

The Traditional Foods of Puget Sound Project
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Introduction

In the Squaxin Island Tribe of the Medicine Creek Nation it was common for our people to live beyond 100 years old. Tribal elders attribute this longevity to knowledge about traditional foods and medicines that was passed down from generation to generation. Their powerful traditional science included understanding techniques for gathering, knowing when was the most potent time to harvest, how food was processed for everyday use and how plants were used for ceremonial purposes. This knowledge was highly regarded as a sacred gift that contributed to living a long and fulfilling life.

-Charlene Krise
(personal communication, November 16, 2009)

Almost every tribal community in Western Washington has stories of relatives who lived to be over 100 years old. Often they are remembered for gathering and growing their own food. This practice has been passed down for countless generations. It was a way of life that both sustained people and created a rich culture.

As archeological research has confirmed, Northwest Coastal Indian ancestors ate a great variety of foods before European contact (Puget Sound Traditional Foods and Diabetes Project, n.d.). The land was rich with fish, shellfish, wild game, berries, fruits, wild greens, nuts and roots. As the seasons changed, people traveled to places where special foods were abundant. Those foods were often processed and preserved for later use. Food was a living part of the culture - a direct link with the land. Cultural protocols were traditionally followed for fishing, hunting, gathering, preparing and eating. These protocols protected natural resources and insured continued abundance (Ryser, personal communication, January 21, 2010).

Gathering food and sharing it with family and community was woven into everyday life. Food brought people together over a common purpose. Stories and laughter were shared while hands processed fish, berries, and nuts. As Rudy Ryser from the Cowlitz Indian Tribe said, "The kitchen table was a place where cultural knowledge was passed from one generation to the next." (Personal communication, January 21, 2010)

In just a few generations, Northwest Coastal Indian peoples' ability to eat their traditional foods has declined. Important foods, including camas, soapberry, gooseberry and eulachon that were commonly eaten are now difficult or nearly impossible to find. Elders from many communities are saddened that they can no longer harvest and prepare the foods they grew up eating. The implications of this are vast. As the availability of these foods has declined, the stories and language connected to them fall silent. Invaluable aspects of the culture are lost.

Northwest Coastal Indian peoples' health has also suffered from a loss of traditional foods. Type 2 diabetes was non-existent among Northwest Coastal Indian people about 100 years ago (Ferreira, 2006a). During colonization, native foods, which are rich in complex nutrients, were replaced with commodity foods that are high in carbohydrates, sugar, dairy and poor quality fats. Today Native American communities are at greater risk for diabetes than other groups. Having American Indian or Alaskan Native heritage is one of the top four risk factors (National Diabetes Statistics Clearinghouse, 2005). Currently the prevalence of

diabetes among Native Americans is 5-8 times higher than that of the general population (Lang, 2006).

Many people believe that traditional foods can help prevent the chronic diseases that are so prevalent among Indian people today. It is generally agreed upon by researchers that when native people eat the foods that their ancestors relied on for countless generations they are less likely to suffer from chronic diseases including diabetes, heart disease and cancer. Some of the solutions to preventing modern chronic diseases are clear: eat healthier foods and have a more traditional lifestyle that includes exercise. Accomplishing this goal has proven to be a difficult challenge for many tribal communities. This project addressed this challenge by seeking to:

1. Understand the barriers to tribal communities accessing traditional foods
2. Document what tribal communities are doing to protect or restore access to traditional foods
3. Improve the health of native people by providing a booklet that includes resources on traditional foods

Project Background

The *Traditional Foods of Puget Sound Project* emerged out of a movement among tribal people in Western Washington to improve individual, family and community wellness by reviving their communities' traditional foods. It is not only that traditional foods are nutritious. Of equal importance is the link they provide to culture and to place.

The *Project's* roots go back to 2003 when members of an archeological team from the University of Washington's Burke Museum of Natural History and Culture collaborated with King County and several tribes (including Tulalip, Muckleshoot and Suquamish) to identify the foods that sustained Northwest Coastal Indians before European contact.

By understanding the diet that created a comprehensively healthy foundation for Northwest Coastal people, the researchers hoped they might help improve people's health today. Many tribal people believe that diabetes and other chronic diseases are the results of the drastic changes in diet and lifestyle that have been occurring over the last several generations. Research has confirmed this to be true (Lang, 2006, Ferriera, 2006, Pollan, 2008). When Native people anywhere in the world eat their traditional foods, they are less likely to suffer from diabetes and other chronic diseases.

The Burke's research team reviewed the plant and animal remains found in 130 archeological sites in King, Kitsap and Snohomish counties. Over 280 kinds of plants and animals were identified. According to Robett Kopperl, a member of the archaeological team, some of them were found in sites that were used as many as 5,000 years ago (Community Roundtable Discussion, April 21, 2009). Clearly the Northwest Coastal Indian ancestors had benefited from a widely varied diet that included many types of mammals, birds, fish, shellfish and plants.

The purpose of the Burke project was to generate data that would ultimately result in a reduced incidence of diabetes among tribal people by increasing our understanding and

use of the foods that were traditionally eaten. The information they compiled was indeed impressive. While many of the identified foods are still available, many others are now difficult to obtain or have become locally extinct in what has become a highly urbanized environment.

While the Burke's findings are of great interest and value to diabetes researchers and other specialists, they have only been maintained in spreadsheets. This makes them difficult to access and interpret for members of the general public. To remedy this, members of the Burke research team asked the Northwest Indian College to help make the findings more useful and available to tribal communities.

Northwest Indian College is the only accredited tribal college in the Pacific Northwest. Its main campus is located at the Lummi Nation near Bellingham, Washington. Full-service extended campuses are located at four reservations in Washington (Swinomish, Muckleshoot, Port Gamble S'Klallam, and Tulalip) and one in Idaho (Nez Perce). Courses are offered through distance learning modalities so that students can take classes no matter where they live. During the 2008-2009 year the College provided academic courses to 1,254 students. Students came from 101 tribes and First Nations bands throughout the U.S. and Canada.

One of the most popular offerings from the College's Cooperative Extension Office is the *Diabetes Prevention Through Traditional Plants Program*. Since 2005, the *Plants Program* has offered regular classes to tribal members throughout the Puget Sound Region on topics including native foods nutrition, harvesting traditional plants, gardening and medicine making. Gatherings to engage students in these disciplines have been hosted by many different tribes throughout the Puget Sound. Elders, cultural specialists and local plant experts regularly share their knowledge with the greater tribal community. Over the years, a strong community of people actively interested in traditional foods and medicines has developed. Some have stepped forward and begun to teach classes in their own communities.

Traditional foods have consistently been one of the *Plants Program's* favorite themes. For example, the group has harvested salad berries to make fruit leather at the Quinault Reservation, prepared edible wild greens at the Muckleshoot Reservation, dined on seaweeds and barnacles at the Makah Reservation and hosted an annual fall harvest festival at several locations. Taking the Burke's research findings and making them useful for Indian people today was a natural next step for the *Plants Program*.

After receiving extensive input from a wide range of community members, the College applied for and received a grant from the U.S. Department of Agriculture Economic Research Service's Research Innovation and Development Grants in Economics (RIDGE) program. The *Traditional Foods of Puget Sound Project* was initiated in spring 2009.

The Traditional Foods of Puget Sound Project

Through this community-based research project, the research team worked with scores of tribal service providers and cooks to address this research question: *How do we utilize research about traditional foods of Puget Sound Indians to create a healthier diet and lifestyle*

for Indian people today? Throughout the project the research team attempted to identify barriers and solutions that will ultimately help improve the health of Northwest Coastal Indian people by increasing their access to traditional foods and healthy local foods.

Using historical data on the traditional foods of the Puget Sound region in conjunction with nutritional information on the benefits of healthy local foods, they created a picture of a modern yet “traditional” healthy diet. The project also hosted two day-long community roundtable discussions with broad community representation. To maximize participation, one discussion took place in the northern Puget Sound region and the other in the southern Puget Sound region. Participants included:

- tribal cooks
- food program employees
- diabetes prevention staff
- nutritionists
- diabetes counselors
- tribal decision makers
- welfare program administrators
- elders
- cultural specialists
- educators

Each day began by sharing information on traditional foods, archeological data, the nutritional benefits of different types of foods and modern equivalents to traditional foods. Participants then discussed how their families and/or communities historically gathered traditional foods and whether or not these practices were still occurring. People shared rich stories about their experiences with traditional foods. They then described the barriers encountered when integrating traditional foods into their contemporary diet. In closing, people shared the steps they and their communities have taken or are beginning to take in the journey to overcome those barriers. A summary of the findings from these community roundtable discussions is documented later in this paper.

A few weeks later the research team brought together 18 cooks from Puget Sound tribal communities for three days of recipe development at a commercial kitchen in Poulsbo, Washington. The cooks created tasty, healthy and affordable traditional foods recipes. These recipes also use locally available non-native foods that are nutritionally similar to native foods.

The findings from the archeological research, the community roundtable discussions and the tribal cooks camp were compiled in a book called Feeding the People, Feeding the Spirit: Revitalizing Northwest Coastal Indian Food Culture. The book was distributed to participating tribal communities in March of 2010.

Methodology

The main purpose of this research project has been to improve the health of Native American people through increasing access to traditional foods and healthy local foods. The project was generated out of a voiced need from the participants in the *Diabetes Prevention through Traditional Plants Program*, which represents over 250 people from tribal communities in Western Washington.

The research team has seen many health programs that attempt to instigate change in tribal communities through programs that were generated from *outside* tribal communities by people who do not understand the epistemology or current reality of tribal

people. A culturally relevant community based participatory research process was utilized so that health outcomes that would be useful and specific. Roundtable discussions were planned in order to gather information about historic and contemporary uses of traditional foods along with strategies to increase their accessibility and use. A diverse community of people participated, including elders, youth, cultural specialists, cooks, hunters, gatherers and those involved in community food programs.

Prior to this, the principle investigator submitted an application to the Northwest Indian College Internal Review Board. The project was accepted after a thorough review around cultural sensitivity and honoring cultural property rights. Community roundtable discussion participants had the option to participate in research and be recorded, or to remain anonymous in a discussion group. Research questions were developed using appreciative inquiry, which builds on strengths and conditions. Open-ended questions led to related topics that were unanticipated, yet important to the project.

The results of the discussions were carefully summarized and printed in a book that was distributed to participating communities. Specific stories shared by participants are documented in the book. Current tribal programs that support restoring traditional foods and increasing community food security were documented and are listed in the book as resources.

Results

Developing a Modern Traditional Foods Diet

The principle investigator and the project assistant analyzed archeological data and determined which traditional foods are still readily available and safe to use. This was accomplished through interviewing elders, traditional foods experts and tribal cooks. A review of traditional foods literature was also completed. Plant foods were poorly represented in archeological findings due to their fragile composition but knowledge about their use has been passed down through oral tradition and ethnographic accounts. Several foods that were present in archeological data may be available today but are no longer considered palatable, so they were not included. The results are listed on the following page. For a full list of the foods that were found in archeological sites in the *Puget Sound Traditional Foods and Diabetes Project* visit:

<http://faculty.washington.edu/plape/tradfoods/tradfood.htm>

Traditional Foods of Puget Sound

Nuts

Hazelnuts
Acorns

Berries

*Blackcap Raspberry
*Cranberry
Elderberry
Huckleberry
Salal
*Salmonberry
*Saskatoon (Service Berry)
Soapberry
*Thimbleberry
Wild Blackberry
Wild Strawberry

Fruits

Bitter cherry
Chokecherry
Crabapple
Current
Gooseberry
Indian Plum
Wild Rose

Edible Greens

*Cat- tail
Cow Parsnip (Indian Parsley)
*Fiddlehead Ferns
*Fireweed Shoots
*Horsetail Fertile Shoots
*Nettles
*Sprouts (salmonberry or thimbleberry shoots)
*Spruce shoots
*Wild lettuces - spring beauty, violet, watercress

Roots/Bulbs

Camas
Biscuit Root (wild carrot *Lomatium*)
*Bracken Fern Root
Lily Roots (several possible varieties)

**Indicates species that were not found in archeological digs, but were considered important in interviews with elders or ethnographic texts.*

*Pacific Cinquefoil
Springbank Clover
Wapato (Indian Swamp Potato)
Wild Onion

Other

Bedstraw (Cleavers)
Maple sugar (possible)
Mustard

Seaweed

*Kelp (with herring row)

Non-native nutritious wild foods

Chickweed
*Dandelion Greens
Lamb's Quarters

Common Seafood

Clams (many types)
Geoduck
Muscles
Gooseneck barnacles
Oysters
Shrimp
Crab
Seal
Octopus

Fish

Salmon
Smelt (eulachon)
Halibut
Ling cod
Sturgeon
Trout

Wild Game

Duck
Grouse
Deer
Elk
Bear

Roundtable Discussions

The first roundtable discussion took place on April 8th at the Northwest Indian College campus at the Lummi Indian Reservation. Over 50 people participated in the event including diabetes specialists, tribal cooks, tribal administrators, elders, students, local farmers and community food coordinators. In the morning, experts on traditional foods and archeological data around native foods of the Puget Sound gave presentations on phase one of the project. Participants had an opportunity to review which native foods were used at the time of contact and what foods are commonly available today. The nutritional and cultural benefits of these foods were discussed.

After a healthy traditional foods lunch was served, the larger group broke into two research-based groups that were recorded with video and hand-held recorders and one non-research based group. Facilitators lead each group in a discussion with these questions:

1. *Is your community/family currently accessing native foods and local healthy foods? If so, how?*
2. *What are the barriers in your community/family to accessing traditional foods on a regular basis?*
3. *How do you think your community/family might be able increase access to native foods and healthy local foods?*

After an hour and a half of group discussions, the entire group met and discussed how the discussions went. Participants shared key themes and discussed the future of the project, including how it can be most useful for tribal communities.

The second roundtable discussion took place at the Squaxin Island Museum on April 21st. Over 35 people participated and the format followed the roundtable discussion at Lummi. Whereas most of the participants at Lummi were from Northern Puget Sound, the Squaxin group was primarily from Sound Puget Sound. Many inspiring stories and resources were shared, which are documented in the traditional foods booklet. The key themes for both of the discussion groups are listed below.

Key Themes from Discussion Groups

Question 1: Ways family/community are accessing traditional foods:

This question brought out stories of the past or stories of “the way things were”. Elders and even younger people talked about growing up and harvesting traditional foods with their family. Many participants spoke about fishing and gathering clams or oysters on the beach, which was often a family event. What emerged even more than an appreciation for the food itself was the quality of experience with community and family. Several people said that those times of working together to harvest, prepare and eat food were the best experiences of their lives. The research team was touched by watching people recount these experiences with joy and laughter. Sadly, most participants said this type of activity rarely happens any more. Here is one quote from Vanessa Cooper from the Lummi Reservation at the community roundtable discussion on April 8, 2009:

I saw a video on the first salmon ceremony here at Lummi on my fishing rights . An elder explained how around the time of the first salmon everyone camped at the river. Everything was quiet as people put up their nets. At night there was a big huge sound, a big splash, everyone knew what it was. It was the first king salmon coming through. The whole village would honor it. It did not matter if was tiny, everyone would share that first fish. She remembered how special that time was - it was the best time in her life.

We as Lummi people still do that; we have the honoring of the first salmon. We don't do it as a whole village any more, it's really sad. Hearing that elder's story brought back some things that I was taught and opened my mind to how I am going to teach my children the importance of these things. We take for granted the things we were taught and do not sit down like this any more to share teachings.

I am going to be creating a community garden that will be a teaching tool so youth can learn how to give back to their community. I want them to know and learn what it feels like to give back to their community. It will carry them as they get older.

Many people said that their families often ate together at the table and shared stories and events. One elder said that the table is where the transmission of culture from one generation to the next takes place. Several people acknowledged that families do not sit down to eat together as often as they used to and this may be a problem.

The importance of a land base

Participants from the Snoqualmie and Cowlitz tribes said that they do not have a land base to harvest traditional foods. They need to create partnerships with the U.S. Forest Service, Department of Natural Resources and other landholders to harvest food, and this is a real challenge. Other participants from tribes with a large land base like Lummi or Quinault said that it was easier for them to harvest native foods. Some participants worked with their natural resources departments to gather native foods.

Adapting to urban life

Some of the participants said that they or their parents grew up on reservations, but have moved to the city or to suburban areas where they do not have access to native foods. They do not have a strong relationship with traditional foods like their elders do.

Question 2: Barriers to accessing traditional foods:

Common themes emerged as roundtable discussion participants addressed this question. The barriers have been listed in order of importance as the participants identified them.

Environmental Toxins

Toxins in the environment have diminished all traditional foods sources. Every group identified this as one of the most powerful barriers to accessing traditional foods. People shared that their tribal shellfish beaches often have unsafe levels of heavy metals. Puget Sound fish, including Chinook salmon and rockfish, have high levels of mercury and PCB's,

which can cause learning and behavioral problems in children. Water quality is a major issue as the Puget Sound now has several dead zones where pollution robs the water of oxygen and makes it inhospitable for living things. Fish and shellfish populations are a fraction of what they were just two of decades ago. Research shows that this is partly due to environmental toxins.

Even if fish or shellfish do have toxic levels of mercury or other heavy metals, many people say that the benefits of eating them outweigh the risks. This may be true nutritionally and spiritually. The participants said that eating traditional foods is essential to the overall health of many Indian people.

While the Environmental Protection Agency has worked in partnership with many tribes to clean up toxic sites, there is still much more that needs to be done to clean up old sites and to prevent new ones from forming. Cleanup projects are extremely expensive and can be controversial because environmental toxins may be quickly released into the water during the cleanup process instead of being slowly released over many years. In the community discussions, people shared many stories about environmental toxins harming natural resources in the water and on land. Dr. Frank James told one such story at the community roundtable discussion on April 8, 2009:

The Nooksack Indian Tribe is working through a grant from the Center for Disease Control on increasing traditional foods as a way to impact chronic disease. Modifying one's diet as a community is one of the most powerful acts a community can take to stay healthy.

Access to traditional foods is extremely limited now. For example, the paper manufacturing plant in Bellingham discharged 26,000 lbs of mercury into Bellingham Bay over 40 years. This mercury accumulates in fish and shellfish, and when these are consumed by native people, particularly childbearing age women, it is possible for the mercury to impact future generations. Mercury can decrease both intelligence and fine motor coordination in offspring exposed to high levels while inside their mother's womb. This fact has two sides. First, it can have physiologic impacts and second, knowledge of those impacts will keep native people from eating salmon and other foods that are otherwise very important to their health and spiritual life out of a concern about food safety. There has been a dramatic increase in heart disease and metabolic diseases such as diabetes directly mirroring the decrease in healthy fish consumption. There are well-understood benefits of fish consumption that are being missed both because of the pollution but also because of the decrease in the salmon runs and access to fish as a food source.

Toxins are also a concern for those harvesting wild plants. Berry fields may be sprayed with pesticides if they are near clear cuts. Insecticides and herbicides are commonly sprayed in public areas, including fields and along roadsides. Wild foods may be growing in places that were once industrial areas or dumpsites and the soil can carry toxic compounds that are absorbed by plants. It can be difficult to find out if harvest areas are safe and the information may not be available without costly environmental tests. Clearly, environmental toxins need to be addressed in order to restore the health of people and the environment.

A Loss of Rights

Despite supposed treaty rights stating that Indian people can hunt, fish and gather in their usual and accustomed places, many participants at the community discussions said that this simply is not the case. People struggle over a loss of rights to gather their traditional foods. This struggle goes back to the time of European colonization.

A violent war for natural resources began brewing between Indian people and settlers soon after non-Indians arrived in the Pacific Northwest. While settlers wanted to possess the land through ownership, Indian people wanted to *access* the land as they had for countless generations. This difference in world-view caused tensions and Indians became the target of animosity and violence, perhaps because they stood between settlers and the Northwest's rich resources. Initially, the U.S. government was complacent about treaty rights, believing that settlers were primarily interested in farming as a food source. They were gravely mistaken. Indian peoples' right to fish in accustomed places in Washington State was not upheld until what is commonly referred to as the "Boldt Decision" of 1974. In spite of U.S. District Court Judge George Boldt's decision in *United States v. Washington*, tension among sports and commercial fishers, the State of Washington, tribes and tribal fishers has persisted to the present.

The Boldt Decision was a regular topic of conversation in our community discussion groups. Elders told how, prior to the Boldt Decision, they carried blue cards and could fish or hunt any place they wanted and any time they wanted. Now people can fish and hunt only at certain times dictated by the federal or state government. For most people, the Boldt Decision was a double-edged sword because it took half of their rights away, but guaranteed the other half.

Other laws pose threats to harvesting native foods. New regulations require that Indian people get a permit for harvesting forest products, including berries and cedar. This costs extra time and money.

Participants from Nooksack and Muckleshoot said that their communities have access to shellfish but are not harvesting them. There was concern that if people do not exercise their rights to harvest, they will lose those rights. As Dr. Frank James, Health Officer for the Nooksack Indian Tribe, said, "Shellfish are an important source of healthy protein that is otherwise often in short supply in our communities' diet. Fewer and fewer families still harvest shellfish and other natural resources. It would be a travesty to have these rights pass into history."

A Loss of Land

Wild spaces where traditional foods flourish are continually diminishing. This year, several roundtable discussion participants experienced this first hand. When one family went to harvest camas last spring, they found one of the most abundant prairie areas had been paved over and turned into a housing development. Sadly, many people who harvest traditional foods have similar stories. This loss of land for Indian people goes back to treaty times. The following history has been included to illustrate how little land remains for harvesting traditional foods.

When Washington became a U.S. territory in 1853, the federal government began implementing a policy of moving many tribes onto a few reservations to open up land for settlers who were arriving in large numbers (Bergeson, Ash and Hurtado, 1997). Ultimately, Indian people had few alternatives to signing treaties. U.S. representatives often came to negotiation meetings with a proposed treaty or the threat of war. In 1855, Washington Governor Isaac Stevens met with the Puget Sound and Washington coastal tribes and secured seven treaties that formed most of Washington State's reservations (Bergeson et al., 1997). The U.S. government took title to 64 million acres of land. Indian people were forced onto small reservations, a change that severely hindered and drastically altered traditional ways of living.

Once they were moved onto reservations, Indians were expected to become "civilized" by divorcing themselves from their migratory lifestyle and learning to farm new European foods. This completely disrupted the organization of Indian culture, which was based on traveling to different places to harvest seasonal foods. Reservation land was often inhospitable or far from customary gathering places. Instead of living in longhouses or seasonal camps, families were forced to live near Forts where commodity foods were distributed.

In 1887, the General Allotment Act (Dawes Act) broke the integrity of the reservation system by taking even more land away from Indian people. Indians were to select 160 acres of land on the reservation for each head of a family and 80 acres each for other tribal members. If they failed to choose, Indian agents would choose for them. The purpose of this was to open Indian lands for non-Indians to purchase. Reservation land ownership looked like a checkerboard in many places. This took power away from "sovereign nations" and allowed the U.S. government to have jurisdiction over non-Indians within the reservation. Native land holdings decreased from 138 million acres to 48 million acres (American Indian Issues, An Extracurricular Guide for Educators, n.d., historic overview section). The act was repealed in 1934, but the damage of fracturing tribal communities had been done and has added to the challenges of accessing and gathering traditional foods.

Modern Foods verses Traditional Foods

Diabetes did not emerge as a chronic disease for Indian people in the Pacific Northwest until around the time when Indian people began eating larger amounts of commodity foods and modern industrialized foods instead of traditional foods. In the book In Defense of Food (2008) Michael Pollan writes:

Chronic diseases that now kill most of us can be traced directly to the industrialization of our food: the rise of highly processed foods and refined grains; the use of chemicals to raise plants and animals in huge monocultures; the superabundance of cheap calories of sugar and fat produced by modern agriculture; and the narrowing of biological diversity of the human diet to a tiny handful of staple crops, notably wheat, corn and soy. . . . Early in the 20th century a group of doctors and medical workers noted that when people gave up their traditional ways of eating and adopted a modern Western diet they developed modern diseases, including obesity, diabetes, cardiovascular disease, and cancer. Traditional foods diets all over the world were linked with low incidence of chronic disease and greater health.

Among Washington coastal tribes, dietary changes away from a traditional diet began in the mid to late 1800s when annuity foods that included pig fat, beans, flour and sugar began to be distributed. According to Rudy Ryser, chair for the Center for World Indigenous Studies, “The strategy was to wean people away from reliance on the land. Then they would not need access to deer, fish, and other traditional foods. They could become ‘civilized.’” (Personal communication, January 3, 2007.) These annuity foods were used to create foods such as fry bread. Unfortunately, the lard that was provided came off the back and belly of the pig instead of the most healthy and nutritive fat around the kidneys. It was far inferior to the people’s customary sources of fat from wild animals and fish.

Carbohydrates, including wheat, were refined in a way that removed most of the fiber and made them into quick digesting high-gluten cereal and flour. According to indigenous food expert, Gary Paul Nabhan, PhD (2002), “This results in blood-sugar and insulin responses two to three times higher than those reported from whole grains or coarse-milled products like bulgur wheat.” Because milk and grains were not present in the traditional diet of Washington coastal tribes, people did not have the ability to digest lactose and high-gluten wheat. All of these may be factors in the subsequent development of chronic diseases, including diabetes.

In the 1930s, the U.S. government created the formal commodity foods program to help farm workers who were suffering from the upheaval of the Great Depression. Surplus grains and other foods were bought from American producers to keep prices stable. Commodity foods changed over time based on what surplus was available. These surplus foods were distributed to Indian communities. Rudy Ryser remembers growing up with commodity foods, including powdered milk that would not dissolve, poor quality meat, and processed cheese (personal communication, January 3, 2007).

Modern foods like soda, sugary snacks, and sweets have become less expensive and more widely available over the last several decades. In the *American Journal of Clinical Nutrition*, T.K. Welty (1991) says that, “The introduction of refined foods plus a decrease in physical activity caused Indian people to develop obesity in less than a generation.”

Colonization and Cultural Oppression

Since the time of colonization, Northwest Coastal People have battled cultural oppression. Stories of how this has affected people’s relationship with their traditional foods came out during our community discussions. The following background on colonization in Washington State illustrates the points that were raised.

One of the most devastating assaults on Indian culture was the mandate that Indian children attend schools where their behavior could be molded by Christianity and the U.S. government. This took effect in the Pacific Northwest during the 1840’s as Indian children were sent off to school as early as six years of age. At first, day schools were created where children were allowed to return home at night. Later, reservation schools took children farther from home, and eventually boarding schools that were great distances from home became the norm. Students often remained at school for eight to nine months out of the year and saw their families only during summer and the Christmas holiday. Captain Richard Pratt, a leader in the assimilation through education policy, believed that “Indian ways were

inferior to those of whites. He subscribed to the then popular principle, ‘kill the Indian and save the man’” (Marr, n.d.).

Children were not allowed to speak their native language in school and were sometimes severely punished for doing so (Duran, 2005; Keohane, 2005, Marr, n.d.). Language is not only made of mere words; language is a *way of thinking*. Certain Salish words represent concepts that are very difficult or nearly impossible to describe in English. Also, the sounds that people use to communicate are informed by the land itself. The word for bear or wren or elk might sound like those creatures. Many words are rich with stories including the names of places. Because speaking the language was prohibited, a whole way of thinking and interacting with the earth was oppressed.

Indian students were made to dress in European-style clothing. Their hair was cut and they were given new “pronounceable” names (Keohane, 2005). The notion that their culture was no longer valid was continually reinforced. Then they would return home to their families and be expected to speak their own language and fit in to their culture. This must have caused severe strain in self-identity and self-esteem.

In her essay *The Reservation Boarding School System in the United States, 1870-1978*, Sonja Keohane (2005) points out that another method of boarding school oppression was the control over students’ environment. She writes:

The school, the new physical environment, was also used as a teaching tool. The wild and natural was pushed back and orderly, managed grounds were constructed. The land was tamed, controlled, and conquered and mirrored the process outlined and established to deal with the students, all an expression of the power of the white man.

Children were taught European farming techniques where land was cleared, plowed, and then planted in orderly rows. This was in stark contrast to traditional land management techniques that worked with the natural environment to grow food. Every part of the boarding school experience forced Indian children into a new way of relating to their environment and their culture.

Students were fed government commodity foods that included poor quality fats, refined high-carbohydrate foods, and dairy products. Today, it is estimated that as many as seventy five percent of Indian people are lactose intolerant (Keller, 2002). It is likely that lactose intolerance was an even greater problem back then. This would have caused many children to have digestive problems. As children became accustomed to their new diet, they likely encouraged their families to adopt European-style foods into their diet as well (Keller, 2002).

By the 1920s, the Bureau of Indian Affairs changed its education strategy. This was due to complaints about the high expense of boarding schools and the belief that they caused more dependency on the government than self-sufficiency. The federal government began allowing teachings around Indian cultural diversity. Most boarding schools had closed down by the 1930’s, and most Indian children attended public schools (Marr, n.d.). But after more than 50 years of severing Indian children from their families and communities, a

generational gap between traditional ways and modern ways was well entrenched. Native foods and cultural practices that might have prevented the rise of diabetes and other chronic disease had receded under the pressure of colonization.

Participants in our community discussions spoke about the shame that many of their elders experienced around their culture due to their boarding school experiences. People who survived that time of cultural oppression were sometimes not interested in maintaining cultural practices and did not pass them on to their children. For them, this was an act of love and protection.

During the tribal cooks' camp that was part of our project, elders shared that they experienced shame about eating traditional foods when they were young. One woman said that when her family went camping, they would cook fish heads and other foods that white people did not eat. People would walk up to their camp and ask why they were eating those foods. They began eating inside their camper with the curtains closed so that people would not question them. Some Indian children also experienced shame at school because the traditional foods they brought were "different."

While cultural oppression has caused fewer people to eat traditional foods, the next generation is showing an interest in re-introducing them. Several of our community discussion participants said that young people today are eager to learn about their traditional foods. One woman shared that her three boys know more about which wild berries are edible and how to prepare them than she does. She finds this very hopeful.

Non-native Invasive Species Have Changed the Environment

No matter where you look in the Pacific Northwest – in lakes, in rivers, in the Puget Sound, in forests, or on open prairies – you will find non-native species of plants and animals that have changed the environment. Some of these non-natives are a threat to traditional foods. Numerous examples were brought up in community discussions. Scotch broom is an invasive bush that has taken over prairies where camas, bracken fern, edible lilies, strawberries, and other wild foods grow. Milfoil has taken over many lakes. Spartina grass has displaced eelgrass in Puget Sound shallows and along the Pacific coastline, and is a threat to native species of crab and fish. According to Cowlitz Natural Resources employees, carp were introduced into the Columbia River and have consumed large amounts of native wapato, an important edible root. These are just a few examples of the many non-native species that are a threat to traditional foods ecosystems.

Lack of Time and Money

Several participants in our community discussions said they simply do not have time to harvest traditional foods. People's lives are busy, and most work a lot just to keep up financially. It is a predicament of our modern lifestyle that we have so little free time. Many people have to work and take care of families, with little time remaining to hunt, gather or grow their own foods. Native foods like berries and wild fish can be expensive to buy.

One story about the challenges of needing money to harvest traditional foods came from a Muckleshoot woman. Muckleshoot has clam beds on Vashon Island that are available

for tribal members to harvest. However, you have to take a ferry to get there, and that costs forty dollars. Because the beds are not being harvested, the clams are growing too close together and are dying off. This is an example where traditional harvesting techniques would actually help the clam beds to be healthier.

Under-education about Traditional Foods

Participants from several communities complained that their doctors, nurses, dieticians, diabetes educators, tribal cooks and others were under-educated about the nutritional benefits of traditional foods. Healthcare workers often try to teach people to eat a low fat diet but they do not educate people about the difference between good quality traditional fats and unhealthy fats. Tribal cooks may not understand the health benefits of traditional foods. In addition, they may be uncomfortable with trying to cook something so new to them. Many cooks have busy schedules and do not have time to process and prepare traditional foods.

Federal, State and Tribal Food Program Regulations:

According to the participants in our community discussions, many tribal food programs (e.g., Head Start, elders programs, and community events) serve unhealthy foods that come from major food distribution corporations. These foods are usually frozen and pre-cooked and may contain trans-fats and sugars. Some participants spoke about the poor quality foods that are offered at casino buffets. Overall, people voiced a desire to have more fresh and healthy foods served through their tribal programs.

Those who work for tribal food programs reported that some regulations prevent them from using native foods and local fresh foods in their programs. Some said that they cannot serve traditional foods at all because they are funded through food assistance programs. Others said that they can serve them *on the side* as long as they include all of the food groups in their meals. All agreed that foods from local fishermen, hunters, or gatherers are not funded under food programs. It is possible to buy many traditional foods, including fish, shellfish, and even elk and deer from food distribution corporations, but they are usually farmed and are not locally grown.

There was considerable confusion around this topic and it will require further investigation. The *Diabetes Prevention through Traditional Plants Program* created by the Northwest Indian College is planning a tribal community gathering to address this challenge.

Other barriers:

- **Community Members involvement in garden projects** - While several community educators and program managers said that their community has expressed an interest in traditional foods and developing community gardens, too few people participate when it is actually time to do the work.
- **Lack of transportation** - Many elders said they do not have a way to travel to harvest sites.

- **Geographic isolation** – Some reservations are far from grocery stores with healthy fresh foods. Convenience stores may be the only local option and unhealthy snack foods are cheap, while fresh produce, fish or meat may be expensive or unavailable.

Ways to increase access to traditional foods:

While community roundtable discussion groups reported great loss around traditional foods, there was also great hope in what remains intact. Many families and communities are revitalizing their traditional foods systems in order to improve the health and well-being of their people.

Community food security emerged as a topic at both roundtable discussions. Northwest Coastal Indian people historically ate many types of seasonal foods from a variety of ecosystems. Because of this, you could say that their ability to access good food was fairly stable. If there was a bad salmon run, people could rely on other types of seafood. If it was a bad berry year for one kind of berry, people might be able to substitute another of the many types of wild berries and fruits. The greater the diversity of foods people ate, the better their health was and the more secure their food supply.

The terms *food sustainability* and *food sovereignty* are used to describe whether a community has access to high quality local food. Sustainability is the capacity to endure over time. In nature, this means that biological systems need to remain diverse and productive. People live sustainably when they take care of the natural resources that support them. Sovereignty is the ability to have supreme independent authority over a territory. Therefore, communities that have *food sustainability* and *food sovereignty*:

- Have access to healthy food
- Have foods that are culturally appropriate
- Grow, gather, hunt or fish in a way that is maintainable over the long-term
- Distribute foods in ways so that people get what they need to stay healthy
- Adequately compensate the people who provide the food

According to the many of the roundtable discussion participants, tribal communities often rely on government commodities and state and federal food programs. The food provided is often high in sugar, carbohydrates and poor quality fats, increasing the risk of developing diabetes and other chronic diseases. Fresh produce and good quality proteins and fats that were the foundation to a healthy traditional diet are not as available in these food programs. Additionally, state and federal food programs often mandate what types of foods must be served, even if they are not culturally appropriate. This is where the importance of food sovereignty is evident. When tribal communities are able to produce more of their own healthy food, they will be less restricted by food regulations. There are many reasons that tribal communities may want to become more stable in their ability to provide their own food. According to the *Food Sovereignty Assessment Tool* designed by the First Nations Development Institute (2004):

Assuming power to localize your food supply affords opportunities to regain control of the most significant assets possessed by Native communities. Conscious

management of food supplies affords opportunities for tribal use of land, deliberate control of health, sustainability of the environment, and maintenance or revitalization of cultural integrity.

Food Restoration Programs

In the *Traditional Foods of Puget Sound Project* roundtable discussions, participants were asked how they might increase access to traditional foods. People shared many exciting ideas and current projects. Some of these included:

- Community food gardens where people can learn to plant, grow, harvest and cook with both native and non-native fruits and vegetables
- Pea Patch Gardens or small family gardens
- Native food restoration projects that will help recover plants, fish, shellfish and other native food populations
- Community food banks where hunters, fisherman and gatherers can donate extra food to elders and other community members
- Partnerships with the U.S. Forest Service, Department of Natural Resources and private land owners that allow tribal people access to traditional harvesting areas
- Partnerships with local farmers who are willing to supply produce to tribal communities

One woman who fishes for a living reminded people of how important it is to get to know people who gather, hunt or fish in their communities. Often they are willing to donate food for tribal events or may also be willing to trade. People spoke of how we all have different gifts and it is good to rely on each other. This helps build a strong community and when we recognize our dependence on the environment and on other people we can take up our responsibilities to maintain those relationships and pass them on to the next generation.

The following initiatives, programs and projects are examples of what tribal communities are doing around maintaining and restoring traditional foods

The Tribal Canoe Journey

For Northwest Coastal Indian people, waterways were freeways for trade and cultural exchange, and the canoe was the primary mode of transportation. The canoe, with the cultural significance it carries, had almost disappeared after colonization. In 1989, an 89-year-old elder from Quinault named Emmett Oliver recognized that his community and the Earth needed healing. He and others organized the Paddle to Seattle in conjunction with the Washington State centennial. A canoe from Hoh River and two from La Push paddled to Golden Gardens outside of Seattle, where they were joined by Suquamish, Tulalip, Lummi and Heiltsuk canoes (Neel, 1995).

During the gathering a member of the Heiltsuk canoe invited all the other canoe nations to gather in Bella Bella in four years. This became the birth of the *Qatuwas* (people

gathering together in one place) Festival (Neel, 1995). Since then the Canoe Journey or Tribal Journeys has been hosted by a different tribe each summer. The number of people involved is now several thousand strong.

The Tribal Journey embodies all aspects of cultural revitalization. Pullers must train for months ahead to learn safety and to build physical endurance. Many people weave traditional cedar hats and other regalia. Traditional foods and herbs are used throughout the journey. Participants speak native languages and sing traditional songs. The Tribal Journey is a unifying force for all the elements of culture. It is a place where people from all the Canoe Nations can come together and learn who they are as individual communities and as a broader tribal community. It builds cultural pride and a sense of belonging (Brigit Ray, personal communication, April 8, 2009)

A common saying at the Tribal Journey is “If the tide is out, the table is set.” Traditional foods are a big part of the event. During the journey canoes camp at different sites, including reservations. Salmon is cooked on sticks over the fire at Quinalt, clams and oysters are cooked in pit ovens at Little Boston, crab is cooked at Suquamish and there is halibut chowder at Neah Bay (Bear O’Lague, personal communication, January 4, 2007). Good food is essential so that the pullers and the ground crews can keep up their energy for weeks of strenuous activity. It is also an important time to educate people about the healing benefits of traditional foods.

The Center for World Indigenous Studies: Culture, Food and Medicines Workshops

In 2000 the Center for World Indigenous Studies began offering workshops for Northwest Indian Tribes on culture, foods and medicines. The workshops are usually three days and participants learn through many vehicles, including visual documentation, stories, tasting, smelling, touching, harvesting and processing. In the words of Rudy Ryser, Chair of the Center for World Indigenous Studies (personal communication, January 3, 2006):

Culture, foods and medicine sprang from the notion that the engine of community ritual needed to be restarted and validated. Family coming together, gathering foods, preparing them and speaking to each other was missing in the Northwest. This connected to a need to reclaim knowledge of their traditional place through gathering traditional foods and medicines. Our job was to mirror, “Your culture is valuable and your culture can reverse chronic disease, not an injection of chemicals.” This is a whole process, and the whole community is necessary to create the remedy for chronic disease.

The knowledge that is presented in the workshops is specifically tailored to each community. This includes historical context and what foods are available in that area. The emphasis is on learning and validating through doing. As people process foods and medicines together, they learn from each other and they transfer knowledge.

Native nutrition is taught through the “Salish Food Mound” as opposed to the food pyramid. This addresses nutritional differences between indigenous foods and introduced foods, and it offers dietary guidelines specifically for Salish people. Assessing what a healthy diabetes-preventative diet can be confusing for Indian people, especially since there have

been so many mixed messages from nutritionists and doctors over the years. The workshop tries to demystify this and uses both traditional knowledge and scientific research to acknowledge the healthy benefits of native foods and medicines.

The Lower Elwha Klallam Tribe Community Gardens

The Lower Elwha Klallam Tribe is located on the Olympic Peninsula. They began their community garden project thanks to a “Healthiest State” grant from the Washington Health Foundation. Volunteers built a Medicine Wheel Garden at the health clinic with typical and traditional medicinal plants. This garden is laid out by color and honors the four directions with oyster shell outlines. The garden committee is growing this garden one traditional plant at a time. The committee writes up each individual plant in the monthly newsletter for all tribal members to read, remember and comment on.

The Washington Health Foundation grant also supports two food gardens. The first garden surrounds the Medicine Wheel Garden with three raised beds where vegetables are grown and distributed to the elders. The second garden is at the childcare center where children learn about gardening, sustainable food production and basic ecology. This garden includes a greenhouse and a worm composter. In addition, the childcare center received canning equipment and dehydrators to teach food preservation and nutrition to the children.

The Lummi Traditional Foods Project

The Lummi Nation, located near Bellingham in northwest Washington, hosts the main Northwest Indian College campus. The College’s *Lummi Traditional Foods Program* is a two-year community-based research project that promotes healthy eating habits. Through the project, fifteen Lummi families will learn about the benefits of the traditional foods their ancestors ate. To improve peoples’ diets, the program will offer workshops on harvesting, processing and preparing native foods. Information about how to prepare locally grown foods that are nutritionally similar to native foods will also be included. Once a week, each participating family will receive a box of fresh local produce with directions and recipes on how to prepare those foods. The research team will conduct interviews to document how families eating habits change based on the new resources they are given. If this project is successful, it will be used as a model for other tribal communities.

The Muckleshoot Tribal School Food Program

In 2009, the Muckleshoot Indian Tribe opened the doors to a new K-12 tribal school. They hired a tribal school nutritionist to offer top quality nutrition education to both the youth and parents within the community. A goal of the program is to include the voice of tribal members to address issues of health disparities within the community through nutrition education. This educational program includes hands-on learning opportunities that reinforce the experiential learning style of our ancestors through working with the students to build a garden and working with teachers to develop curricula related to the garden. The school lunch program has also developed a set of standards for the kitchen that will help to reinforce a healthy eating style that is close to a traditional diet. These include:

- No trans-fat and hydrogenated oil

- No high fructose corn syrup
- Ordering local and seasonal produce whenever available
- Reducing sugar by offering a low-starch and dessert free menu
- Taking a home-cooking approach to both breakfast and lunch
- Supporting tribal enterprises by purchasing seafood from Muckleshoot's Seafood Products
- Requiring a traditional foods meal once a week

This program is an on-going and collaborative project that engages participants in addressing health concerns. It also builds knowledge and experience within the tribal community around nutrition and traditional foods in an appropriate cultural context. The main goal is to support the overall health of the community through cultural continuity.

The Nisqually Tribe Community Gardens

The Nisqually Indian Tribe is located on the Nisqually River in rural Thurston County, 15 miles east of Olympia, Washington. Over the past 25 years, the tribe has had community gardens to serve community and nutritional program needs, such as meals served by the elders and Head Start programs. Although the gardens have had interruptions throughout the years due to a lack of consistent funding, there has been an enduring interest in connecting with tradition, food, plants, and the land.

The Nisqually Tribe is home to several garden initiatives. The Elders' Community Garden consists of raised vegetable beds and a landscape of perennial food and medicine plants. The garden is located behind the Intergenerational Building, which houses both the Nisqually Elders' and Child Care Centers. Elders and youth interact while growing and harvesting food, which is used to supplement weekly lunches and the Elders' nutrition program.

The community garden project at the *sx^wda?dab* Cultural Center was started in the summer of 2009 to further tribal goals of self-sufficiency, self-reliance and self-determination. It was created with the conviction that gardening not only decreases dependency on the mainstream world but also feeds the soul and is a healing modality for mental health and substance abuse. Native and non-native vegetables as well as an abundance of traditional food and medicinal plants are grown in the garden, which is overseen by the tribe's Cultural Committee. The purpose of the garden program is to support healthy lifestyle changes and heal historical trauma within the tribe.

The garden program works closely with the tribe's Vocational Rehabilitation, Youth, Education, Head Start, Nutrition, Library and Elders' Programs. In 2010, harvests from the garden will be distributed at a garden stand and through a weekly box program. Supporting activities and workshops throughout the year focus on growing, harvesting, and preparing medicine and food from the garden and beyond.

The Nooksack Indian Tribe Diabetes Program and Traditional Plants Grant

The Nooksack tribe has begun work incorporating traditional foods education into their diabetes program. Diabetes team members and an elders' advocate attended the *Diabetes Prevention through Traditional Plants Curriculum* training offered by the Northwest Indian College. Nooksack Diabetes Team members gathered, dried, and stored nettles and provided nettle tea for participants of the diabetes support group as well as nettle soup. The tea was also prepared at one of the elders' lunches and interested elders were invited to taste it. Attributes of nettles and traditional uses were shared.

The tribe began work on a traditional plants grant in 2009. A wellness committee, which included diabetes team members and SNAP-ed staff, was established for planning the grant. A garden was planted at the Elders Nutrition Site. With assistance from a county master gardener and input from the elders, it was decided to plant a "salad garden" using raised boxes that had been constructed by tribal workers. The garden consisted of a number of greens, including lettuce, chard, and herbs as well as tomatoes, squash, beets and broccoli. The garden was maintained by one of the tribal elders. Diabetes Program and SNAP-ed staff prepared items utilizing the garden plants and served them as part of the elders' lunch. Recipes included mixed greens with homemade vinaigrette dressing and Swiss chard sautéed with olive oil and tomatoes.

Another larger community garden is being planned for the coming year with help from the after school youth program and residents from the drug and alcohol treatment center. The Diabetes Program plans to offer gathering sessions with community members along with education on traditional plants and diabetes.

The Northwest Indian Drug and Alcohol Treatment Center

Native Plant Nutrition Program

The Northwest Indian Treatment Center is a 45-day residential treatment program run by the Squaxin Island Tribe in Elma, Washington. It has been open since 1994 and was created by Squaxin Island tribal members to address a need for culturally-based treatment centers for Indian people who grew up on reservations. It is unique in the way it weaves culture into the basic fabric of the program. The program specializes in chronic relapse patterns related to unresolved grief and trauma, including historic trauma from colonization.

The Treatment Center incorporates cultural traditions and native ways of knowing into the program, including singing, drumming, a sweat lodge, a plant program, beading and support/services from the smokehouse community, the Shaker church and the Pentecostal church from Neah Bay. These act as pillars to help hold patients up as they go through their treatment and recovery. When patients' traditions are honored in the healing process, re-traumatization is less likely to occur.

The Native Plants Nutrition Program was incorporated into the treatment program in 2005. Weekly hands-on classes focus on traditional foods and medicines, including methods

for growing, harvesting, processing and preparation. Patients also experience traditional plants through the teaching gardens at the treatment center.

- The Traditional Foods Garden is used for growing both native and non-native vegetables. It is centered around a large mound that represents the Northwest prairies, an important food cultural ecosystem. Camas, chocolate lilies and other edible plants grow on the prairie mound. Patients learn to start most of the vegetables in the garden from seed. Favorites to grow are Ozette potatoes and the three sisters: corn, beans and squash. Patients who have experience with gardening mentor those who do not. Vegetables are used in cooking classes and to amend regular meals.
- The Medicine Wheel Garden was designed and built by patients as a means to integrate plant medicine into treatment. The shape of the garden honors the four directions. Pathways in the garden are made out of oyster shells. Each of the eight beds has a theme. Some are designed with plants for beauty or taste, some for spiritual medicine and some for healing specific disorders including diabetes, digestive problems, anxiety, insomnia, respiratory disorders and infections.
- The Native Berry Garden includes many wild, edible berries including huckleberries, strawberries, blackberries, gooseberries, salmonberries and thimbleberries so patients can learn to identify, harvest and prepare them.

In 2009, the Treatment Center began to partner with the Northwest Indian College so the plants program could serve as a model for other tribal communities. Teacher training programs for the *Diabetes Prevention through Traditional Plants Curriculum* and for creating community gardens are offered at the Treatment Center.

The Skokomish People of the River Healing Garden

The People of the River Healing Garden flourishes around the Tuwaduq Family Services Building. It was started in the spring of 2005 and was inspired by Bruce Miller's ethno botanical garden. Mr. Miller had diabetes and believed that it was medicinal plants that kept him alive in his later years. The garden was designed to affirm and hold Skokomish traditional knowledge that elders like Mr. Miller have passed on. It is funded through the TANF program.

Thematic areas in the garden include edible wild foods, berries, Northwest natives, prairie plants, sacred herbs, basketry plants, natural dyes, medicinal herbs, and a scent and touch garden for children. Plants from the garden have been gathered and made into cosmetics, nutritive teas, healing salves and remedies for diabetes, arthritis, indigestion, coughs and colds. Cultural classes offered through Tuwaduq Family services often incorporate the garden into the curriculum. A gathering shelter in the middle of the garden is used for outdoor cultural classes and community gatherings. Artist Pete Peterson and tribal youth collaboratively painted Skokomish art on old growth cedar boards. These were placed on the gathering shelter and were blessed along with the garden at the opening.

The garden has been a place for tribal youth to learn about traditional foods and medicines. Each summer, community members and several youth are hired to help with the garden. They learn how to plant, harvest and maintain the garden. They also go to different

sites to harvest berries and traditional medicines that are used for community events. Each fall the garden hosts a harvest celebration where traditional foods and herbal products made from plants in the garden are given away to community members. The garden project has brought together people of all ages to share and pass on the cultural wealth of the Skokomish people.

The Snoqualmie Tribe Traditional Foods Systems

The Snoqualmie Tribe is located east of Seattle on their traditional lands, which encompass the Snoqualmie Valley and the foothills of the Cascade Mountains. The following are many of the local and traditional foods systems used by the tribe to supply members with traditional and healthy foods:

- Arrangements with the U.S. Fish and Wildlife Service allow the tribe to receive road-killed or illegally poached elk, deer and bear, and illegally-captured salmon. These are butchered and frozen, then distributed to tribal members and used in tribal events.
- The tribe purchases large quantities of salmon to be distributed to tribal members and used in smoked salmon meals for tribal events and fundraising efforts.
- The City of Seattle hosts field trips for tribal members to the nearby Cedar River Watershed (closed to the public) to gather traditional plant materials, including huckleberries, chanterelles, cedar bark, basketry and herbal medicine materials.
- The Snoqualmie Tribe Canoe Family offers numerous gathering expeditions to harvest devils club, Oregon grape, fern roots, nettle shoots and many other medicinal and edible food plants and shares knowledge about how to use them.
- Nearby organic Full Circle Farms donates weekly unclaimed food boxes from their “CSA program,” which are then distributed to tribal members.
- Full Circle Farms and other local farms donate excess farm produce to the tribe’s Food Bank, which is heavily used by tribal members and the community in need. This recently included pallets of organic potatoes, carrots and onions.
- Elders’ luncheons, tribal meetings, Thanksgiving dinners and other special events include alder smoked salmon, fish chowders, berry dishes and teas.
- Three traditional plants demonstration gardens have been installed – one at the tribal health clinic, one at the social services office in Carnation, and one at the Snoqualmie Casino. These gardens contain native plants historically used for food, medicine and fiber, and have signage and a guidebook.
- Tribal members are growing and sharing knowledge about vegetable gardens, an activity that is gaining popularity with the younger generations. Education programs teach about growing seeds, preparing gardens, using healthy foods and making herbal medicines from the garden.

Many of the above programs have been funded through grants the tribe has received for preventative health through traditional knowledge. Future plans include expanded vegetable and community gardens with related education programs on the use of these plants for food.

These programs depend on the dedication of certain tribal and community members who are willing to do the work to butcher and package the meat, to pick up and distribute

the CSA boxes and donated produce, organize the food bank, distribute food and organize excursions. Most people do this on their own initiative and often without compensation.

Traditional Foods at the Squaxin Island Tribe

The Squaxin Island Tribe Wellness and Prevention Program takes the importance of their traditional foods to heart. For example, The *Diabetes Prevention (DP) Program* teaches the use of native foods and meal planning for weight control and for benefitting overall health. The DP outreach and support group gathers at the Elder's Center once a month during the lunch program to talk about native foods and nutrition. The DP Program Coordinator sets up different displays and provides handouts that showcase traditional foods, including elk and nettle stew, encouraging elders and other tribal members to eat a balanced Native diet.

The Squaxin Island Museum features exhibits that show how game, fish and plants are gathered and prepared. Feasts bring the people together and the First Salmon Ceremony reaffirms annually that the fish harvest would continue to sustain the Tribe.

The Museum is developing a new indoor/outdoor ethno botanical exhibit that will feature traditional food plants and basket making plants. Baskets were important in cooking and storing food. The new plants exhibit will feature Lushootseed, the language spoken by southern Puget Salish tribes. The Museum's *Language and Living Culture Program* continues to develop and refine its curriculum that is delivered four times a week for people of all ages. The Museum also offers weekly classes in basket making and quarterly classes in native food nutrition, plant harvest and medicine preparation, including a popular herbal first aid kit workshop.

The Squaxin Island Museum's annual Water Sounds Auction, which benefits the "House of Sacred Belongings," celebrates culture and tradition by serving a traditional foods meal. Eating traditional foods is a way of reaffirming Native identity and pride. Practice of culture is proven to raise self-esteem and helps assert healthier life choices based on tribal life ways. Several Squaxin youth are walking strong along this pathway, and will lead in future efforts with Native health and wellness, traditional foods and medicine.

The Squaxin Island Canoe Family participates in the annual canoe journey to join others from all over the Salish Sea as they paddle together to the final destination at the hosting tribe's territory. This last year, Squaxin travelled along with their neighbors from Skokomish. They both decided to try and use subsistence along the two-week route on the water, fishing off their canoes, gathering shellfish from the shore, and picking berries.

Stillaguamish Tribe Banksavers and Bison Farm

BankSavers Native Plant Nursery & Restoration was established by the Stillaguamish Tribe in 1999 as an environmental restoration company and native plant nursery. The original focus of BankSavers was twofold: 1) provide and produce a reliable source of high quality native plants to use for stream and wetland restoration, as part of the local watershed effort towards addressing and improving degraded salmon habitat conditions; and 2) provide education, job experience, and skills development for tribal members, other Native Americans, and displaced workers. The focus of BankSavers remains the same. In recent

years, an emphasis on utilizing native plants in commercial landscaping as well as for restoration purposes has increased market demand and allowed the nursery operation to grow. In 2009, tribal members and BankSavers staff joined together to design and create a cultural/ medicinal plants and healing garden to use as an educational showpiece for the tribe and the local community. BankSavers Nursery plans to grow a variety of plants that will be made available for medicinal purposes, cure common ailments, and boost general health. They are working with the Tribal Naturopathic Clinic to develop a list of plants that will meet this goal. They will also do additional field research to further identify what traditional plants grow in our area.

The mission of the Stillaguamish Bison Program is to offer a healthy food source for tribal members and their families, as well as to restore tribal culture and promote cultural education for Native Americans and the local community. The initial goal of purchasing and establishing a bison herd was to assist the Stillaguamish Social and Health Services' Diabetes Management Program by providing a healthy food source for tribal families impacted by diabetes. The goals of the Bison Program have since grown to address dietary health for all tribal members, economic sustainability, cultural heritage, and training and outreach. In 2007, eight head of bison were purchased from the Yakama Nation and a herd of nine now resides at an upland site where BankSavers Nursery is located. Due to the small size of this initial herd, limited harvest of the animals has occurred to date.

The Suquamish Tribe Community Health Program

The Suquamish Tribe Community Health Program recently received a cancer prevention grant to promote use of traditional plants in the community. They are developing and presenting a series of four seasonal plants classes over the course of the year with a goal of increasing the use of easily accessible traditional plants in the Suquamish community. Each class focuses on seasonal foods and emphasizes a hands-on approach. Class members will learn to prepare and cook traditional foods and will enjoy a traditional meal at the conclusion of each event. In addition, one of the classes will contain information on traditional tobacco use and health risks of commercial tobacco.

In 2009, ground was broken for the Pathway to Health Native Plants Garden, which is located next to the tribe's administration building. A traditional blessing was held on February 20, 2009. The garden remains a work in progress. In the future, they intend to use the garden to teach both children and adults about caring for and using plants.

Also in 2009, the tribal nutritionist was asked to create a lesson on nutrition to be incorporated into a substance abuse curriculum for teens. Some information for the class was derived from Northwest Indian College's *Diabetes Prevention through Traditional Plants Curriculum*. A community meeting provided many elders with an opportunity to share stories about how they used plants during their youth. This was used to guide the choice of plants included in the curriculum. A list of community members with who could serve as community educators in a variety of topic areas was compiled.

The Traditional Foods Advisory Group consists of community members with an interest in using and promoting traditional foods. The advisory group meets on an as-needed

basis to advise the Community Health Program on program planning, grant applications, and other issues related to traditional foods and physical activity.

Tribal Cooks Camp

On May 11-13, 2009, twenty cooks from eight different tribal communities gathered at a facility with a training kitchen in Poulsbo, Washington, for three days of “recipe brainstorming.” At the Tribal Cooks Camp, each cook brought traditional foods and recipes that she or he specialized in. Basic ingredients were provided and cooks were encouraged to be creative in developing recipes that could be prepared on a regular basis. Some cooks conducted a training session on the food they brought and how to harvest, process and prepare it according to their tradition. Ideas and methods were shared and some new recipes that are affordable and accessible were developed. Local foods that are nutritionally similar to native foods were also discussed. For example, chard can be used as a substitute for nettles if they are not available. Recipes that were generated are printed in the Traditional Foods of Puget Sound booklet. They include:

- Spring salmonberry and thimbleberry sprouts
- Sautéed nettles
- Nettle soup
- Camas nettle soup
- Baked camas
- White bean, kale and sausage soup
- Spinach and wild rice salad
- Seaweed salad
- Wild greens salad
- Thimbleberry dressing
- Salmon wrapped in skunk cabbage
- Baked halibut
- Clam fritters
- Clam chowder
- Oyster chowder
- Seafood chowder
- Grilled venison with huckleberry sauce
- Buckskin bread
- Traditional pemmican
- Fruit leather
- Cranberry orange bread
- Huckleberry buckle
- Wild berry crisp
- Easy rosehip jam
- Rose hip tea
- Spruce, fir or hemlock tip tea
- Berry tea

Print Booklet of Findings and Recipes

A booklet detailing the project outcomes has been compiled by the principle investigator and the research assistant. It will be distributed to tribal communities who were involved in the project. Additional funds will be raised for a second printing so that the book will be available and free to tribal communities in the Puget Sound region. The table of contents is below. To reach a broader audience, text is accompanied by photos, drawings and traditional stories and modern accounts of harvesting and preparing native foods.

Conclusion

A tremendous amount of information was generated in the process of completing this project. Many stories were shared, some full of loss and hardship, and others full of hope

and the promise of a better future. Hearing the stories, both past and the present, is healing in itself. It validates peoples' experiences and speaks to how important food is to the culture. It is also a great way to support capacity building by drawing on the diverse range of teachings from community members and culture bearers.

Ultimately, the purpose of the project is to improve the health of Indian People through increasing access and consumption of traditional foods and healthy local foods, but this is a complex and difficult task. A complex web of factors contributes to instigating social change around food – cultural, economic, environmental and political just to name a few. This project is a small piece of that puzzle. The research team hopes that by printing the booklet of findings and distributing it to the hands of many people, ideas will be shared, connections will be made, both traditional and new recipes will be prepared and healthy foods will served at the tables of families and communities who gather together.

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Traditional Foods of Puget Sound Project community roundtable discussions. 2009
April 8th, Northwest Indian College Campus, Lummi Reservation, Bellingham, WA.
April 21st, Squaxin Island Museum, Kamilche, WA.

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