

RAINFALL AT Bradford Leeming Res.

70

Lat.

Lon.

County of York W.R.

Rain Gauge, by

Observer A. R. Binnie Esq

12

Diameter...											
Height							5	.	.	.	
Altitude							1	.	.	.	
							850	.	.	.	
Year	1870	1871	1872	1873	1874	1875	1876	1877	1878	1879	MEANS.
January							# 1.41	5.46	3.81	1.53	
February....							5.70	3.25	1.75	3.09	
March.....							4.61	2.76	1.65	2.20	
April							3.43	4.29	1.96	3.25	
May							1.04	2.41	4.02	.94	
June							3.34	2.70	3.52	6.86	
July.....							3.35	4.40	.94	5.08	
August							2.25	5.82	6.41	4.72	
September ..							4.92	4.15	4.75	(2.00)	
October							2.59	5.69	5.43	1.79	
November ..							4.56	5.13	3.27	1.09	
December ..							8.41	4.36	2.04	2.53	
TOTALS ..							45.61	50.42	39.55	35.08	

1879 Sept. estd. for Fyfe Water III. 12.

1879 Gauge tampered with in Sept.

RAINFALL AT *Bradford, Leeming*

80

Lat. _____

Lon. _____

County of _____

Yorkshire

Monthly

Rain Gauge, by _____

Observer _____

A. R. Binnie, Esq., C.E.

Over. Air 9

Diameter	5										
Height	1.0										
Altitude	850 ft										
Year	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	MEANS.
January	31	38	2.83	5.25	6.35	3.30	5.25	2.70	1.83	2.10	3.080
February	3.73	4.98	3.83	3.25	3.89	3.40	1.40	.84	.93	2.95	2.923
March	2.40	2.47	3.93	1.20	2.97	1.72	3.96	2.83	4.90	3.11	2.949
April .....	.21	1.20	4.75	2.85	1.40	2.40	3.40	1.20	3.45	4.35	2.521
May	1.90	2.21	1.97	.85	2.09	2.20	4.60	2.05	1.59	2.64	2.210
June	2.86	1.79	3.85	3.20	.77	3.35	1.51	.21	3.50	.85	2.189
July	4.38	3.82	4.46	3.40	4.50	1.69	3.50	2.30	6.22	2.92	3.719
August	1.68	2.34	1.85	1.85	1.30	1.85	1.43	1.91	3.21	5.06	2.248
September....	3.90	2.45	2.10	6.50	1.20	5.06	3.56	4.86	1.36	2.45	3.344
October	4.12	2.10	4.27	4.25	2.58	7.70	6.12	3.60	2.15	5.39	4.228
November....	3.05	2.15	5.90	5.50	1.30	2.80	4.17	3.97	11.85	1.42	4.211
December	4.86	3.50	5.23	3.35	5.95	.90	6.62	3.80	3.54	3.65	4.140
TOTALS	33.10	29.89	44.97	41.45	34.30	36.37	45.32	30.27	44.53	36.92	38.712?

(39.39)

1881 Record imperfect
roughly est. (Ragley Water VII 12)

RAINFALL AT Bradford Leeming Reservoir

Lat. _____

Lon. _____

County of _____

York W.R.

Rain Gauge, by _____

Observer _____

J. Webster Esq. C.E.
J. Watson Esq. C.E.
Course - Ave 9 Monthly

Diameter	5											
Height	10											
Altitude	850 π											
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.	
January	7.46	3.68	4.24	1.23	6.12	4.48	1.89	2.36	4.00	7.93		
February ....	.90	.50	3.40	5.75	8.17	.66	1.88	4.10	4.50	2.53		
March	4.15	2.84	.99	1.30	4.13	3.81	5.80	6.11	1.58	2.60		
April	1.66	2.98	1.92	.93	2.51	3.09	2.49	3.24	3.74	3.35		
May	3.95	3.47	4.50	2.39	2.55	.62	.71	2.26	2.23	2.70		
June	4.12	1.91	4.08	2.63	3.75	2.14	4.37	3.67	3.00	2.28		
July	1.13	2.50	3.21	4.45	3.77	7.05	1.60	1.55	1.10	1.85		
August	6.42	7.81	4.02	3.39	4.55	7.00	2.25	4.40	4.83	1.58		
September	2.75	3.51	3.42	3.90	4.7		4.20	4.55	1.00	7.50		
October	2.92	5.20	8.66	4.52	6.34	4.56	1.46	1.81	6.78	3.45		
November	7.05	5.21	2.79	3.68	2.98	5.55	1.43	4.40	3.00	2.70		
December ....	.78	10.02	2.40	5.56	4.04	5.25	5.95	6.90	6.00	3.60		
TOTALS . . .	43.29	49.63	43.63	39.73	49.38	44.21	34.03	45.35	41.76	42.02	(43.303)	

1895 Aug + Sept. Gauge tampered with.

1895 Aug-Sept. estd for Fyldre Water III 1912

RAINFALL AT

Bradford Learning Reservoir

Lat.

Lon.

County of

York W. & Central

Rain Gauge, by

Observer

J. L. T. E. C. L.

Rise - Rise 9M

Diameter ..	5										
Height	1 0										
Altitude ..	850 π										
Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEAN.
January ..	6.30	3.45	4.55	4.00	4.50	1.72	6.68	1.67	3.19	2.66	3.872
February ..	4.40	1.80	1.80	5.00	5.00	2.16	3.21	2.59	3.04	2.33	3.133
March ....	.93	4.55	2.20	6.55	2.60	3.72	2.80	3.54	4.17	3.73	3.482
April	2.30	3.40	2.25	2.37	2.90	2.97	1.98	2.76	3.05	3.96	2.794
May	2.10	1.15	3.29	3.25	3.30	.66	3.66	3.71	2.53	2.95	2.660
June	4.25	1.00	2.00	1.55	1.62	2.84	1.12	5.69	2.03	2.43	2.453
July	1.30	1.85	3.05	4.50	1.90	1.78	2.37	2.80	4.51	4.80	2.886
August	5.40	2.60	4.00	4.90	5.00	6.26	4.92	3.33	3.11	3.09	4.261
September ..	1.30	1.40	2.35	5.60	1.10	2.18	.92	.98	3.18	3.58	2.259
October	5.80	2.80	5.70	12.35	1.50	3.44	7.10	6.17	2.66	4.44	5.196
November ..	5.20	7.05	3.20	2.40	3.30	5.00	5.12	2.97	3.21	1.62	3.907
December ..	5.60	6.40	4.70	2.90	3.43	1.04	3.60	5.00	3.26	6.82	4.165
TOTALS ..	44.88	37.45	39.09	55.37	36.15	33.77	43.41	41.21	37.94	41.41	41.068

Hills

RAINFALL at

Bradford Leeming Reservoir

10 3271

No. 12

County of W. R. Yorkshire

Observer W. J. Watson Esq. C.E.

River Basin Ons. Ons. 9

L. Mitchell Esq. C.E.

Rain Gauge, by

M

Diameter ...	5										
Height	1.0										
Altitude ...	850 ft										
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS.
January ...	6.07	1.71	5.57	4.55	3.89	5.32	2.56	1.89	2.45	4.00	
February ...	5.55	5.05	2.46	1.82	4.01	4.00	4.70	.54	4.13	1.65	
March .....	.84	1.97	5.18	5.80	5.28	.71	3.78	2.64	1.55	4.77	
April	3.71	1.99	.96	4.18	2.00	1.22	2.10	1.77	.83	1.65	
May	2.86	.98	3.57	3.71	1.61	1.66	2.11	1.90	2.64	1.76	
June	2.70	4.13	6.82	1.98	2.34	.54	2.36	2.06	1.44	.86	
July	4.11	.55	6.00	1.28	2.68	4.10	2.62	1.57	4.59	2.24	
August	5.41	2.14	6.96	1.35	2.61	4.80	1.98	5.58	2.22	2.02	
September ..	.26	3.48	1.95	1.99	2.19	.52	1.40	1.54	8.16	1.32	
October ...	3.87	4.29	4.78	2.66	2.10	1.61	6.74	6.16	2.39	2.11	
November ..	5.46	4.63	2.86	4.85	5.81	2.37	3.87	3.85	1.86	2.94	
December ...	5.56	7.15	4.54	2.97	6.79	6.84	3.04	1.62	6.15	5.64	
TOTALS ...	46.43	38.07	51.65	37.14	41.31	33.72	37.26	31.12	38.40	31.86	

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

RAINFALL at Bradford Leeming Reservoir N. 312County of N. YorksObserver L. Mitchell Esq. G.C.River Basin Guse - AireEng. BradfordSnarfordBradford5.005.044.96

Rain Gauge, by

W. Newlands, Esq. (1920)Glass went

Diameter ...	5"											
Height	10	<u>13</u>					10					
Altitude ...	850											
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	<u>Mean</u>
January ...	3.09	<u>5.72</u>	2.18	<u>3.93</u>	3.28	6.05	5.47	4.64	<u>11.53</u>	1.65	7.46	
February ...	2.93	<u>1.7</u>	3.16	<u>7.24</u>	1.75	8.28	4.22	2.05	<u>6.22</u>	.79	1.33	
March	3.69	<u>2.24</u>	1.67	<u>2.86</u>	1.59	1.79	2.48	5.25	<u>3.36</u>	.79	3.35	
April	<u>5.57</u>	<u>1.13</u>	3.40	<u>3.48</u>	2.50	3.55	2.08	4.01	<u>1.28</u>	1.39	3.35	
May	<u>4.59</u>	<u>1.48</u>	1.10	<u>5.07</u>	5.88	5.16	4.02	1.46	<u>1.80</u>	2.46	1.87	
June	2.22	<u>.05</u>	1.82	<u>1.01</u>	2.73	.05	2.63	3.89	<u>6.22</u>	1.42	1.80	
July	<u>6.52</u>	<u>2.04</u>	3.79	<u>4.16</u>	1.66	1.41	2.74	3.16	<u>1.21</u>	2.35	6.86	
August	1.86	<u>3.22</u>	5.24	<u>4.84</u>	4.33	4.37	3.63	6.91	<u>5.33</u>	3.29	5.79	
September...	1.70	<u>.96</u>	3.22	<u>4.99</u>	4.46	3.21	2.47	4.94	<u>.68</u>	1.42	5.10	
October	2.14	<u>2.34</u>	1.00	<u>5.32</u>	4.65	5.55	4.00	5.21	<u>6.19</u>	5.09	5.99	
November...	2.17	<u>2.06</u>	2.28	<u>7.37</u>	3.21	2.75	4.65	5.04	<u>7.69</u>	7.82	6.39	
December...	3.70	<u>4.36</u>	5.09	<u>3.86</u>	5.74	5.82	1.85	1.99	<u>2.84</u>	10.36	40.4	
TOTALS...	40.08	<u>25.57</u>	<u>33.95</u>	<u>54.13</u>	44.18	<u>47.99</u>	<u>43.24</u>	<u>48.55</u>	<u>54.35</u>	38.83	<u>53.33</u>	

Inspected 75. 6.10.22. S. at edge of reservoir with quite reasonable shells all round. It was found however that reservoir at times is lowered to nearly being empty (50 ft). It was concluded that this would render gauge readings considerable over exposure for uncertain periods (to the N.W.). The reservoir was particularly low in 1921. A better position was chosen across stream near Butts further from reservoir.

1922: low.

Gauge moved in April 1923 66 yards away to West.

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	Parish Church.	Distance from gauge	Direction

RAINFALL at Bradford (Leeming Reservoir)County of West RidingObserver Bradford Capt W.W.River Basin Ouse - Aire - 9.W Newlands Esq C.E.Type of Gauge SnowdonThe Waterworks EngineerAnnual Average 41.0 in. based on 42 years obs. un-weighted. Period of average 1881-1918 Ref 5

660554/26

Diameter	5.										
Height	1.0.										
Altitude	850.										
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means Total
January	4.71	5.10	3.22	4.30	2.58	5.20	5.62	6.83	7.19	(2.29)	41.04
February	5.85	.83	5.13	4.48	8.18	3.21	7.61	2.08	5.91	2.16	40.94
March	4.8	3.19	2.90	3.66	2.39	2.71	2.79	1.41	3.60	3.60	26.73
April	4.29	4.67	1.94	2.75	4.44	1.90	2.92	.62	2.04	3.95	29.42
May	3.60	4.64	2.37	2.79	1.06	1.87	2.91	4.71	1.36	1.87	26.88
June	5.89	.74	2.30	2.53	4.11	4.40	2.19	5.10	3.13	.65	31.04
July	4.78	3.98	2.91	3.29	1.73	4.13	2.90	4.17	6.45	4.39	38.73
August	4.75	1.61	1.07	3.30	1.64	2.79	2.04	5.49	3.94	1.68	28.31
September	4.50	5.25	2.29	2.80	7.22	4.91	1.77	2.36	1.87	4.51	37.48
October	2.86	7.53	6.31	5.09	10.36	5.22	2.76	10.76	3.38	4.93	58.20
November	9.04	3.54	2.70	2.81	7.32	6.44	2.45	7.43	7.40	8.02	57.15
December	2.76	1.99	0.58	6.37	4.25	3.25	2.62	4.92	2.98	4.37	36.09
TOTALS	53.51	42.47	32.72	40.17	55.28	47.73	38.58	55.88	49.25	42.42	458.01
	D	D	D	D.	D.	D	D	D	D	D	

1940. Jan. corrected 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

RAINFALL at

Bradford (Leeming Reservoir) ✓

Station No. T.F. 3271

41

County of West Riding

Observer The Waterworks Engineer.

River Basin Ouse - Aire

Type of Gauge Standard

Annual Average 31.2 in. based on 42 years obs. un-weighted. Period of average 1881-1915 Ref. S

File No. 660554b/26

Diameter	5"		074	939							
Height	1' 0"			1							
Altitude	850'			41							
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means Totals
January	2.78	4.11	5.76	7.46	3.89	5.09	4.21	10.59	2.65	3.07	49.61
February	4.31	(1.66)	3.38	2.42	5.59	7.19	3.85	3.94	3.98	7.28	46.60
March	4.69	2.84	1.43	49	1.47	1.76	7.56	2.09	1.39	2.69	26.41
April	2.03	2.34	2.52	3.63	2.86	2.06	4.45	3.21	4.77	4.48	33.35
May	2.69	4.81	3.08	2.98	3.81	2.01	4.08	1.20	3.09	2.78	30.48
June	1.36	1.40	4.20	3.16	4.03	2.97	3.11	5.56	6.1	1.58	27.01
July	1.45	3.67	2.36	3.25	2.57	3.93	2.52	1.55	3.10	4.21	27.91
August	6.98	4.70	5.59	3.53	5.00	6.87	47	4.27	3.31	5.99	46.71
September	1.51	2.64	4.63	7.20	2.74	7.61	2.88	2.79	1.28	6.05	38.33
October	5.23	6.64	2.67	4.32	6.61	99	1.48	2.11	4.86	3.00	38.51
November	3.68	1.82	3.84	7.80	82	7.56	7.19	2.20	7.28	5.66	47.85
December	2.93	4.02	2.96	5.42	3.02	3.81	5.09	4.69	9.16	2.95	44.05
TOTALS	41.64 D	40.65 D	42.42 D	52.96 D	42.41 D	51.85 D	46.89 D	44.20 D	45.57 D	49.6 D	458.22 D

Average of 41.0 based not be used (1119 of file refers)

20004

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

Station No. 3271 T.P. 40RAINFALL at Bradford (Leeming Reservoir) 51County of West Riding Yorks.Observer J. H. Matthews Engineer.River Basin Ouse-Aire-9Type of Gauge London

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

Ref.

" " 46.37 " " 31 " " with 1923-57 " " 1916-50

File No. 660554/26 E 22502/58

Diameter ...	5"		074	939							
Height ...	1'0"			1							
Altitude ...	850'			51							
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means Total
January ...	5.12	5.64	1.60	3.64	2.51	5.88	3.85	4.32	3.84	5.86	42.26
February ...	4.50	1.72	3.17	3.46	2.88	1.90	3.24	7.38	.51	4.07	32.83
March ...	5.17	2.53	2.25	2.71	2.61	2.36	2.99	2.53	1.89	2.23	27.27
April ...	2.39	2.99	3.71	.63	1.58	3.79	.35	1.42	4.52	2.79	24.17
May ...	4.28	2.60	2.48	3.71	3.72	1.72	1.36	5.37	1.69	1.99	28.92
June ...	1.25	3.10	3.69	2.16	2.89	4.84	2.20	4.61	3.78	1.22	29.74
July ...	3.03	1.88	5.50	3.91	.77	4.91	3.93	3.70	3.03	5.78	36.44
August ...	4.92	6.44	5.21	8.29	1.38	8.51	5.19	4.45	1.42	4.65	50.46
September ...	2.91	4.72	3.88	5.30	2.11	4.91	4.72	4.09	.33	2.85	35.82
October ...	1.61	5.21	2.30	7.79	3.19	2.21	5.16	3.67	5.47	6.43	43.04
November ...	9.85	2.21	5.68	6.75	2.78	1.79	2.49	1.35	5.08	7.91	45.89
December ...	9.81	4.84	2.43	7.05	6.51	4.70	4.87	5.69	9.14	6.01	61.05
TOTALS ...	54.84	43.88	41.90	55.40	32.93	47.52	40.35	48.58	40.70	51.79	457.89
	D	D	D	D	D	D	D	D	D	D	

Note 1957. G. Sumner leading slightly. Has been repaired
 1968 Insp. Mr. O'Keefe 25 Sept. of tower and sub-base satisfactory

Position of Station on Ordnance One-Inch map :

No. of Map 96National Grid Reference SE (HA) 046343

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

Summary of Earlier Records from 10-year Sheets :

Record D, or d	1910-19	1920-30	1931-40	1941-50	1951-60
	✓	✓	✓	✓	
	-	- but D 25-30	✓	✓	