



## Guidelines on Removing Sargassum from Beaches, October 2015

**What is it?** Pelagic sargassum is a brown alga, or seaweed that floats free in the ocean and never attaches to the ocean floor. These free-floating forms are only found in the Atlantic Ocean. Sargassum provides refuge for migratory species and essential habitat for some 120 species of fish and more than 120 species of invertebrates. It's an important nursery habitat that provides shelter and food for endangered species such as sea turtles and for commercially important species of fish such as tunas.

**Where does it come from?** Sargassum travels on ocean currents. Scientists are able to determine where the sargassum comes from by back-tracking from its stranding location using ocean models and data on movements of satellite trackers that are deployed at sea. It is believed that the recent influxes are related to massive sargassum blooms occurring in particular areas of the Atlantic, not directly associated with the Sargasso Sea, where nutrients are available and temperatures are high. The sargassum consolidates into large mats and windrows and is transported by ocean currents towards and throughout the Caribbean.



Sargassum on Seven Mile Beach, 30 Sep 2015

**Will the sargassum influx occur every year?** We don't know for sure if it will happen every year, but currently proposed efforts to develop prediction and alert systems would help answer this important question. Signs from the Eastern Caribbean so far this year are that we'll be seeing sargassum in the region periodically throughout 2015. Some scientists associate the cause of sargassum with higher than normal temperatures and low winds, both of which influence ocean currents, and they draw links to global climate change.

**Is it a problem to leave it to rot on the beach?** Sargassum occurs naturally on beaches, albeit in smaller quantities. It plays a role in beach nourishment and is an important element of shoreline stability. During decomposition there will inevitably be a smell and insects around. The experience in locations that have left the sargassum on the beach is that it will eventually get washed away or buried in the next storm, with rain easing the smell. Leaving sargassum on the beach has proven to be the simplest and lowest cost approach, also helping to nourish the beach and stabilize the shoreline.

**Are there any uses for sargassum?** Sargassum can be used as mulch or compost – allow salt to wash out in the rain and mix with manure and soil. Collected sargassum can also be usefully redistributed in areas affected by beach erosion. But care is needed in how this is done to avoid impacting sea turtle nesting and bird nesting habitat.

### Good practices to apply if removing sargassum from beaches:

**It is always preferable to leave sargassum where it is, if possible.** Where this is not possible or feasible, the guidelines below should be followed.

- Removal of sargassum by mechanical means cannot be undertaken without consultation with the DoE and issuance of a letter of approval, which will outline any conditions to be followed. In some instances it may be necessary for a member of DoE staff to be present to check for wildlife e.g. turtle nests, prior to any clearing;
- Least intrusive practices are preferred - **hand raking is preferable to machinery**. Permission is not required from DoE for raking but **permission is required for clearing by mechanical means**;



**Rake removal of sargassum on Seven Mile Beach, 1 Oct 2015**

- **Extreme care should be taken during turtle nesting and hatching season, with peak activity spanning from May to November.**
- Removal of sargassum should be from and to agreed areas only, and equipment should use the same route on to and off the beach to prevent destroying beach vegetation or turtle nests;
- There is a difference between achieving a naturally clean beach and an over-sanitized beach - constant grooming of the beach for regular maintenance or for aesthetic purposes is discouraged due to very real risks of worsened beach erosion from physical damage of machinery and unintended removal of sand;
- Patience is required. It is not necessarily desirable to clean beaches that are already facing a precarious erosion situation, that are essential habitat for sea turtle nesting or where grooming will increase wind-blown sand and worsen erosion. Sargassum is highly mobile, moving with the wind and ocean currents. In some instances it will get blown offshore without the need for intervention;
- Cleaning should always occur at low tide. Cleaning schedules should take into account wind direction and should be undertaken when wind and storms are less likely to immediately bring new influxes;
- Applying any chemicals to sargassum makes things worse, is hugely damaging to reefs and fish and is illegal;
- As sargassum is naturally occurring, it is not the responsibility of Government agencies or departments to remove it.

**For more information or assistance please call the Department of Environment – 949 8469.** *Guidelines based on Doyle, E. and J. Franks. 2015. Sargassum Fact Sheet. Gulf and Caribbean Fisheries Institute (SEP 2015).*