



# Communicating Sargassum Forecasts

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24/10/2019



A vertical strip on the left side of the slide shows a close-up of Sargassum seaweed. The seaweed is a mix of brown and yellowish-green, with many small, feathery structures. It is set against a clear, bright blue background, likely the sky or water surface.

# Sargassum influxes

- Arrival of influxes extremely variable
- Complicates development of viable uses
- Makes planning very difficult
- Very disruptive to tourism, fisheries and health sectors

The development and communication of reliable medium-term forecasts of significant sargassum influx arrivals is **critical!**

# What's available?

## Sargassum prediction products:

- SaWS Outlook Bulletin from USF (3-months)
- NOAA Sargassum Inundation Report (weekly)
- SEAS program from TAMUG (8-days)
- Other experimental products under development (e.g. CLS )

### Current Constraints

- Products not widely known
- Difficult to interpret for non-scientists
- Predictions based on visual best-guess with some use of currents and wind





# Sub-Regional Outlook Bulletin

## Design Criteria

- ✓ Target audiences: Tourism businesses, policy makers, fisheries managers, fisherfolk
- ✓ Easily accessible
- ✓ Simplify scientific jargon so that stakeholders can understand
- ✓ Sargassum abundance intensity-level
- ✓ 3-month outlook
- ✓ Implications to sectors
- ✓ Links to useful resources



# Sub-Regional Outlook Bulletin

## Zero draft tested

- ✓ At FAO-UWI Sargassum Symposium 2018, at GCFI 2018, and local fishers
- ✓ Feedback was very positive
- ✓ Reiterated need to keep language simple
- ✓ Preferred delivery as 'active' pdf by email
- ✓ Want further development of embedded interactive media
- ✓ Want a chance to contribute through Citizen science reporting

# Screen shots of trial 1<sup>st</sup> issue

## SARGASSUM

SUB-REGIONAL OUTLOOK BULLETIN



CC4FISH

OCTOBER 2019 | VOL 1 | ISSUE 1

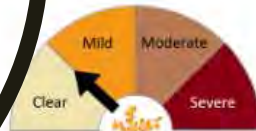


Sargassum image sourced from Optical Oceanography Laboratory USF. Click on picture above to access the source image.

The map above is a satellite image processed to show sargassum abundance over a 7-day period. Warm colours represent high sargassum abundance.

### SARGASSUM INFLUX EVENTS WILL REMAIN MINIMAL OVER THE NEXT THREE MONTHS (OCT-DEC 2019)

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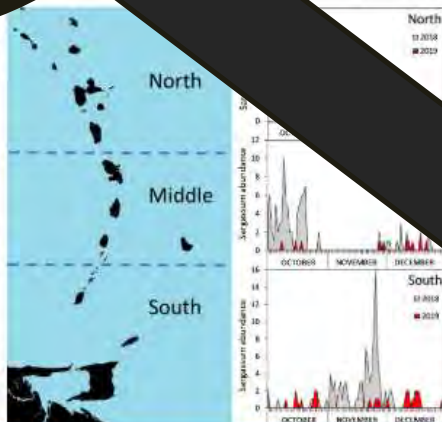


Sargassum abundance intensity level 30 September 2019)

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- Southern islands are likely to remain relatively free of sargassum to year end especially during early November.



### IMPLICATIONS FOR THE TOURISM SECTOR

- The decrease in sargassum influx events is welcomed at the start of the 2019 tourism high season (December - April).
- Beaches and bathing areas should remain relatively clear of sargassum.
- Hotels and other tourism businesses should stay tuned for the next issue!

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- Fisherfolk and fisheries management authorities should stay tuned for the next issue!

### SPOTLIGHT ON SARGASSUM INNOVATION

In Barbados, the grabs used to load sugar cane onto trucks have proven effective at picking up sargassum without removing sand from beaches.



Click here to watch the video

### FOR MORE INFORMATION:



Scan for more useful resources

### USEFUL RESOURCES



Click on the titles below to download resources

Best practices handbook for Caribbean fishers coping with sargassum

GCFI Sargassum Influx Response Poster

CHTA/CAST- Sargassum: A Resource Guide for the Caribbean

CERMES/GCFI/SPAW-RAC Sargassum Management Brief

CRFM Model Protocol for Management of Sargassum Seaweed

### LATEST PUBLICATIONS

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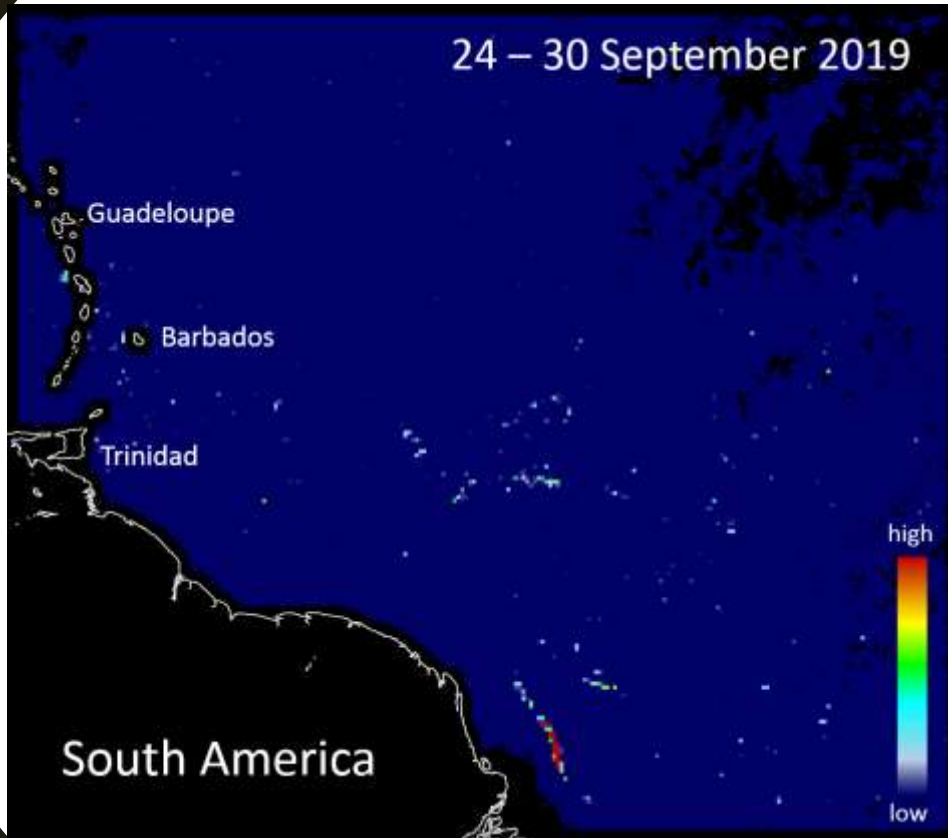
Sarg' Expo (23-26 Oct 2019)  
GCFI Conference (4-8 Nov 2019)

**SUBSCRIBE TO SARGNET LISTSERV (CLICK HERE)**

**REPORT SARGASSUM STRANDINGS HERE (CLICK HERE)**

# Screen shots of trial 1<sup>st</sup> issue

- 7-day composite image from USF
- Annotated for easier interpretation
- Use as the base image for our 3-month outlook predictions
- Embedded link to source image



- Mid...
- Southern islands...

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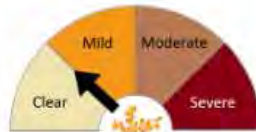


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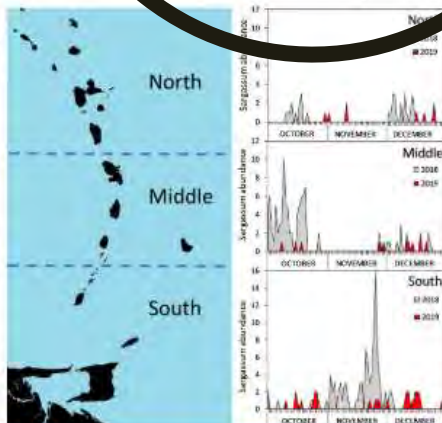


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Cropal Bay Barbados. Click here to watch.

### FOR MORE INFORMATION



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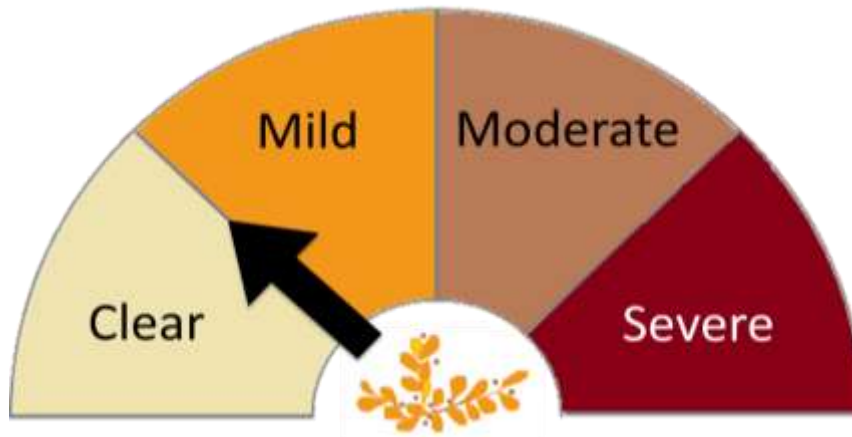
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# Screen shots of trial issue

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Sargassum intensity gauge

- Current status 'intensity gauge' is qualitative
- Based on visual interpretation and past experience
- Quantitative gauge under development

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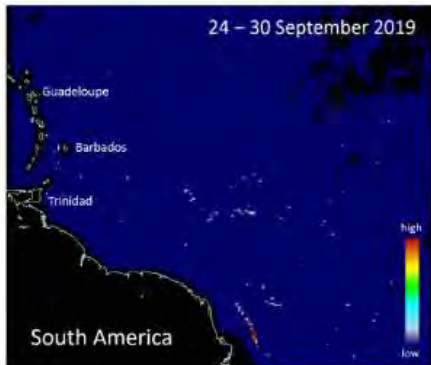
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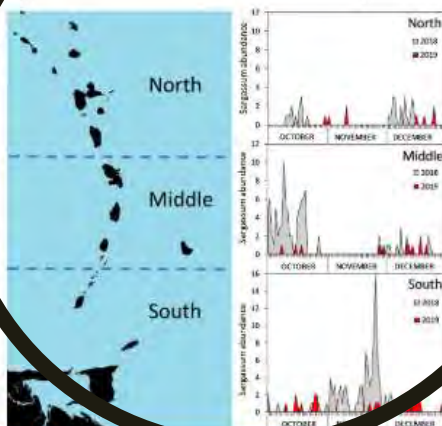


Sargassum abundance intensity model (24-30 September 2019)

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In Barbados, a company is using sugar cane tops to create a biodegradable material for picking up sargassum from beaches.



Click here to watch the video

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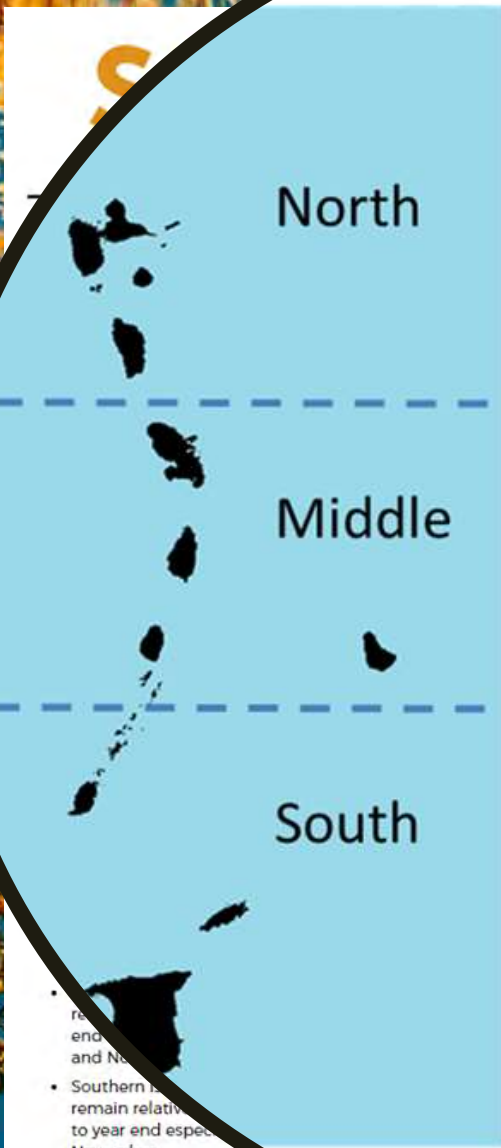
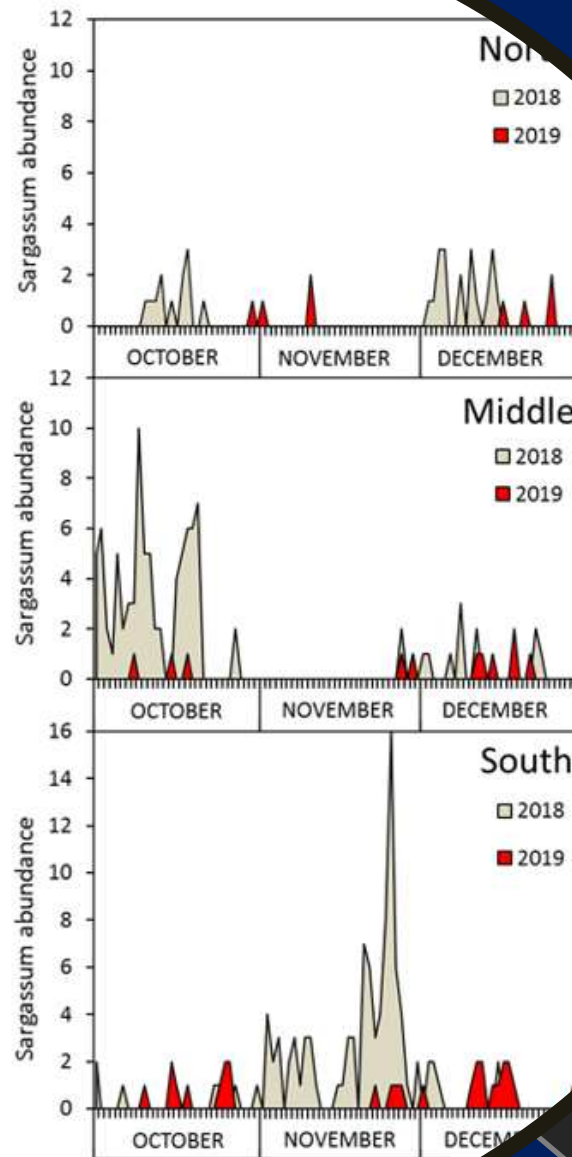
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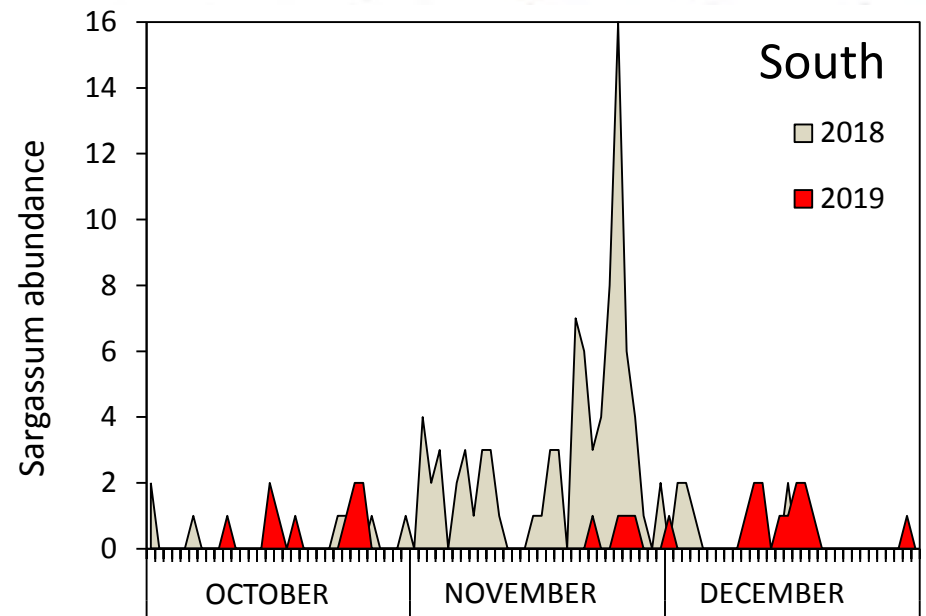
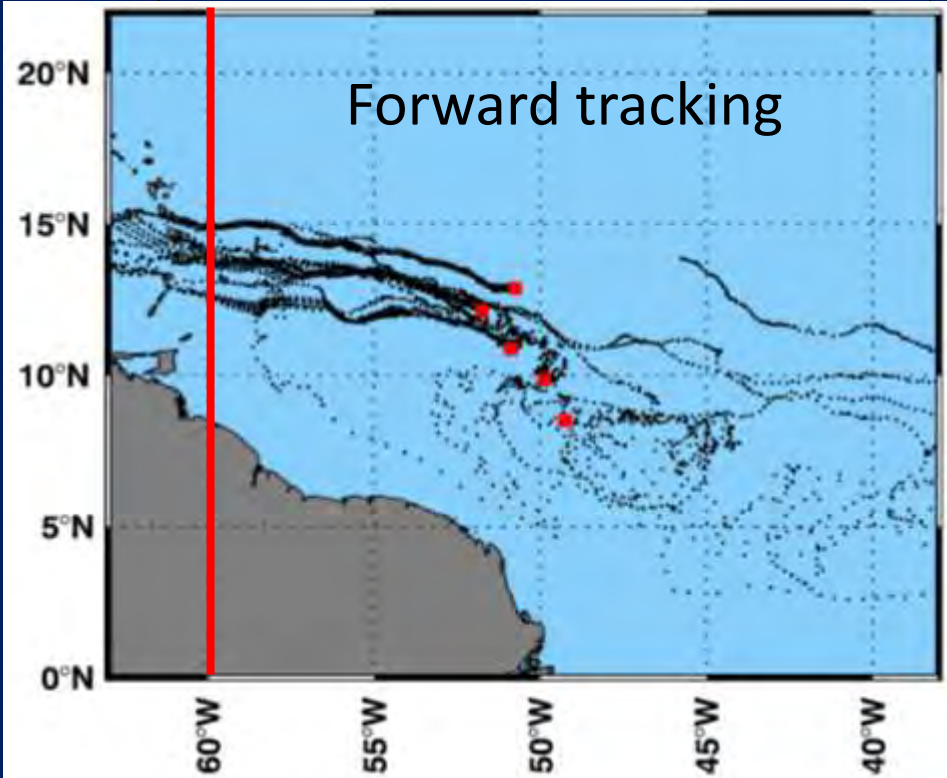
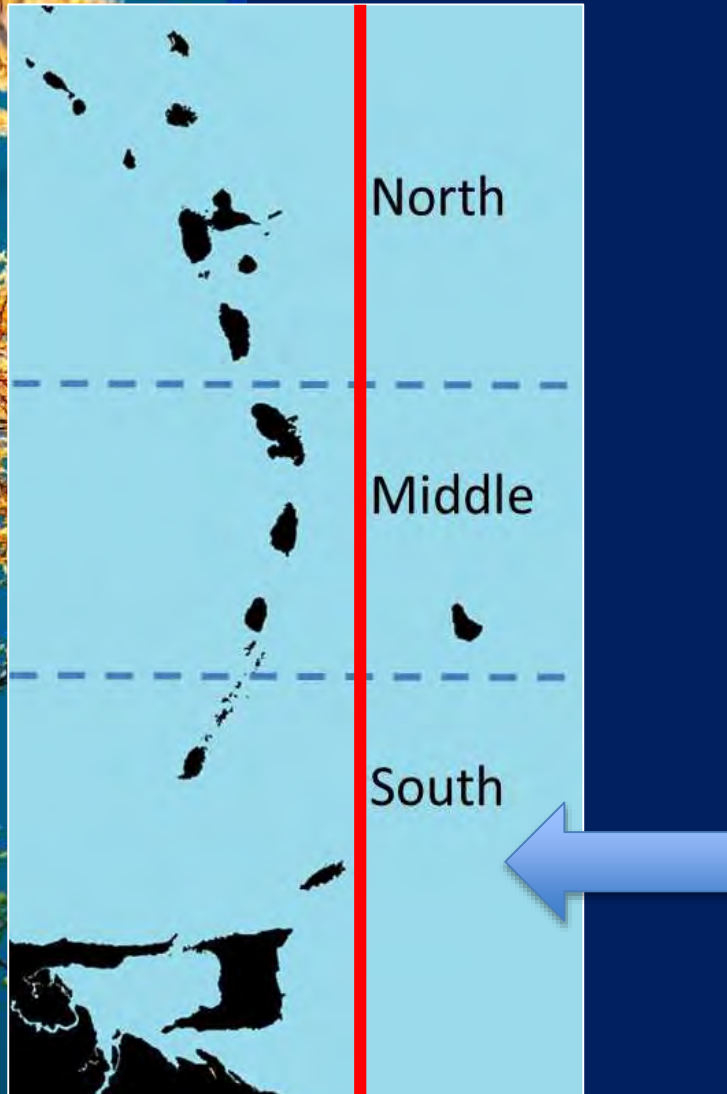
**REPORT SARGASSUM STRANDINGS HERE (CLICK HERE)**

# Outlook (3-months)

- Quantitative
- Based on 10-yr climatology of current models
- Gives comparison with last year
- Short narrative for each island group



# Outlook (3-months)



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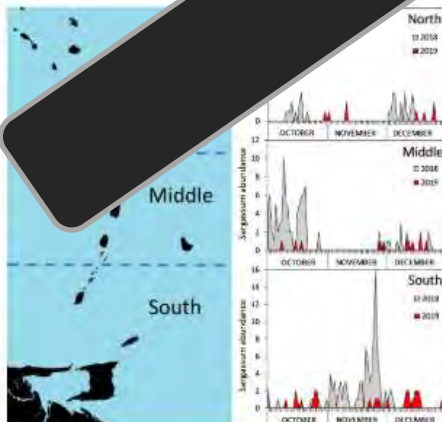


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### FOCUS ON SARGASSUM INNOVATION

Robots, the grabs used to load sugar cane onto ships have proven effective at picking up sargassum without removing sand from beaches.



Click here to watch the video

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CRFM Model Protocol for Management of Sargassum S



# Embedded links

## Responding to a sargassum influx

If sargassum appears on your beach, what you do next can be good or bad for the beach and business. Important lessons have been learned so far.

### Here's what you need to know

Sargassum is a natural seaweed that floats in the Atlantic Ocean. It's an important home for marine life, like fish and sea turtles. It's a problem only when it comes ashore in massive amounts. A complaint is the smell of rotten egg gas as well sargassum decomposes. There are potential health risks at high gas concentrations.

### What should you do?

**Communication is key!**  
Inform beach users about sargassum - manage their expectations.  
Direct beach users to unaffected or clean beaches.  
Agree how much sargassum justifies cleaning.  
Determine which beaches will be cleaned.  
Join with partners and share the job.  
Organise wildlife partners to inspect for stranded sea creatures like sea turtle hatchlings, cormorants and release them with some sargassum into offshore currents.  
Leave some sargassum for beach nourishment.  
Keep in touch with local environmental agencies as forecasting models are in development.

### Take care!

These actions cause serious harm to the beach.

- 1 Constant beach grooming
- 2 Removing sand from the beach or dunes
- 3 Heavy machinery used carelessly
- 4 Clearing or trampling beach vegetation
- 5 Driving above the high water mark and through sand dunes
- 6 Driving over sea turtle nests
- 7 Clearing debris or rubble - Last item check for signs of wildlife before you start cleaning.

### If my beach looks like this...

#### No action required on this beach

Leave the sargassum alone - let nature take its course. Be patient. A lot will wash away or get buried again and buried - it will benefit your beach and save you money and effort.

#### Taking action?

Manual raking is the approach to take. It's direct, low cost and environmentally friendly. Get communities involved in these beach clean-ups. Run educational campaigns for sea users. Run educational campaigns for sea users. Separate plastic pollution from sargassum for disposal. Transport using preferential routes, for disposal. Transport using preferential routes, for disposal. Separate plastic pollution from sargassum for disposal. Transport using preferential routes, for disposal.

#### Work with partners and plan a mechanical response

Take a multi-stage approach - remove topsoil layers of sargassum with machinery, without trampling the sand, then rake manually or run mechanical beach raking equipment. Clean high water mark areas first and leave other beaches for future to clean. Remove the sargassum as soon as possible after arrival to avoid some accumulation.

### Do's & Don'ts

#### How do we DISPOSE of sargassum?

- Use as mulch or compost - wash out salt first.
- Some sites are being developed - like bio-methane and bio-fuel.
- Sargassum is not suitable for human consumption.

#### REMOVAL from shallow water?

Sargassum is heavy when wet. Removal from close to shore may prevent sargassum from drifting in the water. Consider a horse drawn trap to collect sargassum in suitable sea conditions as an environmentally friendly removal option. Different methods have been tried but are labour intensive and costly like booms, barges, pumps. Results are mixed - stability problems, soil-souring issues and unlicensed by-catch of marine life.

**Do's:** Use same route on and off the beach; Consider public safety; Supervise use of machinery; Machines with a clear or chain are preferable; Manual cleaning is preferred; Close at low tide; Keep equipment on dump used in the same zone.

**Don'ts:** If using a bucket, don't pour sand; Never use wet or ballast equipment; Don't clean near dunes; Use machines with large salt tires; Observe - patrol the beach searching for wildlife; NO-GO Areas: Turtles and bird nests. Do not enter with firearms or weapons.

**Other notes:** Designated sites for the removal of sargassum; Use sunny locations for drying and decomposition; For sea turtle nesting beaches, transport sargassum off-site, don't dump on dunes or nears.

# BEST PRACTICES FOR CARIBBEAN FISHERS COPING WITH SARGASSUM

CC4FISH  
Fishers' Guide

GCFI Good Practices Poster

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Conset Bay, Barbados

[Click here to watch the video](#)

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STRANDINGS HERE  
(CLICK HERE)**



# Next steps

## Design

- Continue to engage stakeholders in the co-development process
- Revise based on feedback

## Develop

- Continue to improve prediction model
- Secure sustainable production mechanism

## Distribute

- Build a mailing list for distribution
- Trial issue release this week!
- Publish quarterly or monthly?

# Questions?

Read more about our  
sargassum related work



<https://www.cavehill.uwi.edu/cermes/projects/sargassum/home.aspx>

Sign up for the Eastern Caribbean Outlook Bulletin:  
[sargassumoutlookbulletin@gmail.com](mailto:sargassumoutlookbulletin@gmail.com)