ANTIGUA AND BARBUDA MONTHLY AGROMETEOROLOGICAL BULLETIN

ANTIGUA AND BARBUDA METEOROLOGICAL SERVICE CLIMATE SECTION

ANNOUNCEMENTS

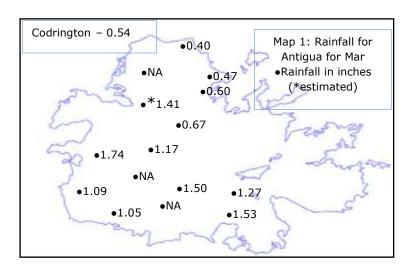
The Antigua and Barbuda Meteorological Service (ABMS) Climate Section will be taking part in Caribbean Climate Outlook Forum in St. Lucia early June; the Forum will be preceded by a technical workshop to develop capacity in the development and provision climate services. The ABMS Climate Section has started to publish a monthly newsletter to highlight recent weather and climate events, and the outlooks for the upcoming months. We continue to welcome feedbacks on this bulletin and our other products.

WEATHER AND CLIMATE SUMMARY IN BRIEF FOR ANTIGUA – MARCH 2015

March was very dry for Antigua. The rainfall average rainfall total for the month was 20.8 mm (0.82 in); this is the 15^{th} lowest on record. At the V. C. Bird International Airport, there was a record low two wet days (with ≥ 1 mm). This low number of wet days can only be expected to happen once in every 42 Marches, on average. The maximum 24-hour total was just 4 mm; the sixth lowest on record. With the low rainfall for the month, the drought has further reintensified to serious levels.

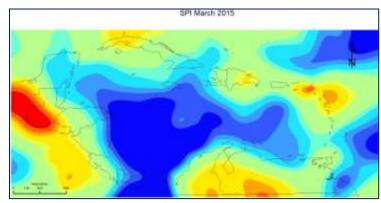
Night-time temperatures were once again above normal for the third consecutive month. The mean daily minimum (night-time) temperature was 23.3°C, tying 2007 for the sixth warmest on record. On the other hand, the mean daily maximum temperature of 28.3°C was below normal and the lowest since 2011. Meanwhile, the mean temperature was near normal - 25.5°C.

Meanwhile, the "season" January to March (JFM), had well below normal rainfall -90.4~mm (3.56 in), drier than JFM 2014 and the seventh driest on record. The temperature -25.5°C , was near normal. See map 1 for rainfall distribution.



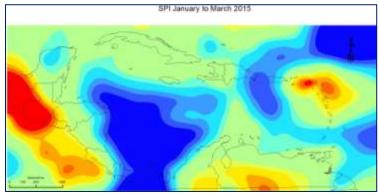
WEATHER AND CLIMATE SUMMARY IN BRIEF FOR THE CARIBBEAN – JANUARY TO MARCH

Mixed conditions existed in the eastern Caribbean and Guyana for the month. Trinidad, Tobago and St. Lucia were normal; Grenada and St. Vincent slightly wet; Barbados moderate to very wet; Dominica, Anguilla and St. Croix moderately dry...; St. Kitts slightly dry; St. Maarten extremely dry; and Guyana extremely wet in the north to normal in the east. Aruba was very wet but Puerto Rico normal. (SPI explanation).



Map 2: Standardised Precipitation Index for March

For [JFM], in the eastern Caribbean and Guyana, there is a clear distinction between the normal to below normal north and the normal to above normal south. Read more...



Map 3: Standardised Precipitation Index for JFM

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WEATHER AND CLIMATE OUTLOOKS FOR ANTIGUA

EXPERIMENTAL MONTHLY OUTLOOK - APRIL

Rainfall

Below normal rainfall is most likely i.e. less than **2.0** inches. Probabilistically, there is a

- 25% chance of above normal rainfall;
- 35% chance of near normal rainfall and
- 40% chance of below normal rainfall.

Temperature

Above normal temperature is most likely i.e. greater than **26.5°C**. Probabilistically, there is a

- 15% chance of above normal temperature;
- 35% chance of near normal temperature and
- **50%** chance of below normal temperature.

SEASONAL OUTLOOKS – APRIL TO JUNE

Rainfall

Near normal rainfall is most likely i.e. **7.1 to 10.4** inches. Probabilistically, there is a

- 25% chance of above normal rainfall;
- 40% chance of near normal rainfall and
- 35% chance of below normal rainfall.

Temperature

Above normal temperature is most likely i.e. greater than **27.4°C**. Probabilistically, there is a

- 45% chance of above normal temperature;
- 35% chance of near normal temperature and
- 20% chance of below normal temperature.

NATIONAL AGRICULTURAL SUMMARY

The ongoing drought has further intensified to serious levels. The rains of November had reduced it to slight intensity; however, since then it has been all down hill with no sustained respite in sight.

As dry as it has been, it could have been even worse if not for some unexpected heavy downpours on the night of March 31/April 1, amounting to over an inch in a few places. Up until then, the island average was less than 10 mm. This stemmed the worse but was only a drop in the bucket or reservoirs. Surface and ground water continues to dwindle, including ponds used by farmers. The Antigua Public Utility Authority (APUA) has indicated that a third surface water catchment, Hamilton, has fallen below extraction level. The two others below extraction levels are Big Creek and Break Knocks. Meanwhile, according to APUA, Potworks Dam, which

has a capacity of about a billion gallons, is around one-third full.

Compared to this time last year, farming conditions appear worse. The period January-March 2015 is about 20% drier than the same period last year. Farmers are having difficulty germinating some crops while some existing ones are wilting. However, for the time being, much of the drought impacts are being masked by desalinated water resources. Thus, the latest reports from extension officers are that while things are not the best, they are not as bad as the climate would suggest.

The reduced rainfall continues to allow for land preparations and the relatively easy control of pest and diseases. The dry weather also continues to impact negatively on the unwanted Giant African Snail, which has closed down some farms.

Climate smart agriculture emphasizes the need for water conservation and efficiency. This is especially so in times of rainfall deficits. Water efficiency by farmers can be improved by making the right decisions on crop selection, irrigation scheduling and methods and source of water.

Crops harvested during March included sweet potatoes, pumpkins, carrots, tomatoes and cotton. Crops planted included butternuts plus the first four mentioned above. The glut of pumpkins and carrots has come to an end, and there are few scarcities, according to extension officers. Crops in the field include tomatoes, cantaloupes, cabbages and butternut squashes (seen below).



The outlooks for rainfall are not encouraging: below to near normal for April, April-June and July-September. (See inserts on the left). For agricultural and other activities the 7-Day Forecast and the Hazardous Weather Outlook are recommended as useful planning tools.

Acknowledgements

Thanks to the CAMI Project and the Min. of Agriculture.

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