

METEOROLOGY FOR JANUARY, 1878.

PRIVATE OBSERVATORY, HOBART TOWN.

Latitude 42° 52' 13" S.; Longitude 9h. 40m. 20.2s. E.  
(Registered for the Royal Society of Tasmania.)

Day of Month.	Bar. corrected for temperature instrumental error, and to mean sea level.		Thermometers (Reading.)			Thermometers (Self-Registering.)			Relative Humidity. Percent		Clouds.		Wind.		Rain in Inches	Spon. Evap.	Ozone. Scale.
	7 30 a.m.	4 30 p.m.	Centigrade, 7 30 a.m.	Fahrenheit, 7 30 a.m.	Fahrenheit, 4 30 p.m.	Highest in Sun, 4 30 p.m.	Highest in Shade, 4 30 p.m.	Lowest on Grass, 7 30 a.m.	7 30 a.m.	4 30 p.m.	7 30 a.m.	4 30 p.m.	7 30 a.m.	4 30 p.m.	7 30 a.m.	7 30 a.m.	7 30 a.m.
	Character.	Amount.	Character.	Amount.	Direction from.	Force in lbs. per square foot.	Direction from.	Force in lbs. per square foot.	7 30 a.m.	7 30 a.m.	7 30 a.m.						
1 20 926	29 970	12.5	55.0	72.0	90.0	72.0	38.0	93	82	N	10 0 K	10 0 S	0	SE	.52		
2 20 963	30 049	16.5	62.0	68.0	110.0	76.0	38.5	67	63	K	6 0 0	0 W	.26	SE	.25		5.0
3 30 925	30 256	12.0	54.0	61.0	95.0	70.0	36.0	81	77	K	3 0 K	8 0 N	0	SE	2.60		5.0
4 31 300	30 235	13.5	56.5	63.0	92.0	66.0	37.5	81	67	K	10 0 K	9 0 SE	0	SE	2.60		2.0
5 30 148	29 971	12.5	54.5	68.0	110.0	73.0	36.5	65	60	K	7 5 K	4 0 NW	0	SW	.65		4.0
6 30 190	29 195	14.0	58.0	70.0	108.5	74.0	37.0	61	68	K	4 0 0	0 N	0	SE	.52		4.5
7 30 121	30 069	13.5	57.0	73.0	95.0	78.0	36.5	76	54	0	0 0	0 S	0	SE	.52		2.0
8 20 974	29 935	15.0	60.0	64.0	85.0	72.0	37.0	71	88	K	10 0 KN	10 0 N	.26	SE	0		4.0
9 20 921	29 759	13.5	57.0	87.0	126.0	90.0	36.5	81	30	K	4 5 0	0 N	.26	SE	.26		2.0
10 20 850	29 871	16.0	61.0	64.0	95.0	84.0	39.5	82	77	KS	10 0 K	10 0 SE	.52	SE	.52	1.65	2.5
11 20 895	29 949	15.0	59.0	64.0	100.0	71.0	35.0	82	08	K	6 0 0	0 E	0	SE	0	.05	5.0
12 30 074	30 041	11.5	55.0	71.0	110.0	75.0	34.5	70	69	0	0 0	0 NW	0	S	.26		4.0
13 20 963	29 830	17.0	63.0	76.0	116.0	83.0	40.0	63	66	K	5 5 K	4 0 NW	.52	SE	.26		3.0
14 20 409	29 074	17.5	65.0	81.0	124.0	81.0	40.0	64	56	K	3 0 K	6 0 N	.26	NW	2.60		6.0
15 20 429	29 628	17.0	63.0	65.0	112.0	78.0	39.5	59	59	K	7 0 K	5 0 NW	5 21 W	5 21 W	5 21		2.5
16 20 937	29 052	10.0	50.0	63.0	110.0	68.5	35.5	68	55	K	8 0 K	3 5 S	5 20 SW	2 60		.01	6.5
17 20 935	29 855	12.0	54.0	65.0	100.0	70.0	39.0	60	59	K	5 0 K	5 0 NW	.26	SE	.52		4.0
18 20 567	29 625	15.5	60.5	73.0	125.0	82.0	40.5	67	54	K	3 5 K	8 0 NW	0	SW	2.60		4.0
19 20 635	29 555	15.0	59.5	62.0	105.0	70.0	40.0	54	62	K	3 0 KN	9 0 NW	10 42 N	.52			2.5
20 30 931	29 960	12.5	54.5	60.0	76.5	66.0	40.0	74	66	K	8 5 K	10 0 W	5 21 S	5 20		2.19	2.5
21 30 665	30 269	11.0	52.0	60.0	80.0	64.0	36.5	74	71	KN	10 0 K	3 5 S	0	SE	.52	.02	4.0
22 30 928	30 145	12.0	54.0	71.0	112.0	78.0	38.0	75	83	C	0 0	0 NW	.26	SW	.52		5.0
23 20 963	30 006	14.0	58.0	66.0	115.0	72.0	40.0	71	64	K	9 0 K	5 0 NW	0	NW	2.60		4.0
24 30 237	30 190	10.5	57.0	67.0	105.0	79.5	41.0	69	60	K	3 0 K	3 5 NW	0	S	.52		4.0
25 30 360	30 212	12.0	54.0	63.0	112.0	75.0	41.5	81	61	0	0 K	4 0 NW	0	S	2.60		2.0
26 30 935	29 890	15.0	59.0	70.0	95.0	77.0	42.0	71	78	K	10 0 K	5 0 N	.26	SE	.26		4.0
27 20 936	29 982	15.5	60.0	67.0	100.0	73.0	42.0	71	56	K	4 0 K	4 0 NE	0	S	.52		5.0
28 30 242	30 225	12.5	55.0	68.0	110.0	74.0	38.0	81	60	KN	10 0 K	2 0 S	0	S	.52		3.0
29 30 279	30 131	12.5	55.0	72.0	124.0	85.0	38.5	75	78	K	4 0 K	4 0 S	.26	SW	2.60		3.5
30 30 041	29 937	14.5	59.0	82.0	112.0	85.0	40.0	71	47	K	4 5 K	7 0 NW	.52	N	.62		4.0
31 20 942	29 870	17.5	63.0	76.0	120.0	82.0	42.5	83	84	K	10 0 0	0 SE	0	NE	.26	1.65	2.0
Mean Press. 29 977	Mean M'n. Tem. 13° 84'	63° 07'	Mean. 105 50	Mean. 75 88	Mean. 35 60	Mean. 69	Mean for Month. 5 10	Mean Force 1.2 lb.	Tl. 25	Tl. 5 49	Tl. 117 0						
Greatest do. 30 925	Max. 17.5	Max. 126 00	Max. 90 00	Max. 42 50	Prev. Character, K	Greatest Force 10 42	Least Force. 0	Prevailing Direction. NW, SE, S			Me'n 3 80						

The Meteorological form brought into use at the beginning of 1876 differs in some respects from the former one. It has been adapted with the view of assimilating the Hobart Town records more closely with those of stations in Europe, America, etc., in order to co-operate in a system of International Meteorology. Readings are added from the centigrade thermometer, that being the instrument generally used on the continent of Europe.

The mean is in all cases taken from the sums of the two daily registers, not from the maximum and minimum.

The direction of the wind is registered from currents at a height of 92 feet above sea level, and its force in lbs. per square foot.

The relative quantity of rain that fell under the different winds is registered each n. crvng at 7 30 a.m.

The 35 years' standard tables are used for obtaining the difference from average.

FRANCIS ABBOTT, F.R.A.S., etc.

Time of leafing, flowering and fruiting of a few standard plants in the Royal Society's Gardens during the month of January, 1878.  
10th.—*Veronica angustifolia* in full flower.

- 12th.—First Royal Apricot ripe.
- 16th.—*Grevillea Robusta* in full flower.
- 20th.—*Jargonelle* Pear ripe.
- 25th.—Black Mulberry commencing to ripen.

F. ABBOTT, JUN., Superintendent.

Results of observations taken at New Norfolk, in accordance with new forms, at 7 30 a.m. and 4 30 p.m. :—  
Barometer, mean of two daily readings, corrected and reduced, 30.102in.

Thermometer, mean of 2 ditto, 64.72deg.  
Ditto mean of maximum and minimum in shade, 63.96deg.  
Dew point, mean position of 2 ditto, 50.20 deg.  
Elastic force of vapour mean, of 2 ditto .364.  
Humidity of air mean of 2 ditto, .60.  
Solar intensity, mean of maximum temperature, 137.67deg.  
Terrestrial radiation, mean of minimum temperature, 41.35deg.

Rainfall, .2in.  
Evaporation, 9.49in., in excess of rainfall, 9.28.  
Clouds, mean amount of 2 ditto, 5.01. (Scale, 0—10.)  
Ozone, mean ditto, 2 ditto, 7.21. (Scale, 0—10.)  
W. E. SHOBRIDGE, Bushy Park.

## JANUARY WEATHER, 1878, AT NEW NORFOLK, TASMANIA.

The year commenced with thick easterly weather and soft rain, '11 inch, falling on the morning of the 1st, but the prospect of moist weather was soon dispelled, and before the first week was over it had set in dry and hot, the humidity of the air on 6th being down to '30 per cent., with a mild hot wind and high barometer; and there were extensive bush fires on the hills around that continued burning during the whole month. On the 9th the temperature in shade was 95°, and the humidity at 4'30 p.m. was again down to '30 per cent.

On the 13th, cool S.W. set in, and on 15th there were slight stormy showers that cooled the air, and cleared the smoke away, although only 0'2 inch of rain fell. Owing to the dry clearness of the air and S.W. wind, it was quite cold for a day or two, till, on morning of 17th, there was a white frost, the self-registering thermometers showing 23° on the grass, and 35° in the shade.

On 19th it was again stormy, cold, and threatening, and although only '08 inch of rain fell here, yet there must have been more on the hills to the W., as the River Styx rose over 2ft. on night of 20th. Sea breezes set in again on 21st, and brought up on 22nd thick clouds and cool weather, but no rain, only hot smoky haze from the bush fires. A clear W. wind set in at 3 p.m. on the 23rd, and next morning there was a slight frost, the thermometer on grass being down to 31°. Sea breezes and hot smoky haze prevailed till 26th, when, after a threatened thunderstorm that did not come here, the wind changed on 27th to W. and S.W., but it only seemed to give the fires a fresh start, and there was hot hazy weather till 30th, when N.W. clouds threatened rain, but it still kept hot and dry, till 31st closed the hottest and driest month registered here for the last five years, there being only '21 inch of rain for the month to 1'01 inches in January, 1877; 1'66 inches in 1876; 1'57 inches in 1875; and 1'25 inches in 1874. The spontaneous evaporation was 9'49 inches, and the mean humidity of air '60 per cent. The mean of max. and min. in shade was 63'96 to 60'04 last January, and solar intensity 137'67 to 129'83.

W. F. SHOOBRIDGE, Bushy Park.

4th February, 1878.