

# RAINFALL AT *Hawkshead Black Fell*

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

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

County of *Lancashire*

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

Observer *S. A. Marshall Esq*

*Seven + 6.2*

Diameter ....	5											
Height .....	1 6											
Altitude ....	1055 <sup>T</sup>											
Year .....	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.	
January ....	11.25	6.45	5.75	2.30	9.00	1.80	5.80	1.50	7.30	10.00	6.115	
February ....	.77	.58	1.55	8.50	11.25	.60	6.00	6.00	6.50	5.85	11.750	
March .....	4.60	1.25	1.90	1.80	4.00	6.35	8.15	9.25	2.50	5.70	4.550	
April .....	2.15	3.40	1.50	1.05	2.25	4.30	1.80	3.10	6.80	8.40	3.1175	
May .....	3.80	2.20	6.50	4.15	5.80	.65	.22	2.20	3.10	6.15	3.1177	
June .....	5.45	2.20	4.40	2.70	4.70	1.30	3.35	5.25	5.10	1.95	3.610	
July .....	5.60	3.65	4.50	5.00	4.75	5.50	7.15	2.70	1.20	3.85	4.390	
August .....	5.20	13.55	10.25	7.90	5.05	7.50	3.40	9.60	11.15	2.30	7.620	
September....	5.35	8.90	10.60	5.55	.37	1.75	10.25	5.30	4.05	5.90	5.802	
October .....	3.00	7.75	6.50	7.75	8.05	5.80	7.50	4.65	7.50	6.60	6.510	
November....	12.90	8.25	7.05	2.70	13.00	7.70	2.30	11.25	7.60	7.50	8.025	
December ....	.60	12.85	3.40	9.55	10.60	5.65	11.80	11.00	13.50	4.25	8.320	
TOTALS . . .	60.67	71.03	63.90	58.95	78.2	49.10	67.72	71.80	76.30	68.45	66.674	

1898 New copper gauge fixed early in the year

N.B. Rejected from Survey as 10' too low.

# RAINFALL AT Hawthhead Black Fell

Lat. ....

Lon. ....

County of Lancashire North

Rain Gauge, by .....

Observer S. a Marshall Esq  
W. Marshall

Seven 2

Diameter ..	5										
Height ....	1 6										
Altitude ..	1055 I										
Year ....	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.
January ..	9.81	4.50	5.70	10.20	10.35	5.00	12.40	85	13.36	8.36	
February ..	4.85	1.85	3.30	10.00		4.30	5.50	3.60	5.08	6.51	
March ....	3.30	4.30	5.10	11.25	12.70	6.75	5.70	...	6.64	4.64	
April .....	4.80	4.30	3.40	2.35	7.30	5.90	2.62	3.25	2.62	4.89	
May .....	4.10	1.85	3.30	4.70	4.50	3.60	10.02	7.30	5.96	4.01	
June .....	6.80	3.75	1.35	3.00	3.55	4.50	3.14	12.79	4.84	2.76	
July .....	2.50	1.00?	3.80	7.00	4.40	3.25	5.10	3.71	6.86	9.21	
August ....	7.65	10.05	5.40	10.70	6.30	7.50	7.73	9.25	8.66	4.29	
September ..	5.20	5.60	3.50	8.00	5.80	5.25	3.21	1.70	9.59	4.19	
October ....	8.75	7.70	6.30	15.80	5.70	5.10	11.30	9.76	4.17	14.87	
November ..	7.70	6.35	6.20	4.55	6.50	9.82	6.96	8.78	7.42	4.90	
December ..	16.85	7.70	8.20	6.50	9.30	7.35	4.95	13.29	7.23	13.93	
TOTALS ..	79.31	58.95	55.55	94.05	76.40	68.32	78.63		81.43	82.56	

1906 July estimated

1907. Jan. ? small. March gauge tampered with

N.B. Rejected from Survey as too low

RAINFALL at Hawkhead Black FellCounty of North LancashireObserver Miss C MarshallRiver Basin Leven & C 2

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

Diameter ...	5										
Height .....	1 6										
Altitude ...	1055										
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS.
January ...	10.56	6.33	8.02	8.06	6.35	6.68	11.28	2.62	10.07	8.88	
February ...	12.49	11.83	7.25	5.06	10.45	11.25	6.90	1.89	8.98	1.70	
March .....	5.11	3.77	11.26	8.42	7.70	2.70	1.35	2.98	3.44	5.53	
April .....	4.94	6.23	1.62	8.13	2.20	4.50	4.63	2.68	1.37	3.04	
May .....	3.82	4.27	3.05	4.25	3.15	1.18	5.20	4.60	2.34	2.13	
June .....	2.76	5.82	7.86	6.05	1.22	2.12	4.71	3.56	2.73	2.53	
July .....	5.69	1.31	7.21	1.12	5.40	4.80	3.53	2.47	6.09	1.37	
August .....	12.19	6.99	8.66	2.86	7.85	4.51	3.45	11.82	6.29	5.46	
September ..	.70	6.85	2.81	2.80	3.55	1.35	3.39	7.22	14.81	8.32	
October ...	4.27	7.97	10.75	4.83	2.62		15.27	11.57	12.85	2.16	
November ...	6.47	13.18	4.16	8.70	11.53		12.16	7.12	4.43	5.07	
December ...	11.08	14.54	13.24	4.75	10.93	14.95	6.28	3.37	13.26	11.80	
TOTALS ...	80.08	89.09	85.89	65.03	72.95		78.15	61.90	87.16	57.99	

1915 Oct + Nov &amp; looking.

N.B. Rejected from Survey as 10" too low.

Date.	Lat. N.	Long.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.



RAINFALL at Hawthhead Black FellCounty of N. LancashireObserver Miss G. MarshallRiver Basin Severn & C. 2

† in Bradford Rain Gauge, by Benalla  
 N.O. (26) Dist: 5.02  
 5.00  
 4.98

† See memo, as for Sheldale fold

Diameter ...	5"										
Height .....	1 6					1.5					
Altitude ...	1055'										
Year .....	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	MEAN 1930
January ...	10.92	13.26	7.77	7.13	7.90	9.40	14.05	7.51	21.10	3.30	12.25
February ...	7.88	3.4	7.64	8.46	7.5	6.50	20.35	5.32	14.20	2.65	.42
March .....	9.18	11.30	4.74	3.27	2.63	1.75	2.82	7.50	7.32	1.45	3.84
April .....	6.34	1.93	2.61	4.90	3.78	6.48	3.58	2.65	3.10	2.64	3.12
May .....	(10.00)	5.54	4.56	3.02	7.55	8.88	2.98	2.70	1.68	4.14	3.10
June .....	3.27	1.19	3.59	7.63	4.59	4.0	3.70	4.20	7.68	2.64	3.45
July .....	9.56	4.16	7.84	5.80	6.88	2.30	5.08	5.90	14.64	(7.00)	5.15
August .....	4.84	8.85	7.26	9.94	4.35	6.39	6.44	7.00	10.43	9.20	9.78
September...	5.11	2.72	5.19	8.70	10.74	7.49	7.25	10.70	5.25	3.15	(4.50)
October .....	3.33	4.19	3.46	14.53	7.39	10.40	4.82	7.63	13.45	9.55	(14.00)
November...	6.19	(4.60)	4.10	10.18	5.72	2.65	10.66	8.75	16.80	19.56	9.86
December...	9.37	11.63	10.92	8.68	15.58	6.69	1.58	2.00	7.50	14.56	11.50
TOTALS...	(84.99)	(68.71)	69.65	86.20	78.06	(69.33)	83.31	71.86	123.75	(60.37)	(80.97)
				M	M		M	M	M	M	

1920 May ~~estd~~

1927. R. is overexposed on Moor

1921 Nov. "

† Inspected R. Barker 5.10.25. Gauge fixed in rock on top of fell not far from edge may be affected by eddies. Possibly a little exposure could be got if g. were set in hollow to E. of present site. Perch slopes are distinct 8 yds. W., 30 yds. E., 50 yds. N., & whole off hill 30 yds. S.

1930. Sept &amp; Oct estimated.

NB. Corrected from Survey as 10" too low.

Position of Station on Reduced Ordnance Survey Map, 2 miles to 1 inch Series

No. of Map

Reference No.

Date.	Lat. N.	Long. W.	Railway Station.	Distance from gauge	Direction	Parish Church.	Distance from gauge	Direction
1925	54° 24'	3° 1'	Coniseton	3 mi	S.W.	Brathay	1 3/4 mi	N.E.

RAINFALL at Hawkshead (Black Fell)\*County of North LancashireObserver Miss C. Marshall,River Basin Leven & C - 2

Type of Gauge.....

Annual Average.....in. based on.....years obs. un-weighted. Period of average.....Ref.....

662692/26.

Diameter	5.										
Height	1.6.										
Altitude	1055.										
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means
January	7.50	14.09	7.56	13.08	3.97	<del>10.44</del>					
February	8.64	(.20)	(10.35)	.56	14.06	<del>3.15</del>					
March	1.12	5.60	4.96	6.02	2.60	<del>4.80</del>					
April	2.70	(7.00)	3.60	3.78	4.68	<del>1.12</del>					
May	(5.00)	5.30	3.63	6.79	.61	<del>8.54</del>					
June	8.65	2.30	3.53	3.70	6.84	<del>5.02</del>					
July	7.67	7.95	6.79	2.50	4.10	<del>7.80</del>					
August	3.69	1.70	(4.35)	3.02	4.89	<del>5.65</del>					
September	2.86	10.00	1.20	12.02	11.96	<del>7.90</del>					
October	6.86	12.30	5.68	12.64	13.00	<del>7.56</del>					
November	18.09	7.40	2.90	.60	8.96	<del>8.56</del>					
December	8.00	14.20	(1.74)	14.85	5.96	<del>13.25</del>					
TOTALS	(60.78)	(88.04)	(56.29)	(94.56)	81.63	<del>75.65</del>					

\* Gauge over-exposed on moor. (B.R.)

1931. May - estimated. g tampered with

1933 n.p. - low.

1936 - figures for new gauge - No 8031/1.

NB. Figures from 1936 as 10" too low.

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	Direction	Parish Church.	Distance from gauge	Direction