RAINFALL DISTRIBUTION IN NEW PROVIDENCE FOR 2006

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Introduction

Due to changes in the publication of the *Bahamas Journal of Science*, and its incarnation within the *Bahamas Naturalist*, the annual rainfall report for New Providence will now be posted on this website (`http://henge.bio.miami.edu/coastalecology/`). In due course the past reports and statistics will also be filed here, along with a selection of articles on the Bahamas by Neil Sealey and Kathleen Sullivan Sealey.

The advantages of a published hard copy are no longer what they were, and although many persons will prefer the traditional format, the attractions of a digital format have now become overwhelming for this type of data. This is especially so as meteorological records are in constant demand by researchers in other fields who need to know conditions during their research periods, and often historically as well. Having everything available on a single site, with download and printing options, is clearly an advantage.

In addition to the rainfall report, complete meteorological records on an hourly basis will be posted for all the years starting with 2000. These will be in the form of an Excel table.

Rainfall in 2006

Inches	Montagu	Sea Breeze	Airport	Coral Harbour
January	0.74	0.00	1.01	0.90
February	2.23	1.69	2.36	1.23
March	0.94	0.44	0.84	0.69
April	2.75	2.42	1.65	0.59
May	3.87	4.26	6.29	4.23
June	8.60	6.82	5.74	5.30
July	5.38	1.60	6.97	5.91
August	8.62	11.37	8.29	7.98
September	2.72	8.51	7.92	6.36
October	4.92	2.36	4.77	3.77
November	1.94	2.42	2.40	1.69
December	2.13	0.59	2.09	0.82
TOTAL	**44.84**	**42.48**	**50.33**	**39.47**

Totals for the four stations were fairly close together, and a bit below the long-term average. However while the Sea Breeze and Montagu stations were quite well matched on a monthly basis, and also close to last year's totals, Coral Harbour showed significantly lower rainfall for the second half of the year, ultimately leaving that location with some 10" less rainfall than the relatively close Airport station, which in turn was higher than the others.

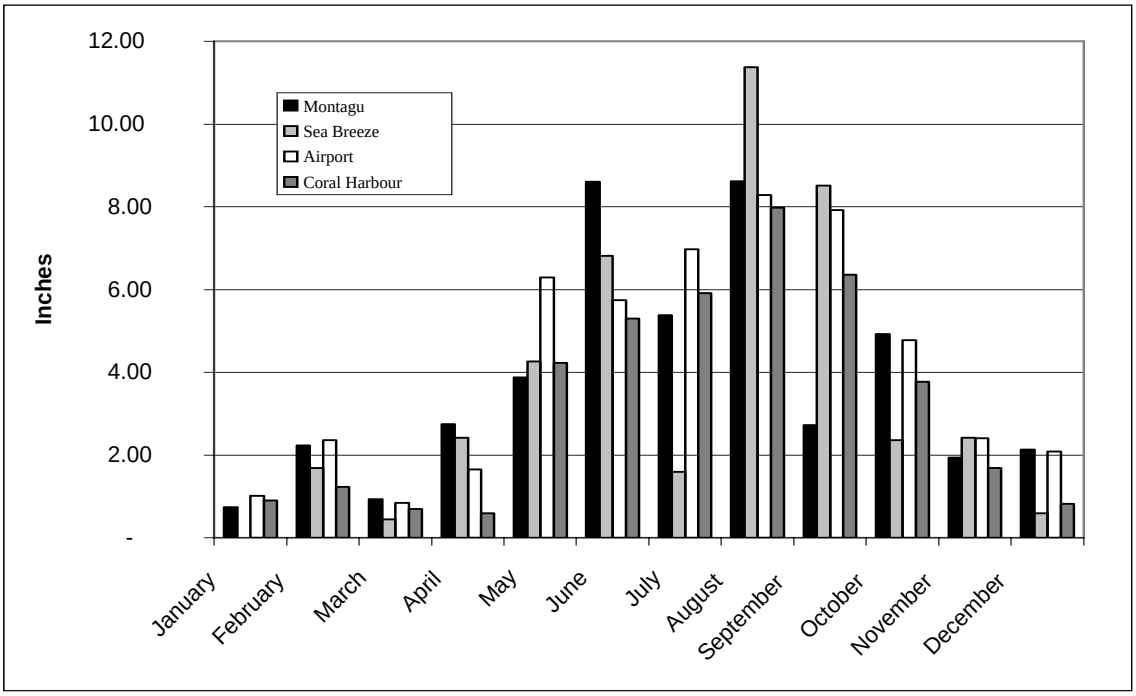

Figure 1. Rainfall totals for 2006 for all four stations on New Providence.

Figure 1 shows that the monthly rainfall distribution conformed to the typical 'dry winter wet summer' pattern. The midsummer minimum, which usually occurs in August, was, like 2005, more evident in July, but even so the Airport and Coral Harbour did not actually record less than for June. No hurricane or tropical storm activity was noted for the year so the rainfall was predominantly the result of normal frontal and convectional activity. Convectional storms in the summer can be judged responsible for the individual station discrepancies, such as the low for Sea Breeze in July; the low for Montagu in September; and the high for the Airport in May.

Montagu Heights and the other stations 2006

Table 1 shows the monthly totals for the four stations in 2006. The conventional wet/dry season is well displayed with a marked 6-month dry season from January through April plus November and December.

Variation among the stations was not exceptional, although Coral Harbour again showed up as the most divergent of the four stations. Every month for Coral Harbour was drier than for the Airport, with some seven months being an inch or more drier. Nevertheless compared with the other southern station, Sea Breeze, Coral Harbour was only 3" drier, so there is no reason to read too much into the discrepancy.

Summer:Winter Ratio

The ratio of summer to winter rain was at 3.9:1 and continues the trend of the last few years of being higher than normal, being driven mainly by the low rainfall for the winter months. However, the contrast has become progressively weaker, compared with 6.6:1 in 2004 and 5.1:1 in 2005. This pattern for the last three years tends to confirm the

general tendency to a more pronounced wet/dry season regime than had been seen in the 1990s.

Overall Trend

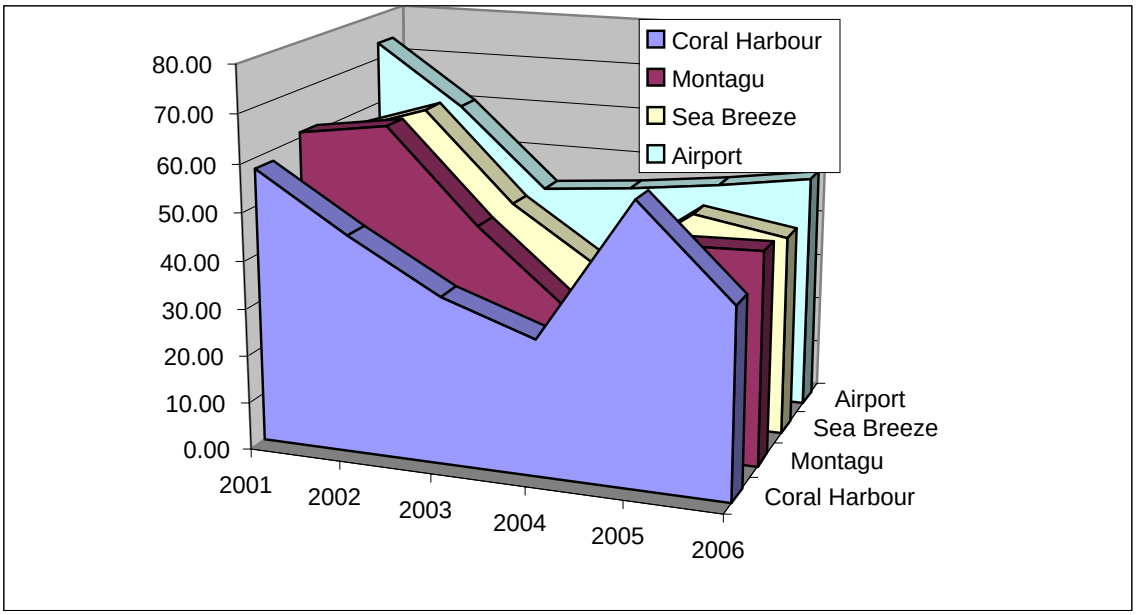

Figure 2. Comparison of rainfall totals for four stations for 2001 through 2006

Figure 2 shows the combined results for the four stations over a six-year period, and suggests a return to average rainfall totals highs of 2001 and 2002, and the low of 2004.

Acknowledgements
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