

RAINFALL AT BroughamS. MarshallWestmorland

Observer

Rain { By.....  
 Gauge }.....  
 Diameter.....in. Height above Ground,.....ft. ....in. From Total book  
 Above Mean Sea Level.....ft.

YEAR.....								MEANS.
January.....								
February.....								
March.....								
April.....								
May .....								
June .....								
July .....								
August.....								
September.....								
October.....								
November.....								
December.....								
TOTALS .....						35.00		

Brougham

A. J. H.

YEAR - -	1850	1851	1852	1853	1854	1855	1856	1857	1858	1859	MEANS.
January - -	8.29	6.90	6.20	2.81	.68	2.39	1.80	1.55	5.10		
February - -	1.80	3.92	1.17	1.65	1.01	2.57	1.81	.30	2.35		
March - - -	3.21	.07	.84	.60	2.45	.25	3.38	1.65	2.08		
April - - -	1.91	.63	1.88	.51	.62	1.35	1.82	.50	1.51		
May - - -	.83	2.85	.91	2.83	1.11	4.06	1.35	2.31	.05		
June - - -	2.21	3.33	3.34	4.38	2.10	2.14	3.35	2.66	1.35		
July - - -	3.61	1.61	3.23	1.98	2.98	.64	1.65	3.10	1.80		
August - - -	3.04	5.08	2.25	3.27	3.57	3.36	3.50	3.54	3.26		
September -	3.14	2.40	2.51	1.36	.87	3.40	2.07	3.27	3.72		
October - -	2.26	2.54	3.45	3.17	3.59	2.20	2.30	3.53	2.61		
November -	7.0	3.75	2.13	3.05	1.83	.80	2.39	2.71	3.50		
December -	.57	7.58	.25	3.90	1.72	4.71	2.84	3.26	3.38		
TOTALS -	31.58	40.66	28.16	29.51	22.55	27.8	28.32	28.38	31.49		

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From 5019 of the Salter's annual record

Brougham Hall  
Westmorland

Marshall

by Campbell Gardner 1 ft 6 in  
soil + ground 4 ft 6 in Level 400

YEAR --	1860	1861	1862	1863	1864	1865	1866	1867	1868	1869	MEANS.
January --	5.60	1.00	3.47	6.32	1.16	.70	9.30	1.95	5.57	5.07	
February --	1.10	3.15	.78	2.90	1.24	.45	3.00	2.95	3.45	6.11	
March --	4.40	4.58	2.55	.83	2.40	1.30	1.75	1.07	5.07	1.18	
April --	2.23	.82	1.98	2.10	1.35	.70	2.90	3.78	2.73	.50	
May --	2.40	.50	1.20	1.49	1.15	4.05	.20	2.22	1.95	2.33	
June --	4.72	1.89	3.31	3.57	1.70	.45	4.15	1.55	.84	2.09	
July --	1.16	3.95	3.36	.96	1.70	1.70	2.95	3.47	.39	.74	
August --	4.25	3.97	2.61	2.91	1.01	3.90	1.57	4.16	1.34		
September --	.72	5.62	4.85	5.38	3.08	.48	6.15	3.22	1.13	6.64	
October --	4.57	2.71	6.38	4.20	3.70	4.33	1.96	3.00	3.08	3.31	
November --	2.17	6.55	1.20	2.60	3.65	3.53	4.09	1.59	1.56	4.61	
December --	6.48	2.70	5.10	2.85	1.85	3.18	4.36	1.08	8.62	5.29	
TOTALS -	37.80	37.44	33.79	36.05		24.88	44.71	28.25	38.55	39.21	

C C C C C C C C C C C

1860 stated to be 36.68 in another volume paper

1865 6 in centre of garden quite exposed, its funnel shaped with floating Indicator

1866 - New 5 in gauge used in Nov & Dec and records of the previous 10 months increased by 25 per cent inasmuch as that is the error of the old gauge - see article this volume

1868 above the average

1860 Total = 36.68 in ppt by S. Marshall

1864 = August entered as 1.08 by Mr Fletcher

## RAINFALL AT Brougham Hall [Cumb.]

Lat.....

Lon.....

County of Westmoreland

..... Rain Gauge, by.....

Observer

W. G. Campbale  
1877 9th a Lodge

Diameter	.5	:	6					5	5	.	.
Height	1	.	5·5					4	5·5	.	.
Altitude	470	.						470	.	.	.
YEAR	1870	1871	1872	1873	1874	1875	1876	1877	1878	1879	MEANS.
January	3·54	2·74	6·21	7·36	3·32	5·43	1·12		2·68	·98	
February	3·69	2·71	4·98	1·00	2·00	22	2·64		1·10	1·83	
March	-·85	3·08	1·54	1·32	2·24	1·21	3·73		2·15	1·97	
April	1·00	2·17	1·43	·57	2·73	·79	2·11		1·68	1·26	
May	3·28	1·08	2·92	1·64	1·42	94	99		3·94	1·34	
June	1·92	2·72	2·30	1·54	1·25	3·43	2·40		2·40	3·62	
July	-·85	3·93	5·45	2·37	2·91	3·42	1·70		·51	4·02	
August	3·21	2·05	3·29	3·55	4·18	1·78	4·99		4·28	3·59	
September	3·57	2·80	4·39	1·33	5·57	3·86	1·18		3·71	1·87	
October	+7·49	3·30	5·19	4·08	5·74	2·49	4·30		3·98	1·07	
November	2·63	1·23	7·32	1·62	2·50	2·42	3·95	6·13	2·88	1·32	
December	1·44	3·04	4·61	1·48	2·34	2·67	5·42	2·82	2·49	2·33	
TOTALS	33·47	30·83	49·63	27·86	36·15	28·66	34·53		31·80	25·20	

C C C

1877 Mr. Lodge only came to the gardens in Nov

1878 Bushes 5ft high, 6ft distant

RAINFALL AT *Gronham Hall* 80

Lat. \_\_\_\_\_

Lon. \_\_\_\_\_

County of *Westmoreland*

Rain Gauge, by \_\_\_\_\_

Observer *W<sup>4</sup>A. Lodge**Eden - 1.*

Diameter .....	5										
Height .....	5.5										
Altitude .....	490										
Year .....	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	MEANS.
January .....	65	38	2.10	4.67	5.90	2.45					
February .....	4.34	4.13	2.23	5.73	4.41	4.47					
March .....	1.43	2.91	2.70	2.97	3.31	2.09					
April .....	1.70	.73	4.03	1.54	1.62	2.36					
May .....	1.18	2.08	.84	.68	2.13	2.10					
June .....	1.54	2.06	3.21	3.27	1.01	1.23					
July .....	4.74	3.55	4.43	3.99	5.42	.72					
August .....	1.14	4.23	2.92	2.63	1.44	2.08					
September .....	4.56	3.55	1.77	4.16	3.69	3.17					
October .....	1.07	2.14	2.61	4.52	2.17	3.60					
November .....	4.92	6.18	4.98	4.00	2.22	2.12					
December .....	4.34	3.68	3.19	3.31	3.76	1.67					
TOTALS .....	31.61	35.62	35.01	41.47	37.08	28.06	91.0				

## RAINFALL at Penrith, Brougham Gardens.

County of Westmorland

Observer.

River Basin Eden 1

Mr J.H. Lane

No. 5167

Rain Gauge, by Caselle

An. A.J. 1916-50 34.20"

Diameter ...											5
Height .....											0.5 2.51
Altitude.....											470
Year .....	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS.
January.....											3.50
February ...											.51
March .....											1.90
April .....											1.38
May .....											1.41
June .....											1.14
July .....											.93
August .....											2.59
September...											1.53
October.....											1.96
November...											5.60
December ...											5.08
TOTALS ...											24.03

1914 Slope area 10 ft 90 ft. W.E.

Date.	Lat. N.	Long.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.
1919			Penrith	1 mi	W	St. Helens Brougham	2 mi	NE

## RAINFALL at Penrith Brougham Gardens

County of Westmorland

Observer Mr. J. H. Lane (gauge)

River Basin Eden 1

Lord Brougham &amp; House

SNOWDON

1920 B.R. Curtis (gauge)

No. 8177

Rain Gauge, by Casella

An. Av. 1916-50 34.20"

1920

1930  
MEANS

Diameter ...	5"										
Height .....	0' 5"	5' 0"									4' 6"
Altitude ...	470										450'
Year .....	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930 MEANS
January .....	4.05	5.27	2.39	2.41	2.79	5.18	4.00	4.00	6.74		
February .....	2.65	(2.0)	2.47	4.62	.66	5.04	2.62	1.96	3.99		
March .....	4.27	4.13	1.95	2.01	.90	1.37	1.84	3.60	3.51		
April .....	3.21	.69	2.58	2.71	1.76	3.62	2.13	2.08	0.68		
May .....	4.52	1.64	1.28	2.77	3.93	4.31	1.78	1.92	1.20		
June .....	1.24	.30	1.84	1.63	1.40	.26	3.13	2.88	4.27	ff recorded imp	
July .....	4.27	2.05	3.81	2.25	3.27	1.90	2.96	3.59	3.31		3.64
August .....	1.31	4.33	2.17	7.40	1.66	3.14	4.13	7.55	7.02		7.24
September...	2.26	1.30	2.51	3.27	4.52	3.66	4.41	6.70	1.43		3.13
October .....	2.06	2.26	.82	6.13	3.19	4.18	3.83	3.90	6.25		4.96
November...	2.61	1.86	1.30	4.00	2.88	1.03	6.58	2.07	6.34		3.09
December...	2.80	4.25	6.98	3.55	6.65	4.39	.47	1.06	2.15		2.97
TOTALS...	35.26	28.28	30.10	42.75	33.61	38.68	37.88	41.31	46.89	NR	imp.

1920. Wall 9 ft high 307 ft W

1921. Site also f map

1927. Last record

1930. Imprecise June gauge on wall. Recommended that it be moved to 1 ft above ground. Measure in case broken above .30 in. mark.

Position of Station on reduced Ordnance Survey } No. of Map \_\_\_\_\_ Reference No. \_\_\_\_\_  
Map, 2 miles to 1 inch Series

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Direction	Parish Church.	Distance from gauge	Direction
1920			Penrith	1 mi	W	Brougham & Ninians	2 mi	N.E.

## RAINFALL at Penrith (Brougham Castle Gage)

County of Westmorland

Observer Mr. B.R. Curtis.

River Basin 1-Eden

Type of Gauge Snowdon

Annual Average 33.2 in. based on 15 years obs. un-weighted. Period of average 1881-1915 Ref.

34.20 1916-50

765224/27

Diameter	5"										Means
Height	4' 8"										
Altitude	70 450'										
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	
January	3.24										
February	2.75										
March	1.11										
April	1.75										
May	2.33										
June	4.31										
July	4.59										
August	3.43										
September	1.71										
October	1.89										
November	5.95										
December	2.46										
TOTALS	35.52										

Gardens closed, no observations now taken

Position of Station on reduced Ordnance Survey Map, } No. of Map..... Reference No.....  
1 mile to 1 inch Series

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge		Parish Church.	Distance from gauge	
				1m	W.		Brougham, St. Ninian's	2m
1936.			Penrith					

BRITISH RAINFALL ORGANIZATION, EXHIBITION ROAD, LONDON, S.W.7.