

**SEPTEMBER STATISTICS RECORDED  
AT LERWICK OBSERVATORY**

	<b>September 2008</b>	<b>Averages 1971-2000</b>
Mean maximum temperature	13.8°C	12.4°C
Mean minimum temperature	10.2°C	8.2°C
Daily mean temperature	11.9°C	10.1°C
Mean sea-level pressure	1014.6 hPa (mb)	1009.5 hPa (mb)
Total rainfall	60.0 mm	115.3 mm
Wet days => 1 mm	12 days	17.4 days
Sunshine (electronic sensor)	66.5 hours	100.8 hours
Air frosts	0 days	0.0 days
Ground frosts	1 day	1.7 days
Snow/sleet	0 days	0.2 days
Days with gale	0 days	2.1 days
Maximum daily mean temp.	13.8°C on 9 <sup>th</sup>	
Minimum daily mean temp.	8.7°C on 30 <sup>th</sup>	
Highest maximum	16.8°C on 21 <sup>st</sup>	
Lowest day maximum	11.1°C on 30 <sup>th</sup>	
Highest night minimum	13.1°C on 1 <sup>st</sup>	
Lowest minimum	6.4°C on 30 <sup>th</sup>	
Lowest grass minimum	-0.1°C on 4 <sup>th</sup>	
Wettest day	11.8 mm on 9 <sup>th</sup>	
Sunniest day	9.5 hours on 3 <sup>rd</sup>	

**A MILD AND DRY BUT RATHER CLOUDY MONTH**

**While, during most Septembers, we normally expect to see Atlantic depressions pass by in quick succession, this year the month was unusually anticyclonic. Though not often situated close to Shetland, the centres of high pressure were generally close enough either to keep fronts away or - those that did reach our shores - were often weak affairs. On a broad scale, high pressure - initially centred over Scandinavia - became more or less confined to the south as the month progressed. The result was that wind directions were often S or SE'ly at first, but became SW or W'ly later. Because of our peripheral position on the edge of the anticyclones, cloudy conditions often prevailed. However, Fair Isle, with 108.3 hours, was somewhat sunnier than Lerwick.**

**Only three depressions of note affected the British Isles during the month. The first tracked east across southern Britain, with little effect in the north. Another, just before mid-month, turned back into the Atlantic after approaching western Scotland. The third tracked east just to the north of Shetland on the last day of the month. However, its full significance only became apparent a few days later, as unseasonably early snow fell across parts of Shetland.**

A shallow area of low pressure lay across the north of Scotland during the first four days of the month. Initially there was a lot of moist air bringing heavy rain and murky conditions on the 1st. The 2nd was brighter and clearer with a mix of sunshine and showers, some heavy, prolonged and locally thundery. It then became mostly dry, with warm sunshine by day and cool, clear nights, resulting in the only grass frost of the month on the morning of the 4th.

The low moved away to the east on the 5th and a deep low developed off southwest Britain. While this low tracked slowly east across southern England as a filling feature on the 6th, an anticyclone over the Atlantic ridged northeast across Faeroe and the southern Norwegian Sea, resulting in strengthening NE'ly winds which brought a continuation of the mostly dry conditions, with well-broken cloud cover.

This eased during the 7th as the remains of the low moved out over the southern North Sea, backing NW'ly by the 8th as high pressure transferred into Scandinavia. As the high declined on the 9th, a SE'ly airflow began to freshen, as a deepening Atlantic low - running in towards northwest Scotland - pushed fronts northeast to bring heavy overnight rain to Shetland.

Strong SE'ly winds eased and veered S'ly for a time early on the 10th, as the filling low moved away and fronts cleared Shetland. However, S to SE'ly winds soon strengthened again as the next depression - rushing in off the Atlantic towards western Scotland - drove its fronts towards the Northern Isles. Just managing to reach

Shetland on the 11th, the fronts then became blocked by high pressure to the east. They remained slow-moving - though steadily weakening - close to Shetland for the next few days, bringing outbreaks of generally light rain together with some mist and low cloud. The fronts were eventually pushed clear as the intensifying Scandinavian anticyclone extended a ridge west across the northern North Sea. The ridge persisted for the next two days, with light winds then freshening on the 18th as it declined, and Atlantic fronts began to push in from the west.

However, as the equinox approached - a period that can often see the first significant gale of approaching winter - high pressure continued to dominate our weather. While one anticyclone to the east slipped south over the North Sea, another developed to the southwest of the British Isles. A mild SW'ly airflow covered northern Scotland between the 19th and 22nd, with Atlantic fronts close to Shetland. However the proximity of high pressure meant that these were fairly weak, and - apart from some patchy rain and occasional misty conditions - it remained mostly dry with some brightness. In fact, the second sunniest day of the month occurred on the 22nd, when Lerwick reported 9.1 hours of sunshine: a welcome relief in what was a virtually sunless period extending from the 11th to the 27th!

On the 23rd the anticyclone to the southwest drifted slowly northeast over Scotland, re-invigorating the waning Scandinavian high for a time as the two merged. High pressure to the east - maintaining a ridge southwest across the UK - then drifted south. Between the 24th and 27th the airflow was mainly SW'ly, with Atlantic fronts trailing around the edge of the high pressure again affecting the Northern Isles from time to time. This became quite a strong W'ly accompanied by heavy blustery showers on the 29th, as a depression, tracked east from Iceland and fronts crossed Shetland. Fair Isle reported a thunderstorm and hail during the afternoon. The 30th saw the strong W'ly winds veer to a cooler NW'ly, as the low moved east into Scandinavia.

#### **Dave Wheeler**

#### **Initial Statistical details for Scotland as a whole (1961-1990 average) for September:**

**Mean Temperature** – 11.1°C (0.6°C above average).

**Rainfall** – 105.8 mm (73% of average).

**Sunshine** – 81.7 hours (83% of average). Dullest September since 1985, when 80.8 hours were recorded.

#### **Data from the UK Met Office**