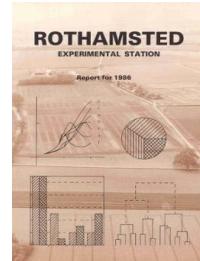


Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



# Rothamsted Experimental Station Report for 1986

[Full Table of Content](#)



## Broom's Barn Weather 1985-86

### Rothamsted Research

Rothamsted Research (1987) *Broom's Barn Weather 1985-86* ; Rothamsted Experimental Station Report For 1986, pp 326 - 326 - DOI: <https://doi.org/10.23637/ERADOC-1-27>

*BROOM'S BARN WEATHER 1985-86*  
Latitude 52° 16' N; Longitude 0° 34' E; Altitude 75 m

|  | 1985 | Oct  | Nov  | Dec  | Jan  | Feb  | Mar  | Apr  | May  | June | July | Aug  | Sept | Oct  | Nov  | Dec  | Year |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| <b>TEMPERATURE (°C)</b>  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Mean screen maximum  | 15.1 | 6.6  | 8.6  | 5.8  | 0.4  | 8.6  | 16.0 | 19.9 | 20.9 | 18.5 | 15.1 | 10.6 | 8.4  | +1.4 | +1.7 | 12.5 |      |
| Difference from average  | +0.9 | -2.6 | +1.9 | -0.3 | -5.8 | -0.4 | -2.0 | +0.4 | +0.8 | -0.1 | -2.0 | +0.8 | +1.4 | +1.7 | -0.7 | -0.7 |      |
| Mean screen minimum  | 7.4  | 1.0  | 4.7  | 0.6  | -3.5 | 1.2  | -2.6 | 7.4  | 9.7  | 12.0 | 10.3 | -7.1 | 4.8  | +2.9 | +4.8 | 5.2  |      |
| Difference from average  | 0.0  | -2.6 | +2.9 | +0.2 | -4.4 | -0.9 | -0.9 | +0.8 | 0.0  | +0.4 | -1.4 | -3.0 | +0.2 | +1.1 | +1.1 | -0.6 |      |
| Soil at 10 cm  | 10.2 | 3.4  | 5.8  | 2.2  | -0.1 | 3.1  | 5.7  | 11.9 | 15.8 | 18.2 | 14.9 | 11.2 | 10.3 | 6.5  | 4.0  | 8.7  |      |
| Dew point  | 8.8  | 1.4  | 5.2  | 0.8  | -3.3 | 2.4  | 3.3  | 7.6  | 10.2 | 12.1 | 10.2 | 8.5  | 9.1  | 5.7  | 3.0  | 5.8  |      |
| No. of days with ground frost  | 9    | 19   | 4    | 20   | 26   | 10   | 0    | 1    | 0    | 0    | 0    | 2    | 1    | 5    | 15   | 100  |      |
| Difference from average  | +6   | +11  | -9   | +6   | +11  | +8   | +1   | -2   | +1   | 0    | 0    | +2   | -2   | -3   | +2   | +24  |      |
| <b>RADIATION</b>   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Sunshine (h per month <sup>-1</sup> )                                | 132  | 103  | 35   | 72   | 63   | 132  | 138  | 219  | 243  | 186  | 155  | 174  | 127  | 70   | 61   | 1640 |      |
| Difference from average  | +23  | +35  | -14  | +21  | +1   | +26  | -6   | +29  | +42  | +2   | -22  | +29  | +18  | +2   | +12  | +154 |      |
| Mean daily radiation (MJ m <sup>-2</sup> day <sup>-1</sup> )         | 6.4  | 3.7  | 1.7  | 2.6  | 4.9  | 8.5  | 11.6 | 16.5 | 19.9 | 13.1 | 11.6 | 6.5  | 3.3  | 1.9  | 9.5  |      |      |
| Difference from average  | +0.3 | +0.7 | -0.1 | +0.3 | +0.6 | +0.2 | -1.1 | -1.3 | +1.0 | 0.0  | -1.0 | +2.0 | +0.4 | +0.3 | +0.1 | -0.1 |      |
| Mean daily diffuse radiation (MJ m <sup>-2</sup> day <sup>-1</sup> ) | 3.2  | 1.7  | 1.3  | 1.5  | 2.8  | 4.6  | 5.9  | 8.7  | 8.9  | 10.3 | 8.1  | 5.8  | 3.7  | 2.1  | 1.2  | 5.3  |      |
| <b>WIND (km day<sup>-1</sup>)</b>                                    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Wind run at 2 m  | 124  | 167  | 249  | 283  | 258  | 249  | 192  | 253  | 205  | 139  | 164  | 119  | 188  | 230  | 269  | 213  |      |
| Difference from average  | -73  | -72  | +1   | +30  | +25  | -2   | -37  | +48  | +22  | -34  | -8   | -74  | -9   | -9   | +21  | -1   |      |
| <b>WATER (mm per month<sup>-1</sup>)</b>                             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Rainfall (5 inch gauge)  | 13   | 42   | 72   | 57   | 12   | 57   | 55   | 42   | 23   | 64   | 87   | 25   | 80   | 67   | 71   | 640  |      |
| Difference from average  | -39  | -20  | +18  | +9   | -24  | +14  | +13  | -11  | -30  | +21  | +36  | -31  | +28  | +5   | +17  | +47  |      |
| Rain days  | 7    | 15   | 19   | 19   | 7    | 20   | 20   | 18   | 8    | 14   | 15   | 4    | 15   | 20   | 17   | 177  |      |
| Difference from average  | -6   | -2   | +2   | 0    | -7   | +4   | +6   | +4   | -3   | +3   | -8   | +2   | +3   | +3   | 0    | +9   |      |
| Open water evaporation   | 39   | 20   | 14   | 20   | 19   | 43   | 52   | 91   | 135  | 103  | 98   | 64   | 41   | 21   | 19   | 707  |      |
| Class 'A' pan  | 0    | 0    | +4   | +11  | +2   | +2   | +3   | -15  | -16  | +9   | -28  | -27  | +2   | +1   | +9   | -70  |      |
| Difference from average  | 18   | 2    | 2    | 4    | 10   | 29   | 44   | 84   | 106  | 92   | 73   | 44   | 21   | 7    | 5    | 519  |      |
| Potential transpiration  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |

NOTES ON THE TABLE

1. Except for potential transpiration, all quantities are measured.
2. Long term averages are 1965-84 except evaporation—1970-84, wind 1969-84.