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

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WEATHER TABLES

ROTHAMSTED WEATHER 1970-71

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

	Temperature (°C)				Radiation			Wind	Water			
	Mean air	Soil at 10 cm	Dew-point	Ground frosts	Sunshine hours	mWh cm ⁻² day ⁻¹	Run at 2 m km day ⁻¹		Rain mm	Rain days	Drainage bare soil	Evaporation (mm) Open water
1970												
Oct.	10.7	9.6	8.1	10	97	150	235	22	12	TR	35	24
Nov.	7.3	6.3	5.2	8	52	87	250	156	23	128	18	9
Dec.	3.3	3.3	2.3	22	36	43	235	50	17	30	6	-3
1971												
Jan.	3.7 (+0.8)	3.6	2.3	14	31 (-21)	43	215	86 (+26)	19	90	5	5
Feb.	4.1 (+0.7)	2.9	1.6	21	75 (+6)	109	200	27 (-24)	9	19	14	9
March	4.4 (-0.8)	3.7	1.0	18	95 (-21)	191	235	67 (+23)	19	38	31	29
April	7.3 (-0.4)	6.8	3.4	13	123 (-30)	284	255	36 (-12)	10	14	53	49
May	11.5 (+0.4)	11.9	6.8	6	228 (+34)	473	185	49 (-4)	11	11	90	85
June	12.3 (-1.8)	13.3	9.0	0	131 (-72)	398	225	103 (+48)	14	65	79	75
July	16.8 (+0.9)	18.1	12.7	0	222 (+31)	462	150	15 (-45)	7	TR	113	93
Aug.	15.7 (+0.1)	15.6	12.6	0	130 (-49)	312	190	64 (-2)	19	10	73	60
Sept.	13.9 (+0.5)	13.5	11.2	1	167 (+22)	294	125	13 (-47)	4	TR	78	43
Oct.	11.1 (+1.5)	9.6	9.3	7	143 (+40)	179	185	73 (+12)	9	44	35	14
Nov.	5.3 (-0.5)	4.7	3.8	17	84 (+23)	85	215	69 (-6)	16	45	17	1
Dec.	5.7 (+2.1)	5.1	4.3	10	26 (-19)	33	205	20 (-47)	7	14	8	1
Total or mean	9.3 (+0.1)	9.1	6.5	107	1455 (-56)	239	200	622 (-78)	144	350	596	464

NOTES ON THE TABLE

1. Except for last column, all quantities are measured.
2. Drainage and evaporation measured in inches, soil temperature in °F.
3. Drainage is through 50 cm bare undisturbed soil.
4. Departures from long-period averages (in brackets) are for different periods:
Air temperature 1878-1970; Sunshine 1892-1970; Rain 1948-70.

WOBURN WEATHER 1970-71

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

	Temperature (°C)				Radiation Sunshine hours	Wind Run at 2 m km day ⁻¹	Water	
	Mean air	Soil at 10 cm	Dewpoint	Ground frosts			Rain mm	Rain days
1970								
October	10.8	10.0	8.1	11	103	250	18	8
November	8.0	6.8	5.1	10	61	265	131	20
December	3.7	3.9	2.3	8	35	190	38	12
1971								
January	4.1 (+1.1)	3.7	2.9	12	45 (-7)	210	87 (+33)	18
February	4.1 (+0.8)	3.4	2.2	19	69 (+2)	185	15 (-25)	7
March	4.5 (-0.9)	4.5	2.5	17	85 (-33)	200	48 (+7)	14
April	7.3 (-0.8)	7.7	3.8	14	109 (-36)	180	33 (-12)	7
May	11.1 (0.0)	12.8	7.1	11	224 (+40)	145	35 (-19)	13
June	12.1 (-2.3)	13.9	9.1	0	124 (-76)	190	84 (+35)	13
July	16.7 (+0.7)	18.7	12.7	1	230 (+50)	125	37 (-20)	6
August	15.8 (0.0)	16.2	12.5	0	136 (-36)	190	86 (+23)	19
September	13.3 (-0.4)	13.7	11.6	5	152 (+17)	115	16 (-37)	5
October	11.2 (+1.2)	10.2	8.9	7	148 (+46)	205	79 (+25)	8
November	5.7 (-0.6)	5.0	3.6	15	96 (+37)	195	67 (+2)	13
December	5.9 (+2.1)	5.4	4.2	11	30 (-14)	215	21 (-32)	10
Total or mean	9.3 (0.0)	9.6	6.7	112	1448 (-10)	180	608 (-20)	133

NOTES ON THE TABLE

1. Soil temperatures were measured in °F
2. Standard long-period is 1930-70

WEATHER TABLES

BROOM'S BARN WEATHER 1970-71

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

	Temperature(°C)				Radiation		Wind	Water			
	Mean air	Soil at 10 cm	Dew-point	Ground frosts	Sunshine hours	mWh cm ⁻² day ⁻¹	Run at 2 m km day ⁻¹	Rain mm	Rain days	Evaporation (mm)	
										Open water	Pot. Trans.
1970											
October	11.3	10.1	7.8	2	104	—	215	24	14	46	38
November	7.8	6.4	5.1	4	60	—	210	153	22	—	14
December	3.7	3.5	2.2	14	36	—	215	51	19	—	1
1971											
January	4.2 (+0.8)	3.3	2.6	10	39 (-7)	52	235	78 (+34)	21	—	3
February	4.5 (+1.1)	3.2	1.3	14	65 (+2)	118	205	18 (-16)	11	—	7
March	4.7 (-0.2)	3.9	1.7	13	95 (-22)	—	225	41 (+5)	19	—	30
April	7.3 (-0.4)	7.1	4.1	8	117 (-21)	—	230	33 (-17)	6	57	47
May	11.6 (-0.1)	12.2	8.0	5	230 (+38)	455	160	37 (-5)	11	98	77
June	12.7 (-1.7)	13.6	9.2	0	134 (-70)	369	205	87 (+31)	17	100	73
July	17.3 (+1.2)	18.3	12.6	0	240 (+60)	475	162	35 (-21)	7	134	97
August	16.5 (+0.6)	16.1	12.8	0	136 (-22)	307	205	54 (-4)	18	96	69
September	14.4 (+0.1)	14.2	11.0	0	172 (+28)	285	160	24 (-23)	5	89	43
October	11.6 (+0.3)	10.2	9.1	4	152 (+41)	173	215	59 (+16)	10	44	18
November	5.7 (-0.2)	4.9	3.6	12	83 (+19)	80	255	77 (+8)	20	20	5
December	5.7 (+2.0)	4.9	4.1	7	29 (-8)	45	240	23 (-35)	12	7	3
Total or mean	9.7 (+0.3)	9.3	6.7	73	1492 (+38)	—	210	566 (-27)	157	—	472

NOTES ON THE TABLE

1. Except for the last column, all quantities are measured.
2. Temperature were measured in °F until September, thereafter in °C.
3. Departures (in brackets) are from averages:— Air temperature and rainfall 1964-71, sunshine 1965-71.

SAXMUNDHAM WEATHER 1971

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

	Temperature (°C)				Radiation mWh cm ⁻² day ⁻¹	Wind Run at 2 m km day ⁻¹	Water (mm)			Accumulated Day-degrees F	
	Mean air	Soil at 10 cm	Dewpoint	Ground frosts			Rain	Rain days	Evap. Open water	A	B
January	3.8	3.6	0.6	13	88	254	86	17	—	27	117
February	4.4	3.7	0.0	13	116	225	20	8	—	54	201
March	4.3	3.8	0.0	14	150	267	39	18	35†	100	317
April	6.9	7.1	2.8	9	182	246	15	5	13	215	354
May	11.2	12.0	6.7	3	357	159	23	8	105	547	362
June	11.9	12.1	8.9	0	295	201	83	12	102	899	362
July	16.3	17.5	13.9	0	314	114	76	6	140	1501	362
August	16.7	16.3	13.3	0	248	171	60	15	113	2135	362
September	14.6	13.5	11.1	0	200	142	39	5	70	2625	362
October	11.6	10.1	8.9	5	120	221	62	10	50	2976	369
November	6.5	5.2	4.4	12	65	270	102	17	—	3082	425
December	6.0	5.7	4.4	7	88	238	29	9	—	3159	479
Total or mean	9.5	9.2	6.2	76	186	209	636	130	—	—	—

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 on 9 March 1971(†). 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.
8. Dew-point values January to March are suspect. An instrument error was put right about mid-March.