

Trashing Our Treasure

Marine Debris Is Not For Me!



Living in The Bahamas surely has its benefits, like enjoying the beautiful sun, sand and sea. What if those things weren't so beautiful anymore because they were covered with trash? Would you want to live here? Would tourists still come? Many people think that the ocean is so BIG that there's no way it can be harmed. It's just a little trash right? Wrong! Marine debris causes serious harm to ocean animals and our environment. Let everyone know: Don't Trash Our Treasure!

BLUE LAGOON ISLAND
BAHAMAS
HOME OF DOLPHIN ENCOUNTERS

What is Marine Debris?

Marine debris is trash that has made its way into the ocean. Whether an animal gets entangled in it or indigests it, marine debris can be very deadly.



Trash can look like food!

The most common types of trash found are: cigarettes, food wrappers, caps and lids, plastic bottles, plastic utensils (forks, knives and spoons) and aluminum cans, glass bottles, straws, fast-food containers and fishing nets.

If just these items were disposed of properly, our beaches would be 82% cleaner!



Where does it come from?



Locally, most of our trash comes from **beachgoers** and lunch time **picnickers**. Every day thousands upon thousands of people visit local beaches to enjoy the natural beauty they offer.

Unfortunately, many of these beachgoers leave behind materials that become marine debris, such as cans and food containers. This trash can be **blown** into the ocean, picked up by **waves** or **washed** into the water when it rains. Even trash that's generated miles inland can become marine debris.

Keep in mind that most of our Bahamian islands are relatively narrow and short, which can possibly make trash dropped ANYWHERE marine debris.

Marine Debris Timeline

6 WEEKS



2 MONTHS



3 MONTHS



1 YEAR



50 YEARS



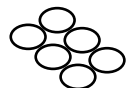
50 YEARS



200 YEARS



400 YEARS



450 YEARS



600 YEARS



UNKNOWN



Can Marine Debris hurt animals?

Marine mammals, turtles, birds, fish and crustaceans are all affected by the two major problems caused by marine debris; **entanglement** or **ingestion** (eating).

Entanglement results when an animal becomes trapped or wrapped up in debris. It can occur accidentally, or when the animal is attracted to the debris as part of its normal behavior or out of curiosity. Not only can entanglement cause wounds that can lead to infections or loss of limbs, it may also cause strangulation or suffocation. *Entanglement is also known to impair an animal's ability to swim, hunt and escape predators which usually results in death.*



Ingesting marine debris may sound disgusting or nasty to you but some ocean animals have bad eyesight and mistake debris for food all too often. When animals eat trash it can lead to **malnutrition** or **starvation** if the items cannot be digested or broken down in the body. If an object has sharp edges, it can damage the air way or stomach of the animal, leading to infection or pain.

One of the most drastic examples of entanglement and ingestion hurting a species is found in **endangered sea turtles**. Sea turtles have been found to swallow plastic bags because they look like jellyfish, one of their favorite foods. This may cause the turtles digestive tract to become blocked, leading to starvation.

Don't think only fish and marine mammals are affected by marine debris because nearly a million **seabirds** are thought to die from entanglement or ingestion every year. Since most seabirds feed on fish, they are often attracted to fish that have been caught or entangled nets and fishing line. Seabirds are some of the most frequent victims of abandoned nets.

The Great Pacific Garbage Patch

The Great Pacific Garbage Patch is a collection of marine debris in the North Pacific Ocean. Also known as the Pacific trash vortex, spans from the west coast of North America to Japan. The patch is actually comprised of the Eastern Garbage Patch, located near Japan, and the Western Garbage patch, located between the U.S. states of Hawaii and California.

These areas of debris are linked together by the **North Pacific Subtropical Convergence Zone**. This zone acts like a highway that moves debris from one patch to another. The entire patch is bounded by the **North Pacific Subtropical Gyre**. An ocean gyre is a system of ocean currents formed by the earth's wind patterns, and the forces created by the rotation of the planet.



The area in the center of a gyre tends to be very calm and stable. The **circular motion** of the gyre draws marine debris into this stable center, where it becomes trapped. A **plastic water bottle** discarded off the coast of California, for instance, takes the California Current south towards Mexico. There, it may catch the North Equatorial Current, which crosses the vast Pacific. Near the coast of Japan, the bottle may travel north on a powerful Kuroshio Current. Finally, the bottle travels westward on the North Pacific Current. The gentle rolling vortex of the Eastern and Western Garbage Patches gradually draws in the bottle.

What can you do?

Marine debris is one of the most solvable problems facing society today. By properly disposing of our trash and practicing the 3 R's - **Reduce, Reuse, Recycle** - trash in our communities can be a thing of the past. An important step to success is simply to NOT LITTER!!

Volunteer and participate in community clean up programs like the International Coastal Cleanup. Don't just stop there! You contact Dolphin Encounters to schedule your own beach cleanup through our **Beach Buddy Program!**



Trash-Free Sea TIPS

- Recycle! Recycle! Recycle!
- Buy reusable or biodegradable products
- Bring an extra bag to stow your trash when at the beach or picnicking
- Use recycle totes for your shopping bags
- Store your lunch in a reusable container
- Secure trash that is left out for collection
- Never toss anything overboard
- Dispose of fishing gear properly
- Try the 6-Week Trash-Free Challenge
- Volunteer at The International Coastal Cleanup in September