"Not One Single Berry":
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"Not One Single Berry": Indigenous Knowledge and Environmental Change in British Columbia

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Abstract

Indigenous elders throughout British Columbia have observed many changes in the productivity of their traditional food and other resources over the course of their own lifetimes. These changes are seen both in small details, such as the appearance of a single unusual bird in a community during a particular week, and at larger scales of time and space, such as in the widely observed lower productivity of berries and other plant food resources over the past several decades. In order to understand and respond to environmental change, it is important for planners and policy-makers to recognize and respect Indigenous knowledge, and to collaborate with Indigenous experts in planning and decision-making at all levels.

Introduction

> *Where we used to pick berries, oh, they were really plentiful! Right here where our house is situated now [in Mount Currie], that is where we used to come to pick berries, like gooseberries [**sxniz'** -* Ribes divaricatum*]. Now there are no gooseberries near us. Now the other berries are the same. They have all disappeared. We named other grounds of ours around here; called them 'The Picking Places' because that is where we went to pick berries. **Now you will not find one single berry there.**[i]*

This quotation, from the late Baptiste Ritchie, Lil'wat elder from Mount Currie, near Whistler, British Columbia, is part of a much longer narrative about one person's integration of environmental management through the use of fire, with the environmental changes that have occurred since intentional burns were prohibited as part of British Columbia government forest policy (see Swoboda 1971; Turner 1999). Baptiste Ritchie exemplifies the critical importance of indigenous expert knowledge in our search for understanding environmental change, its causes and results. Throughout North America and beyond, there are thousands of indigenous people who have a profound knowledge of their local ecosystems and landscapes, developed through each person's own lifetime of observation and experience and built upon many generations of lifelong observations and experiences brought forward orally through narratives, discourse, ceremony, songs, language and names within a given cultural tradition and the territory in which it is situated.

Baptiste Ritchie's knowledge of ecological succession in the subalpine parkland environment of his people's territory is well illustrated in his narrative, for example:

> *When there were a lot of bushes ["sticks"; i.e. "when it got bushy"] then the ripe berries disappear and the roots like potatoes [*Erythronium*], **skimuta** [*Lilium columbianum, *tiger lily], **skwenkwina** [*Claytonia lanceolata, *spring beauty or mountain potato], disappear, when it gets too bushy. Then they burned….*
>
> *When they used to burn that grass above timberline they used to say the Indian potatoes were as big as your fist. Now they are only that big [like marbles], 'cause they are not cultivated. They would burn every five or six years. The ground can only support so much.*

He astutely attributes the observed decline in berries and root vegetable productivity to an enforced cessation of the burning, due to imposed economic interests and values of the dominant society:

> *But now, because the white man really watches us, we don't burn anything. We realize already, it seems the things that were eaten by our forefathers have disappeared from the places where they burned…. If you go to burn then you get into trouble because the white men want to grow trees. …. Then we forget the good food of our earliest forefathers….*

The impacts of economic restructuring and resulting environmental change, on the health and well-being of people, are imposed, not only through changing peoples' ability to access their traditional foods and other resources, but also their capability for managing the production of these resources. It is the people themselves who are most aware of such impacts, and if the rest of us want to help support indigenous peoples' rights to their lands and resources and to continue their cultural traditions, including traditional food systems, we need to learn from them and to listen to them.

Indigenous peoples' environmental knowledge can inform us in many ways and at many levels. Today, I want to provide you with some examples of how we can better understand indigenous perspectives of environmental change, and to elaborate on the types of working relationships strategies that can bring effective recognition of indigenous peoples' knowledge and wisdom in environmental decision-making.

British Columbia is vast and extremely diverse ecologically. Fourteen biogeoclimatic zones have been described on the basis of vegetation, climate and geographical features (British Columbia Ministry of Forests 1988). The Indigenous Peoples of the province, whose homelands fall within these zones, are culturally and linguistically complex. There are about 190 Bands of First Peoples, within at least 30 distinct indigenous language groups, which are in turn classified within seven language families. Three major cultural divisions are recognized – Pacific Coast, Plateau, and Mackenzie River (as well as one small Algonkian community), and within these divisions, there is a tremendous richness and variety of cultural features.

To place this presentation in context, I want to emphasize the imperative for meaningful collaboration with indigenous and local peoples and recognition of their rights to use and stewardship of their territories and resources. There are international conventions in place that validate these rights and the role of indigenous and local peoples, some of which are cited in the following section.

International Context for Recognition of Indigenous Knowledge and Interests

The Brundtland Report, Our Common Future, states (World Commission on Environment and Development 1987:12):

> *Tribal and indigenous peoples will need special attention as the forces of economic development disrupt their traditional life-styles--life-styles that can offer modern societies many lessons in the management of resources in complex forest, mountain, and dryland ecosystems. Some are threatened with virtual extinction by insensitive development over which they have no control. Their traditional rights should be recognized and they should be given a decisive voice in formulating policies about resource development in their areas.*
>
> and:
>
> *....These [indigenous] communities are the repositories of vast accumulations of traditional knowledge and experience that link humanity with its ancient origins. Their disappearance is a loss for the larger society which could learn a great deal from their traditional skills in sustainably managing very complex ecological systems* (World Commission on Environment and Development 1987:115).

These admonitions are reinforced in the UN Convention on Biological Diversity (5 JUNE 1992), and in AGENDA 21, the United Nations overarching document that came from the United Nations Conference on Environment and Development. The latter states (Chapter 26) that, "Indigenous people generally have an historical relationship with their lands and a holistic traditional scientific knowledge of natural resources and the environment." Additionally, this document stresses:

> *A process to empower indigenous communities should recognize their values, traditional knowledge and resource management practices, and their dependence on renewable resources and ecosystems. Their lands should be protected from environmentally unsound activities and from activities indigenous people consider to be socially and culturally inappropriate….*

This theme is reiterated in several other articles and sections in Agenda 21, as well as in the UNCED Agreement on Forests. Among the Principles and Elements of the Agreement on Forests are:

> *8(b) Forest resources and forest lands should be sustainably managed to meet the social, economic, ecological, cultural and spiritual human needs of present and*

future generations. These needs are for forest products and services, such as wood and wood products, water, food, fodder, medicine, fuel, shelter, employment, recreation, habitats for wildlife, landscape diversity, carbon sinks and reservoirs, and for other forest products. Appropriate measures should be taken to protect forests against harmful effects of pollution, including air-borne pollution, fires, pests and diseases in order to maintain their full multiple value...

(d) Governments should promote and provide opportunities for the participation of interested parties, including local communities and indigenous people, industries, labour, non-governmental organizations and individuals, forest dwellers and women, in the development, implementation and planning of national forest policies....

The Agreement also includes the following:

12(d) Appropriate indigenous capacity and local knowledge regarding the conservation and sustainable development of forests should, through institutional and financial support, and in collaboration with the people in local communities concerned, be recognized, respected, recorded, developed and, as appropriate, introduced in the implementation of programmes. Benefits arising from the utilization of indigenous knowledge should therefore be equitably shared with such people.

These and other documents provide the legal and moral framework for the important role of indigenous peoples in land use and conservation decisions. There are a number of others, at a more specific level, including the Declaration of Belem, developed by the first International Congress of Ethnobiology (see Posey 1990). This Declaration confirms the critical role of Indigenous People as holders of knowledge and practices relating to caring for, and enhancing the world's biodiversity. It also stresses the responsibility of ethnobiologists and others who work with Indigenous peoples and benefit from their knowledge, to represent their interests and rights to other academics, governments and decision-makers, when they are not able to do so themselves.

Indigenous Perspectives of Environmental Change

A couple of years ago (2001), I was visiting my friends Chief Johnny and Helen Clifton at Hartley Bay, a small coastal community of the Gitga'at Nation, a Coast Tsimshian group, on the north coast south of Prince Rupert. Helen spoke of seeing a bird they had never before had visit their village. As she described it, I realized that it was a yellow-headed blackbird. Not knowing a name for it, and in recognition of the special significance of its presence among them, Helen said they called it a ***naxnox***, or "spirit" bird. Shortly after, I was able to see it for myself and confirm its identity. I knew it as a bird of the interior marshes, mostly far to the south. To Helen, this bird, although it was only a single occurrence, represented a trend in weather patterns and strange happenings that they had been witnessing over the past few years. She went on to observe how the weather was disrupting their seaweed harvesting routine. For three (now, four) consecutive years instead of experiencing sun in the month of May, when the people generally harvest their edible seaweed, they have had continuous rain. The month of

April, usually rainy, has been sunny the last few years, but at that time, it is too early to harvest the seaweed.

The change in weather and climate, as symbolized for Helen by the ***naxnox*** bird, brings a host of worries, relating to the health and well-being of people in her community. Because of the rains, people cannot pick their seaweed; there is firm taboo against picking the seaweed when it's raining. Helen commented,

> *It's hard to say [about whether they'll be able to pick seaweed] because the weather has changed so much, it's hard to say what's happening to the natural growth of whatever. …We work with the tides. Whatever we're getting here depends on the tides, and the weather.*

Furthermore, the seaweed has to be the right length; its growth is said to parallel that of the stinging nettle at the seaweed camp. And, it can only be picked at the lowest tides, when it is attached to the rocks and exposed by the tide; you cannot pick it when it is floating in the water. This is both a safety measure, in which the risk of being washed away by the waves is lessened, and a conservation measure: at least some of the seaweed plants are inevitably left to grow and reproduce when there is such a narrow window for harvesting. In order to pick the seaweed safely and process it effectively, it is necessary to have the right combination of sunny days and low tides first thing in the morning to heat up the drying rocks and ensure that the seaweed once harvested and spread on the rocks, will dry thoroughly in one day. Helen explained:

> *For years you could depend on "April showers will bring May flowers." You need that for…[predicting] the weather. Worldwide, the weather is so different now, you can't depend on those old sayings. You're lucky if you get one day of sun. And if you're not at the right tide, even if you pick that seaweed for that [day], you might be picking late afternoon, and you can't dry it on those rocks. Some of our people have tried to experiment right now, and tried to put some into the deepfreeze to see [how it does]. And yet, some of our older people will taste it, and there's a difference. There's a difference to that seaweed that has been frozen. And so they will taste it. Even though we try to save it, … they'll try many ways because we haven't had the sun that we used to depend so much on.*

Furthermore, Helen fears that when people are not picking the seaweed routinely and systematically any more, that the seaweed beds and the seaweed are deteriorating because they are not being tended. Already, far fewer people are picking seaweed than occurred a generation ago or so. Part of the reason is that the children have to remain back in Hartley Bay to go to school, and the younger adults of the community have wage jobs that they cannot leave to go to the seaweed camp. The unpredictable weather makes it even more difficult for them to come, even on the weekends. Helen notes:

> *And so our young people that can help us - because they're working, they come down here on weekends - and so they get stuck because they're weatherbound. They can't make it down here; they can't help us. They get the wood, they get the water, they do many things for us. We need their help, us elders that live here….*

Another elder who has taught me and many others about environmental change and deterioration of food plants and other culturally important species she has observed over

the course of her own lifetime is Dr. Mary Thomas, Secwepemc elder, from Salmon Arm, Neskonlith Nation. As a young child, she participated with her parents and grandmothers in the harvest of many traditional plants, including wapato (*Sagittaria latifolia*) and water-parsnip (*Sium suave*), bog cranberry (*Vaccinium oxycoccus*), hazelnuts (*Corylus cornuta*), and highbush cranberries (*Viburnum opulus*) near her home, around the estuary of the Salmon River. She remembers basketfuls of wapato tubers, which she and her brother and sister gathered up from what her grandmother, wading in the water, tossed out to them. They took them home and steamed them and had a big meal from them. Today, sadly, the wapato had entirely disappeared from the area where she used to gather it. In a recent lecture at the University of Victoria (Thomas 2001), she talked about her concerns, in the context of her early upbringing:

> *I'm one of the elders that was fortunate to grow up and experience the beautiful times, the richness of our mother earth. I went with my grandmother and we did a lot of learning from the way they survived…. And I've seen in my 81 years, a big change - and I'm afraid not for the best. And I am really worried….*

One of my students, Ann Garibaldi, has worked with Mary to document the series of environmental changes that occurred, ultimately resulting in the disappearance of wapato and other valued plants, to the point where no one in the entire Neskonlith or neighbouring communities even remembered the name or use of wapato, called ***ckwalkwalús, ckwalkwalul's*** **(E)** (lit. "yellowed/jaundiced eye," from ***kwel / kwal-*** "yellow/green"; ***-us*** "face/eye"). Ann and Mary identified many different factors that lead to the loss of this population, including construction of the railway across the end of the estuary, re-channelling the Salmon River on at least two occasions for flood control and irrigation, introduction of carp to Shuswap Lake (their foraging in the shallow waters where wapato grows muddied the waters and disturbed the habitat), grazing of cattle herds in the estuary, logging and farming on the hills and upper reaches of the Salmon River, resulting in water depletion in the river and drying out of the wapato beds.

Mary Thomas (1998) has observed these changes systems first hand:

> *… I left the reservation 33 years ago. I went to look out, to see what is out there, what is living in a city like. But I always kept calling back, calling back, to where I was born and raised. And every time I came back, I saw a lot of difference. That river [Salmon River] one time used to be just full of sockeye salmon. In the fall, there was spring salmon went up, coho salmon went up to spawn. They were getting less and less. And I'd ask why, what is happening? When I seen the water [level] going down. My people used to go down that river to torch for fish at night and I'd spearfish. Now, you couldn't even get a boat to go down that river. It's getting less than ever….*

On another occasion, she described how the river channel had been diverted and what the impacts were:

> *Where the river is right now that was one big meadow: that was my meadow. …The original… was supposed to be filling in… with silt. So they diverted it back to my side of the meadow and cut my meadow right in half. And that's where it is today. And I told them, "It's over my dead body before you guys ever touch that*

> *mouth of the river again. I've had enough." And that's the highest part of the delta. And the water is not flushing out fast enough and it's collecting silt right at the mouth of the river. And the [salmon] fingerlings are trying to get by and the gulls are right there just picking 'em right and left, 'cause it's so shallow*. (pers. comm., February 2001).

She reiterated her concerns about the changing depth of the river:

> *I could remember that the Salmon River used to be really wide and fairly deep all year round. And now it's just a little trickle. When you really look at the issue, it's just like a big vicious circle there's a lot of things that contribute to the water beginning to low. The salmon are trying to go up and temperature of the water is fairly warm and it's unhealthy for the fish.* (pers. comm., February 2001*).*

Mary has also observed a change in the productivity and health of the traditional root vegetables they used to rely on, like the yellow glacier lily (***scwicw***) and "mountain potato" or spring beauty (***skwakwína***). She commented:

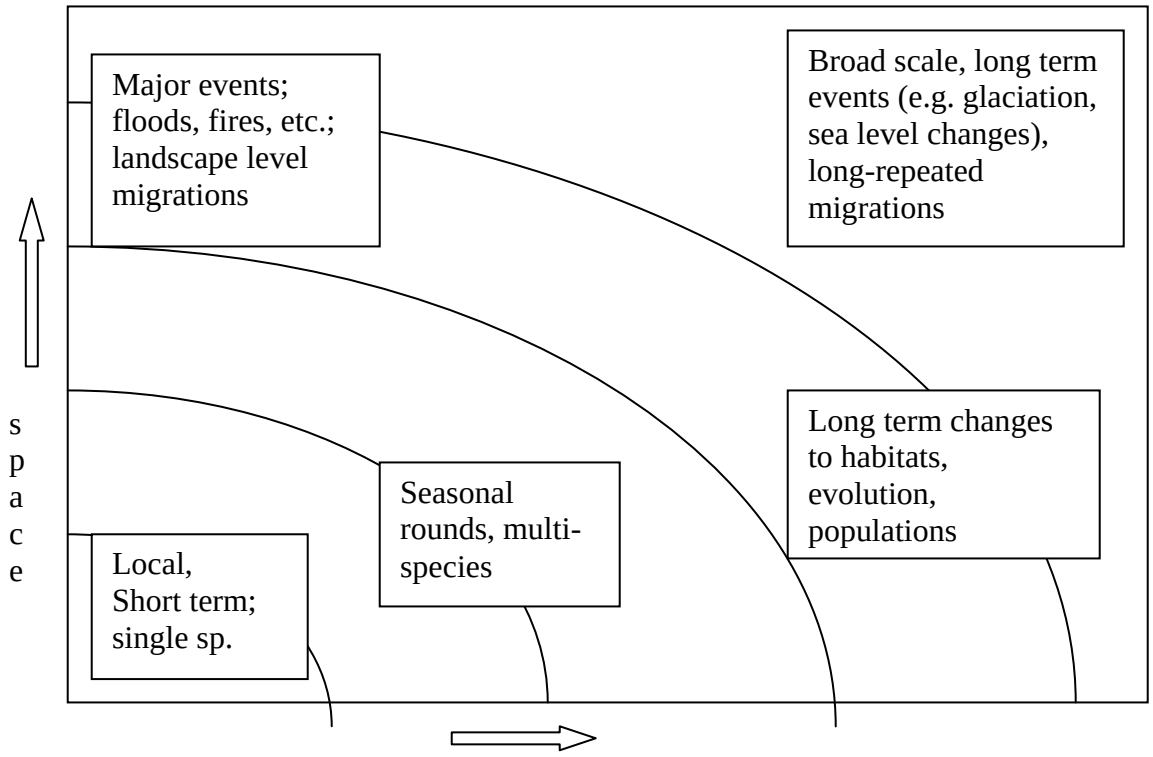
> *Everything is deteriorating - the surface of the soil where we used to gather our food, there's about 4-6 inches of thick, thick sod and all introduced. And on top of that the cattle walk on it, and it's packing it to the point where there's very little air goes into the ground, very little rain, and it's choking out all the natural foods, and it's going deeper and deeper, and the deeper they go the smaller they're getting.* (Mary Thomas, interview 1994).

The Importance of Scale: Time and Space

Knowledge of environmental change for First Peoples extends over space and time. Even the smallest details of change, such as Helen Clifton's ***naxnox*** bird or the disappearance of one patch of wapato as noted by Mary Thomas, are significant. When these observations are accumulated over a time scale of many generations, and over a spatial across wide geographical expanses, they become extremely powerful, and profound. At each level – and especially at all scales combined, they can give us a critical understanding of changes or shifts in populations, species and ecosystems, and can also help us to respond to these changes and to predict the impacts of other human activities in other places.

Different kinds of consultation and consideration are required to understand change at these different scales. Learning from individuals, like Baptiste Ritchie, Helen Clifton or Mary Thomas, about environmental change and its impacts from their personal observations over their own lifetimes is the first step. Hearing from them the stories and vocabulary of seasonal and climate indicators, of the impacts of human actions and environmental change passed down from previous generations can give us a deeper understanding of human-environment interactions within a particular locality or region. Superimposing the lifetime experiences and observations of individuals over a broad geographical range can likewise inform and enrich our knowledge of commonalities in practices, perspectives, and management strategies that have had widespread influences on the environment, or that reflect extensive environmental change. And, finally, combining the depth of many generations of knowledge with the breadth of knowledge,

understandings, practices and belief systems for many communities and traditional territories over a wide geographical area will reveal broad-scale patterns in the history of land and resource use and environmental change, and of the intersection between these. These different scales, and the type of information they might speak to in terms of cumulative environmental knowledge are shown in Table 1.



Think for a moment of the detailed knowledge of Baptiste Ritchie of the use of fire to enhance the productivity of berries and root vegetables in the region around Mount Currie. Of itself, this information may be considered interesting, but might be disregarded as a single person's account pertaining to a restricted area. Similarly, Helen Clifton's observations about the ***naxnox*** bird, or Mary Thomas' about the loss of wapato from her local river estuary. However, if similar, comparable, or parallel observations and knowledge are recounted from other regions, or practices are embodied in narratives and language, in place names that have a multi-generational time depth, then the resulting patterns of change become particularly impressive and notable.

For example, Nlaka'pmx elder Annie York, who was a contemporary of Baptiste Ritchie's, but from a different territory and language community (mainly Spuzzum), also

remembered the practice of burning to enhance the berries and roots. She recalled (pers. comm. 1991):

> *I've seen it, when the old people used to do it. I was just a little girl. I'd go up the mountain with granny. After we'd pick berries, my uncle would say, "It's going to rain pretty soon; time to burn." He stays up [after we finished]. Then, we go back the next year, it's all burned. Now, it turns into bush. That's why we don't get many berries any more. We're not allowed to burn…*

Mabel Joe, another Nlaka'pmx elder, but from the Merritt area, also had experienced the practice of landscape burning. She noted that Coquahilla Pass, for example, where people used to burn, is all grown over and not as good as it used to be for huckleberries (*Vaccinium membranaceum*). She mentioned blackcaps (*Rubus leucodermis*) and wild raspberries (*R. idaeus*) as two other types of berries that grow well after a burn. Now, she said (pers. comm. 1991), the people are not allowed to burn. "You just start a fire, and right away they put it out."

Mary Thomas and many other elders also remember landscape burning practices. In all, 19 food plant species (including berries and roots) were reported by various individuals from Bella Coola to the Okanagan Valley to be enhanced by landscape burning, and, by inference, to suffer in productivity without the periodic fires people used to light (Turner 1999). There has been a general understanding among these elders that fire, with its resultant clearing and nutrient infusion to the soil, significantly enhances the growth and productivity of huckleberries, blackcaps and other berries, and the root vegetables people relied upon – camas (*Camassia*), yellow glacier lily, nodding onions (*Allium cernuum*), tiger lily (*Lilium columbianum*) and mountain potato. Many elders have said that, a few years after a fire, the bushes produce copious, large berries, and the root vegetables are much larger. These food plants are gradually crowded out by invading trees and brush, with increasingly reduced productivity as overgrowth out-competes with them for light, moisture and nutrients. All around British Columbia, and beyond, many elders have said, the area occupied by primary berry-picking grounds is declining rapidly as old burns become reforested and new burns are quickly suppressed as part of our modern forest management policy. Just as Baptiste Ritchie stated, many formerly productive berry areas now produce no berries at all (see also Minore 1972).

This is only one example, of how cumulative observation and insights can lead us to recognition of the critical importance of traditional ecological knowledge. This example is particularly relevant this year in British Columbia, since there were rampant wildfires over vast areas of interior of the province. I can hear Baptiste Ritchie and Annie York saying, "*That's because we weren't allowed to burn anymore!*"

Conclusions

There are many other examples of detailed observations of environmental change, particularly in relation to food production and availability. These range from pollution to overharvesting, to wetlands depletion, and invasive species impacts (Thomas et al. In press; Turner et al. In press). We have had serious problems with introduced weedy species like thistles, burdock, knapweed, mustards and foxglove that are taking over large tracts of logged, burned, or otherwise disturbed lands in British Columbia. We have infestations of insects like spruce budworm and mountain

pine beetle in epidemic proportions, and their damage to forests, in turn, exacerbates the risk of major wildfires. Our practices of clearcutting vast swathes of forest land have resulted in disruption of hydrological systems – loss of soil moisture, diminishment of springs and flows in the rivers like the Salmon River where Mary Thomas lives – which in turn have lead to loss of critical habitat for fish, waterfowl and other wildlife. Overgrazing of livestock on range and meadowlands both in coastal and interior areas also poses an increasing threat to the productivity of traditional resource species. Pollution of rivers and oceans from pulpmill effluent and other toxins, and over-fishing and habitat destruction along the coast have resulted in losses of salmon, eulachon, herring, clams and abalone, as well as contamination of seaweed beds and eelgrass meadows. All of these have been observed and described by indigenous people, but seldom have they been taken seriously by those not directly affected.

I don't need to remind any of us here that it is elders who have borne the brunt of the inattention and lack of respect that non-indigenous society have exhibited towards indigenous environmental knowledge and the holders and practitioners of that knowledge. Instead of listening to people like Baptiste Ritchie or Mary Thomas, government and industry officials, resource managers and policy makers have too often turned a blind or even hostile eye to them. The result has been an overall and notable deterioration in the productivity of the lands and waters, and a notable reduction in the availability of the healthy traditional foods that have sustained indigenous populations for hundreds of generations. The solution is obvious: listen to the people who know; pay attention to their concerns and their warnings. Mary Thomas and the others stress that the land nurtures all of us, and if we don't pay attention to these changes, big and small, short term and long-term, we will all be the poorer.

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References

British Columbia Ministry of Forests. 1988. Biogeoclimatic Zones of British Columbia (map). Research Branch, Victoria.

Minore, Donald. 1972. The Wild Huckleberries of Oregon and Washington--a Dwindling Resource. Forest Service Research Paper No. 143. USDA Forest Service, Portland,

Oregon
Posey, Darrell A. 1990a. Intellectual Property Rights: What is the Position of Ethnobiology. Journal of Ethnobiology 10 (1): 93-99.
Swoboda, Leo John. 1971. Lillooet Phonology, Texts and Dictionary. Unpublished master of arts thesis, Department of Linguistics, University of British Columbia, Vancouver, British Columbia.
Thomas, Mary. 1998. Keynote Speaker. Helping the Land Heal Conference. Ecological Restoration in British Columbia. Restoration of Natural Systems Program, University of Victoria, B.C.
Thomas, Mary (N. Turner, A. Garibaldi, R. Hood and J. Infanti, eds.). 2002. The Wisdom of Dr. Mary Thomas. School of Environmental Studies, University of Victoria, Victoria, BC.
Thomas, Mary, Nancy J. Turner and Ann Garibaldi. In prep. "Everything Is Deteriorating": Environmental And Cultural Loss In Secwepemc Territory. In: K. P. Bannister, N. Turner And M. Ignace (eds.) Secwepemc People And Plants: Research Papers In Shuswap Ethnobotany. Secwepemc Cultural Education Society, Kamloops. Submitted For Preliminary Review To New York Botanical Garden, Bronx, NY for Advances in Economic Botany series.
Turner, Nancy J. 1999. "Time to Burn": Traditional Use of Fire to Enhance Resource Production by Aboriginal Peoples in British Columbia." Pp. 185-218, In: Indians, Fire and the Land in the Pacific Northwest, edited by Robert Boyd. Oregon State University Press, Corvallis.
Turner, Nancy J. 2003. The Ethnobotany of "Edible Seaweed" (*Porphyra abbottiae* Krishnamurthy and related species; Rhodophyta: Bangiales) and its use by First Nations on the Pacific Coast of Canada. Canadian Journal of Botany 81 (2): 283-293
Turner, N. J., Chief A. Dick (Kwaxsistala), D. Sewid-Smith (Mayanilth), K. Recalma Clutesi (Ogwilogwa), and D. Deur. in press. "From the beginning of time": Indigenous land rights, environment and resources on the British Columbia Coast. Forests, Fields, and Fish: Politicized Indigenous Landscapes, M. K. Steinberg, editor, University of Texas Press, Austin
United Nations Agreement on Forests. 1993. AGREEMENT ON FORESTS.
United Nations Biodiversity Convention: CONVENTION ON BIOLOGICAL DIVERSITY, 5 JUNE 1992
United Nations Commission on Environment and Development. 1993. Agenda 21 Documents. Chapter 26. Recognizing and Strengthening the Role of Indigenous People and Their Communities. pp. 227-229.
World Commission on Environment and Development. 1987. Our Common Future. Gro Haarlem Brundtland, Chair. United Nations, Oxford University Press, New York.

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[i] This account, given originally in Stl'atl'imx in December, 1969 by the late Baptiste Ritchie of Mount Currie, was translated by him for Salishan linguist Leo Swoboda, and later for Salishan linguist Randy Bouchard. The original text in Stl'atl'imx, together with a word-by-word translation, is given in Swoboda (1971:182-191).