597	4,249,559	3,084	3,725
Walsh.....	763	850	804,520	734,006	1,054	864	820,268	89.5	2,649,975	2,781,431	2,513	3,221
Ward.....	718	634	1,153,475	1,014,320	1,607	1,600	1,288,422	78.7	2,623,383	3,635,288	1,633	2,272
Wells.....	435	438	785,692	724,757	1,806	1,655	813,244	89.1	3,089,877	3,946,213	1,711	2,385
Williams.....	569	539	999,227	1,114,295	1,756	2,067	1,329,706	83.8	1,925,239	2,859,106	1,096	1,383
<b>State.....</b>	<b>26,364</b>	<b>25,068</b>	<b>39,341,591</b>	<b>38,537,022</b>	<b>1,492</b>	<b>1,537</b>	<b>44,160,310</b>	<b>87.3</b>	<b>2,546,783</b>	<b>3,287,801</b>	<b>1,707</b>	<b>2,139</b>

## Producer Characteristics: 2017 and 2022

Item	2017	2022
Producers (number) .....	41,904	43,560
Sex of producers:		
Male .....	29,588	30,553
Female .....	12,316	13,007
Primary Occupation:		
Farming .....	23,103	22,505
Other .....	18,801	21,055
Age group:		
Under 25 years .....	644	810
25-34 years .....	4,000	4,093
35-44 years .....	5,129	6,111
45-54 years .....	7,428	6,130
55-64 years .....	12,292	10,750
65-74 years .....	8,274	10,523
Over 75 years .....	4,137	5,143
Average age of operator .....	56.0	56.8
Place of residence:		
On farm operated .....	26,807	25,473
Not on farm operated .....	15,097	18,087
Race:		
American Indian/Alaska Native .....	315	361
Asian .....	21	21
Black or African American .....	8	13
Native Hawaiian/Other Pacific Islander .....	7	5
White .....	41,389	43,034
More than one race .....	164	126
Other producer characteristics:		
Hispanic, Latino, Spanish origin .....	225	260
With Military service .....	3,835	3,288
New and beginning farms .....	6,213	7,025

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## Farm Characteristics: 2017 and 2022

Item	2017	2022
Farms by Size:		
1 to 9 acres	571	507
10 to 45 acres	2,514	2,371
50 to 179 acres	4,988	4,916
180 to 499 acres	4,549	4,597
500 to 999 acres	3,184	3,214
1,000 acres or more	3,837	3,404
2,000 acres or more	6,721	6,059
Farms by value of sales:		
Less than \$2,500	7,928	7,035
\$2,500 to \$4,999	888	608
\$5,000 to \$9,999	1,091	1,015
\$10,000 to \$24,999	1,606	1,473
\$25,000 to \$49,999	1,703	1,460
\$50,000 to \$99,999	1,889	1,773
\$100,000 to \$499,999	6,112	5,590
\$500,000 or more	5,147	6,114
Net cash farm income of		
Operations.....(1,000)	2,349,624	4,999,442
Average per farm.....(dollars)	89,122	199,435

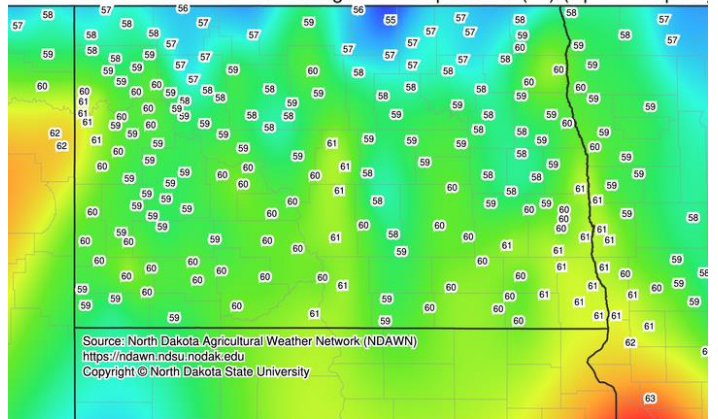
2022 Census of Agriculture

## 2022 Ranking of Market Value of Ag Products Sold

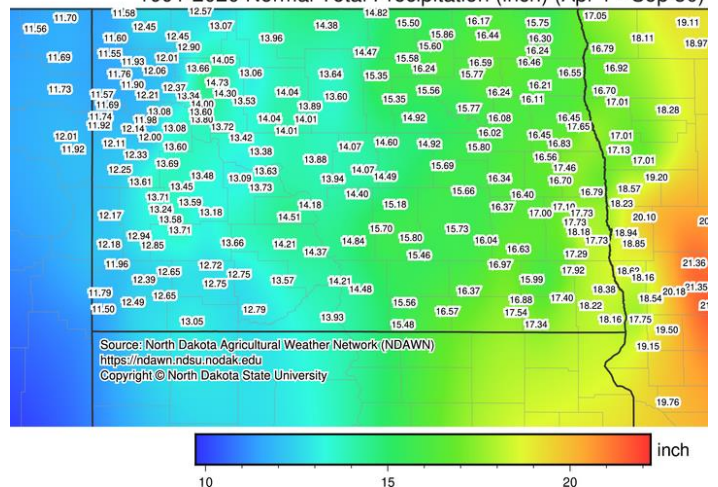
Item	Farms	Sales (\$1,000)	Rank by Sales in ND	Percent of Total sales
<b>Total Sales</b> .....	25,068	12,138,799	(X)	100.0
Grains, oilseeds, dry beans and dry peas .....	11,884	9,683,315	1	79.8
Cattle and calves .....	6,861	1,216,633	2	10.0
Other crops and hay .....	6,244	579,446	3	4.8
Vegetables, melons, potatoes, and sweet potatoes .....	287	307,952	4	2.5
Other animals and other animal product .....	411	112,411	5	0.9
Hogs and pigs .....	175	104,148	6	0.9
Milk from cows .....	58	75,788	7	0.6
Poultry and eggs .....	528	25,332	8	0.2
Horses, ponies, mules, burros, and donkeys .....	694	13,040	9	0.1
Nursery, greenhouse, floriculture and sod .....	80	9,476	10	0.1
Sheep, goats, wool, mohair and milk .....	568	8,824	11	0.1
Fruits, tree nuts, and berries .....	71	1,507	12	(Z)
Aquaculture .....	5	915	13	(Z)
Cultivated Christmas trees and short rotation woody crops .....	7	10	14	(Z)

2022 Census of Agriculture. (Z) Less than half of the unit shown.

1991-2020 Normal Average Air Temperature (°F) (Apr 1 - Sep 30)



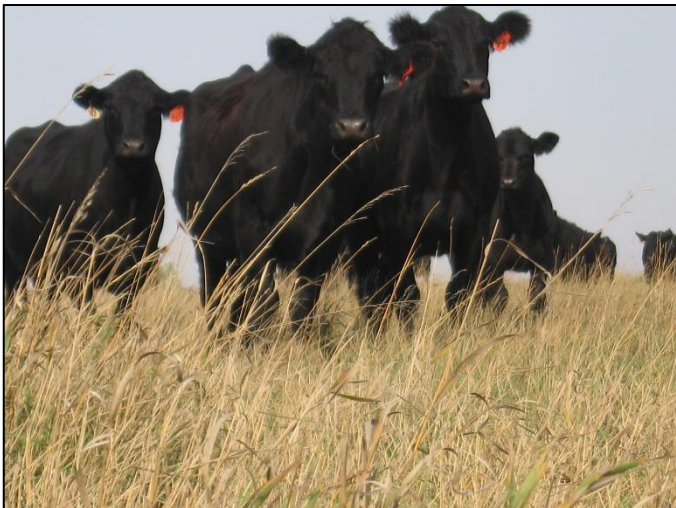
1991-2020 Normal Total Precipitation (inch) (Apr 1 - Sep 30)



## Production, Inventory, and Rank: North Dakota, 2023

Commodity	2023 North Dakota production	Percent of Nation's production	2023 rank in U.S.
<b>Crops</b>			
		(percent)	
Barley.....bushels	40,470,000	21.9	3
Beans, dry edible, all .....cwt	8,939,000	37.4	1
Navy.....cwt	811,000	25.3	3
Pinto.....cwt	6,021,000	70.0	1
Canola.....pounds	3,466,150,000	83.4	1
Corn for grain ..... bushels	543,400,000	3.5	11
Flaxseed.....bushels	2,163,000	73.0	1
Hay, all .....tons	4,428,000	3.7	9
Alfalfa .....tons	2,601,000	5.2	6
Other .....tons	1,827,000	2.7	13
Lentils.....cwt	1,095,000	19.1	2
Oats .....bushels	7,980,000	14.0	1
Peas, dry edible.....cwt	6,003,000	33.2	2
Potatoes, All .....cwt	26,250,000	6.0	5
Rye.....bushels	2,583,000	24.9	1
Soybeans .....bushels	218,680,000	5.3	9
Sugarbeets ..... tons	6,110,000	17.3	3
Sunflower, all..... pounds	1,122,980,000	49.6	1
Non-oil.....pounds	157,680,000	53.1	1
Oil.....pounds	965,300,000	49.1	1
Wheat, all .....bushels	307,845,000	17.0	1
Durum .....bushels	32,005,000	53.9	1
Spring.....bushels	267,720,000	53.0	1
Winter.....bushels	8,120,000	0.7	26
Honey production .....pounds	38,325,000	27.7	1
<b>Livestock Inventory</b>			
January 1, 2024:			
All cattle and calves.....head	1,660,000	1.9	15
Beef cows.....head	860,000	3.0	10
Milk cows.....head	10,000	0.1	35
All sheep and lambs .....head	63,000	1.3	26
December 1, 2023			
All hogs and pigs .....head	150,000	0.2	22

USDA, NASS, Crop Production Summary, 2023.



## Population – North Dakota

County	County population			County seat
	2010	2023	2023 rank in ND	
Adams.....	2,343	2,163	43	Hettinger
Barnes.....	11,064	10,726	13	Valley City
Benson.....	6,660	5,745	21	Minnewaukan
Billings.....	784	1,034	52	Medora
Bottineau.....	6,429	6,349	20	Bottineau
Bowman.....	3,151	2,867	35	Bowman
Burke.....	1,968	2,134	45	Bowbells
Burleigh.....	81,308	100,012	2	Bismarck
Cass.....	149,778	196,362	1	Fargo
Cavalier.....	3,994	3,596	31	Langdon
Dickey.....	5,287	4,900	24	Ellendale
Divide.....	2,071	2,135	44	Crosby
Dunn.....	3,536	4,019	26	Manning
Eddy.....	2,385	2,263	40	New Rockford
Emmons.....	3,545	3,224	33	Linton
Foster.....	3,337	3,309	32	Carrington
Golden Valley...	1,680	1,743	50	Beach
Grand Forks.....	66,864	72,708	3	Grand Forks
Grant.....	2,394	2,215	42	Carson
Griggs.....	2,421	2,248	41	Cooperstown
Hettinger.....	2,478	2,415	37	Mott
Kidder.....	2,435	2,342	38	Steele
LaMoure.....	4,141	4,096	25	LaMoure
Logan.....	1,988	1,869	48	Napoleon
McHenry.....	5,392	5,131	23	Towner
McIntosh.....	2,813	2,488	36	Ashley
McKenzie.....	6,359	14,252	10	Watford City
McLean.....	8,962	9,832	15	Washburn
Mercer.....	8,424	8,309	17	Stanton
Morton.....	27,469	33,895	6	Mandan
Mountrail.....	7,663	9,383	16	Stanley
Nelson.....	3,129	2,991	34	Lakota
Oliver.....	1,848	1,879	47	Center
Pembina.....	7,403	6,661	19	Cavalier
Pierce.....	4,359	3,902	27	Rugby
Ramsey.....	11,451	11,463	12	Devils Lake
Ransom.....	5,457	5,603	22	Lisbon
Renville.....	2,470	2,279	39	Mohall
Richland.....	16,321	16,558	9	Wahpeton
Rolette.....	13,939	11,728	11	Rolla
Sargent.....	3,829	3,776	29	Forman
Sheridan.....	1,321	1,266	51	McClusky
Sioux.....	4,154	3,643	30	Fort Yates
Slope.....	727	674	53	Amidon
Stark.....	24,199	33,001	7	Dickinson
Steele.....	1,975	1,782	49	Finley
Stutsman.....	21,100	21,392	8	Jamestown
Towner.....	2,246	2,030	46	Cando
Trail.....	8,121	7,908	18	Hillsboro
Walsh.....	11,123	10,305	14	Grafton
Ward.....	61,675	68,332	4	Minot
Wells.....	4,207	3,876	28	Fessenden
Williams.....	22,399	39,113	5	Williston

Source: Population Division, U. S. Census Bureau.