

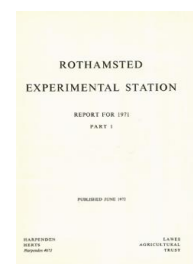
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED  
RESEARCH

## Report for 1971

[Full Table of Content](#)



---

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

#### Rothamsted Research

Rothamsted Research (1972) *Weather Tables Rothamsted; Woburn ; Broom's Barn ; Saxmundham ; Report For 1971*, pp 373 - 377 - DOI: <https://doi.org/10.23637/ERADOC-1-126>

## 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 <sup>-2</sup> day <sup>-1</sup>	Run at 2 m km day <sup>-1</sup>		Rain mm	Rain days	Drainage bare soil	Evaporation (mm) Open water
<b>1970</b>												
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
<b>1971</b>												
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 <sup>-1</sup>	Water	
	Mean air	Soil at 10 cm	Dewpoint	Ground frosts			Rain mm	Rain days
<b>1970</b>								
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
<b>1971</b>								
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 <sup>-2</sup> day <sup>-1</sup>	Run at 2 m km day <sup>-1</sup>	Rain mm	Rain days	Evaporation (mm)	
										Open water	Pot. Trans.
<b>1970</b>											
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
<b>1971</b>											
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 <sup>-2</sup> day <sup>-1</sup>	Wind Run at 2 m km day <sup>-1</sup>	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.