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HOW TO... Keep Our Water Clean

Common Ocean Pollutants Still Doing Significant Damage

As much of the world grows increasingly earth-conscious, ocean pollution continues to be one of the biggest issues concerning the environment. While global warming and the ongoing debate surrounding its effects might garner the most headlines, ocean pollution remains a considerable concern for environmentalists and ocean lovers alike. Part of the problem is the lack of understanding as to just what is contributing to ocean pollution. Simply put. nearly everything we do has an impact on the ocean, be it positive or negative. Oftentimes, we are even contributing to ocean pollution without so much as knowing how or why. The following are among the chief contributors to ocean pollution across the globe:

* Sewage. Anything going down our drains falls under the category of ocean sewage. This includes what we flush down the toilet to dishwater and even any chemicals we might dispose of through our drains. Sooner or later, what we flush or wash down our drains makes its way into the ocean. This ocean sewage often results in oxygen depletion that harms marine life as well as significant nutrient loading, which occurs when excessive nitrogen and phosphorous is deposited into the ocean's ecosystem. The result is the formation of algae blooms, which consume substantial amounts of oceanic oxygen supply. That reduction, or depletion, of the oxygen supply makes it extremely difficult for many organisms to breathe, oftentimes resulting to death.

Ocean sewage disposal also increases the level of bacteria and parasites in the ocean. That creates a ripple effect that negatively impacts the fishing industry. It might also be hurting the tourism industry, since the increased presence of bacteria and parasites in coastal ocean waters oftentimes leads to beach closures. Sewage treatment facilies exist throughout more developed countries of the world to counter this problem, but less developed countries, including many popular tourist locales, do not necessarily have as many effective treatment facilities.

* Garbage. Perhaps nothing has done more harm to the ocean over the years than marine garbage disposal. While laws written to safeguard the oceans have helped reduce ocean dumping, such laws have not banished the problem entirely. That means garbage is still finding its way into the ocean, threatening wildlife in several ways. Sadly, starvation is a common side effect of marine garbage, a result of plastic bags and even balloons lodging in the digestive systems of whales, making it impossible for the whales to digest their food as they slowly starve to death. Oxygen starvation is another unfortunate side effect of marine garbage. When marine life gets tangled in discarded fishing nets, marine animals include dolphins, of burning wood and coal as

sharks and whales become entangled in the fishing nets. slowly and painfully suffocating to death.

Perhaps most disconcerting about marine garbage is the prominent role many seemingly innocuous pieces of garbage we don't give a second thought play in the pollution of our oceans. Plastic pop tabs from aluminum

cans, for instance, can find their way into the mouths of marine wildlife and choke unsuspecting wildlife to death. Consequences are similar with poorly disposed plastic six-pack wrappers. But simply cutting up your six-pack wrappers before discarding them is enough to keep wildlife from being harmed.

* Toxic pollutants. Arguably nothing is more detrimental to the world's oceans than toxic pollutants, which can cause birth defects in wildlife and might even contribute to instances of cancer among human beings. Lead and mercury poisoning collect in the tissue of whales and sharks, leading to birth defects and nerve damage to marine life. According to the World Wildlife Federation (WWF). researchers have found that other wildlife, including polar bears and frogs, have experienced decreased fertility, thyroid dysfunction and feminization, and demasculinization in males as a result of exposure to pesticides and industrial chemicals.

Among the other toxic ocean pollutants are polychlorinated biphenyls (PCBs), which typically are used to manufacture electrical equipment and have been known to cause reproduction problems in marine animals. Polyaromatic hydrocarbons (PAHs) are the result well as oil pollution a malities in marine an

> For more Joe A. Hinojo



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