

# RAINFALL AT *Loughton High Beech*

Lat. \_\_\_\_\_

Lon. \_\_\_\_\_

County of \_\_\_\_\_

*Essex*

Rain Gauge, by \_\_\_\_\_

Observer \_\_\_\_\_

*W.B. Bryan Esq C.E.*
*Sea - 1.*

Diameter ....	8											
Height .....	10											
Altitude ....	376 $\pi$											
Year .....	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.	
January ....	2.45	1.81	.54	1.52	2.64	1.40	.48	1.77	.75	2.18	1.554	
February ....	1.01	.01	1.43	2.76	1.65	.06	.37	2.28	.97	1.82	1.236	
March .....	1.52	1.22	1.06	.42	.93	1.36	2.84	3.59	.97	.56	1.447	
April .....	1.36	.86	.86	.09	1.64	1.35	.69	1.34	1.29	2.39	1.187	
May .....	1.78	3.39	1.50	.67	1.40	.21	.20	1.57	2.35	1.05	1.412	
June .....	3.87	1.18	2.36	.72	1.83	.28	2.48	2.17	1.18	1.32	1.739	
July .....	5.02	2.91	1.83	2.30	3.01	3.37	1.60	.79	.86	1.63	2.332	
August .....	3.87	4.42	3.15	1.66	2.77	1.96	2.02	2.96	1.15	.61	2.457	
September....	.65	.97	2.48	.67	1.16	1.01	5.64	2.37	.39	2.78	1.812	
October .....	1.52	5.21	3.56	3.08	3.65	2.43	3.17	.64	3.21	2.30	2.877	
November....	2.46	2.26	2.23	1.93	2.60	2.85	1.09	.97	1.46	4.22	2.207	
December ....	.46	3.55	1.45	2.08	2.12	2.24	3.16	2.43	2.25	1.32	2.106	
TOTALS . . .	25.97	27.79	22.45	17.90	25.40	18.52	23.74	22.88	16.83	22.18	22.366	

1890. This gauge is 200 yards west of the "King's Oak" P.N. High Beech

RAINFALL AT Loughton High Beech

Lat. ....

Lon. ....

County of Essex

Rain Gauge, by .....

Observer W. B. Bryan Esq. Cl.Sea - 1.W. Blachburn Esq. Cl.  
with waterboard

Diameter ..	8											
Height ....	1 0											
Altitude ..	376 ft											
Year ....	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.	
January ..	2.62	.53	.81	1.86	2.27	1.29	3.79	.93	1.46	.71	1.627	
February ..	2.73	1.02	1.25	.73	2.69	.87	2.14	1.19	1.66	.78	1.506	
March ....	.60	1.89	1.56	2.15	1.48	2.81	1.12	.80	2.26	2.59	1.726	
April .....	.97	1.80	.49	1.61	.70	1.94	.43	3.15	2.65	2.00	1.574	
May .....	.97	1.92	2.75	2.44	1.85	1.01	1.43	1.85	2.08	1.65	1.795	
June .....	2.29	.55	3.15	6.02	1.18	2.76	2.44	1.72	1.94	4.15	2.620	
July .....	1.23	1.74	1.46	6.78	2.36	1.74	1.51	2.46	4.51	4.36	2.815	
August ....	2.72	1.52	4.37	4.58	1.91	2.54	.69	1.95	3.01	1.77	2.506	
September..	.97	1.79	.52	2.58	1.30	2.21	1.76	.70	1.72	2.25	1.580	
October ....	2.03	2.10	1.07	6.34	1.29	1.26	3.58	3.05	1.44	3.94	2.610	
November..	1.89	.41	1.54	1.84	1.46	2.72	4.09	2.58	.59	.76	1.788	
December ..	3.05	3.13	1.16	1.41	1.63	.83	2.26	3.54	1.89	2.70	2.160	
TOTALS ..	22.07	18.40	20.13	38.34	20.12	21.98	25.24	23.92	25.21	27.66	24.307	443

+ Inspected

Hub

RAINFALL at Loughton High Beach ReservoirCounty of EssexObserver Met Water BoardRiver Basin Thames. Lea 1W. Blackham Ch.  
J. M. Wood

Painted Copper Flasher Rain Gauge, by

Diam {  $\begin{matrix} 1.91 \\ 8.06 \\ 8.06 \\ 7.93 \end{matrix}$  } (190)Glas {  $\begin{matrix} .85-.150 \\ .30-.290 \\ .45-.444 \\ .50-.496 \end{matrix}$  }

Diameter ...	8											
Height .....	1.0											
Altitude ...	37 ft											
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS.	Total
January ...	1.55	1.48	3.36	3.07	.58	3.58	1.63	1.31	2.71	3.76		18.21
February ...	2.71	1.65	1.66	.81	2.47	3.49	3.77	.71	1.14	3.53		9.41
March .....	.89	1.94	3.08	1.93	4.21	.96	3.92	1.77	1.00	3.12		9.81
April .....	1.31	1.56	.09	2.90	.85	.92	1.33	2.34	3.39	3.03		10.09
May .....	2.41	1.91	.98	1.61	1.56	2.60	2.24	2.58	2.30	.24		7.36
June .....	3.86	3.08	3.49	.59	1.71	1.03	2.52	1.36	1.04	1.62		6.54
July .....	2.37	2.92	1.54	1.78	1.47	5.04	1.52	4.31	5.23	3.24		14.30
August .....	2.16	.81	5.02	1.72	1.65	2.98	5.31	4.47	2.08	2.70		14.56
September ..	.84	1.66	2.39	1.42	1.07	1.94	1.35	1.95	4.96	1.22		9.48
October ...	2.20	2.93	2.02	3.57	1.25	1.83	3.48	3.61	1.40	.60		9.09
November ..	3.33	3.63	1.97	2.74	3.03	2.54	4.30	1.76	2.10	2.27		10.43
December ...	3.62	4.69	2.87	.81	6.56	5.24	2.92	1.06	2.49	3.79		10.26
TOTALS ...	27.25	28.26	28.47	22.95	26.44	32.15	34.29	27.23	29.84	29.12		120.68
	D	T	T	T	T	T	T	T	T	T		100%

+ Inspected es. 19-11-13 on top of covered Reservoir. A good exposure, no shelter, rather too open if anything

Date.	Lat. N.	Long. E.	Railway Station.	Distance.	Direction.	Church.	Distance.	Direction.
	51.39.46	0.2.28	Loughton					



RAINFALL at Loughlin High Beech ReservoirCounty of EssexObserver Robt. Walter BoardRiver Basin Cheney LeaNortham DistrictCopper Plate Rain Gauge, by David

Funnel all to pieces and good. Newb. is necessary 11.21.

X.25 Anemometer Wind turned

Diameter ...	8										5	
Height .....	1	0									0.8	
Altitude ...	376											
Year .....	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	<del>1930</del> 1930	Totals
January ...	2.89	2.39	3.08	1.24	2.70	1.78	2.88	1.58	3.49	1.40	2.67	26.13
February ...	.58	.59	2.13	3.20	.72	2.76	2.95	3.59	1.65	.70	.70	19.54
March .....	1.54	1.10	1.93	2.01	1.19	.55	.48	2.43	1.90	.02	1.65	16.80
April .....	3.98	1.70	3.12	1.73	3.32	1.97	3.15	1.92	1.17	1.44	2.09	25.59
May .....	.88	1.38	1.14	1.67	3.29	1.90	1.30	1.16	2.52	1.82	3.31	20.37
June .....	1.68	.38	1.44	.70	2.33	.14	3.48	2.78	2.90	.97	3.55	20.35
July .....	5.16	.26	3.65	2.82	4.16	3.70	2.58	3.22	1.93	1.66	2.00	31.14
August .....	1.76	1.17	3.51	1.60	2.65	2.20	2.06	4.36	2.38	1.72	3.09	26.50
September...	3.18	2.90	2.24	1.67	3.27	2.61	1.55	4.85	.66	.71	3.10	26.74
October .....	1.24	1.04	.93	5.18	3.75	3.06	2.51	2.13	4.02	3.61	1.20	28.67
November...	.90	2.24	1.50	1.97	2.49	1.56	5.10	2.13	2.46	3.70	4.17	30.22
December...	2.24	1.45	2.68	2.29	3.13	2.29	.35	3.00	2.56	4.55	2.54	27.68
TOTALS...	26.60	16.60	27.35	26.08	33.00	24.52	28.39	33.15	27.64	24.30	30.07	297.70
	D	D	D	D	D	D	D	D	D	D	D	126

Inspected C.S. 2.11.21. Site is as good as can be obtained.

" 13.11.23. Satisfactory.

" 15.12.25. 2. on reservoir on high ridge and somewhat overexposed but as good

" 28.1.27 see green file

1929 Gauge House 10 ft. high 47 ft. E.

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

No. of Map

Reference No.

Date.	Lat. N.	Long. E.	Railway Station.	Distance from gauge	Direction from gauge	Parish Church.	Distance from gauge	Direction from gauge
	57.29.46	0.2.28	Loughlin			(1929) High Beech	400 yds.	S.

RAINFALL at Loughton (High Beech Res.)County of EssexObserver Mt. Water BoardRiver Basin Thames - Lea -

Type of Gauge.....

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

" " 25.1 in. computed by Mr. Cornish (1938) Ref. 56245/26 833894/28

Diameter .....	5.						8				
Height .....	0.8.	1.	2.								
Altitude .....	376.										
Year .....	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Totals. Means
January .....	1.61	1.76	1.64	1.62	2.29	4.84	3.92	2.94	5.58	2.29	28.49
February .....	2.11	.18	1.40	.23	2.55	1.78	4.11	.83	.94	1.55	15.68
March .....	.21	1.53	2.40	2.22	.55	1.24	2.64	.56	1.70	3.08	16.13
April .....	3.59	2.50	1.05	2.17	3.11	1.27	3.08	.16	2.67	1.73	21.33
May .....	3.06	2.73	1.94	.57	1.28	.47	2.86	1.98	1.61	1.74	18.24
June .....	1.69	.63	1.97	1.35	3.76	4.97	2.04	.47	1.43	.51	18.82
July .....	2.76	2.25	1.03	.91	.45	2.76	2.63	1.85	2.86	3.34	20.54
August .....	5.35	1.58	.63	2.42	1.54	.53	1.72	1.49	3.49	.08	18.83
September .....	1.94	1.92	2.81	1.51	3.55	3.10	1.48	3.13	1.50	.95	21.89
October .....	.68	5.32	1.74	1.26	3.00	1.88	2.13	2.88	5.73	3.19	27.81
November .....	2.28	1.36	.99	2.17	3.77	3.47	1.55	3.46	4.54	6.83	30.42
December .....	.87	.49	.47	5.08	3.12	1.97	3.60	3.51	1.18	1.24	21.53
TOTALS .....	26.15	22.25	18.07	21.51	28.97	23.28	31.76	23.26	32.93	26.53	259.74 km

1931. Gauge House 10' high 47' E

+ Inspected 10/2/38. Gauge set in dip 9" deep on top of reservoir.

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.						High Beech	400 yds	S

Station No. 1235

RAINFALL at Loughton (High Beach Res.)

41

County of Essex

Observer Mr W. B. Board

River Basin Thames: Lea - 1

Type of Gauge

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

25.1 in computed by Mr. Cornish (1938) Ref. 561243/36 File No. 883893/28

Diameter	8"			239	259							
Height	1'0"											
Altitude	376'											
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means	Totals
January	3.00	2.44	4.85	1.80	2.44	1.87	1.93	4.41	1.13	1.36		25.23
February	2.69	1.41	1.33	1.01	1.55	2.90	1.69	1.96	1.14	3.45		19.13
March	3.21	2.19	.44	.14	.85	1.56	5.98	.69	.84	.89		16.79
April	1.56	1.30	1.21	1.41	1.21	1.77	1.79	1.67	1.42	1.41		14.75
May	2.20	2.56	1.81	.60	2.46	2.64	.82	2.07	1.96	1.65		18.67
June	.93	.21	1.69	1.76	1.90	2.83	2.52	2.22	.71	1.88		16.75
July	5.12	1.73	1.78	1.70	3.08	3.16	1.98	.81	1.24	3.86		24.76
August	4.36	2.20	1.52	3.09	1.47	4.06	.04	3.56	1.93	2.08		24.31
September	.86	1.46	2.23	3.10	1.72	3.20	1.51	1.73	.78	2.83		18.92
October	1.00	4.47	2.45	3.65	2.59	1.87	.19	1.96	5.50	.40		24.08
November	2.39	2.40	1.75	3.99	.29	4.36	.94	2.17	2.54	4.75		25.58
December	1.73	2.78	1.48	1.38	3.12	2.10	2.67	2.51	1.65	1.90		21.32
TOTALS	29.05	25.15	22.54	23.63	22.68	32.32	22.06	25.86	20.64	26.36		250.29
	D	D	D	D	D	D	D	D	D	D		925

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. 1235 T.F. 86

RAINFALL at <sup>6</sup> Loughton (High Beech Res.)

51

County of Essex

Observer Met. Water Board

River Basin Thames - Lea - 1

Type of Gauge Soudon (Bavilla)

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

" " 25.1 computed by Mr. Cornish (1938) Ref 561245/26 File No. 833893/25 E 3144/46

Diameter	20.52	6.44	25.45	1916-1950	1916-1950	1916-1950	1916-1950	1916-1950	1916-1950	1916-1950	Ref	P
Height	8"			239	259							
Altitude	1' 0"											
Year	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means	
January	3.00	2.09	1.08	1.23	2.77	3.56	1.55	2.45	2.07	2.06		21.86
February	5.88	.83	1.79	2.51	2.02	.46	2.99	3.59	.11	2.27		22.45
March	3.46	3.62	.51	2.38	1.35	1.05	1.18	1.14	1.98	1.10		17.77
April	2.97	1.14	2.81	.28	.41	1.08	.16	1.58	2.77	.65		13.85
May	2.30	2.22	1.38	1.85	4.49	.71	.76	2.72	1.14	1.84		19.41
June	.66	1.43	1.34	2.67	2.28	3.58	.79	5.59	1.11	1.50		20.95
July	1.00	.71	4.28	2.88	.24	4.24	3.17	2.89	1.95	2.99		24.35
August	5.90	3.94	2.02	3.80	1.21	4.74	2.30	3.50	1.46	2.42		31.29
September	3.29	3.38	1.89	1.54	2.01	2.23	2.62	3.88	.04	3.98		24.86
October	.74	2.56	3.27	2.41	3.44	2.45	1.99	2.58	1.84	6.22		27.50
November	4.91	3.84	1.11	3.88	.89	.67	2.26	1.80	3.04	3.43		25.93
December	2.08	2.46	.68	1.60	1.87	2.91	1.86	2.98	3.74	2.81		22.99
TOTALS	36.19	28.22	22.16	27.03	22.98	27.68	21.63	34.70	21.25	31.27		273.11

Ins. 1.12.53. G. sound. Set in pit (diameter 6"8" depth 9") in reservoir w/ 9 and shelter all round but with ~~gap~~ is most exposed. G and turf wall recommended. - Engr. A.C.H. stated he did not know MOS when recommended had been carried out no further information 26/5/55.

Inspected Sept 1956 Mr. Deedes. Gauge sound, measure correct. Site most exposed on top of reservoir. Protected all directions except N. Gauge in pit with turf wall. S.

Ins. II (1959) B.O. Satisfactory  
Inspected 10.10.60. G. in pit and well. Lk a new top but reasonably satisfactory.

Position of Station on Ordnance One-Inch map: No. of Map 161 National Grid Reference 51/410980

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

Summary of Earlier Records from 10-year Sheets:

1916-1950, P-accepted

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