

XXVII. *A Letter from Thomas Barker, Esq; of Lyndon in Rutlandshire, to James West, Esq; Pres. R. S. concerning Observations of the Quantities of Rain fallen at that Place for several Years.*

S I R,

Lyndon, March 22, 1771.

Read April 18,  
1771. **O**N the other side is the quantity of rain, which has fallen at Lyndon in Rutland, since May 1736, with a table of the mean rain in the first four or five years, and every ten years since; which shews that there has been more rain in the latter part of this period, than in the former. But the least four years were from 1740 to 43, little more than  $16\frac{1}{2}$  inches a year; and the greatest four years from 1767 to 70, above  $25\frac{1}{2}$  inches a year. For comparing of dry seasons and wet ones, I have made a table of the three driest months, the three driest two months, three, four, &c. to twelve successive months; and a like table of wet ones: but as the years 1763, 68, 70, exceeded any others, I have made another like table of them. There are no three months come up to the last quarter of 1770,

7 $\frac{1}{4}$

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7½ inches of which came in three weeks, from Nov. 6 to 26; but 1763 and 68, were wetter than 70, except those three months: and in this country 63 was the wettest; yet, by what I heard, I suppose 68 exceeded it in many places. In common speaking, those are called wet years, in which the summer, the growing season, was wet and cold; and those dry ones, wherein the summer was dry and burning; so that though 1740, 1, 2, and 3, had all but little rain, yet 42 and 43 were not properly called dry years, because the ground never burned long together; and as the different degrees of heat, and frequency of rain, do not appear in this table, one cannot certainly judge, from the quantity of rain, which were the driest summers. Those complained of for dry, were, 1737, 40, 41, 50, 60, 62, and 65; but the hottest and most burning were 1750, 60, and 62; and 40 and 65 were cold and dry. On the other hand, the wet years were 1738, 39, 51, 52, 56, 63, and 66 to 70; but the wettest 1751, 56, 63, and 68; and above all the last quarter of 1770.

Feb. 12 last, the thermometer abroad, was down at 4 of Fahrenheit's scale, which is lower than I have observed it in above 20 years past; the lowest I had before observed, was 10½, Jan. 5, 1768. I have therefore given the rise and fall of the thermometer for above a week in the frost.

	Morn	Afternoon
Feb. 8	27 N.byW.	36 E.N.E.
9	26½ N.E.	29½ N.E.
10	28 N.E.	33 E.byW.
11	24½ E.S.E.	29½ S.W.
12	4 W.byN.	31 N.W.
13	15½ W.	30½ S.
14	9 S.W.	25 S.S.W.
15	12 S.W.	27½ E.
16	31 E.byW.	35½ E.

It was remarkable, that as long as the wind continued N. E. the frost was moderate, when it turned S. W. it became very severe; and when the wind turned back into the East again, the frost went away. This looks as if the weather was severer Southward than here; as I think was likewise the case in Feb. 1754, which was also a very cold season.

I am, Sir,

Your humble servant,

Tho. Barker.

Lyndon, mean rain at different periods

	4 years 5 years 36-40	10 years 40-50	10 years 50-60	10 years 60-70	34 years 35 years 36-70
Jan.	1.271	1.410	1.722	1.606	1.544
Feb.	1.194	0.856	1.146	1.715	1.234
Mar.	1.101	1.374	1.472	1.143	1.303
April	1.341	1.394	1.905	1.298	1.510
May	1.408	1.196	1.609	1.661	1.476
June	1.406	2.272	2.158	2.614	2.213
July	2.623	2.052	2.974	2.478	2.518
Aug.	3.074	1.105	2.701	2.302	2.194
Sept.	2.128	1.765	1.370	1.731	1.694
Oct.	1.517	1.741	1.561	2.673	1.924
Nov.	0.985	1.939	1.614	2.325	1.820
Dec.	1.742	1.443	1.898	1.729	1.698
	19.790	18.547	22.130	23.275	21.118

Annual quantities of rain.

	1736	1737	1738	1739	1740	
		0.615	1.788	2.430	0.250	Jan.
		1.660	0.568	2.487	0.060	Feb.
		1.768	1.189	0.814	0.632	Mar.
		0.676	1.230	2.585	0.872	April
	0.985	1.000	2.160	1.860	1.036	May
	0.922	0.720	2.420	1.537	1.430	June
	6.550	0.306	0.624	1.965	3.668	July
	2.500	6.300	1.418	2.350	2.800	Aug.
	1.540	3.465	2.110	1.903	1.620	Sept.
	0.620	2.025	1.640	0.522	1.050	Oct.
	0.620	9.570	0.692	1.557	1.488	Nov.
	1.500	1.830	1.320	1.540	2.412	Dec.
	16.967	20.935	17.159	21.660	17.318	

Annual

Annual quantities of rain at Lyndon.

	1741	1742	1743	1744	1745	1746	1747	1748	1749	1750	
Jan.	1.088	1.435	0.406	1.198	0.827	1.758	2.862	0.938	2.483	1.107	Jan.
Feb.	0.618	0.863	0.365	0.941	0.572	1.706	1.211	0.369	1.017	0.894	Feb.
Mar.	0.568	0.055	1.193	1.428	2.541	1.880	1.240	1.946	1.870	1.020	Mar.
April	0.270	1.908	1.252	2.759	1.708	0.762	1.017	1.367	0.548	2.348	April
May	0.441	1.546	0.868	1.257	1.137	0.546	2.829	1.178	1.107	0.995	May
June	1.366	1.430	0.379	3.479	3.451	2.900	1.562	3.044	3.039	2.069	June
July	0.873	3.136	5.230	0.820	0.724	1.442	2.248	3.484	1.049	1.510	July
Aug.	1.633	0.160	1.124	0.957	3.934	0.456	0.071	1.305	0.767	0.640	Aug.
Sept.	4.935	1.778	0.008	3.298	0.899	1.633	1.922	0.553	0.618	1.003	Sept.
Oct.	1.460	2.386	3.088	3.142	1.460	2.274	0.582	1.060	1.086	0.875	Oct.
Nov.	1.960	2.417	0.724	2.276	2.067	1.789	4.920	0.430	0.688	2.124	Nov.
Dec.	0.490	0.163	1.427	1.168	1.233	1.279	3.624	1.549	1.674	1.827	Dec.
	15.702	17.277	16.064	22.723	20.553	18.425	24.088	17.223	16.946	16.412	

Annual quantities of rain at Lyndon.

	1751	1752	1753	1754	1755	1756	1757	1758	1759	1760	
Jan.	3.098	2.518	1.692	0.925	1.021	2.016	2.144	1.867	0.876	1.062	Jan.
Feb.	0.924	1.377	1.841	0.887	0.835	0.689	0.594	2.060	0.379	1.872	Feb.
Mar.	2.046	1.203	1.172	1.247	1.657	1.370	1.905	1.792	1.874	0.452	Mar.
April	3.086	0.827	1.395	1.455	1.965	3.899	2.090	0.917	3.026	0.389	April
May	2.656	2.134	0.980	1.400	1.393	1.258	1.371	1.269	2.739	0.890	May
June	1.847	3.084	1.007	2.883	1.811	2.973	0.375	2.160	2.970	2.470	June
July	4.989	3.678	2.595	3.849	1.585	3.197	3.002	5.023	0.927	0.895	July
Aug.	1.580	1.334	3.380	1.060	2.258	4.257	6.057	1.711	3.729	1.644	Aug.
Sept.	2.614	0.480	0.706	0.107	2.546	2.080	0.518	1.465	0.854	2.333	Sept.
Oct.	1.819	0.295	1.458	1.866	1.628	1.528	1.954	1.032	1.500	2.531	Oct.
Nov.	1.338	1.090	2.112	1.960	3.138	0.975	1.498	0.912	0.980	2.134	Nov.
Dec.	1.161	3.127	3.865	2.218	1.408	0.944	2.175	1.386	1.085	1.613	Dec.
	27.158	21.147	22.203	19.857	21.245	25.186	23.683	21.594	20.939	18.285	

Annual quantities of rain at Lyndon.

	1761	1762	1763	1764	1765	1766	1767	1768	1769	1770	
Jan.	0.191	1.727	0.600	3.984	1.435	0.164	3.079	2.834	1.194	0.852	Jan.
Feb.	1.469	0.968	2.882	1.134	1.240	2.102	2.002	3.062	1.556	0.736	Feb.
Mar.	0.529	1.527	0.919	0.829	2.767	0.785	1.052	0.391	0.693	1.934	Mar.
April	0.490	0.595	0.692	1.524	2.111	1.955	0.845	2.023	0.843	1.900	April
May	2.035	0.738	2.304	1.095	0.406	3.286	2.123	1.622	1.451	1.553	May
June	3.487	0.764	2.426	2.182	0.788	2.279	2.163	4.521	4.769	2.765	June
July	0.566	1.119	5.657	4.624	0.582	2.363	3.682	2.402	1.994	1.788	July
Aug.	3.614	3.615	2.929	1.770	2.805	0.409	1.527	1.720	2.360	2.270	Aug.
Sept.	2.349	1.525	3.307	0.830	0.696	1.080	0.687	3.025	2.583	1.223	Sept.
Oct.	3.685	4.154	1.606	1.359	4.842	0.829	2.822	3.119	1.202	3.114	Oct.
Nov.	1.443	0.923	1.894	1.765	1.281	1.938	0.926	4.040	1.224	7.818	Nov.
Dec.	1.541	0.233	3.525	2.398	1.048	1.776	0.400	2.146	1.608	2.613	Dec.
	21.399	71.888	28.741	23.494	20.001	18.966	21.308	30.905	21.477	28.566	

Three driest seasons from one month to twelve.

1 Month	Sept. 43	0.008	Mar. 42	0.055	Feb. 40	0.060
2	Jan. and Feb. 40	0.310	Dec. 42 Jan. 43	0.569	Feb and Mar. 40	0.692
3	Dec. 42-Feb. 43	0.934	Jan. — Mar. 40	0.942	Mar. — May 41	1.279
4	Jan. — April 40	1.814	Feb. — May 41	1.897	Dec. 42-Mar. 43	2.127
5	Jan. — May 40	2.850	Jan. — May 41	2.985	Dec. 42-April 43	3.379
6	Feb. — July 41	4.136	Dec. 42-May 43	4.247	Jan. to June 40	4.280
7	Dec. 42-June 43	4.626	Jan. — July 41	5.224	Dec. 39-June 40	5.930
8	Oct. 39-May 40	6.579	Jan. — Aug. 41	6.857	Nov. 42-June 43	7.045
9	Oct. 39-June 40	8.009	Nov. 36-July 37	8.865	Sept. 59-May 60	9.084
10	Sept. 39-June 40	9.912	Oct. 40-July 37	10.174	Aug. 42-May 43	10.988
11	Aug. 42-June 43	11.367	Sept. 40-July 41	11.794	Aug. 39-June 40	12.262
12	Aug. 40-July 41	13.427	Sept. 59-Aug. 60	14.093	July 39-June 40	14.227

Three wettest seasons, from one month to twelve, except 1763, 1768, and 1770, which are below.

1	Month	July 36	6.550	Aug. 37	6.300	Aug. 57	6.057
2		Aug. Sept. 37	9.765	July Aug. 57	9.059	July Aug. 36	9.050
3		Aug. Sept. Oct. 37	11.790	July Aug. Sept. 36	10.590	June July Aug. 56	10.427
4		July — Oct. 36	12.940	April — July 51	12.578	June — Sept. 56	12.507
5		April — Aug. 56	15.584	Mar. — July 51	14.624	Aug. — Dec. 37	14.190
6		April — Sept. 56	17.664	April — Sept. 51	16.772	Aug. 37—Jan. 38	15.978
7		April — Oct. 56	19.192	Mar. — Sept. 51	18.818	May — Nov. 61	17.179
8		Mar. — Oct. 51	20.637	Mar. — Oct. 56	20.562	July 57—Feb. 58	19.131
9		Jan. — Sept. 51	22.840	Jan. — Sept. 56	21.739	July 57—Mar. 58	20.923
10		Dec. 50—Sept. 51	24.667	Nov. 55—Aug. 56	24.205	Nov. 47—Aug. 48	22.175
11		Nov. 50—Sept. 51	26.791	Nov. 55—Sept. 56	26.285	Aug. 37—June 38	23.545
12		Nov. 50—Oct. 51	28.610	Sept. 55—Aug. 56	28.379	Aug. 57—July 58	27.290

Wetness of the Seasons in

	1763			1768			1770		
1	Month	July	5.657	June	4.521	Nov.	7.818		
2		July Aug.	8.586	Oct. Nov.	7.159	Oct. Nov.	10.932		
3		July — Sept.	11.893	Sept. — Nov.	10.184	Oct. — Dec.	13.545		
4		June — Sept.	14.319	Sept. — Dec.	12.330	Sept. — Dec.	14.768		
5		May — Sept.	16.623	June — Oct.	14.787	Aug. — Dec.	17.038		
6		July — Dec.	18.918	June — Nov.	18.827	June — Nov.	18.978		
7		July 63—Jan. 64	22.902	June — Dec.	20.973	June — Dec.	21.591		
8		June — Jan.	25.328	May — Dec.	22.595	May — Dec.	23.144		
9		May — Jan.	27.632	April — Dec.	24.618	April — Dec.	25.044		
10		May — Feb.	28.766	Feb. — Nov.	25.925	Mar. — Dec.	26.978		
11		May — Mar.	29.595	Jan. — Nov.	28.759	Feb. — Dec.	27.714		
12		Feb. 63—Jan. 64	32.125	Jan. — Dec.	30.905	Jan. — Dec.	28.566		