

A Dismal Mess - 2018

*by Suzy Hopkins*

On this beautiful planet that we call home there is an island twice the size of Texas. It is located below the Northern Jet Stream and above the Southern Trade Winds 1,000 miles off the California coast. You can't dig your toes in the warm sandy beaches or sit in the shade of the coconut palms. Why? Because the majority of it is made of plastic. That's correct. Household garbage, fishing nets. It is called the Northern Pacific Gyre (pronounced jyer). A gyre is a circular smooth ocean current that does not circulate into the rest of the ocean.

Loggerhead sea turtles die having eaten plastic bags they mistook for their favorite food – jellyfish. Birds have become strangled by the plastic used to hold six packs together. Fish and birds eagerly eat the tiniest bits and die. Millions of marine animals have been killed. At 1.9 million pieces of plastic, per square mile, this dreadful trash mass blocks sunlight from reaching plankton and algae, the lowest rungs on the food ladder. This blockage will change the area's entire food chain. The smallest fish eat the tiny pieces, are eaten themselves by larger fish. People eat the larger fish species caught with plastic in their stomachs.

The UV rays in the sun break down the plastic to miniscule pieces. Those pieces can take 450-1,000 *years* to biodegrade completely, depending on the type of plastic. PETE plastic, used in reusable water bottles and ketchup type containers, *never, ever* biodegrades. In many countries there is no recycling of plastic. I shudder when, even in this country, I see people purchasing huge quantities of bottled water.

Since no one feels responsible for this disgusting, dismal and dangerous mess it remains and is growing.

The slim bit of good news is that recently Japan has discovered an enzyme that eats plastic. At this time it is limited as to how much it can eat but at least there is hope for the Earth.