NH Scientists Present Findings On Mercury In The Environment

Contact: Kirsten Weir
603-749-1565
NH Sea Grant Science Writer

August 1, 2006

DURHAM, N.H. -- Mercury contamination in New England is a serious threat to both the environment and human health. Mercury is a neurotoxin that can kill wildlife and damage a person's brain and nervous system. According to the Environmental Protection Agency, New Englanders are mainly exposed to mercury by eating contaminated fish or shellfish.

Two NH Sea Grant-funded scientists are working to address the issue of mercury contamination in New England. Steve Jones, research associate professor of natural resources and marine sciences at the University of New Hampshire, and Celia Chen, research associate professor of biological sciences at Dartmouth College, will present the results of their research at the Eight International Conference on Mercury as a Global Pollutant, August 6-11 in Madison, Wis.

Jones, also the NH Sea Grant Assistant Director for Research and the director of UNH's Center for Marine biology, will discuss his study of mercury distribution in Penobscot Bay, Maine, which has suffered historically high levels of contamination. To find out how that may be impacting marine organisms, Jones sampled sediments as well as bacteria, marsh grass and blue mussels at two sites within the bay and river. His findings suggest that mercury levels in the sediments remain elevated, especially in the tidal portion of the Penobscot River, and that marsh grass may be taking up mercury from marsh sediments.

Chen will present the findings of her study on mercury in the Gulf of Maine ecosystem. Mercury bioaccumulates, building up in the tissues of animals up through the food web. Chen's study characterized the bioaccumulation and transfer of mercury in interdidal food webs in four different Gulf of Maine sites. She found that patterns of mercury bioaccumulation and transfer vary depending on the feeding strategies of the organisms in question and on the degree of contamination at each site. Chen initiated her study with a NH Sea Grant development grant and was later awarded a major grant from the Department of Defense to continue the research.

The NH Sea Grant College Program provides support, leadership and expertise for university-based marine research, extension and education. A component of the National Oceanic and Atmospheric Administration (NOAA) and based at the University of New Hampshire, it's one of more than 30 Sea Grant programs throughout the nation promoting the understanding, wise use and stewardship of coastal resources.