



UP FRONT

Traditional Knowledge, or **TK** for short, is a thread running through Aboriginal culture from the ancient past to today.

The sponsor of this publication, FORED BC, has had a strong, working relationship with First Nations, based on respect for traditional knowledge, for several years.

Through a FORED program called AHEAD, meaning Aboriginal Heritage Education And Dialogue, FORED has a number of initiatives underway to reach students, elders and First Nations communities.

In this magazine you will see samples of award-winning essays by Aboriginal post-secondary students on the subject of Traditional Knowledge. A montage of posters submitted by Aboriginal elementary students on the TK theme is presented. There is also a report on a survey conducted among Aboriginal communities on the importance of TK to their communities.

You will find, as well, articles offering various perspectives on Traditional Knowledge.

In years of working with First Nations as a business and professional advisor, I have observed the importance of TK to today's Aboriginal communities. In offering professional development workshops to business professionals from over 80 Bands, I have seen high technology trends and traditional resource management discussed in the same workshop. Publications I've written for First Nations covering themes ranging from Aboriginal Business Management Challenges to Career Paths for First Nations Youth all incorporated TK material. Otherwise, they would not have connected with Aboriginal readers.

Enjoy and hopefully learn. Your comments are welcome.



Victor Godin

Editor

Email: startbc@shaw.ca

Telephone: 604 264 4474

Answers from Ancestors

CONTENTS:

UP FRONT ▶

THE SEEDS OF KNOWLEDGE

IGNORING AN ANCIENT HARVEST ▶

TRADITION DRIVING OPPORTUNITY ▶

WHAT DOES ELDER MEAN ▶

TRADITIONAL PLANTS LOST ▶

COLOURFUL CREATIONS ▶

OLD FRIENDS MAKING UP ▶

THE GRANDFATHER TREE ▶

FIRST NATIONS OPINION SURVEY ▶

THE SEEDS OF KNOWLEDGE

Developing an understanding of how plants could treat or prevent illness was a time-consuming process. It involved millions of people conducting trial and error experiments over thousands of years.

Consider the task of making the links between disease and plant life.

There are 20,000 plants in North America today.

A plant has 5 main parts. Each of those has sub-parts but let's keep the math simple.

Therefore, there are, at a minimum, a potential 100,000 ways plant parts could be used to treat disease.

The trial and error process was made more challenging by the complex nature of disease.

Pneumonia for example has 10 different symptoms. So which of those symptoms would tell an ancient healer that the person indeed had pneumonia and how many of the 100,000 options could be selected after the diagnosis was made?

That's why the accumulation of traditional knowledge took so many people working so many thousands of years.

How will this work in the future?

The forests of BC have a wealth of plant species on the forest floor. The number exceeds 1000. Some of those have the potential to cure disease. In South America, the Amazon tribes have placed a claim on any future profits that drug companies will earn as a result of cures developed from flowers in the Amazon jungle.

Will First Nations in BC see the forest as more than trees and do likewise?



IGNORING AN ANCIENT HARVEST

When Europeans first arrived in North America, they saw an endless bounty of nutritious foods stretching to the horizon.

They ignored all of them and planted a few seeds they brought from home. Foods that had sustained First Nations for thousands of years were of no interest to the newcomers.

Now, people are taking a second look at a treasure.

A legume is an edible vegetable. About 18,000 varieties exist around the world. People have domesticated less than 50 types, and eat less than half of those. Of those, three crops –corn, wheat and rice–make up two-thirds of the world's calories.

The plants of choice for the Europeans were annuals. The plants that were already here and a staple in Aboriginal diet were perennials. They did not need to be planted every year, they grew close together thus preventing weeds, and because they are deep rooted, they lock carbon in the soil. They also survive changeable weather better than the crops that replaced them. Finally, they use much less water.

As climate change and drought preoccupy our thinking today, the traditional knowledge surrounding historic Aboriginal diets is in the forefront of scientific thinking about future food supplies.

TRADITION DRIVING OPPORTUNITY

The Nicola Valley Institute of Technology (NVIT) is described as “The Home of Aboriginal Public Post-Secondary Education in BC”. The student body is 75 per cent Aboriginal, drawn from 70 per cent of the Bands in BC. NVIT was founded by five First Nations bands and offers a range of career-focused courses including natural resources and technology.



For several years, FORED has had a scholarship program for Aboriginal students at NVIT. The program invites students to participate in essay contests to broaden public understanding of Aboriginal perspectives. The following are samples of winning contributions on the theme of Traditional Knowledge.

Everett Tom is a member of the STATIMC NATION-LILLOOET BC, XWISTEN-BRIDGE RIVER BAND. In an essay describing the importance of fishing to his community he says “When I was younger we caught so much salmon and there was plenty to be caught, now the fisheries have” to be managed in order to preserve the salmon so there will be some left for the younger generations”. He adds; “To me this is TEK,

my parents teaching me about fishing and me teaching my children what I know. When we hear the crickets making that clicking noise in the summer, we know that the salmon are running. I pray that the crickets never go silent, and the salmon continue to return”.

Cherlyn Allen is an Inuit and a Nunatsiavut Government Beneficiary. She draws upon her acquired traditional knowledge to explain the importance of seals to her people.

“Many tools were made from seals. The unâk pronounced oo-knock (harpoon) is a spear with a detachable point or head. The head was attached to a line allowing the hunter to retrieve a catch after striking it. Essentially, the harpoon heads were made of animal bones, ivory from walrus and narwhale tusk, antler and stone. The shaft was usually made out of drift wood if available as it would float when hunting sea animals and was retrievable for use once again. The line attached to the head was made out of the thick hide of the seals. Nothing was wasted”

Noting the custom

among Inuit of eating raw seal meat she explains” A lot of times hunting was tough and the Inuit would go hungry, so the kill would be eaten right away while still warm to provide warmth and to settle the hunger pangs”.

Describing the many uses of seals she explains “the skin was stripped of fat with an ulu pronounced oo-loo (woman’s knife), dried and made into many necessities such as clothing including, parkas, pants, boots, and mitts. These were sewn by the women and made to be waterproof and warm for protection against their harsh environmental conditions of the north”.

Student Ernie Last makes a clear case for the value of Traditional Ecological Knowledge, (TEK) and places it on a level playing field with modern science.

“TEK is intimate knowledge based upon and built up on the area and surroundings of traditional lands where people dwell. It is the understanding of nature and area by close observation of animals and plants over time. TEK



is based upon more of spiritual context rather than facts and theories as followed by western science.

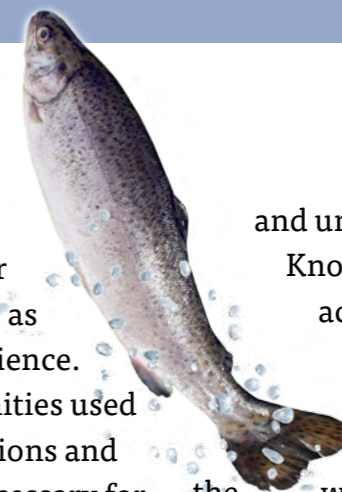
Traditional communities used TEK to sustain populations and maintain resources necessary for survival. Modern communities do not use TEK much anymore except for recreation and leisure. Traditional communities would often till or work an area to get it to consistently produce yield year after year”.

He describes how TEK shuns the modern system of trophy hunting for animals such as the caribou in the high arctic. “The TEK view holds that only hunting large males will quickly result in the accelerated death of the remaining population”.

He sees TEK as being slowly, but increasingly adopted by the resource sectors as they realize that project acceptance will be unlikely if it counters traditional ecological values.

Betty Squinas of the Ulkatcho First Nation provides an encompassing view of Traditional Knowledge.”

Western science is based upon the principle of repeatability and predictability, tends to reject traditional knowledge of native people as anecdotal and non-quantitative, without method



and unscientific. Traditional Knowledge is the accumulated knowledge and understanding of the place of human beings in relation to the world in an ecological and spiritual sense. It combines biology, botany, linguistics, social sciences, and other disciplines that connect Aboriginal people in an interdisciplinary way to examine how Aboriginals perceive the world they live within and use its resources”.

She references the ceremonial aspect of TK.

“An example of our Traditional Knowledge, which is handed down for generations, is when there is a decline of winter rainbow stock and size; the first trout that is caught is used in a special ceremony. Ulacan grease is put into the mouth of the trout and an ancestral prayer is done; the trout is released back into the water. This practice always increases the stock and size for the following year”.



WHAT DOES ELDER MEAN?



In the USA, medical science predicts that one out of two babies born today will live to be 100. In Europe, the prediction is that 40 per cent of people born today will reach 100.

Whatever figure is right, 40 per cent or 50 per cent, it means that a century from now, society will have no shortage of elders.

Non-Aboriginals are often confused by the use of the term “elders” in Aboriginal communities, particularly as it relates to traditional knowledge. They ask if being referred to as an elder is only a matter of age. Does the wisdom click in automatically on a certain birthday? For example, about 5 years ago, the Department of Indian Affairs appointed an official elder to give counsel to Aboriginal employees at the Ottawa office. She was 56 years old.

The short answer is that the deep wisdom to solve disputes or teach about traditional practices does not click in at any particular age, whether it's 56 or 96. In Aboriginal communities, elders are accorded respect based on a wide range of their past experiences and behaviors. It's a complex, selective process, driven by community consensus. Not everybody who reaches a particular age is deemed a wise elder.

So, those who may wonder if an Aboriginal person, born, raised and living an entire life in downtown Vancouver, suddenly acquires deep environmental knowledge on his 56th birthday, the answer is “no”.

And that won't change in 100 years, when elders will still be advising their communities.



TRADITIONAL PLANTS LOST

Before European arrival, a glance across the prairies of North America would have revealed an important difference. There was no wheat.

Instead, the Great Plains were covered with a plant called fescue. The bison (they are not buffalo) that lived here at the time, survived on fescue. Their numbers ran into the millions. About two-thirds of the fescue plant was underground. Scientists claim that's why those plants could store carbon for 200 years, about 50 years longer than the carbon sink of a forest.

But European cattle couldn't eat fescue. So the farmers ploughed it into the earth, slaughtered the bison that lived on it and the fescue, along with all of the related plants it nourished, disappeared.



In the early 1800's there were an estimated 75 million bison on the Great Plains of North America. By 1890, there were about 800, according to the famed naturalist and researcher into Aboriginal culture, Ernest Seton.

The intentional slaughter of those herds was conducted on a massive scale and had one official purpose. The American government's goal was to rid the plains of the animal that Aboriginals used for food, shelter and trade. Once the bison were eliminated, the plains would be given to farmers and ranchers, and the plains Indians were placed on reservations.

We know the scale of the slaughter because government paid the

continued on next page

...continued from previous page



bison hunters and kept records. The totals were astounding. In 1872, the

town of Dodge City in Kansas had 1200 people. That year, 3 million bison were killed near the town. In the state of Kansas, that had a population of 11,000 at the time, there were 2000 buffalo hunters. A good hunter could make \$100 a day. At the time, the average American made \$129 a year. The meat and bones were left to rot, while the hides were shipped east to be turned into machine belts and polishing cloths.

The openly declared purposes of the slaughter were to eliminate a species and the lifestyle of a society that depended on it.

Today science is beginning to understand that it also resulted in the elimination of a natural plant species that covered half a continent.

It also took out hundreds of related plants that had provided medicinal and nutritional benefits to Plains inhabitants for thousands of years.

We will never know the true price.

OLD FRIENDS MAKING UP

Sea Otters Have a Relationship with Coastal First Nations Reaching Back Thousands of Years.



The otters are unique among sea mammals in a number of ways. They use tools, specifically rocks to smash open prey. They eat the undersea creatures that eat the kelp forest. Loss of kelp increases green house gases and upsets the inter-related ecology of the shore, leading to losses of other plants and animal species. They have no blubber, instead relying on a coat that has from 250,000 to a million hairs to stay warm, as they dive 100 metres in search of food.

Unfortunately for the otters, that thick coat and their appetites brought about a string of bad luck and ill feelings.

The bad luck was the demand for their fur by Asian buyers. This resulted in a hunting frenzy that brought them to the brink of extinction in the 1800's. First Nations

participated in that hunt.

In the last 50 years or so, Coastal First Nations have moved steadily into the commercial shellfish industry, building upon a tradition in which shellfish were also culturally important.

The appetites of sea otters for shellfish brought about a clash when the species was re-introduced on the west coast. Now, the ancient allies were at odds because otters can be a serious threat to commercial shellfish harvesting.

First Nations have also been more concerned about the explosion of sea urchins that devastate kelp forests and related underwater plant life. Sea urchins are a favourite food of otters. That's why they are called a keystone species.

Work is underway to restore the balance that existed for millennia. That balance would allow First Nations to hunt otter, as they always have, in order that populations can be balanced, not eliminated. That would also allow the shellfish harvesting business to dodge the risk of being eaten out of existence.

Old allies are cooperating again.

COLOURFUL CREATIONS

Each year, FORED launches a poster contest in BC, inviting Aboriginal students to submit their artistic impressions on traditional knowledge. Posters are sent by the hundreds from children in Bands as well as Aboriginal children in urban schools.

This is a gallery of some of these.

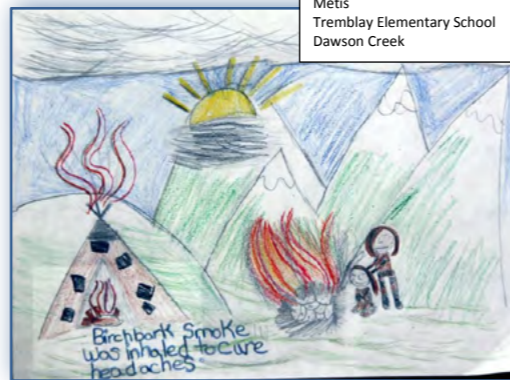
TRADITIONAL KNOWLEDGE AND MEDICINE

Aboriginal Poster Contest

Secondary Winner - Jenna & Jacqueline
Nangis First Nation
Spectrum Community School, Victoria



Primary Winner - Zoee
Metis
Tremblay Elementary School
Dawson Creek



To celebrate the rich cultural and heritage traditions of BC's aboriginal people, FORED BC Society sponsored a poster contest for aboriginal youth. More than 130 entries were received from all across British Columbia as part of FORED's Aboriginal Heritage, Education and Dialogue (AHEAD) program. Winners in each of three categories received a \$50 prize.



Intermediate Winner - Serenity
Penticton Indian Band
Outma Sqikw Cultural School
Penticton

Partial support for this project comes from the Government of BC

TRADITIONAL KNOWLEDGE AND MEDICINE

ABORIGINAL POSTER CONTEST



To celebrate the rich cultural and heritage traditions of BC's aboriginal people, FORED BC Society sponsored a poster contest for aboriginal youth. More than 130 entries were received from all across British Columbia as part of FORED's Aboriginal Heritage, Education and Dialogue (AHEAD) program. Winners in each of three categories received a \$50 prize.



Partial support for this project comes from the Government of BC

MORE ON
NEXT PAGE



COLOURFUL CREATIONS

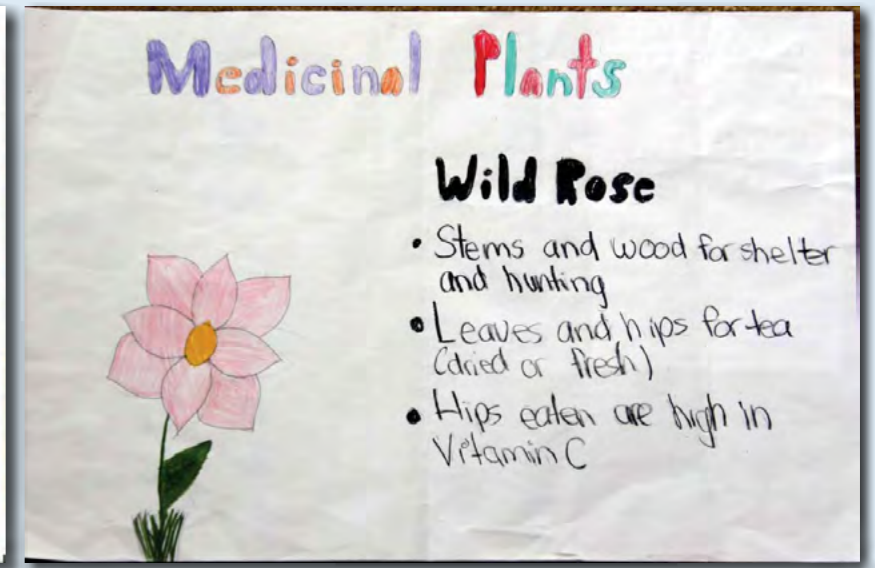
cont'd from previous page



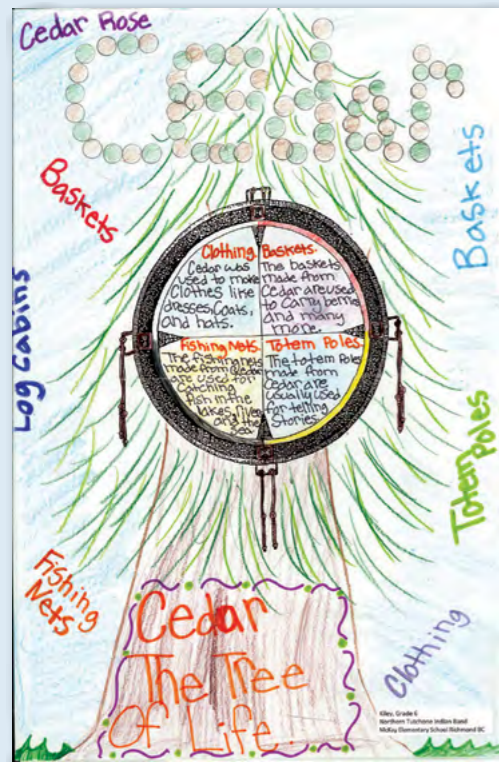
Madeline—Invermere



Kelanna—Osoyoos



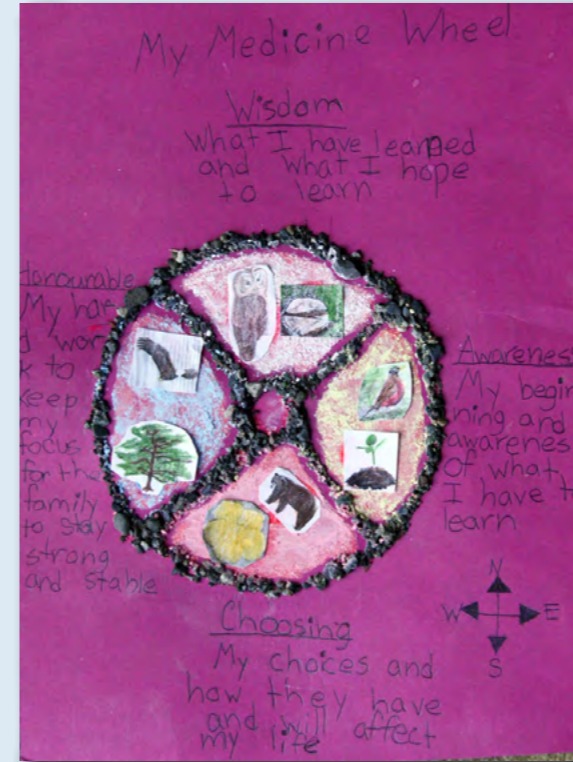
Jordanne—Kamloops



Sarina—Osoyoos



Int'l Winners: Renee & Raven
Gitwangak



Hon. Mention Dane, Mettis-Cree



Primary Winner—Sarina, Osoyoos

THE GRANDFATHER TREE

There is often confusion between traditional values and traditional knowledge. Many people express having the former while believing it means the latter. Few people possess both. The person in this story is one of that few.

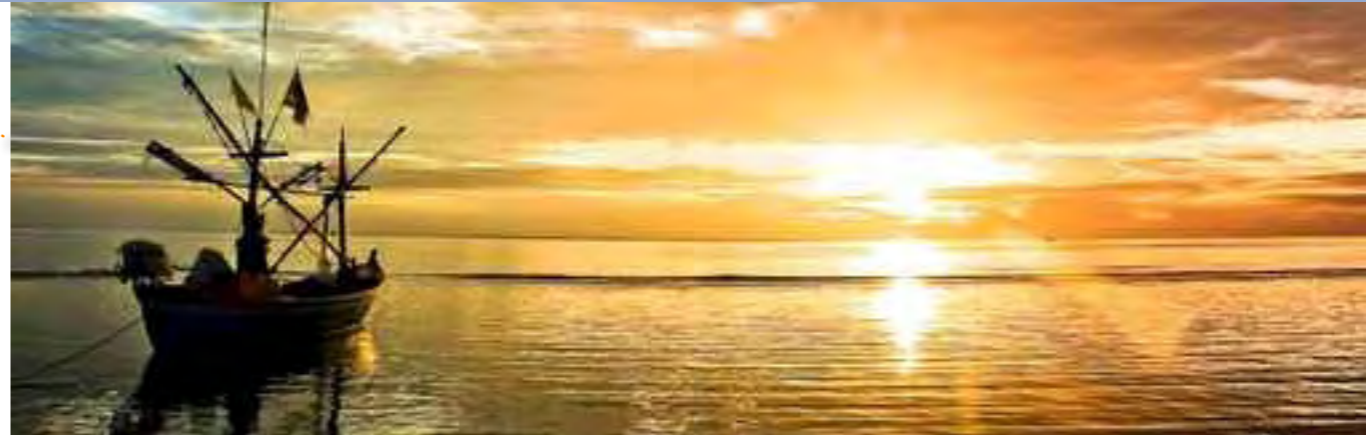
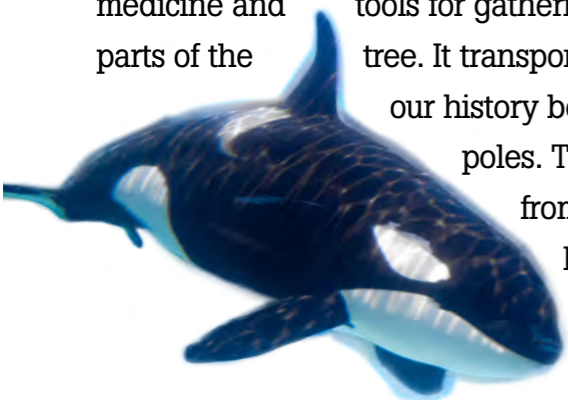
Earl Smith is an Elder of the Ehattesaht First Nation who, as a child before the Second World War, remembers accompanying his grandfather on fishing expeditions at three in the morning far out into the Pacific Ocean. He also remembers a time when he was five years old and his grandfather told the tale of the cedar tree while young Earl watched his father, uncle and great-uncle carve canoes from two huge cedar logs. This is the Earl's recollection of that story.

"My Grandfather called the cedar tree the Grandfather Tree. Like a grandfather, it looked after its families. It sheltered them in big houses, parts of the tree were used for medicine and tools for gathering, harvesting and fishing were made from certain parts of the tree. It transported us in the famous Nootka whaling canoes, it was our history book, telling us our family and tribal history in totem poles. The clothing hats and leggings that we wore were made from cedar bark. And, like a grandfather is a storyteller, the lessons learned from the cedar tree started at the very top and went down to the finest hair roots.

From the foliage and cones, we used cedar needles mixed with deer tallow, along with other herbs to make medicine and salves. Cedar cones were used as fuel and to freshen the air. We left most of the cones or scattered them in other areas where cedar regeneration had the best chance.

The use of cedar branches was meticulous. The young branches were used for fish traps of various sizes as well as traps for eel and rock crab. We used the young branches to construct funnel traps 15 to 20 feet in size that were used in conjunction with fish weirs. The purpose of these funnels was to guide fish to shallow areas of the river into another weir where we could harvest, picking and choosing the desired fish. This was to ensure that a balance of females and males reached the spawning grounds.

Larger cedar branches were used for lattice construction in order to create shade in unshaded areas of spawning beds. Branches, cedar pieces and shavings were also used to heat rocks when it was time to increase the width of a canoe with water and hot rocks.



Cedar bark had a multitude of ceremonial and functional uses. The most prestigious use of cedar bark was as a rope attached to the whaler's harpoon as well as the tow-rope for bringing the whale home. My mother's traditional family name signified her family's duty to tow the whale home for the Chief. Smaller diameter ropes made of bark were used for anchoring canoes, rafts and for binding the logs that were used as floats during herring spawning season. Cedar ropes were also used to bind a platform placed between two canoes to move family belongings to the next living site, along with the house planks. The bark was used for capes, leggings and hats as well as ceremonial seating mats and place mats for feasts. Artists and basket weavers used cedar bark extensively in ceremonial artifacts. Finally shredded cedar bark was used in cedar storage boxes to keep insects and moths out.

The cedar trunk provided planks for our big houses; it was used for our canoes, our paddles and our bailers. Cedar boxes measuring four feet by eight feet stored winter foods of smoked and sun dried fish of various species.

Even the roots were part of the gifts from the Grandfather Tree. Fine hair roots were gathered and dried and used as matting for baby cradles. Runner roots were used as a lacing and binding material and different root sizes were incorporated into gift baskets used at potlatches. As well, our protective armor was made from roots."

Earl had a working education and remembered his first job given to him as a child by his grandfather. He recounts "Stone traps were constructed at low tide; they were usually six feet in diameter and two feet in height. My grandfather built the traps and it was my job to dismantle the trap once we got what we needed. These traps were used to capture shiners, perch, crab and herring when they were running. It was my responsibility to dismantle the rock traps and scatter the rocks so that not a single fish would be trapped and die from lack of water at low tide."

That is the difference between musing on values and demonstrating knowledge.





First Nations Opinion Survey On Traditional Knowledge

A total of 68 BC First Nations participated in an on-line survey to express their views on the importance of traditional knowledge. The following are some highlights.

selecting “somewhat”.

One respondent said “Schools need to devote more resources to teaching all students about traditional knowledge and it’s importance to the history of BC”.

This may well be a reflection of the reality that BC teachers have little access to information resources that allow them to integrate traditional knowledge into the curriculum.

In a resource economy like British Columbia, it is relevant to see if there is a link between resource development and respect for traditional knowledge. To explore this link, the survey asked:

“How important is it for resource development companies to demonstrate understanding and respect for traditional knowledge”

Over 90 per cent of the respondents selected “very important” as a response.

This is a critical factor in the consultation process. Often, the impact of a project on traditional values is a stumbling block to acceptance by Aboriginal

communities. Respect cannot be expressed easily without some evidence of knowledge. It may well be that understanding of traditional knowledge and values should be acquired by companies and governments long before a project reaches the former consultation phase.

Said one respondent “What is needed now is an effort by business and government to show sincere respect for traditional knowledge.”

The final question explored the generational aspect of traditional knowledge. The question was intended to explore the level of interest that young Aboriginals had in traditional knowledge.

Respondents indicated that 70 per cent of young people had some interest in traditional knowledge and 30 per cent of young people had considerable interest.

When asked if their communities had the necessary resources to meet the level of interest young people have in traditional knowledge, there was a range of responses. About 26 per cent said they had adequate resources, while 30 per cent reported “a serious lack of resources”. The remainder reported having “some resources”.

Participants were asked “How necessary is it for the general public in BC to understand the importance of traditional knowledge to Aboriginal people?”

Fully 90 per cent of respondents indicated it was “very necessary” with the remainder indicating that it was “somewhat necessary”.

If there is a shared belief among First Nations that the general public should understand the importance of traditional knowledge, it leads to questions about learning opportunities.

On this point, when asked how well the education system in BC informs all students about traditional knowledge, Aboriginal participants had cautious views. About 40 per cent selected “poorly” as their response with the balance. 60 per cent

CONTACT US

FIRST NAME

M/I. LAST NAME

STREET ADDRESS

SUITE NO.

CITY

PROV / STATE

COUNTRY

TELEPHONE

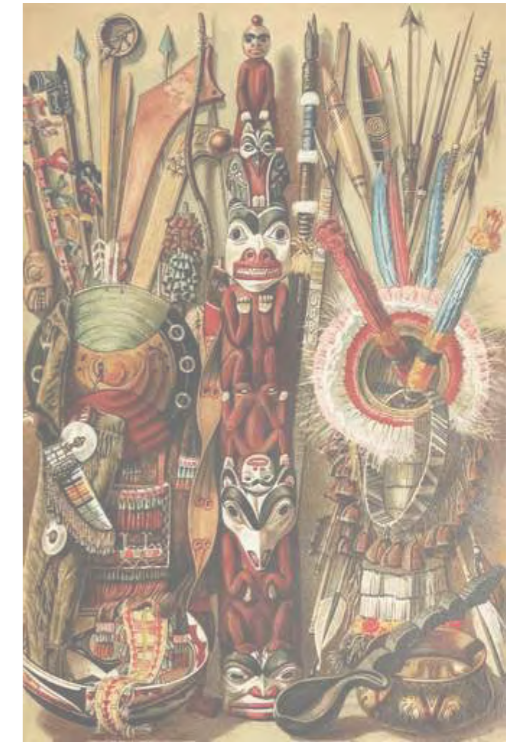
EXT

MOBILE

FAX NO.

EMAIL

SUBMIT



We acknowledge the financial support of the Province of British Columbia



BRITISH COLUMBIA

Answers from Ancestors

Answers from Ancestors is published by **FORED BC** and available on-line to members and community leaders in the public and private sectors, First Nations and the non-profit community. **FORED BC** is a non-profit association that provides information resources and consulting support to organizations and volunteers involved in building sustainable communities.

EDITOR:

Victor Godin

PROJECT MANAGEMENT:

Cheryl Ziola, President

DESIGN, LAYOUT AND PRODUCTION:

AccuGraphics Design Inc.

FORED BC

#213-4438 West 10th Avenue
Vancouver, BC V6R 4R8

TEL: 604-737-8555

FAX: 604-737-8598 (main)

E-MAIL: info@foredbc.org

Visit our website: www.landscapesmag.com

Copyright 2014. Reproduction or copying in part or whole of newsletter articles and images is not allowed without express permission from the publisher.