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Report for 1972 - Part 1

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

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WEATHER TABLES

ROTHAMSTED WEATHER 1971-72

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 |
| 1971 | | | | | | | | | | | | |
| October | 11.1 | 9.6 | 9.3 | 7 | 143 | 179 | 185 | 73 | 9 | 44 | 35 | 14 |
| November | 5.3 | 4.7 | 3.8 | 17 | 84 | 85 | 215 | 69 | 16 | 45 | 17 | 1 |
| December | 5.7 | 5.1 | 4.3 | 10 | 26 | 33 | 205 | 20 | 7 | 14 | 8 | 1 |
| 1972 | | | | | | | | | | | | |
| January | 3.1 (+0.2) | 2.9 | 1.5 | 17 | 44 (- 8) | 47 | 225 | 85 (+24) | 22 | 76 | 7 | 0 |
| February | 3.9 (+0.5) | 2.7 | 2.4 | 15 | 30 (-38) | 56 | 215 | 66 (+16) | 17 | 58 | 8 | 5 |
| March | 6.4 (+1.2) | 4.3 | 3.0 | 20 | 149 (+34) | 236 | 240 | 70 (+25) | 17 | 37 | 33 | 32 |
| April | 8.0 (+0.3) | 7.3 | 4.2 | 10 | 109 (-43) | 292 | 305 | 54 (+ 7) | 18 | 24 | 49 | 56 |
| May | 10.5 (-0.6) | 10.3 | 7.0 | 3 | 165 (-29) | 409 | 265 | 44 (- 9) | 22 | 3 | 71 | 78 |
| June | 11.7 (-2.4) | 12.9 | 8.2 | 0 | 160 (-42) | 423 | 175 | 37 (-20) | 16 | TR | 76 | 74 |
| July | 15.5 (-0.4) | 16.2 | 11.9 | 0 | 158 (-33) | 388 | 150 | 29 (-29) | 10 | TR | 87 | 79 |
| August | 15.1 (-0.5) | 15.3 | 11.5 | 0 | 165 (-14) | 355 | 150 | 36 (-30) | 5 | 12 | 91 | 66 |
| September | 11.7 (-1.7) | 11.5 | 8.1 | 2 | 124 (-20) | 246 | 155 | 31 (-27) | 5 | TR | 69 | 42 |
| October | 10.5 (+0.9) | 9.1 | 7.5 | 9 | 102 (- 1) | 154 | 205 | 29 (-33) | 6 | 9 | 42 | 22 |
| November | 5.7 (-0.1) | 5.1 | 3.5 | 16 | 86 (+25) | 83 | 240 | 66 (- 9) | 15 | 46 | 13 | 4 |
| December | 5.1 (+1.5) | 4.5 | 3.8 | 21 | 45 (0) | 45 | 210 | 92 (+27) | 14 | 88 | 8 | -2 |
| Total or mean | 8.9 (-0.1) | 8.5 | 6.1 | 113 | 1337 (-169) | 228 | 210 | 639 (-72) | 167 | 353 | 554 | 456 |

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 1878-1971; Sunshine 1892-1971; Rain 1948-71.

WOBURN WEATHER 1971-72

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 |
| 1971 | | | | | | | | |
| October | 11.2 | 10.2 | 8.9 | 7 | 148 | 205 | 79 | 8 |
| November | 5.7 | 5.0 | 3.6 | 15 | 96 | 195 | 67 | 13 |
| December | 5.9 | 5.4 | 4.2 | 11 | 30 | 215 | 21 | 10 |
| 1972 | | | | | | | | |
| January | 3.5 (+0.4) | 3.5 | 1.8 | 14 | 43 (-9) | 205 | 59 (+5) | 20 |
| February | 4.1 (+0.8) | 3.1 | 2.7 | 15 | 36 (-30) | 190 | 38 (-1) | 16 |
| March | 6.5 (+1.1) | 4.7 | 3.3 | 20 | 141 (+24) | 205 | 43 (+1) | 16 |
| April | 8.1 (0.0) | 7.7 | 4.0 | 5 | 103 (-41) | 265 | 49 (+3) | 18 |
| May | 10.5 (-0.6) | 10.8 | | 2 | 149 (-36) | 245 | 40 (-14) | 20 |
| June | 11.9 (-2.4) | 13.6 | | 1 | 156 (-42) | 205 | 27 (-23) | 12 |
| July | 15.3 (-0.8) | 16.3 | 11.8 | 0 | 138 (-43) | 155 | 67 (+11) | 13 |
| August | 15.0 (-0.8) | 15.3 | 11.5 | 0 | 158 (-13) | 155 | 15 (-47) | 4 |
| September | 11.4 (-2.3) | 11.5 | 8.2 | 4 | 113 (-22) | 120 | 36 (-16) | 6 |
| October | 10.1 (0.0) | 9.1 | 7.8 | 10 | 95 (-8) | 155 | 22 (-33) | 8 |
| November | 6.0 (-0.3) | 5.2 | 3.4 | 15 | 79 (+19) | 255 | 52 (-13) | 13 |
| December | 5.3 (+1.4) | 4.5 | 3.6 | 16 | 48 (+4) | 215 | 46 (-6) | 14 |
| Total or mean | 9.0 (-0.3) | 8.8 | 6.0 | 102 | 1259 (-197) | 195 | 494 (-133) | 160 |

NOTE ON THE TABLE

1. Standard long-period is 1930-71. Departures are in brackets.

BROOM'S BARN WEATHER 1971-72

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. |
| 1971 | | | | | | | | | | | |
| October | 11.6 | 10.2 | 9.1 | 4 | 152 | 173 | 217 | 59 | 10 | 44 | 18 |
| November | 5.7 | 4.9 | 3.6 | 12 | 83 | 80 | 253 | 77 | 20 | 20 | 5 |
| December | 5.7 | 4.9 | 4.1 | 7 | 29 | 45 | 238 | 23 | 12 | 7 | 3 |
| 1972 | | | | | | | | | | | |
| January | 3.1 (-0.3) | 3.0 | 1.3 | 11 | 38 (-7) | 51 | 258 | 59 (+13) | 25 | — | 3 |
| February | 4.0 (+0.5) | 2.8 | 2.6 | 9 | 42 (-18) | 87 | 238 | 36 (+2) | 18 | — | 9 |
| March | 6.7 (+1.6) | 4.7 | 3.2 | 13 | 150 (+29) | 229 | 256 | 40 (+3) | 17 | — | 33 |
| April | 8.0 (+0.3) | 7.5 | 4.0 | 3 | 131 (-6) | 270 | 296 | 43 (-6) | 18 | 66 | 51 |
| May | 11.0 (-0.6) | 10.9 | 6.7 | 1 | 179 (-11) | 396 | 267 | 40 (-2) | 22 | 100 | 77 |
| June | 12.5 (-1.7) | 13.4 | 7.7 | 0 | 170 (-29) | 432 | 211 | 30 (-23) | 16 | 111 | 83 |
| July | 15.9 (-0.1) | 16.3 | 11.9 | 0 | 156 (-21) | 374 | 179 | 35 (-19) | 14 | 105 | 81 |
| August | 15.7 (-0.2) | 15.6 | 11.1 | 0 | 193 (+30) | 357 | 197 | 26 (-28) | 7 | 117 | 73 |
| September | 12.1 (-1.9) | 11.9 | 8.8 | 0 | 114 (-26) | 223 | 158 | 46 (-1) | 8 | 67 | 35 |
| October | 10.7 (-0.5) | 9.3 | 7.9 | 3 | 100 (-10) | 151 | 203 | 3 (-36) | 6 | 43 | 23 |
| November | 6.1 (+0.2) | 5.4 | 3.9 | 8 | 79 (+13) | 78 | 273 | 54 (-13) | 16 | 19 | 6 |
| December | 5.5 (+1.6) | 4.5 | 3.9 | 8 | 58 (+18) | 52 | 233 | 58 (0) | 17 | 11 | -2 |
| Total or mean | 9.3 | 8.8 | 6.1 | 56 | 1410 (-38) | 225 | 231 | 470 (-111) | 184 | | 472 |

NOTES ON THE TABLE

1. Except for the last column, all quantities are measured.
2. Departures from average (in brackets) are for different periods: Air temperature and rainfall, 1964-72; Sunshine, 1965-72.

SAXMUNDHAM WEATHER 1972

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) | | | Accumulaed Day-degrees F | |
|---------------|------------------|------------------|----------|------------------|--|--|------------|--------------|---------------------------|-----------------------------|-----|
| | Mean air | Soil at 10 cm | Dewpoint | Ground frosts | | | Rain | Rain days | Evaporation Open water | A | B |
| January | 3.7 | 3.1 | 1.7 | 13 | 85 | 262 | 62 | 10+ | — | 18 | 122 |
| February | 4.3 | 3.1 | 2.8 | 10 | 95 | 265 | 32 | 9 | — | 41 | 204 |
| March | 6.5 | 4.3 | 3.9 | 17 | 169 | 277 | 31 | 8 | 15† | 155 | 253 |
| April | 8.0 | 7.3 | 4.4 | 4 | 208 | 323 | 45 | 16 | 64 | 307 | 269 |
| May | 10.7 | 10.5 | 7.2 | 1 | 288 | 282 | 39 | 15 | 100 | 602 | 274 |
| June | 12.3 | 12.7 | 10.0 | 0 | 286 | 211 | 44 | 12 | 90 | 966 | 275 |
| July | 15.7 | 16.6 | 11.7 | 0 | 284 | 145 | 51 | 8+ | 96 | 1532 | 275 |
| August | 15.3 | 14.9 | 11.1 | 0 | 253 | 18 | 10 | 4+ | 97 | 2058 | 275 |
| September | 11.9 | 11.7 | 8.9 | 0 | 152 | 167 | 66 | 7 | 69 | 2399 | 275 |
| October | 10.5 | 9.5 | 7.8 | 5 | 98 | 220 | 6 | 4 | 38 | 2686 | 283 |
| November | 5.8 | 5.3 | 3.9 | 7 | 63 | 288 | 49 | 12 | 17 | 2771 | 351 |
| December | 5.7 | 4.9 | 4.4 | 6 | — | 267 | 30 | 10 | — | 2846 | 414 |
| Total or mean | 9.2 | 8.7 | 6.7 | 63 | | 240 | 465 | 115+ | | | |

NOTES ON THE TABLE

1. Except for the last two columns, all quantities are measured.
2. Temperatures were measured in °F.
3. 'Radiation' is measured on a radiometer built at Rothamsted.
4. Rain and evaporation were measured in inches.
5. 'Evaporation' is the mean of two open water tanks installed on 22 March 1972(†). 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.