

The ocean...

The most incredible and fascinating place on the planet. The ocean is as grand as the gray whales who call it home, as engaging as the dolphins that ride the waves, and as intricate as the coral reefs that majestically enhance its beauty.

The ocean takes our breath away with unimaginable creatures...close encounters...and riches yet to be discovered.

So much about the ocean remains a mystery, and while some individuals might be more captivated by it than others, a simple fact remains: we cannot live without it. Today, the ocean, our greatest resource, is in peril. The increase in population around the world and the resulting pollution have put it in jeopardy. Now, only people can save it.



Climate change

Climate change has occurred on this planet multiple times during the Earth's history. This has resulted in periods of warmth and in ice ages. In the past, natural factors alone drove changes in our climate, but with the advent of the Industrial Revolution in the late 18th century, the composition of our atmosphere has changed due to human impact.

Some of the human activities believed to be driving this change include the burning of coal and oil, urbanization, and deforestation. These human actions have led to increases of greenhouse gasses, which trap heat in our atmosphere and result in increases in the Earth's temperature. Data collected by NOAA and NASA indicate that the Earth's surface temperature has increased approximately 1.2 to 1.4 degrees Fahrenheit during the last 100 years. Increases in water temperature have affected coral reefs worldwide, causing them to bleach. The warming of the oceans is being studied around the world to develop a better understanding of its impact. Reduce your carbon production by decreasing your electricity use, combining your errands to reduce your car mileage, and by replacing your old appliances with energy-efficient versions.



Overfishing

Humans are taking too many fish out of the ocean. Almost 70 percent of the world's fish populations are now overexploited and the global fish catch has continued to decline since the late 1980s, despite the increase in the number of fishers and the amount of time spent fishing. Fisheries need to be better managed since they supply the food and livelihoods for millions of people. You can help! Before purchasing fish, go to www.seafoodwatch.org to determine if your preferred catch of the day is part of a sustainable fishing practice.



Marine debris

There are very few marine areas around the world where you can go and not see garbage. Marine debris comes in all shapes and sizes from small cigarette butts to massive, discarded fishing nets. It includes plastics, glass, metal, Styrofoam™, and rubber as well as fishing gear and old vessels. It enters our waters through littering, dumping, storm water discharge, and natural events, including hurricanes, tornados, and floods. This discarded trash has now formed the biggest



landfill in the Pacific Ocean: the Great Pacific Garbage Patch. The patch is estimated to be bigger than Texas and is formed by a slowly moving, clockwise spiral of currents that trap the trash, most of which is plastic. Some of this trash, especially plastic bags and small pieces of plastic, is mistaken for food, and when consumed, it leads to the deaths of sea turtles and other ocean creatures. By reducing, reusing, and recycling as well as picking up litter, you can reduce the amount of trash that plagues our oceans.

Pollution

Over 40 percent of the world's population lives 31 miles from the coast.

And about 80 percent of the ocean's pollution is generated from land-based activities. Outside of Europe and North America, over 80 percent of the sewage is dumped into the ocean untreated. In some areas of the world where too many nutrients end up in the water, "dead zones" result. Imagine large swaths of ocean in the Gulf of Mexico and the Baltic Sea with no living creatures! You can reduce your impact on our oceans by using biodegradable detergents and cleaning products, eliminating the use of fertilizers on your lawn and garden, and picking up your pet waste.



Introduced species

Throughout the world, fish, crabs, mussels, and jellyfish have been introduced to new areas and have outcompeted and displaced native animals. These intruders include the lionfish from Southeast Asia, which spread through the Caribbean; the European green crab, which has invaded the North Atlantic coast and consumes native clams and scallops; and Pacific jellyfish, which have increasing populations in Hawaii and the Gulf of Mexico where they are threatening local fish populations. Exotic species are often released unknowingly. If you have a collection of fish or other aquatic animals, ensure that they are not released into native waters.



Conservation

The ocean's challenges



The ocean looks wild, pure, and vast. It seems unimaginable that a system so large and seemingly endless could be harmed. But the influence of humans on the ocean has put it in danger. The challenges facing the ocean include:

- 1) Overfishing
- 2) Pollution
- 3) Marine debris
- 4) Introduced species
- 5) Climate change
- 6) Coastal development



Making a difference

Around the world, scientists and conservationists are working to help preserve our oceans. In The Bahamas, Eleanor Phillips leads a team from The Nature Conservancy to help preserve some of the most special marine places on the planet, including Andros Island, home to endangered sea turtles and sawfish as well as flamingos, bull sharks, and iguanas. In Bangladesh, Brian Smith from the Wildlife Conservation Society (WCS) is working to save the endangered Ganges River dolphin and irrawaddy. Dr. Stuart Campbell, also with WCS, focuses his research and conservation work on the coral reefs in Pula Weh and Pula Aceh, off the coast of Sumatra, which were affected by the devastating 2005 tsunami. He works with local groups to create Marine Protected Areas to help these communities employ sustainable fishing practices to ensure their continued food security.



Be Blue!

The most important thing you can do to help protect coral reefs is to invest in their future. Participate in activities at Atlantis, Paradise Island, such as the Blue Adventure tours, and learn more about the local reefs. A portion of each program sale goes to **the blue project**SM. You can also help protect reefs by reducing, reusing, and recycling; disposing of fishing line and pet waste properly; buying biodegradable detergents and soaps; purchasing seafood wisely; avoiding the purchase of items made of coral or shells; and picking up and properly disposing of litter from beaches.

www.blueproject.com



Kerzner Marine Foundation

The focus of the nonprofit Kerzner Marine Foundation is protecting the integrity of tropical marine ecosystems, which are becoming increasingly threatened due to overpopulation and overexploitation. We place a priority on projects that include developing and managing Marine Protected Areas (MPAs), conserving coral reefs, as well as supporting dolphin and whale conservation and research on a global level. The Foundation is partially funded by YOU through your participation in Blue Adventures and Dolphin Cay programs.

www.kerznermarinefoundation.org

