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12-1888

Meteorological Tables, May---November, to
Accompany Garden Notes and other Reports of
Field Observations

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Keffer, C.A., "Meteorological Tables, May---November, to Accompany Garden Notes and other Reports of Field Observations" (1888). *Bulletins*. Paper 6.
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AGRICULTURAL COLLEGE,
AND
EXPERIMENT STATION,
BROOKINGS, DAKOTA.

Bulletin No. 6.

DECEMBER, 1888.

Meteorological Tables, May--November,

TO ACCOMPANY

Garden Notes and Other Reports of Field Observations.

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DAKOTA AGRICULTURAL COLLEGE.

REMARKS.

By the establishment of a volunteer weather station at the Dakota Agricultural College by the United States Signal Service, the Experiment Station of that College is able to publish the following tables of meteorology. The instruments could not be obtained and set up earlier than May 17, 1888, and even then only a part of them. Fuller observations are now taken and will be continued. These tables, however, though imperfect, throw some light upon the bulletin's descriptive of the growth of the garden vegetables, corn and other grains, as well as the forestry and fruit trees.

It will be noticed that there was no frost from the beginning of the observations on temperature, May 20, until September 12. The average temperature for

May, (the last eleven days) was:	55°:54
June,	66°:70
July,	70°:40
August,	65°:40
September,	57°:30
October,	42°:90
November,	31°:49

The highest recorded temperature was 101° on July 30. The mercury stood above 90° four times in June, six times in July, three times in August, and once in September. During the season the temperature reached or exceeded 80° on no less than sixty-one times, reaching 83° on September 30.

In May (from the 17th when observations began) rain fell to

to the extent of	2.61 in.
In June rain fell to the extent of	.71 "
" July " " " " " "	1.61 "
" August " " " " " "	3.21 "
" September " " " " " "	.56 "
" October " " " " " "	.62 "

Total, after May 17th to November 1, 9.32 in.

The last half of April and the first half of May were very rainy. Though not measured, it is estimated that during that time not less than six inches of water fell. This would give for the six months beginning with April about fifteen inches of rain. Rain fell on forty-seven different days during the period of 167 days from May 17th to October 31.

DAKOTA AGRICULTURAL COLLEGE,

METEOROLOGICAL RECORD FOR MAY, 1888.

Day.	TEMPERATURES.			Rain Fall.	Mean Barometer.
	Highest.	Lowest.	Average.		
17				.33 in.	
18					
19	58°			.18	28.71 in.
20	73	50°	62.7°		28.16
21	68	44	59.2	.27	28.16
22	70.5	45	56	.63	28.11
23	57	38	52.2	.37	28.04
24	58	51	53.7		28.07
25	72	41	59.5		28.05
26	61	50	54.6	.22	28.10
27	61	48	54.2	.05	28.07
28	69	40	56.6		28.15
29	65	40	52.6	.02	28.28
30	64.2	44	51	.54	28.16
31	67	35.8	52.8		28.18
Totals or Avg.			53.47	2.61	28.165

METEOROLOGICAL RECORD FOR JUNE, 1888.

Day.	TEMPERATURES.			MOISTURE OF ATMOSPHERE.						Rain Fall.	Mean Barometer
	Highest.	Lowest.	Average.	7 A. M.		2 P. M.		9 P. M.			
				Dry Bulb.	Wet Bulb.	Dry Bulb.	Wet Bulb.	Dry Bulb.	Wet Bulb.		
1	60°	41°	46.7°							.0 in.	28.343
2	71	38.5	55.9							.0	28.363
3	75	47	63.8							.0	28.270
4	71	48.2	64								28.016
5	67.5	44	50							.04	28.146
6	70.3	37	57.8							.0	28.466
7	82.5	50	71.1							.01	28.230
8	82	63	68.7							.0	27.956
9	64	52	54.8							.03	28.023
10	76	48	61.8							.03	28.336
11	70	50	62.4							.01	28.306
12	81	57	68.7							.07	28.143
13	88	58	81.3							.0	28.096
14	93.5	56	78							.0	28.190
15	91	61	78.2							.0	28.170
16	94	70	81.1							.0	28.180
17	95	69	78							.0	27.216
18	89	66	78.8							.0	28.196
19	83	65	76.8							.0	28.120
20	81	60	65.7							.04	27.786
21	75	55	64.5							.01	27.933
22	72.6	49.8	56	58°	58°	66.6°	64.8°	57°	57°	.0	28.013
23	67.8		52.5	52	52.8	56	56	57	56	.0	28.116
24	68	47	57.6	53	52.6	60.3	60.5	58.2	57	.0	28.216
25	70	50	60.3	57.3	56.2	66	61.5	57	65	.0	28.296
26	58	51	54	53	53	53	53	55	55	.24	28.180
27	70	53	61	55	54.6	63	60	62	60	.23	28.236
28	70	55	64.2	61	54.6	67.5	64	65	64	.0	28.350
29	83	60	70.8	62	61	80	79	72.8	70	.0	28.383
30	90	61	79	68	63.8	82	85	80.8	78	.0	28.313
Totals or Avg.			66.7	56.4	56.2	66.7	64.8	62.7	60.2	.71	28.184

DAKOTA AGRICULTURAL COLLEGE.

METEOROLOGICAL RECORD FOR JULY 1888.

Day.	TEMPERATURES.			MOISTURE OF ATMOSPHERE.						Rain Fall.	Mean Barometer	Soil Temperature.	
	Highest.	Lowest.	Average.	7 A. M.		2 P. M.		9 P. M.				2 P. M.	
				Dry Bulb.	Wet Bulb.	Dry Bulb.	Wet Bulb.	Dry Bulb.	Wet Bulb.			2 in.	12 in.
1	92.3°	73°	80.5°	76°	74°	89°	78°	78.5°	74°	.0 in	28.205		
2	87	71	76.1	75	70.3	81.1	76	73	68	.0	28.092		
3	76.3	57	61.2	61.5	58	59	58	66.2	61	.24	28.255		
4	84	51	71.1	60.3	60	78	68.5	72	68	.11	28.313		
5	83	56	74.6	65	63	81.7	73	76	74.8	.0	28.370		
6	80	64	68.7	67	64	77	71	66	60.5	.65	28.431		
7	87	69	71.7	64	61	85	69	69	66	.01	28.380		
8	75	64	67	69	68	69	66	65	65	.02	28.390		
9	83	50	68.5	60	58	78	67	68	63	.0	28.440		
10	87	67.4	75.7	62	60	85	72	73	71	.0	28.330		
11	94.5	64	79.5	70	68	92	80	78	75	.0	28.180		
12	85	65	72.5	72	70	83	74	68	67	.0	28.270		
13	69	58.5	67.8	63	62	67	65	61	61	.09	28.320	69°	
14	81.5	58	98.5	62.3	62	78	70	66	65	.11	28.426	81	
15	81	56	69.2	59	59	78	69	71	68	.0	28.380	77	
16	82	53	64.2	60	56	62.3	75	62	59	.0	28.313	81	
17	79	51	68	59	56	75	67	64	60	.0	28.341	71	
18	78	51	64.5	59	58	74	66	62.5	59	.0	28.301		
19	86	42.5	66.6	50.2	51	80	69	68	63.5	.0	28.300	82	
20	93	56	77.1	65	61	89.5	77	77	71	.0	28.539		
21	92	65	74.2	72	67.8	91	80	67	64	.0	28.391		
22	82	50	61.5	58	57.7	82	70	63	61	.0	28.500		
23	82	53	67.3	61	60	78.5	68	67	63	.0	28.520	84	
24	83	57	70	64	62	78	74.5	69	68	.0	28.476	86	
25	82.5	65	71	69	68.5	73	71.6	71	70.5	.0	28.336	84	
26	89	57	75.2	67	67	81	74	72	69	.0	28.340	83	
27	88	62	75.7	66.7	66.2	86	87	75.6	73	.0	28.370	81	
28	94	65	74.1	70	70.7	88	82.8	69	67	.0	28.433	85	67°
29	89	63	78	70	69	87	80	77.5	75.5	.15	28.423	70	70
30	101	68	76.4	73.2	73.2	95	84	69	68	.23	28.273	103	76
31	73	51	64.1	58	58	70	65	65	63	.0	28.433	87	65
Totals or Avg.....			70.4	64.8	59.9	81.3	72.8	69.5	64.2	1.61	28.359		

DAKOTA AGRICULTURAL COLLEGE.

METEOROLOGICAL RECORD FOR AUGUST, 1888.

Day.	TEMPERATURES.			MOISTURE OF ATMOSPHERE.						Rain Fall.	Mean Barometer.	Soil Temperature.	
	Highest.	Lowest.	Average.	7 A. M.		2 P. M.		9 P. M.				2 P. M.	
				Dry Bulb.	Wet Bulb.	Dry Bulb.	Wet Bulb.	Dry Bulb.	Wet Bulb.			2 in.	12 in.
1	77°	56°	66.4°	62°	61°	74°	72°	69.2°	69°	in.	28.350	75°	67°
2	91	60	75	68	61.2	88	82	72.8	70.5		28.175	85	68
3	83	62	72.8	66.7	66	82.6	76.6	71	69		28.255	93	70
4	89	58	73.5	63	62.9	88	82	65	65		28.225	85	71
5	79	57	69	62	62	73	75	64.6	64.3	1.27	28.146		
6	75.8	48.5	63.7	55	56	72	68	63.8	62.8	.12	28.228	83	68
7	71	48	60.5	57	57	71	67	58.8	57	.0	28.20	77	67
8	75.8	42	53.3	46.7	46	60.1	54.9	49	49	.28	28.351	63	64
9	63	47	53.7	51	51	60	58.7	54	54	.0	28.485	63	60
10	60	43	53.8	51.2	51.5	56	56	54	54.2	.40	28.471		
11	62.5	40	56.3	54	54	59.6	58.2	50	50	.01	28.673		
12	74	41.5	60	50.3	50.5	71	65.6	60	58.2	.0	28.623		
13	69.2	53	62.3	57.5	56.5	66	65	63.5	63	.0	28.363		
14	75	56	63.6	62	62	72	69	69.5	60	.50	28.261	67	
15	69	54	62.7	68	68	67	65	57	57	.20	28.323	63	
16	72	52.3	62.6	61	60	73.4	68	58.5	57	.0	28.45	71	
17	73.2	45	60.1	49	48	69.2	63.2	66	62	.0	28.376	72	
18	82	54	66.7	59	58.3	80	71	64	63	.0	28.473	71	
19	72	52.3	62.7	65	64	65	64	60	60	.42	28.366		
20	80	53	68.4	62	62	77.2	76	66.5	66.5	.01	28.416		
21	79	54	67.1	61	60.5	77	74	62	61	.0	28.436	70	
22	82	49	63.9	53.5	53.2	80	69	61.2	57.5	.0	28.570	78.5	78
23	83	54	70.2	61	58.5	81	72	70	65.7	.0	28.446	76	71
24	89	52.2	72.2	61	60.2	88	74	70	67	.0	28.286	77	70
25	94	56	75.2	61	60	91	75	74.5	68.5	.0	28.276	82	75
26	84	58.5	76.5	66	65	82	75	65.2	61.8	.0	28.533		
27	89	56	71.5	63	60	85.5	75.8	69.3	67	.0	28.466	84	78
28	82	53	68.3	66.2	62.2	87.2	81.5	72	69	.0	28.416		
29	93.6	58.7	77.5	60.2	58	90	83	68	67	.0	28.341		
30	78.5	57	63.7	62	60	77.4	74	57	56.5	.0	28.403	86	71
31	69	40.2	55.5	48.2	48.2	66.8	64	51.5	51	.0	28.526	83	67.5
Totals or Avg.....			65.4							3.21	28.393		

DAKOTA AGRICULTURAL COLLEGE.

METEOROLOGICAL RECORD FOR SEPTEMBER 1888.

Day.	TEMPERATURES.			MOISTURE OF ATMOSPHERE.						Rain Fall.	Mean Barometer	Soil Temperature	
	Highest.	Lowest.	Average.	7 A. M.		2 P. M.		9 P. M.				2 P. M.	
				Dry Bulb.	Wet Bulb.	Dry Bulb.	Wet Bulb.	Dry Bulb.	Wet Bulb.			2 in.	12 in.
1	84°	36°	63.7°	44°	44°	77°	73°	63°	62°	in.	28.425		
2	80	47	72.7	54	54	84	83.6	66	65		28.425		
3	82	53	59	58	57.8	70	68.9	54	53.4		28.351	71°	65.5°
4	80	42	57.5	48.3	48.3	74.6	72	56	55		28.407	76	65
5	81.6	45.2	67.1	54	52	52	79	71	67		28.467	33	66
6	76.5	58	68.4	61	61	75.2	72.6	68	67	.005	28.345	73	65
7	80.5	56.1	64	59	58.1	77	76	60	59.7	.07	28.326	82	65
8	77	45	59.2	49	48.8	75	68	56	56		28.401		
9	81.5	38.5	64.1	43.6	43	78	74.6	67	66		28.280		
10	93.2	60.5	83.2	64	64	91	83.1	62	60.4		28.215	86	66
11	70	42.3	50.2	45	43	68	67	46	45		28.416	81	64
12	68	28	48.2	35	31.2	64.3	61	47	41.8		28.546	74	63
13	78		66	49	48	76	74	64.5	65		28.306	79	62
14	67	51	55.3	54	50	65	63.2	51.4	52	.04	28.268	66	62
15	57	45	55.3	49	47.2	65	63.2	51	49	.06	28.236		
16	64.8	43	49.5	45	45	62	56	45	44		28.372		
17	67.6	39	50.8	44.7	44.1	67.2	65	46	43		28.341	70	60
18	73.8	35	52.2	40.1	40	69	61	50	48		28.300	71	59
19	75	36.6	58	45	43	73	65	58	57		28.380		
20	62.6	54	55.5	56	56	60.6	60	57	57.5	.385	28.370		
21	73.2	49.5	58.5	55	55	69	65	55	54		28.423		
22	76	49	60.7	54	53	74	65	57	55.6		28.546		
23	82	51	64	57	57	76	76	62.5	61		28.540		
24	77	49	58	57.7	56.7	76	76	50	48		28.523		
25	68	34.8	52.8	37	37	64.5	63	55	52		28.383		
26	61	41	51	48	47	57	55	49	49		28.253		
27	56	37	39.8	33	33	49	47	38	36		28.570		
28	51	30	44	45	43	50	47	41	40		28.603		
29	65	33	45.5	35.2	35	62	62	43	42		28.567		
30	83	34	58.4	33.4	38	80	71.2	56	53.5		28.151		
Totals or Avg.....			57.3							56	28.413		

DAKOTA AGRICULTURAL COLLEGE.

METEOROLOGICAL RECORD FOR OCTOBER, 1888.

Day.	TEMPERATURES.			MOISTURE OF ATMOSPHERE.						Rain Fall.	Mean Barometer
	Highest.	Lowest.	Average.	7 A. M.		2 P. M.		9 P. M.			
				Dry Bulb.	Wet Bulb.	Dry Bulb.	Wet Bulb.	Dry Bulb.	Wet Bulb.		
1	59.8°	39.3°	46.2°	48°	47°	56°	56°	40°	40°	in.	28.296
2	57	27	38	30.1	30	51.5	48	35	84.5		28.423
3	73	28	50	30.1	30	70	61.8	48.7	43		28.096
4	55	31	44.6	39	39	51.7	49	44	42		28.190
5	55	35	41.7	38	36	51.8	48.8	39	38		28.436
6	64	24	43.4	30	28	62	56	42	39.5		28.416
7	78	29	54	38	37	75	75	51	51		28.336
8	82	32	54.5	39.2	39	79	76	52	51		28.276
9	75	46.3	58.7	48	47	72.2	72	56	56		28.190
10	68	41	48.1	46	46	67	67	43	43		28.281
11	64	28	42.5	30.1	29.7	63	55	39	39	.44	28.306
12	51	28	39.3	36	33.6	49	49	34	31		28.370
13	59.2	28.1	41.7	36	36	56.5	50	38	37		28.340
14	49	34	39.9	39	38	45	45	39	39	.09	28.210
15	56.1	32.1	40.9	35	35	55	52	36	31	.01	28.180
16	48	27	38.8	34	34	43	43	40	39		28.320
17	47.3	22	40.3	25	25	46	41.8	44.8	41		28.390
18	45.1	31	37.8	42	42	44	44	30	30.2	.07	28.160
19	65	26.7	33.1	33	33	36	34.2	32	32		28.326
20	37.9	24	30.1	25	25	37	36	30	29		28.456
21	43.3	24	37.5	33	32.7	41	39	38	38		28.423
22	49	31	38.8	37	36	46	43	32	31		28.326
23	55	29	40	33	33	49	42.3	40	39		28.016
24	71	32.6	48.3	36	35	69.5	60	44	42		27.896
25	41.1	28	35.7	28	28	40	40	37	37		28.305
26	45	27	44.2	34	34	42	42	34.9	33.5	.01	27.996
27	42.2	26	34	29	27	40	36	34	33		28.226
28	54.5	21	40.3	24	23	53	43	42	42		28.293
29	63	30	43.7	31.1	29	61	59	43	42		28.420
30	76.9	30	54.9	44.8	43	70.1	57.3	52	47		28.123
31	53	35	41	37	33	52	50	37	34		28.220
Totals or Avg.			42.9							.62	28.243

DAKOTA AGRICULTURAL COLLEGE.

METEOROLOGICAL RECORD FOR NOVEMBER, 1888.

Day.	TEMPERATURES.			MOISTURE OF ATMOSPHERE.						Rain Fall.	Mean Barometer
	Highest.	Lowest.	Average.	7 A. M.		2 P. M.		9 P. M.			
				Dry Bulb.	Wet Bulb.	Dry Bulb.	Wet Bulb.	Dry Bulb.	Wet Bulb.		
1	40.6°	35°	39.66°	40°	40°	42°	42°	37°	36.5°		28.016
2	50.3	24	41	30	30	48.5	58	35	31		28.236
3	67	24.5	47.43	33	31	66.5	52.5	47	42		28.103
4	55	32	44	39	35.5	53.7	43	40.5	35.5		28.200
5	42	25	22.53	32.6	32.3	30	36	26	25.5		28.236
6	52	16	34.76	19	19.5	51	45.5	33.8	31		28.160
7	40	22	34.9	26.2	26.2	44	42.5	34.5	33.5		28.286
8	36	24.5	30.83	27	27	35	33.5	30.5	30.5		28.423
9	41.6	20	29.06	26.2	26.2	40	35	21	21		28.286
10	47	17	30	23	23	45	40	21.5	21.5		28.333
11	57	10.5	36.33	25	25	56	56	31	23.5		28.196
12	63	21	40.5	22	22	62	50.5	37	34.5		28.223
13	61	30	43.3	32.5	32.5	58.5	50	38.2	35		28.086
14	39	16	21.66	17	17	27	26.5	20	20		28.390
15	34.6	12.7	18.5	13.6	13.8	25.5	25.5	15.5	15.5		28.363
16	29	18.7	16.33	9	9.5	28.5	28.5	11.5	11.5		28.386
17	34	2	18.93	3.5	3.5	32.5	32.2	22.5	22.5		28.430
18	38	20	26.5	20.5	21	37	37	21	21		28.346
19	31.2	9	19.33	16	16.5	22	22	19.5	20		28.686
20	41.5	17	29.33	23.5	23	40	38.5	25	24.5		28.623
21	48	11	29.86	17	17.2	48	42	25.5	25.2		28.510
22	43	17.7	29.13	18	18.5	42	38	26	26		28.410
23	50.8	16	31.06	17.5	17.5	48	43	27.5	27		28.540
24	58	20	37.5	21	20	55.2	54.75	36	35		28.563
25	36	26	38.76	29	28	52	46.5	35	34		28.403
26	39	28	38.33	29.5	29	54	48	30	29.5		28.373
27	42	29	37.5	20.5	22	54	48	30	29		28.360
28	33	24	26.33	25	25	28	27.5	25	25.5		28.406
29	27	11	23.16	24	24	28.5	27	16	16		28.346
30	20	17	18.33	15.5	16	23	23	18	17.5		28.340
Totals or Avg.....			31.49								28.339

DAKOTA AGRICULTURAL COLLEGE.