

RAINFALL AT

Harrogate = Ten Acre Res. **80**
Haverah Park Res.

Lat.

Lon.

County of

York W.R.

Rain Gauge, by

Observer

E. W. Dixon Esq.

Duse - Nidd 11

Diameter				8					8		
Height				2.9					2.0	3.6	
Altitude				620					620		
Year	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	MEANS.
January					5.80	2.06	3.10	1.45	.90	.94	
February					2.62	2.40	.60	.67	.15	1.12	
March					-	1.60	1.66	.97	2.50	1.47	
April					2.10	1.74	2.02	1.00	2.80	2.22	
May					-	2.50	4.45	1.90	.80	2.21	
June .....					.60	1.95	1.23	.00	2.35	.35	
July ..					4.50	1.10	2.95	1.24	5.33	1.18	
August					1.22	1.46	2.40	2.24	3.43	3.55	
September....					1.80	3.00	1.96	4.05	.40	1.06	
October				4.26	1.33	5.30	4.55	2.00	.70	4.08	
November....				3.15	1.17	2.55	2.66	2.80	6.33	3.5	
December				1.63	3.57	.80	4.00	1.75	2.05	1.57	
TOTALS						26.46	31.58	19.07	27.74	19.65	

1889 House 25 ft high 150 ft N

1889 Nov? Readings only from 13th to 30th.

Tabulated from the Records at Harrogate by Mr. G. J. Symons

Rejected from Survey : 14" too low

- Ten Acre Res.

RAINFALL AT *Harrogate Harrosh Park Reservoir*

Lat. _____ Lon. _____ County of *York W.R.*

Rain Gauge, by _____ Observer *E. W. Dixon Esq*

Ruse Nidd 11

Diameter	8											
Height	2.9								1.6			
Altitude	620											
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.	
January	3.54	1.40	1.46	.75	3.36	2.83	1.17	2.05	1.93	4.04	2.253	
February ....	.75	.11	1.42	2.93	5.03	.38	.58	2.94	2.25	1.63	1.802	
March	2.03	1.41	.67	.84	2.55	2.59	3.44	4.07	.72	1.42	1.974	
April	1.03	1.95	1.53	.68	2.14	2.15	1.61	2.16	2.71	2.46	1.842	
May	2.46	1.76	3.14	2.50	1.57	.39	.54	1.25	2.23	3.21	1.905	
June	2.22	.99	4.68	1.82	3.16	2.69	5.38	4.66	1.47	1.36	2.843	
July	2.79	3.32	1.71	2.62	3.55	4.92	2.03	.79	1.21	1.91	2.475	
August	4.40	3.87	4.09	3.15	3.02	2.83	1.64	3.51	3.34	1.22	3.107	
September....	2.07	(2.07)	1.50	1.55	.94	1.73	4.07	3.07	1.03	3.57	(2.160)	
October	1.44	4.20	6.48	2.35	4.91	4.65	3.60	1.88	4.25	2.92	3.668	
November....	2.14	3.17	1.87	1.64	1.67	4.10	1.44	2.40	2.17	1.19	2.179	
December ....	.88	4.48	.99	3.65	2.38	3.09	4.64	3.42	3.33	3.00	2.986	
TOTALS	25.75	(28.73)	29.54	24.38	34.28	32.35	30.14	32.20	26.64	27.93	(29.194)	

Tabulated from the records at Harrogate by
 W. G. J. Symons Jan'y 1898
 1891 Sept. Fall from 1st to 20th estimated

Rejected from Survey: 1" too low

RAINFALL AT *Harrogate Ten Acre Reservoir*

Lat. *54° 11'* Lon. *1° 11'* County of *York W.R. Northern*
Flaisher Rain Gauge, by *E. W. Dixon Esq. C.E.*
mid - 11. Observer *F. J. Dixon Esq. C.E.* *F. J. Dixon Esq. C.E.*

Diameter ..	8											
Height	1.6											
Altitude ..	620 T											
Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.	
January ..	3.96	1.35	1.31	1.92	2.59	.81	3.55	.84	1.16	.80	1.832	
February ..	3.73	1.16	1.13	2.75	2.76	1.39	1.66	1.48	1.30	.54	1.790	
March ....	.45	1.52	1.11	3.52	1.47	2.64	1.47	2.06	3.30	3.74	2.128	
April	1.67	2.86	1.56	1.23	1.68	2.04	.61	1.44	2.31	2.57	1.797	
May	1.24	1.03	2.96	3.83	2.36	.63	2.13	4.09	2.80	1.67	2.274	
June	3.67	1.46	1.89	1.72	1.67	1.47	1.04	3.67	.90	3.28	2.077	
July	3.03	1.57	2.19	3.69	2.89	1.06	1.65	2.09	3.54	3.74	2.545	
August	5.21	1.26	3.28	3.31	3.54	3.64	2.86	1.74	2.02	3.49	3.035	
September ..	.77	1.36	1.19	4.06	1.26	1.81	.72	1.00	2.82	1.70	1.669	
October	3.70	2.00	3.75	7.95	.74	1.71	4.25	6.73	1.77	2.51	3.511	
November ..	3.65	4.08	2.18	1.85	2.38	4.35	3.37	2.35	1.70	.99	2.690	
December ..	3.33	2.88	2.29	1.24	1.47	.42	1.59	3.45	1.25	4.18	2.210	
TOTALS ..	34.41	22.53	24.87	37.07	24.81	21.97	24.90	30.94	24.87	29.21	27.558	

1908 *Beckwithshaw Church 1 1/2 miles* SE
Harrogate Station SE
Nothing near

Rejected from Survey: 1' too low.

058487

10 3351

RAINFALL at Harrowgate Tem Ocrs ReservoirCounty of W. YorkshireObserver F. Bagshaw Esq. Ch. A. B. West Esq.River Basin Onze Nidd 11Rain Gauge, by Harrowgate

Diameter ...	8										
Height	1.6										
Altitude ...	620 ft										
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS. 1910-19
January ...	2.56	.96	3.64	3.64	1.51	4.45	1.92	3.19	2.66	4.36	12.13
February ...	2.58	2.65	2.12	1.06	1.64	3.76	3.87	.74	3.73	3.44	10.78
March .....	.54	1.55	3.44	3.26	2.96	.84	3.31	2.36	1.28	2.66	9.61
April	2.49	1.15	.40	2.92	1.08	1.08	1.48	1.07	.84	1.64	5.03
May	2.28	.79	2.87	2.59	1.22	1.61	3.07	1.71	3.39	1.47	9.64
June	2.82	2.82	6.62	1.57	2.33	.54	1.76	1.90	.89	1.54	5.89
July	2.56	.27	4.70	.82	4.38	3.76	2.09	1.25	4.48	3.30	11.02
August	3.93	2.63	6.12	1.33	1.44	2.44	2.28	6.51	3.12	2.55	14.26
September ..	.20	2.43	1.73	1.36	1.65	.53	1.97	1.14	7.50	1.15	11.76
October ...	4.11	2.90	3.10	2.42	2.36	1.44	5.66	4.01	1.98	3.12	14.77
November ..	3.49	3.40	1.88	2.63	4.80	1.62	3.10	3.42	1.88	1.98	10.05
December ...	2.93	4.46	3.07	1.51	6.61	6.77	2.10	1.72	5.89	4.57	14.28
TOTALS ...	30.49	26.01	39.69	25.11	31.98	25.84	32.61	29.02	37.31	30.28	129.22

Expected from survey: 1' too low.

Date.	Lat. N.	Long.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.
			Harrowgate	.5 m	SE	Beckwithshaw	1 1/2 m	SE

RAINFALL at Harrigate W. W. Ten Acres ReservoirCounty of W. YorkshiresObserver A. L. West Esq. C.E.River Basin Cuse - Ridd 11Water Eng. HarrigateGlaisher Rain Gauge, by Smith 911-237-96
8-00

Diameter ...	8												
Height	1	6											
Altitude ...	620												
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930 MEANS.	1920-30 TOTALS	
January ...	4.10	4.85	3.96	1.67	2.18	2.88	3.20	2.61	6.48	1.61	6.01	39.55	
February ...	2.09	1.6	3.50	5.35	1.15	4.97	3.05	1.44	5.10	.74	1.29	26.84	
March	2.81	1.71	2.48	1.56	1.23	1.29	1.26	2.23	5.00	.39	2.75	20.71	
April.....	4.66	1.03	3.15	2.24	1.86	3.85	1.62	2.10	1.00	1.40	3.49	26.40	
May	3.54	1.84	1.01	3.20	4.92	5.03	2.47	1.87	2.51	1.96	1.67	30.12	
June	1.51	1.0	1.43	.87	2.20	.06	4.13	3.48	5.61	1.04	2.13	22.56	
July	7.37	1.90	5.13	4.04	4.47	1.05	2.47	4.39	.85	3.20	5.10	39.95	
August	1.93	4.10	5.50	4.17	3.02	2.87	3.43	8.17	4.22	2.33	3.33	43.07	
September...	1.05	1.09	3.76	2.67	3.48	2.31	1.58	4.00	.42	.91	4.12	25.39	
October.....	3.72	1.89	1.02	3.75	3.84	3.72	3.77	3.18	5.33	3.13	2.81	36.16	
November...	1.93	2.82	1.22	3.60	2.89	2.38	6.11	3.42	4.08	4.70	4.64	37.79	
December...	3.47	4.56	3.61	3.31	3.10	4.18	1.20	2.88	2.06	6.46	3.13	37.96	
TOTALS...	38.18	26.05	35.77	36.53	34.34	34.59	34.29	39.77	38.64	27.87	40.47	386.50	

8.11.23
Inspected G.S. station in fairly sheltered position near reservoir. On mound 2 ft. high. Drop of 15 ft. about 15 yds N to water, probably less steep usually. Good shelter on W & E, & high ground to S but not greater than 10° at gauge. Should be moved away from mound & reservoir to position indicated nearer base and put at 1 ft. This would give good exposure.

Revised from Survey: 1' 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.	Railway Station.	Distance from gauge	Direction	Parish Church.	Distance from gauge	Direction
1920			Harrigate	5 mi	S E	Peckwithshaw	1 1/2 mi	S E

RAINFALL at Harrogate W.W. (Ten Acres Res.)

County of West RidingObserver A.S. West, Esq., C.E.River Basin Ouse - Nidd - Il.

Type of Gauge

Annual Average 34.9 in. based on 14 years obs. ~~un~~ weighted. Period of average 1881-1915 Ref. 1.W.5

660560/26

Diameter	8.											
Height	1.6.											
Altitude	620.											
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1931-40 Means Totals	
January	2.38	2.92	2.22	2.51	2.23	4.42	4.51	4.92	4.94	1.85	32.93	
February	2.81	.46	4.44	.32	4.18	2.99	5.69	1.88	3.19	1.91	27.87	
March	.72	2.87	2.15	3.31	1.09	2.80	3.60	.40	2.42	2.27	21.13	
April	3.85	2.96	1.61	3.89	2.37	2.15	3.38	.21	1.73	2.71	24.86	
May	3.66	5.28	4.04	1.89	1.42	2.30	3.20	3.08	1.28	.57	26.72	
June	6.39	.72	2.08	2.17	3.27	5.04	2.65	2.83	2.44	.50	27.79	
July	4.84	3.99	2.02	1.50	.87	4.18	2.16	3.85	6.01	4.92	34.34	
August	4.81	1.45	0.57	1.41	1.94	2.58	1.39	4.52	2.72	.71	22.40	
September	5.10	3.22	2.08	2.57	6.15	2.85	1.47	2.83	1.46	2.58	30.31	
October	1.40	4.39	4.25	3.03	5.84	2.40	2.65	6.68	3.17	3.79	37.68	
November	5.71	2.68	3.05	2.64	6.38	3.96	2.23	3.95	4.94	5.08	40.62	
December	1.48	1.39	0.86	6.56	2.58	2.95	3.04	4.93	2.40	3.24	29.43	
TOTALS	43.15	31.85	29.37	32.10	38.32	38.62	35.97	40.08	36.40	30.13	356.00	
	D	D	D	D	D	D	D	D	D	D		

Reported from survey as 1" too low. Same sent 14/1/53

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
1931			Harrogate	3 ³ / ₄ m	ENE	Beckwithshaw	1 ¹ / ₄ m	E

Station No. 3351

RAINFALL at Harragale W.W. (Ten Acres Res.)

41

County of West RidingObserver A.S. West Refused 1945
E. Sq. CERiver Basin Ouse - NiddThe Water Engineer

Type of Gauge.....

Annual Average 34.9 in. based on 14 years obs. un-weighted. Period of average 1881-1915 Ref. 1 W.S.File No. 660560/24

Diameter	8"										
Height	1' 6"										
Altitude	620'										
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means 1941-50
January	4.55	4.78	3.82	4.33	4.71	3.47	2.53	1.93	1.52	2.01	39.65
February	3.93	1.42	1.91	1.59	4.22	3.80	(3.43)	2.12	1.63	6.08	30.13
March	3.92	2.38	1.06	.51	1.12	1.30	(6.69)	1.65	1.25	1.48	21.36
April	2.69	1.75	1.70	2.89	2.45	1.69	3.44	2.69	2.65	2.21	25.16
May	2.74	2.93	2.38	.95	2.71	2.60	3.79	1.17	2.05	2.21	23.53
June	.10	1.05	2.79	2.76	3.36	2.38	3.76	3.96	1.09	.88	22.13
July	2.91	2.51	1.84	4.62	2.40	4.21	2.51	1.71	2.35	2.76	28.82
August	3.81	2.78	3.47	3.16	3.78	4.69	1.04	4.51	2.79	8.92	35.95
September	.59	2.30	3.78	5.59	1.86	6.55	1.99	2.56	1.15	4.72	31.09
October	4.41	2.65	2.13	2.20	5.04	1.96	1.50	1.57	3.90	2.17	28.53
November	3.15	1.45	2.70	6.22	.54	7.05	4.01	1.60	4.85	4.49	36.06
December	.92	2.71	1.81	3.78	2.16	2.38	3.09	3.32	5.10	1.85	27.12
TOTALS	34.02 D	28.71 D	29.39 D	39.30 D	34.35 D	42.08 D	37.78 D	34.79 D	30.33 D	38.78 D	349.53

1947 Feb. 4 max. part ex'd for snow

30004

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.
1941			Harragale	3 1/2 ml.	E.N.E.	Beckwithshaw	1 1/2 ml.	E

Station No. 3351RAINFALL at Harrrogate W.W. (Ten Acres Res.)

51

County of West Riding - Yorks.Observer Lt. Water Engineer
Gloucester Water BoardRiver Basin Don - Nidd - U.Type of Gauge TK 1955Annual Average 34.9 in. based on 14 years obs. un-weighted. Period of average 1881-1915 Ref. 1.W.5File No. 660560/26 F. 16133/53

Diameter ...	8"		058	487		5"		5"			
Height ...	1'6"			1				11"			
Altitude ...	620'			51							
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means
January ...	2.97	3.13	.72	2.33	1.98	3.71	2.00	2.00	3.28	6.33	
February ...	3.18	.60	1.53	2.69	1.94	2.02	2.34	3.65	.24	2.32	
March ...	3.69	1.92	.89	2.31	2.07	1.34	2.38	1.87	1.48	2.56	
April ...	1.40	1.70	2.60	.51	1.16	2.65	.41	1.05	3.86	1.71	
May ...	5.77	2.06	1.65	4.52	3.04	.95	1.23	3.85	.88	0.84	
June ...	1.07	2.11	1.78	2.04	2.12	3.10	2.23	3.67	1.73	1.18	
July ...	2.34	1.31	3.23	1.64	1.11	4.88	2.98	3.80	2.08	5.32	
August ...	5.71	3.72	4.44	7.05	1.90	6.70	5.58	2.04	1.07	2.65	
September ...	2.71	3.91	2.94	2.92	1.59	3.93	3.87	3.81	.16	3.99	
October ...	1.04	3.43	2.36	4.75	2.35	1.60	3.22	2.36	2.71	5.78	
November ...	7.69	1.99	3.15	5.66	2.23	1.05	2.11	.98	4.59	5.53	
December ...	4.08	2.19	1.54	3.83	5.23	2.26	2.90	4.28	5.93	3.75	
TOTALS ...	41.65	28.07	26.83	40.25	26.72	34.09	31.25	33.36	28.01	41.96	
	D	D	D	D	D	np	np	np	np	np	

1953. New TK 1955 brought in 9/55. 1956 NP/100.

1957 np. low
Jan. 1959 J.B.O.K. Over exposure NE-SE-SW. Near side clean at 249535
1958 np low o/e

1959. - np low

Position of Station on Ordnance One-Inch map: No. of Map 96 National Grid Reference 44 248 336

Date.	Lat. N.	Long.	Railway Station.	Distance Direction from gauge	Parish Church.	Distance Direction from gauge.
1951			Harrrogate	3 3/4 m ENE	Beckwithshaw	1 1/4 m E

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
	✓	✓	✓	✓	
	-	✓ but - 20-28	✓	✓	