

Seaweed Secrets Solved!

At first sight, seaweed on the beach may appear unsightly, smelly, and out of place to those unfamiliar with the dynamic beach system. Nevertheless, seaweed that has washed in from the ocean plays an important role for our marine and coastal ecosystems and can hold many secrets for new visitors and regular beach goers alike to discover!

When seaweed is out floating in the ocean it is home to many sea creatures seeking food and shelter, including baby sea turtles! When sea turtles are young, they use this habitat as camouflage to hide from predators in. They also find food such as shrimp and small crabs in the seaweed. During strong onshore winds, usually between August and November, the sea weed normally floating miles offshore actually gets washed onto the beach. Sometimes these young turtles will wash in along with it which is how they have earned their common name as “washback” sea turtles. Up on the beach, these young sea turtles are vulnerable to dehydration and predation and do not have a large reserve of energy needed to make the long swim back off shore to the floating sea weed beds like they once did as energy filled hatchlings. Since all species of sea turtles are listed as threatened or endangered, it is imperative, that these be recovered off our beaches and brought in for care rather than placed back into the turbid ocean or left on the beach where they will surely perish. They should never be held in water of any kind, just gently carried on a dry or damp towel to the closest lifeguard or station.

In Volusia County, the Environmental Management sea turtle habitat conservation plan (HCP) program, coordinates a group of volunteers called Washback Watchers, to search through fresh sea weed to find and rescue these at risk sea turtles. This program is designed to enhance the surveys already conducted by Beach Safety officers in the public driving areas by surveying all areas of our beaches. All personnel and volunteers who participate are trained and permitted through the Florida Fish and Wildlife Conservation Commission (FWC) to properly find and transport these endangered and threatened species. So far this year, 150 washback sea turtles have been found and recovered from the sea weed laying on Volusia County beaches.

Once found, all the sea turtles are taken to our local sea turtle hospital at the Volusia County Marine Science Center (MSC), in Ponce Inlet. The MSC rehabilitation staff treats each turtle as it arrives. The washbacks are cared for until they can be returned to sea by boats which will deliver them offshore and back onto floating seaweed lines found in the Gulf Stream currents. The MSC also cares for other injured sea turtles, freshwater and terrestrial turtles and injured birds. In the educational areas open to the public, there are aquariums displaying fish, rays, eels, coral reef inhabitants, snakes, and permanently injured birds. There is also an after-hours drop-off boxes for washback sea turtles or injured birds found by the public at the Marine Science Center.

Besides the natural treasures including sea turtles, tropical plant seeds (sea beans), and shells, the seaweed often brings in human trash that has been floating out in the ocean. When it washes ashore, it is our opportunity to remove it from the system all together by disposing of it properly. Volusia County offers many organized efforts to remove trash from our beaches as well as has a full time contractor dedicated to doing the same task. We encourage solitary beach walkers to carry along a disposable shopping bag to collect trash while visiting our beaches. If left on the beach or in the ocean, trash is unsightly and can contribute to marine life mortality in many ways including water quality degradation.

Seaweed is not trash and plays many important roles in the marine environment. It is intentionally left lying on the sand when it washes ashore to fulfill its important functions. From the time it lands on the sand, the seaweed starts a new process of life by providing food to foraging birds and insects. As it dries out, the nutrients that come from this decomposing material act like fertilizer, providing nutrients to the plants on the beach. If left alone, the terrestrial seeds transported by the wrack line, can grow into plants that provide further stabilization to the beach system and habitat for many types of wildlife. As the seaweed dries out, the color becomes darker and becomes very brittle. In this form it begins trapping wind blown sand. The dried sea weed which is unsightly and offensive to some, actually serves the most vital function over time of building sand

dunes on the beach. Sand dunes as is well understood in the scientific community are Mother Nature's own built in mechanism for protecting shorelines and act as natural buffers to the first impacts of storms with high surf.

The sea weed decomposition process is unpleasant to people because of the unfamiliar salty fishy smell it generates and beach managers often receive complaints about it. Regular beach goers however, will tell you that the smell quickly goes unnoticed and the process is relatively short. However, when multiple days of fresh seaweed is brought on to the beach, the process and all that goes along with it can linger for longer. This generally is most noticeable in the fall when there are fewer visitors in the area.

So next time you are at the beach, think of the secret you've just learned and look a little closer, you might notice some things happening that you had never realized before. When you do understand, you may even begin to appreciate that salty smell in the air that only the beach environment can provide.

To find out more about the Washback Watcher volunteer program or about our record high sea turtle nesting year and other environmental programs, check out our website at www.volusiaseaturtles.org .

To learn when you can visit the Marine Science Center, call 386-304-5545 or visit www.marinesciencecenter.com .