

Weather Report 1996-1999

Helen MacLeod

Detailed particulars of the daily weather may be obtained from the meteorological records in the Museum library.

The daily readings, with the exception of the sunshine, are recorded by Mr J. Morton in the grounds of Rothesay Academy. These records are used by the Society and are also sent to the Meteorological Office in Edinburgh. The sunshine records are collected by Mrs J. Speirs at Gartnakeilly Farm.

The average annual rainfall for the period was 1426mm which compares unfavourably with the long term average (1951-1980) of 1317mm. This is despite the fact that both 1996 and 1997 were comparatively dry years. Indeed 1997, with only 1138mm of rain (44.8ins), was the driest year since 1971. Both 1998 and 1999 were well above average, and among the wettest years of the last half century.

The sunshine recording of 1191 hours in 1998 was rather poor, although still sunnier than the very dull years of 1993 and 1994. The remaining years were just below the long term average of 1333 hours.

The most notable weather feature during this period was the severe gale on the evening of December 26 1998, with gusts of over 80 mph. This caused much structural damage to buildings, devastated woodlands, especially Cnocnicoll wood, and damaged so many power lines that parts of the island were without electricity for more than three days.

It is of interest to compare the readings of the last decade with those of the 30 year average, for which the period 1951-1980 is used. Taken as a whole, the last ten years have been warmer, cloudier and wetter than the earlier 30 year period. The mean daily maximum temperature exceeded the average in every one of the ten years, and was higher overall by 0.6°C. The mean minimum was 0.3°C higher, although it was actually lower in three of the ten years. Taken together, these figures mean that the daily range was larger than in the past, and this is difficult to explain. Normally, increased cloudiness would be accompanied by a reduction in the daily range of temperature, as a result of the insulating effects of cloud cover. In this case some other factor must have been at work, and the anomaly remains unexplained.

Overall, annual sunshine totals for the decade fell about 40 hours below the long-term average. Omitting 1992, when records were incomplete (this would seem to have been a rather dull year), six years were below average and three above, only 1995 exceeding it by a substantial amount. This was more than made up for by the exceptionally cloudy year of 1993, which fell 283 hours short of the average figure.

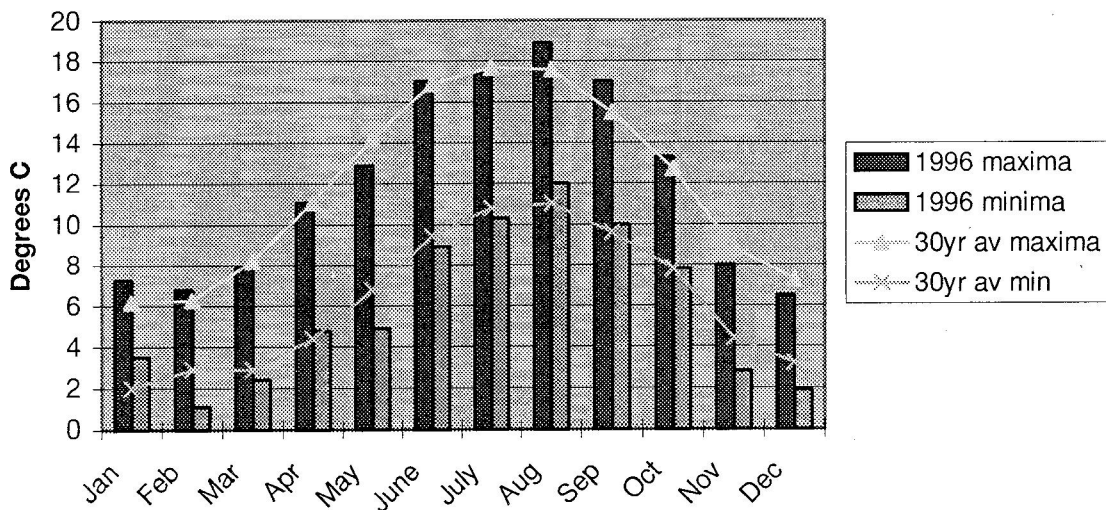
Rainfall exceeded the average in seven out of the last ten years, on four occasions by more than 300mm, making those four years (1990, 1992, 1998, 1999) among the wettest ever recorded. Over the decade, the average excess was more than 100mm per year (about 8%).

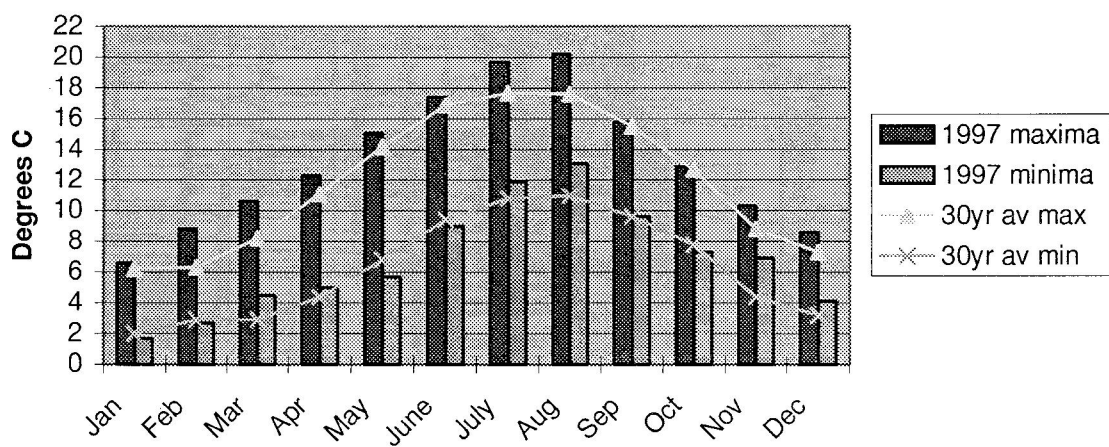
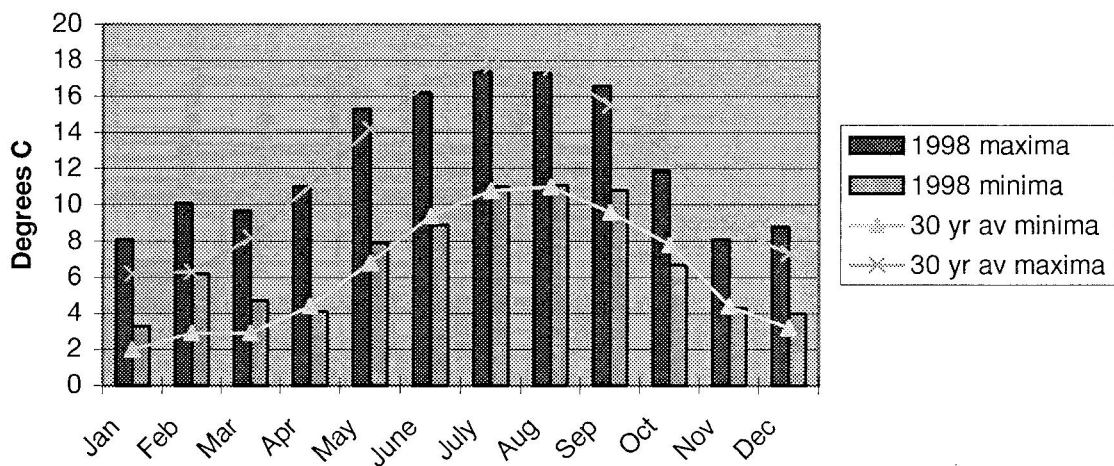
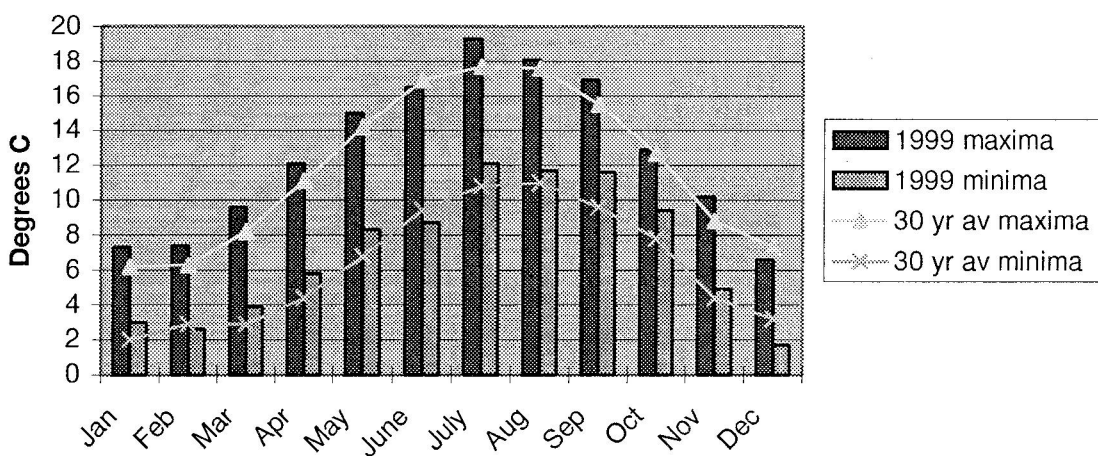
Temperature 1996-1999

Monthly means of the daily maximum and minimum readings are shown in the following tables and graphs.

	Mean maxima					Mean minima				
	1996	1997	1998	1999	30yr av	1996	1997	1998	1999	30yr av
Jan	7.3	6.6	8.1	7.3	6.2	3.5	1.7	3.3	3.0	2.0
Feb	6.8	8.8	10.1	7.4	6.3	1.1	2.7	6.2	2.6	2.9
Mar	7.9	10.6	9.7	9.6	8.2	2.4	4.5	4.7	3.9	2.9
Apr	11.1	12.3	11.0	12.1	11.1	4.8	5.0	4.1	5.8	4.4
May	12.9	15.1	15.3	15.0	14.2	4.9	5.7	7.9	8.3	6.8
June	17.0	17.4	16.2	16.5	16.9	8.9	9.0	8.9	8.7	9.4
July	17.4	19.7	17.4	19.3	17.7	10.3	11.9	11.0	12.1	10.8
Aug	18.9	20.2	17.3	18.1	17.6	12.0	13.1	11.1	11.7	11.0
Sep	17.0	15.8	16.6	16.9	15.5	10.0	9.6	10.8	11.6	9.6
Oct	13.3	12.9	11.9	12.9	12.7	7.8	7.3	6.7	9.4	7.8
Nov	8.0	10.3	8.1	10.2	8.8	2.8	6.9	4.3	4.9	4.4
Dec	6.5	8.6	8.8	6.6	7.3	1.9	4.1	4.0	1.7	3.2
mean	12.0	13.2	12.5	12.7	11.9	5.8	6.8	6.9	7.0	6.2
range	12.4	13.6	9.3	12.7	11.5	10.9	11.4	7.8	9.5	9.0

Temperature: 1996

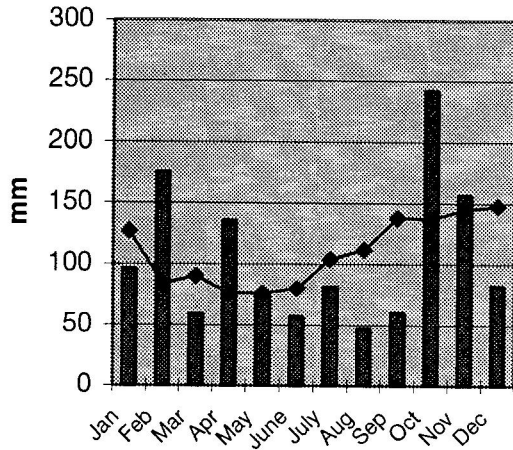


Temperature: 1997**Temperature: 1998****Temperature: 1999**

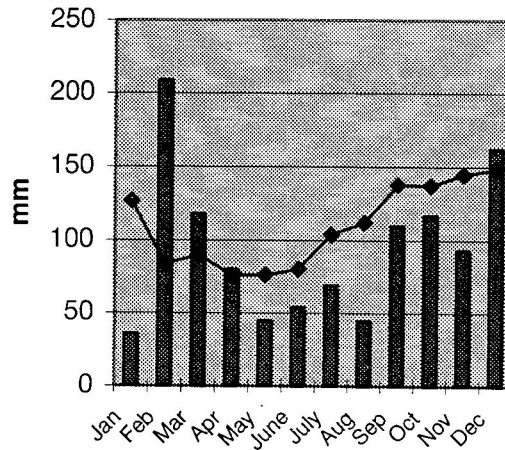
Rainfall

The line on each graph represents the 30 year average 1951-1980.

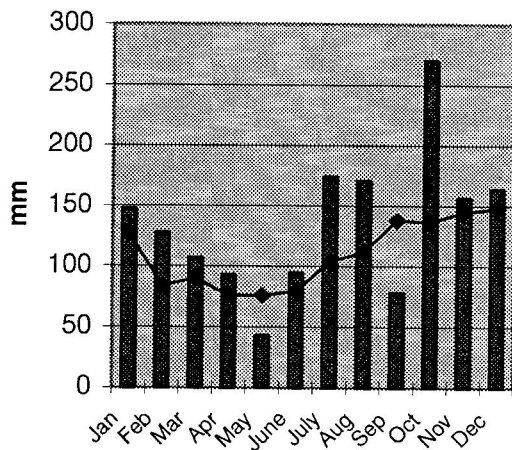
1996: 1268mm



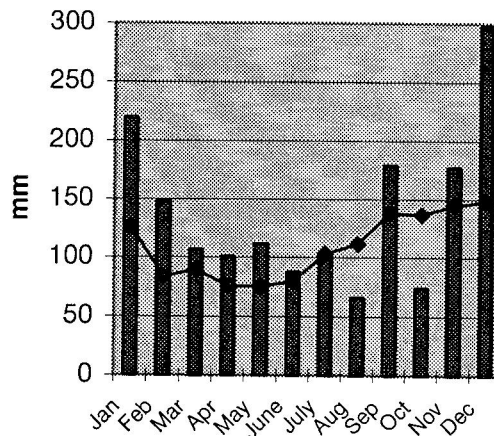
1997: 1138mm



1998: 1627mm



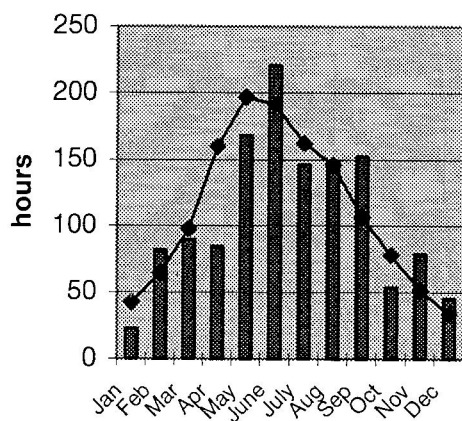
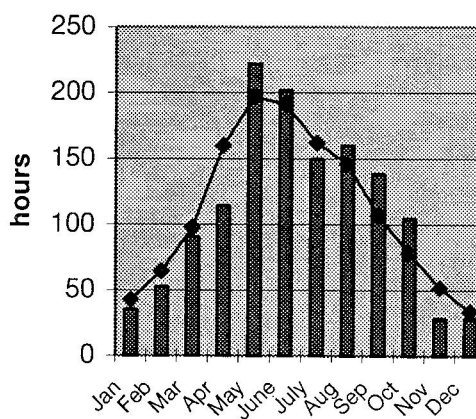
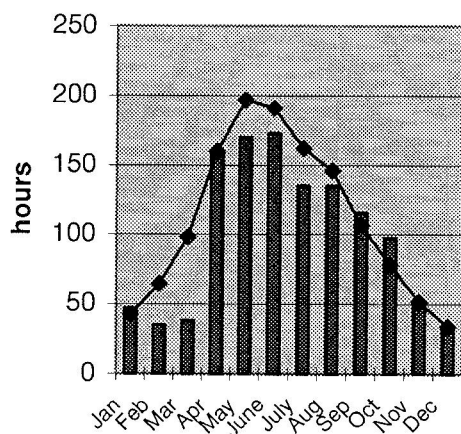
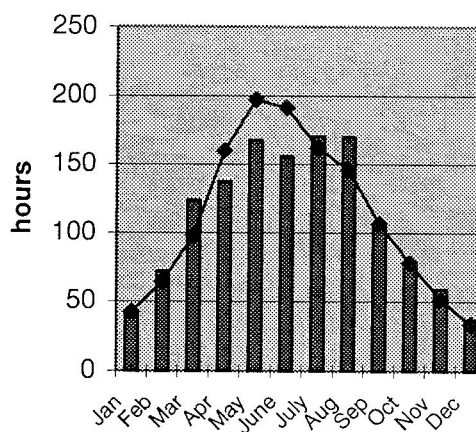
1999: 1673mm



Rainfall (mm)	1996	1997	1998	1999	30yr av
Jan	96	36	147	220	127
Feb	175	209	128	148	84
Mar	59	118	107	107	90
Apr	136	80	93	101	76
May	76	45	43	112	76
June	57	54	95	88	80
July	81	69	174	102	104
Aug	47	45	171	66	112
Sep	60	110	78	179	138
Oct	242	117	270	75	137
Nov	157	93	157	177	145
Dec	82	162	164	298	148
Total	1268	1138	1627	1673	1317

Sunshine

The line on each graph represents the 30 year average 1951-1980.

1996: 1296hrs**1997: 1327hrs****1998: 1191hrs****1999: 1316hrs**

Sunshine (hrs)	1996	1997	1998	1999	30yr av
Jan	23.1	35.6	47.1	42.2	42.9
Feb	81.8	52.8	35.0	72.0	64.5
Mar	90.2	90.8	38.0	123.9	98.2
Apr	84.9	114.2	159.1	137.4	160.0
May	167.9	221.9	170.4	167.4	197.0
June	220.8	201.9	173.4	156.0	191.4
July	146.7	149.8	135.0	170.6	162.2
Aug	149.4	160.0	135.0	170.3	146.2
Sep	152.7	138.6	115.8	103.5	106.9
Oct	53.9	104.7	97.4	76.7	78.4
Nov	79.2	28.4	53.0	59.0	51.7
Dec	45.6	28.5	31.9	37.0	33.9
Total	1296	1327	1191	1316	1333