

NW RESEARCH & OUTREACH CENTER, CROOKSTON, MN.

Month January 2004

	Temperatures		Precip.	Sky	Wind
	Max.	Min.			
1	27	9		PCL	S
2	29	-5	0.09	CL	E
3	-1	-12		C	NW
4	-5	-21		C	NW
5	0	-21		C	NW
6	10	-11		C	S
7	4	-9		C	S
8	13	-2		C	NE
9	22	12	T	CL	E
10	26	18		CL	S
11	24	12		CL	N
12	30	-7	0.01	CL	N
13	21	-7		C	NW
14	12	-3		C	NW
15	23	11		C	S
16	27	10		CL	SE
17	17	-15		C	NW
18	-3	-15		C	NW
19	9	-6		CL	S
20	27	-2	0.01	CL	S
21	0	-14		CL	N
22	5	-11		C	NW
23	8	-20	0.05	CL	SE
24	9	-15		C	N
25	10	-9	0.1	CL	E
26	13	-25	0.01	CL	E
27	-6	-30	0.04	PCL	NW
28	-20	-30		C	W
29	-20	-35		C	NW
30	-8	-32		C	NW
31	2	-9	0.05	CL	S

Number of Days

C - Clear	<u>16</u>
PCL - P.Cloudy	<u>2</u>
CL - Cloudy	<u>13</u>

Recorded by:  
James Cameron  
Research Plot Coordinator  
NW Research & Outreach Center  
University of Minnesota  
Crookston, Mn. 56716

High Temperature for the Month 30 on January 12

Low Temperature for the Month -35 on January 29

		2004	2003	114 Yr. Avg.
<u>January</u>	Avg. Temperature (F)	0.2	7.7	5.3
<u>January</u>	Precipitation (Inches)	0.36	0.15	0.44

NW RESEARCH & OUTREACH CENTER, CROOKSTON, MN.

Month February 2004

	Temperatures		Precip.	Sky	Wind
	Max.	Min.			
1	7	-22		CL	NW
2	3	-32		CL	SE
3	-2	-25		C	NW
4	21	-15		PCL	S
5	24	6		C	N
6	7	-20	0.02	CL	NW
7	15	-16		C	S
8	27	14	0.02	CL	S
9	21	-17	0.01	CL	NE
10	17	-10		C	S
11	17	-11	0.03	CL	N
12	15	-8		C	S
13	28	-11		C	S
14	2	-23		C	NE
15	11	-8		C	S
16	24	-11		C	W
17	25	-5		C	S
18	35	15		CL	S
19	36	27		CL	S
20	30	7	T	CL	NW
21	33	12		CL	S
22	29	23		CL	S
23	33	24		CL	S
24	30	25		CL	S
25	31	27		CL	S
26	37	28		PCL	S
27	40	30		CL	S
28	40	30		CL	S
29	35	32		CL	S

Number of Days

C - Clear	<u>12</u>
PCL - P.Cloudy	<u>2</u>
CL - Cloudy	<u>15</u>

Recorded by:  
James Cameron  
Research Plot Coordinator  
NW Research & Outreach Center  
University of Minnesota  
Crookston, Mn. 56716

High Temperature for the Month 40 on February 27 & 28

Low Temperature for the Month -32 on February 2

		2004	2003	114 Yr. Avg.
February	Avg. Temperature (F)	12.7	4.8	10.4
February	Precipitation (Inches)	0.08	0.24	0.54
Jan-Feb.	Precipitation (Inches)	0.44	0.39	0.98

NW RESEARCH & OUTREACH CENTER, CROOKSTON, MN.

Month March 2004

	Temperatures		Precip.	Sky	Wind
	Max.	Min.			

NW RESEARCH & OUTREACH CENTER, CROOKSTON, MN.

Month March 2004

	Temperatures		Precip.	Sky	Wind
	Max.	Min.			
1	35	23	0.25	CL	NW
2	32	23		CL	N
3	26	-3	0.05	CL	N
4	27	6		C	S
5	31	15	0.1	CL	N
6	30	20		CL	S
7	33	9		PCL	N
8	37	11		C	S
9	40	25		C	S
10	36	-5	0.14	CL	N
11	13	-4		CL	N
12	35	12		C	S
13	40	23	0.05	CL	S
14	30	12		C	N
15	32	15		C	S
16	33	11	0.02	CL	S
17	33	12	0.13	C	S
18	37	21		PCL	S
19	46	12		C	S
20	35	10		C	S
21	24	6		C	S
22	40	15		C	S
23	39	20		C	SE
24	48	31		PCL	NW
25	57	21		C	S
26	47	28		PCL	S
27	53	36		CL	S
28	48	29	0.02	CL	NW
29	32	22	T	CL	NW
30	39	25		C	N
31	53	32		C	S

Number of Days

C - Clear	<u>15</u>
PCL - P.Cloudy	<u>3</u>
CL - Cloudy	<u>13</u>

Recorded by:  
 James Cameron  
 Research Plot Coordinator  
 NW Research & Outreach Center  
 University of Minnesota  
 Crookston, Mn. 56716

High Temperature for the Month 57 on March 25

Low Temperature for the Month -5 on March 10

	2004	2003	114 Yr. Avg.
March Avg. Temperature (F)	26.7	23.6	23.8
March Precipitation (Inches)	0.76	0.86	0.74
Jan-Mar. Precipitation (Inches)	1.2	1.25	1.72

NW RESEARCH & OUTREACH CENTER, CROOKSTON, MN.

Month April 2004

	Temperatures		Precip.	Sky	Wind
	Max.	Min.			
1	57	32		C	S
2	56	29		C	E
3	43	25		C	S
4	52	29		C	S
5	65	30		C	S
6	63	33		C	S
7	52	27	0.06	CL	S
8	40	28		C	N
9	32	20		CL	NW
10	33	23		C	NE
11	35	26		C	N
12	45	31		CL	S
13	51	33		C	N
14	53	35		CL	S
15	57	31	0.02	CL	SE
16	58	32		CL	N
17	52	40		PCL	SE
18	51	32	0.01	CL	SE
19	54	34		C	S
20	54	37	0.19	CL	S
21	45	32	0.15	PCL	NW
22	55	30		C	S
23	50	25		CL	S
24	66	36		C	S
25	61	30		C	NW
26	47	34		CL	NW
27	78	44		C	S
28	83	31		C	S
29	49	32		CL	NW
30	53	33		CL	N

Number of Days

C - Clear	<u>17</u>
PCL - P.Cloudy	<u>1</u>
CL - Cloudy	<u>12</u>

Recorded by:  
James Cameron  
Research Plot Coordinator  
NW Research & Outreach Center  
University of Minnesota  
Crookston, Mn. 56716

High Temperature for the Month 83 on April 28

Low Temperature for the Month 20 on April 9

	2004	2003	114 Yr. Avg.
April Avg. Temperature (F)	42.1	43.6	41.6
April Precipitation (Inches)	0.43	0.75	1.41
Jan-Apr. Precipitation (Inches)	1.63	2	3.13

NW RESEARCH & OUTREACH CENTER, CROOKSTON, MN.

Month May 2004

	Temperatures		Precip.	Sky	Wind
	Max.	Min.			
1	54	23		C	SE
2	53	31		C	N
3	68	31		CL	S
4	56	33		C	N
5	81	35	0.05	C	S
6	55	31		PCL	NW
7	63	43		PCL	S
8	76	55		C	S
9	70	39	0.32	C	S
10	55	37		C	N
11	40	38	1.72	CL	E
12	43	30	0.87	CL	NW
13	38	30		CL	NW
14	50	34		C	N
15	57	39	0.6	PCL	S
16	55	42	0.1	PCL	N
17	62	36		PCL	N
18	73	46		C	C
19	68	43	0.9	CL	S
20	61	44		C	N
21	65	45		CL	S
22	64	50	0.07	CL	E
23	58	46		CL	NE
24	51	42	0.45	CL	E
25	52	44		CL	N
26	73	40		CL	N
27	61	38	0.01	PCL	NW
28	72	49		C	S
29	71	53	2	CL	S
30	62	54	0.87	CL	E
31	60	50	0.06	CL	E

Number of Days

C - Clear	<u>12</u>
PCL - P.Cloudy	<u>5</u>
CL - Cloudy	<u>14</u>

Recorded by:  
James Cameron  
Research Plot Coordinator  
NW Research & Outreach Center  
University of Minnesota  
Crookston, Mn. 56716

High Temperature for the Month 81 on May 5

Low Temperature for the Month 23 on May 1

		2004	2003	114 Yr. Avg.
<u>May</u>	Avg. Temperature (F)	<u>50.3</u>	<u>55.5</u>	<u>54.6</u>
<u>May</u>	Precipitation (Inches)	<u>8.02</u>	<u>3.41</u>	<u>2.52</u>
<u>Jan-May</u>	Precipitation (Inches)	<u>9.65</u>	<u>5.41</u>	<u>5.65</u>

NW RESEARCH & OUTREACH CENTER, CROOKSTON, MN.

Month May 2004

	Temperatures		Precip.	Sky	Wind
	Max.	Min.			
1	54	23		C	SE
2	53	31		C	N
3	68	31		CL	S
4	56	33		C	N
5	81	35	0.05	C	S
6	55	31		PCL	NW
7	63	43		PCL	S
8	76	55		C	S
9	70	39	0.32	C	S
10	55	37		C	N
11	40	38	1.72	CL	E
12	43	30	0.87	CL	NW
13	38	30		CL	NW
14	50	34		C	N
15	57	39	0.6	PCL	S
16	55	42	0.1	PCL	N
17	62	36		PCL	N
18	73	46		C	C
19	68	43	0.9	CL	S
20	61	44		C	N
21	65	45		CL	S
22	64	50	0.07	CL	E
23	58	46		CL	NE
24	51	42	0.45	CL	E
25	52	44		CL	N
26	73	40		CL	N
27	61	38	0.01	PCL	NW
28	72	49		C	S
29	71	53	2	CL	S
30	62	54	0.87	CL	E
31	60	50	0.06	CL	E

Number of Days

C - Clear	<u>12</u>
PCL - P.Cloudy	<u>5</u>
CL - Cloudy	<u>14</u>

Recorded by:  
James Cameron  
Research Plot Coordinator  
NW Research & Outreach Center  
University of Minnesota  
Crookston, Mn. 56716

High Temperature for the Month 81 on May 5

Low Temperature for the Month 23 on May 1

		2004	2003	114 Yr. Avg.
<u>May</u>	Avg. Temperature (F)	50.3	55.5	54.6
<u>May</u>	Precipitation (Inches)	8.02	3.41	2.52
<u>Jan-May</u>	Precipitation (Inches)	9.65	5.41	5.65

NW RESEARCH & OUTREACH CENTER, CROOKSTON, MN.

Month July 2004

	Temperatures		Precip.	Sky	Wind
	Max.	Min.			
1	81	56		C	E
2	83	66	1.6	CL	SE
3	85	53	0.23	PCL	S
4	61	52		CL	NW
5	59	48	0.32	CL	NE
6	58	46	0.5	CL	N
7	70	49		PCL	N
8	72	57		CL	S
9	80	57		C	S
10	83	60	0.6	PCL	S
11	84	63		C	S
12	85	59	0.16	PCL	S
13	78	59		C	W
14	82	63		C	n
15	86	60	0.05	PCL	N
16	80	55		C	N
17	80	62		C	N
18	83	61	0.04	C	S
19	88	65		C	S
20	85	70		PCL	E
21	87	51		C	S
22	72	48		PCL	E
23	70	47		PCL	E
24	80	52		PCL	S
25	83	56		C	S
26	80	60		C	S
27	83	62		PCL	S
28	77	55	0.37	CL	S
29	68	47		PCL	NW
30	70	44		C	S
31	78	55		C	S

Number of Days

C - Clear	<u>14</u>
PCL - P.Cloudy	<u>11</u>
CL - Cloudy	<u>6</u>

Recorded by:  
James Cameron  
Research Plot Coordinator  
NW Research & Outreach Center  
University of Minnesota  
Crookston, Mn. 56716

High Temperature for the Month 88 on July 19

Low Temperature for the Month 44 on July 6

		2004	2003	114 Yr. Avg.
July	Avg. Temperature (F)	66.9	68.9	69.6
July	Precipitation (Inches)	3.87	2.78	3.38
Jan-July	Precipitation (Inches)	14.91	13.24	12.89

NW RESEARCH & OUTREACH CENTER, CROOKSTON, MN.

Month August 2004

	Temperatures		Precip.	Sky	Wind
	Max.	Min.			
1	84	59		C	NW
2	80	54	0.08	C	E
3	78	50		C	S
4	77	49		C	S
5	78	53		C	N
6	68	60	1.35	CL	S
7	73	59		PCL	S
8	78	56	0.02	CL	S
9	58	46	0.24	CL	NW
10	57	47		CL	NW
11	66	43		C	N
12	70	47		C	S
13	72	42		C	NW
14	76	51		C	S
15	75	52		CL	S
16	76	55		C	S
17	80	57		CL	NW
18	62	42		PCL	NW
19	76	34		C	S
20	65	37		C	NW
21	72	46		C	S
22	67	42		PCL	NW
23	69	49	0.01	CL	S
24	77	45	0.5	CL	S
25	75	52		C	S
26	74	55	2.37	CL	S
27	68	44		CL	W
28	71	48	0.1	C	S
29	72	50	0.15	CL	S
30	74	52		C	NW
31	75	51		PCL	S

Number of Days

C - Clear	<u>17</u>
PCL - P.Cloudy	<u>3</u>
CL - Cloudy	<u>11</u>

Recorded by:  
James Cameron  
Research Plot Coordinator  
NW Research & Outreach Center  
University of Minnesota  
Crookston, Mn. 56716

High Temperature for the Month 84 on August 1

Low Temperature for the Month 34 on August 19

		2004	2003	114 Yr. Avg.
<u>August</u>	Avg. Temperature (F)	60.8	71.3	67.7
<u>August</u>	Precipitation (Inches)	4.82	1.12	3.07
<u>Jan-Aug.</u>	Precipitation (Inches)	19.73	14.36	15.96



NW RESEARCH & OUTREACH CENTER, CROOKSTON, MN.

Month September 2004

	Temperatures		Precip.	Sky	Wind
	Max.	Min.			
1	80	56		C	SE
2	90	60		PCL	S
3	79	63		PCL	S
4	70	57	0.37	CL	S
5	67	53	0.5	CL	S
6	64	45	0.28	C	NW
7	63	47		CL	NW
8	68	51		C	S
9	76	53		C	S
10	80	46		C	S
11	65	48		C	NW
12	86	64		C	S
13	75	50	0.55	PCL	S
14	62	47		C	NW
15	54	39	0.45	CL	NW
16	69	42		C	S
17	76	54		C	S
18	80	68		C	S
19	89	66		C	S
20	69	50	1.04	CL	S
21	58	44	0.07	CL	NW
22	56	49	0.17	PCL	NW
23	61	50	0.65	CL	N
24	68	47		CL	NW
25	75	49		C	S
26	82	44		C	S
27	63	32		C	NW
28	66	36		C	S
29	70	48		C	S
30	62	37	0.05	CL	NW

Number of Days

C - Clear	<u>17</u>
PCL - P.Cloudy	<u>5</u>
CL - Cloudy	<u>8</u>

Recorded by:  
James Cameron  
Research Plot Coordinator  
NW Research & Outreach Center  
University of Minnesota  
Crookston, Mn. 56716

High Temperature for the Month 90 on September 2

Low Temperature for the Month 32 on September 27

	2004.0	2003	114 Yr. Avg.
<u>September</u> Avg. Temperature (F)	60.3	56.7	57.3
<u>September</u> Precipitation (Inches)	4.13	3.67	2.2
<u>Jan-Sept.</u> Precipitation (Inches)	23.86	18.03	18.16

NW RESEARCH & OUTREACH CENTER, CROOKSTON, MN.

Month October 2004

	Temperatures		Precip.	Sky	Wind
	Max.	Min.			
1	46	30	0.04	CL	NW
2	62	30		C	NW
3	55	26		C	NW
4	51	27		C	NW
5	73	38		C	S
6	80	49		C	S
7	67	50		C	S
8	67	33	0.01	PCL	N
9	70	38		C	S
10	75	45		C	S
11	69	42		C	S
12	68	41	0.01	C	S
13	48	28		PCL	NW
14	43	32	0.2	CL	S
15	38	30	0.08	CL	NW
16	33	29		CL	NW
17	36	29		CL	NE
18	48	33		C	SE
19	47	36	0.27	CL	S
20	51	36		CL	NW
21	54	48	0.02	CL	S
22	55	40	0.03	CL	S
23	49	32	0.32	CL	NW
24	46	31	0.13	CL	S
25	50	31		C	S
26	52	31		C	S
27	50	33		CL	E
28	54	47	0.5	CL	E
29	55	37	1.14	CL	NE
30	38	32	0.48	CL	NW
31	40	35		CL	S

Number of Days

C - Clear	<u>13</u>
PCL - P.Cloudy	<u>2</u>
CL - Cloudy	<u>16</u>

Recorded by:  
 James Cameron  
 Research Plot Coordinator  
 NW Research & Outreach Center  
 University of Minnesota  
 Crookston, Mn. 56716

High Temperature for the Month 80 on October 6

Low Temperature for the Month 26 on October 3

		2004	2003	114 Yr. Avg.
October	Avg. Temperature (F)	44.7	47.2	44.2
October	Precipitation (Inches)	3.2	1.48	1.61
Jan-Oct.	Precipitation (Inches)	27.09	19.51	19.77

NW RESEARCH & OUTREACH CENTER, CROOKSTON, MN.

Month November 2004

	Temperatures		Precip.	Sky	Wind
	Max.	Min.			
1	45	28		PCL	S
2	47	32		C	NW
3	52	32		C	S
4	47	33		C	NW
5	57	35		C	S
6	55	28		PCL	S
7	42	26		C	NW
8	35	29		CL	S
9	52	32		C	S
10	39	17		C	N
11	39	19		C	W
12	42	25		C	S
13	48	30		C	S
14	47	30		C	S
15	48	34		C	S
16	52	31		C	S
17	39	29		C	N
18	48	23		C	N
19	40	25		PCL	S
20	40	21		CL	N
21	42	23		CL	NW
22	42	23		CL	S
23	30	14		C	NW
24	32	15		C	N
25	30	23	T	CL	SE
26	32	8	0.15	CL	S
27	31	9		C	N
28	24	4		C	N
29	35	15		C	S
30	35	12		C	S

Number of Days

C - Clear	21
PCL - P.Cloudy	<hr/> 3
CL - Cloudy	<hr/> 6

Recorded by:  
James Cameron  
Research Plot Coordinator  
NW Research & Outreach Center  
University of Minnesota  
Crookston, Mn. 56716

High Temperature for the Month 57 on November 5

Low Temperature for the Month 4 on November 28

		2004	2003	114 Yr. Avg.
November	Avg. Temperature (F)	32.5	21.9	26.1
November	Precipitation (Inches)	0.15	0.32	0.86
Jan-Nov.	Precipitation (Inches)	27.2	19.83	20.63

NW RESEARCH & OUTREACH CENTER, CROOKSTON, MN.

Month December 2004

	Temperatures		Precip.	Sky	Wind
	Max.	Min.			
1	17	3	0.1	CL	NW
2	27	0		C	N
3	42	20	0.05	CL	SW
4	24	10		CL	NW
5	30	20		CL	NE
6	32	25	0.06	CL	E
7	27	18		CL	N
8	31	20	T	CL	S
9	32	15	0.05	CL	E
10	21	15		CL	N
11	39	7		CL	S
12	25	-1	0.04	CL	NW
13	10	-1		C	NW
14	30	8		C	S
15	35	17		CL	W
16	18	3		C	N
17	40	4	0.03	C	S
18	15	-16		CL	NW
19	27	-10	T	CL	S
20	40	-7	0.07	C	S
21	-1	-14		C	NW
22	-3	-15		C	NW
23	-2	-16		C	NW
24	7	-8		C	S
25	6	-7	T	CL	S
26	20	-3	0.03	PCL	S
27	24	18		CL	S
28	28	22		CL	NW
29	27	18		CL	S
30	32	7	0.4	CL	E
31	17	3	0.05	CL	NW

Number of Days

C - Clear	<u>9</u>
PCL - P.Cloudy	<u>1</u>
CL - Cloudy	<u>21</u>

Recorded by:  
 James Cameron  
 Research Plot Coordinator  
 NW Research & Outreach Center  
 University of Minnesota  
 Crookston, Mn. 56716

High Temperature for the Month 42 on December 3

Low Temperature for the Month -16 on December 18 & 23

		2004	2003	114 Yr. Avg.
December	Avg. Temperature (F)	14.065	17.2	11.6
December	Precipitation (Inches)	0.88	0.63	0.56
Jan-Dec.	Precipitation (Inches)	28.1	20.46	21.19