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Weather Tables Rothamsted; Woburn ; Broom's Barn ; Saxmundham

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WEATHER TABLES

ROTHAMSTED WEATHER 1967-68

Latitude 51° 48' 30" N; Longitude 0° 21' 10" W; Altitude 128 m

ROTHAMSTED REPORT FOR 1968

378

		Temperature (°C)		Radiation		Wind	Rain	Rain	Water (mm)	Evapora-	Potential	
		Soil at	Dew-	Sunshine	Kipp	Run at 2 m	Standard	gauge	Drainage	tion	Trans-	
		10 cm	point	hours	mWh	miles day ⁻¹	gauge		50 cm	M.O.	piration	
		Mean air	Ground	cm ⁻² day ⁻¹	cm ⁻² day ⁻¹	at 2 m	gauge		bare soil	tank	mm	
			frosts			Run at 2 m						
						miles day ⁻¹						
1967												
	Oct.	10.4	8.5	93	135	145	150		114	33	15	
	Nov.	5.1	3.9	67	71	110	51		44	12	-3	
	Dec.	3.3	0.6	64	52	130	61		51	2	0	
1968												
	Jan.	3.3 (+0.4)	1.1	38 (-14)	46	155	62 (+7)		66	3	7	
	Feb.	1.5 (-1.9)	-0.3	43 (-25)	95	140	25 (-26)		18	7	9	
	Mar.	6.3 (+1.1)	2.4	134 (+18)	237	205	26 (-18)		Trace	44	41	
	Apr.	7.9 (+0.2)	4.1	170 (+18)	355	125	63 (+16)		21	62	52	
	May	9.6 (-1.5)	6.2	145 (-50)	379	115	53 (+1)		23	62	63	
	June	14.6 (+0.6)	11.1	152 (-51)	427	120	55 (-1)		14	84	86	
	July	15.0 (-0.9)	11.3	136 (-56)	385	110	84 (+21)		46	89	79	
	Aug.	15.2 (-0.4)	12.6	112 (-70)	276	145	72 (+5)		30	66	58	
	Sept.	14.1 (+0.7)	11.8	107 (-38)	233	130	136 (+73)		88	48	53	
	Oct.	12.3 (+2.8)	10.7	56 (-48)	123	110	52 (-14)		28	25	18	
	Nov.	5.9 (+0.1)	4.7	29 (-32)	48	140	48 (-23)		35	16	3	
	Dec.	2.1 (-1.6)	1.2	27 (-18)	29	120	79 (+12)		72	4	-2	
	Total or mean	9.0 (0.0)	6.4	1149 (-366)	219	135	755 (+53)		441	510	467	

NOTES ON THE TABLE

1. Except for the last column, all quantities are measured.
2. Temperatures were measured in °F.
3. 'Soil at 10 cm' and 'Dewpoint' are at 0900 GMT.
4. For radiation, 100 calories = 116 mWh.
5. Run of the wind is measured in miles per day, and is used in calculations in this unit.
6. 'Standard gauge' is 5 in. diameter and surrounded by a turf wall to meet Meteorological Office specification. Measurements were in inches.
7. Drainage is through bare, undisturbed soil: gauge area = 1/1000 acre.
8. M.O. tank is 6 ft square, 2 ft deep, water at ground level, and rim projecting 3 in. above.
9. Potential transpiration—the only calculated entry—is derived from mean air temperature, dewpoint temperature, sunshine, Kipp record and run-of-the-wind.
10. Departures from long-period averages (in brackets) are for different periods:

Air Temperature	1878-1967
Sunshine	1892-1967
Rain	1948-1967

WEATHER TABLES

WOBURN WEATHER 1967-68

Latitude 52° 1' 5" N; Longitude 0° 35' 35" W; Altitude 89 m

	Temperature (°C)		Ground frost	Radiation Sunshine hours	Wind Run at 2 m miles day ⁻¹	Rain	
	Mean air	Soil at 10 cm				Dewpoint	Standard mm
1967							
October	10.9	10.5	7.8	98	178	114	21
November	4.9	5.4	3.5	60	105	45	15
December	3.7	3.7	1.7	65	125	45	20
1968							
January	3.6 (+0.7)	3.4	1.5	44 (- 9)	159	46 (- 7)	17
February	1.8 (-1.6)	1.8	-0.4	39 (- 28)	96	22 (- 18)	10
March	6.6 (+1.1)	4.8	2.8	134 (+ 15)	187	16 (- 27)	15
April	7.7 (-0.4)	7.7	4.2	158 (+ 14)	107	51 (+ 5)	13
May	9.7 (-1.4)	10.7	6.6	147 (- 38)	91	55 (+ 0)	17
June	14.8 (+0.5)	15.8	11.3	173 (- 25)	107	77 (+ 28)	15
July	14.8 (-1.3)	16.6	11.4	120 (- 61)	81	108 (+ 53)	13
August	15.3 (-0.5)	15.5	12.7	109 (- 66)	110	75 (+ 13)	13
September	14.1 (+0.4)	14.1	11.5	113 (- 22)	129	108 (+ 56)	19
October	12.7 (+2.8)	12.3	10.6	67 (- 36)	119	41 (- 16)	13
November	6.3 (0.0)	7.1	4.4	32 (- 27)	98	53 (- 10)	15
December	2.3 (-1.7)	2.8	1.2	26 (- 20)	86	47 (- 7)	12
Total or mean 1968	9.2 (-0.1)	9.4	6.5	1162 (-303)	114	698 (+71)	172

NOTES ON THE TABLE

1. Where relevant, as for Rothamsted.
2. Standard long period is 1930-67 for temperature, sunshine and rain.

ROTHAMSTED REPORT FOR 1968

BROOM'S BARN WEATHER 1968

Latitude 52° 16' N; Longitude 0° 34' E; Altitude 75 m

	Temperature (°C)		Dewpoint	Radiation		Water (mm)	
	Mean air	Soil at 10 cm		Sunshine hours	mWh cm ⁻² day ⁻¹	Rain	Evaporation
January	3.5 (+0.1)	2.6	1.2	37 (-15)	55	41 (-8)	
February	1.9 (-1.9)	1.4	-0.5	45 (-27)	98	31 (-5)	
March	6.6 (+0.3)	4.2	1.9	128 (+4)	241	22 (-9)	
April	8.3 (+0.5)	7.7	3.6	186 (+26)	383	48 (+4)	
May	9.9 (-2.0)	10.5	5.9	158 (-43)	422	30 (-11)	67
June	14.7 (-0.3)	15.3	11.0	174 (-37)	457	67 (+29)	102
July	14.9 (-1.9)	16.0	11.6	146 (-47)	382	70 (+8)	100
August	15.7 (-1.0)	15.1	12.8	122 (-62)	283	110 (+58)	82
September	14.3 (-0.2)	14.5	11.3	133 (-8)	251	152 (+100)	62
October	12.8 (+2.1)	11.4	10.4	71 (-36)	142	45 (-4)	34
November	6.5 (-0.4)	5.2	4.7	37 (-19)	63	41 (-11)	22
December	2.2 (-2.5)	2.3	1.0	21 (-24)	33	44 (-2)	
Total or mean	9.3 (-0.7)	8.8	6.2	1261 (-288)	234	701 (+149)	

NOTES ON THE TABLE

1. Temperatures were measured in °F and water in inches.
2. Evaporation is for open water. Tank is 22½ in. diameter, 13½ in. deep, water at ground level, and rim projecting 2½ in. above.
3. Departures from long-period averages (in brackets) are relative to values at Mildenhall.

SAXMUNDHAM WEATHER 1968

Latitude 52° 13' N; Longitude 1° 28' E; Altitude 37 m

	Temperature (°C)		Ground frosts	Radiation mWh cm ⁻² day ⁻¹	Wind Run at 2 m miles day ⁻¹	Water (mm)		Accumulated Day-degrees F	
	Mean air	Soil at 10 cm				Dewpoint	Rain	Evapora- tion	A
January	2.6	3.8	0.0	64	195	64	14	34	197
February	2.2	2.4	-1.5	89	150	60	12	38	379
March	6.4	4.9	2.5	205	230	28	13	150	448
April	8.1	8.0	3.0	355	160	27	12	343	501
May	10.0	10.0	6.5	349	130	42	14	604	511
June	14.4	15.4	11.0	405	120	56	18	1082	512
July	14.7	15.9	12.0	356	105	64	(9+)	1595	512
August	15.7	15.2	12.0	287	135	73	18	2162	512
September	14.3	13.1	11.0	238	150	139	16	2636	512
October	12.6	11.2	10.0	123	140	51	12	3032	513
November	6.7	6.6	4.0	65	150	41	23	3133	550
December	2.4	2.9	-1.0	67	150	45	13	3151	741
Total or mean	9.2	9.1	5.8	217	150	690	174	—	—

NOTES ON THE TABLE

1. Except for the last two columns, all quantities are measured.
2. Temperatures were measured in °F.
3. 'Soil at 10 cm' and 'Dewpoint' are at 0900 GMT.
4. 'Radiation' is measured on a radiometer built at Rothamsted.
5. Rain and evaporation were measured in inches.
6. 'Evaporation' is the mean of two open water tanks, installed 21 March 1968. They are 22 in. diameter, 12 in. deep, and set 6 in. in the ground. Water level is about 2½ in. below the rim.
7. Calculated values of accumulated temperatures are:
 - A. Day-degrees above 42° F
 - B. Day-degrees below 42° F