

Crop and Weather Data: 2014

Growing Season Highlights

Below normal temperatures and precipitation were received during March with the month ending in blizzard conditions. This storm brought heavy snowfall which, along with cooler than normal temperatures, delayed spring planting.

Cool, wet conditions during the entire month of April delayed spring fieldwork even further as very little work occurred.

Continued cool, wet conditions delayed planting of crops until about the middle of May when drier conditions were finally experienced.

Even though some rainfall was received in early July, the amounts were minimal and drier conditions became

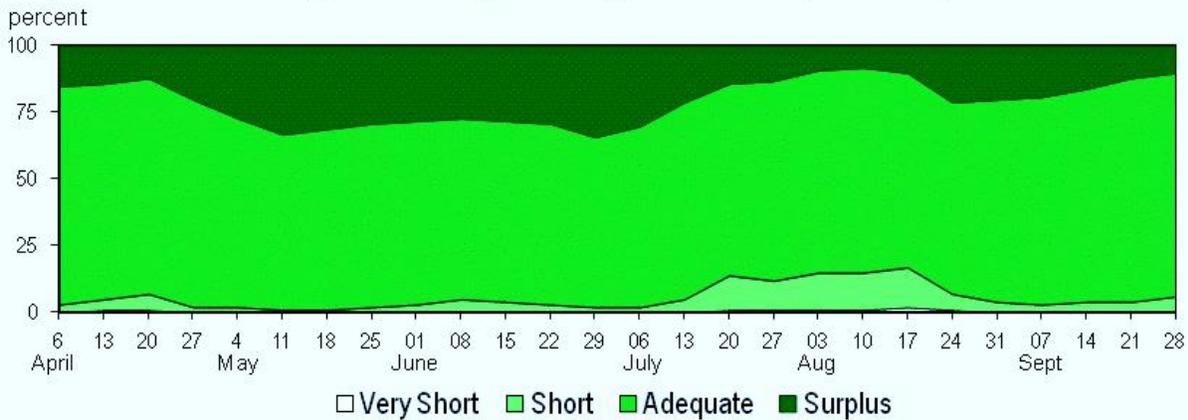
more prevalent allowing soils to finally start to dry up. Significant rainfall the last three weeks of August and into early September slowed harvest dramatically.

While the moisture during August and September was bad for the harvest of small grains, it was beneficial for row-crop development.

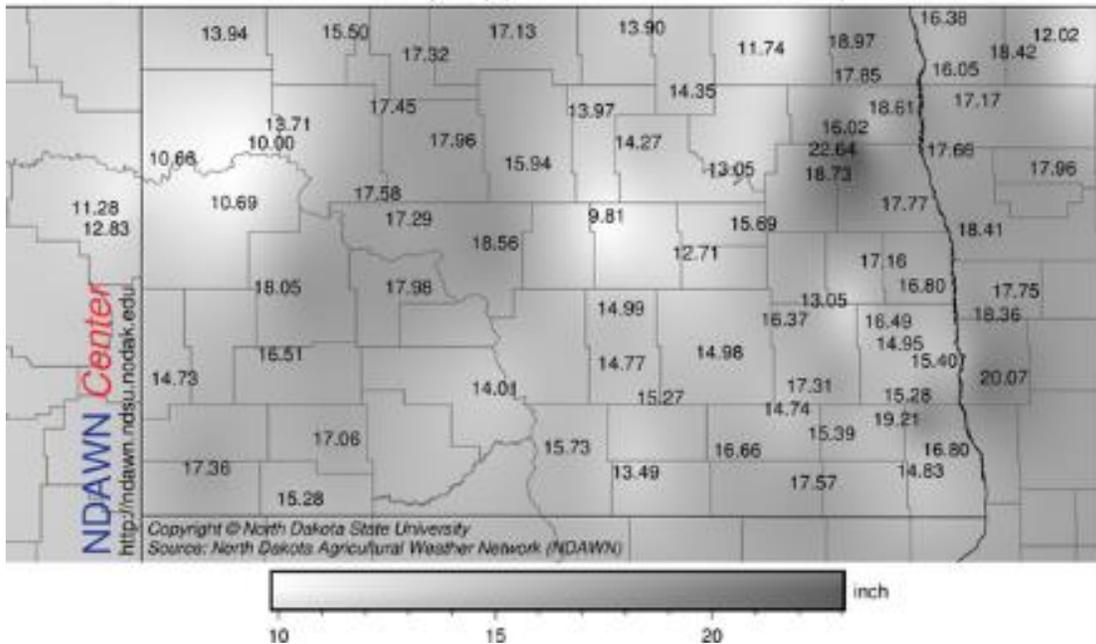
However, a hard freeze in early October virtually ended the growing season for all remaining crops.

Precipitation was above normal for most areas of the state during the 2014 crop year. The only exceptions were the southeast and extreme northwest corners of the state, both of which were below normal.

Topsoil Moisture Supplies during Growing Season – April to September: 2014



Total Rainfall (inch) (2014-04-01 – 2014-09-30)



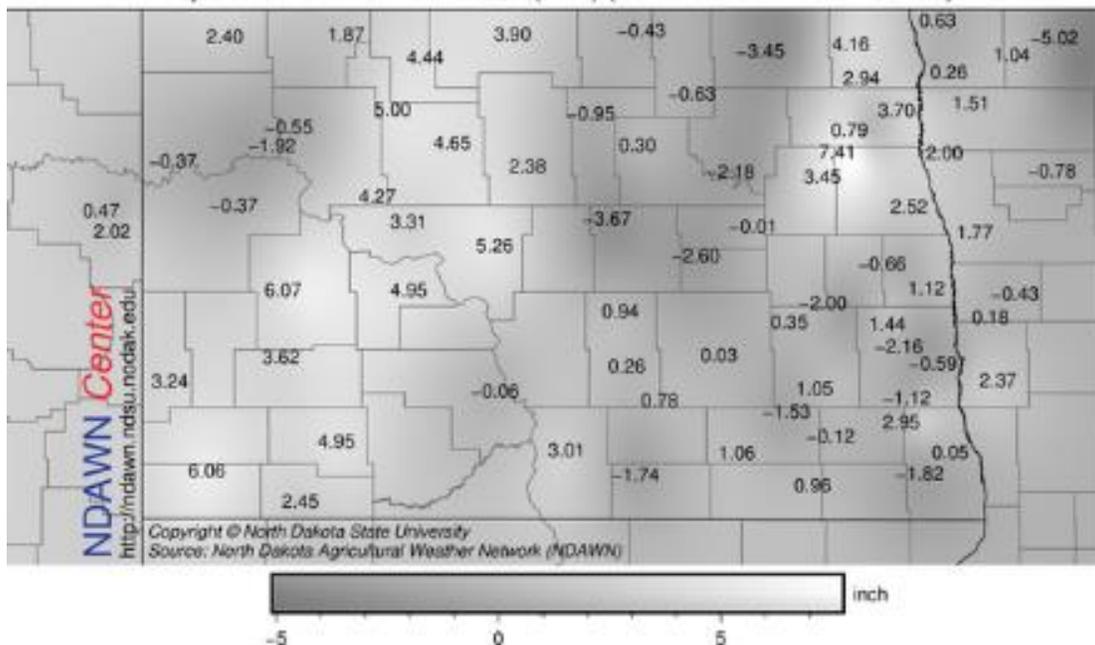
Precipitation

Monthly Precipitation by District – North Dakota: 2014 and 30-Year Average (1981-2010)

District	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	(inches)												
Northwest:													
2014	0.25	0.32	0.26	1.82	1.71	4.58	1.65	3.38	1.03	0.50	0.45	0.09	16.04
Average	0.52	0.38	0.69	1.03	2.24	3.10	2.72	1.78	1.39	1.14	0.60	0.51	16.11
North Central:													
2014	0.59	0.31	0.42	2.35	2.29	4.72	2.31	3.84	0.99	0.73	0.57	0.08	19.32
Average	0.52	0.43	0.75	1.05	2.42	3.48	2.86	2.18	1.55	1.36	0.73	0.58	17.90
Northeast:													
2014	0.66	0.28	0.70	2.42	2.94	5.43	3.01	3.30	1.44	0.50	0.25	0.17	20.98
Average	0.57	0.50	0.87	1.05	2.61	3.68	3.18	2.62	1.91	1.62	0.85	0.66	20.12
West Central:													
2014	0.22	0.18	0.61	1.66	3.78	4.18	1.21	5.93	1.32	0.69	0.56	0.20	20.42
Average	0.43	0.38	0.70	1.22	2.38	3.20	2.56	1.71	1.39	1.23	0.61	0.47	16.29
Central:													
2014	0.52	0.12	0.49	2.51	2.30	5.30	1.63	3.30	1.43	0.44	0.58	0.26	19.11
Average	0.48	0.46	0.82	1.16	2.60	3.42	3.15	2.23	1.85	1.51	0.70	0.52	18.90
East Central:													
2014	0.55	0.10	0.22	3.64	2.45	5.53	1.17	2.89	1.30	0.55	0.54	0.15	19.23
Average	0.56	0.49	1.02	1.24	2.83	3.57	3.36	2.62	2.34	1.96	0.79	0.60	21.39
Southwest:													
2014	0.21	0.30	1.00	1.55	3.12	3.89	1.17	6.06	1.60	0.61	0.52	0.24	20.27
Average	0.37	0.36	0.77	1.35	2.42	2.99	2.25	1.50	1.37	1.25	0.55	0.38	15.56
South Central:													
2014	0.25	0.19	0.61	1.95	1.67	4.42	0.95	5.69	0.92	0.45	0.55	0.21	18.00
Average	0.40	0.45	0.85	1.36	2.57	3.21	2.74	1.97	1.51	1.36	0.62	0.47	17.50
Southeast:													
2014	0.41	0.11	0.29	3.13	2.29	5.66	1.41	5.62	0.93	0.46	0.58	0.22	21.11
Average	0.54	0.51	1.11	1.58	2.88	3.53	3.24	2.40	2.33	1.93	0.75	0.54	21.35
State:													
2014	0.41	0.21	0.51	2.34	2.51	4.86	1.61	4.45	1.22	0.55	0.51	0.18	19.39
Average	0.49	0.44	0.83	1.22	2.53	3.34	2.87	2.09	1.71	1.46	0.68	0.52	18.18

Source: National Climatic Data Center

Departure from Normal Rainfall (inch) (2014-04-01 – 2014-09-30)



20 Temperature, Usual Planting and Harvesting Dates

Temperature

Monthly Temperature by District – North Dakota: 2014 and 30-Year Average (1981-2010)

District	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	(°F)												
Northwest:													
2014	10.3	5.1	22.5	38.4	54.2	61.8	67.4	67.6	57.6	46.9	20.1	18.2	39.2
Average	10.0	15.2	27.0	42.1	53.2	62.3	68.0	66.9	55.8	42.3	26.3	13.1	40.2
North Central:													
2014	2.0	0.2	17.5	35.3	52.6	62.0	65.6	66.5	57.3	44.9	17.4	13.6	36.2
Average	7.5	12.7	25.0	41.4	53.4	62.7	67.8	66.5	55.8	42.2	25.4	11.2	39.3
Northeast:													
2014	-0.3	0.3	15.3	35.4	53.0	63.9	66.7	66.9	57.6	45.3	19.5	15.8	36.6
Average	5.7	11.2	23.9	41.1	53.6	63.0	67.7	66.1	56.0	42.2	25.0	10.3	38.8
West Central:													
2014	11.2	7.6	24.4	38.7	53.3	61.5	66.6	67.1	58.1	46.8	20.2	20.1	39.6
Average	13.1	18.1	29.3	43.1	54.0	63.1	69.5	68.4	57.3	43.9	28.4	15.7	42.0
Central:													
2014	6.9	4.8	23.0	38.4	54.6	64.1	67.7	67.7	58.5	46.6	20.2	16.4	39.1
Average	9.3	14.4	26.6	42.0	54.1	63.4	69.0	67.4	56.9	43.4	26.8	13.2	40.5
East Central:													
2014	3.1	3.1	20.8	38.4	55.2	66.1	68.0	68.1	58.9	47.0	21.6	18.7	39.1
Average	8.3	13.8	26.8	43.0	55.5	64.6	69.6	67.8	57.8	44.2	27.3	12.8	41.0
Southwest:													
2014	17.0	10.5	26.6	39.4	53.8	60.9	67.3	66.5	57.4	47.3	22.7	23.6	41.1
Average	16.5	20.9	30.6	42.8	53.4	62.8	69.9	68.7	57.3	44.0	29.6	18.2	42.9
South Central:													
2014	12.4	8.6	25.2	39.0	53.9	61.9	66.8	66.7	58.4	47.0	21.0	20.0	40.1
Average	13.3	18.1	29.4	43.3	54.6	63.8	70.3	68.8	57.9	44.5	28.8	16.2	42.4
Southeast:													
2014	7.0	6.8	24.9	39.4	55.5	65.3	67.9	68.2	59.3	48.1	21.6	19.2	40.3
Average	10.9	16.2	28.4	43.4	55.6	64.8	70.3	68.4	58.1	44.8	28.6	15.0	42.0
State:													
2014	7.7	5.2	22.2	38.0	54.0	63.1	67.1	67.3	58.1	46.7	20.5	18.4	39.0
Average	10.6	15.7	27.5	42.4	54.1	63.3	69.1	67.6	56.9	43.4	27.3	14.0	41.0

Source: National Climatic Data Center

Planting-Harvesting Dates

Usual Planting and Harvesting Dates by Crop – North Dakota: 20-Year Average

(The dates shown indicate the periods in which the crops are planted and harvested in most years based on 20 years of historical crop progress estimates.)

Crop	Usual planting dates			Usual harvesting dates		
	(begin)	(most active)	(end)	(begin)	(most active)	(end)
Wheat, spring	April 16	April 24-May 25	June 3	August 1	August 8-September 13	September 25
Wheat, Durum	April 23	May 2-May 31	June 8	August 7	August 15-September 23	October 5
Wheat, winter	September 6	September 10-September 25	October 2	July 15	July 20-July 29	August 10
Barley	April 19	April 26-May 25	June 3	July 28	August 4-September 3	September 16
Oats	April 19	April 26-May 25	June 3	July 28	August 5-September 5	September 18
Sunflower	May 14	May 19-June 8	June 15	October 1	October 9-November 10	November 23
Soybeans	May 7	May 14-June 3	June 11	September 17	September 24-October 21	November 5
Flaxseed	April 30	May 7-June 3	June 12	August 17	August 26-October 3	October 15
Corn for grain	April 26	May 2-May 28	June 4	September 28	October 8-November 19	December 6
Corn for silage	April 26	May 2-May 28	June 4	August 27	September 6-October 5	October 14
Beans, dry edible	May 14	May 19-June 6	June 13	August 30	September 7-October 11	October 26
Potatoes	April 28	May 5-May 30	June 6	September 2	September 10-October 7	October 16
Sugarbeets	April 19	April 24-May 18	May 26	September 17	September 30-October 17	October 25
Hay, alfalfa	(NA)	(NA)	(NA)	June 10	(NA)	September 6
Hay, other	(NA)	(NA)	(NA)	June 19	(NA)	September 2

(NA) Not available.

Growing Season Average

Length of Growing Season at Temperatures of 28°F and 32°F or above – North Dakota

(Based on data for selected stations. Number of years used in average ranges by station from 26-78 years.)

Station	County	Average date of last spring frost		Average date of first frost in fall		Average number of days in growing season		Number of years in average
		28°	32°	32°	28°	32°	28°	
Northwest:								
		(date)	(date)	(date)	(date)	(days)	(days)	(years)
Crosby.....	Divide	May 10	May 18	September 16	September 23	120	137	63
Minot Exp.	Ward	May 12	May 20	September 17	September 26	119	137	69
Mohall.....	Renville	May 11	May 18	September 16	September 23	122	135	44
Parshall.....	Mountrail	May 15	May 21	September 12	September 18	114	126	59
Powers Lake.....	Burke	May 15	May 23	September 11	September 23	111	133	41
Williston.....	Williams	May 4	May 13	September 22	September 28	132	146	78
North Central:								
Bottineau.....	Bottineau	May 15	May 21	September 15	September 23	116	130	70
Granville.....	McHenry	May 13	May 19	September 15	September 25	119	134	65
Maddock.....	Benson	May 15	May 23	September 13	September 21	113	129	53
Towner.....	McHenry	May 14	May 21	September 12	September 21	114	129	54
Northeast:								
Grafton.....	Walsh	May 9	May 18	September 19	September 25	123	139	70
Grand Forks.....	Grand Forks	May 6	May 16	September 23	September 29	130	146	66
Hansboro.....	Towner	May 17	May 27	September 11	September 18	106	124	65
Langdon Exp.....	Cavalier	May 17	May 28	September 13	September 21	109	126	69
Pembina.....	Pembina	May 12	May 21	September 17	September 25	119	135	70
West Central:								
Dunn Center.....	Dunn	May 12	May 17	September 18	September 27	122	137	50
Garrison.....	McLean	May 8	May 18	September 19	September 25	124	139	62
Washburn.....	McLean	May 6	May 13	September 24	October 1	137	148	26
Watford City.....	McKenzie	May 7	May 13	September 19	September 27	127	141	34
Central:								
Fessenden.....	Wells	May 8	May 17	September 18	September 26	123	140	40
Jamestown.....	Stutsman	May 5	May 15	September 20	September 29	128	146	73
McClusky.....	Sheridan	May 11	May 20	September 18	September 26	120	137	54
Pettibone.....	Kidder	May 13	May 22	September 12	September 17	111	124	46
East Central:								
Amenia.....	Cass	May 6	May 15	September 23	September 28	130	144	73
Cooperstown.....	Griggs	May 11	May 21	September 19	September 26	121	138	49
Fargo.....	Cass	May 4	May 12	September 26	October 2	137	151	66
Mayville.....	Traill	May 8	May 17	September 24	October 2	129	147	57
Southwest:								
Beach.....	Golden Valley	May 12	May 20	September 18	September 27	121	138	58
Bowman.....	Bowman	May 6	May 14	September 21	September 30	130	146	52
Dickinson Exp.....	Stark	May 12	May 19	September 14	September 22	117	132	72
Hettinger.....	Adams	May 11	May 18	September 20	September 27	124	137	36
Marmarth.....	Slope	May 11	May 16	September 15	September 23	122	136	43
South Central:								
Carson #2.....	Grant	May 11	May 19	September 15	September 24	119	135	59
Mandan Exp.....	Morton	May 7	May 12	September 23	September 28	133	144	59
Southeast:								
Edgeley Exp.....	LaMoure	May 11	May 18	September 19	September 28	123	139	66
Lisbon.....	Ransom	May 10	May 19	September 20	September 27	123	139	64
McLeod.....	Ransom	May 9	May 15	September 22	September 29	129	143	62
Napoleon.....	Logan	May 14	May 21	September 16	September 23	118	132	72
Oakes.....	Dickey	May 5	May 13	September 23	October 1	133	149	46
Wahpeton.....	Richland	May 4	May 13	September 25	October 3	136	151	65

Source: National Climatic Data Center.

