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Report for 1970 - Part1

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

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WEATHER TABLES

ROTHAMSTED WEATHER 1969-70

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	Pot. Trans.
1969												
Oct.	12.7	11.8	10.3	1	107	159	160	6	10	TR	42	18
Nov.	4.9	4.8	2.9	16	66	71	275	88	18	46	15	4
Dec.	2.6	2.5	1.5	21	17	28	240	66	20	61	3	2
1970												
Jan.	3.2 (+0.3)	2.9	2.4	17	33 (-19)	38	200	75 (+16)	23	63	6	-2
Feb.	2.4 (-1.0)	1.7	-0.2	19	106 (+38)	133	310	67 (+16)	20	64	3	10
Mar.	2.5 (-2.7)	2.3	0.2	23	95 (-21)	205	270	55 (+12)	21	34	11	26
Apr.	6.2 (-1.5)	5.6	3.2	17	105 (-48)	269	280	75 (+28)	21	37	37	45
May	12.8 (+1.7)	12.9	8.6	0	202 (+8)	450	215	23 (-31)	10	1	95	78
June	16.1 (+2.0)	18.1	11.3	0	262 (+59)	543	200	23 (-33)	7	TR	129	102
July	15.0 (-0.9)	15.7	11.6	1	156 (-35)	384	195	49 (-11)	18	TR	87	76
Aug.	15.8 (+0.2)	16.1	12.3	0	171 (-9)	369	150	64 (-2)	10	21	84	66
Sept.	14.2 (+0.8)	13.6	11.2	0	149 (+5)	289	170	51 (-9)	12	17	59	44
Oct.	10.7 (+1.1)	9.6	8.1	10	97 (-6)	150	235	22 (-41)	12	TR	35	25
Nov.	7.3 (+1.5)	6.3	5.2	8	52 (-9)	87	250	156 (+85)	23	128	18	10
Dec.	3.3 (-0.3)	3.3	2.3	22	36 (-9)	43	235	50 (-18)	17	30	6	-2
Total or mean	9.1 (+0.1)	9.0	6.3	117	1464 (-46)	247	225	710 (+12)	194	395	570	478

NOTES ON THE TABLE

1. Except for the last column, all quantities are measured.
2. Temperatures were measured in °F, rain, drainage and evaporation 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 1878-1969; Sunshine 1892-1969; Rain 1948-69.

WOBURN WEATHER 1969-70

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
1969								
October	12.9	12.1	10.9	3	107	160	3	4
November	5.4	5.2	2.9	16	72	185	65	15
December	2.9	3.2	1.9	21	20	190	49	18
1970								
January	3.6 (+0.6)	3.3	2.5	17	32 (-20)	175	56 (+ 2)	22
February	2.7 (-0.6)	2.1	0.3	22	99 (+33)	265	57 (+17)	20
March	2.8 (-2.8)	2.8	0.9	23	102 (-16)	230	45 (+ 3)	16
April	6.7 (-1.4)	6.4	3.6	16	111 (-35)	245	71 (+26)	22
May	13.1 (+2.0)	13.6	8.6	1	203 (+20)	180	7 (-48)	9
June	16.1 (+1.8)	18.0	10.8	0	237 (+38)	175	33 (-17)	8
July	15.5 (-0.6)	16.2	11.2	0	161 (-20)	220	42 (-15)	16
August	15.7 (-0.1)	15.9	12.3	0	161 (-11)	145	63 (+ 1)	11
September	14.7 (+1.0)	14.2	11.3	0	159 (+25)	200	39 (-14)	11
October	10.8 (+0.8)	10.0	8.1	11	103 (+ 2)	250	18 (-37)	8
November	8.0 (+1.7)	6.8	5.1	10	61 (+ 2)	265	131 (+68)	20
December	3.7 (-0.2)	3.9	2.3	18	35 (-10)	190	38 (-15)	12
Total or mean	9.5 (+0.2)	9.4	6.4	118	1464 (+ 8)	210	600 (-29)	175

NOTES ON THE TABLE

1. Temperatures were measured in °F; rain in inches.
2. Standard long-period is 1930-69.

WEATHER TABLES

BROOM'S BARN WEATHER 1969-70

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.
1969											
October	13.5	12.3	10.5	0	114	160	200	4	5	39	25
November	5.4	5.3	2.6	11	67	81	295	74	18	—	12
December	2.6	2.5	1.2	15	14	30	240	68	20	—	2
1970											
January	3.3 (0.0)	2.7	1.8	11	24 (-23)	46	175	53 (+14)	22	—	3
February	2.8 (-0.5)	1.5	-0.4	20	92 (+30)	132	220	58 (+22)	21	—	16
March	3.1 (-1.9)	2.2	0.1	20	97 (-23)	188	195	34 (-2)	20	—	27
April	6.6 (-1.1)	5.7	3.0	12	117 (-24)	267	205	75 (+14)	26	57	46
May	13.2 (+1.2)	12.9	8.2	0	215 (+24)	462	160	21 (-21)	3	115	86
June	16.3 (+1.6)	18.2	10.0	0	280 (+72)	538	145	13 (-39)	6	145	107
July	15.7 (-0.2)	15.9	11.2	0	173 (-1)	383	165	47 (-12)	17	108	86
August	16.3 (+0.4)	15.9	12.2	0	187 (+20)	346	130	42 (-16)	12	107	71
September	15.2 (+0.9)	14.3	10.7	0	168 (+20)	281	165	36 (-14)	8	82	54
October	11.3 (-0.2)	10.1	7.8	2	104 (-3)	—	215	24 (-17)	14	46	38
November	7.8 (+1.9)	6.4	5.1	4	60 (-2)	—	210	153 (+85)	22	—	14
December	3.7 (+0.3)	3.5	2.2	14	36 (-4)	—	215	51 (-11)	19	—	1
Total or mean	9.6 (+0.2)	9.1	6.0	83	1553 (+86)	—	185	608 (+2)	190	—	549

NOTES ON THE TABLE

1. Except for the last column, all quantities are measured.
2. Temperatures were measured in °F; rain and open water evaporation in inches.
3. Departures from averages (in brackets), air temperature and rainfall 1964-70; sunshine 1965-70.

SAXMUNDHAM WEATHER 1970

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	3.1	1.7	7	147	265	72	16	—	15	66
February	3.4	1.6	0.0	9	148	320	55	22	—	23	133
March	3.3	2.4	0.1	15	172	295	51	17	16†	57	277
April	6.0	5.4	3.1	14	240	285	53	24	40	168	363
May	11.9	12.1	6.8	1	388	230	18	6	105	523	364
June	15.0	17.0	10.7	0	472	200	8	4+	133	1038	364
July	14.6	16.4	10.2	0	359	220	28	9+	98	1545	364
August	15.9	16.5	10.5	0	331	190	21	7	113	2123	364
September	14.7	13.7	8.7	0	234	200	62	7	83	2613	364
October	10.9	9.6	5.9	3	138	235	25	8	49	2922	372
November	7.5	6.4	3.7	0	—	295	151	17	28	3061	404
December	3.9	4.3	1.2	2+	—	235	34	8+	—	3049	520
Total or mean	9.2	9.0	5.2	51+	—	250	578	145+	—	—	—

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 19 March 1970(†). 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. Temperature records for January and February are based on daily readings excluding Sundays.

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