

Plastic is durable but damaging

Anne Mazar, GateHouse News, 3-2-10

The Pacific Ocean usually brings to mind visions of endless deep blue water, not plastic.

However, in the North Pacific there is a massive floating island of swirling garbage, mostly plastic, estimated to be twice the size of Texas and growing.

The "Great Pacific Garbage Patch" is difficult to measure because it is caught in a moving circular current with much of the plastic floating below the surface. Scientists believe there are other floating debris fields, including one in the Atlantic Ocean filled with garbage. Our garbage.

Plastic is dumped off shipping vessels or washed down storm drains making its way to the ocean, but it is estimated that 80 percent is blown off land and into the oceans.

The debris poses a great threat to wildlife. Albatross chicks are dying of starvation because their parents are feeding them little bits of plastic they have mistaken for food. Sea turtles are choking to death on floating plastic bags that look like jellyfish. The resilience of plastic makes it a desirable product for industry, but this same attribute makes it detrimental to the environment.

Plastic will not biodegrade for hundreds of years, but in the meantime it breaks into smaller and smaller pieces. There is concern the toxins in plastics may be entering the marine food chain.

Use of synthetic, petroleum-based plastics exploded after World War II. Plastics offer unique qualities, being flexible or hard and lightweight yet durable. Plastics are used in a wide range of products from pantyhose to bulletproof vests to automobile parts.

In some products, plastic fills a void that cannot be replaced by any other available product, but we have gone berserk using plastic indiscriminately. It is estimated Americans throw out 100 billion polyethylene plastic bags and 29.8 billion plastic water bottles each year. We mindlessly throw out plastic utensils, styrofoam coffee cups and plastic soda bottles.

There is concern that some plastics may contain chemicals that could cause harm to human health. Bisphenol A (BPA) is a chemical used in the production of polycarbonate plastic often used in food and drink packaging. In a 2009 Endocrine Society Scientific Statement on endocrine-disrupting chemicals, it was noted that animal studies have shown exposure to BPA increases the risk of breast cancer, obesity, diabetes, reproductive and neuroendocrine disorders, and the human evidence for BPA is mounting.

A 2003-2004 survey conducted by the Centers for Disease Control and Prevention found detectable levels of BPA in 93 percent of 2,517 human urine samples, considered representative of exposures in the U.S.

More research needs to be done, but people can make wise choices in the meantime by significantly reducing their use of disposable plastic items. Always bring your own shopping bags. Visit www.reusablebags.com to find an assortment of reusable bags. A favorite is the SmartCycle Reusable Bag. It is small enough to slide in your purse, yet sturdy and it's made from recycled plastic bottles.

Drink plain tap water or flavor it with a lemon or drink mix. If you are concerned about your water, buy a water

filter with the money you save from not buying bottled water. Use a glass or metal water bottle. At gatherings don't use plastic ware, make the event classier and just wash your dishes. Use wax paper bags instead of zip-type plastic bags. Store food in glass or metal containers instead of using plastic wrap. Buy items made of recycled plastic. Dispose of plastic properly.

Don't put plastics in the microwave or dishwasher because heat may cause leaching of BPA into foods. Avoid plastics labeled 3, 6 or 7, unless they are BPA-free. Select the salad dressings, beverages or other foods items that come in glass containers, not plastic. And simply be mindful to say "no thank you" to the endless disposable items that come your way. Think about your health and the unfortunate animals that might perish from our garbage. For more information visit: www.algalita.org.