

Integrating Science and Traditional Knowledge

The integration of scientific knowledge with traditional and local knowledge is critical to improving our understanding of ecosystems. Increasingly, scientific and traditional knowledge are being viewed as complementary. An example is Canada's Northern Contaminants Program being conducted in Yukon, the Northwest Territories, and Nunavut. The program's key objective is to reduce and, where possible, eliminate contaminants in northern traditionally harvested (country) foods while providing information that assists informed decision making by individuals and communities in their food use. Aboriginal people and their organizations participate fully in the program's management committee and undertake many of the research studies, sometimes in partnership with scientists. Another example emerged when the moratoria on commercial fisheries were implemented in many parts of Atlantic Canada. Fishers and scientists worked together to establish sentinel fisheries surveys. In these sentinel fisheries, fishers use traditional gear and their specialized knowledge, but fish at fixed sites whose selection is based on scientific analysis and work with scientists to keep and analyze detailed records of their catches.

Reporting

Environmental reporting is an important tool for integrating science into decision making and communicating information to Canadians. How we report on the state of the environment in Canada has evolved to reflect an ecosystem approach. Canada's major national state of the environment reports were published in 1986, 1991, and 1996 by the federal government.

The most recent, *The State of Canada's Environment — 1996*, adopted an "ecosystem approach to reporting", recognizing the complexity of ecosystems and emphasizing that people are a part of ecosystems. Efforts were made to report on interactions among elements in a single ecozone, between ecozones, among environmental components and human activities, as well as among social, economic, and environmental elements. Beyond scanning the state of Canada's major ecosystems, the report examined major issues in an ecosystem context.

The Government of Canada is no longer producing comprehensive national state of the environment reports every five years. However, individual federal departments with environment, natural resources, and health responsibilities are producing reports within the framework of a coordinated federal state of the environment reporting system. As well, a new federal initiative is being proposed to develop a comprehensive national environmental information and reporting system in

Sharing Knowledge

The Innu Nation, Memorial University, and Environment Canada have established an interactive knowledge system called the Quebec-Labrador Integrated Knowledge System (Q-LInKS), which provides information on people, areas of interest, organizations, projects, and data on the Internet (<http://qlinks.ucs.mun.ca/index.html>).

Ashkui

In Labrador, the Innu Nation, Gorsebrook Institute, and Environment Canada have been working together to develop a new approach to combine science and Innu knowledge. This approach uses a conceptual category of a "cultural landscape unit" as the basis for generating new knowledge about the ecology of Labrador. This method starts with Innu knowledge and terminology for an element of the landscape that has value and meaning for them and then builds a knowledge base of that feature from a number of perspectives. The feasibility of this approach is being tested through a case study of "ashkui", which are critical areas of early or permanent open water on lakes, rivers, and estuaries that are used extensively by the Innu.