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Dal to tally global sea census

Underwater sensors key to new concept in data trolling

By JOSH VISSER

Dalhousie University has received $35 million for a global ocean research project to be based at the university, it was announced Monday.

The money from the Canadian Foundation for Innovation will pay for the initial infrastructure and operating costs of the $160-million Ocean Tracking Network.

It is the largest research investment in the university's history.

The project involves placing a series of underwater sensor grids across the globe to monitor fish and other marine life. Seventeen countries have already signed up to contribute.

Computer tags the size of a fingernail will be embedded into a variety of aquatic life, allowing scientists to track their movements as they pass through the grids.

Scientists say the research will revolutionize the study of marine life.

"This will be like the transition from the telegram to the telephone," said oceanographer David Welch, a member of the tracking team.

Data from the project will be made available to the public and private sectors, allowing for its use in everything from setting fish quotas to monitoring the effects of global warming.

Foreign Affairs Minister Peter MacKay, who is also the minister responsible for the Atlantic Canada Opportunities Agency, was on hand for the announcement.

"This tracking technology . . . is like a census (for) fish, birds, mammals and reptile wildlife," Mr. MacKay said.

"It will do everything but track voting patterns," he added to mild laughter from the crowd at Dal's University Hall.

The Canadian Foundation for Innovation is a government-created research organization.

The tracking network will create six to eight full-time positions at Dal and a number of opportunities for undergraduate and graduate students at the university, Mr. Welch said.

It won't just be the brains of the operation based in Nova Scotia — much of the technology will be built here too.

Amirix System Inc. of Halifax, in association with another Nova Scotia company, Vemco, will provide the sensor technology.

The devices could be in place off Nova Scotia by the fall. The size of a coffee machine, they will be anchored to the seabed 800 metres apart.

To acquire the sensor information, scientists will use small boats to get close enough for a wireless signal that will only take a few minutes to download at each sensor.

This is expected to be much cheaper than current ocean-based research that can require large vessels costing $15,000 to $20,000 a day.

A recent Dal-based study predicted a massive collapse in the fishing industry by 2048 unless changes can be made to harvesting practices.

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