ANTIGUA AND BARBUDA MONTHLY AGROMETEOROLOGICAL BULLETIN

ANTIGUA AND BARBUDA METEOROLOGICAL SERVICE CLIMATE SECTION

ANNOUNCEMENTS

The Antigua and Barbuda Meteorological Service (ABMS) Climate Section is looking forward to participating in the ClimPACT workshop scheduled for February 15-19 at CIMH, Barbados. The focus will be on developing climate indices for sector-specific applications. Additionally, we will be publishing our first State of the Antigua and Barbuda Climate report by April 2016. We welcome feedback on this product and other related matters.

NATIONAL AGRICULTURAL SUMMARY - DEC 2015

According to extension officers of the Ministry of Agriculture (MOA), most, if not all, farmers have completed land preparation activities. Conditions across the major growing regions were generally good throughout December. Soil moisture levels remained adequate thanks to the periodic showers that fell during the Month.

Producers across the island are still relying on government supplied water from the state owned Antigua Public Utilities Authority (APUA). In an interview with APUA's water production manager, water supply figures remain unchanged for the month. Desalination accounted for 92% of production, while 8% was obtained from groundwater sources. Furthermore, as a result of the limited rainfall, all surface catchments are still dry or below extraction levels. As stated previously, the government has acquired a new desalination plant that is now expected to come online later this month. Additionally, according to the recently aired Throne Speech, the government plans to install another reverse osmosis plant to further reduce the potable water deficit. This comes as good news for not only the public, but also for farmers in light of the current water woes.

Despite the below normal rainfall, some farmers moved ahead with their planting campaign. Nevertheless, others are keeping a close eye on the weather so as to determine whether or not they will move ahead with sowing activities. At present, the seeding campaign consists of sweet potatoes, cucumbers, tomatoes, cassavas and onions. Meanwhile, the harvest is ongoing for pumpkins, okras, melons and table squashes. It is important to note that at this time, there are no gluts or scarcities on the market. However, the Chief Extension Officer has indicated that the high temperatures during the previous months had negatively impacted the development of crops such as tomatoes and sweet peppers. Therefore, supermarket prices are high for tomatoes and sweet peppers. Normal market price for both is around \$3.00-3.50 per pound, but are currently selling at \$5.00-\$8.00 per pound.

Reportedly, there are a lot of worms and butterflies being found on farms across the island. Therefore, farmers have been spending more money in order to buy pesticides, so as to control or minimize crop loss. One extension officer was of the view that any significant losses would have to be attributed to poor field management.

The plant protection division reported that there were no new infestation sites in December for the Giant African Snail. However, they did note an increase in population size within the areas currently under threat, which to date totals around 16.



The livestock division has stated that currently, the available water is not sufficient enough to maintain herds. Many ponds are remain dry or are fast approaching dry levels. However, there has been a noted improvement in feed for animals. Due to this animals have regained some lost weight. Notwithstanding, culling is being advocated to maximize profits before the animals begin to shed weight again in response to the dry season.

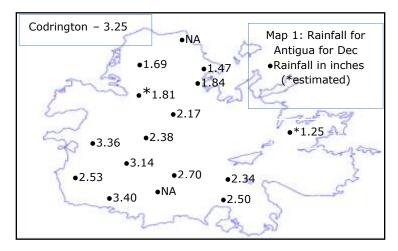
WEATHER SUMMARY IN BRIEF FOR ANTIGUA - DEC 2015

The average temperature recorded at the V. C Bird International Airport (VCBIA) during December was 26.4°C, the fifth warmest dating back to 1971. Additionally, the mean daily maximum temperature measured – 29.0 °C, was the seventh highest since 1969, tying with 2005, 2000, 1994 and

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1992. The daily minimum temperature -24.0 °C, was well above normal, ranking as the second warmest on record. The absolute minimum and maximum temperatures were 22.3 °C and 29.7 °C respectively.

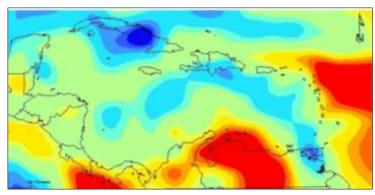
Rainfall on average across the island for the month was well below normal, measuring 49.0 mm. So far, this has been the 10th driest December dating back to 1928 and the driest since 2005. Despite this, it was the fourth wettest month of 2015. The number of wet days (days with at least one mm) and heavy rainfall days (days with at least 10 mm) recorded at the VCBIA were both below normal.



Moreover, the limited rainfall for the month has pushed the drought back to severe levels. October-December is now the ninth driest such period on record and also the driest since 2001.

WEATHER SUMMARY IN BRIEF FOR THE REGION – DEC 2015

With the exceptions of Trinidad that was moderately wet and Grenada slightly wet, the rainfall in islands of the eastern Caribbean was predominantly normal to below normal. Tobago, St. Vincent, Barbados, St. Kitts and St. Croix were normal; St. Lucia and Anguilla moderately dry; Dominica and St. Maarten slightly dry (SPI explanation). Read more...



Map 2: Standardised Precipitation Index (SPI) for December

WEATHER AND CLIMATE OUTLOOKS FOR ANTIGUA

EXPERIMENTAL MONTHLY OUTLOOK – JANUARY

Rainfall

Equal chance of below, near or above normal rainfall. Normal: **50.8-71.1 mm** (2.0-2.8 in). Probabilistically:

- 33% chance of above normal rainfall;
- 33% chance of near normal rainfall and
- 33% chance of below normal rainfall.

Temperature

Equal chance of below, near or above normal temp. Normal: **25.2-25.6°C** (77.4-78.1 °F) Probabilistically:

- 33% chance of above normal temperature;
- 33% chance of near normal temperature and
- **33%** chance of below normal temperature.

SEASONAL OUTLOOKS - JANUARY TO MARCH

Rainfall

Below to near normal rainfall is most likely i.e. less than **198.1 mm** (7.8 in). Probabilistically, there is a

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

Temperature

Above normal temperature is most likely i.e. greater than **25.5°C** (77.9 °F). Probabilistically, there is a

- 55% chance of above normal temperature;
- 30% chance of near normal temperature and
- 15% chance of below normal temperature.

Rainfall and temperature outlooks for the next three months remain less than desirable for agriculture. Below normal rainfall and above normal temperature remain most likely (See inserts above). However, the period April to June is likely to have above to near normal rainfall, but the temperature will likely be above normal. Meanwhile, for January, there are equal chances of below, near or above normal rainfall. For short-term agricultural planning, the 7-Day Forecast and Hazardous Weather Outlook are recommended tools.

Acknowledgements

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