

**Nongrowing season (10/1/2011-4/30/2012)**

**University of MN Southwest Research and Outreach Center, Lamberton**

**<http://swroc.cfans.umn.edu>; 507-752-7372 (Phone)**

mo	day	Tair Max F	Tair Low F	HDD	Cum HDD	Precip (in.)	Snow (in.)	Precip 2012	Soil Temperatures						Solar	Wind Run
									2" Max	2" Min	4" Max	4" Min	8" Max	8" Min		
1	1	43	25	31	2504	0.12	0.20	0.12	37	32	34	31	34	30	81	257
1	2	28	14	44	2548	0.00	0.00	0.12	32	28	32	30	33	30	78	300
1	3	20	7	52	2599	0.00	0.00	0.12	29	23	30	25	31	27	180	139
1	4	39	16	38	2637	0.00	0.00	0.12	29	23	28	24	29	26	151	230
1	5	47	23	30	2667	0.00	0.00	0.12	30	26	30	27	29	28	158	131
1	6	57	33	20	2687	0.00	0.00	0.12	31	29	30	28	29	28	154	167
1	7	49	23	29	2717	0.00	0.00	0.12	33	31	31	30	30	29	141	160
1	8	43	16	36	2752	0.00	0.00	0.12	31	27	31	30	31	29	175	101
1	9	45	15	35	2787	0.00	0.00	0.12	31	27	30	28	30	29	182	242
1	10	56	28	23	2810	0.00	0.00	0.12	31	30	31	29	31	29	181	170
1	11	58	27	23	2833	0.00	0.00	0.12	33	30	32	30	32	30	186	159
1	12	34	5	45	2878	0.03	0.60	0.15	31	28	31	30	32	29	69	270
1	13	9	-3	62	2940	0.00	0.00	0.15	28	21	30	23	31	27	61	219
1	14	17	-4	58	2998	0.01	0.00	0.16	26	20	26	22	27	25	192	91
1	15	34	16	40	3038	0.00	0.00	0.16	29	23	28	24	28	24	110	116
1	16	46	19	33	3071	0.00	0.00	0.16	30	23	29	24	28	24	198	193
1	17	22	5	52	3123	0.06	0.70	0.22	29	23	28	24	28	25	141	232
1	18	9	-7	64	3187	0.00	0.00	0.22	24	18	25	19	26	21	199	165
1	19	28	-11	56	3243	0.00	0.00	0.22	25	15	24	18	25	21	160	275
1	20	5	-12	69	3312	0.13	2.50	0.35	20	14	20	16	22	20	215	86
1	21	10	-15	68	3380	0.02	0.50	0.37	23	19	23	19	24	21	147	104
1	22	24	-11	58	3438	0.00	0.00	0.37	26	22	25	22	25	22	139	205
1	23	29	22	39	3478	0.04	0.20	0.41	27	25	27	25	27	24	42	150
1	24	23	20	44	3521	0.00	0.00	0.41	28	27	27	27	27	25	75	178
1	25	26	19	43	3564	0.07	1.50	0.48	28	28	28	27	27	27	116	80
1	26	36	25	34	3598	0.00	0.00	0.48	29	28	28	28	28	27	114	248
1	27	40	19	36	3634	0.00	0.00	0.48	30	29	29	28	28	27	222	155
1	28	36	18	38	3672	0.00	0.00	0.48	30	29	29	28	29	25	62	259
1	29	34	16	40	3712	0.00	0.10	0.48	30	29	29	28	29	26	239	186
1	30	33	16	40	3753	0.00	0.00	0.48	30	29	29	29	29	27	208	162
1	31	53	26	25	3778	0.00	0.00	0.48	31	29	30	28	30	28	208	153
<b>Monthly Total</b>				<b>1305</b>		<b>0.48</b>	<b>6.30</b>								<b>4583</b>	<b>5583</b>
<b>Monthly Ave.</b>		<b>33</b>	<b>12</b>						<b>29</b>	<b>25</b>	<b>28</b>	<b>26</b>	<b>29</b>	<b>26</b>		
<b>Historic Ave.</b>		<b>23</b>	<b>3</b>		<b>4540</b>	<b>0.61</b>			<b>29</b>	<b>26</b>	<b>29</b>	<b>28</b>	<b>29</b>	<b>28</b>		

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mo	day	Tair Max F	Tair Low F	HDD	Cum HDD	Precip (in.)	Snow (in.)	Precip 2012	Soil Temperatures				Solar	Wind Run		
									2" Max	2" Min	4" Max	4" Min			8" Max	8" Min
2	1	48	23	30	3808	0.00	0.00	0.48	31	31	31	30	30	29	226	119
2	2	55	24	26	3833	0.00	0.00	0.48	31	31	31	30	30	29	221	110
2	3	50	22	29	3863	0.00	0.00	0.48	31	31	31	30	30	29	212	81
2	4	31	25	37	3900	0.00	0.00	0.48	31	31	31	30	30	30	33	11
2	5	36	23	35	3935	0.00	0.00	0.48	31	31	31	30	30	29	163	87
2	6	43	23	32	3967	0.00	0.00	0.48	31	30	31	30	30	29	166	109
2	7	49	23	29	3996	0.00	0.00	0.48	31	29	31	30	30	29	269	213
2	8	29	4	49	4044	0.00	0.00	0.48	31	22	31	26	30	28	136	167
2	9	34	3	47	4091	0.00	0.00	0.48	30	21	30	24	30	28	283	108
2	10	42	1	44	4135	0.00	0.00	0.48	30	20	30	23	29	26	286	285
2	11	12	-3	61	4196	0.00	0.00	0.48	27	13	27	16	28	20	289	225
2	12	21	-4	56	4252	0.00	0.00	0.48	27	13	26	16	26	20	299	141
2	13	33	-2	49	4301	0.00	0.00	0.48	28	14	27	16	26	19	306	235
2	14	28	12	45	4346	0.03	0.40	0.51	28	24	27	25	27	25	88	121
2	15	39	17	37	4383	0.00	0.00	0.51	30	24	29	25	28	22	155	149
2	16	37	20	37	4420	0.00	0.00	0.51	30	24	29	25	28	26	69	81
2	17	41	20	34	4454	0.00	0.00	0.51	30	24	29	25	29	26	275	167
2	18	37	10	41	4496	0.00	0.00	0.51	30	23	29	24	28	26	244	149
2	19	43	11	38	4534	0.00	0.00	0.51	31	22	30	24	28	24	320	112
2	20	44	20	33	4567	0.00	0.00	0.51	31	25	30	26	29	26	306	216
2	21	38	31	30	4597	0.25	0.00	0.76	31	30	30	29	29	24	48	235
2	22	36	24	35	4632	0.00	0.00	0.76	31	31	31	30	30	27	246	190
2	23	41	24	32	4664	0.00	0.00	0.76	32	31	31	30	30	28	211	52
2	24	31	22	32	4696	0.00	0.00	0.76	31	31	31	30	30	28	58	127
2	25	28	8	39	4735	0.00	0.00	0.76	31	30	31	30	30	28	286	203
2	26	27	8	47	4782	0.00	0.00	0.76	31	30	30	29	30	28	364	245
2	27	34	12	48	4830	0.00	0.00	0.76	31	28	30	28	30	25	88	370
2	28	30	12	42	4872	0.00	0.00	0.76	30	27	30	27	29	27	355	134
2	29	32	29	44	4916	1.45	0.20	2.21	31	30	30	29	30	26	33	97
<b>Monthly Total</b>				<b>1138</b>		<b>1.73</b>	<b>0.60</b>								<b>6033</b>	<b>4536</b>
<b>Monthly Ave.</b>		<b>36</b>	<b>15</b>						<b>30</b>	<b>26</b>	<b>30</b>	<b>26</b>	<b>29</b>	<b>26</b>		
<b>Historic Ave.</b>		<b>28</b>	<b>8</b>		<b>5892</b>	<b>0.59</b>			<b>29</b>	<b>27</b>	<b>30</b>	<b>29</b>	<b>29</b>	<b>28</b>		

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mo	day	Tair Max F	Tair Low F	HDD	Cum HDD	Precip (in.)	Snow (in.)	Precip 2012	Soil Temperatures				Solar	Wind Run		
									2" Max	2" Min	4" Max	4" Min			8" Max	8" Min
3	1	32	28	34	4950	0.03	0.20	2.24	31	31	32	31	30	28	78	11
3	2	33	23	35	4985	0.01	0.10	2.25	31	31	32	31	30	29	199	84
3	3	31	19	37	5022	0.00	0.00	2.25	32	31	31	30	30	28	253	255
3	4	23	11	40	5062	0.00	0.00	2.25	31	30	30	29	30	28	339	143
3	5	29	3	48	5110	0.10	3.00	2.35	31	29	30	29	30	28	224	85
3	6	40	15	49	5158	0.00	0.00	2.35	31	30	31	29	30	28	373	278
3	7	61	32	38	5196	0.00	0.00	2.35	38	31	47	30	30	26	370	241
3	8	33	24	19	5215	0.01	0.00	2.36	37	31	46	30	30	28	143	224
3	9	44	17	37	5251	0.00	0.00	2.36	37	31	47	30	30	28	418	214
3	10	43	17	34	5286	0.00	0.00	2.36	37	31	46	30	30	26	421	285
3	11	67	40	35	5321	0.00	0.00	2.36	49	31	32	32	33	27	424	407
3	12	62	43	11	5332	0.04	0.00	2.40	51	35	39	32	41	31	320	211
3	13	70	35	13	5345	0.00	0.00	2.40	58	37	43	32	47	37		
3	14	72	31	13	5357	0.00	0.00	2.40	57	34	43	33	46	35	603	208
3	15	65	33	13	5370	0.00	0.00	2.40	58	39	49	33	48	40	431	164
3	16	67	32	16	5386	0.00	0.00	2.40	59	40	56	39	49	41	373	81
3	17	81	37	15	5402	0.00	0.00	2.40	65	42	61	43	53	42	417	202
3	18	79	58	6	5407	0.00	0.00	2.40	66	52	63	52	56	49	343	334
3	19	83	63	0	5407	0.00	0.00	2.40	71	56	67	56	59	49	408	382
3	20	79	53	0	5407	0.15	0.00	2.55	70	54	66	55	59	52	247	224
3	21	60	47	0	5407	0.13	0.00	2.68	60	51	59	52	54	50	183	117
3	22	60	47	12	5419	0.06	0.00	2.74	60	50	57	51	53	49	132	101
3	23	62	50	12	5431	0.35	0.00	3.09	58	52	57	53	53	50	53	112
3	24	67	43	9	5440	0.00	0.00	3.09	69	48	65	50	57	50	359	64
3	25	73	35	10	5450	0.00	0.00	3.09	70	46	67	49	58	48	488	127
3	26	55	35	11	5461	0.00	0.00	3.09	58	46	57	48	52	46	257	232
3	27	56	40	20	5481	0.00	0.00	3.09	54	45	53	47	49	42	224	452
3	28	68	36	17	5498	0.00	0.00	3.09	63	44	60	47	53	44	391	274
3	29	57	36	13	5511	0.00	0.00	3.09	65	43	61	46	54	46	511	156
3	30	68	38	19	5530	0.35	0.00	3.44	60	44	58	46	52	45	314	200
3	31	64	47	19	5548	0.00	0.00	3.44	65	50	62	51	56	47	354	156
<b>Monthly Total</b>				<b>633</b>		<b>1.23</b>	<b>3.30</b>								<b>9649</b>	<b>6025</b>
<b>Monthly Ave.</b>		<b>58</b>	<b>34</b>						<b>52</b>	<b>40</b>	<b>50</b>	<b>40</b>	<b>45</b>	<b>39</b>		
<b>Historic Ave.</b>		<b>40</b>	<b>21</b>		<b>6937</b>	<b>1.51</b>			<b>38</b>	<b>32</b>	<b>36</b>	<b>33</b>	<b>33</b>	<b>32</b>		

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mo	day	Tair Max F	Tair Low F	HDD	Cum HDD	Precip (in.)	Snow (in.)	Precip 2012	Soil Temperatures						Solar	Wind Run
									2" Max	2" Min	4" Max	4" Min	8" Max	8" Min		
4	1	72	46	12	5560	0.00	0.00	3.44	66	50	63	51	56	49	325	215
4	2	78	45	9	5570	0.00	0.00	3.44	68	52	65	53	58	49	380	373
4	3	80	48	6	5576	0.00	0.00	3.44	72	55	68	56	60	52	305	302
4	4	66	34	3	5579	0.00	0.00	3.44	67	48	63	50	58	51	442	249
4	5	66	33	1	5580	0.00	0.00	3.44	61	47	59	49	55	48	456	151
4	6	64	36	15	5595	0.00	0.00	3.44	62	47	60	49	55	47	486	176
4	7	65	40	16	5610	0.00	0.00	3.44	61	47	59	48	54	46	527	254
4	8	57	35	15	5625	0.00	0.00	3.44	61	47	59	48	55	46	449	252
4	9	63	32	13	5638	0.00	0.00	3.44	61	46	59	48	54	43	472	179
4	10	51	27	19	5657	0.00	0.00	3.44	58	42	56	45	53	43	579	177
4	11	45	18	17	5674	0.00	0.00	3.44	56	40	54	42	51	39	591	170
4	12	55	19	26	5700	0.00	0.00	3.44	60	39	57	41	52	41	600	68
4	13	60	35	33	5733	0.28	0.00	3.72	54	43	53	44	50	43	291	247
4	14	60	45	28	5761	0.11	0.00	3.83	53	46	52	47	49	42	108	316
4	15	72	45	18	5779	0.66	0.00	4.49	60	46	57	47	53	43	341	237
4	16	73	33	16	5794	0.41	0.00	4.90	63	45	60	47	55	45	191	256
4	17	43	32	7	5801	0.00	0.00	4.90	51	41	50	43	48	41	291	149
4	18	64	34	17	5818	0.00	0.00	4.90	57	41	54	43	50	41	416	213
4	19	56	43	28	5846	0.04	0.00	4.94	60	49	59	49	53	47	434	176
4	20	43	33	16	5862	0.30	0.00	5.24	49	39	50	41	49	42	111	187
4	21	60	34	16	5877	0.00	0.00	5.24	61	39	59	41	52	42	590	133
4	22	60	38	27	5904	0.29	0.00	5.53	54	45	53	46	49	42	205	246
4	23	52	33	18	5923	0.00	0.00	5.53	53	40	52	42	48	42	219	114
4	24	70	34	16	5939	0.00	0.00	5.53	65	40	63	42	55	41	622	128
4	25	82	46	23	5962	0.00	0.00	5.53	74	48	71	49	61	48	622	140
4	26	82	44	13	5975	0.00	0.00	5.53	73	55	70	56	63	54	526	184
4	27	62	42	1	5976	0.18	0.00	5.71	71	52	68	54	61	51	632	264
4	28	57	38	2	5978	0.42	0.00	6.13	57	46	57	48	54	46	303	428
4	29	46	38	13	5991	0.01	0.00	6.14	48	45	49	47	49	45	82	241
4	30	52	44	18	6009	0.00	0.00	6.14	52	47	52	48	49	45	122	112
<b>Monthly Total</b>				<b>460</b>		<b>2.70</b>	<b>0.00</b>								<b>11715</b>	<b>6336</b>
<b>Monthly Ave.</b>		<b>62</b>	<b>37</b>						<b>60</b>	<b>45</b>	<b>58</b>	<b>47</b>	<b>54</b>	<b>45</b>		
<b>Historic Ave.</b>		<b>57</b>	<b>34</b>		<b>7531</b>	<b>2.83</b>			<b>56</b>	<b>40</b>	<b>49</b>	<b>42</b>	<b>45</b>	<b>41</b>		

University of Minnesota  
 SW Research and Outreach Center  
 23669 130th Street; Lamberton, MN 56152

Growing Season Monthly Report  
 May 1 - September 30, 2012

mo	day	Tair Max	Tair Low	GDD	CumGDD	Historic Cum GDD	Daily Precip (in.)	Pan Evap (in.)	Soil Temperatures						Solar	Wind Run
									2" Max	2" Min	4" Max	4" Min	8" Max	8" Min		
5	1	70	47	10	10	7	0.00	0.12	68	48	66	49	58	46	602	210
5	2	84	53	18	28	14	1.92	0.96	71	54	69	55	61	49	420	269
5	3	81	55	18	46	21	0.00	0.22	76	55	73	56	64	55	568	126
5	4	79	54	16	63	30	0.00	0.17	75	58	72	59	65	58	380	111
5	5	72	55	13	76	40	0.38	0.21	69	57	67	59	61	57	312	229
5	6	64	54	9	85	50	2.29	1.48	62	57	61	58	58	54	114	267
5	7	67	48	9	94	59	0.00	0.12	68	52	67	54	61	53	343	128
5	8	66	46	8	102	68	0.00	0.26	68	51	65	53	60	52	647	193
5	9	59	46	4	106	77	0.16	0.11	62	51	61	52	57	51	371	165
5	10	66	47	8	114	87	0.00	0.10	69	51	66	52	60	50	493	57
5	11	79	50	15	129	97	0.00	0.37	75	51	72	53	64	52	680	248
5	12	63	44	7	136	107	0.07	0.14	69	52	67	54	61	54	412	152
5	13	71	41	10	146	116	0.00	0.26	77	52	73	54	65	53	714	64
5	14	75	45	13	158	126	0.00	0.30	77	53	73	55	66	54	699	151
5	15	85	53	19	178	137	0.00	0.54	82	57	77	58	69	57	703	223
5	16	73	45	11	189	149	0.00	0.35	80	57	76	59	69	59	698	167
5	17	77	46	13	202	161	0.00	0.34	82	57	78	59	70	58	698	125
5	18	93	64	25	227	173	0.00	0.67	79	64	76	64	69	59	513	489
5	19	95	68	27	255	186	0.05	0.71	84	67	80	67	73	63	667	413
5	20	84	51	8	262	199	0.41	0.31	79	61	76	63	69	62	336	241
5	21	65	48	8	270	212	0.05	0.11	69	54	68	56	63	57	480	147
5	22	76	51	14	283	225	0.00	0.24	77	54	73	56	67	56	596	114
5	23	87	61	24	307	239	0.02	0.65	80	59	76	60	69	55	665	403
5	24	86	58	22	329	251	1.66	0.58	78	62	74	63	68	56	350	191
5	25	62	49	6	335	263	0.20	0.00	65	55	65	57	62	55	171	105
5	26	65	52	8	343	276	0.90	0.38	66	55	65	57	61	55	296	102
5	27	72	57	15	357	288	0.00	0.04	64	59	64	59	60	57	118	250
5	28	87	60	23	380	301	1.76	0.80	76	63	74	63	67	54	519	267
5	29	74	50	12	393	316	0.00	0.25	78	57	76	59	69	60	700	250
5	30	63	44	7	399	331	0.00	0.14	66	51	64	54	61	55	386	185
5	31	58	45	4	403	346	0.46	0.21	64	51	62	54	59	54	353	88
<b>Monthly Total</b>							<b>10.33</b>	<b>11.14</b>								
<b>Monthly Ave.</b>		<b>74</b>	<b>51</b>						<b>73</b>	<b>56</b>	<b>70</b>	<b>57</b>	<b>64</b>	<b>55</b>		
<b>Historic Ave.</b>		<b>71</b>	<b>46</b>				<b>3.34</b>		<b>72</b>	<b>53</b>	<b>64</b>	<b>54</b>	<b>57</b>	<b>53</b>		

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 23669 130th Street; Lamberton, MN 56152

Growing Season Monthly Report  
 May 1 - September 30, 2012

mo	day	Tair Max	Tair Low	GDD	CumGDD	Historic Cum GDD	Daily Precip (in.)	Pan Evap (in.)	Soil Temperatures						Solar	Wind Run
									2" Max	2" Min	4" Max	4" Min	8" Max	8" Min		
6	1	64	45	7	410	361	0.00	0.17	68	52	66	54	61	54	562	114
6	2	67	50	9	419	375	0.01	0.08	68	52	65	54	60	54	440	95
6	3	76	54	15	433	389	0.00	0.26	76	56	72	57	65	56	723	108
6	4	83	56	20	453	406	0.00	0.26	75	58	72	60	65	58	577	174
6	5	85	55	20	473	423	0.00	0.26	79	59	75	61	68	59	726	100
6	6	84	60	22	495	440	0.00	0.38	78	60	75	61	68	60	694	124
6	7	85	63	24	519	458	0.16	0.20	79	62	75	63	70	62	534	201
6	8	82	64	23	543	476	0.22	0.00	77	65	75	66	69	64	441	202
6	9	89	67	27	569	492	0.00	0.40	81	65	77	66	72	64	610	275
6	10	90	70	28	597	508	0.00	0.42	86	66	80	67	75	60	737	316
6	11	89	60	23	620	525	0.07	0.44	81	64	78	66	73	64	402	252
6	12	73	47	11	632	543	0.00	0.36	79	60	74	62	71	63	656	212
6	13	72	50	11	643	562	0.03	0.26	83	60	77	62	72	60	734	96
6	14	79	57	18	661	581	0.04	0.28	75	65	72	66	68	60	467	279
6	15	87	61	23	684	599	0.00	0.27	78	66	75	67	70	59	323	222
6	16	79	59	19	703	616	0.00	0.21	76	66	74	67	70	64	350	90
6	17	81	53	17	720	634	0.00	0.30	82	64	77	66	73	64	595	138
6	18	87	59	23	743	653	0.20	0.07	77	64	73	66	69	63	415	291
6	19	91	65	26	768	671	0.00	0.42	93	69	85	70	79	65	728	151
6	20	93	65	26	794	690	0.00	0.42	91	73	84	73	79	69	595	344
6	21	74	56	15	809	709	0.52	0.35	79	62	76	65	74	65	267	123
6	22	77	56	17	826	728	0.00	0.30	81	62	76	65	73	64	728	130
6	23	84	60	22	848	747	0.01	0.36	89	63	83	65	76	63	651	83
6	24	82	63	23	871	767	0.00	0.36	89	69	84	70	78	67	607	152
6	25	87	61	23	894	787	0.00	0.46	91	71	86	72	80	69	655	170
6	26	83	58	20	914	808	0.00	0.38	92	71	87	73	80	71	713	167
6	27	85	65	25	939	829	0.00	0.34	91	71	86	72	80	71	680	217
6	28	98	70	28	967	850	0.00	0.50	97	74	91	75	83	72	657	126
6	29	87	61	23	991	870	0.00	0.38	97	74	91	77	84	74	676	75
6	30	90	62	24	1015	890	0.00	0.32	91	74	88	76	82	75	485	67
<b>Monthly Total</b>							<b>1.26</b>	<b>9.21</b>								
<b>Monthly Ave.</b>		<b>83</b>	<b>59</b>						<b>83</b>	<b>64</b>	<b>78</b>	<b>66</b>	<b>73</b>	<b>64</b>		
<b>Historic Ave.</b>		<b>80</b>	<b>57</b>				<b>3.98</b>		<b>83</b>	<b>63</b>	<b>75</b>	<b>65</b>	<b>68</b>	<b>65</b>		

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mo	day	Tair Max	Tair Low	GDD	CumGDD	Historic Cum GDD	Daily Precip (in.)	Pan Evap (in.)	Soil Temperatures						Solar	Wind Run
									2" Max	2" Min	4" Max	4" Min	8" Max	8" Min		
7	1	91	64	25	1040	911	0.00	0.33	96	73	92	76	84	74	693	57
7	2	93	73	29	1069	932	0.00	0.42	97	78	92	79	85	74	647	138
7	3	95	75	31	1100	953	0.00	0.41	97	78	91	80	85	76	647	233
7	4	98	75	30	1130	974	0.00	0.48	99	79	94	81	87	77	629	127
7	5	97	77	31	1161	995	0.00	0.48	98	81	93	82	86	79	671	193
7	6	92	72	29	1190	1016	0.00	0.40	95	80	91	82	85	79	511	126
7	7	98	64	25	1216	1038	0.00	0.58	99	78	93	81	86	73	647	192
7	8	83	64	24	1239	1060	0.00	0.28	93	76	88	79	83	73	591	137
7	9	87	66	26	1265	1081	0.09	0.18	95	76	92	79	85	75	595	61
7	10	85	57	21	1286	1103	0.00	0.28	94	74	89	76	84	75	692	96
7	11	87	58	22	1308	1125	0.00	0.48	97	74	91	76	85	74	697	55
7	12	87	62	24	1332	1146	0.00	0.52	95	75	91	77	84	74	697	129
7	13	86	68	27	1359	1168	0.06	0.26	87	76	85	77	80	75	367	148
7	14	90	63	25	1384	1189	0.00	0.3	95	75	91	77	84	74	611	73
7	15	91	64	25	1409	1210	0.00	0.4	98	76	93	78	85	75	647	56
7	16	91	66	26	1435	1232	0.00	0.37	95	77	91	79	85	73	579	187
7	17	95	69	27	1462	1255	0.00	0.56	97	79	92	80	86	72	678	225
7	18	95	70	28	1490	1278	0.00	0.40	99	79	95	81	87	77	599	108
7	19	87	67	27	1517	1301	0.06	0.17	93	79	90	81	84	77	530	85
7	20	92	69	27	1544	1322	0.00	0.33	99	79	94	80	87	76	618	87
7	21	91	70	28	1572	1343	0.05	0.26	95	79	91	81	85	77	501	165
7	22	90	72	29	1601	1365	0.10	0.10	90	77	87	79	82	76	343	109
7	23	94	72	29	1630	1386	0.00	0.23	93	77	89	78	82	75	484	91
7	24	87	70	28	1658	1407	0.17	0.05	88	76	86	78	80	74	296	112
7	25	93	70	28	1686	1429	0.00	0.24	93	76	89	77	82	73	560	204
7	26	89	61	23	1709	1450	0.00	0.40	96	74	91	77	84	75	512	90
7	27	86	62	24	1733	1470	0.00	0.28	91	73	87	76	81	74	549	124
7	28	80	60	20	1753	1491	0.00	0.25	88	72	86	75	80	72	453	76
7	29	82	65	23	1777	1511	0.21	0.2	88	72	86	75	79	72	477	130
7	30	81	66	23	1800	1531	0.00	0.14	86	72	84	74	78	72	430	110
7	31	87	59	23	1823	1552	0.00	0.28	93	71	89	74	82	71	599	106
<b>Monthly Total</b>							<b>0.74</b>	<b>10.06</b>								
<b>Monthly Ave.</b>		<b>90</b>	<b>67</b>						<b>94</b>	<b>76</b>	<b>90</b>	<b>78</b>	<b>84</b>	<b>75</b>		
<b>Historic Ave.</b>		<b>84</b>	<b>61</b>					<b>3.78</b>	<b>91</b>	<b>69</b>	<b>82</b>	<b>71</b>	<b>75</b>	<b>71</b>		

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mo	day	Tair Max	Tair Low	GDD	CumGDD	Historic Cum GDD	Daily Precip (in.)	Pan Evap (in.)	Soil Temperatures						Solar	Wind Run
									2" Max	2" Min	4" Max	4" Min	8" Max	8" Min		
8	1	90	60	23	1845	1573	0.00	0.35	94	71	90	74	84	72	626	78
8	2	95	66	26	1871	1594	1.06	0.62	94	72	90	74	84	72	496	191
8	3	87	64	25	1896	1615	0.00	0.25	87	70	86	73	79	71	657	70
8	4	90	62	24	1920	1635	1.05	0.53	91	70	86	72	81	70	588	147
8	5	79	53	16	1936	1655	0.00	0.23	80	63	79	67	74	67	520	146
8	6	76	54	15	1951	1675	0.00	0.23	85	62	81	66	75	65	674	97
8	7	87	58	22	1974	1695	0.00	0.26	90	65	86	68	78	66	633	127
8	8	87	61	24	1997	1716	0.00	0.28	93	70	89	73	81	70	600	74
8	9	81	57	19	2016	1736	0.00	0.18	89	69	86	72	79	71	402	104
8	10	77	53	15	2032	1755	0.00	0.28	88	67	85	70	79	69	601	129
8	11	76	47	13	2045	1773	0.00	0.18	85	65	84	69	77	67	566	85
8	12	73	48	12	2056	1793	0.00	0.15	79	65	78	68	73	67	380	102
8	13	59	51	5	2061	1813	0.42	0.32	67	59	69	62	67	62	58	131
8	14	79	51	15	2076	1831	0.00	0.24	77	58	77	62	71	60	561	78
8	15	75	56	16	2092	1850	0.03	0.07	73	61	73	65	69	64	276	114
8	16	82	55	19	2110	1869	0.00	0.32	85	64	82	67	75	64	553	176
8	17	69	46	10	2120	1889	0.00	0.30	83	60	80	64	74	64	621	155
8	18	73	47	11	2132	1907	0.00	0.25	83	60	80	63	73	62	612	62
8	19	74	52	13	2145	1926	0.04	0.13	82	62	79	65	73	64	495	105
8	20	76	48	13	2158	1944	0.00	0.26	84	63	81	66	74	64	539	76
8	21	79	48	14	2172	1962	0.00	0.20	85	63	82	66	75	64	606	59
8	22	82	49	16	2188	1982	0.01	0.25	85	63	82	66	75	64	601	106
8	23	89	62	24	2212	2000	0.15	0.14	80	66	79	69	73	66	364	172
8	24	88	65	26	2238	2019	0.06	0.19	80	67	79	70	73	67	371	176
8	25	87	67	27	2264	2038	0.05	0.28	84	68	83	69	76	66	555	176
8	26	74	65	20	2284	2057	0.19	0.08	75	68	75	70	71	67	156	91
8	27	86	57	21	2305	2075	0.00	0.23	86	67	84	70	76	66	531	59
8	28	88	56	21	2326	2094	0.00	0.22	85	66	84	69	76	66	532	62
8	29	92	60	23	2350	2111	0.00	0.19	84	69	84	71	77	68	421	94
8	30	93	61	23	2373	2129	0.00	0.28	87	69	86	72	78	69	559	151
8	31	94	58	22	2395	2146	0.00	0.27	84	69	83	72	77	70	382	132
<b>Monthly Total</b>							<b>3.06</b>	<b>7.76</b>								
<b>Monthly Ave.</b>		<b>82</b>	<b>56</b>						<b>84</b>	<b>66</b>	<b>82</b>	<b>68</b>	<b>76</b>	<b>67</b>		
<b>Historic Ave.</b>		<b>81</b>	<b>57</b>				<b>3.06</b>		<b>87</b>	<b>67</b>	<b>79</b>	<b>69</b>	<b>74</b>	<b>69</b>		

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mo	day	Tair Max	Tair Low	GDD	CumGDD	Historic Cum GDD	Daily Precip (in.)	Pan Evap (in.)	Soil Temperatures						Solar	Wind Run
									2" Max	2" Min	4" Max	4" Min	8" Max	8" Min		
9	1	85	52	18	2413	2163	0.00	0.3	82	67	81	69	75	68	509	116
9	2	87	53	19	2433	2181	0.00	0.34	83	66	82	68	75	66	522	129
9	3	91	59	23	2455	2198	0.00	0.27	83	68	81	70	75	67	446	133
9	4	91	61	24	2479	2214	0.00	0.28	85	71	83	72	77	69	475	92
9	5	92	55	21	2499	2230	0.20	0.13	86	67	84	69	77	69	520	105
9	6	78	48	14	2513	2246	0.00	0.25	81	63	78	65	74	65	540	102
9	7	84	48	17	2530	2263	0.09	0.14	78	62	76	64	71	64	389	103
9	8	69	43	9	2540	2278	0.00	0.33	73	58	71	61	68	61	381	134
9	9	81	44	15	2555	2293	0.00	0.45	74	57	72	60	68	58	495	181
9	10	77	45	14	2569	2308	0.00	0.27	77	58	74	61	69	60	534	90
9	11	85	53	19	2588	2323	0.00	0.64	76	60	74	62	69	56	512	310
9	12	96	58	22	2610	2337	0.00	0.70	80	66	78	67	72	61	458	232
9	13	59	46	5	2614	2351	0.27	0.18	67	56	69	59	67	58	94	80
9	14	77	45	14	2628	2362	0.00	0.34	72	55	70	58	65	56	487	85
9	15	81	45	16	2644	2373	0.00	0.39	75	57	72	60	67	58	498	109
9	16	85	51	18	2662	2385	0.00	0.69	74	58	72	60	67	58	484	277
9	17	83	48	16	2678	2397	0.55	0.10	76	60	74	62	68	61	424	137
9	18	64	37	7	2685	2410	0.00	0.14	67	49	65	53	62	54	379	121
9	19	61	38	6	2690	2422	0.00	0.46	62	48	61	52	58	53	364	140
9	20	73	46	11	2702	2433	0.00	0.27	68	52	67	55	62	52	464	182
9	21	66	44	8	2710	2444	0.00	0.32	67	52	66	55	61	53	412	97
9	22	66	35	8	2718	2453	0.00	0.42	69	51	68	54	62	55	401	139
9	23	58	29	4	2722	2462	0.00	0.33	66	48	65	51	60	52	438	133
9	24	63	29	7	2729	2471	0.00	0.32	66	47	65	50	59	49	474	87
9	25	79	43	15	2743	2481	0.00	0.65	69	49	67	52	61	50	451	181
9	26	72	33	11	2754	2491	0.00	0.41	69	51	67	54	62	53	423	95
9	27	67	30	8	2762	2501	0.00	0.34	67	50	66	53	60	52	452	94
9	28	73	30	11	2773	2511	0.00	0.56	68	49	66	52	60	51	443	55
9	29	81	39	15	2789	2520	0.00	0.40	70	52	68	54	62	53	403	53
9	30	87	44	18	2807	2530	0.00	0.53	72	54	70	56	64	54	406	45
<b>Monthly Total</b>							<b>1.11</b>	<b>10.95</b>								
<b>Monthly Ave.</b>		<b>77</b>	<b>44</b>						<b>73</b>	<b>57</b>	<b>72</b>	<b>59</b>	<b>67</b>	<b>58</b>		
<b>Historic Ave.</b>		<b>73</b>	<b>48</b>				<b>2.92</b>		<b>74</b>	<b>57</b>	<b>69</b>	<b>61</b>	<b>65</b>	<b>62</b>		

**Nongrowing season (10/1/2012-4/30/2013)**

**University of MN Southwest Research and Outreach Center, Lamberton**  
<http://swroc.cfans.umn.edu>; 507-752-7372 (Phone)

mo	day	Tair Max F	Tair Low F	HDD	Cum HDD	Precip (in.)	Snow (in.)	Precip 2012	Soil Temperatures						Solar	Wind Run
									2" Max	2" Min	4" Max	4" Min	8" Max	8" Min		
10	1	83	45	0	0	0.00	0.00	22.64	71	55	69	57	63	56	356	79
10	2	70	33	1	1	0.00	0.00	22.64	69	52	68	56	63	56	395	160
10	3	74	32	13	14	0.00	0.00	22.64	68	51	67	54	61	53	417	109
10	4	79	40	6	20	0.00	0.00	22.64	69	53	67	55	61	53	376	225
10	5	48	32	25	45	0.00	0.00	22.64	60	48	60	51	57	52	223	235
10	6	47	31	26	71	0.00	0.00	22.64	58	46	58	50	54	48	396	206
10	7	44	21	33	103	0.00	0.00	22.64	54	40	54	44	52	45	216	132
10	8	56	25	24	128	0.00	0.00	22.64	56	40	55	43	51	42	394	202
10	9	69	45	8	136	0.03	0.00	22.67	57	46	56	48	53	45	181	189
10	10	49	28	27	163	0.00	0.00	22.67	54	44	54	47	51	47	190	161
10	11	60	27	22	184	0.00	0.00	22.67	57	42	57	45	52	45	374	230
10	12	47	17	33	218	0.00	0.00	22.67	53	39	53	43	51	44	139	138
10	13	56	17	29	246	0.00	0.00	22.67	54	38	53	42	50	41	348	202
10	14	67	41	11	257	0.00	0.00	22.67	58	50	57	52	53	49	101	84
10	15	60	29	20	278	0.00	0.00	22.67	59	45	58	48	54	45	269	147
10	16	68	28	17	295	0.00	0.00	22.67	58	44	58	47	53	47	256	197
10	17	76	49	3	297	0.00	0.00	22.67	67	52	64	54	59	51	312	110
10	18	61	40	14	312	0.03	0.00	22.70	60	49	59	52	56	50	136	325
10	19	47	40	22	333	0.69	0.00	23.39	51	46	52	48	51	46	54	229
10	20	43	38	25	358	0.12	0.00	23.51	47	44	48	46	47	45	49	141
10	21	56	40	17	375	0.00	0.00	23.51	54	44	54	46	50	44	225	118
10	22	64	42	12	388	0.00	0.00	23.51	58	45	57	47	52	45	286	123
10	23	59	41	15	403	0.05	0.00	23.56	53	45	54	47	51	46	128	161
10	24	61	49	10	412	0.01	0.00	23.57	58	53	57	54	54	50	71	127
10	25	50	32	24	436	0.04	1.00	23.61	53	41	55	44	53	44	35	194
10	26	36	31	31	468	0.01	0.00	23.62	43	37	44	40	46	40	95	204
10	27	38	22	35	503	0.00	0.00	23.62	41	36	43	38	41	38	93	154
10	28	40	22	34	537	0.00	0.00	23.62	41	35	42	37	40	36	208	97
10	29	49	34	24	560	0.00	0.00	23.62	45	36	45	38	42	36	211	152
10	30	54	29	24	584	0.00	0.00	23.62	48	37	47	40	44	38	232	182
10	31	46	29	28	612	0.00	0.00	23.62	44	36	44	39	42	39	94	69
<b>Monthly Total</b>				<b>612</b>		<b>0.98</b>	<b>1.00</b>								<b>6856</b>	<b>5084</b>
<b>Monthly Ave.</b>		<b>57</b>	<b>33</b>						<b>55</b>	<b>44</b>	<b>55</b>	<b>47</b>	<b>52</b>	<b>46</b>		
<b>Historic Ave.</b>		<b>61</b>	<b>36</b>		<b>514</b>	<b>2.03</b>			<b>58</b>	<b>45</b>	<b>55</b>	<b>49</b>	<b>53</b>	<b>50</b>		

**Nongrowing season (10/1/2012-4/30/2013)**

**University of MN Southwest Research and Outreach Center, Lamberton**

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mo	day	Tair Max F	Tair Low F	HDD	Cum HDD	Precip (in.)	Snow (in.)	Precip 2012	Soil Temperatures						Solar	Wind Run
									2" Max	2" Min	4" Max	4" Min	8" Max	8" Min		
11	1	58	28	22	634	0.00	0.00	23.62	51	36	49	39	45	38	254	89
11	2	43	26	31	664	0.00	0.00	23.62	49	37	48	40	45	39	212	112
11	3	38	26	33	697	0.00	0.00	23.62	41	36	42	39	40	38	71	105
11	4	46	33	25	723	0.08	0.00	23.70	46	38	45	40	43	39	101	47
11	5	40	36	27	749	0.19	0.00	23.89	44	41	45	42	43	41	47	64
11	6	42	35	26	776	0.10	0.00	23.99	42	39	43	41	41	39	25	158
11	7	44	31	27	803	0.00	0.00	23.99	43	37	43	40	41	38	86	166
11	8	50	31	25	828	0.00	0.00	23.99	49	36	47	39	43	38	245	133
11	9	56	31	21	849	0.00	0.00	23.99	50	37	48	39	44	38	244	123
11	10	56	32	21	870	0.00	0.00	23.99	46	36	46	39	43	37	165	294
11	11	68	28	17	887	0.42	0.00	24.41	54	40	53	43	48	42	188	224
11	12	28	19	42	929	0.02	0.20	24.43	42	32	43	35	43	35	188	262
11	13	27	16	50	979	0.00	0.00	24.43	33	30	35	33	36	33	183	168
11	14	47	20	48	1028	0.00	0.00	24.43	33	29	34	33	33	32	188	106
11	15	54	27	25	1052	0.00	0.00	24.43	43	31	41	34	38	32	203	120
11	16	44	14	36	1088	0.00	0.00	24.43	43	32	42	35	39	34	226	116
11	17	48	13	34	1122	0.00	0.00	24.43	36	31	36	34	35	33	233	202
11	18	59	36	17	1140	0.00	0.00	24.43	43	34	42	35	39	34	154	291
11	19	59	41	15	1155	0.00	0.00	24.43	46	38	44	39	42	37	174	290
11	20	61	24	22	1177	0.00	0.00	24.43	51	37	48	40	44	40	199	114
11	21	62	24	22	1199	0.00	0.00	24.43	47	36	46	38	43	38	218	198
11	22	69	42	10	1209	0.00	0.00	24.43	51	40	49	41	45	40	200	326
11	23	47	18	32	1241	0.01	0.00	24.44	47	35	47	38	45	37	115	291
11	24	26	9	48	1289	0.00	0.00	24.44	37	31	38	34	39	34	190	139
11	25	35	14	40	1329	0.00	0.00	24.44	32	31	34	33	35	32	109	157
11	26	35	10	43	1372	0.00	0.00	24.44	37	31	37	34	35	33	153	135
11	27	23	9	49	1421	0.00	0.00	24.44	32	29	34	32	34	32	201	156
11	28	38	11	41	1462	0.00	0.00	24.44	31	28	33	32	32	31	127	158
11	29	42	11	38	1500	0.00	0.00	24.44	31	28	32	31	32	30	160	125
11	30	43	20	34	1533	0.00	0.00	24.44	31	29	33	32	32	31	160	132
<b>Monthly Total</b>				<b>921</b>		<b>0.82</b>	<b>0.20</b>								<b>5017</b>	<b>5003</b>
<b>Monthly Ave.</b>		<b>46</b>	<b>24</b>						<b>42</b>	<b>34</b>	<b>42</b>	<b>37</b>	<b>40</b>	<b>36</b>		
<b>Historic Ave.</b>		<b>42</b>	<b>23</b>		<b>1478</b>		<b>1.27</b>		<b>39</b>	<b>35</b>	<b>41</b>	<b>38</b>	<b>40</b>	<b>38</b>		

**Nongrowing season (10/1/2012-4/30/2013)**

**University of MN Southwest Research and Outreach Center, Lamberton**  
<http://swroc.cfans.umn.edu>; 507-752-7372 (Phone)

mo	day	Tair Max F	Tair Low F	HDD	Cum HDD	Precip (in.)	Snow (in.)	Precip 2012	Soil Temperatures				Solar	Wind Run		
									2" Max	2" Min	4" Max	4" Min			8" Max	8" Min
12	1	39	19	36	1546	0.00	0.00	24.44	31	30	33	32	32	31	108	160
12	2	55	24	26	1572	0.00	0.00	24.44	39	29	37	33	35	31	98	135
12	3	60	22	24	1596	0.00	0.00	24.44	41	31	40	34	38	32	162	245
12	4	55	28	24	1619	0.00	0.00	24.44	46	34	44	37	41	35	125	203
12	5	34	17	40	1659	0.00	0.00	24.44	40	32	39	34	37	34	183	109
12	6	51	20	30	1689	0.00	0.00	24.44	38	30	39	34	37	32	95	305
12	7	45	23	31	1719	0.00	0.00	24.44	42	33	41	36	39	35	121	102
12	8	30	23	38	1757	0.15	2.50	24.59	34	33	36	35	36	35	32	87
12	9	33	24	37	1794	0.15	2.90	24.74	34	33	36	35	35	34	60	186
12	10	33	-5	51	1845	0.21	4.20	24.95	34	33	36	35	35	33	59	224
12	11	18	-6	59	1904	0.02	0.30	24.97	34	33	35	35	34	34	190	112
12	12	27	7	48	1952	0.00	0.00	24.97	33	32	35	35	34	32	114	102
12	13	39	14	48	2000	0.00	0.00	24.97	33	32	35	35	34	31	163	264
12	14	20	5	39	2039	0.00	0.00	24.97	33	32	35	35	34	33	148	80
12	15	38	8	52	2091	0.14	0.00	25.11	33	32	35	34	34	33	171	105
12	16	34	14	42	2133	0.14	1.20	25.25	33	32	34	34	33	33	59	55
12	17	21	15	41	2174	0.01	0.00	25.26	33	33	35	34	33	33	114	11
12	18	27	19	47	2221	0.02	0.20	25.28	33	33	35	34	33	33	79	11
12	19	30	19	42	2264	0.00	0.00	25.28	33	32	34	34	33	32	81	101
12	20	34	18	41	2304	0.02	0.20	25.30	33	32	34	34	33	32	118	126
12	21	18	2	39	2343	0.00	0.00	25.30	33	31	34	34	33	32	141	223
12	22	21	1	55	2398	0.00	0.00	25.30	33	32	34	34	33	31	175	121
12	23	22	6	54	2452	0.00	0.00	25.30	33	32	34	34	33	32	162	131
12	24	15	5	51	2504	0.00	0.00	25.30	33	31	34	34	33	33	151	129
12	25	13	-8	55	2559	0.00	0.00	25.30	33	32	34	34	33	31	162	167
12	26	3	-8	62	2621	0.00	0.00	25.30	32	32	34	33	33	28	175	87
12	27	12	0	67	2689	0.00	0.00	25.30	32	31	33	33	32	29	164	50
12	28	17	8	52	2741	0.09	2.90	25.39	31	31	33	33	32	31	77	136
12	29	17	-1	57	2798	0.00	0.10	25.39	32	31	33	33	32	30	134	80
12	30	14	-6	61	2859	0.00	0.00	25.39	32	31	33	33	32	30	176	96
12	31	29	7	47	2906	0.00	0.00	25.39	32	31	33	33	32	30	156	212
<b>Monthly Total</b>				<b>1396</b>		<b>0.95</b>	<b>14.50</b>								<b>3953</b>	<b>4155</b>
<b>Monthly Ave.</b>		<b>29</b>	<b>10</b>						<b>34</b>	<b>32</b>	<b>35</b>	<b>34</b>	<b>34</b>	<b>32</b>		
<b>Historic Ave.</b>		<b>28</b>	<b>9</b>		<b>2918</b>	<b>0.66</b>			<b>30</b>	<b>29</b>	<b>32</b>	<b>31</b>	<b>33</b>	<b>32</b>		