

RAINFALL AT Pendle Hill Ogden Reservoir
 Lat. _____ Lon. _____ County of Central Lancashire
 Rain Gauge, by _____ Observer Smith Whitehead Esq

Ribble & Co.

Diameter											
Height											
Altitude											935
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.
January											8.13
February											2.18
March											3.09
April											4.09
May											3.49
June											1.54
July											2.33
August											1.70
September											6.03
October											3.142
November											2.81
December											3.57
TOTALS											42.38

(899 Rec'd 28 Sep & End 17 Dec 1917)

RAINFALL at Pendle Hill Ogden Reservoir

County of Central Lancashire

Observer Smith Whitehead Esq

River Basin Ribble & L.

Rain Gauge, by

Diameter ...											
Height											
Altitude ...	935										
Year ...	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	M.EANS.
January ...	4.73	2.38	4.67	5.27	4.36	3.07	6.43	2.47	5.81	2.46	
February ...	5.56	2.12	1.52	6.40	4.20	3.59	2.54	3.11	3.81	5.58	
March53	2.79	4.13	6.25	2.52	3.66	2.92	5.22	3.46	2.99	
April	2.96	3.45	2.57	3.63	4.52	2.36	1.22	2.31	(4.50)	4.74	
May	1.81	1.44	3.52	2.93	3.23	1.02	4.54	4.90	3.48	2.61	
June	3.56	1.86	1.64	2.51	1.64	3.54	1.50	9.37	2.73	2.65	
July	3.12	1.64	4.54	5.01	1.94	3.20	2.22	3.49	6.99	8.47	
August	6.33	3.70	4.26	7.53	5.83	4.48	4.47	6.87	4.90	3.43	
September...	2.78	.87	1.34	6.07	1.92	3.60	1.34	1.36	5.42	3.51	
October ...	7.37	4.36	5.83	12.17	2.66	4.34	5.56	4.75	1.82	6.14	
November...	4.80	9.31	3.02	3.89	5.61	4.67	4.50	3.07	4.22	2.68	
December...	5.14	6.15	4.40	3.10	3.96	2.29	4.18	6.77	3.90	7.32	
TOTALS ...	48.69	40.07	41.44	46.76	42.29	39.82	41.42	53.69	(49.10)	52.58	

1908 Aug out of order estimated
 1910-1909 Recd 28 Sep End 17 Dec 1917

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

(Barley)

RAINFALL at Pendle Hill Ogden Reservoir

County of Central Lancashire

Observer

Smith Whitehead Esq.

River Basin Ribble &c

Gauge Rain Gauge by NB

Stand $\begin{cases} 7.96 \\ 8.05 \\ 7.93 \\ 8.00 \end{cases}$ (17.12.20)

Diameter ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS.
Height										8	
Altitude ...	935									20	
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	
January ...	7.07	2.18	3.51	4.68	3.09	6.69	4.95	2.47	3.09	4.40	
February ...	6.37	7.82	1.87	2.49	3.47	3.45	4.18	1.57	7.50	1.60	14.85
March	1.05	3.20	6.44	6.43	5.07	2.21	1.72	1.83	1.65	5.41	10.61
April	3.62	4.03	1.45	4.34	1.50	2.20	3.27	1.43	1.06	2.15	7.91
May	3.56	3.82	2.25	3.50	2.46	2.12	2.84	1.55	1.71	2.31	8.41
June	3.30	4.33	6.95	3.09	1.88	.62	2.90	3.52	2.81	1.82	11.05
July	4.88	.88	3.67	1.34	2.82	5.22	2.89	1.91	5.27	2.07	12.14
August	7.54	3.79	7.75	2.18	3.62	4.96	4.08	5.93	5.09	3.69	18.79
September ..	.68	4.88	2.98	2.38	2.95	1.44	2.50	3.06	13.25	3.84	22.65
October ...	4.53	3.90	5.27	1.99	2.39	.65	5.46	8.13	5.77	2.28	21.64
November ..	4.42	4.29	4.99	5.33	6.43	1.72	3.68	3.32	3.92	3.59	14.51
December ...	5.42	7.43	6.03	3.94	5.38	5.95	3.71	2.52	11.02	7.12	24.37
TOTALS ...	57.93	50.65	53.16	41.69	41.06	37.17	42.18	37.24	62.14	40.25	181.84

1910-1916 Rec'd 28 Sept 1st 17 Dec 1917

17.12.20. G. fixed in stone block in small wooden enclosure 2 ft high
at S. side of no. 3 Reservoir (1/2 mi E of no. 1.) 100ft. above water & on sloping
ground probably little over exposed.

Date.	Lat. N.	Long.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.
1917	53°51'10"	2°17'22"E	Nelson	3 1/2 m	SE	Newchurch	7 1/8 m.	SE
1918	53°51'09"	2°16'58"E		3 1/4		St. Mary.	3 1/4	

RAINFALL at Barley Ogden Reservoir

County of Lancashire
River Basin Ribble & C.Observer Smith Whitehead Esq. C.E.
(1925) J.A. Rodwell Esq. C.E.

Barley Rain Gauge, by Neg.

Water gauge below

Diameter ...	8										MEANS.	
Height	20										16	
Altitude ...	950											
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	MEANS.	1930
January ...	4.64	8.45	4.51	6.76	4.03	4.38	4.76	5.73	13.26	2.78	7.70	Totals 67.00
February ...	5.40	.67	6.41	6.22	.77	7.71	5.75	2.07	7.36	1.00	.61	43.97
March	3.88	4.69	2.92	1.86	1.95	1.81	1.98	4.58	2.88	1.81	2.74	31.10
April.....	4.12	1.65	3.20	4.30	2.25	3.03	1.88	3.96	1.60	1.54	3.45	31.06
May	4.53	2.89	2.13	4.83	6.58	4.47	4.23	2.17	1.26	3.25	3.32	39.66
June	2.90	1.04	3.78	1.86	3.71	.12	3.15	4.31	6.46	3.18	4.72	35.53
July	8.12	3.64	6.02	6.45	5.02	2.84	4.08	5.38	3.45	4.97	4.94	55.21
August	3.06	7.20	6.27	7.37	8.78	5.55	5.20	8.62	8.35	9.02	8.12	77.54
September...	2.68	2.91	4.81	7.48	5.87	4.16	5.87	9.07	1.71	2.36	3.89	50.81
October.....	1.91	4.23	1.04	7.83	5.15	5.72	5.60	5.62	6.52	4.22	8.60	59.54
November...	2.94	2.56	3.04	7.83	6.14	2.54	7.19	6.57	7.45	9.02	7.75	62.06
December...	3.25	8.94	4.82	5.67	5.58	4.58	2.13	.97	3.64	10.11	3.67	53.09
TOTALS...	47.43	48.97	48.95	67.86	54.83	46.91	51.82	59.05	64.65	56.59	59.51	606.57
	0	0	0	0	0	0	0	0	0	0	0	47.00

1920 Gauge inspected 3.5.17, XII.20. See Cast sheet

1928 Wall 5' high 120' S and 140' W

1929. Record from old Barley gauge at 8' above ground; new gauge to be fixed soon.
Wall 5' high 120' S and W

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
1918	53°51' 9"	2°16' 55"	Nelson Brierfield	3 1/4 mi 2 5/8	S E S E	St. Mary	3/4 mi 1/2

RAINFALL at Barley (Ogden Reservoir)

County of Central Lancashire

Observer Nelson Corpn. W.W.

River Basin Ribble & L. - 1

Type of Gauge

Annual Average 46.0 in. based on 31 years obs. un-weighted. Period of average 1891-1915

Ref. 3

665521/26.

Diameter	5.									8	
Height	1.6										
Altitude	950										
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means
January	6.53	6.62	3.55	4.54	2.45	4.25	4.18	6.61	6.11	1.94	Total 46.88
February	6.87	1.16	4.75	H7	9.33	2.06	6.73	2.54	5.26	2.61	40.28
March	1.67	3.45	3.14	2.50	1.89	2.64	1.93	2.65	2.60	3.65	25.12
April	3.33	3.59	1.87	3.42	3.42	1.32	4.00	1.19	2.54	3.41	28.09
May	2.82	4.43	2.37	4.39	1.24	1.19	2.58	3.72	1.54	1.46	25.76
June	7.41	1.26	2.19	3.42	4.07	4.28	3.58	5.61	4.67	.91	37.50
July	5.10	6.99	3.60	3.09	2.80	7.10	2.80	6.25	7.48	4.74	49.99
August	5.41	1.92	2.22	5.71	1.71	4.03	3.33	6.06	2.34	3.50	36.25
September	3.24	9.27	1.46	4.66	8.87	5.29	3.05	2.41	1.77	5.34	45.36
October	4.03	8.51	4.37	7.36	12.71	6.17	2.09	11.65	1.67	4.72	63.28
November	7.72	4.03	2.01	3.11	5.36	5.65	2.17	6.39	9.13	7.04	52.61
December	3.54	2.11	.69	5.84	3.58	5.90	2.47	5.51	4.31	5.97	39.92
TOTALS	56.47	52.34	32.22	48.51	57.43	50.08	38.91	60.59	49.46	45.29	491.00
	D	D	D	D	D	D	D	D	D	D	D

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

Date.	Lat. N.	Long. W.	Railway Station.	Distance from gauge	Direction from gauge	Parish Church.	Distance from gauge	Direction from gauge
1932.	52° 51' N	2° 16' 52"						

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

Station No. 2986

41

RAINFALL at § Barley (Ogden Reservoir)

County of Central Lancashire Observer Nelson Cooper. W.W.

River Basin Ribble & L. - 1

Type of Gauge Standard

Annual Average 46.2 in. based on 31 years obs. un-weighted. Period of average 1881-1915 Ref. S

File No. 665521/26

Diameter	5"										
Height	1' 6"										
Altitude	950'										
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means
January	1.41	6.27	5.95								
February	6.14	1.99	3.50								
March	3.96	3.42	1.74								
April	2.55	1.75	2.87								
May	2.48	2.74	2.77								
June	.53	1.37	6.07								
July	1.56	7.11	4.75								
August	6.93	6.15	8.51								
September	1.06	4.43	5.01								
October	7.55	9.48	(4.61)								
November	2.45	1.82									
December	3.50	5.52									
TOTALS	40.22	52.05	imp.								

New gauge 2986/1. uses 50%.

§ Turf well round gauge Aug 1943

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

Station No. 2386/1

RAINFALL at Basby (Ogden Reservoir) gauge

41

County of Central Lancashire Observer Nelson Corson W.W.

River Basin Ribble & C-1

Type of Gauge.....

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

File No. 665521/26

Diameter	574	467	5"								
Height			1' 0"								
Altitude		41	908'								
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means
January			100 (5.93)	9.97	5.04	5.71	4.91	9.25	4.44	4.72	Totals 57.64
February			100 (3.50)	3.76	7.18	7.62	3.25	4.39	4.61	6.94	47.38
March			100 (1.71)	1.19	2.53	1.49	8.01	3.24	2.58	2.56	30.72
April			100 (2.27)	3.71	3.40	1.73	3.97	3.04	6.09	4.26	33.37
May			100 (2.77)	4.58	5.49	1.56	2.70	1.56	2.92	2.23	29.03
June			100 (6.1)	4.65	6.27	3.44	3.64	5.69	1.22	4.21	37.11
July			100 (4.53)	4.48	3.80	5.66	5.22	2.61	3.40	4.83	43.42
August			100 (8.07)	4.04	3.18	9.97	1.25	5.41	4.01	10.15	58.40
September			100 (5.00)	8.49	4.05	8.63	4.89	5.28	2.10	9.40	53.34
October			100 (5.03)	6.03	6.30	7.41	1.49	1.14	4.18	5.79	53.47
November			100 (4.67)	8.87	7.6	8.11	10.11	3.99	6.11	7.92	55.11
December			100 (3.24)	5.77	2.87	5.07	5.30	3.41	10.47	4.13	49.28
TOTALS			156.11	65.81	51.98	60.50	53.39	52.05	53.71	66.45	550.27 446

1943 no obstructions New gauge is 50ft from old site

1943 5 turf wall round gauge

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

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Direction	Parish Church.	Distance from gauge	Direction
1943			Nelson	2 2/3 m	116°	Newchurch	1/2 m	128°

BRITISH RAINFALL ORGANIZATION

Station No. 2986/1

51

RAINFALL at Barley (Odger Reservoir)

County of Central Lancashire

Observer

Nelson Corporation

River Basin. Ribble & L.

Type of Gauge.

Annual Average in. based on years obs. un-weighted. Period of average Ref.
 " 55.85 " 12 " within 1944-57. " " 1916-50 55.
 File No. 665521/26

Diameter ...	5"			574	467							
Height ...	1' 0"					1						
Altitude ...	908'					51						
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means	
January ...	6.13	7.58	2.72	5.53	2.84	5.33	6.08	3.82	3.91	7.28		
February ...	4.48	1.76	3.57	3.36	3.06	1.64	3.63	4.35	1.23	3.34		
March ...	5.57	3.06	2.40	3.29	1.94	2.16	5.55	2.19	1.94	1.62		
April ...	3.05	3.21	3.77	1.62	3.50	2.99	.99	1.98	3.23	3.56		
May ...	1.74	2.10	2.47	3.22	4.60	3.07	2.12	6.05	2.05	2.02		
June ...	1.59	4.63	2.32	3.98	4.35	2.95	2.59	5.36	3.70	1.67		
July ...	4.82	3.67	7.45	9.44	1.80	5.88	7.16	4.02	4.83	11.73		
August ...	6.11	9.80	7.42	8.32	1.28	11.47	6.87	4.75	.66	7.10		
September ...	5.35	6.13	5.84	8.34	4.04	5.70	7.98	6.60	.51	3.19		
October ...	1.54	4.12	2.21	11.18	3.78	3.47	9.71	4.15	7.10	3.69		
November ...	10.15	2.77	7.46	7.44	2.06	2.29	2.10	2.44	5.91	8.38		
December ...	12.86	5.36	3.36	9.51	8.80	5.63	7.53	4.54	8.52	6.34		
TOTALS ...	68.39	54.19	50.99	75.73	12.55	55.88	62.31	55.25	43.59	59.92		
	D	D	D	D	D	D	D	D	D	D		

1951 Range runs by long wall & no other obstruction

9/23

Position of Station on Ordnance One-Inch map :

No. of Map. 95

National Grid Reference SD 671 143 285

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Parish Church.	Distance from gauge.
1951			Nelson	3 m. 11°	Newchurch	1/2 m 128°

Summary of Earlier Records from 10-year Sheets :

1916-1950, P - Rejected

Record D, or d		1910-19	1920-30	1931-40	1941-50 before 1944	1951-60
		✓ D 17-19	✓ ✓	✓	✓	✓