

XII. *Abstract of a Register of the Barometer, Thermometer, and Rain at Lyndon in Rutland, in 1785. By Thomas Barker, Esq. Also of the Rain at South Lambeth, in Surrey; and at Selbourn and Fyfield, Hampshire. Communicated by Thomas White, Esq. F.R.S.*

Read February 23, 1786.

		Barometer.			Thermometer.						Rain.			
		Highest	Lowest	Mean.	In the House.			Abroad.			Lyndon	S. Lambeth.	Selbourn.	Fyfield.
					Inches.	Inches.	Inches.	High.	Low.	Mean				
					°	°	°	°	°	°	Inch.	Inch.	Inch.	Inch.
Jan.	Morn.	29,83	28,59	29,31	45 $\frac{1}{2}$	34 $\frac{1}{2}$	39	45	25 $\frac{1}{2}$	35	1,494	1,78	2,84	2,12 $\frac{1}{2}$
	Aftern.				46	34 $\frac{1}{2}$	40	47 $\frac{1}{2}$	27	38 $\frac{1}{2}$				
Feb.	Morn.	30,16	28,45	29,34	39	29	34 $\frac{1}{2}$	38	10	28	0,365	1,20	1,80	1,85
	Aftern.				40	30 $\frac{1}{2}$	36	42 $\frac{1}{2}$	23	34				
Mar.	Morn.	29,84	29,16	29,61	44	29 $\frac{1}{2}$	36	43 $\frac{1}{2}$	17	30 $\frac{1}{2}$	0,212	0,35	0,30	0,00 $\frac{1}{2}$
	Aftern.				45	31 $\frac{1}{2}$	37 $\frac{1}{2}$	51	27 $\frac{1}{2}$	38				
Apr.	Morn.	30,05	28,88	29,71	56	36	48	52 $\frac{1}{2}$	25	41	0,175	0,34	0,17	0,14 $\frac{1}{2}$
	Aftern.				58	37	50	67 $\frac{1}{2}$	37 $\frac{1}{2}$	54				
May	Morn.	30,09	28,95	29,54	61	50 $\frac{1}{2}$	55	58 $\frac{1}{2}$	42	48	0,666	0,81	0,60	0,96
	Aftern.				64	51 $\frac{1}{2}$	56 $\frac{1}{2}$	75 $\frac{1}{2}$	50 $\frac{1}{2}$	60 $\frac{1}{2}$				
June	Morn.	29,99	29,32	29,71	66 $\frac{1}{2}$	53	61	60	48	55	1,567	2,04	1,39	1,19
	Aftern.				69 $\frac{1}{2}$	55 $\frac{1}{2}$	63	80 $\frac{1}{2}$	54 $\frac{1}{2}$	69				
July	Morn.	29,82	28,97	29,42	68 $\frac{1}{2}$	60	64	64	53 $\frac{1}{2}$	58 $\frac{1}{2}$	3,283	1,73	3,80	1,69
	Aftern.				73	61	65	83	60 $\frac{1}{2}$	70				
Aug.	Morn.	29,72	28,99	29,36	64 $\frac{1}{2}$	55 $\frac{1}{2}$	59 $\frac{1}{2}$	59 $\frac{1}{2}$	43 $\frac{1}{2}$	53 $\frac{1}{2}$	4,315	3,05	3,21	4,26
	Aftern.				65	56 $\frac{1}{2}$	61	71	55	64				
Sept.	Morn.	29,89	28,51	29,29	63	50	59	59	36	52	3,314	2,75	5,94	5,30
	Aftern.				64 $\frac{1}{2}$	51 $\frac{1}{2}$	60	72	47	63				
O&.	Morn.	29,99	28,95	29,45	58	41 $\frac{1}{2}$	50 $\frac{1}{2}$	55 $\frac{1}{2}$	28	42 $\frac{1}{2}$	1,653	4,04	5,21	2,52
	Aftern.				59 $\frac{1}{2}$	43	51 $\frac{1}{2}$	62 $\frac{1}{2}$	37 $\frac{1}{2}$	52				
Nov.	Morn.	30,02	28,33	29,33	51 $\frac{1}{2}$	39	44 $\frac{1}{2}$	49 $\frac{1}{2}$	28	37	1,125	2,27	1,46 $\frac{3}{4}$	
	Aftern.				52 $\frac{1}{2}$	39 $\frac{1}{2}$	45	56 $\frac{1}{2}$	34 $\frac{1}{2}$	44				
Dec.	Morn.	29,79	28,76	29,32	43 $\frac{1}{2}$	32	39	43	20 $\frac{1}{2}$	33	2,037	1,53	4,02	3,04
	Aftern.				44 $\frac{1}{2}$	32 $\frac{1}{2}$	40	45 $\frac{1}{2}$	24	37				
Inches											20,206	19,62	31,55	24,55 $\frac{1}{4}$

The



The severe frost of December, 1784, broke early in January, and was all gone before the middle, and the most open part of this sharp winter followed it, being misty or thick and warm very wet air; but the last day of January another frost set in, which, though not so steady as the former, was sometimes very severe, and did not go away till near the middle of March: and this winter, particularly the former frost about December 10, was much severer in the south of England than here, and greater signs of destruction by it were seen among the trees and plants there. From the breaking of the frost till April 4, was chiefly frosty mornings, and sometimes in the shade all day, so that, if you count the number of frosty days, I do not know that any winter had more, though I have known several longer frosts, and more steady, and some few more severe.

From April 5, the weather began to mend, was tolerably pleasant, and things came on gradually; yet not without some frosty mornings, even in May. The seed time began late, but was without hindrance; and there having been very little rain since the frost, it harrowed remarkably fine, and the lands and roads were uncommonly dusty. The corn came up very well, except the late sown, some of which, especially in the south of England, lay dry till June; for it continued a remarkably dry time all spring, so that the grass was very short, and hay very scarce; yet the grain continued particularly fine-coloured, and eared very well, though some of the winter corn was rather thin; yet that was much mended by some refreshing showers in May and June, which were enough to freshen things, though not to make much grass: and during this drought there were great numbers of little whirlwinds, sometimes several in a day.

The weather began to be showery the middle of July, and several great rains; and after August 3d it was more frequent, but less at a time. This made plenty of good grafs, but was very troublesome for the harvest, which was got in slowly, and with loss, but came out again full as well as could be expected. The wheat was remarkably full-eared. The barley good, except the late sown, which never ripened; and some too hastily carried in harvest. The birds of passage went away rather early this year: almost all the Swifts were gone in July, and most of the Swallows and Martins in September; the last were August 7, and October 12. It continued very showery till near the middle of October; after which the autumn was pretty fine, and less wet than before, yet enough to make it very dirty when the sun lost its power in December; and the winter began for the most part open and pleasant, till a frost and large snow at Christmas, which grew severer to the end of the year.

On the Variations of Seasons.

Measuring the rain for a few years will not shew completely the general quantity of rain which falls in any place; for there is a very great difference at different periods of time. If I had measured the rain at Lyndon only in the four years 1740, 1741, 1742, 1743, the mean would have been found to be only $16\frac{1}{2}$ inches in a year; yet they were not all complained of as dry summers. 1740 was cold and dry till July 30. The spring

spring 1741 was cold and dry, the summer hot, dry, and burning till the beginning of September; then ten days wet and very warm again, being the finest autumn for grass ever known. 1742 was a showery summer, and 1743 wet in the middle; but then the winters were dry, so that the quantity of rain upon the whole was small. 1741 to 1750 the mean was $18\frac{1}{2}$ inches. 1741 and 1750 were hot, dry, and burning, 1750 being the hottest year I have known. The intermediate years were neither very wet nor very dry; and this was the most plentiful and cheapest time for corn of any ten years I remember; for grain oftener fails in England from too much wet than too little. 1751 to 1760 the mean year was $22\frac{1}{8}$. 1760 was hot, dry, and burning; but several of the summers were wet, and the crops not so plentiful. Three wet summers together, 1754, 1755, and 1756, were a time of scarcity, and we have had more failing crops since that time than before it. From 1761 to 1770 there was $23\frac{1}{4}$ in a year. 1762 was hot, dry, and burning; and 1765 cold and dry; but several years were wet, 1763 and 1768 remarkably so; and of those ten years several had failing crops, and some had great snows. There was a great change of the seasons at 1763; for I have had more rain since that time than I had before it in the proportion of 5 to 4. From 1770 to 1780 there was at a mean 26 inches. 1771 was dry, and 1778 and 1779 were hot, yet not without fits of rain; and most of the other years were wet, and some great snows. 1773, 1774, and 1775, were so wet that there came 32 inches in a year, which is nearly double what there was from 1740 to 1743. In twelve months, from October 1773, to September 1774, there came 39,390 inches of rain, which is nearly a Lancashire year. And in

one month, September 1774, there was 8 inches: this was in barley and pease harvest, and for three weeks together not a load could be carried in. By the above state of the case it appears, that, for four successive periods of ten years, the quantity of rain has been increasing each time.

