



# MONTHLY AGRO-METEOROLOGICAL BULLETIN

## OVERVIEW OF CONDITIONS FOR FEBRUARY

Abnormally dry to normal conditions were experienced in Dominica for the month of February 2016. The Atlantic High Pressure System dominated the weather conditions during the month. Weak unstable conditions generated by trough systems contributed to most of the monthly rainfall total.

**Canefield Airport:** Normal rainfall total was recorded at the Canefield Airport. A total of 58.3mm was recorded and this is approximately 94% of the monthly mean. The highest daily rainfall total of 14.7mm was recorded on the 17<sup>th</sup>. There were 10 rainfall days and that is 2 days below the normal. There was a 7 day dry spell during the first half of the month.

**Douglas-Charles:** Normal rainfall total was also recorded at the Douglas-Charles Airport. A total of 102.3 mm was recorded for the month. The highest daily total was 26.2mm and was recorded on the 18<sup>th</sup>. There were 17 rainfall days (normal) with no significant dry spell.

Parameter	Canefield Airport	Douglas-Charles Airport
Rainfall Total normal	58.3mm 45.8 to 81.7mm	102.3mm 77.2 to 106.7mm
Wet Days (≥1.0mm)	10 (below normal)	17 ( above normal)
Temperature 30 year average	27.0°C 26.4°C	26.3°C 25.9°C
Maximum Temperature	32.2°C (28th)	29.3°C (6th)
Minimum Temperature	20.3°C (4th, 5th)	18.7°C (5th)
Relative Humidity	66%	76%
Maximum wind gust	69km/h	44km/h
Average daily sunshine hours	-	8hrs

Table 1 Monthly weather parameters

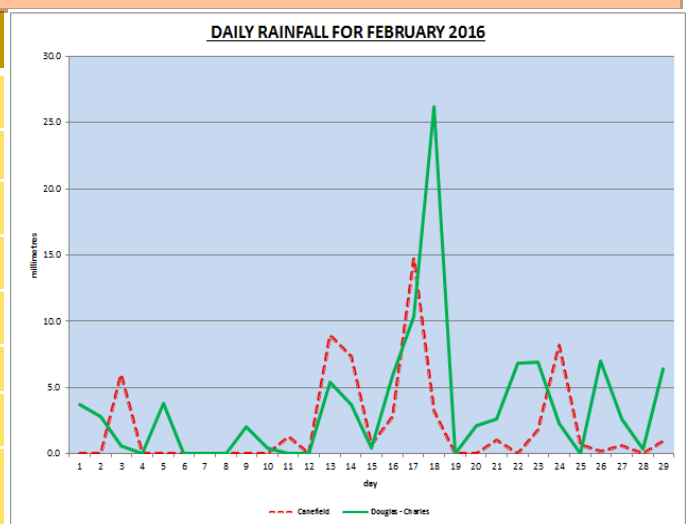
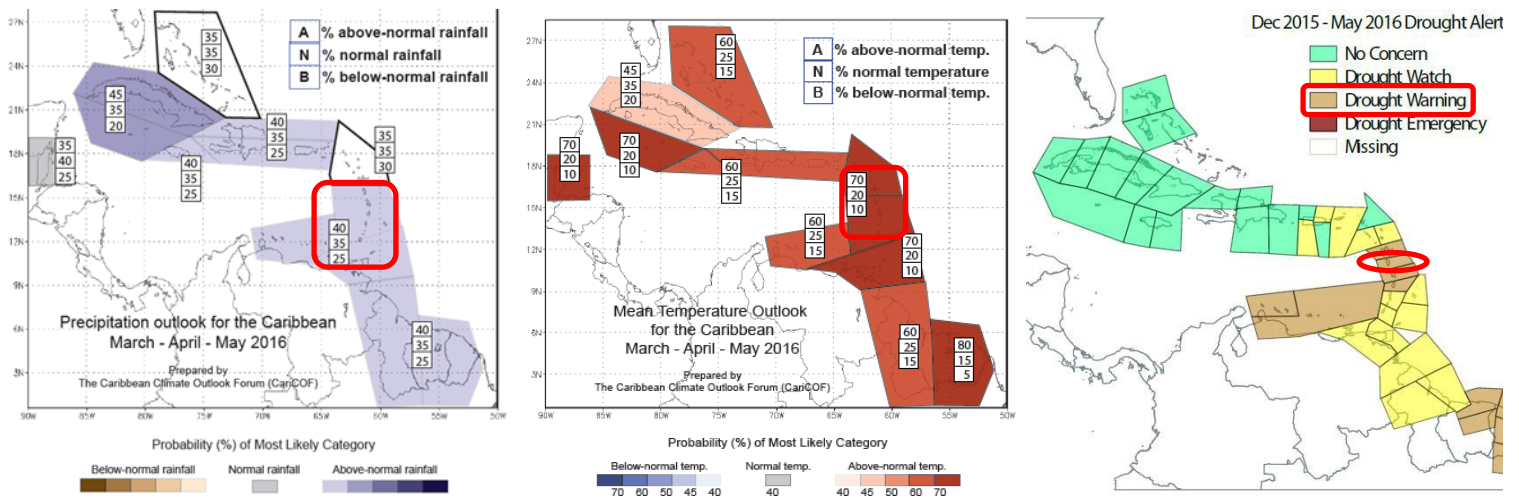


Figure 1 Daily Rainfall At Canefield and Douglas-Charles Airport

## FARMING COMMUNITY

- ◆ The weather was favourable for agricultural activities such as land preparation, fertilizing, weeding, transplanting, pesticide application and harvesting of crops for the month of February. Farmers agreed that this was a time to take advantage of the weather and undertake the necessary activities to bring the farm to a more productive level. In general the weather on the coast was relatively dry however in the interior rain showers were experienced.
- ◆ Farmers continued the establishment of root crops such as white potatoes, dasheen, tannia, yams and sweet potatoes. Vegetable establishment is ongoing with a full range of vegetable crops to include: beets, carrots, lettuce, tomato, cabbage and culinary herbs. Tree crops such as: citrus, avocado, banana and plantain are also being established across the agriculture communities.
- ◆ Majority of crops are being harvested though not in full bloom. Vegetables and root crops especially sweet potatoes, dasheen, plantains and bananas are available to meet local demand. Other crops such as: Avocados, breadfruit and grapefruit are also available in limited quantities.
- ◆ White potato crop establishment is coming to an end. Over a hundred farmers established more than 300 acres of potatoes for this planting season. The crop thus far experienced approximately 90 percent germination rate in the field owing to favourable weather condition. Some plots have started to flower. Wilting and fungal issues have also been observed.
- ◆ The livestock department conducted a bio-security workshop for Avian Influenza. The small ruminants and rabbit farmers continue to employ cut and carry foraging system for their animals and to build strong wire fencing animal houses. In the apiculture sector it was observed that the bees were not foraging aggressively during low temperatures for the past two to three months and hence, nutritional supplements would have been an added advantage for the bees. During the current month bees have increased their foraging activity.
- ◆ Activities to control pest and disease are ongoing with emphasis being placed on the control of the Black Sigatoka Disease, Giant African snail, Fruit flies and Scale insects. The Scale insects surveillance continued during the month and the natural enemy has been observed in all areas where the scale insect is present. The quarantine department continued the multiplication and release of natural enemies to combat the Scale insects. There were reports of pest and disease infestation on vegetables. White fly and Diamondback moth was observed in certain vegetables. Stink bug was observed in the central region in the Irish and Sweet potato crop. Wilting was also observed. Research work is ongoing in a Dasheen germplasm plot at the Laplaine Agriculture Station.

**REGIONAL OVERVIEW ON SEASONAL FORECASTS**



- ◆ Below to normal rainfall amount is expected to continue until April. A transition to above to normal is anticipated as El Niño slowly weakens and is expected to return to normal conditions between June to August 2016, with increasing chances of La Niña conditions before the end of 2016.
- ◆ Above to normal, increasingly uncomfortable temperatures is expected throughout the region.
- ◆ A short-term drought warning alert has been issued for Dominica. This means that drought like conditions are evolving. Continue to protect resources. Adhere to established water conservation practices and recycle water.
- ◆ The wet season may start abruptly up to one month earlier than usual (April to May), with high intensity rainfall. Dry compacted and damaged soils after the dry season may not readily absorb the high intensity rainfall amount and may lead to flash floods.

**FARMER'S OUTLOOK**

Young established crops will require sufficient water for survival during the dry season especially the vegetables seedlings.

Livestock farmers must ensure that quality water is provided to the animals during the upcoming months.

The dry season has started and water conservation techniques should be applied on farms. In spite of this farmers must also



be aware of the fight against the Aedes aegypti mosquito responsible for transmitting the Zika virus. We will use this opportunity to sensitize farmers on some basic facts and what they need to do to safeguard and mitigate themselves from becoming a victim.

On a daily basis sanitary measures must be practiced in farm houses. The capacity of mosquitoes and their resistance to insecticides threatens the control of diseases that they carry such as Zika. Until alternative control tools are implemented, characterizing resistance mechanisms is crucial for managing resistance in natural populations. Insecticide biodegradation by detoxification enzymes is a common resistance mechanism.

The mosquito breeds in clean water and bites during daytime. The Aedes aegypti mosquito breeds in unused containers like: coolers, drums, barrels, pots, plant saucers, overhead tanks, open cement tanks, tyres, plastic glasses, bottles, coconut shells, curing tanks, mortar and pestle or anything big or small which will store water.



**Prevent breeding of mosquitoes by:**

- Covering all water storage containers with tight lids.
- Emptying and drying water storage containers at least once a week before refilling.
- Disposing of and destroying all junk materials, unused tyres, coconut shells and flower pots.
- Wearing full sleeve clothing and using mosquito nets while sleeping.

**CLIMATE SUMMARY FOR MARCH**

Parameter	Canefield Airport	Douglas-Charles Airport
Rainfall normal	31.6 to 56.0mm	74.2 to 130.3mm
-highest total	129.2mm (2004)	317.4mm (1995)
-lowest total	5.5mm (2005)	27.7mm (1994)
Temperature	26.9°C	26.4°C
-maximum	34.4°C (2010)	32.3°C (2010)
-minimum	18.1°C (2009)	17.2°C (2000)
Chance of 5 day dry spell	100%	65%
Chance of 10 day dry spell	71%	26%

☾ LQ: 1st & 31st   ● NM: 9th   ● FQ: 15th   ○ FM: 23rd

Agromet bulletins from across the region can be accessed via [http://rcc.cimh.edu.bb/climate-bulletins/agriculture/http://63.175.159.26/cami/regional\\_bulletin.html](http://rcc.cimh.edu.bb/climate-bulletins/agriculture/http://63.175.159.26/cami/regional_bulletin.html).

This bulletin is prepared by the Dominica Meteorological Service with support from the CAMI project and the Ministry of Agriculture. Feedback on this bulletin should be forwarded to [metoffice@cwdom.dm](mailto:metoffice@cwdom.dm) or [aictudoa@gmail.com](mailto:aictudoa@gmail.com). Tele: 767 445 7878, 767 449 1990. Website: [www.weather.gov.dm](http://www.weather.gov.dm) Hotline: 447 5555