

Sea otter deaths are no mystery
Commentary for Santa Cruz Sentinel and Monterey Herald, 6/29/03

One hundred and five California sea otters have washed ashore since the beginning of the year. Our sea otters are in serious trouble; so are we if we do not start paying attention.

Some federal and state officials said the strandings were a mystery and called for more research funding. Research funding is important and needed – but why the otters are dying is no mystery. We know why they are dying and we know what to do about it. Before it is too late, we need to focus on the solutions.

Before being hunted to the brink of extinction, there were around 18,000 sea otters along what is now "coastal" California. From a remnant population of around 50, the recovering California sea otter population peaked in 1995 at around 2,400 otters and has declined for six of the past seven years. The spring 2002 count put the population at about 2,100. Given that about 40-percent of all dead otters are recovered, somewhere between 5 and 10 percent of the population may have died since the beginning of the year.

About 15 percent of all sea otters deaths are recovered "fresh" and studied to the microscopic level; we know why sea otters die. Forty-percent of all sea otter death is due to disease -- this is huge, and very different from other wildlife populations. Sea otters are dying from an unusual variety of diseases, including diseases from land (such as toxoplasmosis from cat feces) that wash into the sea. And, sea otters are carrying toxic loads of immune system-suppressing chemicals such as DDT, PCB, and butyltins: Some of our otters have three-times the level of PCBs than would cause reproductive failure in mink, a close relative.

Solutions are difficult but straightforward.

We need to stop biological pollution from reaching our ocean. Better sewage treatment will kill the bacteria, parasites, and human related diseases streaming from our communities. We need to crack down on the accidental sewage spills that close our beaches and pollute our sea.

We need to ban toxic chemicals known as POPs: persistent organic pollutants. Right now, Republicans and Democrats in the U.S. Senate Environment and Public Works Committee are negotiating compromise legislation that would ban POPs. Last year, the Bush administration held a Rose Garden ceremony praising POPs legislation, but is now working behind the scenes with chemical companies to limit the effectiveness of the bill.

We need to ban butyltin, one of the most toxic chemicals ever put into the marine environment, and found in extremely high levels in our sea otters, especially around Moss Landing, Monterey, and Morro Bay. Butyltin is mixed with some boat paints to kill algae and barnacles that grow on hulls. A 1998 study by K. Kannan found that tissues from sea otters in our harbors contained "at least an order of magnitude greater concentrations than those from open locations." The study also revealed a correlation between butyltin and disease – otters with high levels of butyltin were more likely to have died of disease. The International Maritime Organization (a part of the United Nations) passed a treaty to ban the use of this toxin, the Bush administration expressed its intent to ratify, but has now stalled introduction to the Senate.

Harbor sediments often have high concentrations of toxic chemicals and the backwaters are breeding grounds for disease. Last month harbor masters from Pillar Point, Santa Cruz, Moss Landing, and Monterey met with the head of NOAA and asked for "buffer zones" around their harbors where they did not have to comply with the National Marine Sanctuary's environmental regulations. The harbors need more environmental regulation and compliance, not less.

The California sea otter is a report card showing how well we are taking care of our oceans. We are failing. Sea otters are eating from the same ocean soup where we get our crabs and shellfish. This is not just an ocean problem: These chemicals and diseases can be toxic to people, too. Saving the sea otter will make this a healthier place for all of our children and us.

More research is needed to provide the best guidance. But research alone will never save a single animal. Only our action -- now -- will save our sea otter.

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