

Restricting Plastic Bag Use May Bring Little Oceanic Payoff

Posted by David Godow on April 20th, 2011

The push by state and local governments to either tax or ban conventional plastic bags revolves around the assumption that plastic bag use degrades the environment. One of the biggest weapons in tax advocates' intellectual arsenal is the so-called "Great Garbage Patch", a collection of various man-made debris (including plastic) blighting the North Pacific Ocean. The garbage patch, often said to be the size of Texas, is luridly described as "the largest landfill in the world," a vortex of plastic that poisons oceanic wildlife.

It turns out the true story might be a little less exciting. According to researchers at Oregon State University, the "great garbage patch" is neither especially great, nor even really a "patch." Instead, it's a zone of ocean where debris particulates — often invisible from the surface — exist at a higher concentration than the rest of the ocean. There's no great mass of plastic bags the size of Texas; research has established that the reality is closer to 1 percent of the state's size. As assistant professor of oceanography Angel White puts it:

"If we were to filter the surface area of the ocean equivalent to a football field in waters having the highest concentration (of plastic) ever recorded, the amount of plastic recovered would not even extend to the 1-inch line."

Research like White's may deflate some of the outlandish claims made by plastic bag tax/ban advocates about the impact of plastic on the oceanic environment. Of course, land-based plastic bag pollution could still be considerable. Still, environmental analyses in Washington, D.C., home of the nation's first ever plastic bag tax, found bags made up only 5 percent of land-based litter.

Still, there is at least some evidence, at least in D.C.'s case, that plastic bags could be a somewhat more significant source of litter in waterways. But if other states and municipalities want to push anti-plastic measures, they should probably do it without resorting to sensationalized stories about goings-on in the Pacific Ocean.