### CANADIAN FOREST SERVICE

## Science HIGHLIGHTS



TRADITIONAL ECOLOGICAL KNOWLEDGE

# How can we help preserve and learn from Aboriginal forestry knowledge?

Bringing Aboriginal youth and elders together is helping spread and preserve traditional ecological knowledge of Canada's forests

Aboriginal forestry practices passed from generation to generation are part of a body of information and skills called traditional ecological knowledge. Many Canadian researchers recognize traditional knowledge for its value in contemporary environmental management and are calling for it to be incorporated in sustainable forest management planning.

"If we can work using traditional knowledge and forest science alongside each other, it will help us make the best possible decisions on how to manage the forest sustainably," says Reg Parsons, a Canadian Forest Service—Natural Resources Canada liaison officer at the Atlantic Forestry Centre in Corner Brook, Newfoundland and Labrador. He works closely with the Aboriginal communities of Newfoundland and Labrador on sustainable forest management. His work also includes collaborating with researchers and Aboriginal communities across Canada and internationally.

Traditional knowledge is usually practical expertise in agriculture, fisheries, health, horticulture, forestry and environmental management. With 80% of all Aboriginal communities located in forested areas, Aboriginal peoples possess a vast amount of traditional ecological knowledge about forests.

#### Traditional ecological knowledge takes a holistic view of forestry

Traditional ecological knowledge encourages multiple-use forestry—the sustainable development of forests to serve a variety of community needs. These needs include protecting wildlife, preserving clean water, establishing recreation and tourism areas, encouraging traditional cultural and spiritual use, and producing timber and other forest products. Community-based decision-making strategies are central to the idea of traditional ecological knowledge role in sustainable development.

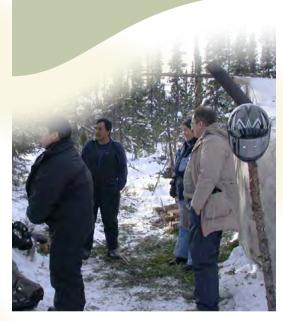
Parsons and his colleagues are working carefully to create ways for this valuable knowledge to be appropriately used in sustainable forest management decision making. "Our research is with or for Aboriginal people, not on them," Parsons says. "We regularly ask Miawpukek Elders for advice. It's an honour for us to be asked to go out on the land with them." The Miawpukek First Nation is on Newfoundland's south coast.

#### **Overview**

Traditional ecological knowledge is recognized for its value in sustainable forest management.

Community-based strategies are central to the idea of traditional ecological knowledge.

Opportunities for Aboriginal youth to pursue careers in forestry could help promote traditional ecological knowledge.



Tour of Innu Nation research on the effects of retention harvesting on mammal populations



Parsons' "participatory" research is leading him to the conclusion that the most sustainable Aboriginal forestry practices are found in communities with Aboriginal foresters on staff. Foresters or forestry positions tend to be longer term and therefore provide more continuity to forestry policy in Aboriginal communities.

#### Turning Aboriginal youth on to forestry careers may be the best hope for preserving traditional ecological knowledge

To help promote longer-term, more sustainable forestry practices, Parsons wants to provide opportunities for Aboriginal youth to pursue careers in forestry. He says an important first step is to create opportunities for Aboriginal youth to learn about the forest from Aboriginal Elders.

Parsons began in 2006, when he coordinated a series of workshops for the Canadian Model Forest Network's Aboriginal Strategic Initiative designed to learn from youth about how they want to become involved in natural resources. Three First Nations workshops were held across Canada. They involved Sturgeon Lake First Nation in Saskatchewan, Black River First Nation in Manitoba and Waswanipi Cree Nation in Quebec.

Parsons has maintained his focus on youth since then. In mid-March 2010, supported by the First Nations Forestry Program, about 40 youth from Miawpukek First Nation participated in a week-long traditional ecological knowledge and science camp. "They learned about traditional and scientific knowledge systems and how to apply them in a natural resource setting. An additional benefit is that youth are exposed to their own language. This also helps preserve traditional ecological knowledge," Parsons says.



Elder Noel Joe from the Miawpukek



Reg Parsons talking to youth about traditional ecological knowledge and science