

The ocean covers 71% of the earth's surface, and assumes 99% of the biosphere's volume. We rely on the oceans to maintain a functioning biosphere, including managing the weather, providing food, and providing oxygen. Small drifting plants called phytoplankton produce over 50% of the earth's oxygen.

Interesting Ocean Statistics

- Approximately one-third of the world's fish catch takes place in only 0.1% of the ocean – where upwelling occurs.
- Oceans cover 71% of the earth's surface.
- Over 90% of the world's living biomass is found in the oceans
- Approximately 40% of the world's population lives within 100 km of the coast (which is about 20% of the land mass).
- Worldwide, the oceans are currently rising 1-2 mm per year, ten times faster than the rate observed for the previous 3,000 years.
- Of the earth's 33 animal phyla (major forms of life), 32 are found in the ocean while only 12 are found on land; if plants are included then there are 43 phyla in the sea and 28 on land.
- Most invasive marine species are introduced via ships' ballast water and, at any one moment more than 3,000 species may be in motion around the world.
- Approximately one half of all wetlands, which serve as aquatic nurseries and environmental cleansers, have already been lost.

Oceans nourish and heal us. Fisheries worldwide provide more animal protein than any other source. Pharmaceuticals are derived from marine organisms. Historical data reveal that many areas of the world's oceans are a vastly different from their former selves. They no longer contain the enormous abundances of wildlife they once did. Many species of fish, marine mammals, seabirds and sea turtles are in decline.

Large swaths of the planet's coastal oceans are eutrophied from excessive nutrient enrichment; "dead zones," algal blooms, and reduced fisheries productivity have ensued as a result.

Coral reefs, covering 15% of the world's coastline, are the foundations of tropical marine ecosystems. Approximately 30 to 40% of all bony fishes in the world live on coral reefs. The reef provides essential protection from erosive wave action to island communities. Coral reefs have the highest productivity of any system in the sea and greater than most on land. If fully exploited, the reef's fish production could amount to nearly 10% of global fisheries.

Scientists estimate that 20% of the world's reefs have been effectively eliminated. Additionally, a study researched in December 2004, states that 24% of coral reefs are under imminent risk of collapse, while an additional 26% are under a long-term threat of collapse. The threats are due to human pressures on the reef system. Dead coral reefs mean big losses in tourist dollars, lower fish catches, and island nations that are more vulnerable to storms and sea level rise. Yet reefs are resilient. If we address the problems affecting them, they have a good chance of recovering. Damaged reefs in well-managed areas have shown recovery.

Depleted fisheries, degraded coastal habitats, toxic algal blooms, bleached coral reefs, extinct and endangered species all indicate that the marine environment, once thought limitless and impervious to human activity, is finite. In a single lifetime, the seas have been profoundly affected by the onset of intensive industrialized fishing, habitat destruction, pollution, and indirectly by ozone layer depletion and global warming.
