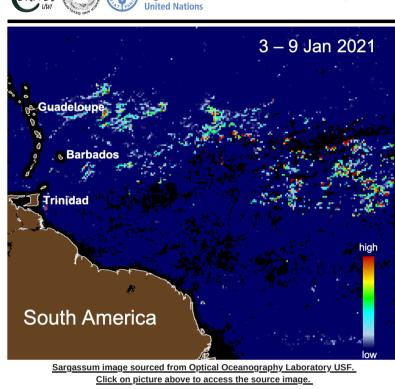
# SARGASSUM

### SUB-REGIONAL OUTLOOK BULLETIN

JAN 2021 | VOL I | ISSUE 8



Food and Agriculture

Organization of the

The map above is a satellite image processed to show sargassum abundance over a 7-day period. Warm colours represent high sargassum abundance. **Sa**rgassum **W**atch **S**ystem (**SaWS**) website: https://optics.marine.usf.edu/projects/saws.html

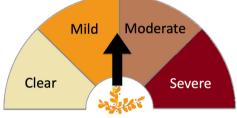
### SARGASSUM INFLUX EVENTS WILL BE MODERATE TO SEVERE OVER THE NEXT 3+ MONTHS (JAN - APRIL 2021)

CARIBBEAN

Federal Ministry for the Environment and Nuclear Safety

**KFW** 

- The Eastern Caribbean islands saw mild sargassum influxes at the end of 2020. (Click here to view photos)
- The level of sargassum arriving now has increased slightly.
- There is 150% more sargassum visible out in the Atlantic than this time last year. However, this is still below 2018 levels, the worst year to date.



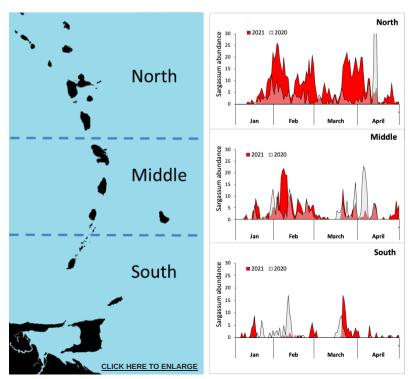
Sargassum abundance intensity level (based on image 3 - 9 Jan 2021)

# **CURRENT OUTLOOK (JANUARY-APRIL 2021)**

NOTE: New satellite imagery indicates much higher levels of sargassum than was predicted by the previous forecast.

The islands of the Eastern Caribbean can expect moderate to severe sargassum influxes over the next 3+ months (red), especially so for the northern islands, compared with the same period in 2020 (grey).

- Northern islands are set to receive moderate to severe influxes over the next 3 months with some reprieve in early March.
- Middle islands will experience moderate influxes from the end of January through early March with periodic influxes thereafter.
- In contrast, southern islands are expected to remain largely clear with a spike in late March.



# IMPLICATIONS FOR THE TOURISM SECTOR

- Stakeholders in the tourism industry can expect more-orless continuous mild to moderate sargassum influxes over the next few months in the middle and southern islands, with an ease at the beginning of April. Islands in the northern part of the island chain will be hard hit in the first 3 months.
- Clean up operations will likely put an extra strain on resources adding to the current COVID-19 challenges.

# IMPLICATIONS FOR THE FISHERIES SECTOR

- The traditional pelagic fishing season got off to an unexpected slow start given the absence of sargassum. There were moderate landings of flyingfish and dolphinfish, with some juveniles being caught.
- Consumers can expect an increase in the availability of almaco jacks (amberfish) in the coming months given the current sargassum forecast.
- Fishers should remain vigilant at sea, particularly in the north-east where they are likely to encounter large sargassum mats.
- Fisherfolk will likely need to keep clearing their windward landing sites through much of the first quarter of 2021

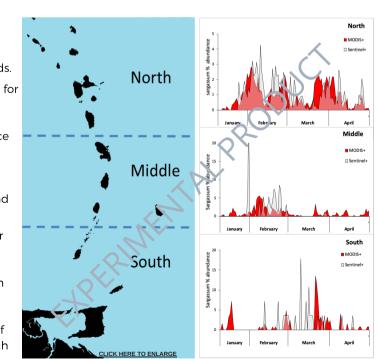
# **EXPERIMENTAL PREDICTION PRODUCT**

The prediction graph below illustrates a comparison of 3+ month forecasts using a *relative index* of sargassum from processed satellite images by SaWS (USF/MODIS+) and SAMtool (CLS/Sentinel+). Close overlap of the two lines on any one graph indicates that the predictions are similar between the two datasets.

The forecast is remarkably similar for the northern islands.

The prediction for the middle islands shows some difference with only Sentinel+ predicting a spike at the end of January.

The outlook for the southern islands differs quite a bit with Sentinel+ showing an earlier arrival of sargassum each month.



### **USEFUL RESOURCES**

Click on the images and titles for more information



**BGI-SAMS Project Announcement** 



Sargassum Watch (NOAA) Data collecting tools (English and Spanish) 21 - 22 January 2021 | Online

<u>Upcoming Webinar: Sargassum Watch</u> (NOAA) Data Collecting tools

### LATEST PUBLICATIONS

Click on the titles below to access articles

Pelagic Sargassum Prediction and Marine Connectivity in the Tropical Atlantic (Johnson et al. 2020)

A NEMO-based model of Sargassum distribution in the Tropical Atlantic (Jouanno et al. 2020)

Sargassum distribution model based on the NEMO ocean modelling platform (Jouanno and Benshila 2020 )

In situ observations and modelling revealed environmental factors favouring occurrence of Vibrio in microbiome of the pelagic sargassum responsible for strandings (Michotey et al. 2020)

Massive influx of pelagic Sargassum spp. on the coasts of the Mexican Caribbean 2014-2020: challenges and opportunities (Chávez et al. 2020)

## SUBSCRIBE TO SARGNET LISTSERV (CLICK HERE)

Acknowledgement: The development of this information product has benefited from the generous support of the Food and Agriculture (FAO) / Global Environment Fund (GEF) project 'Climate Change Adaption in the Eastern Caribbean Fisheries Sector' (CC4FISH), and the Caribbean Biodiversity Fund (CBF) project 'Adapting to a new reality: managing responses to influxes of sargassum seawed in the Eastern Caribbean (SargAdapt), co-financed by the International Climate Initiative (IKI) of the German Federal Ministry for Environment, Nature Conservation, and Nuclear Safety through KMV. Disclaimer: The information bulletin is meant to provide a general outlook of current sargassum abundance and the likelihood of future sargassum influx events for the Eastern Caribbean. By no means should it be used for commercial purpose, or for predicting the arrival of an influx event for a specific location or beach. We make no warranties, either expressed or implied, concerning the accuracy, completeness, reliability or suitability of said information. The bulletin may be freely used and distributed by the public with appropriate acknowledgement of its source but shall not be modified in content and then presented as original material. We take no responsibility for improper use or interpretation of the bulletin.