XIX. Abstract of a Register of the Barometer, Thermometer, and Rain, at Lyndon, in Rutland. By Thomas Barker, Esq.; with the Rain in Surrey and Hampshire, for the Year 1792; and a Comparison of wet Seasons. Communicated by Thomas White, Esq. F.R.S.

Read June 20, 1793.

		Barometer.			Thermometer.						Rain.			
	-				Int	he Ho	use.	A	Abroad			Surrey.	Hamp	shire.
		Highest.	Lowest.	Mean.	High.	Low.	Mean.	High.	Low.	Mean.	Lyndon.	South Lam- beth.	Sel- bourn.	Fyfield
Ian	Morn.	Inches.	Inches. 28,47	Inches.	0 47½	o 30	° 39	0 46 <u>1</u>	° 16	0 34 <sup>1</sup> / <sub>2</sub>	Inches.	Inches.	Inches.	Inches.
Jan. Feb.	Aftern. Morn. Aftern.	29,92 94	29,04	29,18 48	49 47 <del>1</del> 49	301	39½ 41 42	51½ 47½ 55	25 16 <u>1</u> 26	$36\frac{1}{2}$ $35$ $42\frac{1}{2}$	0,712	2,51	1,68	1, 6
Mar.	Attern.	30,00	28,53	26	50 51	$35 \\ 35\frac{1}{2}$	44 45	48½ 57	301	39 47½	1,096	2,13	6,70	2,92
Apr	Morn. Aftern.	29,85	72	42	60	43½ 44	5 I 5 3	56 71	36½ 39	46 57	4,042	2, 4	4,08	2, 9
May	Morn. Aftern.	91	77	49	$\begin{array}{ c c c c }\hline 58\frac{1}{2}\\ 62\\ \end{array}$	46	$50\frac{1}{2}$	68	36 <u>₹</u> 45	47½ 57	1,660	1,49	3,00	2,51
June	Morn. Aftern.	88	97	46	63	50	54½	775	47	53 621	4,043	1,45	2,78	3,17
July	Morn. Aftern.	71	29,13	41	65	53 57 <sup>1</sup> / <sub>2</sub>	$59^{\frac{1}{2}}$	78	575	57½ 67½	3,674	3,98	5,16	3,81
Aug.	Morn. Aftern.	83	28,89	48	69 73	57	62 2	67½	61	58½	2,861	2,86	4,25	2,52
Sep.	Morn. Aftern.	85	57	30	$61\frac{1}{2}$	48	55	60	41 7	58	3,977	2,66	5,53	3,93
Oct.	Morn. Aftern.	97	72	34	58	46	50-2	57	35 46	45½ 52	1,756		5,55	4, 6
Nov.	Morn. Aftern	91	78	52	$51\frac{1}{2}$	40 39	4.6	501		42½ 47	0,761		1,65	90
Dec.	Morn. Aftern	85	50	31	48 48	36	41 42	52 54	29 31	39 41 ½	2,723		2,11	1,40
											29,402		48,56	32,84

THE winter was a severe one; there was a sharp frost every month from December to March, chiefly between the full and the new moons, and the intervals were often stormy and wet; but those in February, both at the middle and latter end of the month, were milder, and less wet. The beginning of March continued mild, with frequent though small rains; then followed as sharp a frost, for a week, as any in the winter. After that stormy weather into April, but warm and growing; till a violent thunder storm toward Stamford the 19th, and two days continued rain here, and in most other places, about the 18th, renewed the wet season; which lasted all summer, and was perhaps wetter in many places than here, for we had no heavy thunder storms all the summer, as they had in some parts. Whenever there was thunder this year, it was almost always cold after it, and often cold weather without it; very little sunshine, and many sharp frosty mornings both in May and June, which cut off the apples after they appeared to be set. The greatest rains this summer were after the middle of April; before the middle of May; about the 8th of June; the 21st of July; the 18th of August; and 14th of September: those in April, June, and July, made floods, the two latter of which did great damage to the meadow hay; and there were frequent, sometimes almost daily, lesser rains. The intervals of fair and fine weather were short, and not many, and those not always warm; the beginning of May, and about the 21st; the beginning and end of June; the beginning of July; and, what was the finest time this summer, the first half of August. During this, in general so very wet a season, the hay and harvest were got in, and, where they were not flooded, I think with less damage than might have

been expected. The latter hay was got up during the fine time in August; some of the harvest in a tolerable time the beginning of September; and what was delayed by the almost daily rains for two-thirds of September, was finished in a fine time the beginning of October; the crop of wheat was tolerable well, but barley, oats, and peas, were dear.

This year was the wettest since 1782, which, with 1774, and some others, exceeded it; and this, like those two years, began to grow less wet the beginning of October. Yet the frequent rains after that, though less in quantity, kept the ground from drying, which was already too wet, and the roads continued uncommonly torn up all winter; and December, being wetter, increased it. The last six weeks of the year were in general dark and cloudy, or misty; very little sun, and not much frost, and so far seems to promise an open winter; but December was a stormy time; several great ones, and some great rains and floods.

## A Comparison of wet Seasons.

## Twelve Months.

No. I.

	1774.		1782.		1792.	
_	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
January	3,308		2,333	_ ,	2,097	
February	1,946	5,254	0,636	2,969	0,712	2,809
March	2,728	7,982	1,923	4,892	1,096	3,905
April	1,523	9,505	6,125	11,017	4,042	7,947
May	3,142	12,647	5,722	16,739	1,660	9,607
June	2,483	15,130	1,295	18,034	4,043	13,650
July	3,227	18,357	2,697	20,731	3,674	17,324
August	3,910	22,267	3,114	23,845	2,861	20,185
Septem.	8,000	30,267	5,151	28,996	3,977	24,162
October	1,156	31,423	1,502	30,498	1,756	25,918
Novem.	1,530	32,953	1,074	31,572	0,761	26,679
Decem.	2,282	35,235	0,517	32,089	2,723	29,402
	1773	29,376				
	1775	31,699				
Three	years	96,310	•			

No. II.

Oct. 3, 177 Oct. 2, 17		Dec. 1 Nov.	774 to 1775.	_	791 to 1792.		763 to	17	68.
Oct. 3 Nov. Dec. Jan. Feb. March April May June July August Septem. Oct. 1 & 2	nches. 2,615 3,605 2,897 3,308 1,946 2,728 1,523 3,142 2,483 3,227 3,910 8,000 0,340 9,724	Jan. Feb. Mar. April May June July Aug. Sep. Oct. Nov.	Inches. 2,282 1,973 2,522 1,728 1,035 0,900 0,887 4,078 4,760 5,670 3,480 3,570	Nov. Dec. Jan. Feb. March April May June July Aug.	Inches. 3,319 4,231 1,150 2,097 0,712 1,096 4,042 1,660 4,043 3,674 2,861 3,977	Mar. April May June July Aug. Sept. Oct. Nov. Dec.	Inches. 2,882 0,919 0,692 2,304 2,426 5,657 2,929 3,307 1,606 1,894 3,525 3,984	Feb. March April May June July Aug. Sept. Oct. Nov.	Inches. 2,834 3,062 0,391 2,023 1,622 4,521 2,402 1,720 3,025 3,119 4,040 2,146

No. III.
Three years.

May	9, 1773, 1	17 months.—May 9, 1773, to Oct. 8, 1774.			
1773.	1774.	1775.	1776.	1773.	1774•
Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
	3,308	1,973	2,511	l	3,308
	1,946	2,522	3,195		1,946
	2,728	1,728	1,518		2,728
	1,523	1,035	0,887		1,523
	3,142		0,860		3,142
					2,483
, ,	3,227	4,078		1,077	3,227
	1			3,379	3,910
					8,000
					0,460
2,897	2,282	1,096		2,897	
25,550	35,235	31,699	8,971	25,550	30,727 56,277
	1773. Inches.  6,770 2,389 1,077 3,379 2,812 2,621 3,605 2,897	Inches. Inches.  3,308 1,946 2,728 1,523 6,770 3,142 2,389 2,483 1,077 3,379 2,812 8,000 2,621 1,156 3,605 1,530 2,897 2,282	1773. 1774. 1775.  Inches. Inches. 3,308 1,973 1,946 2,522 2,728 1,728 1,523 1,035 6,770 3,142 0,900 2,389 2,483 0,887 1,077 3,227 4,078 3,379 3,910 4,760 2,812 8,000 5,670 2,621 1,156 3,480 3,605 1,530 2,897 2,282 1,096	Inches.	1773.         1774.         1775.         1776.         1773.           Inches.         Inches.         Inches.         Inches.         Inches.           3,308         1,973         2,511         Inches.         Inches.           1,946         2,522         3,195         1,518         Inches.           1,523         1,035         0,887         0,887         0,887         2,389           2,389         2,483         0,887         2,389         1,077         3,227         4,078         1,077           3,379         2,812         8,000         5,670         2,812         2,621         1,156         3,480         2,621           3,605         1,530         3,570         2,812         2,621         3,605         2,897         2,897           25,550         35,235         31,699         8,971         25,550

No. IV.
Nine months.

Jan. 6, to Oc. 6, 1774.			n. 1782 Sept.		7, 1773 1. 1774.		, 1763 n. 1764.		l, 1768 Dec.	1 2	. 1792 Sept.
Jan. 3,308 Feb. 1,946 Mar. 2,728 Apr. 1,523 May 3,142 June 2,483 July 3,227 Au. 3,910 Sep. 0,460	Jul. 4, Aug 4, Sep. 5, Oct. 3, Nov. 3, Dec. 1, Jan. 2, Feb. 3, Mar. 1,	ches. ,078 Jan. ,760 Feb ,670 Mar ,480 Apr ,570 Mar ,096 Jun ,511 July Aug ,518 Sep	. 0,636 1,923 6,125 5,722 1,295 2,697 3,114	May June July Aug Sep. Oct. Nov. Dec. Jan.	1,077 3,379 2,812 2,621	May June July Aug Sep. Oct. Nov. Dec. Jan.	Inches. 2,304 2,426 5,657 2,929 3,307 1,606 1,894 3,525 3,984 27,632	Apr. May June July Aug Sep. Oct. Nov. Dec.	Inches. 2,023 1,622 4,521 2,402 1,720 3,025 3,119 4,040 2,146	Jan. Feb. Mar. Apr. May June July Aug Sep.	Inches. 2,097 0,712 1,096 4,042 1,060 4,043 3,674 2,861 3,977 24,162

No. V. Six months.

April 12, 1782, to Oct. 11.	July to Dec.	April to Sept.	April to Sept. 1792.
April 12 5,375 5,722 June 1,295 July 2,697 August Septem. Oct. to 11 0,950	Aug. 4,760	May 3,142	May 1,660
	Sept. 5,670	June 2,483	June 4,043
	Oct. 3,480	July 3,227	July 3,674
	Nov. 3,570	Aug. 3,910	Aug. 2,861

No. VI.
Three months.

to Oc	f. 2.		75.		782.	<u>'</u>	70.
July 3 August Septemb. Oct. 1 & 2		Aug.	Inches. 4,078 4,760 5,670	Apr.		Nov.	Inches. 3,114 7,818 2,613
	15,477		14,508		13,770		13,545

1763.		17	37.	17	84.	May 25, 1792, to Aug. 24.		
July Aug. Sept.	Inches. 5,657 2,929 3,307	Aug. Sept. Oct.	Inches. 6,300 3,465 2,025	June			Inches. 0,770 4,043 3,674 2,511	
	11,893		11,790		11,780		10,998	

No. VII. One month.

No. VIII. Abstract.

	,		
1774 September 3 to Oct. 2	Inches. 7,930 0,340 8,270	Three years time Three calendar years, 1773, \ 1774, and 1775 \ Seventeen months Twelve months	Inches. 101,455 96,310 56,277 39,724
1770 November 6 to Dec. 5	7,818 0,410 8,228	Nine months Six months Three months One month	30,727 24,304 15,477 8,270
1773 May 1736 July - 1737 August - 1782 April - 1757 August - 1782 May - 1775 September 1763 July 1743 July 1776 August - 1782 September 1792 August 16 to Sept. 15	6,843 6,550 6,300 6,125 6,057 5,722 5,670 5,657 5,230 5,151 2,762 2,346		
	5,108		

The year 1792 was a very wet one, and by many imagined to exceed all others, but that does not appear to be fact; the wet of last year is fresh in memory, that of former years is more forgotten. It might seem the wetter, because the autumn of 1791 was wet, so that there was a long continuance of it; and perhaps there might be more rain in some other places than here, as we had no great thunder storms all the summer at this place, which they had in several parts, some not many miles off. The wettest years

here were about 1774 and 1782, which I have therefore compared with last year, in No. I. where I have set down the whole rain, and cast up the sum, from January the first, to the end of every month, in each year: and it appears, that to the end of January, to the end of February, and of March, the wettest was 1774, the next 1782, and 1792 was less wet than either of them. The very wet April and May in 1782 altered the order of them; and to the end of April, of May, of June, of July, and of August, the wettest was 1782; the next 1774; and the last 1792. September, 1774, that wettest of all months in fifty-seven years, altered the order again to 1774, 1782, 1792; and it continued so to the end of the year. In No. II. I have given some of the greatest twelve months, whether beginning with January or not; and the greatest 365 days is from October 3, 1773 to October 2, 1774, which is 39,724 inches; and all that I have here given exceed 1792. In No. III. is the greatest three years, from May 9, 1773 to May 8, 1776, which is 101,455 inches; and the greatest seventeen months, from May 9, 1773 to October 8, 1774, is 56,277 inches. In No. IV. are the greatest nine months, January 6 to October 6, 1774, 30,727 inches; and several others, to 1792, 24,162 inches. In No. V. are several of the greatest six months, from 1774, 24,304 inches, to 1792, 20,257 inches. In No. VI. are several of the greatest three months, from 15,477 inches in 1774, to 10,998 inches in 1792. The greatest month last year was, from August 16 to September 15, 5,108 inches, but I have had thirteen greater; the most of all was in 1774, 8,270 inches; the rest are set down in order in No. VII.; and the last is that in 1792. Lastly, in No. VIII. I have set down together the wettest times in all the several cases.

At Selbourn, between Alton and Petersfield, in Hampshire, which lies at the NE foot of a steep hill, that rises an hundred yards perpendicular above it, they have half as much more rain as I have; there was  $48\frac{1}{2}$  inches last year, as it is set down in the first page; but they had  $50\frac{1}{4}$  inches in 1782, which is something more. But I was surprised to see, in the Supplement to the Gentleman's Magazine, page 1197, that Mr. Gough says there was  $83\frac{1}{2}$  inches of rain at Kendal last year. This is an astonishing quantity; though it is a hilly country, it is almost four times my common year, and above double the greatest; and I should have thought it enough, in latitude  $54^{\circ}$ , to have made the whole country a marsh.