

WEATHER 2005 PARKHEAD CLIMATOLOGICAL STATION

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Introduction A new automatic digital system was added to the Parkhead Climatological Station, Stirling University at the end of 2004. The recording system now records much more continuous information. For example mean daily temperatures/rain falls/wind strengths from hourly readings are now possible along with the maxima and minima and the hour of day at which they were recorded. For this year data has been extracted which allows direct comparison with the 30 year Climatological Normals (CNs) established in 2000 (1771-2000). For the future, as data is accumulated, it should be possible to offer a fuller comparison of local weather variations.

The bad news is that due to some unwanted attention the Station suffered damage and the loss of the January data. In order to allow some general annual comparisons to be made still, the yearly CNs published in Volume 24 of the *Forth Naturalist* have been recalculated on an 11 month basis by subtracting the measurements and means for January. Where appropriate these replace the CNs (in brackets) following this year's figures in Tables 1 and 2.

The year 2005 (Jan-Dec). Taken as a whole the year was slightly warmer (mean temp. maxima +0.4°C mean temp. minima +0.9°C) and wetter (+58 mm, 7 %). What stands out though is that whilst the higher temperature maxima/minima were common to all months except November and December which were close to average, the rain was concentrated in the spring (April-June) and the month of October. These months together received no less than 57 % of an average annual fall (475 mm vs 832 mm) and more than double the CNs for these months.

The summer and late autumn were then comparatively dry.

February – March The first half of February continued mild as had been in much of January, as some may recall. Until the 13th there were no air frosts and day time highs reached 10°C. 85 % of the month's rain fell. Winds were mostly from the west and though no gales, gusts of 13-43 kph were recorded every day. A good month for windmills you might think.

In the second half of the month, the winds veered to the north, backed and veered again settling in the north and east until mid March. Snow was seen in the air in the third week of February and again some settled during the first two weeks of March. When it wasn't windy, and most days were, an average number of air frosts were recorded.

From the third week of March milder air was associated with a series of depressions, wind and average rain from every quarter, but with some good highs of 15°C and nights little cooler at (11°C).

April – June. These three months were characterised by the same wet mild

windy unsettled weather, as late March. Grass grows well in these conditions, I am informed, but at the same time further south in the UK, almost annual, preparations were being made for a hosepipe ban.

There were no air frosts (last on 14th March), though an average of 5 plus are noted in the CNs. Otherwise temperature minima were unexceptional, given the cloudy days, and wind. Day time highs were also unexceptional, but mid June recorded 12 days with temperatures of 20-24°C, light winds with near average rain. June was still ranked as the 5th wettest month of the year.

July, August and September July, especially 2nd and 3rd weeks might be remembered as one of the warmest and driest for some years. Day temperature maxima were well up 20-29°C and light rain on only 7 days. August and September had near average rain fall with above average temperature maxima and minima.

Winds were generally light from the WSW though depressions in late August and September produce gusts of up to 41 kph (ca. 23kts).

October was one of the wettest months on record. In other years, without having had some respite in late summer there would have been serious fears for the harvest. In the second week alone 73 mm of rain were recorded. As might be expected, temperature highs and especially lows were above average and again no air frosts were recorded. Winds too were unexceptional for October.

November The first two weeks seemed to continued the pattern of October, with moderate winds, above average rain and no frosts.

From the 16th temperatures fell and every second night had a serious frost. On the 18th Parkhead CS recorded its lowest minimum night temperature for the year of -4.8°C and its first negative mean daily temperature. It was to record another four "negative" days before the year end. Snow began to appear on the hills.

December Temperatures in the month were very close to average. Precipitation was actually very low although December normally is the wettest month of the year. In 2005 it was the second driest. It was also one of the quietest months, having four windless days and matching June for the lowest mean wind strength (1.4 kph, <1kt).

The hopes of a white Christmas were not realised, but snow, at least above 50 m, was delivered to most areas in Christmas week.

Table 1 Temperature readings Parkhead Climatological Station February to December 2005

	mean - maxima		mean - minima		Number of Air Frosts	
February	7.4	(6.9)*	1.6	(0.8)*	9	(11)*
March	10.2	(9.1)	4.0	(1.9)	8	(7)
April	11.8	(11.8)	4.2	(3.4)	0	(4)
May	14.9	(15.3)	5.4	(5.8)	0	(1)
June	18.5	(17.7)	10.7	(8.4)	0	(<1)
July	20.1	(19.8)	11.3	(10.6)	0	(0)
August	20.0	(19.4)	10.4	(10.2)	0	(0)
September	17	(16.3)	9.5	(8.3)	0	(<1)
October	13.8	(12.9)	8.3	(5.4)	0	(2)
November	8.8	(9.2)	2.1	(2.6)	11	(8)
December	7.2	(7.2)	1.2	(1.1)	14	(11)
Year February-December 2005	13.6	(13.2)	6.2	(5.3)	42	(44)

* Climatological Normals 1971-2000 are shown in brackets.

Table 2 Rainfall and Wind Feb.-Dec. 2005 Parkhead Climatological Station

	Total rain (mm)	Greatest fall (mm)	Number of days >0.2 mm	Number of days >1.0 mm	Number of days >5 mm	mean Wind strength (m/s)	Gust max. at time, date (m/s)
February	50.8 (73.2)*	13.0 (31.8)*	15 (16)	9 (12)	3 (5)	0.8 .	12.1 SW 13.00, 13/02
March	75.4 (81.4)	15.2 (44.0)	18 (17)	15 (14)	4 (5)	0.7 .	11.2 SW 09.00, 16/03
April	98.6 (47.5)	27.1 (35.3)	17 (13)	11 (10)	6 (3)	0.9 .	14.8 WSW** 11.00, 15/04
May	116.1 (56.9)	23.6 (28.3)	17 (14)	14 (11)	7 (4)	0.9 .	13.4 ENE 00.00, 27/05
June	86.4 (57.1)	15.5 (35.8)	16 (13)	13 (10)	4 (4)	0.4 .	8.5 N 13.00, 12/06
July	15.0 (62.9)	4.2 (65.5)	10 (13)	5 (10)	0 (5)	0.6 .	9.8 ENE 11.00, 29/07
August	68.8 (68.1)	14.2 (30.0)	20 (14)	14 (11)	4 (5)	0.5 .	11.2 WSW 17.00, 24/08
September	69.6 (87.7)	21.3 (44.2)	15 (15)	13 (12)	4 (6)	0.6 .	11.6 WSW 16.00, 23/09
October	174.0 (97.9)	42.4** (66.2)	19 (17)	17 (14)	11 (6)	0.5 .	11.6 E 11.00, 24/10
November	88.1 (98.9)	18.5 (68.3)	20 (17)	12 (14)	6 (7)	0.6 .	12.5 SW 15.00, 11/11
December	48.3 (101.0)	9.9 (43.8)	21 (18)	10 (15)	3 (7)	0.4 .	9.4 N 21.00, 15/12
Year Feb.-Dec. 2005	891.1 (832.3)	42.4** (68.3)	188 (167)	133 (133)	52 (57)	0.6 .	14.8 WSW **

* Climatological normals 1971-2000 are shown in brackets.

