State of Alaska Ethnobotany Project

Hatcher Pass Field Trip to Identify Plants Used for Medicinal Purposes.

The original grant write-up stated:

"The results of the Alaska Ethnobotany Project will impact commercialization of traditional use plants in Alaska by public and pharmaceutical companies on State-owned lands. Subsistence gathering of native plants for nutriceutical and pharmaceutical purposes occurs now as well as throughout history.

Indigenous Alaskans will be able to continue harvesting these plants without concerns of exploitation because the State is taking an active roll in researching and disseminating information on ethical and environmentally sound harvesting of native plants. Legislation for state-owned lands (not Federal, private, or tribal-owned) will protect these plants and peoples from unethical commercialization and will enable a starting point for protection of intellectual knowledge.

Through communications between Tribal Councils, native peoples, Alaska Native Heritage Center, various agencies, and the Alaska Plant Materials Center (PMC) protection of non-timber forest products on state owned lands will be instigated before non-reparable damage is done.

Adoption of this protective measure will positively impact the accessibility of native plant usage. Demonstration gardens with interpretive signage at the Alaska Native Medical Center (and other visible places) will display native plant identification and usage for the public, the native people's children, and for potential growers. This will help keep traditions alive while protecting them also.

The Plant Materials Center will develop plant growth protocols and flyers for growers and collectors of traditional plants. Through networking, the PMC will provide education programs for teachers, students, and commercial harvesters - thus impacting a wide range of civic individuals."

Manual for Commercial Harvest of Native Plants on State-Owned Lands

Harvesting native plants for profit occurs throughout the world. Most harvesters are very conscientious about how to pick so that the plant communities do not suffer. This is because of many reasons. First, if the harvesters depend upon the plant for continuance of their own livelihood, then it only makes sense to harvest selectively and replenish the seed/root, etc. for further growth. Second, most harvesters love the plants and the out-

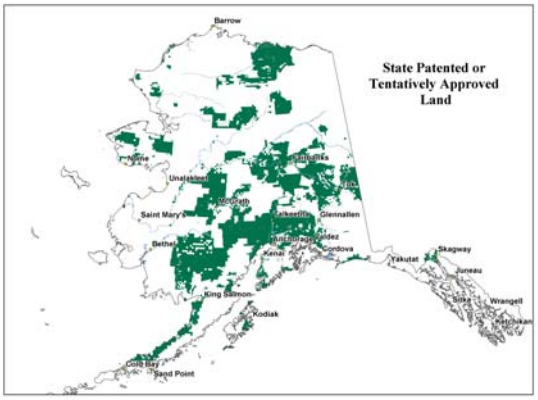
of-doors and have selected this means of employment because of their conscious decision. Thus, their life-quality would be injured if they were to eradicate a plant population.

Some harvesters are only in the business for profit. They do not concern themselves with what might happen if they harvest all of a certain plant. They do not worry about whether they might be taking away from the rights of other people who may depend upon a plant for subsistence, food, bartering, or medicine. This unregulated harvest has caused quite a few plants to become endangered or absent from many places in the world.

Harvesting Conks for Tobacco

The Alaska Ethnobotany Project came into existence in 2004. One of the goals of the Project was to evaluate which Alaska native plants were being commercially harvested and to what extent. This was because forward thinking people in the state realized that instead of being reactionary after the fact when a plant or plant population became scarce, the state of Alaska could be pro-active and form regulations to protect the rights of plants and people before problems occurred.

A combination of steps was taken at the beginning of this Project to enable this endeavor. A long look at the regulations in place in countries and states throughout the world was developed in an excel spreadsheet by the State of Alaska's Department of Law. Existing permits, problems with the permitting system, and suggestions to make the permitting process more user friendly were investigated by the State of Alaska's Division of Mining, Land, and Water (which is responsible for giving out permits for harvesting plants for profit on State-owned lands.)



Areas in green represent permitting lands regulated by Alaska Division of Mining, Land, and Water.

As the recipient of the grant from the United States Department of Agriculture, the Alaska's Plant Materials Center (PMC) was responsible for coordinating the many aspects of this Project. This involved contacting experts from Alaska and the world on Non-Timber Forest Products (NTFP). These experts were comprised of Alaska Native Peoples (Elders, harvesters, subsistence users), local people, books, articles, University professors and students, agency professionals, NTFP practitioners, and native plant ecologists.

In a community where few wage or salaried jobs are available, as in much of rural Alaska, subsistence IS the economic system, not just the nutritional system. As the lead for Alaska's NTFP management program we have very little knowledge about NTFP species populations, current harvest, annual changes – all the information we could gather with an intact inventory and monitoring program. The grant did

not include inventory and monitoring. With a short timeline, we've felt the need to address the immediate need for a working permitting system.

The State wasn't set up well in "Square One" to monitor people and activities relating to NTFPs, much less vast quantities of NTFPs across this big and ecologically diverse state. If it took you more than 2 months and a LOT of hassle to get a permit to pick mushrooms commercially, but the mushrooms were fruiting RIGHT NOW and there was no enforcement of permits whatsoever, would you get a permit? Most people say "No way". Hundreds, if not thousands, of people are saying "No way" and as a result there is very little information about where harvesting is happening and what is being taken. We felt like we had to start here in order to even know what NTFPs are important to monitor and inventory. Revamp and streamline the system and then push education about it, get it some teeth legislatively and fiscally, all this is in order to start getting a picture of the current NTFP activities in the state.

It's clear that an inventory and monitoring arrangement with active harvesters takes a good relationship to start with. The relationship of trust with people most intimately involved with the issues, is difficult for an agency to do. Building into the permitting system some form of "return and report" which makes it user-friendly and not too inconvenient while collecting pertinent information is a tough balance to keep, but we're working on it right now. Just taking money and handing out permits isn't enough to build a monitoring and inventory program on, but neither is frustrating harvesters because of cumbersome reporting policies. At least putting "pins on the map" will let us know where to start focusing monitoring and inventory effort.

Fiddle Head Ferns Ready For Harvest

Harvester Carrying a Bag of Harvested Fiddlehead Ferns, Spring, 2009, Hatcher Pass.

The Harvest Manual ended up delineating the amount and harvest requirements for many of the NTFP's in Alaska for commercial harvests on State-owned lands. This manual only spoke to small amounts of

Alaska Non-Timber Forest Products Harvest Manual

For Commercial Harvest on State-Owned Lands

State of Alaska
Department of Natural Resources
Division of Mining, Land and Water

April 2, 2008

plants. If a commercial entity wants to do a more extensive harvest, then it needs to go through the entire, several month, permitting process. Before it was made into a State law, the public commented on it. Most of the suggestions were incorporated into the manual. The manual is not complete – and probably never will be, but it is better than nothing. It can be found on-line at: http://www.dnr.alaska.gov/mlw/ntfp/index.cfm. So far we do not have any measurable or educational results from this permitting process.

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Ethnobotany Education

As part of achieving the goal of being good managers of these forest products on state lands, the cultural significance of these plants needs to be understood and taught. We are thus in the process of developing collaborations with Native organizations, museums, and heritage sites to establish on-site demonstration gardens to display and teach about the plants used by Native Alaskans. We offer plants, and any necessary guidance, to establish such a garden at their facilities for educational purposes.

We hope to create a lasting educational experience for visitors to demonstration gardens all across the state. The cultural resources of Alaska Native peoples are worth the effort to understand, teach and preserve.

We have written several "Alaska Plant Profiles" on various groups of native plants harvested for edible and nutriceutical purposes. These are "Fiddlehead Ferns", "Bog Blueberry/Alpine Blueberry", and "Conks". Other papers are in the works. We are also working with teachers to develop curricula using ethnobotanical plants to teach various subjects – such as "Alaska Studies", "Ecology of Alaska", "Alaska Agriculture", and "Observing and Using Alaska native plants". Some of these can be followed through this web-site: http://dnr.alaska.gov/ag/pmc_NTFP.htm.

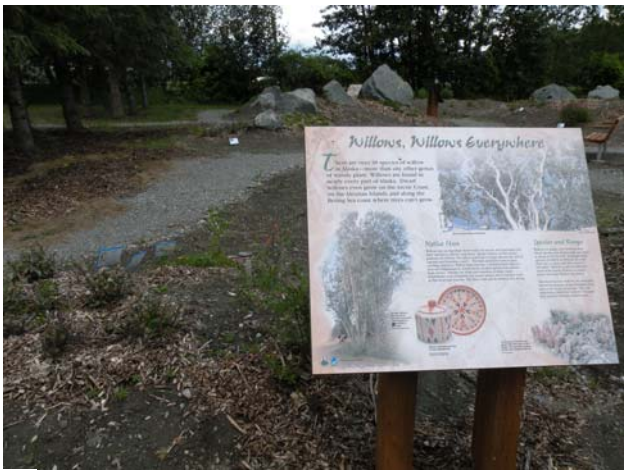
Ethnobotany Teaching Garden at the Plant Materials Center

PMC Ethnobotany Teaching Garden, Summer, 2009

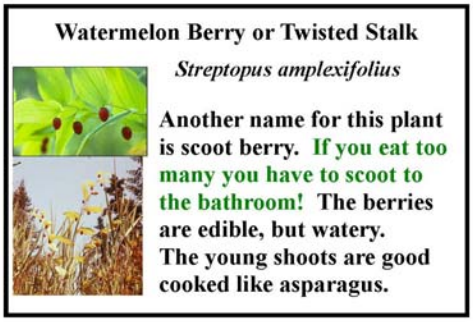
The PMC started an ADA accessible Ethnobotany Garden for education and plant increase for other cultural centers in summer, 2008. This garden was designed by Bill Evans, an interpretive landscape architect from the State Division of Parks and Outdoor Recreation. He used the cultural and ecological regions of Alaska to design the garden. We now have Denali, the Yukon, Aleutian Islands, an arctic, interior, southcentral, western, and southeast Alaska constructed at the PMC. These regions represent cultural areas historically lived in by Eyak, Tlingit, Haida, Tsimshian, Athabascans, Iñupiak, Yup'ik, Cup'ik, Aleut, Siberian Yupik, and Alutiiq Peoples.

The plants that are and will be in the garden are ones traditionally and presently used for food, medicine, and other uses—the knowledge about these plants are publicly printed in various books and papers. By the end of fall, 2009, about 150 different species of plants have been planted in the garden. This fall agronomists selected about 45 different plants to research and prepare growth protocols and propagate for spring planting. Interpretive signage is being created. Many people and groups are excited

about coming to learn about Alaskan plants, culture, ecology, and landscape use of native plants. These plants are available for other cultural gardens. The PMC is currently working with the Alaska Native Heritage Center, Southcentral Foundation, Chickaloon/Sutton Historical Center, and the Alaska Native Tribal Health Consortium Cancer Program.



Miniature Yukon River Being Constructed at the PMC Ethnobotany Garden, Fall, 2009.



Interpretive Signs at PMC Ethnobotany Garden, Summer, 2009.

For more information, please contact Peggy Hunt (Agronomist, Plant Ecologist, Educator, Ethnobotanist).

Alaska Plant Materials Center

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