

Redding Garden Club Conservation



Sea Grass Meadows, Kelp Forests, and Other Ocean News

July 2012
by Jill Kotch

With the arrival of summer and the first heat wave, I know that after early morning spent watering, nipping, pinching back and harvesting that a shady spot and good reading might be restful. I've been reading a lot about the state of the oceans and since any fertilizer, pesticide, even uncollected dog waste can potentially end up in a waterway and ultimately the oceans, here are some interesting tidbits to cool you off from Science News and the Ocean Conservancy.

Sea Grass Meadows



Sea grasses trap 2-3X more carbon than a typical forest: 183 million pounds of carbon/sq. kilometer. They take up 0.2% of the oceans of the world but absorb more than 10% of carbon. Sea grass "meadows" can be found along the Gulf coast states and also provide habitat for many fish and shrimp. There is an improved turtle extruder device for shrimpers to use with their nets in the Gulf of Mexico. Some boats which were exempt from using it are now included since studies have shown the importance of use to help the very depleted populations of all marine turtles in the Atlantic.

Kelp Forests



There has been a serious drop in the kelp "forests" along the Pacific coast. Sea otter populations have been severely reduced by killing them for their lustrous, dense fur and they have serious problems from pollution to disease. Part of their diet is sea urchins, which have been devastating the

contd

kelp forests. The otter population needs to rebound, which will be a good thing for the kelp. Oddly, I was babysitting for my granddaughter and there was a cartoon of The Cat in The Hat taking the children to the otters and a kelp forest! Science on PBS for toddlers! California has designated numerous underwater parks along the coast, which means increased safety for many marine animals.

Oyster Bed Depletion



Worldwide there are serious drops in oyster beds for all sorts of reasons from higher water temperature to pollution. Here in Rhode Island we are having great success with oysters and scallop bed rehabilitation as well.

The Great Pacific Garbage Patch



Do you remember the devastating tsunami in Japan? Debris of all kinds is finding its way across the Pacific, landing on our west coast beaches like a huge section of a dock in Oregon. Scientists are studying what arrives here and there is actually another swirling mass of floating debris starting in the Pacific from it. The Great Pacific Garbage Patch, the size of the state of Texas, already exists where marine debris, mostly plastics, have been swirling for many years. Most of what is there is small pieces of stuff that are not recognizable anymore but pose an enormous threat to wildlife by ingesting it....think turtles, birds and many of the fish that humans will eventually eat. Scientists are studying the sea life affected, and the trash patch itself. Plans have been made to deal with it, but still it exists. Plastics are toxic to all living things, serious stuff.

Mantis Shrimp



My last tidbit about marine life is the little mantis shrimp from the Indian Ocean which is being studied for its club-shaped "arms" that are super fast and strong when striking prey. The structure of the appendages is unique and has possible applications for use in joint implants and military body armor as well as light-weight vehicles, aircraft pistons and other materials which suffer from impact. Keeping our trash from ever getting in the waterways and being sensible about reducing potentially toxic runoffs from each of our properties is important for Planet Earth.

