Supplementary Materials

for the article: A Century of Knowledge: Kwakwakwala Elders and Environmental Change

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Introduction

BW1: "One of the things that really need to take place, is that governments in place got to start understanding. They can take a valuable lesson from First Nations people in the true meaning of conservation, in true meaning of balance, true meaning of sustainable. What does sustainable mean to this government? When you talk about precautionary measures, it's just a word to them. When you talk about farm fishing industry coming in, you got shellfish industries coming in. I mean we're catering to corporate businesses and industries and forgetting the priorities. Not only the forest but the water. One of the things that I think today, is that water is more valuable than gold today. Fresh water." - Brian Wadhams

Definition of the potlatch system, as drawn from U'mista 2021 (see also Williams 2001, Turner 2005, Newell and Schreiber 2007):

- To publicly recognize class structure and status
- To pass on a family's rights and privileges or inheritance. Such rights include:
 - a) Rights to land, property, fishing holes, berry patches, hunting grounds, and beach fronts.
 - b) The right to specific dances, songs, stories, and the right to display animal crest designs of a family's clan.
 - c) The right to wear, use, and display certain regalia and objects that indicate leadership: hats, blankets, dance aprons, carved benches, shield-shaped copper plaques, masks, painted housefronts, and carved posts.
- To celebrate marriages, the naming of babies, and the passing on of chief titles, names held within a family, and names that indicate leadership
- To honor important people who have passed on
- To comfort those who have lost a loved one
- To celebrate the opening of ceremonial bighouses and raising of carved poles
- To recognize the lineage of a family and renew the community's ties to the ancestors
- To celebrate the people's relationship to the animal spirits and to give thanks
- To restore one's reputation in the community after a humiliation

BW2: "We never gave up our rights to the land, we never gave up our traditional ways. When you talk about the potlatch system, the government tried to wipe that out. Threw my great-

grandfather to jail for six months for practicing the potlatch. What makes my fight so great today, I'm not afraid to take on the government, I'm not afraid to fight for what I believe in. My great-grandfather taught me that. Everything he fought for then is now my privilege, so everything I fight today, is the privilege of my great grandchildren tomorrow. First Nations people have a great thought, we always think seven generations. That's' about 400 years and that's how far ahead you've got to plan." -Brian Wadhams

KJ1: ""[I am visiting Alert Bay] which is between Malcolm Island and the Vancouver Island, on an island 'Cormorant'. Before, Alert Bay was an Indian village, and it still is. In winter, appr. 1000 indians live there, but in the summer just a couple of hundred as so many of them are fishing. The same indian families have multiple accommodations depending on what river mouth the salmon or other fish species may appear. Alert Bay is however their permanent, stationary place of living. Large tent shaped open shacks of planes are of much sturdier and better craftmanship here in Alert Bay than elsewhere. Usually they do not have windows at all, just a smoke on the ceiling for the smoke to escape. Floor is ground trodden flat. Night and day in the middle of the floor large wooden blocks are burning. They are burned with purpose when they are fresh or wet, so that no fire can break out. Families sit huddling around the fire, some chatting and some listening. I d think they are trading similar fish or hunting stories as we do. Maybe they are as well telling stories of war and conquest from a long time ago, of battles between tribes, I do not know for certain.

It is a shame that I am not a researcher of culture. These children of nature possess a lot of knowledge. These North Pacific Indians are expressions of calm themselves in all of their being and character. But I think in the olden days they used to be more warlike. Some say even cannibals. We were fishing in Rivers Inlet and they showed me a place where Indians from Alert Bay had fought with Bella Bella on control over salmon fishing waters. They say 80 people had died in that conflict. Later Mamalikula Indians showed me another important fighting place, where over 2, 000 people had died. This is east of Malcolm Island...Now both tribes meet at this place, avoiding with horror the locality of fighting. Do not go to shore, unless they are forced, such as in an event of a storm. In mid-summer they fish there sockeye salmon for the Canadian canning trusts....I have to admit that at first I was a little bit scared in Alert Bay surrounded by the masks and war dances of the people around me every night. I was worried that the government gave a rifle to every grown indian at first....Those who know the internal workings of the Indian society here, claim that they are perfect natural socialists. They share common fishing grounds, lands, forests, all areas of subsistence, this means production sources. If somebody gets rich for this or that reason, he gives everything away divided even among the tribe! Those who share most get honorary statues in front of their huts. These statues have bizarre carvings, birds, wings spread, big mouthed fish, men with spears, all of them carved with great care. Many think at first that these are heathen images, and so did I. But suddenly I realized that they instead advocate people to release themselves from the worst evil there is unnecessary items and ownership! It is a shame that these people are forced to become Christians." - Kaapro Jääskeläinen (1907: 52-57)

CC1: "Sometimes they go beside the Island when they get to spawn and the weather's too hot. It depends on the summer. They probably go deeper when they travel." -Chas Coon

Results

AC1: "In the old times we didn't believe in borders. But these days they made (them) because they wanted to make land claims. But in the old days they didn't believe in that. Now, because of treaty processes. A lot of these three bands here, Gilford, Kingcome and 'Namgis...got territory and they overlapped like this. They came to a treaty process. In Kingcome we wanted to do just one treaty, not with the other bands. But we haven't profited anything in this area, logging, commercial salmon, fishing... What we see now is that there's a lot of logging, they are logging like hell. Because the treaty process is coming. See, in Nanaimo, on the high way...the logging is going and not even the second growth, they are just wiping it out... See, we aren't going to have no value at all when it comes to the treaty process. Nothing to log, nothing to fish. They are taking pretty well all. So we don't get a case for the federal or the industry about what's going on. What you have to do is to get to the politicians. Got to get them here to see what's happening..." -Alfred "Baker" Coon

BW3: "One of the things you've got to understand, there was a protocol that went from each First Nation up and down this coast. I give you a good example. I'm a Nam'gis, I go into Gilford Island territory. When I go fishing there I pick up two or three of their members, bring them out to go to halibut fishing and give them half, for allowing me into their territory. That's a protocol, you share. And I thank them, I catch them salmon, because they don't have any boats to do that. I give you another example. New Vancouver, I go out and catch them 300 sockeye. He gives me three gallons of grease and pays for my fuel. That's bartering, First Nations people do that, I do that everywhere I go. I trade. It's got nothing to do with money, it has to do with respect. That's something that's really important to understand, when you talk about these overlapping issues. It bothers me because I mean, now the government has found a way to get the First Nations people to learn to be greedy like them. And that's what I keep saying everywhere I go, that all the First Nations people have to come together as one big Nation and fight this as one, not different tribes up and down this coast." -Brian Wadhams

BW4: "I go everywhere! In our traditional territory. For clams, I dig clams for food and ceremonial purposes, I hunt all over in the mainland and Vancouver Island, ground fish all over in the mainland and Johnstone Strait, food fishery for Johnstone Strait for sockeye, pinks. So, I basically use the whole territory, what we have as part of my... There's not so many people left that do the things I do. It's got to do with the loss of boats. I'm you know one of the guys that owns, one of the few guys that still own a commercial fishing boat. That's where the problems occur. That the capacity to get out there is getting harder and harder for the communities in the Broughton Archipelago and the Namgis. So, that's one of the problems, that's one of the concerns I have. You learn the tides, you learn the areas. I was really fortuned to do, to understand the tides. If you can't read the tides, you'll never be a good fisherman. That's one of the greatest things about being a fisherman, if you don't pay attention - you're not a fisherman. It's like anything else, it's a real challenge. I love being a fisherman!" -Brian Wadhams EM1: "Tide is not the easiest thing in our area. It took me eight years to learn our spot, and probably still another three more, before I've really perfected it. But for commercial, yeah, I went to one spot, and I perfected it and no too many people can do that. I fished with my dad, there was no pressure. There was no pressure probably until I was about 17 years old, when he taught me how to fish, where to catch fish. Before that there was no pressure. Taught me how to build nets, and when I learned my spot I had to learn all over again. Different bottoms, different boats. Lots of fish. Different areas for different species. Go to a different area for cod, go to different another one for spring salmon, another one for large sockeye." – Eddie MacDougall

BW5: "I've witnessed changes in the wintertime. Back when I was a young fellow I used to be able to walk around in three of four feet of snow in the wintertime. Today you're lucky to see a snowfall. So, those are the kind of changes I've witnessed. Well, it comes every year, but you know just in sprinkles, not the way it used to. It used to stay for weeks, now we're lucky if it stays for a day. That's' one of the things I see a change. We don't seem to get pretty good winters now, especially this year (2003). That's what makes the changes in the fish also, you asked that question a while ago. You know, cold winters, herring and others will come later, but when it's warm like this, the eulachons will come later, but when it's warm, they seem to come earlier that seems to be what's happening right now. This year they, for some reason the eulachons came back on time, but the herring were quite early again, so that's the kind of things you notice in the weather. I don't know whether it has got to do with the water flow coming from the rivers and the streams. I know the eulachans, one of the things, you know the glaciers, there should be a certain temperature before they go up the river, so you know the more the ice melts." – Brian Wadhams

AC2: "But when a fish farm first came...that's when everything changed. People, because they didn't have the power to fight the provincial, federal. They had no voice...see what do you call those...protocols. When people say to you what to do. That they couldn't do it...going to court. Clams, cod, halibut... It's because of that waste. Boy, what's left to the bottom. What fish farm industry didn't really do was consult with the First Nations for the clam beds. When current flows, where does it go? To the beaches. Clam beaches are just around the corner. That's where you notice the black and white clams." – Alfred "Baker" Coon

HB: "I started when I was six years old. And my dad never taught me a thing because I was always there with him, to watch. Now that's not happening anymore because there are no fishing boats. We've been more or less...how do you put that...more or less pushed out of this fishing industry. Almost seems like they want to close down the commercial fisheries on the coast here. This is my opinion. There was less boats. And you could catch quite a bit more. I'm not saying that we lost all that fish; there were a lot of boats in my time fishing here. Compared to when I started out to fish. Yes, we caught a bit with my dad. Compared to today." - Henry S. Beans HN: "In 1996, we've experienced a really serious decline in chum salmon. And the stocks were expected to come back, you know like say 230 000 pieces, and we were lucky to get 2000 - 3000 back that year. In 1997 there was a phenomenon first time I've seen and experienced, sockeye fish that were heading south... And I've talked to some fisheries people about it, just recent as two months ago, and they were telling me that they weren't Fraser River fish. But we thought that they were Fraser River fish, they headed down south. We were still out commercial fishing, I used to go fish in the summer, you know while I was working. And 1997 a lot of this fish didn't go back down and ended up spawning in the rivers here, that didn't have sockeye salmon spawning in them before. And for some reason, it had something to do with the temperature too, they stopped at a certain temperature than go further. But a lot of them were really skinny, small, right, and they were already mature that when we had them on the deck of the boat, they would already spew out some eggs and melt and that was nothing we'd seen before." – Henry (Hank) J. Nelson

BW6: "A lot of erosion. I worked there for five years as a fisheries guardian and that was one of the things I did up in the Nimpkish Valley there, I swam down all the rivers and streams, basically three of four months in a year on a daily basis to see the logging that is having a real impact on the riverbanks. You could see the changes in the rivers, the silt, and the sand, it all just builds up to the bottom to one of the runs. You see the changes in the rivers in the way they floated in the past. There's a lot of changes due to logging. There's gotta be a buffer zone for at least minimum of 500 meters for any river or streams to really deal with these concerns because. When you talk about logging, there's no monitoring system. They seem to monitor themselves. It's real tough to deal with them, you know." – Brian Wadhams

BW7: "I've noticed a lot of red tide. I don't know what that could be from, I don't know if that's got to do with the climate change. We've seen some strange fish, that are not from here. Sunfish. In the past we've caught sunfish in a commercial fishery. There's some changes, like that, you know before you'd never see that around when I was younger. We caught one, it must have been ton. You know, that's a change. What brought that up, maybe there's a little warming coming. I think that El Nino, that comes around every so often, that's' what brings the changes. It basically happens every once in a while. I don't know if it's a shiner or whatever it is, but it looks like a tropical fish. I don't know what their names are, but it looks like a big goldfish. You know we're catching stuff like that. But that was the time El Nino was here, so I thought that's what really pushes them in. And blue sharks, no, I mean, white sharks that we've never heard from are coming to B.C." – Brian Wadhams

On Weather Prediction

"In the old days they knew, when they saw the clouds and the sunset. They really knew. You sort of feel it sometimes. First thing in the morning you take a look and if it's going to be a nice weather like today, you would feel a wind coming this way. It's *coming from the west. Westly wind... The big tide, you can feel it. Big tide when it comes."* Alfred "Baker" Coon

"After December we would look at the moon to look if it was gonna be a full year. By the shape of the moon. When the moon is like this, like smiling, it's gonna be a good year, 'cause nothing can't get out. For everything, for fishing and everything." – Eddie MacDougall

Discussion

HB1: "It's difficult for the salmon itself. Because sometimes there's not enough water in the river to go up. Or the water in the river is too warm and they can't go up. They don't go up...certain temperature when they do go up. And sometimes, if it's too warm too long, they just die at the mouth of the river instead of spawning. But that's one of the effects warm weather has. And we don't get that much...what keeps...in the water because there are no more glaciers. And with all the logging, on the river, every time it rains it just floods through, the river. There's no more hold bank with the trees that hold approximately 80% of that rain and gradually it comes down. But without the trees... And when it washes down to the river it brings the silt and then covers up the spawning beds of the salmon. They can't spawn there anymore. That's what I see today. We are kind of destroying our ozone. That we get more heat than we used to have before. And the fishing part... Well that's affected with the weather also! You get too warm water in the river and they aren't going to go up. And if it's not in the water to go up...they aren't going to go..." -Henry S. Beans

Conclusions

BW8: "I've been fighting them for so long now, I'm trying to ensure that the commercial fishery will always be there. When we talk about our traditional way of life, that's part of it, it's not just commercial fishing, it's gonna effect the gathering of the wild stocks. Logging, ozone layer, the pulp mills, the ozone layer is getting smaller and smaller. That's what frightens me, that sometimes we value dollars over the environment, and the species that we have in it. Somewhere along the line we need balance, we have to understand the values of what nature has to provide for us as people. We take too much for granted. We think that everything's gonna be here until we're gone. We're gonna be the only ones left, and what are we gonna eat? Not us but our great great great grand children. That's' the fear that I have." – Brian Wadhams

HB2: "It hurts me. To see what's happening to our people here. It's almost like they've pushed us in to a corner and say you stay over there and don't say anything. And they come every now and then and they make money off from... When I was young, we were free to go anywhere. If there was a big tree standing over there across that way a big tree, you looked at it and said that's going to be a good tree for a canoe. We're going to get it for a canoe. Today, you'd probably get put in to jail for doing that! That's so much it has changed." – Henry S. Beans