

Rainfall at *Whittle Dam Reservoir*

Diameter of Gauge, in.

Height above Ground, ft. in.

Above Mean Sea Level, ft.

YEAR - -	1850	1851	1852	1853	1854	1855	1856	1857	1858	1859	MEANS.
January - -	1.40	1.87	1.98	2.08	2.72	.48	2.08	1.09	.48	.75	1493
February - -	1.35	1.21	1.24	1.99	.70	1.57	1.15	.92	.50	.90	1153
March - - -	.25	1.93	.36	1.20	.42	1.68	.12	2.00	.72	1.78	1046
April - - -	1.97	1.30	.72	1.32	.50	.62	2.67	2.09	.63	2.74	1456
May - - - -	1.15	1.02	2.84	.63	1.93	1.38	3.04	1.56	1.20	.23	1498
June - - - -	1.08	3.14	4.56	.75	2.78	4.39	3.20	1.30	1.99	2.14	2533
July - - - -	3.24	2.46	3.77	4.07	2.11	3.24	1.41	1.99	4.85	2.93	3007
August - - -	.90	2.14	4.29	1.42	4.17	3.60	4.12	1.64	2.16	1.50	2594
September -	1.23	3.67	.76	.89	.34	.28	3.68	3.78	2.58	3.49	2070
October - - -	2.70	1.48	5.54	3.29	1.22	2.90	1.54	1.65	2.63	3.25	2620
November - -	2.11	.78	3.15	.74	3.71	2.35	.98	2.47	1.88	1.41	1958
December - -	.30	.33	4.60	2.13	2.24	.90	1.73	.58	.89	1.66	1536
TOTALS -	17.68	21.33	33.81	20.57	22.84	23.39	25.72	21.07	20.57	22.78	22964

C C C C C C C C C C

Rainfall at *Whittle Dean Reservoir*
nr Harlow Hill.

D. D. Main

Diameter of Gauge, in.

Height above Ground, ft. *6* in.

Above Mean Sea Level, *380* ft.

YEAR - -	1860	1861	1862	1863	1864	1865	1866	1867	1868	1869	MEANS.
January - -	3.01	1.25	1.83	3.37	.74	1.27	3.89	2.88	1.76	1.16	2.116
February - -	1.07	1.74	1.55	.72	2.17	1.34	3.02	2.25	2.46	2.02	1.834
March - - -	2.08	.82	2.72	2.10	3.53	.60	2.51	.95	2.15	1.45	1.891
April - - -	1.22	1.04	1.04	1.10	.94	1.09	2.14	2.77	3.25	2.39	1.698
May - - - -	1.63	.33	2.87	1.62	2.10	2.42	1.87	1.68	.99	3.13	1.864
June - - - -	2.96	2.40	3.22	3.40	1.25	.48	1.89	1.40	.45	1.69	1.914
July - - - -	2.52	3.86	2.36	1.25	.64	2.52	.90	3.13	.52	.33	1.803
August - - -	2.04	1.90	3.50	1.84	.84	2.64	2.10	2.10	1.67	1.40	2.219
September -	.72	2.70	1.16	3.82	2.89	.32	4.53	2.15	2.57	3.19	2.413
October - -	2.78	1.67	1.82	3.39	4.60	7.05	1.10	.96	2.54	1.31	2.722
November -	3.93	3.66	.99	3.06	2.73	2.35	4.91	.47	1.92	2.78	2.680
December -	3.32	1.27	1.18	1.42	3.49	1.01	2.59	2.65	3.49	2.21	2.263
TOTALS -	27.28	22.80	24.32	27.09	25.92	23.09	33.45	23.39	23.77	23.06	25.417

28.67 ($\frac{6}{7}$)

This is St. Lyne Valley
H.W.

RAINFALL AT Newcastle E. N. N. Middle Dean Rd

Lat.

Lon.

County of NorthumberlandRain Gauge, by Observer Rev. R. S. Wheler

Diameter											
Height											
Altitude											
YEAR	1870	1871	1872	1873	1874	1875	1876	1877	1878	1879	MEANS.
January.....	1.55	90	2.72	1.68	1.37	2.78	.56	2.65	3.29	.69	1.819
February .....	.91	1.42	2.43	.82	.86	1.06	1.74	2.71	.77	2.55	1.527
March	1.32	.90	2.35	1.69	1.21	.96	3.32	3.37	.57	1.02	1.679
April .....	.74	3.10	3.14	.44	2.05	.72	1.49	4.02	2.54	2.05	2.037
May .....	.74	.40	1.20	2.90	2.15	.66	2.43	2.54	2.72	1.70	1.744
June	1.36	4.07	2.10	1.61	.81	1.26	2.50	1.35	2.43	4.72	2.221
July .....	.68	3.10	4.17	2.66	2.00	4.31	.98	3.14	.25	3.53	2.490
August	1.69	2.40	3.44	2.65	2.20	2.27	1.76	7.40	3.97	4.39	3.217
September.....	1.24	3.07	3.88	2.35	2.82	3.20	3.52	1.69	2.26	.85	2.568
October	3.62	2.78	5.40	2.58	1.75	4.01	1.68	2.48	1.41	.81	2.652
November.....	1.60	2.46	3.96	1.54	1.98	4.27	3.64	2.25	3.63	2.10	2.743
December.....	3.93	1.36	4.61	.99	4.53	2.90	6.74	2.50	2.07	.85	3.048
TOTALS	19.38	27.00	39.40	21.91	23.73	28.40	30.36	36.10	25.91	25.26	24.445

C C

RAINFALL AT *Whittle Dean*

80

Lat. _____

Lon. _____

County of _____

Northumberland

Rain Gauge, by _____

Observer _____

D. D. Main, Esq.

J. Maugham, Esq.

Type Lower 3.

Diameter	10											
Height												
Altitude												
Year	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	MEANS.	
January	45	28	92	2.49	3.75	1.47	4.42	.77	1.04	.74	1.633	
February	1.52	2.47	1.94	1.43	1.45	.76	1.17	.53	.49	.67	1.243	
March	1.27	2.18	.87	.97	1.82	1.83	1.48	1.12	1.61	2.01	1.516	
April	2.13	1.00	2.26	1.33	1.87	1.44	1.38	.96	2.90	4.11	1.938	
May	1.12	1.65	1.63	2.40	1.69	3.28	3.82	1.48	.37	1.05	1.849	
June	2.62	2.19	3.77	1.86	.53	1.37	.56	.32	1.85	.38	1.515	
July	4.99	3.18	2.91	3.58	4.10	1.39	3.03	1.23	5.24	3.03	3.268	
August	1.27	4.97	3.10	2.33	.92	3.09	2.78	1.61	1.99	3.22	2.528	
September....	4.51	4.44	1.35	4.22	2.52	2.54	1.98	4.33	1.63	.71	2.823	
October	3.20	3.78	2.68	1.95	1.34	2.98	4.25	2.45	.58	4.54	2.775	
November....	2.83	1.80	4.22	1.64	1.21	1.56	4.29	3.03	4.15	1.06	2.579	
December	3.30	2.18	3.16	1.63	1.95	1.28	3.16	1.84	1.08	1.35	2.093	
TOTALS	29.21	30.12	28.81	25.53	23.15	22.99	32.32	19.67	22.93	22.87	25.760	

RAINFALL AT *N.E.W. Whittle Dean*

Lat. _____

Lon. _____

County of *Northumberland*

Rain Gauge, by _____

Observer _____

G. Smith Esq

Type 3

Diameter	10											
Height .....	...										
Altitude ....	...										
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.	
January	1.93	.95	1.29	2.25	1.67	3.96	1.22	1.63	1.15	2.39	1.80	1.1
February	1.18	.05	3.14	3.40	3.22	1.07	36	.99	1.16	.80	1.53	7
March	1.97	2.89	.69	.25	.77	2.06	3.07	3.26	1.49	.63	1.70	8
April .....	.82	1.83	1.20	.47	1.38	1.90	1.07	1.12	1.80	2.20	1.37	9
May	1.57	1.74	3.23	1.95	2.15	.58	78	1.77	2.82	4.32	2.09	1
June	4.21	1.58	3.62	.16	3.30	1.24	2.66	2.87	2.39	.76	2.27	9
July	1.88	3.53	2.14	4.05	2.03	4.77	3.75	1.81	.62	3.06	2.76	4
August	6.57	4.13	3.90	1.49	3.11	3.84	1.75	3.41	2.53	.85	2.15	8
September....	1.81	2.21	2.52	1.80	1.02	.82	2.31	1.97	.48	1.49	1.64	3
October	1.20	1.52	5.24	1.67	3.63	3.31	3.05	1.05	5.19	2.50	2.83	6
November....	4.23	2.07	1.02	2.08	.62	2.12	2.18	1.37	3.18	1.13	2.00	0
December	1.31	3.34	1.30	1.07	1.31	1.94	4.71	2.16	1.49	3.37	2.20	0
TOTALS . . .	28.68	25.84	27.29	20.64	24.21	27.61	26.91	23.41	24.30	23.50	25.12	9

1890

RAINFALL AT Newcastle & Gateshead w. w. Whittle Dean.

Lat.

Lon.

County of Northumberland

Rain Gauge, by

Observer

Type, lower - 3.

P. Smith Esq.
A. L. Foster Esq. C.E.

11

Diameter ..	10				5						
Height ....	...				6						
Altitude ..	...				380						
Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.
January ..	3.28	1.30	.98	2.21	1.39	.44	2.30	.47	1.35	1.22	1.494
February ..	4.38	1.15	1.56	1.33	1.91	.84	.76	1.09	1.26	1.91	1.619
March	1.04	1.43	1.46	1.84	1.52	1.56	1.37	1.18	3.34	3.67	1.841
April	1.36	1.12	1.21	1.01	1.52	2.99	1.30	2.32	1.87	2.59	1.729
May	1.36	1.99	1.86	2.12	2.32	.74	3.99	2.82	2.25	1.66	2.111
June	3.79	1.31	2.34	2.16	2.28	.89	2.19	3.46	.57	2.56	2.155
July	1.49	3.89	2.26	4.19	1.18	1.54	1.28	1.62	3.14	1.79	2.238
August	3.95	1.59	1.64	3.26	2.34	3.42	5.09	2.40	1.38	3.29	2.836
September ..	.90	1.27	.64	1.29	1.13	1.91	.58	.61	2.32	1.79	1.244
October	4.37	2.08	2.21	5.67	.73	2.14	3.91	5.98	1.91	2.19	3.119
November ..	3.05	3.68	2.43	1.94	2.62	3.98	3.15	1.51	1.41	.52	2.429
December ..	1.93	2.38	1.75	1.57	1.59	.70	1.38	2.56	.57	3.04	1.747
TOTALS ..	30.90	23.19	20.34	28.59	20.53	21.15	27.30	26.02	21.37	26.23	24.562

H. H. H.

RAINFALL at Whittle Dean Newcastle W.W.County of NorthumberlandObserver A. Forester Esq C.E.River Basin Tyne, Lower 3

Rain Gauge, by _____

Diameter ...	5										
Height	0 6										
Altitude ...	380										
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1910-19 MEANS Totals
January ...	1.65	1.22	2.46	2.86	1.59	2.14	1.61	3.68	2.26	2.65	10.20
February ...	2.52	1.27	2.16	.82	1.45	1.92	2.96	.88	1.69	1.89	7.40
March .....	.32	2.59	1.75	2.97	2.31	1.55	3.13	1.54	1.26	2.26	8.19
April	2.19	1.62	.29	2.50	.89	.63	1.42	2.12	1.39	1.66	6.59
May	2.16	.87	2.78	2.09	1.49	1.77	2.77	2.38	1.72	1.25	8.12
June	1.50	4.14	4.42	1.71	2.51	.56	2.34	2.27	.72	1.04	6.37
July	3.27	.82	2.54	.95	1.91	3.22	2.64	1.13	3.33	2.03	9.13
August	3.42	2.14	5.57	1.89	2.13	3.16	3.50	5.81	1.89	2.65	13.85
September ...	.78	2.96	2.52	3.79	1.55	1.94	1.49	2.01	4.95	1.57	9.82
October ...	2.86	2.30	2.65	2.68	2.27	.84	3.36	2.03	2.57	4.04	12.00
November ...	2.54	2.88	1.52	1.80	3.53	1.52	4.16	1.26	1.14	4.17	10.73
December ...	1.93	2.68	2.01	1.25	4.14	5.25	3.33	1.89	2.44	2.50	9.96
TOTALS ...	25.14	25.49	31.67	25.21	25.77	24.50	32.71	27.00	25.36	27.29	112.36

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

RAINFALL at Whittle Dean, Newcastle N.H. (no. 1)County of NorthumberlandObserver A. L. Forster Esq. G.E. (dec?)River Basin Type Lower 3At Hardcastle by A. (1921)Howard Rain Gauge, by
link → X. 26.measure correct.

Diameter ...	5													
Height	0 6													
Altitude ...	380													
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930. MEANS.	1920-30 TOTALS		
January ...	2.76	4.24	2.74	1.00	1.84	2.08	1.85	1.48	2.85	1.81	3.15	25.80		
February ...	1.23	.09	2.40	2.85	.94	2.54	2.63	.47	1.80	.83	1.63	17.41		
March	2.58	1.15	1.46	1.21	.99	1.96	1.32	2.39	2.58	.30	1.81	17.75		
April	2.84	.96	2.44	1.70	1.49	2.36	1.11	1.87	.68	1.75	1.64	18.84		
May	3.50	1.89	.94	1.91	5.14	2.72	3.19	1.61	1.08	.77	1.13	23.88		
June	1.19	.71	1.44	.87	2.27	.35	3.77	3.77	3.89	1.37	1.29	20.92		
July	3.24	1.57	4.82	1.94	4.62	1.86	3.16	3.21	1.84	3.33	6.01	35.60		
August	1.91	5.68	2.02	4.47	3.02	3.62	2.54	5.65	7.89	3.26	5.44	41.50		
September...	1.61	1.56	4.05	1.91	2.42	3.68	3.05	4.36	.77	1.07	2.27	26.75		
October	1.67	2.06	1.19	1.82	3.14	1.93	3.02	1.54	3.11	1.74	2.45	23.72		
November...	1.12	2.18	.67	3.52	1.04	1.60	2.82	2.90	2.67	2.30	2.85	23.67		
December...	3.72	1.94	3.29	1.97	1.95	5.04	.48	3.69	1.91	3.00	2.27	29.26		
TOTALS...	27.37	24.03	27.46	25.17	28.86	29.79	28.94	32.94	27.07	21.53	31.94	305.10		

W
S + N
E
Reservoir

Imperfectly 7. 18. 26. 5. on reservoir bank as sketched. No. 2 was in a similar position on the S. side of embankment (also Howard gauge but no link). Both gauges somewhat over-exposed & better position to the E. about 15 yds from trees at edge of reservoir.

8 yds
Gauge 2
10 yds
Reservoir
10 yds

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

No. of Map

Reference No.

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Direction from gauge	Parish Church.	Distance from gauge	Direction from gauge

RAINFALL at Whittle Dene Res. (Newc. W.W.)County of NorthumberlandObserver A. Hardcastle, Esq., C.E. 1935River Basin Tyne - Lower - 3.Newcastle & Gateshead W.Co.

Type of Gauge.....

Annual Average 25.3 in. based on 35 years obs. un-weighted. Period of average 1881-1915 Ref. 5

660605/26.

Diameter	5.										
Height	0.6.								1'0"		
Altitude	380.										
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means 1930-40
January	1.94	1.07	1.36	1.61	2.14	3.40	2.97	1.69	3.85	1.52	2155
February	1.48	.68	3.73	.19	2.97	2.70	3.51	.85	1.24	1.50	1885
March	1.17	2.41	.99	3.68	.73	2.07	2.46	.50	3.58	2.80	2039
April	3.43	1.54	1.43	3.93	2.65	1.75	2.27	.22	1.05	1.38	1965
May	2.83	3.30	1.89	1.16	.90	2.03	2.66	2.92	1.03	1.08	1980
June	4.07	1.15	2.38	2.47	3.01	2.55	2.00	3.19	2.30	.56	2368
July	4.68	4.86	2.22	2.57	.66	3.67	2.20	2.08	2.77	7.21	3292
August	4.35	2.55	2.27	2.97	3.05	2.57	2.38	2.22	2.78	1.16	2630
September	1.15	3.28	1.90	1.54	3.48	3.19	1.72	1.65	1.39	1.77	2107
October	.93	3.70	3.52	3.72	4.78	1.99	2.04	4.53	6.32	2.85	3438
November	2.47	1.09	3.12	2.95	3.45	2.93	1.11	2.64	3.17	2.74	2567
December	1.12	.92	1.21	3.43	1.63	1.92	4.40	3.50	1.21	2.52	2176
TOTALS	29.62	26.55	26.02	30.22	29.45	30.67	29.72	25.99	30.69	27.09	2860 1/2
	D.	D.	D.	D.	D.	D.	D.	D.	D.	D.	

1940 Jan covered for snow.

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 from gauge	Parish Church.	Distance from gauge	Direction from gauge

Station No. T.F. 3570

RAINFALL at Whittle Dene Res. (New W.W.)

41

County of Northumberland Observer Newcastle & Gateshead W.C.River Basin Tyne - Lower - 3

Type of Gauge

Annual Average 25.3 in. based on 35 years obs. un-weighted. Period of average 1881-1915 Ref. SAv. of about 28 world R. records. 12th 1949File No. 669605/26

Diameter	5"			017	213						
Height	11' 0"				1						
Altitude	380'				41						
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1941-50 Means Totals
January	2.74	2.86	2.67	.99	4.03	1.60	1.56	8.10	1.20	2.21	27.66
February	4.08	1.12	1.37	1.80	1.54	.83	2.79	1.35	1.08	3.79	19.75
March	3.02	.99	.82	.53	.44	1.59	3.08	.82	.63	.74	12.66
April	1.62	.80	1.22	1.62	1.79	.84	3.11	2.03	1.16	2.11	16.30
May	2.26	.89	2.89	1.99	3.96	1.88	2.25	1.84	.65	1.34	19.45
June	.84	1.26	1.96	2.20	2.87	1.95	3.79	3.45	.86	1.20	20.38
July	2.72	2.61	2.12	2.85	1.85	4.48	4.70	1.04	1.85	3.17	27.39
August	3.30	3.96	4.60	1.87	1.52	3.76	.27	5.25	2.26	3.85	30.64
September	.43	2.29	3.06	6.03	2.01	4.64	1.16	3.23	1.13	3.42	27.40
October	3.46	2.67	2.89	2.71	2.93	.87	.93	1.83	2.57	1.14	22.00
November	3.04	.49	1.95	6.21	.79	3.89	3.02	1.54	2.34	4.67	27.94
December	.42	2.12	.94	1.74	1.32	1.79	2.77	1.74	2.80	1.47	17.11
TOTALS	27.93	21.76	26.49	30.54	25.05	28.12	29.43	31.72	18.53	29.11	268.68

1948 Report by Dr. G. Campbell 2/7. Annual means for bottles mounted in various forms from which corresponding rainfall data in Report in G.F.

239.57

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 from gauge	Parish Church.	Distance from gauge	Direction from gauge

BRITISH RAINFALL ORGANIZATION

51

Observer *Newcastle & Gateshead W. Co.*

Type of Gauge..... Snowden

Period of average

Ref.....5

27.78 " " " " = 1916-1950

1916-1950
File No.

05/26 P

1952 Two gauge 2 in. with streamers, conditions normal. Inc. 299 ft. 660 days; 20
23.2 x 63. Incised sites - gauge sound, no change in appearance.
1952. Sept Oct low but engineers state gauge sound.
1956 Feb amended No 3, Eng apers

National Grid Reference NZ45066681

Summary of Earlier Records from 10-year Sheets :

1916-1950, P-accepted

(62) Wt. 13072-389 10M 6/50 T.S. 841