

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 ashore 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!

Seaweed is an accumulation of free floating plants that often travel through the ocean at the will of the currents. When seaweed is out floating in the ocean it is home to many sea creatures that seek it for food and shelter, including baby sea turtles! In their first few years of life, sea turtles use this habitat as camouflage to hide from predators. They also find food such as shrimp, algae, and small crabs in the seaweed. During strong onshore winds, usually between August and November, this seaweed often gets washed onto the beach. Sometimes these young turtles will wash ashore with it and this is why they are known as “washback” sea turtles. Up on the beach, these young sea turtles are vulnerable to dehydration and predation and do not have their large reserve of energy needed to make the long swim back off shore to the floating sea weed beds like they did as energy filled hatchlings. Since all species of sea turtles are listed as threatened or endangered, it is imperative that they be recovered off our beaches and brought in for care rather than placed back into the ocean or left on the beach where they will surely perish. If you ever find a “washback” on the beach, gently carry it on a dry or damp towel in a bucket to the closest lifeguard tower or station. These turtles should never be held in water. Anywhere in the state of Florida, you can also call 1-888-404-FWCC for directions on what to do with the turtle.

In Volusia County, the Environmental Management sea turtle habitat conservation plan (HCP) program coordinates a group of volunteers called the Washback Watchers. Their mission is to search through fresh sea weed on the beach to find and rescue at risk sea turtles. This program is designed to enhance the surveys already conducted by Beach Safety officers in the public driving areas. 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. Every year, washback sea turtles are recovered from the sea weed lying 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 cares for these turtles until they can be returned to sea by boats which will deliver them offshore and back onto floating seaweed beds in the Gulf Stream currents. The MSC also cares for other injured sea turtles, freshwater, terrestrial turtles, and injured birds. This facility is open to the public and has educational areas and displays with coral reef, estuary and other ecosystem themed aquariums and habitats. Visitors can also view permanently injured birds, reptiles, and have a hands-on experience at the stingray touch tank. At the MSC there is also an after-hours drop-off box for washback sea turtles or injured birds found by the public.

Although sometimes smelly, 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 dune plants on the beach. If left alone, the terrestrial seeds known as “sea beans” transported sometimes from other countries by the moving 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. It is during this time that it begins trapping wind blown sand to build bigger dunes. This dried sea weed which may be unsightly and offensive to some, actually serves the most vital function over time by building sand dunes on the beach. Sand dunes are like Mother Nature’s own built in protection for upland shorelines and act as natural buffers to the first impacts of storms with high surf and wind.

Besides the natural treasures including sea turtles, sea beans, and shells, the seaweed often brings in human trash that has been floating out in the ocean. When this trash or marine debris washes ashore, it is our opportunity to remove it from the system and dispose of it properly. Volusia County offers many organized efforts to remove trash from our beaches and waterways as well as has a full time contractor dedicated to doing the same task. We encourage beach walkers and visitors to carry along a disposable shopping bag to collect trash while at the beaches. Beach and ocean trash is unsightly and can contribute to marine life mortality in many ways including water quality degradation, entanglement, and through ingestion.

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 the next time you are at the beach and there is a line of seaweed laying on the sand, 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 other beach 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 .