

RAINFALL AT Garwald Donolly Reservoir

Lat. _____

Lon. _____

 County of Haddington

Rain Gauge, by _____

 Observer Mr. G. Lumsden
8. Cross stream - 3.

Diameter										11	11	
Height										2	- 2	
Altitude										600T	600T	
Year	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	MEANS.	
January									4	1.53	.94	
February									4.23	2.25		
March									8.92	2.23		
April									2.93	3.42		
May									1.12	1.87		
June									2.25	.63		
July									5.00	5.23		
August									2.20	4.64		
September									1.35	1.04		
October . . . . .									.81	6.87		
November									8.24	.94		
December									1.21	1.14		
TOTALS									39.79	31.20		

Garwald Church 1 3/4 Miles NE by E
Green Lan 700 high 1/2 mile W

RAINFALL AT Garwald Donolly Reservoir

Lat. _____

Lon. _____

 County of Haddington

Rain Gauge, by _____

Observer

Mr G Lumsden
Mr J Henderson
Mr G McKellan
G. Coast stream - 3.

Diameter	11											
Height	0	2									1	6
Altitude	600	T									560	
Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	MEANS.	
January	2.94	1.11	2.15	2.11							3.36	
February ....	.86	.25	4.33	3.42							1.43	
March	2.92	6.71	2.92	.73							1.81	
April .....	.71	1.63	1.04	1.13							3.00	
May	1.92	2.37	1.83	4.47							3.47	
June	4.46	1.49	2.17	1.20							.76	
July	3.13	3.79	1.83	3.25							3.52	
August	4.76	4.25	3.64	2.21							.62	
September....	2.12	5.32	1.41	1.34							4.35	
October	2.69	2.57	6.15	2.54							2.17	
November....	5.73	2.78	1.40	3.50							2.02	
December	2.92	6.23	1.34	2.43							3.03	
TOTALS	35.16	38.50	30.21	28.33	^{No} Reply						29.54	

1890 Garwald Church 1 3/4 miles NE by E
Green Law 700 ft high 1/2 mile W

Mr W. H. Lumsden has records from 1 Jan 1888 See Slip.

RAINFALL AT *Garrald Donolly Reservoir*

Lat.

Lon.

County of *Haddington*

Rain Gauge, by

Observer *Mr J McKellar*

E. coast streams - 3.

*H. Blackadder Esq
20 Roseington Cl.*

Diameter ..	11										
Height	1 6										
Altitude ..	560 ^{ft}										
Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.
January ..	4.21	2.83	1.35	6.52	2.50	2.20	2.83	.72	3.15	1.62	2.793
February ..	(4.38)	2.52	.74	4.10	4.45	1.21	1.52	1.32	1.51	2.31	2.406
March	4.54	2.54	1.78	2.47	2.00	2.73	1.75	2.11	4.75	6.45	3.112
April	1.43	1.73	1.80	2.01	2.10	2.41	1.22	2.30	2.50	3.24	2.074
May	1.56	2.00	4.24	1.50	3.58	1.30	7.50	2.31	2.21	2.41	2.856
June	2.84	1.45	3.52	2.73	2.77	1.43	1.96	2.97	1.11	2.20	2.298
July	3.07	1.53	2.56	4.21	2.10	3.43	1.39	3.03	3.59	2.85	2.776
August	4.02	6.40	1.43	3.63	3.13	(3.37)	5.26	2.52	2.32	3.48	3.556
September ..	2.01	2.21	1.67	2.78	2.20	4.02	1.26	1.81	3.14	3.41	2.446
October	5.03	2.00	2.56	6.82	1.51	2.75	7.46	9.34	1.60	3.71	4.278
November ..	5.15	4.35	2.50	2.21	2.50	5.75	4.74	2.71	1.82	.58	3.231
December ..	4.31	7.53	4.21	2.11	2.56	1.00	1.85	4.02	.65	4.25	3.249
TOTALS ..	(42.55)	37.09	28.36	41.04	31.35	31.60	38.74	35.16	28.35	36.51	35.075 530

1900 *Garrald Church* ^{2 miles} $1\frac{1}{2}$ miles E

February Snow estimated

1903 *Earlinton Station* 6 miles

1907 *Lifford Station* 3 S

gauge "free of everything"

H. B.

RAINFALL at Garwald, Donolly ReservoirCounty of HaddingtonObserver W. Ross Young Esq. C.E.River Basin East Coast Streams 3
Lyne 7.A. G. Merriles Esq. C.E. (1912.)

Rain Gauge, by _____

Diameter ...	11										
Height	1	6									
Altitude ...	560	7			600						
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS.
January ...	4.26	1.29	4.52	4.72	1.58	1.85	2.73	6.73	3.57	4.35	3560
February ...	3.73	1.52	2.34	1.24	2.03	3.83	3.90	.62	2.30	2.36	2387
March	1.33	3.00	3.00	3.69	3.14	2.58	5.26	2.00	1.25	3.36	2561
April	3.01	1.56	.28	2.23	1.28	1.01	2.25	3.28	1.95	4.55	2170
May	2.80	1.00	1.87	3.87	1.70	1.49	5.00	1.75	2.78	.70	2296
June	2.16	5.40	4.28	1.52	2.53	1.98	4.23	1.53	.86	2.26	2675
July	4.03	1.25	1.53	.59	2.45	4.35	3.92	1.34	3.14	.76	2836
August	5.36	1.03	3.18	1.67	2.63	2.94	4.59	6.50	1.85	2.00	3175
September ..	1.60	1.39	4.15	2.53	.70	3.10	3.50	1.58	3.90	2.38	2483
October ...	4.61	4.01	3.08	3.40	2.67	2.20	4.85	4.46	3.86	2.47	3561
November ..	3.62	5.39	1.61	1.76	3.05	2.30	5.61	1.60	2.48	7.80	3522
December ...	2.93	4.32	2.20	2.31	4.58	3.75	3.47	2.80	1.50	3.90	3176
TOTALS ...	39.44	31.16	32.04	29.53	28.34	31.38	49.31	34.19	29.44	37.19	34202

Annual values reported from Murray Mts. 1929.

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

RAINFALL at *Garwald (Donolly Reservoir)*.County of *Haddington*Observer *J. G. Miller, Esq., C.E.*River Basin *East Coast Fens* Mr. Andrew Robertson (1925)

Rain Gauge, by

Base Surveyor (*N. Benwick*)

Diameter ...	5					1 1/2"	5				
Height	1.0					1'					
Altitude ...	550					500'			550		
Year	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930 MEAN.
January ...	4.15	5.10	3.25			1.45	2.40	2.10	3.22	.94	3.20
February ...	3.20	2.86	2.68			3.20	1.85	.71	1.66	.52	.95
March	3.60	2.30	2.75			2.40	1.15	2.90	2.68	.15	1.87
April	3.20	1.00	2.75			4.20	2.10	1.08	1.04	1.59	1.52
May	3.95	1.45	1.10			3.20	2.15	1.80	1.18	1.72	1.15
June	0.25	1.00	2.25			.70	3.80	2.73	4.72	2.12	1.50
July	4.70	1.36	4.55			2.30	3.80	4.10	1.90	2.41	4.98
August	5.70	4.30	3.30			3.00	1.30	6.38	4.10	4.97	5.90
September...	2.15	2.65	2.75			4.70	4.40	7.08	1.87	.21	4.30
October	2.25	3.85	5.86			1.50	3.90	3.66	3.62	2.87	2.46
November...	2.85	2.75	1.25			1.00	3.40	2.53	3.96	3.90	4.60
December...	4.15	2.20	2.35			2.90	.62	3.18	2.22	4.30	2.10.
TOTALS...	40.15	30.82	34.84	29.00	30.20	30.55 M	30.87	38.25	32.17	25.70	34.53. M

1920. Reservoir 20 60^x South

Site inspected by D. Macfarlane 18.7.29.

Don.

19207

Semi box

1920 1922

245048

23774:19207 = 100 : 81

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
1920	55° 54' 43"	2° 46' 20"	Gifford	3 m.	W.	Garwald.	1.2 m.	N.W.

RAINFALL at *Garroca (Donnelly Reservoir)*County of *Haddington*Observer *A. Robertson, C.E.*River Basin *S. East Coast Streams**James Ross Esq. (5/1939)*Type of Gauge *In. O. Standard**Adam Robison Esq.*Annual Average *32.8* in. based on *32* years obs. un-weighted. Period of average *1881-1912* Ref. *5*

Diameter	5"										
Height	1' 0"										
Altitude	550'								570'		
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means
January	1.70	2.46	1.94	1.66	1.43	3.54	(3.00)	2.75	6.18	.39	2549
February	1.46	.75	2.20	.00	1.48	3.60	2.46	.85	1.76	1.46	1602
March	.72	2.58	.70	4.46	1.00	2.80	3.30	.35	3.38	2.53	2181
April	3.24	1.68	1.57	3.98	2.96	1.84	.87	.10	.93	1.67	1887
May	2.78	2.78	1.00	2.46	1.10	1.13	2.65	2.98	1.37	1.65	1990
June	3.70	1.08	1.87	2.97	2.90	1.33	1.18	3.29	3.39	.48	2219
July	3.36	3.48	3.00	2.40	.87	3.74	3.63	3.35	2.72	9.41	3596
August	6.35	.42	.88	3.48	3.10	1.80	3.16	1.60	2.44	1.07	2430
September	2.37	2.72	2.55	1.72	2.00	3.72	1.25	3.18	1.78	2.61	2390
October	1.62	7.20	3.10	2.98	6.50	1.87	3.70	5.15	5.07	3.50	4069
November	3.02	1.35	2.85	4.08	4.30	3.20	1.30	3.40	2.09	4.65	3124
December	.90	2.60	2.00	6.18	2.30	1.83	5.95	2.95	1.11	2.13	2695
TOTALS	31.25	29.10	23.66	35.30	29.94	30.30	(32.45)	29.95	33.22	32.06	30732

1934. Jan estimated

+ when heading 10 for shell. fr. now decided use
East Lothian instead of Haddington for any other concerns

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			Gifford	3m (approx)	W.	Gawald	1.2m.	N.N.E.

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

Station No.

5095

RAINFALL at Garwald (Donolly Reservoir)

41

County of East Lothian

Observer

Adam Robson Esq. C.E.River Basin 3 - East Coast Streams

Type of Gauge

Standard M.O.Annual Average 22.8 in. based on 23 years obs. un-weighted. Period of average 1881-1915 Ref. S.

File No.

Diameter	5"				903	588					
Height	1'0"					1					
Altitude	570'					41		532.			
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means
January	1.87	3.20	2.39	1.38	3.13	1.24	3.45	6.21	1.45	.74	2506
February	2.30	1.28	1.04	1.25	1.70	.94	1.04	1.35	.69	2.92	1451
March	2.79	.67	1.28	.56	.38	2.56	(3.31)	.91	1.22	2.12	1580
April	1.12	.96	0.96	1.89	.94	.45	3.12	1.84	1.08	2.69	1505
May	1.88	1.67	2.93	3.74	4.44	1.74	3.16	1.59	2.24	1.81	2520
June	1.57	1.24	2.14	2.45	1.22	1.59	2.34	3.99	1.05	1.74	1933
July	3.44	3.26	3.42	2.58	2.37	2.73	1.93	1.61	2.33	2.22	2589
August	3.04	2.06	2.77	2.64	4.38	4.97	.34	12.88	2.90	2.37	3835
September	0.79	1.97	1.57	5.06	2.82	2.95	1.52	2.64	1.25	5.34	2591
October	3.14	2.68	2.66	2.30	2.85	.55	.72	2.46	5.91	1.44	2471
November	3.69	.78	0.72	5.63	.70	5.31	2.79	1.80	4.98	5.45	3185
December	.63	1.53	0.82	2.51	2.34	2.21	1.88	2.54	2.52	2.16	1914
TOTALS	26.26	21.30	22.70	31.93	27.27	27.24	25.60	39.82	27.62	31.00	28080

1947 Mar. corrected for snow - hp. low New gauge 19.47.
 1.1.49. Gauge re-sited at ^{532.} 532. Hence 10' high 18' west.

low

26793

10004

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	Parish Church.	Distance from gauge.	Direction
1941			Gifford	25 1/2 m	W.	Garwald	1 1/2 m	NE.

BRITISH RAINFALL ORGANIZATION

Station No. 5095

RAINFALL at Garvald (Donsley Reservoir)

51

County of East Lothian Observer Adam Nelson Esq. C.E.

River Basin 3 - East Lothian Stream

Type of Gauge M.O.

Annual Average 32.8 in. based on 33 years obs. un-weighted. Period of average 1881-1915 Ref. S
" " 36.63 " " 41 " " within 1916-58. " " 1916-50 " S
File No.

Diameter ...	5"				903	588					
Height ...	1' 0"					1					
Altitude ...	532'					51					
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means
January ...	3.09	1.96	0.70	2.23	1.84	2.17	2.45	1.49	1.22	4.84	
February ...	3.30	.58	.99	2.25	1.97	3.10	3.98	2.30	0.32	2.84	
March ...	4.30	1.25	.31	1.88	1.81	1.68	1.77	1.80	0.80	1.19	
April ...	3.04	1.85	3.11	.79	.60	.74	.94	3.20	1.82	1.06	
May ...	3.83	2.03	2.40	5.63	1.74	.40	1.22	1.78	0.39	1.32	
June ...	1.53	2.43	2.61	1.93	.76	2.67	1.05	2.89	2.23	0.78	
July ...	3.72	1.63	4.94	1.96	1.79	3.70	4.63	4.92	1.55	2.84	
August ...	5.00	2.53	1.91	6.18	.82	7.93	5.77	2.27	0.72	3.78	
September ...	0.65	3.53	3.46	2.78	.88	3.89	1.41	1.69	0.57	2.35	
October ...	.53	3.05	2.06	4.81	2.00	1.01	1.68	1.38	1.87	5.83	
November ...	5.32	4.24	2.26	4.08	1.23	1.00	2.34	.74	5.97	3.17	
December ...	1.83	3.26	2.31	2.80	4.82	2.93	3.26	5.43	4.57	2.35	
TOTALS ...	36.14	28.44	27.06	37.29	20.26	31.22	30.50	24.89	22.03	31.75	
	1					W	W	W	W	W	

1951 House 10' 18" W.
 Ins. 4.8-60 R. Crauna. E. Sound. In narrow SW-NW valley 4' from dam.
 Risk of spring with S.W. winds and droppings from telephone wires. O/S to
 NW by fir (elevation 400') and to beach (elevation 300') and G. Est. by
 ash (elevation 350'). There should be cut-down. E. was moved from
 site seen at last inspection (1929).

Position of Station on Ordnance One-Inch map: No. of Map National Grid Reference 36/580690

Date.	Lat. N.	Long.	Railway Station.	Distance from gauge	Direction from gauge	Parish Church.	Distance from gauge.	Direction from gauge.
1951			Gifford	2 1/2 mi	W	Garvald	1 1/2 mi	N.E.

Summary of Earlier Records from 10-year Sheets:

Record D, or d	1910-19	1920-30	1931-40	1941-50	1951-60
	/	at 23 and 24	✓	✓ op. 47	W 1910-19, 1920-30

Station No. 5095

RAINFALL at Garvald (Donally Reservoir)

51

County of East Lothian

Observer Adam Robson, Esq.

River Basin 3. East Coast Streams

Type of Gauge. A

Annual Average 32.8 in. based on years obs. un-weighted. Period of average. Ref.

File No. R.300

Diameter ...	5"											
Height ...	1'											
Altitude ...	532'											
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means	
January ...	3.09	1.96	70	2.23	1.84	2.17	2.45	1.49	1.22	4.24	2137	
February ...	3.30	1.58	99	2.25	1.97	3.10	3.98	2.30	3.2	2.84	2163	
March ...	4.30	1.25	31	1.88	1.81	1.68	1.77	1.80	1.80	1.19	1679	
April ...	3.04	1.85	3.11	.79	0.60	.74	.94	3.20	1.82	1.06	1715	
May ...	3.83	2.03	2.40	5.63	1.74	.40	1.22	1.78	39	1.32	2074	
June ...	1.53	2.43	2.61	1.93	.76	2.67	1.05	2.89	2.23	.48	1888	
July ...	3.72	1.63	4.94	1.96	1.79	3.70	4.63	4.92	1.55	2.84	3169	
August ...	5.00	2.53	1.91	6.18	.82	7.93	5.77	2.27	72	3.78	3671	
September ...	.65	3.53	3.46	2.75	.88	3.89	1.41	1.69	57	2.35	2118	
October ...	.53	3.05	2.06	4.81	2.00	1.01	1.68	1.38	1.87	5.83	2422	
November ...	5.32	4.24	2.26	4.08	1.23	1.00	2.34	.74	5.97	3.14	3035	
December ...	1.83	3.36	2.31	2.80	4.82	2.93	3.26	5.43	4.57	2.35	3366	
TOTALS ...	36.14 w	28.44 w	27.06 d	37.29 d	20.26 w	31.22 w	30.60 w	27.89 w	22.03 w	31.75 w	29458	

1951. house 10' high, 18' W

Inspected 9/1/60. Site now in deep bank enclosed on SW by reservoir dam and on NW and SE by steep slopes of hills on either side of valley. Object not of clay from reservoir and in-dripping from nearby wires. True to NW, elev. 40° and true to SE elev. 36°. No better site available. Recommended class should be lifted. Further details on F.M.12.

Position of Station on Ordnance One-Inch map :

No. of Map.....

National Grid Reference 36 580690

Date.	Lat. N.	Long.	Railway Station.	Distance Direction from gauge	Parish Church.	Distance Direction from gauge.
1914			Clifford	2 3/8m W	Garvald	1 1/2m NE

Summary of Earlier Records from 10-year Sheets :

Record D, or d	1890-19	1910-19	1920-30	1931-40	1941-50	1951-60
C.1890-98, 1900-05	✓	30.00 25.00			np 47	