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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

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		Temperature (°C)		Radiation		Wind		Rain		Water (mm)		Evapora- Potential	
		Soil at 10 cm	Dew-point	Sunshine hours	Kipp mWh cm ⁻² day ⁻¹	Run at 2 m miles day ⁻¹	Standard gauge	Rain days	Drainage 50 cm bare soil	Evaporation M.O. tank	Potential Transpiration mm		
1967													
	Oct.	10.4	8.5	93	135	145	150	22	114	33	15		
	Nov.	5.1	3.9	67	71	110	51	20	44	12	-3		
	Dec.	3.3	0.6	64	52	130	61	20	51	2	0		
1968													
	Jan.	3.3 (+0.4)	1.1	38 (-14)	46	155	62 (+7)	20	66	3	7		
	Feb.	1.5 (-1.9)	-0.3	43 (-25)	95	140	25 (-26)	12	18	7	9		
	Mar.	6.3 (+1.1)	2.4	134 (+18)	237	205	26 (-18)	14	Trace	44	41		
	Apr.	7.9 (+0.2)	4.1	170 (+18)	355	125	63 (+16)	14	21	62	52		
	May	9.6 (-1.5)	6.2	145 (-50)	379	115	53 (+1)	17	23	62	63		
	June	14.6 (+0.6)	11.1	152 (-51)	427	120	55 (-1)	17	14	84	86		
	July	15.0 (-0.9)	11.3	136 (-56)	385	110	84 (+21)	11	46	89	79		
	Aug.	15.2 (-0.4)	12.6	112 (-70)	276	145	72 (+5)	18	30	66	58		
	Sept.	14.1 (+0.7)	11.8	107 (-38)	233	130	136 (+73)	21	88	48	53		
	Oct.	12.3 (+2.8)	10.7	56 (-48)	123	110	52 (-14)	13	28	25	18		
	Nov.	5.9 (+0.1)	4.7	29 (-32)	48	140	48 (-23)	18	35	16	3		
	Dec.	2.1 (-1.6)	1.2	27 (-18)	29	120	79 (+12)	14	72	4	-2		
	Total or mean 1968	8.7	6.4	1149 (-366)	219	135	755 (+53)	189	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.

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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 days	Evapora- tion	A
January	2.6	3.8	0.0	64	195	14	34	197	
February	2.2	2.4	-1.5	89	150	60	38	379	
March	6.4	4.9	2.5	205	230	28	150	448	
April	8.1	8.0	3.0	355	160	27	343	501	
May	10.0	10.0	6.5	349	130	42	604	511	
June	14.4	15.4	11.0	405	120	56	1082	512	
July	14.7	15.9	12.0	356	105	64	1595	512	
August	15.7	15.2	12.0	287	135	18	2162	512	
September	14.3	13.1	11.0	238	150	16	2636	512	
October	12.6	11.2	10.0	123	140	51	3032	513	
November	6.7	6.6	4.0	65	150	41	3133	550	
December	2.4	2.9	-1.0	67	150	45	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