2024 North Dakota Custom Rates
Part I – Early Season Operations

August 2024

Introduction

The data in this report are the result of a survey conducted during July and August. Approximately 1,420 reports from aerial sprayers, farmer/ranchers, and other custom operators were tabulated. The survey was designed to provide state averages for custom work rates. The early season survey was last conducted in 2020. Prior to 2020, the early season survey was conducted in 2016 and then had been conducted every three years since 1962, except during the early 1980's when it was conducted every other year.

Appreciation is expressed to all survey participants who provided the data for this report and to the North Dakota State University Extension Service personnel for their assistance on this project.

The Data

This report contains state level custom work rates for land tillage, planting, fertilizer and pesticide application, haying operations, and other custom work.

Included for each operation is the number of reports, range, most frequently reported, and average rates. Also included are state level 2020 average rates, 2024 rates as a percentage of 2020, and historical comparisons back to 1998 for selected operations. **We advise the reader to exercise discretion when using rates where fewer than fifteen reports were tabulated.**

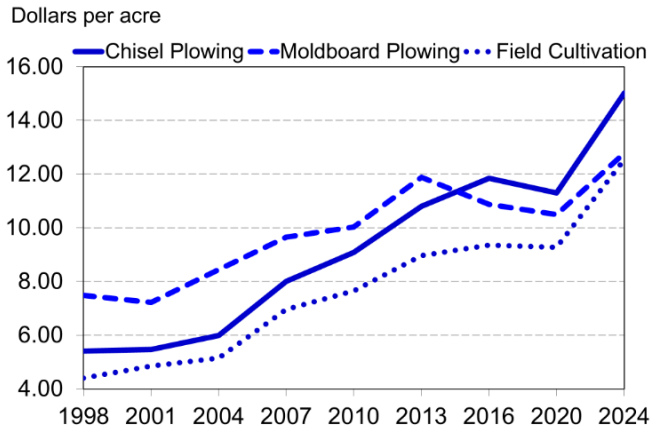
The range shows the minimum and maximum rate reported for each custom operation. The range is affected by the locality of the reporter and the size of the custom operator. A farmer/rancher who does a small amount of custom work for his or her neighbors may charge less than a large-scale operator.

The rates in this report include charges for equipment, power, fuel, and the operator. Exchange work is not considered custom work for this survey.

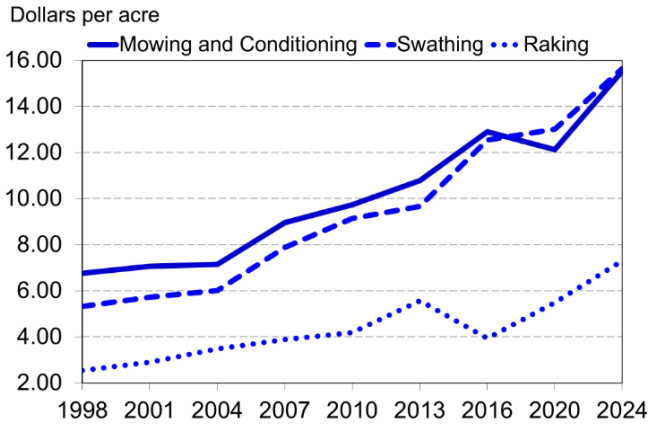
Other Reports

A late season custom rates survey will be conducted in October and November. It will collect data on harvesting, grain drying, crop and hay hauling, and other miscellaneous custom rates. This information will be released in December.

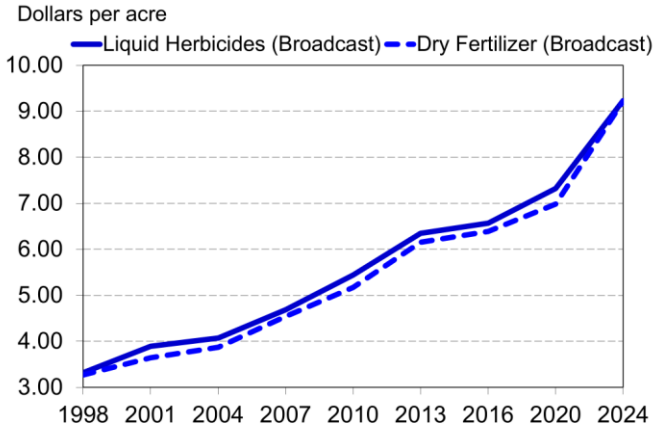
Land Tillage – Average Rate: 1998-2024



Haying Operations – Average Rate: 1998-2024



Chemical Applications – Average Rate: 1998-2024



Survey funded by the North Dakota State University Experiment Station and Extension Service.

LAND TILLAGE, SMALL GRAIN SEEDING AND ROW CROP PLANTING

STATEWIDE AVERAGES, NORTH DAKOTA, 2024

Operation	2024				2020 Average Rate	2024 as Percent of 2020
	Number of Reports	Range in Rates	Most Frequent Rate Reported	Average Rate		
	(number)	(dollars per gallon)	(dollars per gallon)	(dollars per gallon)	(dollars per gallon)	(percent)
DIESEL FUEL	408	2.00 - 4.69	3.50	3.31	1.80	184
LAND TILLAGE	(number)	(dollars per acre)	(dollars per acre)	(dollars per acre)	(dollars per acre)	(percent)
Primary Tillage (Deep):						
Plowing (Moldboard)	6	10.00 - 17.00	12.00	12.78	10.50	122
Sod Breaking	(D)	(D)	(D)	(D)	14.43	(D)
Heavy Disking	13	5.00 - 35.00	1/	16.92	11.12	152
Chisel Plowing	15	6.00 - 25.00	1/	15.03	11.30	133
Sub Soiling (16-20 inches deep)	4	12.00 - 30.00	30.00	23.00	15.18	152
Disk/Chisel Plowing	11	10.00 - 24.00	20.00	17.55	13.09	134
Secondary Tillage (Shallow):						
Field Cultivation	19	5.00 - 22.00	10.00	12.55	9.27	135
One-Way Disking	5	10.00 - 20.00	10.00	12.80	11.04	116
Tandem Disking	11	10.00 - 32.00	10.00	15.55	12.83	121
Rotary Hoe	4	5.00 - 13.00	1/	9.00	8.47	106
Vertical Tillage	20	5.00 - 40.00	10.00	15.78	10.74	147
Land Rolling	27	2.00 - 18.00	5.00	7.32	5.46	134
Light Harrowing	7	4.00 - 15.00	10.00	9.86	7.95	124
Heavy Harrowing	9	5.00 - 15.00	10.00	9.67	7.38	131
Row Crop Cultivation	4	9.50 - 15.00	1/	11.50	8.57	134
SMALL GRAIN SEEDING						
With Fertilizer:						
Regular Drilling	24	3.00 - 40.00	25.00	23.25	14.99	155
Drilling & Tillage	9	8.00 - 25.00	20.00	18.33	17.17	107
Air Seeding	34	10.00 - 40.00	20.00	22.29	17.82	125
No Till Drill	17	12.50 - 40.00	25.00	23.32	19.39	120
Without Fertilizer:						
Regular Drilling	23	3.00 - 30.00	20.00	18.26	14.28	128
Drilling & Tillage	7	14.00 - 40.00	20.00	20.57	15.92	129
Air Seeding	20	8.00 - 30.00	20.00	17.43	16.13	108
No Till Drill	26	10.00 - 30.00	20.00	21.04	16.47	128
ROW CROP PLANTING						
With Fertilizer:						
Corn, Soybean, Sunflower (Regular)	29	15.00 - 75.00	25.00	28.83	18.70	154
Corn, Soybean, Sunflower (Air Seed)	14	15.00 - 40.00	25.00	25.86	17.85	145
Dry Edible Beans	12	15.00 - 47.00	25.00	29.25	20.89	140
Sugarbeet	(D)	(D)	(D)	(D)	(D)	(D)
Without Fertilizer:						
Corn, Soybean, Sunflower (Regular)	28	12.50 - 35.00	20.00	21.02	17.53	120
Corn, Soybean, Sunflower (Air Seed)	14	12.00 - 25.00	20.00	19.21	18.51	104
Dry Edible Beans	10	10.00 - 26.00	20.00	19.15	18.75	102
Sugarbeet	(D)	(D)	(D)	(D)	(D)	(D)
No Till With Fertilizer:						
Corn, Soybean, Sunflower	23	18.00 - 40.00	20.00	25.96	20.23	128
No Till Without Fertilizer:						
Corn, Soybean, Sunflower	15	14.00 - 35.00	25.00	22.73	19.04	119

1/ Data not available due to multiple rates being reported at the highest frequency. (D) Withheld to avoid disclosing data for individual operations.

FERTILIZER AND PESTICIDE APPLICATION AND HAYING OPERATIONS

STATEWIDE AVERAGES, NORTH DAKOTA, 2024

Operation	2024				2020 Average Rate	2024 as Percent of 2020
	Number of Reports	Range in Rates	Most Frequent Rate Reported	Average Rate		
	(number)	(dollars per acre)	(dollars per acre)	(dollars per acre)	(dollars per acre)	(percent)
FERTILIZER APPLICATION						
Dry Fertilizer:						
Broadcast	147	5.00 - 40.00	8.00	9.22	6.98	132
Deep Banded	13	8.00 - 35.00	15.00	20.15	14.55	138
Liquid Fertilizer:						
Broadcast	23	4.00 - 20.00	1/	9.47	7.38	128
Side-Dressing	6	5.00 - 22.00	1/	11.25	9.91	114
Anhydrous Ammonia:						
With Knife Applicator	9	8.00 - 26.00	10.00	16.33	10.23	160
While Chiseling	9	8.00 - 28.00	15.00	18.00	13.33	135
PESTICIDE APPLICATION						
By Surface Vehicles						
Herbicides:						
Broadcast, Liquid	111	3.00 - 26.50	8.00	9.23	7.32	126
Dry	27	3.00 - 12.00	9.00	8.22	7.85	105
Incorporated, Liquid	22	5.00 - 15.00	8.00	8.65	8.43	103
Dry	12	8.00 - 25.00	1/	11.04	9.11	121
Insecticides:						
Broadcast, Liquid	46	4.25 - 12.00	8.00	8.45	6.89	123
Dry	16	5.00 - 12.00	9.00	8.67	7.06	123
Incorporated, Liquid	11	7.00 - 10.00	8.00	8.58	7.58	113
Dry	7	8.50 - 25.00	10.00	11.57	(D)	(D)
Fungicides	63	4.25 - 13.00	9.00	8.68	6.99	124
Desiccants	43	4.00 - 13.00	10.00	8.72	7.00	125
By Aircraft (All Pesticides):						
1 Gallon	29	4.50 - 15.00	9.75	9.76	8.95	109
2-3 Gallons	40	6.00 - 15.00	10.00	9.77	8.00	122
4-5 Gallons	34	8.00 - 20.00	10.00	10.00	8.27	121
Over 5 Gallons	20	8.25 - 25.00	11.00	11.25	8.42	134
HAYING OPERATIONS						
Mowing and Raking:						
Mowing	11	6.00 - 25.00	12.00	13.73	9.83	140
Mowing and Conditioning	16	6.50 - 25.00	1/	15.53	12.12	128
Swathing	11	7.00 - 25.00	1/	15.64	13.00	120
Raking	14	2.00 - 12.00	10.00	7.29	5.48	133
Baling (Wire or Twine Included):		(dollars per bale)	(dollars per bale)	(dollars per bale)	(dollars per bale)	
Small Square Bales, 250 lbs or less	6	1.00 - 9.00	1/	3.00	2.50	120
Large Square Bales, Over 250 lbs	4	8.00 - 15.00	15.00	12.00	8.43	142
Round Bales, 1,500 lbs or less	21	5.00 - 30.00	15.00	12.99	11.43	114
Round Bales, Over 1,500 lbs	13	5.00 - 60.00	15.00	15.27	10.88	140

1/ Data not available due to multiple rates being reported at the highest frequency. (D) Withheld to avoid disclosing data for individual operations.

OTHER CUSTOM WORK AND HISTORICAL DATA

OTHER CUSTOM WORK, STATEWIDE AVERAGES, NORTH DAKOTA, 2024

Operation	2024				2020 Average Rate	2024 as Percent of 2020
	Number of Reports	Range in Rates	Most Frequent Rate Reported	Average Rate		
	(number)	(dollars per head)	(dollars per head)	(dollars per head)	(dollars per head)	(percent)
Branding Calves	(D)	(D)	(D)	(D)	6.23	(D)
Shearing Sheep	5	4.50 - 10.00	1/	6.80	5.57	122
Custom Feeding Livestock:		(dollars/head/day)	(dollars/head/day)	(dollars/head/day)	(dollars/head/day)	
Weaned Calves	4	2.00 - 3.00	2.00	2.38	1.71	139
Yearlings and Cull Cows	5	1.45 - 4.00	2.50	2.48	1.64	151
Wintering Pregnant Beef Cows	4	2.50 - 4.00	3.00	3.13	1.83	171
Calving Out Cows	4	2.00 - 3.00	2.50	2.50	1.89	132
On-Farm Feed Grinding & Mixing:		(dollars per ton)	(dollars per ton)	(dollars per ton)	(dollars per ton)	
Mobile Truck	(D)	(D)	(D)	(D)	(D)	(D)
PTO Unit	(D)	(D)	(D)	(D)	(D)	(D)
Tub Grinding Hay:		(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)	
Farmer Supplies Power	(D)	(D)	(D)	(D)	224.58	(D)
Power Supplied	(D)	(D)	(D)	(D)	191.43	(D)
Self-Contained Unit	8	100.00 - 500.00	1/	280.00	241.20	116
		(dollars per bushel)	(dollars per bushel)	(dollars per bushel)	(dollars per bushel)	
Pneumatic Handling of Grain	4	0.05 - 0.30	1/	0.18	0.08	225
Post Hole Digging:		(dollars per hole)	(dollars per hole)	(dollars per hole)	(dollars per hole)	
Digging	(D)	(D)	(D)	(D)	7.44	(D)
Building Multi-Strand Wire Fence: (No Supplies Included)		(dollars)	(dollars)	(dollars)	(dollars)	
Per Rod	4	1.70 - 31.25	1/	15.96	13.51	118
Per Hour	5	20.00 - 200.00	20.00	61.00	(D)	(D)
Loader Work:		(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)	
Skid-Steer Loader	22	20.00 - 200.00	100.00	104.09	74.76	139
Tractor Loader	6	20.00 - 125.00	1/	67.50	63.46	106
Industrial Loader	8	75.00 - 200.00	1/	137.50	87.23	158

1/ Data not available due to multiple rates being reported at the highest frequency. (D) Withheld to avoid disclosing data for individual operations.

HISTORICAL DATA, STATEWIDE AVERAGES, NORTH DAKOTA, 1998 – 2024

Operation	1998	2001	2004	2007	2010	2013	2016	2020	2024
	($/acre)	($/acre)	($/acre)	($/acre)	($/acre)	($/acre)	($/acre)	($/acre)	($/acre)
Plowing (Moldboard)	7.48	7.22	8.44	9.65	10.03	11.88	10.88	10.50	12.78
Chisel Plowing	5.41	5.47	5.99	8.01	9.09	10.80	11.85	11.30	15.03
Field Cultivation	4.40	4.85	5.15	6.96	7.65	8.97	9.36	9.27	12.55
Small Grain Drilling:									
Regular, With Fertilizer	6.48	7.30	7.95	10.32	12.37	13.69	17.97	14.99	23.25
Regular, Without Fertilizer	6.27	6.38	7.18	9.53	10.93	13.24	16.94	14.28	18.26
Air Seeding, Without Fertilizer	7.92	8.50	9.49	11.46	13.24	14.35	16.67	16.13	17.43
No-Till Drilling, Without Fertilizer	9.00	9.19	10.26	12.14	14.37	15.06	17.80	16.47	21.04
Fertilizer Application									
Dry Fertilizer (Broadcast)	3.27	3.64	3.87	4.54	5.17	6.15	6.39	6.98	9.22
Liquid Fertilizer (Broadcast) [1]							6.92	7.38	9.47
Anhydrous Ammonia:									
With Knife Applicator	5.11	5.33	6.12	7.62	9.39	10.40	10.78	10.23	16.33
While Chiseling	5.79	6.32	6.61	8.76	10.00	12.44	15.16	13.33	18.00
Ground Application of:									
Liquid Herbicides (Broadcast)	3.32	3.89	4.07	4.69	5.44	6.35	6.57	7.32	9.23
Liquid Insecticides (Broadcast)	3.38	3.93	4.11	4.77	5.42	6.61	6.60	6.89	8.45
Haying:									
Mowing and Conditioning	6.76	7.06	7.14	8.95	9.73	10.78	12.90	12.12	15.53
Swathing	5.31	5.72	6.01	7.88	9.13	9.66	12.54	13.00	15.64
Raking	2.54	2.90	3.47	3.88	4.18	5.57	3.93	5.48	7.29
Loader Work:	($/hour)	($/hour)	($/hour)	($/hour)	($/hour)	($/hour)	($/hour)	($/hour)	($/hour)
Skid-Steer Loader	31.78	34.05	36.07	44.29	52.45	59.84	60.96	74.76	104.09

1/ Data series began in 2016.