

Show Transcript
Deconstructing Dinner
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Title: Exploring Ethnobiology II: (Nancy Turner on Ethnobiology)

Producer/Host - Jon Steinman
Transcript - Angela Moore

Jon Steinman: Welcome to Deconstructing Dinner - a weekly radio show and Podcast produced in Nelson, British Columbia at Kootenay Co-op Radio CJLY. This show is heard on radio stations around the world including WMRW 95.1FM Warren, Vermont. I'm Jon Steinman.

Today marks part II in our series, "Exploring Ethnobiology". In May of this year, 2010, Deconstructing Dinner travelled to Vancouver Island where two international conferences on ethnobiology were being hosted. Ethnobiology examines the relationships between humans and their surrounding plants, animals and ecosystems. Today, more and more people seem to be interested in developing closer relationships with the earth, and so there's much to be learned from the research of ethnobiologists and in particular, from the symbiotic human-earth relationships that so many peoples around the world have long maintained.

On this part II of the series, we'll listen to segments from a one-on-one interview with Nancy Turner of the University of Victoria. Nancy is perhaps the most well known ethnobiologist in Canada. I sat down with her in the community of Tofino to learn more about what ethnobiology is, why it's an increasingly important field to pay attention to, and what we all might learn from the many indigenous peoples that ethnobiologists work with.

Also on the show, a recording of a presentation by Cheryl Bryce and Pamela Tudge who are examining how the indigenous peoples living in what is now the City of Victoria might reinstate traditional harvesting practices of and important traditional food - camas.

Music Fades Out

On part one of this Exploring Ethnobiology series, we heard from indigenous youth from Vancouver Island who are seeking to reconnect with their traditional ways of accessing, producing and conserving food. It was learned that re-establishing or strengthening those connections is much more than just ensuring food security, but is instead a powerful tool to preserve culture and honour the sacredness of our natural surroundings. Nancy Turner is very familiar with the importance of these connections... she's been studying the field of ethnobiology for most of her life.

Born in Berkeley, California, Nancy moved to Victoria at the age of 5 and she lives there today as a Distinguished Professor in the School of Environmental Studies at the University of Victoria. She earned a PhD in Ethnobotany in 1974 from the University of British Columbia when she studied three contemporary indigenous groups of the Pacific Northwest (the Haida, Bella Coola and Lillooet). Nancy's major research has demonstrated the role of plant resources in past and present aboriginal cultures and languages as being an integral component of traditional knowledge systems. Nancy has also played an important role in helping demonstrate how traditional management of plant resources has shaped the landscapes and habitats of western Canada.

In 1999 Nancy received the Order of British Columbia and 10 years later in 2009 received the Order of Canada. She's authored numerous books including, among others, *Food Plants of Coastal First Peoples*, *Food Plants of Interior First Peoples*, *Plants of Haida Gwaii* and *The Earth's Blanket - Traditional Teachings for Sustainable Living*.

I sat down with Nancy in May 2010 while we were both attending the 12th International Congress of Ethnobiology held in Tofino, British Columbia.

Nancy Turner: Ethnobiology is the study of people and the natural world, especially the study of people and their relationships with plants and animals, and especially people who have direct relationships with their surroundings - the plants and animals that grow in their own home places.

I've grown up in a family where my dad was an entomologist, he studied insects, and my grandfather was an entomologist, both of whom really encouraged me to study natural history. I always loved birds and plants from the time before I was 5 years old and as I got into maybe 9-10-11, I started thinking more about plants that you could eat.

I was fascinated that you could eat dandelion leaves for example and I would pick them and bring them in and make salads when I was just a kid. I didn't really realize that there was a field that you could actually study that was about all of this; how plants could be used and all of the different knowledge about plants, as food, or materials, or medicine - how to make fibre. That was actually something that you could study and I first was given two books when I was in high school, maybe first year university, but by that time all already knew about this field ethnobotany.

There was a book by Erna Gunther called *The Ethnobotany of Western Washington* and there was a book edited by Elsie Steedman on Thompson Indian ethnobotany that pertains to the Nlaka'pamux nations' relationships with plants (mostly of notes recorded by James Tate, who was an ethnographer who lived in that area in the late 1800's and early 1900's). When I saw these books and then I started reading about work from Franz Boas, who worked specially with the Kwakwaka'wakw (then he called southern Kwakiutl), I decided this was what I wanted to study.

Although I went through biology and botany, I took a course in anthropology in third year and my term paper was the Ethnobotany of the Southern Kwakiutl of British Columbia. Then I did an honours' thesis and that's when I started learning from the Saanich people near Victoria and started to work with elders there, like Christopher Paul from Tsartlip. I would go out every Tuesday afternoon in my fourth year at the university and he would teach me as much as I could learn about plants, the Sencoten names and all of the importance of them to their people.

So that's how I got started and its one of those fields that's endlessly fascinating. The more that you learn about them the more fascinating and interesting it becomes and the more you see the importance and relevance of the knowledge of local people and indigenous people in this modern world.

JS: This is Deconstructing Dinner. Within the field of ethnobiology are a number of more specific fields of research (ethnobotany, ethnozoology and ethnoecology). For a while Nancy Turner was known more for her work as an ethnobotanist, but today refers to herself as an ethnoecologist. Her reason for the title change demonstrates one example of how ethnobiologists and indigenous peoples learn from each other.

NT: I've been working in this field for over 40 years. I've been learning especially from indigenous elders and knowledge holders here in British Columbia over that time. And I've come more to recognize the people's knowledge is very holistic and you can't just separate out plants it's just not possible because they relate to fish, they relate to the birds, the animals, the fungi and so forth. More and more that knowledge becomes to be reflected in their relationships between people and their whole environments; their movements around the land and their seasonal rounds and their stories that involve plants, animals and environments in habitats. The ways that they have not just sustaining but actually enhancing environments and plants and animals where they live and the woods that they rely on and the belief systems that help them to manage these other living beings.

JS: Nancy Turner's comments highlight why Deconstructing Dinner has come to recognize ethnobiology as such an important field to explore, especially today. We've finally arrived at a time of widespread acceptance that 'yes', we as humans are having an incredible impact on the earth - an impact that no doubt has been fed very much by an inability to understand the relationships between all living things. While attending these two international conferences it became clear that ethnobiology is a field of research that not only studies relationships between people and their surrounding environments but is too a relationship builder itself by bringing together many academic disciplines and fields of research.

NT: Of course every single academic discipline can have an aspect of it that relates to this relationship between people, plants, animals and other living things and environments. So, for example, the most obvious ones would be biology, the study of living things (plants, animals, fungi and so forth) and anthropology, which is the study of peoples of the world and cultures. But also you could imagine linguistics would be very important in

this field because, in all the different languages of the world, there are names and terms that relate to those relationships with plants and animals to the plants and animals themselves and the places where they live, so linguistics is an important element. Then you can think, well political science even (because it involves relationships of trade and social organization) and economics, because throughout history people have valued certain resources from the plant and animal world and have used those to exchange with others. Similarly just about every field you can think of (from education to philosophy and psychology) all relate in some way to ethnobiology.

JS: One of the best examples that I heard on more than one occasion of the importance of the relationships formed between food sources and people is language. While for people of western backgrounds, food has rapidly become of less significant importance, for many indigenous peoples and some non-indigenous peoples, food is front and centre, it's an identification of who they are, so much so that food, within many indigenous cultures maintains a pivotal relationship to their language. And so when we speak of food security, we're speaking also of cultural security - the preservation of language.

NT: Oh there's a tremendous connection there. What's happened in the last 200 plus years since Europeans have arrived has been a cascading effect of so many different impacts on indigenous peoples' lives and cultures and some of them you could say have been positive but many of them have not. Colonialism (the enforced schooling in residential schools and the alienation of people from their lands) has all resulted in that coinciding loss of language and loss of traditional food, a loss of access to traditional foods and loss of the ability to do the activities around the food systems that help to maintain and sustain them over time.

So yes, everything is tied up with language as well. Look at place names here where we are in the Clayoquot Sound, I looked at lists of Nuu-chah-nulth names for these places and so many of them are tied to their food production systems or tied in some way to environments, the weather and the creeks (where the salmon are in) and so forth. If you look at the gazetted names (the English gazetted names) for the same places so many of them are the names of men and ships I found, Meares Island for example, and there are many others.

That represents a loss of language, at the same time a loss of access to places and in a sense an erosion of that knowledge but I have to say its not gone, it's still there it has just been so heavily suppressed. I firmly believe that it's important for all of us to work at reversing this trend that's taken so many different impacts to bring it to the point where it is now. I think it's going to take an equal number of positive moves and positive actions to bring it back again but I believe it really will come back.

JS: Bringing back that knowledge is a key role played by ethnobiologists and it's that role that many indigenous peoples see as being so important. Ethnobiologists can after all take that traditional knowledge and communicate it in ways that are more understandable to western peoples and to western systems. Whether it be marine or terrestrial conservation systems, food systems, transportation systems. The knowledge that ethnobiologists access

and share can support indigenous peoples with their efforts to protect and enhance their traditions and cultures.

But it's also through this process of learning about the relationships between human cultures and their surrounding environments, that non-indigenous peoples in what is now called North America can learn a great deal. In the case of food, we are in the midst of a notable local food movement with peoples in rural and urban communities actively seeking to reconnect with food and in doing so, reconnect with the earth. As part of my conversation with Nancy Turner we spoke about what this movement of local food advocates might learn from the research of ethnobiologists and from indigenous peoples and their relationships to the sea and to the land. We also discussed whether or not the role of ethnobiology has changed, in light of this widespread interest of all peoples to reconnect with our food.

NT: I think it has changed a lot, I think for all of us because of the teachings that we've gained from these wise and knowledgeable people we've been working with around the world, people who are grounded and really place-oriented and many times very spiritual. I think most of us have become a lot more sensitive to that.

In the past maybe there was more of a utilitarian thought of "what can this plant be used for?" The original founder of ethnobiology (the first person who suggested it as a field), John Harshberger, in fact probably defined it as the uses of plants by primitive peoples and that was in the 1890s. A very narrow minded and racist kind of view of what ethnobotany should be and it was that looking at the old textiles, and the old foods and gourds that were found in archaeological sites and then figuring out how we could use them today in some way, very utilitarian. Now a lot of us are becoming more aware that it's not so much the uses of these plants that is necessarily important but it's the relationships we have with these plants, that is the most important thing to understand.

I think what we are facing in the world today are huge threats both to people and the environment, the bio-cultural diversity of the Earth. I think one of the directions that societies in general need to move in is to become so less materialistic and acquisitive, we are taking way more than we should of the resources of the Earth and it doesn't necessarily make us any happier to do that.

A small portion of the world (population wise) is co-opting much of the world's resources and we don't need to do that—that doesn't make us happier. As long as we have our basic needs fulfilled, I think most wise people (the Dalai Lama included for example), would agree that the satisfaction and joy that we get in living has nothing to do with the material things that we have but it has to do with the relationships that we have with each other and with plants, animals and other living beings in our environments.

Just the pleasure in seeing how it all fits together in this magical world can give us so much satisfaction and joy and love and all the fulfillment that we need in our lives. We don't need all of those things, we don't need to ride around and trash the mountains with our ATV's and all of that stuff. As long as we just have enough.

JS: This is Deconstructing Dinner and Part II of our Exploring Ethnobiology series. We're listening to segments from a one-on-one interview with Nancy Turner - an ethnoecologist and distinguished professor at the University of Victoria. I spoke with Nancy in May 2010 while visiting the 12th annual International Congress on Ethnobiology in the community of Tofino on Vancouver Island. Nancy and I spoke about the role of ethnobiology today and its importance in helping all peoples understand the valuable relationships that we can form with our surroundings (with plants, animals, ecosystems and more specifically for those of us interested in deconstructing our dinners.... Our food).

Certainly for those of us interested in better connecting with the origins of our food, new relationships will be established, perhaps a relationship with a tomato plant, with a chicken, with worms or with a farmer or fisherman. And its through these relationships, that we become more capable of understanding our footprints (our ecological footprints, social footprints, economic footprints). And so I asked Nancy Turner if ethnobiology and its study of relationships between people and ecosystems can enhance our concept of what a 'footprint' is.

NT: I think it can because it teaches us about these natural processes and how to work with them instead of trying to totally change and manage in a large scale (an industrial scale) our food production systems for example. A lot of our food can be produced locally without destroying everything by using the natural process that are available to us and the concepts of permaculture, for example, which are largely based on traditional farming agro-ecosystems and so forth. Those are things that local and indigenous people around the world have learned.

If you try to go against the natural processes your going to run into problems. If you try to channelize the water you will create dry areas in other places and your going to create problems for the fish. If you pave over huge areas you're going against the natural processes that are there for us. If you cut down all the trees your thwarting that beautiful process that plants have of eating light and fixing the carbon for us.

All of these wonderful species that we live with they help us and they serve us, they give us their gifts and often we don't even see it we just cut down the trees right away and try and put in something we think is serving us better. In fact if you go to traditional societies and the people who are close to the land, they know that you have to respect all these other life forms and just by doing that you're lessening your ecological footprint.

JS: For the most part, those who were attending the two conference in May on ethnobiology were all studying cultures from the past or indigenous cultures of the present. But what about this rapid emergence of these new relationships with plants and animals being formed by peoples of western descent. Of course here on Deconstructing Dinner, we've been tracking this movement for 4.5 years, showcasing the rise of backyard chickens, of urban farming and of the closer relationships being cultivated with the land that grows our food. But these new relationships being formed were not so

present at these conferences on ethnobiology, and I asked Nancy what an ethnobiologist might think about this new local food movement.

NT: Oh with great fascination. It's important to remember that all of us, at somewhere at some time, our ancestors were living like this. Indigenous peoples and local peoples who have lived in one area for a long period of time have built up these amazing systems but in the backgrounds of all of us in the world, no matter who we are, we have this wisdom.

One of the things that ethnobiologists and ethnoecologists like to study is how this knowledge is acquired, transmitted and adapted and how we learn from each other, how we exchange ideas, people do that all the time. Indigenous people are always learning new things, it's a very adaptive culture. It's never static but always taking advantage of new ideas that are brought in, maybe taking a new technology and turning it into a different direction for a different species. That's essentially the kind of thing that's happening now is that people are doing this, rebuilding and renewing along existing connections.

There is a lot of experimental work but it's a very social thing, not just a mechanical process at all, but there's a social element to all of this practice and knowledge and it builds alongside of it, with it and integrated within it. I think it personally is building better, stronger and more sustainable societies and to see people striving to do that, paying attention and caring, that's the word caring, for the other species and for each other instead of being careless and not thinking about them.

JS: Through the efforts of the local food movement to renew these long-existing relationships that Nancy speaks of, I asked her what wisdom she would pass along to the local food movement.

NT: Well one of the things that the food movement could look at more is the understanding of these temperate food production systems that we have that work with perennial species mainly and that are not the same as the agro-ecosystems further south in sub-tropical and tropical areas where you are planting the seed and you are ploughing the ground. Here the foods that people relied on are the perennial species; shrubs, like the berry bushes (you even eat the sprouts of the berry bushes and then you get the berries), even the edible roots that people have used in the past were harvested in a sustainable way where a selected harvesting system that rotated over several years.

That's one of the lessons, that looking at the way people used small scale fires to maintain open clearings and edges that are productive for berry bushes, working with multiple cropping systems that are different in different places over time.

I think again the principals of Permaculture actually do reflect many of the practices and processes that people have used here in food production, rather than just creating square fields where we plough the ground and plant more seeds of cabbages or whatever, that we could do more and diversify our food production systems and have those wetlands and

ponds that create habitat for birds and insects as well as for people. And there's a lot of good examples, "Farming in Nature's Image" is a book that is good for that.

JS: Nancy Turner has been studying indigenous foods for 40 years, and with all of the wisdom she has to now share, I also asked about her own personal practices, and how she has applied the knowledge that she has learned in her own life.

NT: If you come to my house (and I hope you do sometime) we have a garden. It doesn't produce all the food we need or anything like that but to me it's a garden that if everyone had a garden like that in Victoria it would be a much more diverse and rich, biologically and culturally rich place. That's what I've done for quite a few years now is to just try to increase diversity in the world; create small wetlands, replant plants that used to be there and (in my own yard) try to reflect that philosophy as well as in my work at the university.

We now have a wonderful philosophy of planting more native plants around every new building that we have built in the last couple of years at the university. It has landscapes with native plants and has roofs of native plants and if we can shift ourselves away from this green monoculture that we seem to almost worship in parts of cities in North America (especially the lawn, the American lawn, which is after all introduced species and monoculture and not very biodiverse or culturally interesting to me), If we could get away from that and start to restore some of those wonderful, complex habitats I think it would make a big difference.

I'll tell you a quick story, we decided to put a pond in our front yard. My grandson, daughter and son-in-law got a pond form and dug a big hole and they put it in. My grandson said to my daughter, "We did very well didn't we Mom, we should call this the 'very well pond'". So this is the "Very Well Pond" in our front yard and I was so thrilled.

Within hours of filling there were damselflies around it. Within a couple of weeks there were frogs singing all around and we have a lot of frogs in our yard and I look on tree frogs as being one of the symbols of a healthy ecosystem. You see dragonflies and we also have a lot of native plants: salmon berry, camas blooming, cattails and wapato in the pond. It's just a real thrill to be there and see the life that is there because of the few simple things that we did. We didn't have to do much but working with natural processes is a wonderful way to go.

Increase Music and Fade Out

JS: This is Deconstructing Dinner and Part II of our series Exploring Ethnobiology. Ethnobiology is the scientific study of dynamic relationships between peoples, plants, animals and environments, from the distant past to the immediate present. In May 2010 Deconstructing Dinner attended two international conferences on the subject held on Vancouver Island. This series will feature recordings from those conferences and will include interviews with ethnobiologists from around the world. The series is archived online at deconstructingdinner.ca.

On this Part II we're listening to segments from an interview with well-known Canadian ethnobotanist Nancy Turner of the University of Victoria.

Born in Berkeley, California, Nancy moved to Victoria at the age of 5 and she lives there today as a Distinguished Professor in the School of Environmental Studies at the University of Victoria. She earned a PhD in Ethnobotany in 1974 from the University of British Columbia when she studied three contemporary indigenous groups of the Pacific Northwest (the Haida, Bella Coola and Lillooet). Nancy's major research has demonstrated the role of plant resources in past and present aboriginal cultures and languages as being an integral component of traditional knowledge systems. Nancy has also played an important role in helping demonstrate how traditional management of plant resources has shaped the landscapes and habitats of western Canada.

We'll hear from Nancy Turner later on the show, but first, let's hear from one of Nancy's students, Pamela Tudge, who, along with Cheryl Bryce (a Lekwungen woman) shared their work at the 12th International Congress on Ethnobiology. Their presentation was titled "Lekwungen Camas Harvest: reinstating Indigenous Food Practices in an Urban Landscape". Their presentation was one of many recorded by Deconstructing Dinner that demonstrated the importance of ethnobiology in helping protect, restore and enhance the relationships between all peoples and ecosystems. Also known as the Songhees, Lekwungen peoples are an indigenous Coast Salish peoples whose territory includes what is now the Greater Victoria area on southern Vancouver Island.

Cheryl Bryce is the Lekwungen Lands Manager and Pamela Tudge is a graduate student in the School of Environmental Studies at the University of Victoria. Alongside their advisors Jon Corbett of the University of British Columbia and Nancy Turner, they're in the process of examining how to go about reinstating indigenous harvesting practices in an urban setting, which in this case is the City of Victoria. They looked into what alliances are necessary to form and they investigated what indigenous food sovereignty looks like in that urban setting. Here's Cheryl Bryce.

Cheryl Bryce: As Pam was saying in the Victoria area this is all of our ancestral homelands, which is now known as Victoria, and Lekwungen is the major seven family groups that make up this area as our ancestral lands here. All of this was, is, our homelands and today we live on reserves and this has been heavily urbanized. Development has impacted as well as other impacts I will get into but we are now a small area there. It's about 154 acres of land that we now live on and we have a couple small islands out here and a sacred island in the harbour so our land base is hugely impacted as an urban area.

We have a diverse ecosystem in our ancestral lands, our homelands, and this is just one of many and this one I'm talking about and focusing on one particular part of it because it's a part of the indigenous ecosystem as a whole and it's important for a trade item which is known as Kwetlal or Camas, as it is known in English. These are the indigenous ecosystems known as the Garry Oak ecosystems and the area that I was showing in

Victoria (there was a lot there historically before colonial impact over 150 years ago) a lot of what's now know as Victoria there was a lot of Garry Oak ecosystems. Now it's way less than 5%, probably less than 1% of our ancestral homelands so it's been hugely impacted by many things but this is the indigenous ecosystem.

So up here this is one of the areas where we worked within alliance with the University of Victoria and Pam Tudge as looking at different ways that we can work together in addressing some of these issues. Here we are with some elders from different nations that are coming together and we're looking at ways to also work together in alliance in protecting these ecosystems and ways that we can work together between nations as well. These are nations from the island here that have come down they are Salish, the Hul'qumi'num, the Wa'saanich and Lekwungen people working together towards protecting it and we've done multiple workshops together as far as holding indigenous conferences that focused on this particular type of indigenous ecosystem. We also created cultural books for kids and plays with things in our language to teach to the youth as well and getting the youth involved. As you can see here they come out and we don't just do walkabouts of plant identification they actively get involved in the harvesting and get involved in removing invasive species which is another colonial impact.

Indigenous food sovereignty to me is about our role and the land, the ecosystem itself as a whole, its there because of what our ancestors did. Our ancestors interacted with that ecosystem for it to be what it is and we continue that as Lekwungen. And this is a womans' role to manage these indigenous ecosystems and it's theirs' to trade the Kwetlal, the camas and this role has been impacted by colonialism. What has been put onto the indigenous people nationwide here in Canada as far as the laws (like the Indian Act and the Modern Treaty Process and all these things) are heavily impacting our land and our connections to that land because I still see that as still all my land. But now there is a whole different land title that's being put in place so that individuals occupy and own these lands and so development happens and it just takes over a lot of our home lands, our ancestral lands, through development as well as invasive species. So, really, colonialism is an invasive specie and the settlers have come in and altered our landscape (which is apart of who we are) and some of our food resources.

This is one of the areas that is on our reserve which is on one of the islands, that I mentioned earlier, where we do a lot of our harvesting and traditional management of weeding, burning and harvesting on these sites and pit cooking and celebrating our indigenous ecosystems and food resources. I thought I'd put a picture of myself so you know I actually work, and this is my nephew he was about two years old there and I've been backpacking him through the woods since he was six months and talking and teaching about all the different ecosystems including what's now known as the Garry Oak ecosystem.

And this is the one where me and Pam worked on the site at the University of Victoria (which is part of my ancestral land) and it's one of the places that was know for our ancestors to harvest in these areas and have huge celebrations. People from all over the Neskonlith, the Kwakiutl, the Haida, everyone came to Victoria and it's was a place to

trade. We were know as the place to go to get Kwetlal, which is a very important complex carbohydrate, a form of starch.

Our indigenous foods are much better for us health wise because everything that's introduced contributes to a lot of ailments, such as diabetes, these foreign diseases we never had 50-60 years ago and now we are becoming heavily impacted because we don't have a lot of these traditional foods that have been impacted through colonialism, development and invasive species.

This is something that's just who we are, it's something we have always done as indigenous people. Going out and working with our own family because it's a family right and it's something that's been passed down through family but community, yes, it is linked. There's that communal right as far as this being an indigenous ecosystem and apart of our ancestral land but this particular part of harvesting, such as camas, those are things that are passed down through family .

This was the first huge gathering that we had that was just not family, so this was the whole community that was invited to take part in 2001 where we just had nothing but our indigenous foods. We were cooking it in the traditional ways, whether it was the marine foods (fish, clams, crab) but also our other foods like camas and invited other nations to come. Whether they were indigenous or not and whether they were settlers or indigenous to the land and they came and everyone traded food, everyone brought something that they could bring to the pit and cook and contribute so people were coming with different food. At this particular one some people came from the interior with wapato, so there were a lot of people coming and sharing food.

Part of what we want to do is making sure it is to reinstate roles, which is still on going, but making sure it's going to continue on through generations and know that there will be the land base for this to happen as well. So its reinstating the land and protecting the land and conserving what's left, protecting it and reinstating parts that we can as far as reclaiming areas that we can as apart of who we are within the ecosystems.

JS: This is Deconstructing Dinner. You're listening to Cheryl Bryce - a Lekwungen woman whose territory exists in what is now the Greater Victoria area on Vancouver Island. Cheryl spoke about how her and Pamela Tudge came together to research how Lekwungen people might reinstate an important food practice within the urban setting of Victoria. Pamela Tudge is also heard in this next clip recounting the 2005 camas harvest on the grounds of the University of Victoria. It was the first time in 150 years that such a gathering had taken place, and it continues to be a lot of work to demonstrate how traditional harvesting practices of camas can in fact improve production and improve the important Garry Oak ecosystems that their a part of.

CB: It was about 10 years ago when I realized that I'm tired of being running out of parks that are now called parks, part of our homelands, to harvest our food. As a little girl I would go with my grandma and we would go into the parks, wherever our ancestral lands were, no matter what was there, we would harvest. It wasn't just camas it was other

things, we would strip bark and we did what we wanted to do in our ancestral homelands. This is apart of why I started realizing that I needed to look at ways to create alliances so that we can make sure that these things will be there in the future.

That was difficult because of the issue of trust between indigenous and settlers on how we can work together in protecting what's left and reclaiming things and looking at ways where we could work together. One of the things I was really tired of was these settlers coming to me and asking for my knowledge and asking our community for our knowledge and the fear of that being appropriated and misused and looking at ways that this could be changed. What I liked about Pam when she came to see me she asked "what can I do for you and what are you already doing?" and that's how we started creating that alliance and I'll let Pam talk on her end.

Pam Tudge: In 2003 what we were looking at in Victoria, again it's very urbanized so there are small pockets left of where we could harvest camas from and where we could actually harvest camas and other traditional food and also pit cook camas and also manage (whether we're weeding or burning). There are not that many places left and those that are left are all in parks so the University of Victoria is unique. It actually has quite a bit of land left in Victoria and it has camas so when we were looking at different places we could harvest, the campus became the spot.

One of the big challenges to this in an urban landscape is negotiation. Being able to develop those relationships with who is managing the land right now so we can actually have official harvest and management so that Cheryl and community members are not having to go in and do it where people would run them out. One of the examples of this was to organize a community based harvest in 2003 where we did it up on the campus. We came together and we negotiated permits and fire protocols and we negotiated with UVIC administration (which was really difficult) to be able to do this one camas harvest, add a pit cook and bring people from various nations including a large group came up from the actual Nuuchahnulth nations as well. To be able to have a space that didn't take a lot to get to, like the islands, and bring the elders out to be able to do this, to be able to create that space.

After the camas harvest (which saw about 150 people and it was a successful event) I went through a process of interviews and evaluating the process of what it meant to people. I'm going to shorten the conclusion because one of the things that Cheryl talked about (a lot of it was Nuuchahnulth nation as well as the Lekwungen) everyone talked about this idea of the impacts. They no longer have rights to where their food is, they can no longer get to it and that is impacting them in all kinds of different ways. But on my side, the settler population was not ready to negotiate camas harvesting in a urban landscape and we have a long way to go to create those respectful relationships within the settler population so we can engage first nations respectfully and create those alliances.

JS: Pamela Tudge and Cheryl Bryce, recorded in May 2010 in Tofino, British Columbia. Pamela is a student of the University of Victoria's, Nancy Turner - a well-known Canadian ethnoecologist who has spent the past 40 years studying traditional knowledge

systems of indigenous peoples and who we've been featuring today on this Part 2 of our series Exploring Ethnobiology. Today's broadcast is archived on our web site at deconstructingdinner.ca and the July 22, 2010 broadcast. Links to other episodes of this ethnobiology series are linked to from there.

In this next clip coming back to my conversation with Nancy Turner. She speaks about her work today and she speaks to her responsibility and role to preserve and share the important knowledge that has been shared with her.

NT: I've been working as a facilitator more and more for communities and students and trying to help assist projects that relate to this field in either food production, food renewal, even language renewal to some extent because those names of plants and animals are specialized vocabulary that even if someone could speak the language, converse and say "how are you today?" it doesn't necessarily mean that they know all of those specialized terms that are apart of the depth of a language.

So having had the privilege of working with elders of two or three generations ago and recording those names, I feel its my responsibility to help to keep them going and I feel that's the reason why people took the time, effort and trouble to share their knowledge with me. I feel very strongly that I have a duty and responsibility to them to help to keep that knowledge going and to bring it back whenever its possible.

JS: Similar to the challenges spoken of earlier by Cheryl Bryce when non-indigenous people seek to access indigenous knowledge, Nancy Turner spoke to me about those challenges and how she manages them upon receiving and sharing traditional knowledge systems of the indigenous peoples she works with.

NT: it's really important to remember that information and knowledge are power and that's its not my knowledge, its not my information, I always make sure that people understand. What I do is to try as much as possible to ask permission from the knowledge holders, to check "am I doing the right thing, is this okay?" That's always been so important to me to ask and to seek advice from the people here and the other people I work with or with their families.

I remember very well the words of one elder, up in Cácl'ep in the Lillooet, Stlatiumh country, "go slowly, go slow make no mistakes" so take your time, do it right, try no to rush, try to check back and constantly be checking what you're doing. Then when you do share knowledge, make sure that you also share and give the proper recognition and acknowledgement to the people who shared with me and to be very, very careful.

I've learned lessons over time especially with medicines. That is often private knowledge and its not meant to be widely shared so if I am asked to help with a project by a community (of course under the right circumstances its fine) but otherwise that is the sort of information where to its okay to say this is an important medicinal plant but you don't

want to necessarily give too much unless you are asked to do that, unless people give you permission to do that.

With food, even that can be problematic if it's a food that only grows in some places, like people don't like to share fishing spots because you know other people will go in and help themselves and the mushroom picking spots or even the good berry patches and you need to respect those things and be careful about that. But you can talk in general terms how important these foods are to people for their health, nutrition and for their well being.

JS: The University of Victoria's Nancy Turner. That wraps up today's Part II of our Exploring Ethnobiology series. A thanks to Nancy Turner for sitting down with Deconstructing Dinner at the 12th International Congress of Ethnobiology held this year in Tofino, British Columbia. You can stay tuned for more episodes of this series featuring recordings from that and a similar conference held in Victoria. Helping close out our show here is the music of Adham Shaikh from his recently released album Resonance on Sonic Turtle Music. This track was featured on the soundtrack for the film Fierce Light by British Columbian born and raised filmmaker Velcrow Ripper. The film explores the world of spiritual activism - a practice that certainly can draw many parallels with the focus of this series on ethnobiology.