



Dearden

UVic knowlEDGE

Helping hands

UVic researchers help tsunami victims turn to nature to rebuild their shattered lives



NEPTUNE: our eyes and ears beneath the sea

Providing an earlier warning of tsunamis is one of the goals of the North-East Pacific Time-series Undersea Networked Experiments (NEPTUNE) project off the B.C., Washington and Oregon coasts.

NEPTUNE is a joint U.S.-Canada venture, led in Canada by the University of Victoria and funded by \$62.4 million from the Canadian Foundation for Innovation and the B.C. government. When complete, the project will be the world's largest cable-linked ocean observatory, using 3,000 km of fibre optic cable and 30 or more seafloor "laboratories," or nodes, from which land-based scientists will control sampling instruments, video cameras and remotely operated vehicles.

Information and images collected by NEPTUNE will flow instantly to shore where they will be relayed via the Internet to researchers, educational institutions, science centres and the public. In this way, NEPTUNE will give us a better understanding of earthquakes and the processes that cause them, and warn us about approaching tsunamis.

The first phase of NEPTUNE, off the B.C. coast, is scheduled to be fully operational by fall 2008.

To find out more about NEPTUNE and its research themes, visit www.neptunecanada.ca.

EDGEwise

UVic will host a **Gathering of Remembrance for Tsunami Victims** on Jan. 26, 11:40 a.m. to 12:20 p.m. in UVic's Interfaith Chapel. Everyone welcome.

In early February, UVic's Centre for Asia Pacific Initiatives and Camosun College present two public panel discussions on the impact of the tragedy and what is needed to help the region recover.

The Effect of the Tsunami takes place Feb. 1 at 7:30 p.m. in UVic's Human and Social Development Building, room A240.

Reconstructing the Region takes place Feb. 8 at 7:30 p.m. in room 100 of the Fisher Building at Camosun College.

UVic's Centre for Earth and Ocean Research (CEOR) is one of the sponsors of a public lecture titled **Earthquake and Tsunami Hazard on Canada's West Coast** on Feb. 17, 8 p.m. in the National Geographic IMAX Theatre. Speakers are Dr. Garry Rogers (Geological Survey of Canada) and Dr. Fred Stephenson (Fisheries and Oceans Canada). The lecture is appended to the 7 p.m. showing of the IMAX film, "Forces of Nature," to which regular admission rates apply. For more information call 480-4887 (IMAX) or 721-8848 (CEOR).

by Patty Pitts

Of all the images to be transmitted out of South Asia in the wake of the devastating Boxing Day tsunami, it's the photos of hollow-eyed children that are the most haunting. Youngsters who saw family and friends swept away by the huge waves and whose homes, schools and entire families were destroyed by the sea.

In just a few minutes, an entire generation was left to deal with grief, despair and uncertainty at a shockingly young age.

Dr. Philip Cook, executive director of UVic's International Institute for Child Rights and Development (IICRD), has seen this scale of emotional trauma before—among the AIDS orphans of South Africa and youngsters in war-torn Chechnya. Although it was nature that wreaked havoc on the lives of children in Thailand, Indonesia and India, Cook says it's through

nature that these same youngsters will begin the long process of healing.

"Re-connecting children to the natural world is the first step to reconnecting them to the human world," says Cook, who leaves soon for India. He's part of an initiative sponsored by Save the Children Canada to train teachers in tsunami-affected regions of India on ways to reach youngsters through nature-based therapy.

Cook has seen the healing power of nature among bombed-out apartments in Chechnya. Aid workers created small, formal gardens in the rubble and invited storytellers and artists to entertain the understandably skittish children.

"The kids started growing flowers and making their own art," says Cook. "It's been proven that children's development is tied to their capacity to explore the natural world. We see a positive improvement in their self-esteem, a feeling that they're in control

of their lives. Children have a capacity for resilience and a relationship with the natural world enforces this."

The tsunami also destroyed livelihoods and caused serious environmental damage. UVic geographer and conservationist Dr. Philip Dearden has spent years assisting residents in developing countries create desperately needed employment without sacrificing sustainable practices.

Dearden and his research team have worked on many coastal conservation projects on Thailand's Andaman coast and were doing an assessment of tourism impacts on reefs for the Thai government when the tsunami struck.

"There's a significant relationship between poverty and the environment," he says. "When the environment worsens, people get poorer and then, in their desperation to make a living, they damage the environment even more."

Under Dearden's supervision, UVic grad students are working in Thailand to understand some of the environmental impacts of the tsunami and how to rebuild livelihoods in a way that doesn't further erode the natural environment.

Dearden has also been heavily involved in coastal and development projects in Sri Lanka, including field surveys of the heavily damaged Tamil-controlled territory on the east coast and extensive work in the national park system, including the hard-hit Yala National Park.

He'll return to Sri Lanka in the spring to assist in the reconstruction effort, focusing on the country's national parks and the redevelopment of ecotourism businesses that were levelled by the tsunami.