

**Russel Barsh, Center for the Study of Coast Salish Environments,
Washington: Traditional Ecological Knowledge and its modern application in the
context of Marine Protected Areas (MPAs)**

I used to work for the Mikmaq Grand Council in Atlantic Canada, where of course, there aren't many fish anymore. We watched all of that happen, and one of the problems was that no one was listening to local people. I now work for a little tribally sponsored research center – the Center for the Study of Coastal Salish Environments, established by the Samish Nation. We examine how First Nations people transformed the landscape, how people took care of things. Our main mandate is science in the service of stewardship of the Samish traditional territory. Part of that is combining traditional knowledge with conventional Western science. We work a lot on salmon, rockfish, native oysters and recruiting and training young native scientists into our Samish Stewards program. I work with them to figure out what kind of research to do and we go out together and do it. We don't have a bunch of people sitting in offices; we have young tribal members doing field research and bringing in university experts and their graduate students along to help figure out how to do it best. The Samish leadership has come to the conclusion that there's not much of a future in fishing, but rather in becoming scientists, engineers, teachers, becoming fishers of technology and scientists of fish. We like fish, we eat our science, we only work on species we like to eat. We feel that the people who will have the greatest power and wealth in the San Juan Islands are those who know about fish, make decisions about fish, and who know how to make fish thrive, rather than just those who catch fish. We're seen as having an economic development focus, even though what we do is not development at all. We train scientists.

We're involved right now in three Marine Protected Area projects. The most interesting is the establishment of a "marine stewardship area" for all of San Juan County, which is the entire San Juan archipelago. This project was announced last month by the San Juan Board of County Commissioners. We had our tribal council in the commissioners' chamber with them and it was a joint declaration of the Samish Nation and San Juan County. They passed a resolution declaring the marine stewardship area, and we passed a resolution endorsing it and saying, "we'll work with you and make it a partnership". This is just an idea so far, a framework. There are no rules and regulations at this point. It's a commitment to see that living resources in San Juan County are given the best protection possible so that they will always be there. It's the first step in establishing co-management over a very large habitat area. We worked on the research to support this effort by looking at which habitats and species were at risk in the San Juan Islands, but more importantly, working with non-native communities in the San Juan Islands to get them to see the connection between their concerns and our concerns, organizing a base of mutual interest in building a kind of Marine Protected Area that both native and non-native communities wanted. This is different than having some area declared a park, and asking First Nations later if they agree. Or sometimes it goes the other way around: tribes take action on fishing regulations and quotas under their treaty rights and then wait to see if everyone else will agree. That usually ends up with everyone going to court and fish not being protected.

The Cypress Island Aquatic Reserve is an extremely special place to the Samish people both as a fishing ground (especially halibut, which has been a source of wealth for a very long time), and as a sacred place. The mountains of the island are power places and very, very important spiritually, including places where the Thunderbirds nest. The Thunderbirds control the weather, so these places have huge power, and have to be treated with enormous respect. The State of Washington thought this would make a great park, but we intervened and insisted that they look at it our way and examine what is there to protect, and work with us. We decided to be proactive. Instead of waiting for a proposal from the government about how to set up the aquatic reserve, we designed it and went to them. We presented management regulations, critical areas, cultural landscapes, surveys, fish and wildlife inventories, and the state adopted it. It's a unique arrangement: there's recreational use, but no commercial use; there's subsistence and cultural use; there are places the public can't go because they are spiritual places.

There is a proposal for a network of marine state parks in the San Juans (state owned park lands with a proposed extension to the marine environment). We chose to work with the state parks department because they have a cultural and interpretive mandate, and we could say we also want to protect these marine areas so people can understand the value of the sea to the Samish. It's not just about fish, it's about how Samish people take care of fish, and raising awareness about how Samish people have always been part of the ecosystem, managing and protecting it. Instead of saying "take the people out to protect the fish," we turn that around and say "people are good for fish if they know what they're doing." We can take the pressure off the fish and teach people how to take care of things.

This is another way we are trying to assert ownership over areas of concern in the Samish traditional territory. This is a way of giving Samish people more presence, more influence, more enjoyment of the resources of the area by taking the initiative, rather than being reactive when things are being done-- saying "WAIT a minute that's a VIOLATION of treaty rights!", and wasting our resources fighting about it afterwards. Instead we have the state government saying "That's a great idea and we have some money for research. We would like you to make some maps, establish a ranger program," and so on. That way of thinking goes back to Samish ideas of wealth and power from the past, and to traditional values of stewardship. MPAs are actually old ideas. Instead of talking just about no-take zones we're talking about traditional notions of family ownership of fishing areas. There was always someone responsible for any place that had value. There were areas that were so precious that they really were no-take areas.

The three concepts that have a lot of meaning to us within the Samish community are wealth, cleanliness, and power. Before you go to a ceremony, or seek power, you bathe yourself. You can draw upon the powers of the spirit world to give you a hand, but the spirits don't like the smell of meanness or anxiousness or conflict, emotional dirt, and you seek them in a place that is clean because it's not polluted by human anger and silliness. That's why that mountain on Cypress Island has very high biodiversity. People pass through that area very gently and only for special reasons for centuries, trying to keep it clean so that the spirits like the Thunderbird will stay there. Power is our

connection with all that has been and ever will be. You find it in clean places and when you're clean yourself. When you find that power, it brings wealth to you. The maintenance of refuges where you don't hunt or fish, build camps or fires, to keep areas clean is important for this reason. Each family looked after family estates that were good oyster and clam beds, fishing areas and camas areas. Why not insist on doing it the old way? Which family used to take care of this place? Was this a 'clean' place that was kept specially and why shouldn't it continue that way? This is a way of putting the map of responsibilities back on the landscape.

We're trying to get our non-native neighbours to think the same way and it's working. It's working because of the small nature of the communities that live in the islands, and because non-native people also hunt and fish and have done so for a long time and they care about the environment. They have responded well to the idea of local responsibility and local stewardship. Each community should decide if there's enough there to share with people from outside. Stewardship creates wealth and wealth belongs to those who take care of the things that create wealth. The Northwest Straits Commission is a citizens' initiative that was set up as an alternative to the federal government's top-down approach to creating protected areas. The commission is made up of county level committees and each of these has tribal representatives, commercial and recreational fishermen, water dependent businesses, scientists. The committees elect the regional commission that allocates funding to the committees. The two MPAs that have been created using this process are widely supported. What made it possible, was the traditional idea of the connection between stewardship and wealth, stewardship and rights. Once the San Juan County marine stewardship area has been set up it will be up to each community in the islands to make and enforce local regulations and determine allocation of resources. Local control of resources is still quite controversial and the state and federal governments have not yet agreed to it, but we are all working together in the San Juan Islands to make this change.

Q: Were you part of the Boldt decision?

Russel Barsh: No. The government said we [the Samish] were extinct, that our tribe did not exist and that we couldn't fish. The courts ruled that the government had no basis for that decision, and that it was error and prejudice that led to that position. Now we're back in the courts to assert our fishing rights, because over the past 25 years the pie had all been divided up. However, we're probably generating more income in the community through science, conservation and restoration projects than the fishermen in other tribes are making from fishing. The governments now come to the Samish people looking for data and advice. This is the real power, the old way: Spiritual strength, knowledge, looking after things, creating plenty –and when there's wealth there's power.

Q: Can you comment more on what you mean by wealth – i.e. from my experience First Nation don't differentiate between subsistence fishing and commercial fishing?

Russel Barsh: That cuts to the heart of the issue, because the government measures wealth in terms of pounds of fish or dollars paid at the dock, not in terms meaningful to

the people I work with, who see wealth in terms of how well respected you are. You know you are wealthy because everyone comes to your feast, because everyone knows your name, they expect you to produce a lot of food. To have a very good name, you have to be generous, kind, share a lot of food, and look after your ancestors by being part of the ceremonies and looking after the places where they're buried. That's very different than dollar value. In our area there's a notion that there's a certain kind of guardian spirit, a certain kind of power, that's very important in a sailing and fishing community. It's under- the- water power. Its gift is that your nets are always full of fish. You show you have this power by giving away a lot of fish. You have power by taking care of a place. These traditional fishing areas were very rich, until they were hammered by large-scale commercial fishing. Wealth means the same thing as sustainability. It's having enough to share.

C: I'm envious of your situation. This is a resource frontier, and considered an economic development engine: aquaculture, oil and gas, mismanagement in fisheries and forests. Our county equivalent is the regional district and when I look at how that government is stacked and where our neighbours sit, I scratch my head and say HELP.

Russel: We're lucky in that we're located in a post-industrial area, which had its economic boom in fish canneries and logging 50-75 years ago. There's been a demographic shift to pensioners and small-scale farmers and fishermen. The people feel they have enough money, and love the islands. In Puget Sound, fishing and logging industries have already collapsed. There's just enough subsidy money being poured in to keep the dying patient alive but in a coma a little bit longer. One point of connection is that it's possible to wake our neighbours to this reality and show them the way to the future. We share an opportunity to create a new kind of economy. Maybe that will get their attention.

Q: How did you document traditional knowledge? We have fish farms here that we don't want here so that complicates the issue here?

Russel: We hang out with old timers and talk about these issues, and ask their advice and help in framing research questions. For example, the Fraser River sockeye runs usually go through the San Juans. We asked whether the sockeye were doing anything in the San Juans. My science colleagues all told me "they don't feed there." Talking to the old timers who did the reef net fishing, they said "they're coming in to eat certain things in special places." We followed this up with research and discovered that there are critical feeding grounds for sockeye in the San Juans that have not been protected. Our science says the same thing that they know. We don't like fixing knowledge in a medium that can easily be reproduced because of intellectual property rights considerations. Most of this is family knowledge, so we just enlist the assistance of people who are knowledgeable, and it's on a professional basis, making them members of research teams. We might publish the scientific research, but we leave the traditional knowledge in the hands of the families and individuals.

We are assessing one set of fish farms at Cypress Island, and after talking to the old timers, we're looking at the effects of the fish farms in producing nutrient rich water that increases the encrusting brown algae that grows on eel grass that kills the eel grass. You find this around agricultural areas and clear cuts too.

C: I think its time we counter act the governments and do our own proposal as to who we are and what we are and what our food habitat has been over the years. Our traditional knowledge is stronger than any paper put out by anyone. It's the most powerful tool we have, but we haven't used it to the fullest. Your presentation really opened my as to what I have to do and that's I will do. I'm going to sit down with my family and put a proposal together and tell them what our natural way of life is and the government is not going to tell us what to do.

C: Russel what you passed on to us is power. It's time to take back that power from government. They don't know how to manage us – we know how to manage us. Our people live off the land but our resources are all gone. We're so poor, our last fight with DFO was over chum salmon, the last salmon, the lowest grade. My grandson is five years old and he prefers dried clams to popcorn. I want to really commend you, I agree with everything you said. We need to take control over our own lives, our own resources, we have to work with what little that's left and make it happen for ourselves because there's no one that's going to do it. Thank you for the opportunity to speak.

Q: Where do you obtain funds for the research center and are environmental groups represented on the committees?

Russel: Most of the money comes from restoration (3/4). Government is giving us contracts to clean up different parts of the environment. Some money comes from national science research grants. We work closest with land trusts, from national ones like The Nature Conservancy down to the local land trusts. Also citizen based environmental groups like People for Puget Sound and Friends of the San Juans. We share funding and do joint projects and share science, do politics together. We've been very lucky to work with them. Our historical ecological perspective and their contemporary science are a good marriage. They live locally as well.

Q: The Samish Nation was able to endorse the principles of the Orca Pass Stewardship area. This was also an opportunity to work with the northern straits people who have been separated from some of their fishing grounds by the border. So there is an opportunity to share resources, power and remove some of the artificial barriers.