LANGUAGE ARTS

Camas uses by the Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians

Camas Plants (*Camassia* sp.) are a traditional and staple food for many Tribes, including the Coos (***miluk*** and ***hanis)***, Lower Umpqua (***quuiich***) and Siuslaw (***sha'yuushtl'a).*** Camas was one of the main sources of carbohydrate food. Carbohydrates are a starch food and are important in daily diets. There are many subspecies of camas, which primarily grow in Western North America (Canada, Washington, Oregon, California, Montana and Wyoming). The Confederated Tribes of Coos, Lower Umpqua and Siuslaw had specific words for camas. The ***miluk*** Coos word is ***gem***; the ***hanis*** Coos word is ***qe'me***. The Lower Umpqua and Siuslaw languages share the word ***auchiisii****.*

Camas grow naturally throughout Oregon. There are several camas places with Camas in their place names. They are so named for their abundance of camas growing in the area. Camas Valley is located in Douglas County, Oregon. There are two areas named Camas Swale: one in Lane County and one in Douglas County. Camas Creek is in Umatilla County. The Camassia Natural Area is located in West Linn.

Camas is a perennial, which means it can self-propagate, and if left undisturbed can live for decades. Camas follows a seasonal cycle of dormancy, growth, flowering, harvesting, and regeneration. It can also be grown from seeds that are planted in the fall. In late summer through winter, the plant becomes dormant, resting in the soil

Seeds germinate, or begin to grow, in the spring with green leaves pushing up from the bulb. The plant flower blooms in spring to early summer. Harvesting takes place after the flower blooms. This is because it is important to see the color of the flower. There is a plant called death camas which has a toxic white lookalike flower. It is best to wait for the plant to go to seed before harvesting. This allows time for the seed to grow and mature seeds. During the winter the plant is completely dormant.



Blue Camas, or Common Camas (*Camassia quamash*), is the Camas plant that is harvested and eaten. Harvesting was important as a food source and also good for the soil and plant cultivation. The digging of the ground benefits camas habitat. Loosening the dirt created well aerated soil where the smaller Camas bulbs could grow larger. The bulb of the Camas is the part of the plant that you can eat. Bulbs are generally 3-8 inches deep in the ground and range in size from very small to as large as your fist in the older plants.



Harvesting was governed by the climate (weather) and also determined by the plant itself. Plant growth is impacted by weather and grows in response to weather patterns. Native people watch the plants to determine when it is time to harvest. Harvesting is done by digging up the bulb of the plant. In order to ensure good harvests in the following years, smaller bulbs are left in the ground. If smaller bulbs were accidentally dug up, they were replanted back into the soil to grow larger.

Camas patches were often specifically designated and "owned" by family groups and carefully tended for centuries. Indigenous people were good stewards of their Camas patches and other lands. They were very protective of their Camas plots and the plots were weeded and cultivated for ongoing use. Cultivation was also important in order to ensure the best harvest possible and to protect against the invasion of "death Camas" *(Toxicoscordion venenosum)* into the plot.

Death camas is white in color and generally grows in open, sunny habitat. It has smaller flowers and usually blooms a couple weeks later than Blue Camas. It is important to see the flower of the Camas plant because when not in flower, the bulbs of both the Blue Camas and the white "death Camas" look the same. People were very careful to weed the Camas fields of "death Camas". Indigenous people have passed down important knowledge about how to safely identify and harvest Camas bulbs.

Traditionally, Camas was harvested with a "digging stick", which is a specific tool for Camas harvest. Digging sticks were narrow T-shaped sticks made from hard wood, bone or antler. These tools made it possible to selectively harvest bulbs without damaging them or disturbing larger sections of ground.



Today, we still use digging sticks that look like they did historically, but we also use small shovels (garden spades) to harvest Camas bulbs. Digging sticks today often look exactly like traditional sticks, but are made with metal



handles and picks. Metal is now often easier to acquire than bone and antler and the metal tool lasts longer.



The Coos, Lower Umpqua and Siuslaw harvest Camas in very specific ways. Camas did not grow everywhere in the Tribe's territory, so they sometimes had to travel to other areas to harvest Camas. According to old testimony, an Arrowwood shovel was used to dig the Camas it was described as "slow going" to dig the bulbs. With hard work between 40-70 pounds of Camas could be harvested in a single day.

For millennia, Camas, and many other foods, were traditionally cooked in earth ovens. Earth ovens are typically dug into the ground and filled with fuel material such as wood, and with nonflammable material to protect the food, and the food itself. Earth ovens are a kind of like an underground bonfire. To date, the oldest known and documented earth ovens are dated at 29,000 BC and located in Central Europe. However, there are earth ovens that are over 8,000 years old near Salem, Oregon.

The Coos, Lower Umpqua and Siuslaw had also specific ways in which earth ovens were built and used. An in-ground trench measuring approximately 3-4 feet wide, 8-10 feet long, and 2-3 feet deep was dug. The digging was done with a long stick made of arrowwood which helped soften the ground and Indigenous containers were used to remove the dirt. These ovens were traditionally prepared in the late afternoon so the wood would burn overnight into coals. Burning the fire overnight would make the earth oven ready for cooking in the next day, in the daylight.

After the earth oven it was lined with flat stones. A few large rocks were put in the bottom of the earth oven. Huge fires were built in the earth oven, and the fire would heat the rocks to red hot. Then the rocks were covered with sand. Sand was used to cover the ashes of the burnt wood to hold the ashes in place but still allow for the heat to rise up through the sand to cook the bulbs.

Layer upon layer of grasses and plants were then placed in the oven. Ferns were a favorite layering plant, but salal and skunk cabbage were also used since they had specific properties that assisted in the cooking. Skunk Cabbage leaves *(Lysichiton americanus)* are large and contain a lot of water, which helped to insulate the bulbs and steam them. The Camas bulbs were added to the cooking oven and covered with more layers of ferns. The ferns were then covered with cedar mats or animal hides to hold the heat in the oven. Sometimes other "seasoning" flavors were added to the oven to flavor the camas or other foods. It is recorded that the Coos and Umpqua added Sweet Grass (*Hierochloe occidentalis*) to the pits to flavor the camas. The "seasoning" was



added after the sand and before the leaves so the flavor could “steam up” into the bulbs.

The Camas was baked 2-4 days, depending on the size of the bulb. The Camas was all cooked and not eaten uncooked. “Raw” Camas bulbs can cause severe indigestion, stomach pain and intestinal gas. In order to determine if the Camas bulbs were fully cooked, you would have to open the oven and test the Camas. It was quite a task the check the bulbs and if they were not fully cooked, you had to recover the oven. Camas bulbs are “done” when they have become soft and yellow in color. If it was not yet soft, it had to cook longer. If the Camas bulb has not cooked long enough, it will stick to your teeth. This is another test to see if the bulb is completely cooked.

Most of the harvested Camas were cooked in the earth ovens for storage and later use. However, some of the first bulbs harvested were also boiled, mashed like a potato-like consistency and made into Camas cakes or loaves. The cakes were dried in the sun and then stored in ppouches or baskets for the rest of the year. The Camas cake was eaten by cutting a slice and soaking it in water. The cakes have been described as having the same consistency as cheese. They were not like contemporary cakes in that they were not sweetened or artifically flavored.

Sometimes camas was eaten immediately after cooking by taking a handful of baked camas and mashing it into a ball in your hands. Seal grease and other herb seasonings were then added for flavoring and the bulb was eaten like a mashed potato. Camas soup, or mush, was also made by mixing the Camas bulbs with other foods, such as tarweed seeds (*Madia)* or seal oil for flavoring. This mixture often had the consistency of gravy and added a flavored taste to food.


Skunk Cabbage Leaves


Salal Berry Leaves


Fern Fronds

Cooked Camas, along with other vegetables, seeds and nuts, stored very well over the winter months. People stored their food in large, woven baskets in a warm house. The ability to be saved and stored made Camas a useful trade item.



Today, Camas is often cooked in an oven in a home. Cooking in home ovens makes it easier to regulate the temperature and to check if Camas is done. However, the same flavor is not present as it is harder to cook leaves in the oven. Cooking in an oven is done with slow, low heat. It takes 1-3 days in a home oven to cook Camas bulbs. Camas bulbs can also be cooked in a slow cooker or crock pot. A small amount of water needs to be put into the bottom of the cooker and then the bulbs placed in the cooker inside a metal basket. The bulbs are then cooked on low heat for at least 24 hours. The bulb will be done when they are softer, yellow in color and tastes sweeter. Cooked Camas can be stored today in glass jars with sealed lids or plastic bags or containers. It is important to make sure the Camas is completely cooked and dried so it will not mold.

Camas is a healthy food and still eaten today. Camas fields are harder to find, but members of the Coos, Lower Umpqua and Siuslaw seek out places in their homelands to harvest Camas. Harvesting and cooking Camas is more than food for energy and hunger: The act of harvesting and cooking Camas is also food for our soul and it is a connection of our culture and past and present history.

Camas locations, growing and harvesting has been disrupted by the influx of non-Indian immigrants (Oregon Trail and people moving west). Farmers wanted the fertile lands to grow their own crops that they already knew. In order to plant non-Indigenous crops, the Camas fields were destroyed. Additionally, the non-Indigenous animals (horses, cows, sheep) that were brought caused destruction to fields with their hooves causing the soil to be disrupted. Further disruption occurred when Indigenous people were forcibly removed out of their homeland areas and there was no one to left cultivate and protect the Camas plots.

Some additional resources:
https://www.google.com/search?q=camas+ovens&oq=camas+ovens&aqs=chrome..69i57j0i390i512i650l3j0i751j0i512i546l2.3726j0j15&sourceid=chrome&ie=UTF-8#fpstate=ive&vld=cid:1a3d13aa,vid:DODxBWq7WBo,st:0

https://www.google.com/search?q=camas+ovens&oq=camas+ovens&aqs=chrome..69i57j0i390i512i650l3j0i751j0i512i546l2.3726j0j15&sourceid=chrome&ie=UTF-8#fpstate=ive&vld=cid:a136200f,vid:Fv1kERb2-cs,st:0

https://blogs.uoregon.edu/mmoss/2017/06/23/camas-economic-staple-or-gourmet-trade-item/

https://ospi.k12.wa.us/sites/default/files/2023-10/camas.pdf
illustrations: Tennepah Brainard
images: https://search.creativecommons.org/

