

# Stinking mats of seaweed piling up on Caribbean beaches

August 10 2015, by David Mcfadden

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Children play as their mother keeps an eye on them at a beach heavily covered with seaweed in the east coast town of Humacao, Puerto Rico, Saturday, Aug. 8, 2015. The picture-perfect beaches and turquoise waters that people expect on their visits to the Caribbean are increasingly being fouled by decaying seaweed that attracts biting sand fleas and smells like rotten eggs. (AP Photo/Ricardo Arduengo)

The picture-perfect beaches and turquoise waters that people expect on

their visits to the Caribbean are increasingly being fouled by mats of decaying seaweed that attract biting sand fleas and smell like rotten eggs.

Clumps of the brownish [seaweed](#) known as sargassum have long washed up on Caribbean coastlines, but researchers say the algae blooms have exploded in extent and frequency in recent years. The 2015 seaweed invasion appears to be a bumper crop, with a number of shorelines so severely hit that some tourists have canceled summer trips and lawmakers on Tobago have termed it a "natural disaster."

From the Dominican Republic in the north, to Barbados in the east, and Mexico's Caribbean resorts to the west, officials are authorizing emergency money to fund cleanup efforts and clear stinking mounds of seaweed that in some cases have piled up nearly 10 feet high on beaches, choked scenic coves and cut off moored boats.

With the start of the region's high tourism season a few months away, some officials are calling for an emergency meeting of the 15-nation Caribbean Community, worried that the worsening seaweed influx could become a chronic dilemma for the globe's most tourism-dependent region.

"This has been the worst year we've seen so far. We really need to have a regional effort on this because this unsightly seaweed could end up affecting the image of the Caribbean," said Christopher James, chairman of the Tobago Hotel and Tourism Association.

There are various ideas about what is causing the seaweed boom that scientists say started in 2011, including warming ocean temperatures and changes in the ocean currents due to climate change. Some researchers believe it is primarily due to increased land-based nutrients and pollutants washing into the water, including nitrogen-heavy fertilizers and sewage waste that fuel the blooms.

Brian Lapointe, a sargassum expert at Florida Atlantic University, says that while the sargassum washing up in normal amounts has long been good for the Caribbean, severe influxes like those seen lately are "harmful algal blooms" because they can cause fish kills, beach fouling, tourism losses and even coastal dead zones.

"Considering that these events have been happening since 2011, this could be the 'new normal.' Time will tell," Lapointe said by email.



Large quantities of seaweed blanket the beach in the east coast town of Humacao, Puerto Rico, Saturday, Aug. 8, 2015. There are various ideas about what is causing the seaweed invasion that scientists say started in 2011, including warming ocean temperatures and changes in the ocean currents due to climate change. Some researchers believe it is primarily due to increased land-based nutrients and pollutants washing into the water, including nitrogen-heavy fertilizers and sewage waste that fuel the blooms. (AP Photo/Ricardo Arduengo)

The mats of drifting sargassum covered with berry-like sacs have become so numerous in the Caribbean Sea and the Atlantic Ocean they are even drifting as far away as to West Africa, where they've been piling up fast in Sierra Leone and Ghana.

Sargassum, which gets its name from the Portuguese word for grape, is a floating brownish algae that generally blooms in the Sargasso Sea, a 2 million-square-mile (3 million-square-kilometer) body of warm water in the North Atlantic that is a major habitat and nursery for numerous marine species. Like coral reefs, the algae mats are critical habitats and mahi-mahi, tuna, billfish, eels, shrimp, crabs and sea turtles all use the algae to spawn, feed or hide from predators.

But some scientists believe the sargassum besieging a growing number of beaches may actually be due to blooms in the Atlantic's equatorial region, perhaps because of a high flow of nutrients from South America's Amazon and Orinoco Rivers mixing with warmer ocean temperatures.

"We think this is an ongoing equatorial regional event and our research has found no direct connection with the Sargasso Sea," said Jim Franks, senior research scientist at the University of Southern Mississippi's Gulf Coast Research Laboratory.

Whatever the reason, the massive sargassum flow is becoming a major challenge for tourism-dependent countries. In large doses, the algae harms coastal environments, even causing the deaths of endangered sea turtle hatchlings after they wriggle out of the sand where their eggs were buried. Cleanup efforts by work crews may also worsen beach erosion.

"We have heard reports of recently hatched sea turtles getting caught in the seaweed. If removal of seaweed involves large machinery that will also obviously cause impacts to the beaches and the ecosystems there,"



said Faith Bulger, program officer at the Washington-based Sargasso Sea Commission.

Mexican authorities recently said they will spend about \$9.1 million and hire 4,600 temporary workers to clean up seaweed mounds accumulating along that country's Caribbean coast. Part of the money will be used to test whether the sargassum can be collected at sea before it reaches shore.



Large quantities of seaweed blanket the beach in the east coast "Playa Los Machos" in Ceiba, Puerto Rico, Saturday, Aug. 8, 2015. Clumps of the brownish seaweed known as sargassum have long washed up on Caribbean coastlines, but researchers say the algae blooms have exploded in extent and frequency in recent years. The current invasion appears to be a bumper crop, with a number of shorelines so severely hit that some tourists have canceled trips and lawmakers on Tobago have termed it a "natural disaster." (AP Photo/Ricardo Arduengo)

Some tourists in hard-hit areas are trying to prevent their summer vacations from being ruined by the stinking algae.

"The smell of seaweed is terrible, but I'm enjoying the sun," German tourist Oliver Pahlke said during a visit to Cancun, Mexico.

Sitting at a picnic table on the south coast of Barbados, Canadian vacationer Anne Alma said reports of the rotting seaweed mounds she'd heard from friends did not dissuade her from visiting the Eastern Caribbean island.



Birds are seen on top of a concrete beam covered with heavy seaweed in the east coast "Playa Los Machos" in Ceiba, Puerto Rico, Saturday, Aug. 8, 2015. The seaweed called Sargassum, which gets its name from the Portuguese word for grape, is a floating brownish algae that generally blooms in the Sargasso Sea, a 2 million-square-mile body of warm water in the North Atlantic that is a major habitat and nursery for numerous marine species. (AP Photo/Ricardo Arduengo)

"I just wonder where the seaweed is going to go," the Toronto resident said one recent morning, watching more of mats drift to shore even after crews had already trucked away big piles to use as mulch and fertilizers.



A boat sits abandoned in a heavily seaweed covered beach in the east coast town of Fajardo, Puerto Rico, Saturday, Aug. 8, 2015. Clumps of the brownish seaweed known as sargassum have long washed up on Caribbean coastlines, but researchers say the algae blooms have exploded in extent and frequency in recent years. (AP Photo/Ricardo Arduengo)





An old abandoned sail boat sits partially sunk in a heavily seaweed covered beach in the east coast town of Fajardo, Puerto Rico, Saturday, Aug. 8, 2015. Whatever the reason, the massive sargassum flow is becoming a major challenge for tourism-dependent countries. The algae harm coastal environments, even causing the deaths of sea turtle hatchlings after they wriggle out of the sand where their eggs were buried. Cleanup efforts by work crews may also worsen beach erosion. (AP Photo/Ricardo Arduengo)





Large quantities of seaweed lays ashore at the "Playa Los Machos" beach, in Ceiba, Puerto Rico, Saturday, Aug. 8, 2015. The seaweed invasion, which appears to have hit most of the Caribbean this year, is generally considered a nuisance and has prompted some hotel cancellations from tourists but scientists consider washed-up seaweed an important part of the coastal eco-system. Some scientists have also associated the large quantities of seaweed this year in the Caribbean region with higher than normal temperatures and low winds, both of which influence ocean currents, and they draw links to global climate change. (AP PhotoRicardo Arduengo)



In this July 15, 2015, file photo, tourists walk past large quantities of seaweed piling up on the beach in the Mexican resort city of Cancun, Mexico. From the Dominican Republic in the north, to Barbados in the east, and Mexico's Caribbean resorts to the west, officials are authorizing emergency money to fund cleanup efforts and clear stinking mounds of seaweed that in some cases have piled up nearly 10 feet high on beaches, choked scenic coves and cut off moored boats. (AP Photo/ Israel Leal, File)

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