



## Ecological Change in the Hudson Bay Bioregion: A Traditional Ecological Knowledge Perspective

By Terry Fenge

The November 1996 issue of the respected journal *Policy Options* included an article by Albert Howard and Frances Widdowson that rebuked attempts to incorporate traditional ecological knowledge (TEK) in environmental assessment of resource development projects. In a "take no prisoners" approach, the authors suggest that TEK is spiritually based and that its incorporation in the Broken Hill Proprietary (BHP) assessment processes was resulting in the "imposition of religion on Canadian citizens." They opine:

*The integration of traditional knowledge hinders rather than enhances the ability of governments to more fully understand ecological processes since there is no mechanism, or will, by which spiritually based knowledge claims can be challenged or verified. In fact, pressure from aboriginal groups and their consultants has made TK a sacred cow for which only uncritical support is appropriate. Traditional knowledge is thus granted a sanctity which could lead to the acceptance of incorrect conclusions.*

Because traditional knowledge can be "anything that [its] holders say it is," the authors suggest it will be used to justify over-exploitation of natural resources. Citing, as an example, Inuit harvesting of Bowhead whales, they warn against Aboriginal groups regulating use of renewable resources. They accuse the federal government of "appeasing" and "buying off" Aboriginal groups by attempting to integrate TEK in decision making and, finally, they express "astonishment" that Aboriginal leaders would suggest that traditional knowledge is "intellectual property" for which holders should be paid. Uncompromising stuff.

The Canadian Arctic Resources Committee has always supported the inclusion of TEK in land- and resource-use planning and environmental assessment. CARC believes that incorporating TEK in decision making will help to implement principles of sustainable development adopted by the federal and two territorial governments and enshrined in various international agreements to which Canada is party. Moreover, representation of Aboriginal peoples on institutions to manage natural resources provides an excellent vehicle to integrate scientific and traditional ecological information -- a means of seeking and defining the public good rather than the alleged appeasement.

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Interest in TEK has mushroomed in the last ten years. Academics now teach courses on it; the Government of the Northwest Territories has a policy on how it should be considered and used; and the recently proclaimed Canada Oceans Act mandates federal agencies to consider TEK in promised strategic ocean-use planning and management. And it is not only in Canada that TEK is generating interest. The 1987 Report of the World Commission on Environment and Development, and Agenda 21, agreed to at the Rio de Janeiro Earth Summit in 1992, urge governments to recognize, use, and help preserve the knowledge that Aboriginal peoples have of their natural environment. The Convention on Biological Diversity, also agreed to in Rio, includes the convoluted but justly celebrated clause 8(j) committing contracting parties (including Canada) to:

*Subject to its national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices....*

Who better to respond to Howard and Widdowson than Aboriginal peoples themselves, willing to share their knowledge and understanding of their environment with their fellow Canadians? This issue of *Northern Perspectives* introduces *Voices from the Bay* -- a new book five years in the making -- co-published by CARC and the Environmental Committee of the Municipality of Sanikiluaq, a small Hudson Bay Inuit community on the Belcher Islands. This book draws upon and records the TEK of Inuit and Cree resident in 28 communities on the shores of Hudson and James bays and Hudson Strait.

In the late 1980s and early 1990s residents of communities around Hudson and James bays nervously anticipated construction of the Great Whale hydro project. Having already completed development of La Grande River, Hydro-Quebec intended to develop first the hydro potential of the Great Whale and then of the Nottaway-Broadback rivers. Similar but smaller developments had been completed or were proposed in northern Ontario and Manitoba; for example, the Conawapa hydro project in northern Manitoba was under serious consideration.

Cree and Inuit residents downstream from these developments feared for their future and for the health of their environment. Following extensive political and legal action, primarily by the Grand Council of the Crees of Quebec, an environmental assessment of the Great Whale project was put in place. Notwithstanding its sole jurisdiction over Hudson and James bays, the federal government cited sensitive federal-provincial relations in justifying its decision not to insist on analysis of the project's offshore impacts. Moreover, neither the federal nor the provincial governments were thinking of an environmental assessment of the combined effects of existing and

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proposed development. All bowed to the intellectual merits of such an exercise, yet each jealously guarded the ability to act freely and singly.

It was in this potentially dispiriting milieu that CARC, Sanikiluaq, and, initially, the Rawson Academy of Aquatic Science proposed the Hudson Bay Programme. The programme sponsored a TEK study and proposed to show how science and TEK might be integrated in a combined effects assessment and how it might help to implement sustainable development policies and programmes to help define the bays' "carrying" and "assimilative" capacities -- their limits to withstand development.

Carried out between 1992 and 1995, the study was supported financially by a wide range of interests: the federal and territorial governments, Canadian and American foundations, electric utility companies, regional Aboriginal organizations, and members and supporters of CARC.

A very interesting picture of the Hudson Bay bioregion emerges through TEK. The pace of ecological change in the bioregion seems to be accelerating. Drawing upon close and continual observations of their environment while hunting, fishing, trapping, and gathering and from information passed down from previous generations, and using a wide range of "indicators" often based on animal behaviour, Cree and Inuit are able to record, map, and articulate explanations for what they see going on. In this manner they provide both a picture of their immediate environment and a record of changes to it over time.

This is important because comprehensive scientific studies in the North are expensive and rare. Data are often limited to the last ten to twenty years, making it difficult to establish trends over long periods. Most TEK studies have been carried out by credentialed experts from universities or governments who have interviewed hunters or fishers. Their work tends to concentrate on individual species of wildlife such as the barren-ground caribou or beluga whale to map the distribution and abundance of these animals. This approach sees TEK as a supplement to ecological and biological data collected scientifically.

*Voices from the Bay* documents a study very different in scale, methodology, and outcome and which sets a new standard in TEK research. Rather than dwelling on individual species, this approach, developed by the Environmental Committee of Sanikiluaq, sees TEK as complementary to scientifically collected data and paints a picture of ecological change in a huge portion of Canada. Information was gathered, verified, and analyzed in workshops and meetings by Cree and Inuit themselves in their own languages. Indeed, one interesting outcome of the study was greater understanding between Cree and Inuit, who -- although they live in different parts of the bioregion and rarely meet -- readily shared and exchanged information. They hope all will listen to their voices and benefit from their knowledge -- a far cry from the proprietary attitude attributed to Aboriginal peoples by Howard and Widdowson.

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This special issue of *Northern Perspectives* gives the flavour of the book. The first section summarizes key observations on seasonal change in the bioregion, noting environmental cues or indicators used by Inuit and Cree to understand the ever-repeating rhythm of and transitions between the seasons. Many Canadians learned in elementary school that Inuit have a rich vocabulary to describe snow, but this section details their extraordinary understanding of sea ice. This should not surprise us, for sea ice is a primary highway to Inuit and many travel hundreds of kilometres on it in search of marine wildlife. The book provides an unprecedented model of sea-ice formation and ablation through winds, currents, climate, and other environmental factors. The second section outlines the significance to Inuit and Cree of the environmental changes they observe. The reader gets some indication of the difficulties facing the region's Aboriginal peoples as they adapt to these changes. Finally, the third section outlines, primarily in direct quotations from Inuit and Cree, just what the Elders think should be done in the face of their changing environment. They suggest that, rather than turning back the clock, incorporating their knowledge in decision making may benefit us all. This is particularly generous in light of the sorry history between Cree and Inuit and many federal and provincial governments.

All with an interest in the North should read this book. Filling its 100-odd pages are compelling observations on changing flyways for Canada and snow geese thought to result from birds staging farther inland on reservoirs created by hydro dams, pollution as a result of tire fires in southern Canada, and polynyas (areas of open water in winter) thought to result from current change and alteration in freshwater input to southern Hudson Bay as a result of the La Grande project, and much more. The casual reader is likely to get caught up in the grand sweep of ecological change reported. Specialists may be drawn to the intricate account of sea-ice formation. Whatever the case, here is a wealth of information -- offered in good faith -- that surely we would willingly forgo only as a result of cultural hubris.

While the need for a combined effects assessment of development in the Hudson Bay bioregion remains, the Hudson Bay Programme has shown that TEK should play a central role in such an exercise and that it is possible to integrate scientific and TEK approaches to better understand regional ecological change.

The TEK study conducted under the Hudson Bay Programme suggests not only that TEK has a major role to play in resource management, but also that Howard and Widdowson's argument ignores the practical benefits that TEK can provide. In short, we can all benefit from listening to the *Voices from the Bay*.

**Terry Fenge was formerly the Research Director of the Inuit Circumpolar Conference (Canada) and from 1992 to 1996 was Executive Director of CARC.**

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## *Voices from the Bay*

The following articles, "Traditional Ecological Knowledge of Ecosystem Components," "The Significance of Environmental Change," and "The Future," are excerpted from chapters of the same titles in *Voices from the Bay: Traditional Ecological Knowledge of Inuit and Cree in the Hudson Bay Bioregion*, compiled by Miriam McDonald, Lucassie Arragutainaq, and Zack Novalinga.

### **Traditional Knowledge of Ecosystem Components**

*The world can tell us everything we want to know. The only problem for the world is that it doesn't have a voice. But, the world's indicators are there. They are always talking to us.*

Quitsak Tarkiasuk, Ivujivik

Hudson Bay Cree and Inuit have knowledge about many of the natural processes occurring in their ecosystem. Their holistic view of the environment lends itself to a natural appreciation of linkages -- if a particular phenomenon is observed, then other conditions probably also exist -- among, for example, the seasonal cycles, weather, currents, and sea ice.

The Hudson Bay region starts to transform into a colder environment towards the end of August or during September. Early indicators -- birds migrating south, fish migrating upriver, vegetation changing colour, leaves falling, and the occurrence of frost -- herald the transition to fall. In the Hudson Strait region, Inuit recognize *early fall* as snow geese arrive from the north, caribou shed their antler velvet, and Arctic char migrate upriver. Later, *fall* arrives as the beluga whales and seals migrate to winter locations and the walrus move inshore. In western Hudson Bay, *fall* coincides with young birds flying for the first time; and in eastern James Bay, with the whitefish and lake trout spawning and the caribou mating.

During the transition to fall, precipitation is usually more frequent than in summer and, as air temperatures drop, rain changes to ice-pellet showers and blowing snow. Meltwater pools and ponds are first to freeze, followed by the land, lakes, and rivers as cooler air temperatures prevail. Sea ice first forms within inlets and along shorelines. By the end of the transition, both animals and humans have adapted to Hudson Bay's winter environment.

The spring turning point occurs during *mid-winter* in James Bay, *toward spring* in western Hudson Bay, in early spring in eastern and northwestern Hudson Bay, and with the arrival of *long days* in Hudson Strait. After an initial warm spell, the atmosphere often cools again while the environment responds gradually to warmer air temperatures, longer days, and the sun rising higher in the sky. In some areas, as the cold air warms, frequent snowstorms allow snow to accumulate further. A critical factor during the spring transition occurs when melted snow refreezes, making feeding difficult for caribou, reindeer, fox, Arctic hare, and ptarmigan. Unable to penetrate the hard layer of ice to reach lemmings and mice under the frozen snow, foxes move to the sea

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shoreline in search of food.

*During winter, when the high tide comes, the beach ice will be saturated with water leaking through shoreline cracks. When the high tide and strong currents come, it is time to look for beluga whales because the winds will be strong and coming from the northwest. That is when you expect to see some beluga at the floe edge.*

Noah Isaac, Salluit

Traditionally, Cree and Inuit forecast daily weather, predict seasonal characteristics, and adjust to seasonal change using their knowledge of clouds, stars, northern lights, wind, snow ice, currents, and animal behaviour.

In the Hudson Strait area, Inuit expect bad weather that day or next when *caribou or seals shake their heads*. In spring, Inuit expect bad weather when northbound geese reverse direction, and very bad weather when the geese do not move. Birds gathering in large numbers or animals moving in the same direction is a sign of a storm building; geese flying high signals better weather.

In western Hudson Bay, part of the day will be cold when *the woodpecker's beak moves fast*, and it will be extremely cold when bright northern lights cover the entire sky. Northern lights appearing *reddish-orange on their southern side* portend warmer weather for about three days. When chickadees arrive suddenly on a cold day, milder weather is expected the next day. In western Hudson Bay, snow is expected when the owls call at night.

When rabbit paws turn white earlier than usual in western James Bay, Cree expect an early snowfall and a difficult winter. Thunder in late fall is a sign of a warmer-than-usual winter in western Hudson Bay, while thunder early in spring means a hot summer.

Sea mammals return to the Cape Dorset area soon after the eider ducks, and, in western Hudson Bay, an abnormal influx of wolves signals high numbers of caribou. A sudden population explosion of mice during summer can mean a high fox population in western Hudson Bay.

Inuit interpret environmental indicators and determine animal behaviour with their traditional knowledge of currents and sea ice.

*The currents are the marine animals' access to [food]. Inuit also need the currents, and we are always watching the currents for hunting. Seals come and go with the currents. There would be no whales if there were no currents.*

Peter Matte, Akulivik

*The currents clean everything, ... If the water stopped moving, the animals in the marine world would stop moving, and Inuit would have nothing to eat.*

Lucassie Iqaluk, Inukjuak

*All sea mammals are able to travel further [and faster] with the help of currents. In fall, ... places where there were no seals could have lots of seals when the currents come. All the animals in water seem to come alive when currents strengthen.*

John Kaunak, Repulse Bay

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They also know that a storm develops when the current *acts as if it has stopped knowing where it is supposed to go* during high tide. At this time, animals at the floe edge stop moving and are not seen anywhere.

Inuit have always spiritually respected the sea ice as a living form with influence on the daily lives of both humans and animals. Different ice conditions determine which sea mammals are present in winter, which areas can support hunting and travel, and the type of spring break-up. Their strong reliance on sea ice for travelling and hunting is reflected in their knowledge of its processes, characteristics, and annual cycles. It is not surprising that Inuit use distinct terms to describe each different ice condition through five stages of development. A sampling follows.

### **Stage 1: Early Ice Formation**

*Qainguniq* and *quinguk* result from slush formed offshore under colder air temperatures that is washed ashore by the wind, where it freezes as beach ice at the high-water mark. When new ice forms from slush in narrow water bodies, like inlets, it is called *qiqngurusirtuk*, a soft and unreliable ice for travel.

*Sikulirutit*, *quiquit*, *tullukkalait*, and *putatak* are new ice, freshly frozen from part saltwater and part freshwater along shorelines and within inlets. High tide will float it and winds can blow it offshore in broken pieces. When there is no wind, currents also move it. Seals like to be on this ice.

On a calm day, very thin layers of new ice called *sikuak* and *agutituat* can form, often attaching to the shoreline or other ice. When it thickens, *sikuak* supports very good breathing holes for seals. Once inlets are frozen over, new ice called *sikutak* (new ice that forms from *sikuak*), *ukiurjait*, and *tuvasak* forms. *Sikutait* is solid ice in small inlets or bays formed before the landfast ice starts developing. *Sikuliak* is newly formed ice with no snow on top; it is thinner than old ice, but safe to walk or travel on.

### **Stage 2: Development of Landfast Ice**

Very thin ice forms from *sikutait*, and from the edge of shoreline ice, when landfast ice begins to develop. As the landfast ice extends farther from the shoreline, floe leads and the floe edge form. The floe leads open and close repeatedly, and the landfast ice never stops forming as long as temperatures remain at or below freezing.

Maturing *sikuliak* becomes *tavak*, a landfast ice that stays frozen in the bay and coastal areas and becomes solid ice attached to the shorelines. The last ice to leave an area after breakup, it moves only when the snow melts and shoreline cracks start expanding in spring.

*Uiguak* usually forms as smooth, solid ice when wind blows from the landfast ice. It will meet *aLgutitak*, a rough, slushy, unsafe ice that attaches and extends from the floe edge when winds are blowing into the shore. *Sikuliak* forms when *uiguak* and *agutinik* meet and freeze solid. Thin crystals called *kangutik* and *kanijuk* form on top of *sikuliak*.

*TuLkilik* and *ajukraq* are cracks that occur between two islands or pieces of land when there is water under the ice. Because the cracks shift every day, the ice that forms in *uLkiliit* (plural) is thin and seals use the cracks to make breathing holes.

### **Stage 3: Development of Floe-edge Ice**

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Ice at the floe edge is particularly affected by currents and winds. When the force of strong currents and moving ice causes thin pieces of ice to pile up on one another the resulting ice is called *qalirittinik*. *Ivunik* is rough, scrambled ice of varying thickness formed when moving ice collides with the floe edge and piles up. *Akitkuit*, *aqiqaknit*, and *akkiqaninFuit* form when ice is broken up by strong currents or waves colliding against the floe edge and the broken ice is submerged, allowing new ice to form on top.

When, in eastern Hudson Bay, large areas of sea ice form, "ice joints" occur along the thinner edge of what was the floe edge. To keep the ice flexible, these joints -- *iniruvii* -- open and close continuously like a hinge during high and low tides, but they do not shift sideways. During spring tides, and as soon

as the temperature rises a few degrees, the ice in joints and larger leads breaks off at the point of least resistance.

*Qamait* and *piqurniq* form when the pressure that causes ice to break pushes the broken ice upwards. Seals use them during winter months. *Milutsinik* and *iktaniq* are formed at the floe edge when snow-soaked water freezes. Unsafe in current areas, this ice is avoided by hunters and animals.

#### **Stage 4: Spring Cracks**

Although the thickness of sea ice differs each year depending on weather conditions, most sea ice in Hudson Bay melts completely and new ice forms annually.

Ice joints are the first breaking points in spring. Later, the cracks between land points, where ringed and bearded seals

have wintered, get wider -- *ajuraq* -- and as ice starts to breakaway in them the landfast ice begins to break up.

#### **Stage 5: After Break-up from Spring to Early Summer**

*Tuvak* breaks into big ice packs called *aniksaot* -- large pieces of floating solid ice with no cracks. Separated from the floe edge by strong currents or wind, *aniksaut* can be further broken up by currents or wind.

Thick pack ice from north Hudson Bay called *miqiaq* "moulting ice" often crowds areas so there is no open water in sight. It will stay near the shoreline until it is clean and during this time it *acts as if it has a mind of its own* because no wind, tides, or currents will move it. Inuit have often seen *miqioat* suddenly move out heading into strong winds.

*Our people in the Moose River area have perhaps had the longest experience in seeing the effect of hydro developments. The first dam was constructed around 1914, and construction of a number of dams continued to about 1960. During that 50-year period the people had no say about what happened ... what makes it even worse is that they put in a road when they build those projects. After the road is in, then they come in and start cutting the trees down and looking for other things like minerals. Hunters also start coming in from the south. So hydroelectric development brings a lot of other effects that are just as bad as -- perhaps worse than -- the dam itself.*

John Turner, Moose Factory

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## The Significance of Environmental Change

Eastern James Bay Cree still pursue a traditional life based on natural foods because they believe that *to heal, you have to go back to the land and eat the food*. They note that rates and impacts of change have been much greater since HydroQuebec started damming, diking, and flooding the rivers in the 1970s. Family hunting territories have been flooded, river travel routes submerged or drained of water, camps vandalized, and sacred traditional sites destroyed. They feel their land and their lives have been invaded. A decline in fish and a shift in migration routes of Canada and snow geese are affecting the seasonal diet of coastal Cree; the decline of fish and small game is affecting the diet of inland Cree.

*The sturgeon is affected along with other species of fish. It is on the decline, more so than at the beginning of the flooding. There were plenty of fish before all this happened. Now it is a different story. There are less lake fish in the hunting territories. It is the same story with the birds, especially the willow ptarmigan. There used to be plenty of them during winter.*

WilliAm Fir~mAn /Chisasibi

Northwestern Hudson Bay residents note that caribou, which are not intimidated by mining activity, migrate very close to work camps and may feed in contaminated areas; they wonder about a link between mine tailings and the high rate of cancer-related deaths among Elders since 1990.

*When I was a young man, the only thing that made the sky look different was natural smog from the south winds. It came from the burning trees way down south. In today's weather, very dirty things are falling from the sky.*

Nala Nappaaluk, Kangiqsujuaq

*Two springs ago, we noticed the snow was covered with particles ... Like a black powder. It started in early spring when there was a south wind, and it was snowing at the time. It was really noticeable out on the ice, where the snow was black after the snowfall. You could also see something black floating when the snow melted on top of the ice. This stuff came from the air.*

TimmY Rupert, Chisasibi

Hudson Strait Inuit describe the sun as having a *strong burning effect on human skin*, and it has burnt the faces of Belcher Islands hunters, a phenomenon considered very unusual. Between 1990 and 1993, the sun's heat seemed to change; when a white, misty haze in the higher atmosphere screened the sun, both northwestern Hudson Bay and Hudson Strait Inuit observed that insects and vegetation did not thrive and the sun was less effective in melting the snow and ice.

Since the 1940s, weather in northwestern Hudson Bay has become highly variable. There used to be more clear, calm days, winters were colder, and low temperatures persisted longer. By the early 1990s, weather changes were quick, unexpected, and difficult to predict. Blizzards, for example, would occur on clear days in the Chesterfield Inlet area, but on days when environmental indicators suggested a blizzard, it would not materialize.

*Even if we try to predict what it is going to be like tomorrow, ... the environmental indication isn't what the Elders said it would be.... In the past, when they said, "it's going to be like this tomorrow" it was. But, our*

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*weather and environment are changing so our knowledge isn't true all the time now.*  
Lucassie Arragutainaq, Sanikiluaq

*Rivers and lakes contribute a lot to the well-being of people.... The currents and rivers are the veins of Hudson Bay. They start from inside the basin and go out through Hudson Strait. y any part of the currents or rivers are altered in Hudson Bay, the basin will start to slowly die ... and the animals will die with it.*

Peter Kattuk, Sanikiluaq; George Diamond Sr., Waskaganish

## **The Future**

Traditional ecological knowledge is rooted in a way of life that gives meaning to aboriginal existence. Experience and knowledge handed down from generation to generation provided understanding and guidance to sustain life. Today's Elders try to continue this tradition, but, in their lifetime, they have experienced *outsiders* taking control of almost every aspect of their lives -- including their children's education, their economy, lands, rivers, and the way they can hunt, trap, and use the animals.

*... young people should be taught not only the white man's way. They should also be learning the ways of their own Ancestors and the way of life they survived on. ..*

George Diamond, Sr., Waskaganish

*Once we realized how it affects our children by sending them down South for schooling, we decided to establish our own community high school system which will be equivalent to other high school education.... Today, because we include our culture in the education system, our young people are beginning to realize and understand what effects a major development will have on our traditional way of life.... Because our young people now speak English, they understand the major development issues. They now know what land inheritance means.*

Gabriel Fireman, Attawapiskat

Traditional Cree and Inuit are now asking some tough questions: With all the environmental changes occurring and pressures for change in lifestyles, what will become of their next generation? What problems will be encountered? What *insurance* is therefor their cultural survival?

*The environment must remain healthy because people have to rely on it for food.... contaminants will accumulate over the years, and that's why I am worried for my next generations.*

Johnny Kavik, Sanikiluaq; Simon Makimmak, Akulivik

*How much will the land be damaged before they realize they're damaging the whole population of Hudson Bayand James Bay ?*

Timmy Small. Moose Factory

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It is clear that Hudson and James bays' aboriginal peoples need a sense of renewed ecological security. Specifically, they seek assurance that there will always be a healthy environment and land for future generations.

*We must study together so we know how to share the land. We both have questions, and maybe we could take our colleague's scientific information back to our communities. Maybe scientists can benefit from (our) traditional knowledge.*

*Some development projects ... may be beneficial to our communities. We also look to the future in terms of what will benefit our children.... Elders ... know of long-term changes by nature as well as human-caused changes.*  
Louis Bird, Peawanuck

*The Elders are the ones that are the scientists and professionals in our land.... [white people] have their experts and our experts are the Elders. We should be comparing the knowledge of those two.*  
Edward Tapiatic, Chisasibi; Louis Bird, Peawanuck

*The knowledge of our Elders is even more important today ... We cannot, nor should we, be forced to stop using the land today or in the future.... We have always depended on [our Elders] for guidance and, today, it is evident we will still turn towards [them] for [their] wisdom.*  
Mikidjuk Kolola, Lake Harbour

*The environment has no boundaries. We will have to support each other whether we are Inuit, Cree, white people or other people.*  
Titi Kadluk, Chesterfield Inlet

The series of workshops that brought together Cree *and* Inuit from the communities around Hudson and James bays had many benefits. Community residents contributed and shared information about the environment in their areas -- information gleaned from their observations and juxtaposed with the knowledge and experience gained through the generations. The process gave the participants a renewed sense of worth and of contributing to solving the problems -- in most cases beyond their direct control -- that affect them. Moreover, they consented to having recorded -- and to sharing with those who will read it -- valuable information never before committed to paper.

*It is important to distribute these materials that we have put into writing. We should give them to the young people so they are informed of why our Elders sat here -- the way they express things they think are important. There seems to be a lot of subjects that have been put together in these workshops that would help our young people understand our purpose and determination to save our environment -- what's left of it up North. We know that we cannot stop the major projects that will take place as the Europeans keep increasing in this land of ours. We will not be able to stop them. That is why we must educate our children to adjust more easily and faster than we do, but still not to lose our Ancestral respect of our land and environment, both spiritually and materially. We have shown to each other how much we care for everything that is living or existing as animal, plant, element, liquid or solid rock. We begin to understand how we value these things today and our children will come to understand much better if they see our effort. We are trying to do the best we can. This is why we say we should not allow our efforts in this Programme to be just put onto the shelves and forgotten. We should make sure [copies of our work] exist in each community and for each group that is involved in the public, like politicians or even companies that are interested in our region. So they may understand what we are talking*

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*about. What we want them to know is how much we care for the place we live in, the land and everything.*  
Louis Bird, Peawanuck

These are *Voices from the Bay*.

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