

# RAINFALL AT *Derwent Dale Howden House No 19*

Lat. ....

Lon. ....

County of *W. York Southern*

M. O. *Rain Gauge, by*

Observer *E. L. Harrison by C. L.*

*Trent Derwent 5*

Diameter ..							5	8			
Height ....							1	0			
Altitude ..							775	7			
Year ....	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	MEANS.
January ..							6.12	2.07	3.32	3.00	
February ..							4.08	2.79	3.96	3.85	
March ....							4.10	4.71	4.01	5.11	
April .....							1.75	3.28	3.10	2.44	
May .....							3.04	4.27	3.28	2.55	
June .....							1.60	6.68	2.13	5.04	
July .....							2.76	2.94	4.83	4.57	
August ....							3.66	4.19	4.09	2.29	
September ..							1.54	.62	3.20	3.28	
October ....							7.11	7.96	1.60	5.90	
November ..							6.79	4.68	3.63	1.73	
December ..							4.73	3.92	2.28	8.49	
TOTALS ..	47.89	43.71	39.09	55.64	39.18	38.88	47.28	48.11	39.33	47.75	44.686

'00-'05.

Entered from P. J.

1. XII. 1913.

RAINFALL at Derwent Dale Howden No No 19County of W YorkshreObserver E Sandeman Esq C.E.River Basin Trent - Derwent 5S. B. B. Esq C.E.

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

Diameter ...	8											
Height .....	1 0											
Altitude ...	775 ft					890						
Year ...	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	MEANS.	
January ...	4.29	2.02	5.52	4.21	3.09	6.34	2.79	4.69	4.05	5.04		
February ...	4.95	5.98	2.10	1.43	2.99	6.19	7.76	.84	4.09	3.53		
March .....	.99	2.80	4.89	4.63	4.84	1.84	6.45	2.84	1.96	6.73		
April .....	4.55	3.61	1.24	3.48	2.12	1.70	3.92	2.38	1.38	2.12		
May .....	3.62	1.05	3.63	2.84	2.62	1.56	2.27	2.00	4.12	1.78		
June .....	3.14	3.57	3.64	1.50	4.34	1.15	4.03	1.92	2.59	1.80		
July .....	4.40	.48	6.52	.99	3.46	6.04	2.71	1.81	3.85	3.70		
August .....	5.84	2.60	8.04	1.41	2.64	3.29	1.79	8.04	2.59	3.83		
September ..	.45	2.70	3.23	3.21	3.15	.56	2.15	1.65	10.09	2.54		
October ...	3.10	3.84	3.96	5.05	4.18	3.17	5.79	6.52	2.82	5.24		
November ...	6.07	6.48	3.28	3.96	6.26	4.68	5.02	5.82	1.74	4.10		
December ...	8.47	7.22	6.00	3.05	8.25	8.62	3.92	3.06	6.65	7.24		
TOTALS ...	49.87	42.35	52.04	35.76	47.94	45.14	48.60	41.55	45.93	48.35		

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

RAINFALL at Derwent Dale Howden House No. 19County of W. R. YorkshireObserver S. B. Kinsler Esq. C.E.River Basin Spent - Derwent - 5Derwent Valley Water Bd.8.00  
7.90  
8.10  
8.01Cu Snowden (H) Rain Gauge, by Casella

8230

Weekly. good condition Glass N + Z not checked.

Diameter ...	8										
Height .....	10										
Altitude ...	890	775	890								
Year .....	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930 MEANS
January ...	7.06	6.10	5.29	4.29	2.64	4.15	5.40	3.94	10.26	2.08	6.22
February ...	3.69	.72	5.51	7.21	1.86	7.01	3.34	1.64	5.88	.56	1.52
March .....	4.00	3.14	2.99	2.17	1.10	2.32	2.40	5.74	2.58	.71	3.42
April .....	7.22	2.35	5.11	3.16	2.43	3.24	2.77	6.65	1.74	1.68	4.67
May .....	5.41	1.89	.92	5.01	5.73	4.31	3.62	1.48	1.49	2.86	2.38
June .....	4.14	.31	2.26	0.92	1.49	.03	3.27	5.06	4.72	1.42	4.32
July .....	5.68	.96	4.56	3.88	4.29	1.92	3.37	2.98	1.28	3.24	8.15
August .....	1.89	6.33	6.81	4.44	4.33	4.42	3.65	4.99	5.29	3.51	4.76
September...	1.91	.87	3.55	4.57	4.36	4.00	2.68	6.13	0.43	1.58	6.32
October .....	3.07	2.25	1.68	3.29	5.98	5.47	4.84	4.64	5.82	5.53	6.42
November...	1.38	2.29	2.96	6.11	2.92	4.55	5.20	5.98	7.60	9.28	5.53
December...	4.12	5.64	4.26	5.34	2.63	5.68	3.59	2.22	3.57	9.52	4.32
TOTALS...	49.57	32.85	45.90	50.39	40.76	47.10	44.18	51.45	49.86	41.97	58.03

Inspected 23.12.22. S. on grassy slope to reservoir forming Howden Dam.  
Reservoir - drops 10 ft. in 20 yds. to S.W. Good position.

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 *Derwent Dale (Hardan Lane) No. 72*County of *York W. R.*Observed *Derwent Valley Water Board*River Basin *West Derwent 5*

Type of Gauge

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

Diameter				<i>5</i>								
Height				<i>1 0</i>								
Altitude				<i>965</i>			<i>960</i>					
Year	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means	
January				<i>3.99</i>	<i>3.05</i>	<i>4.50</i>	<i>7.50</i>	<i>6.85</i>	<i>7.70</i>	<i>(4.00)</i>		
February				<i>.42</i>	<i>7.50</i>	<i>4.75</i>	<i>7.76</i>	<i>2.88</i>	<i>4.05</i>	<i>(3.30)</i>		
March				<i>4.99</i>	<i>2.00</i>	<i>5.16</i>	<i>4.50</i>	<i>1.70</i>	<i>4.05</i>	<i>3.80</i>		
April				<i>3.40</i>	<i>3.90</i>	<i>2.75</i>	<i>3.30</i>	<i>.50</i>	<i>3.18</i>	<i>4.00</i>		
May				<i>2.27</i>	<i>.82</i>	<i>2.50</i>	<i>3.87</i>	<i>3.78</i>	<i>2.64</i>	<i>1.44</i>		
June				<i>1.81</i>	<i>3.95</i>	<i>4.00</i>	<i>1.60</i>	<i>3.86</i>	<i>3.30</i>	<i>.91</i>		
July				<i>3.47</i>	<i>2.05</i>	<i>5.00</i>	<i>3.87</i>	<i>5.71</i>	<i>5.40</i>	<i>3.52</i>		
August				<i>3.14</i>	<i>1.93</i>	<i>2.73</i>	<i>1.75</i>	<i>2.61</i>	<i>3.08</i>	<i>1.61</i>		
September				<i>3.83</i>	<i>6.18</i>	<i>6.90</i>	<i>2.21</i>	<i>3.29</i>	<i>3.12</i>	<i>4.44</i>		
October				<i>5.78</i>	<i>10.91</i>	<i>5.99</i>	<i>4.11</i>	<i>10.14</i>	<i>5.50</i>	<i>5.34</i>		
November				<i>4.50</i>	<i>7.80</i>	<i>6.49</i>	<i>2.67</i>	<i>6.90</i>	<i>9.00</i>	<i>11.50</i>		
December				<i>6.17</i>	<i>6.00</i>	<i>5.98</i>	<i>5.19</i>	<i>5.35</i>	<i>4.14</i>	<i>5.67</i>		
TOTALS				<i>43.87</i>	<i>56.09</i>	<i>56.75</i>	<i>48.33</i>	<i>53.57</i>	<i>58.16</i>	<i>(49.53)</i>		

This site selected by Dr. Haslewood 1/33 (see also 584 m. file)

1940. Jan + Feb. est. by stat.

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	Parish Church.	Distance from gauge	Direction

RAINFALL at Derwent Dale (Howden Ho.) 19.....County of West RidingObserver S.B. Winsor, Esq., C.E.River Basin Trent-Derwent S.Derwent Valley Water Board (1933)

Type of Gauge .....

Annual Average 44.1 in. based on 30 years obs. un-weighted. Period of average 1881-1915 Ref. 3

660619/26

Diameter .....	8.										
Height .....	1.0.										
Altitude .....	890.										
Year .....	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	Means
January .....	7.94	5.01	3.55								
February .....	6.94	71	5.20								
March .....	4.8	3.20	3.24								
April .....	6.80	6.61	1.68								
May .....	2.74	5.46	2.01								
June .....	6.36	1.04	3.04								
July .....	5.17	4.90	3.63								
August .....	7.43	1.74	1.01								
September .....	5.99	3.91	1.56								
October .....	2.18	8.12	6.45								
November .....	5.66	4.36	3.50								
December .....	2.43	2.30	0.86								
TOTALS .....	60.12	47.36	36.23	# Abandoned as agreed.							

NB. Inspected 4/30. "Site is unsuitable - g. is now in a plantation, suggest abandon at end of year"

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

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

Station No. T.F. 31971

RAINFALL at Dersent Dald (Hawden Dean) No 72

41

County of York W.R.Observer Dersent Valley Water Bd.River Basin Trent Dersent 5.

Type of Gauge.....

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

C1934

File No. 660619/26

Diameter	5			106	259						
Height	10				1						
Altitude	960				41						
Year	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Means
January	(4.75)	(5.40)	6.73	8.38	(6.00)	7.45	4.20	12.19	2.80	2.36	
February	(6.15)	(2.20)	3.92	3.36	6.20	8.35	(4.30)	4.37	2.80	8.30	
March	7.45	3.03	2.10	94	1.35	2.30	(8.80)	1.70	2.25	2.40	
April	(3.85)	2.67	3.32	3.60	3.10	1.85	4.53	2.65	5.08	5.37	
May	4.33	4.08	3.64	4.30	3.35	2.75	3.37	1.77	2.77	2.82	
June	85	1.02	3.20	2.91	5.00	4.90	3.17	5.92	61	1.57	
July	4.50	5.00	2.19	4.05	1.10	4.00	2.27	2.25	2.75	3.12	
August	6.49	(4.40)	5.31	3.60	2.90	4.85	.33	5.60	2.55	4.29	
September	4.3	3.63	4.00	5.75	2.70	6.32	1.85	2.30	2.10	6.71	
October	6.11	6.40	2.67	5.30	7.50	2.08	1.18	2.60	4.90	2.18	
November	4.97	2.09	4.36	8.90	73	11.34	6.25	2.20	8.25	8.10	
December	3.41	(5.00)	2.61	3.90	3.90	5.19	6.35	4.10	9.32	(3.60)	
TOTALS	(53.29)	(44.92)	44.05	54.99	43.83	61.28	(46.60)	47.65	46.18	60.22	
	M	M	M	M	M	M	M	M	M	M	

1941 Jan. Feb. & April not d. by observer  
 1942 Jan. Feb. Aug. & Dec. not d. by observer.  
 1945 Jan not d. by observer.  
 1947 Feb 7 min. said you know  
 1950 Dec not d. by observer.

30004

00014

6400460214

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. 3107/1

T.F. 26

51

RAINFALL at Derwent Dale (Howden Dean) No. 72County of West Riding - YorksObserver Derwent Valley Water Bd.River Basin East Derwent - 5Type of Gauge SeptapertAnnual Average in. based on 23 years obs. un-weighted. Period of average 1916-50 Ref. 19" " 51.02 " " within 1934-57 " " 1916-50 File No. 6606.19/26

Diameter ...	5"			106	259						
Height ...	1'0"				1						
Altitude ...	960'				51						
Year ...	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	Means
January ...	5.30	6.75	2.20	5.11	3.75	7.70	4.12	5.98	5.24	8.64	
February ...	5.70	2.80	3.40	3.74	(4.10)	2.40	4.28	7.82	.35	4.15	
March ...	6.46	2.85	3.42	3.10	4.65	2.25	3.98	3.80	2.20	2.75	
April ...	2.62	3.10	3.60	.48	1.69	2.75	.46	1.53	3.85	2.94	
May ...	4.05	2.70	2.88	4.26	5.76	1.23	1.74	4.13	2.01	2.12	
June ...	1.10	2.95	3.14	2.90	4.01	4.12	1.47	5.04	1.85	1.60	
July ...	2.56	2.70	5.30	5.10	1.30	8.82	4.66	6.11	3.45	6.90	
August ...	5.10	2.80	4.85	8.14	.93	8.76	7.33	2.88	.86	4.66	
September ...	2.75	7.19	2.30	5.20	1.70	4.75	8.05	5.50	.04	5.39	
October ...	.98	8.13	2.23	7.12	3.80	3.10	4.56	3.47	4.69	8.42	
November ...	11.17	4.65	3.27	8.10	2.95	2.42	3.43	1.27	6.75	6.32	
December ...	7.50	4.40	2.10	8.80	6.50	6.50	6.67	5.98	8.72	6.09	
TOTALS ...	55.29	51.02	38.69	62.05	41.14	54.80	50.75	53.51	40.01	59.98	
	M	M	M						M	M	

1955 Feb. est. by Eng'r.

20004

1956 Jan. Feb. approximated

Inst. No. 1955 f.b.o.k. Tree 50', 50' NE'N. Hillside to N. slightly overhills. Best site available

1960. from such 20 A. South facing

Position of Station on Ordnance One-Inch map :

No. of Map 102National Grid Reference 58 185 926

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
			C 1934	✓	