

RAINFALL AT HARROGATE BEAVER DYE RESERVOIR

Lat. _____

Lat. _____

County of _____

YORK

Rain Gauge, by _____

Observer _____

E. W. Dixon Esq.

OUSE - NIDDA II

Diameter										8	8
Height										11	3.6
Altitude										575	570
Year	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	MEANS.
January94
February											1.78
March											2.42
April											3.47
May											2.15 2.08
June42
July											1.47
August											3.66
September											1.06
October											# 31 4.64
November											6.34 .89
December											1.46 1.75 .63
TOTALS											23.46 24.36

Wood 30 ft high 42 ft NW
 Tabulated from the records at Harrogate by W. G. J. Symons

W.W.
RAINFALL AT Harrowgate & Leaver Dyke South
Lat. 53° 45' N Lon. 2° 15' E W.M. and T.M.
Rain Gauge, by W. R. York
Observer Harrowgate Water Works
E. Wilson, Director of

Close - Nidd 11

Diameter										8	
Height										1.6	
Altitude										630	
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.
January										2.08	4.14
February										2.34	1.66
March										3.75	.91 1.57
April										2.22	2.77 2.59
May										1.14	2.27 3.17
June										4.80	1.72 1.45
July91	1.49 1.81
August										4.32	3.53 1.52
September										2.88	.88 3.79
October										1.82	4.68 2.84
November										2.19	2.66 1.20
December										3.07	3.49 2.81
TOTALS										28.82	28.55

Rejected from Survey: 2" too low.

RAINFALL AT Harrogate Beaver Dyke Reservoir

Lat.

Lon.

County of

York W.R.

Rain Gauge, by

Observer

EW Dixon Esq

Ouse - Nidd II

Diameter	8	8										
Height	20	11										
Altitude	575	575										
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.	
January	3.18	1.71	1.97	.90	3.24	4.45	.90	2.44	1.94	4.22	2.498	
February	1.19	.12	2.66	3.35	5.10	.50	.79	3.16	2.35	1.49	2.071	
March	2.49	1.95	1.11	.80	2.51	2.65	3.33	3.94	1.21	1.55	2.167	
April	1.06	2.47	2.11	.69	2.24	2.25	1.44	2.20	2.81	2.57	1.984	
May	2.63	1.85	3.36	2.27	1.54	.42	.46	1.16	2.52	3.35	1.956	
June	1.88	1.14	4.89	1.85	3.31	2.70	5.15	4.81	1.69	1.52	2.894	
July	2.65	3.45	1.54	2.28	4.06	5.18	2.04	.96	1.46	1.92	2.554	
August	4.23	3.27	3.52	2.82	2.94	2.86	2.01	3.92	3.46	1.60	3.063	
September	1.83	2.27	1.28	1.68	.94	1.83	4.18	2.88	.95	4.03	2.187	
October	1.32	3.48	6.31	2.37	5.15	4.56	3.58	1.86	5.24	3.06	3.693	
November	2.87	3.42	1.59	2.23	1.43	3.75	1.70	2.25	2.19	1.08	2.241	
December	1.10	3.73	.87	3.58	2.38	3.71	4.23	3.02	3.33	2.96	2.891	
TOTALS	26.43	28.86	31.21	24.88	34.84	34.86	29.81	32.60	29.15	29.35	30.199	

Tabulated from the records at Harrogate by
 Mr. G. J. Symons Jan'y 1898

RAINFALL AT Harrogate Beaver Dyke Reservoir

Lat.

Lon.

County of

York WR. Northern

Gauge
field - 11.

Rain Gauge, by

Observer

E. J. Dixon Esq. Ch.

T. J. Dryer Esq. Ch.

F. G. Haworth Esq. Ch.

Diameter ..	8										
Height ..	0. 11										
Altitude ..	5751										
Year ..	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.
January ..	4.00	1.75	1.31	2.07	2.65	.84	4.07	1.25	1.65	1.03	2.062
February ..	4.29	1.35	1.35	2.67	3.52	1.48	1.93	1.56	1.66	1.04	2.085
March ..	.84	1.87	.97	3.47	2.07	2.67	1.96	2.25	4.20	3.81	2.411
April ..	1.66	2.79	1.52	1.28	1.71	2.17	.81	1.43	2.66	2.73	1.876
May ..	1.45	1.61	2.79	4.16	3.06	.77	2.54	4.20	2.92	1.84	2.534
June ..	3.14	1.44	2.05	2.20	1.90	1.46	1.26	4.03	1.03	3.61	2.342
July ..	2.92	2.15	2.19	3.72	3.22	1.06	1.84	2.26	3.48	4.21	2.705
August ..	6.12	1.18	3.39	3.74	3.96	3.94	2.48	1.92	2.01	3.97	3.217
September ..	.67	1.01	1.21	4.29	1.41	2.28	.77	.90	3.85	1.91	1.780
October ..	3.80	1.90	3.76	8.12	.87	2.01	5.29	8.26	2.07	2.24	3.832
November ..	3.82	4.34	2.20	1.79	2.97	4.69	4.15	2.58	1.72	1.04	2.930
December ..	3.49	3.17	2.12	1.39	1.69	.68	1.97	3.56	1.40	4.35	2.382
TOTALS ..	36.20	24.56	24.86	38.90	29.03	24.05	29.07	34.20	28.15	31.78	30.080

1908 Kettlewell Church

2 miles N

Haworth Station

5

Nothing near

H. J. S.

RAINFALL at Harrogate Beaver Dyke Res.

County of W Yorks

Observer 7 Bagshaw Eng cl. a W Yorks

River Basin Aire - Nid

Pluviometer Rain Gauge, by

Diameter ...	8										
Height	0.11										
Altitude ...	575										
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1910-19 MEANS Totals
January ...	3.62	1.58	4.29	4.23	1.79	4.58	1.85	3.19	2.82	4.40	12.26
February ...	2.80	2.77	2.24	1.19	1.74	4.13	4.63	.72	3.62	2.54	11.51
March60	2.20	3.72	3.77	3.11	.93	4.67	2.69	1.40	4.20	12.96
April	2.98	1.25	.42	3.15	1.16	1.24	1.65	1.72	.81	1.71	5.89
May	2.38	1.14	3.16	2.64	1.44	2.18	3.31	2.19	3.44	1.66	10.60
June	2.86	2.92	6.05	1.44	3.95	.50	1.85	2.09	1.02	1.57	6.33
July	2.62	.32	5.22	.95	4.77	3.97	2.73	1.38	4.36	3.67	12.14
August	3.98	2.58	6.13	1.23	1.52	2.69	2.41	6.82	3.11	3.54	14.68
September ..	.20	1.96	1.89	1.55	1.71	.56	2.00	1.24	7.68	1.84	12.76
October ...	4.21	3.16	3.26	2.65	2.43	1.58	5.85	4.23	1.83	3.65	15.06
November ..	3.96	3.83	1.95	2.83	5.01	2.45	3.59	3.05	1.50	3.16	10.30
December ...	3.56	4.74	3.04	2.28	6.65	7.20	2.52	2.04	5.89	4.69	15.14
TOTALS ...	33.77	29.45	41.47	27.91	35.28	32.01	36.56	31.36	37.48	34.23	139.63

Rejected from Survey: 2° too low.

Date.	Lat. N.	Long.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.
			Harrogate	5m	N	Ribblesdale	2m	N

RAINFALL at Harrogate W.W. Beaver Dyke ReservoirCounty of W.R. YorkshireObserver A. S. West Esq. B.E.River Basin Ure - NiddWater Body HarrogateGauge Rain Gauge, byotherwise same (300-23) 8.02
(Daily) 8.00
7.98

Diameter ...	8	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930 MEANS.
Height	0.11											
Altitude ...	575											
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1920-30 TOTALS
January ...	4.23	4.78	3.70	1.58	2.18	2.79	3.14	2.52	6.14	1.64	6.08	38.78
February ...	2.31	1.15	3.37	5.47	1.07	4.80	2.93	1.43	3.06	.77	1.26	26.62
March	2.77	1.71	2.49	2.58	1.20	1.27	1.32	2.17	2.93	.39	2.71	20.54
April.....	4.81	1.05	3.29	2.37	1.78	4.09	1.36	2.30	1.00	1.38	3.36	26.79
May	2.65	2.03	.89	3.58	4.96	5.74	2.45	1.65	2.45	1.83	1.65	29.88
June	1.57	.09	1.46	.83	2.26	.06	3.98	3.04	5.36	.98	2.18	21.81
July	6.92	1.82	4.78	3.82	4.32	.96	2.46	4.74	.83	3.24	5.37	39.26
August	1.60	4.16	6.00	3.97	2.83	2.83	2.30	7.74	3.95	2.34	3.50	42.22
September...	1.08	1.11	3.61	2.82	3.43	2.33	1.69	3.65	.42	.88	4.07	25.09
October.....	3.29	2.01	1.12	3.30	3.42	3.68	3.88	3.10	5.22	3.15	2.73	34.90
November...	1.97	2.99	1.04	3.59	2.63	2.30	5.59	3.23	4.10	4.35	4.51	36.30
December...	3.33	4.24	3.54	3.26	3.13	4.08	1.13	2.77	2.03	6.31	2.99	36.81
TOTALS...	36.53	26.14	35.29	36.17	33.21	34.93	33.23	38.34	37.49	27.26	40.41	379.00

Inspect'd 30.3.34. 23 ^{dat} on grass slope, from house to below reservoir dam. Fall of 15 ft in 10 yrs is 8.5. + considerably more down to SW to reservoir. Slope to N. over exposed alluvium group receives some shelter being in a valley.

Recommended moving to site on flat grass-land well below dam, with good shelter all round but nothing more than 20-25°. Good position 10 yds from junction of two outfalls from Res.

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
1920			Haweswater	5 mi	N	Haweswater	2 mi	N

RAINFALL at Harrogate W.W. (Beaver Dyke R.)

County of West Riding Observer A.S. West, Esq., C.E.

River Basin Ouse - Nidd - 11

Type of Gauge

Annual Average ~~34.1~~ in. based on ~~13~~ years obs. un-weighted. Period of average 1931-1940 Ref. 1 W.S.
(1939) 34.1 13 660560/26

Diameter	8.											
Height	0.11											
Altitude	575.											
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1931-40 Mean Total	
January	2.28	2.68	2.16	2.41	1.90	3.94	4.27	4.46	5.08	2.16	31.33	
February	2.88	.47	4.25	3.30	4.01	2.99	5.13	1.73	2.68	2.35	26.79	
March	.75	2.21	2.04	2.94	1.17	2.83	3.38	.32	2.51	2.32	20.47	
April	3.87	3.00	1.64	3.76	2.11	2.34	3.29	.22	1.96	2.84	25.03	
May	3.61	5.28	3.86	1.87	1.51	2.49	2.96	2.93	1.49	.84	26.84	
June	6.23	.69	1.68	2.14	3.21	5.33	2.56	3.19	2.09	.52	27.54	
July	4.44	4.20	2.16	1.84	.98	4.27	1.91	3.53	5.54	4.81	33.68	
August	4.41	1.39	0.89	1.53	2.19	2.65	1.56	4.39	2.56	.72	21.99	
September	6.10	2.86	2.29	2.32	5.99	3.07	1.32	2.70	1.39	2.25	30.29	
October	1.30	3.99	4.11	2.82	5.62	2.34	2.66	5.96	2.94	3.44	35.18	
November	5.07	2.68	3.07	2.44	6.49	3.87	2.09	3.62	4.81	4.84	38.88	
December	1.29	1.50	0.91	6.35	2.11	2.36	2.87	4.66	2.45	2.94	27.44	
TOTALS	42.23	30.75	28.75	30.72	37.29	38.48	34.00	37.71	35.50	30.03	345.46	
	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.	Railway Station.	Distance from gauge	Direction from gauge	Parish Church.	Distance from gauge	Direction from gauge
1931			Darley	3 1/2 m	NNW	Kettleing	1 3/4 m	N

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

Station No. 3353

RAINFALL at Harrogate WW (Beacons Dyke R) 41

County of West Riding Observer A. S. West Esq. C.E.

River Basin Ouse Nidder The Linker Engineer

Type of Gauge

Annual Average 24.1 in. based on 13 years obs. un-weighted. Period of average 1881-1915 Ref. I.W.S.

File No. 660.560/26

Diameter	8"	0.58	447									
Height	11"		1			1' 0"	11"					
Altitude	575'		41									
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1941-50 Means	1941-50 Range
January	5.10	3.25	4.01	3.52	3.74	3.23	2.67	7.01	1.10	1.87	35.50	
February	4.91	1.67	1.59	1.73	3.90	3.88	(3.42)	1.72	1.37	6.40	29.39	
March	3.66	2.39	1.88	1.51	1.28	1.65	1.16	1.35	1.98	1.46	21.30	
April	2.49	1.32	1.46	2.63	2.45	1.78	3.62	2.55	2.53	2.66	23.47	
May	2.50	2.76	2.38	1.40	2.95	2.97	3.52	1.00	1.78	2.28	23.54	
June	1.10	1.27	2.33	2.50	3.13	2.62	3.69	3.22	1.85	1.73	20.44	
July	2.59	2.41	1.91	4.00	2.51	4.53	2.21	1.13	2.47	2.69	28.11	
August	3.67	2.71	3.17	3.19	3.84	5.16	1.69	4.54	1.98	6.67	34.52	
September	1.51	2.30	3.69	5.87	1.71	6.24	1.88	2.54	1.09	3.86	29.69	
October	4.62	2.53	1.93	2.99	5.06	1.93	1.60	1.34	3.27	1.84	27.01	
November	3.26	1.47	2.65	6.03	5.7	6.20	2.83	1.41	4.34	4.22	32.97	
December	1.82	2.33	1.69	3.19	2.16	2.45	2.85	2.96	4.58	1.61	24.64	
TOTALS	33.88	26.41	21.75	37.56	33.30	42.64	36.14	31.37	26.34	35.19	330.58	

1947. Feb. park used for snow

20004

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 from gauge	Parish Church.	Distance from gauge
1941			Darley	3 1/2 miles	N.N.W.	Kettlestone	1 3/4 miles N.

RAINFALL at Harrogate W.W. (Beaverdale Station No. 3353) 51
 County of West Riding - Yorks. Observer The Water Engineer,
 River Basin Osse - Nidd - 11 Gloucester Water Board
 Type of Gauge 11.0 (min max 14.5 ft) 5835/52

Annual Average 34.11 in. based on 13 years obs. un-weighted. Period of average 1881-1915 Ref. J.W.S.
 File No. 660560/26 F16133

Diameter	8"	5"	058	447							
Height	1' 0"				1						
Altitude	576'				51				600+		
Year	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means
January	2.73	2.21	.58	2.66	2.56	4.85	2.81	2.89	3.75	6.23	31.27
February	2.83	.36	2.58	2.57	2.72	2.44	3.00	5.88	.29	2.89	25.56
March	3.63	1.79	.78	2.14	2.47	1.50	2.88	2.62	1.62	2.83	22.26
April	1.20	1.32	2.50	.40	1.12	3.04	.38	1.04	4.39	2.15	17.54
May	6.08	1.65	1.87	4.18	3.18	1.14	1.42	4.47	1.16	1.09	26.24
June	.96	1.69	1.71	2.24	2.42	3.19	2.12	3.91	1.79	1.34	21.37
July	2.21	1.19	2.96	1.80	1.32	5.51	3.16	4.20	2.41	4.84	29.60
August	5.24	2.98	4.32	6.81	2.11	7.75	5.78	2.61	.86	3.32	41.78
September	2.22	4.29	2.87	2.90	2.12	5.20	4.51	4.04	.21	1.17	32.53
October	1.04	3.52	2.08	4.92	2.63	1.58	3.89	2.61	3.07	7.68	33.02
November	7.16	1.76	2.64	5.95	2.47	1.13	2.47	1.02	4.81	6.07	35.48
December	2.76	2.15	1.50	3.97	5.32	3.32	3.67	5.76	6.80	4.49	39.74
TOTALS	38.06	24.91	26.39	40.54	30.44	40.65	36.09	41.05	31.16	47.10	356.39
	D	D	D	D	D	D	D	D	D	2	

1943 Engineer considers gauge point unsatisfactory on account of nearly absolute lack of bank or walls &c.
 gauge moved to nearly field 400' E. at same height

1954 Disp. 11.0 Beaverdale 5/5. Relocated to rear of stone gauge in perfect condition. Occupied by S, sheltered by N.
 Mod. shelter to E from stone wall 50-60% away. Wall kept dry well secured by concrete posts

1957 J.B.O.K. Occupied wet directions. Poor surface

1958 34.14 in. based on 39 yrs. obs. within 1916-57. 2 1/2 in. less. 1/5 + 1/2. Period of av.
 1916-50-5 Rejected

Position of Station on Ordnance One-Inch map : No. of Map 96 National Grid Reference 4412209547

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Direction	Parish Church.	Distance from gauge.
1951			Barley	3 1/2 m	NNW	Kelteising	1 3/4 m N

Summary of Earlier Records from 10-year Sheets :

1916-1950, P - Rejected

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