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Food and Medicine from the Prairie: An Ethnobotanical Look at the Historical Use of South Puget Sound Prairies Angela Lombardi, Environmental Restoration Company Fort Lewis Range Control Land Management Branch

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Abstract

The Indigenous People of South Puget Sound have utilized the bounty of the prairie for important nutrients and medicine. The People have maintained their use of the prairies by using fire and by harvesting food in a way that ensures future harvests. Fire was primarily used to stimulate growth of food plants and to maintain the prairie edges. Harvesting is done so not to leave a trace and to ensure a harvest the next year. The Indigenous People take care of the prairies and use the prairies as their garden.

Ethnobotany is the relationship between plants and people. Through the study of ethnobotany the knowledge of the Indigenous People is shared with the written tradition of Euro-Americans. Originally, the knowledge of plant-use has been taught to the next generation of Indigenous People through oral tradition and practical use. As a Euro-American I have learned about ethnobotany through literature. I will share the collecting methods and the use of commonly used prairie plants by Indigenous People of South Puget Sound.

As the Cordilleran glacier receded it left behind gravelly/well-drained soil which was pioneered by prairie plants. (Clegg, 1994) The prairies were noted as bordering both sides of the Nisqually and spreading to the Cascade foothills, with small patches of oak, fir, and pine trees (Carpenter, 1986). From a prairie restoration point of view, ethnobotany provides a look at the past botanical composition of the prairies and what plants were the most important.

Ethnobotany means understanding the relationship between people and plants. It is critical to understand that ethnobotany is not only a past account of history, but also a living tradition.

The Indigenous People of South Puget Sound utilized the land for food and medicine. Plant resources are still gathered from the prairies as well as the forests and waterways by the Indigenous People. Current day technologies, such as ovens, stoves, and refrigerators are used to cook, preserve, and store foods that were originally done by pit cooking, boiling in water tight baskets, and sun drying.

The Indigenous People worked with the land and the native flora. Fire was used to promote the growth of food plants which in turn helped to keep the prairies clear of fir trees. The regularity of individual burns are a mystery but the expanse of the fire would be dependent on the fuel load

Indigenous People continue to gather in what would currently be called sustainable harvesting - they only take what is ready or big enough and leave the rest for the next year's harvest. A gathering site is the responsibility of the family and the gatherers are very protective of their sites (Turner, 1995). They would especially care for their camas and Salmonberry plots like a garden. (Pete, 1994). Plants are an important accompaniment to the diet of fish, clams, and meat.

The introduction of the white man led to many changes on the prairie. Grazing was introduced, fires were suppressed, and settlers began to plow the land for controlled agriculture. There is some evidence that a great influx of tree growth on the prairies began in the 1850's. A Steilacoom pioneer reported that when he was traveling south to the execution of Chief Leschi in 1858, the firs were many but they could hardly brush a horse's flank (Walkinshaw, 1929).

The management techniques that Indigenous People used before the introduction of white man and nonnative plant species were successful for their conditions. We are now faced with

many different and more complex issues when we consider restoring and/or maintaining a prairie in Western Washington. Not only are there natural system changes for example the climate changing to warmer, wetter conditions, which is not conducive to drought tolerant plant species. But also there are more factors working against the prairie maintenance efforts then when Indigenous People were managing the prairies; for example, subsequently promoting the growth of invasive nonnative plant species when we burn a prairie or disturb the soil (Hobbs et.al., 1992). But if we continue to learn and share the knowledge of the prairies, we might have a chance maintaining and restoring a shrinking habitat.

Some Prairie Plants and Their Uses

Please note: the following descriptions are not complete and should not be used in any way as a food or medicine guide.

Yarrow Achillea millefolium Asteraceae

Yarrow leaves are used as an antiseptic and an aromatic. The leaves are crushed or boiled and used for a skin or hair wash. The flowers are crushed and applied to topical sores as a disinfectant. (Lombardi, 1996)

Kinnikinnick Arctostaphylos uva-ursi Ericaceae

The most popular use for Kinnikinnick is for smoking. The evergreen leaves are dried and smoked in a pipe.

Commercial tabacoo has replaced much of the use of Kinnikinnick but

sometimes the dried leaves are still mixed in with the tabacco to make it last longer (Turner, 1995).

The red berries have a dry and pulpy texture so they are rarely eaten alone. The berries can be boiled in soup or fried in salmon oil and eaten. The berries are harvested when needed since they will remain on the plant all winter. (Lombardi, 1996)

Puget Balsomroot Balsamorhiza deltoidea Asteraceae

The large taproots of the Balsomroot have the same complex sugar as the Camas and were used to make a "sweet, fermented drink." (McBride, 1994) The roots were gathered just as the leaves emerged and then pulverized and soaked in water to make the fermented drink. The soft, hairy leaves were layered in shoes as a form of insulation and cushioning. Balsomroot seeds can be dried and eaten like current day commercial sunflower seeds (Lombardi, 1996).

Blue Camas Camassia quamash Liliaceae

Camas plots are owned by families and are passed down from generation to generation (Turner, 1995). The gatherers, who were usually women, would dig up the sod with digging sticks made from Hardhack (*Spirea douglasia*), remove the desired bulbs, and return the sod in place leaving no trace. Blue Camas would be harvested during and after flowering to prevent the mistaken identity of Death Camas (*Zigadenesis venenosus*) which is poisonous and had its own important uses (Lombardi, 1996).

The Camas bulbs are steamed in pits as was done hundreds of years ago. A pit is dug 1-2 meters deep and a fire is built on rocks, once the rocks are red hot the ashes would be removed and a layer of Sword Fern and Hemlock branches would be laid on the rocks. The bulbs would be put into the pit followed by another laver of Sword Fern and Hemlock branches and then the pit would be covered with soil and sand. (Turner, 1995) A stick would be inserted in the middle of the pit and water poured down onto the hot rocks for steaming. The bulbs would be left to steam for 1-2 days (Marr et. al. 1980). Steaming the bulbs would release the complex sugars and the cooked bulbs would be soft and used to sweeten foods or eaten alone "like popcorn" but sweeter (Pete, 1994).

Wild Strawberry Fragaria virginiana Rosaceae

Wild Strawberries produce sweet, soft fruits. These fruits are too delicate for storing but are used fresh to make a pemmican with either fish or meat. Pemmican is the combination of dried fish or meat with berries. Strawberry leaves, often combined with Thimbleberry and Trailing Wild Blackberry, can be made into a sweet, refreshing tea for general well being (Turner, 1995).

Chocolate Lily Fritillaria lanceolata Liliaceae

Chocolate lily is known as Rice Root because the bulb produces "rice-like" bulblets which are steamed in pits or boiled in pots (Lombardi, 1996). Chocolate Lily has been replaced with

store bought rice because of the small existing population and the ease of store shopping.

Pomo-celery lomatium or Fine-leaved lomatium Lomatium utriculatum Umbelliferaceae

The entire Pomo-celery plant is utilized. The sprouts, leaves, leaf-stalks, and flowers are either eaten raw, boiled, or steamed. The seeds can be used in cooking as a spice. A tea can also be made from this plant to help ease colds and sore throats (Lombardi, 1996).

Lupine Lupinus albicaulis Leguminaceae

Lupine taproots are said to be "as sweet as sugar" (Turner, 1996). The roots were either roasted on embers of a fire or steamed then peeled and eaten. Lupine roots are an example of a food that if not cooked properly can be harmful to your health. So heed this as a warning before you harvest food (Lombardi, 1996).

Salmonberry Rubus spectabilis Rosaceae

Although Salmonberry is slightly out of the boundaries of a prairie, it is an important food plant to the Indigenous People of the South Sound area. The early spring shoots are stripped and eaten with salmon eggs or a modern version would be to eat the shoots dipped in sugar (Turner, 1995). The early berries are gathered in mass quantity and eaten fresh or combined with other foods.

Snowberry Symphoricarpos albus Caprifoliaceae

Snowberry fruits have soap-like qualities. They can be rubbed in the hair as a shampoo or on the hands as a cleanser. The small leaves can be crushed or boiled and applied to topical wounds as a disinfectant. The thin hollow branches were used to string clams for drying (Lombardi, 1996).

Ethnobotany is not solely an historical account, the local Indigenous People still gather food plants and basket making materials in all habitat types not just prairies. So, it is necessary to take into consideration not only the importance of restoring and maintaining the grassland as an ecological habitat but also as a traditional habitat.

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