

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 1974 - Part 1

[Full Table of Content](#)



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

Rothamsted Research

Rothamsted Research (1975) *Weather Tables Rothamsted; Woburn ; Broom's Barn ; Saxmundham ; Report For 1974 - Part 1*, pp 305 - 309 - DOI: <https://doi.org/10.23637/ERADOC-1-131>

WEATHER TABLES

L

ROTHAMSTED WEATHER 1973-74

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

	Temperature (°C)				Radiation		Wind Run at 2 m km day ⁻¹	Water (mm)				
	Mean air	Soil at 10 cm	Dew- point	Ground frosts	Sunshine hours	mWh cm ⁻² day ⁻¹		Rain	Rain days	Drainage bare soil	Evaporation Open water	Pot. trans.
1973												
October	8.9	8.1	6.8	12	108	149	184	31	11	8	29	17
November	5.3	4.6	2.6	18	97	80	220	25	13	4	14	3
December	4.6	3.4	2.7	17	57	45	245	47	19	42	4	0
1974												
January	5.5 (+2.6)	4.2	3.5	13	43 (- 8)	49	275	92 (+31)	19	83	12	4
February	5.1 (+1.7)	4.1	3.3	16	62 (- 6)	89	242	97 (+47)	17	77	16	7
March	5.5 (+0.3)	4.1	2.7	18	102 (-15)	176	219	47 (+ 2)	11	31	29	23
April	7.9 (+0.2)	7.4	3.9	11	146 (- 5)	325	254	19 (-29)	7	Trace	61	53
May	10.7 (-0.4)	11.2	5.9	11	196 (+ 2)	449	218	27 (-25)	11	Trace	85	85
June	13.7 (-0.4)	14.8	9.5	5	202 (0)	404	218	76 (+19)	11	12	99	78
July	15.1 (-0.8)	15.8	10.8	0	195 (+ 4)	310	233	31 (-26)	13	—	89	67
August	15.3 (-0.3)	15.1	11.5	1	185 (+ 6)	353	175	79 (+15)	16	11	83	64
September	12.0 (-1.4)	11.5	9.1	2	156 (+11)	259	216	118 (+61)	23	76	53	38
October	7.0 (-2.6)	6.5	4.6	7	90 (-13)	132	241	103 (+44)	22	80	29	16
November	6.5 (+0.7)	5.5	5.2	11	45 (-17)	59	247	139 (+67)	26	123	14	4
December	7.4 (+3.8)	5.7	4.6	10	58 (+13)	44	363	37 (-28)	15	23	10	7
Total or mean	9.3 (+0.3)	8.8	6.2	105	1480 (-28)	221	242	865 (+178)	191	516	580	446

NOTES ON THE TABLE

1. Except for the last column, all quantities are measured.
2. Drainage and evaporation were measured in inches.
3. Drainage is through 50 cm bare undisturbed soil.
4. Departures from long-period averages (in brackets) are for different periods: Air temperature, 1878-1973; Sunshine, 1882-1973; Rain, 1948-73.

WOBURN WEATHER 1973-74

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 (mm)	
	Mean air	Soil at 10 cm	Dewpoint	Ground frosts			Rain	Rain days
1973								
October	8.7	8.0	6.9	13	96	148	30	11
November	5.4	4.8	3.0	15	86	217	32	6
December	4.6	3.5	2.9	17	53	238	32	15
1974								
January	5.9 (+2.8)	4.3	3.7	13	49 (- 2)	301	64 (+10)	18
February	5.3 (+2.0)	4.2	3.2	13	54 (-12)	233	63 (+24)	14
March	5.3 (-0.1)	4.2	2.7	14	91 (-27)	175	39 (- 2)	12
April	7.1 (-1.0)	6.9	3.9	16	118 (-25)	164	16 (-30)	6
May	10.4 (-0.7)	11.1	6.0	9	184 (0)	190	33 (-22)	10
June	13.4 (-0.9)	15.0	9.4	2	191 (- 8)	188	68 (+18)	10
July	14.9 (-1.1)	16.0	10.7	0	172 (- 8)	243	41 (-14)	13
August	14.9 (-0.9)	15.1	11.7	0	172 (+ 1)	161	110 (+49)	14
September	12.1 (-1.6)	11.5	9.9	2	151 (+16)	228	109 (+58)	23
October	7.1 (-2.9)	6.7	4.8	12	79 (-23)	177	90 (+37)	19
November	6.7 (+0.4)	5.6	5.3	9	43 (-18)	249	121 (+58)	22
December	7.7 (+3.7)	5.9	5.3	9	52 (+ 7)	391	34 (-18)	15
Total or mean	9.2 (-0.1)	8.9	6.4	99	1356 (-99)	225	788 (+168)	176

NOTES ON THE TABLE

1. Standard long period is 1930-73. Departures are in brackets.

BROOM'S BARN WEATHER 1973-74

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

	Temperature (°C)				Radiation		Wind Run at 2 m km day ⁻¹	Water (mm)			
	Mean air	Soil at 10 cm	Dewpoint	Ground frosts	Sunshine hours	mWh cm ⁻² day ⁻¹		Rainfall	Rain days	Evaporation	
							Open water			Pot. trans.	
1973											
October	9.4	8.3	7.2	5	106	140	170	37	11	32	14
November	5.5	4.4	2.6	12	100	90	256	34	8	20	6
December	4.6	3.2	2.5	12	64	56	271	35	20	16	2
1974											
January	5.6 (+2.1)	4.0	3.3	5	59 (+14)	64	299	38 (-5)	18	18	7
February	5.3 (+1.8)	4.1	3.2	5	69 (+8)	102	262	57 (+24)	17	22	9
March	5.7 (+0.4)	4.3	2.8	10	103 (-19)	190	235	17 (-18)	13	37	27
April	8.1 (+0.5)	7.6	4.3	9	155 (+17)	300	214	20 (-29)	7	80	47
May	11.2 (-0.4)	11.4	6.2	3	207 (+17)	425	218	30 (-14)	11	119	82
June	14.2 (-0.1)	15.0	9.7	0	208 (0)	444	214	50 (-5)	13	132	87
July	15.5 (-0.5)	15.9	10.6	0	174 (-1)	383	242	35 (-18)	13	120	88
August	16.0 (-0.1)	15.7	11.9	0	200 (+34)	355	183	78 (+27)	14	124	70
September	12.7 (-1.4)	11.9	9.3	0	160 (+16)	254	214	89 (+37)	19	75	40
October	7.1 (-4.0)	6.5	5.0	2	74 (-35)	116	220	107 (+68)	19	33	13
November	6.6 (+0.7)	5.1	4.9	6	49 (-21)	63	231	98 (+34)	23	19	5
December	7.7 (+3.8)	5.5	5.0	4	47 (+4)	47	383	33 (-22)	13	22	12
Total or mean	9.6 (+0.2)	8.9	6.3	44	1505 (+34)	229	243	652 (+79)	180	801	487

NOTES ON THE TABLE

1. Except for the last column, all quantities are measured.
2. Departures from long period averages (in brackets) are for different periods: Air temperature and rainfall, 1964-73; Sunshine, 1965-73.

SAXMUNDEN WEATHER 1974

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

	Temperature (°C)				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	Evaporation Open water	A	B
January	5.6	4.0	4.4	8	364	38	14	—	70	69
February	5.2	4.2	3.3	7	323	50	13	—	122	137
March	5.7	4.2	3.9	9	257	26	8	—	195	200
April	8.1	7.3	4.5	5	275	12	4	88	355	223
May	10.6	11.6	7.2	7	254	10	6	131	647	237
June	14.0	14.9	9.5	1	190	31	9	125	1076	239
July	15.2	15.4	11.1	0	200	46	9	127	1609	239
August	15.8	15.4	12.2	0	166	67	10	93	2185	239
September	12.6	11.9	10.0	2	235	106	16	78	2567	241
October	7.3	6.8	5.5	4	240	84	19	33	2686	263
November	6.3	5.3	5.5	6	278	121	19	28	2765	302
December	7.3	5.2	5.5	3	402	33	8	—	2896	336
Total or mean	9.5	8.8	6.9	52	265	624	135	—	—	—

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. Rain and evaporation were measured in inches.
5. 'Evaporation' is the mean of two open water tanks installed on 27 March 1974. They are 56 cm diameter, 30 cm deep and set 15 cm in the ground. Water level is about 6 cm below the rim.
6. Calculated values of accumulated temperatures are: A. Day-degrees above 42°F. B. Day-degrees below 42°F.