



The yearlong celebration of science continues...

Ocean and Water: The YoS2009 June Theme



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➤ Explore the Process of Ocean and Water

Our Water Planet is vast and studying it requires collaborative efforts from a wide variety of people and organizations from around the world. Science plays a huge role in helping us understand and celebrate our Water Planet. To see how, just look around you: safe drinking water, flood control, waste management, and restoring healthy ecosystems are all possible because of science. Science helps us understand the natural world and identify problems such as ocean acidification and global warming. It is the basis for new technologies, such as those we hope will help us use water more wisely, provides new treatments for water-borne diseases, and new solutions to life's problems.

➤ How Are YOU Connected to the Ocean?

Take two breaths. One came from the ocean. It's true! Roughly half of the oxygen we breathe is produced by phytoplankton, tiny single-celled plants that live in the sea. That fact alone means that you - and all life on Earth - depend on the ocean for survival every minute of every day. In fact, no matter how far we may live from the coast, the ocean is important to our daily lives in countless ways. The ocean stabilizes our climate and weather patterns and is vital to the global cycle that supplies us with clean drinking water. It provides seafood to millions of people, and studying the wild diversity of life beneath the waves has helped us produce medicines and other important products. For those who live near the water, the ocean offers direct opportunities for employment, transportation, and recreation.

The ocean nourishes all of us: from the basic essentials of air, food, and water to the calming inspiration that comes from watching waves crash on the beach. Find out how your daily activities affect the ocean and what you can do to take care of the ocean in return.

1) Make the Connection—The first step in making a difference is learning about the ocean and how your actions have an impact. And don't forget to share what you've learned with friends and family.

2) Be Water Wise—All water on Earth is connected. Even if you don't live near the coast, water that goes down your drain or runs off from your yard can eventually make its way into the ocean. You can help keep the ocean—and other waterways—healthy by reducing your family's use of chemicals inside and out.

* **In the yard:** Use as little fertilizer as possible.

* **On the table:** Look for fruits and vegetables that are grown without pesticides.

* **In the house:** Choose non-toxic cleaning products and low-phosphate detergents. Many household chores can be done with simple ingredients like vinegar, baking soda, or lemon juice.

*Dr. Richard Spinrad
NOAA Assistant Administrator for Research*
"In the decades and century to come, we will experience extraordinary changes in our world's oceans and atmosphere, with consequences that may dramatically change the way we live our lives.."
*For more information, please visit:
www.yearofscience2009.org/themes_ocean_water/celebrate/*

3) Trim Down Trash—Remember that trash we "throw away" doesn't disappear. And moving water can carry loose trash to the ocean.

4) Be Fish Friendly—You can avoid trouble by only buying products that you know were sustainably harvested. (Sustainable means that the species can maintain a healthy population and the natural balance is not disrupted by harvesting.)

5) Cut Carbon—You can help slow global warming and ocean acidification by reducing your "carbon footprint"—the amount of carbon dioxide released as you go about your daily activities.

6) Recreate Responsibly—A trip to the beach or out on the water to snorkel or fish is a great way to learn more about the ocean and celebrate all it does for us. But when you visit, make sure you are not causing harm. Remember that every terrain is important to marine life—and to us!

The list above was adapted from the Smithsonian's National Museum of Natural History, Sant Ocean Hall web page. For a complete list with more examples of how your daily activities affect the ocean and what you can do to take care of the ocean in return, go to www.yearofscience2009.org/themes_ocean_water/society/