

## Marine Ecosystem Health Program—Seeking Solutions for Pacific Northwest Waters

Surrounded by nearly 6 million people, the Pacific Northwest ecosystem is facing an unprecedented health crisis.

In the last two decades native populations of northern abalone and Olympia oysters have experienced dramatic declines, and populations of salmon, herring, cod, and rockfish have completely disappeared from some areas. Flocks of common murre and tufted puffins, which once numbered in the thousands, now number in the hundreds or fewer, and harbor porpoises are rarely seen. The resident population of orca in the Puget Sound/Northwest Straits region has been classified as one of the most contaminated (by PCBs, dioxins, and petrochemicals) cetaceans in the world.

Human activity in and around the inland waters has resulted in habitat degradation and loss, diversion of freshwater coming into the estuary, over-harvesting of fish, and toxic contamination from industrial plants and urban run-off—marshes and mud flats have been paved, rocky shorelines replaced by bulkheads, flowing rivers interrupted by dams, and native fish harvested to the brink of extinction.

In 1999, a generous gift from the Peter D. and Kathleen E. Dickinson Foundation created the Marine Ecosystem Health Program (MEHP) in the school's Wildlife Health Center. The mission of the MEHP is to ensure the health of marine wildlife and their ecosystem through science and education. Emphasis is currently given to problems facing the inland waters (Puget Sound/Northwest Straits/Georgia Basin) region of Washington State and British Columbia, Canada.

Core elements of the program include: 1) an annual competitive grants program, which awards funds to scientists investigating important issues facing the marine ecosystem; 2) a staff scientist who imparts scientific information generated by MEHP researchers and others to the stakeholder community in order to guide and inform management and conservation decisions, and 3) a stakeholder advisory board, which meets frequently to ensure that the program remains linked and relevant to the region.

The program already has provided research funding totaling more than \$800,000 through its competitive grants program—researchers are engaged in diverse studies, including projects focused on habitat quality for migratory birds, marine mammals as environmental sentinels, and the design and function of marine protected areas to benefit marine resources.

The MEHP held its first biennial scientific symposium last September. Participants included more than 120 individuals—fishery biologists, marine scientists, conservationists and educators—from 40 different agencies, organizations and institutions. It is an essential part of the MEHP mission that scientific information on the health of marine wildlife and the coastal marine ecosystems on which they depend be made available to natural resource agencies, non-profit organizations and policymakers who are actively engaged in protecting, restoring and managing coastal waters.

Funding for the MEHP comes from grants and private gifts from individuals and foundations, and from members of the *SeaDoc* Society. Continued financial support is needed to sustain MEHP programs and the scientific research that is critical to effective management and conservation of marine wildlife.

For more information, visit the following Web sites: *Marine Ecosystem Health Program* and the *SeaDoc Society* (<http://mehp.vetmed.ucdavis.edu>), *Wildlife Health Center* (<http://www.vetmed.ucdavis.edu/whc>).

Last April, donors and friends of the Marine Ecosystem Health Program christened the MEHP boat *SeaDoc*, used for studies in the San Juan Islands. Pictured: Gary Davis (left), marine biologist for California's Channel Islands National Park, and Ron McDowell (right), resident of Washington's Orcas Island, are members of the stakeholder Advisory Board, which, along with a scientific advisory committee, assists MEHP Program Director Kirsten Gilardi (center, left) and Staff Scientist Joe Gaydos (center, right) in program development and implementation. Dr. Gaydos is also pilot of the *SeaDoc*.

## Unique Gift Benefits Marine Ecosystem Health

Frequently the school receives gifts-in-kind to help fund research or clinical programs. Laboratory equipment (such as balances), books and furnishings are greatly appreciated and quickly put into service.

But the gift of a collection of fine jewelry, timepieces and gemstones—from a friend of the school who wanted to support marine ecosystem health research in Washington's Puget Sound—represented a real challenge. How could the school utilize such a gift?

The answer existed in cyberspace—for the first time the school enlisted e-Bay to create the perfect solution!

The jewelry was consigned through Butterfield & Butterfield for an e-Bay auction that resulted in more than \$21,000 to benefit the Marine Ecosystem Health Program of the school's Wildlife Health Center.

# MEHP



Puget Sound orca absorb toxic chemicals from industrial and urban runoff.

