Camassia:
Camas is a perennial bulb related to Agave with blue or (more rarely) white flowers, blooming between April and mid June. Two species of camas are native to the San Juan archipelago: blue camas (Camassia quamash) and great camas (Camassia leichtlinii). After flowering and producing seed camas goes dormant until winter when leaf growth begins, even under snow! Camas habitat includes rocky open bluffs or balds as well as open meadows.

Ethnobotany:
Camas was a vital food crop for the native Coast Salish people who inhabited these islands. The bulbs were dug in large quantities and pit roasted until they became sweet. Because it was carbohydrate rich, camas was highly prized and widely traded throughout the region. Coast Salish families traditionally cared for and cultivated large camas patches; cultivation increases bulb size, productivity and range. Traditional management utilized a combination of transplantation, weeding, hoeing and burning.

Management and Care:
Camas can be propagated from seeds planted in the fall or stratified by mixing with moist, sterile media such as coir and chilled in the fridge for 60+ days before planting outside. Seeds should be lightly covered. First-year seedlings have very small grass-like leaves; they will grow contractile roots that pull them down into the soil. Bulbs can also be purchased or requested from Kwiaht's camas growers network. Bulbs should be planted in the fall and winter.

Camas is very tolerant of different soil types and can tolerate both drought and periodic inundation. Moist, loose soil, rich in inorganic matter is likely to produce larger bulbs.

To produce the largest bulbs, with few contractile roots: plant bulbs between August and December in a narrow trench approximately 1-2 inches deeper than your largest bulbs, adding approximately 1 tablespoon of bone meal or fish bone meal if desired to each foot of trench and mixing into the soil at the bottom before planting the bulbs. Cover with soil and mulch with at least 2 inches of straw.

Harvesting Camas
When flowering stalks form in spring remove from any bulbs you wish to harvest that year (they can be removed as soon as they form, or while the plants are in full flower). Bulbs may be harvested for cooking at anytime, but are easiest to harvest and largest once all the leaves are brown. Return small bulbs and any bulblets formed by larger bulbs to the camas bed.

If you join our growers network we will keep you up to date with our research results as well as work to connect producers with markets and makers of value-added products.

For more information or to join our camas growers network contact Madrona Murphy kwiaht@gmail.com

KWIÁHT
Center for the Historical Ecology of the Salish Sea
www.kwiaht.org
P.O. Box 415
Lopez, WA 98261
360-468-2808

Funding for this project provided by the Washington State Department of Agriculture.

Our thanks also to Brook Brouwer, the Swinomish Tribe, Skagit River Systems Cooperative, Linda and David Hudson and Liz and Jeff Malinoff.
**Cooking Camas:**
Camas is inedible until properly cooked! It is rich in inulins: short chains of fruit sugar that humans lack the enzymes to digest. Long, moist cooking breaks the inulins down into fructose, a simple sugar that is easy to digest. The traditional method for cooking camas is by pit roasting large quantities of camas for two days.

Smaller quantities of camas can be cooked in a crock pot: clean bulbs (saving the root end of replanting). Line a crock pot or slow well with washed thimble berry leaves, soaked corn husks, or crumpled parchment paper. Add water to cover the leaves on the bottom (around a cup). Line a well in the middle with parchment paper and fill with cleaned bulbs (a full pot will cook more evenly), fold the paper over the top the bulbs, and cook on low for 48 hours, adding more water as needed (every 12 hours or so).

After 48 hours the bulbs will be soft and brown and can be eaten as is, added to recipes or frozen or dried for storage, freshly cooked they are quite perishable and will keep for only a few days in the fridge.

Chopping bulbs before drying makes them easier to re-hydrate and use in recipes. Dry chopped bulbs until fully dry in a dehydrator. Bulbs may be frozen whole with no loss of quality. To re-hydrate dried camas: cover with boiling water.

Cooked camas is mildly sweet and slightly nutty. For recipe ideas see the cookbook on Kwiaht's website.

**Growing a Local Market**
Pre-Contact Coast Salish farmers are estimated to have produced and harvested over 138 tons of camas bulbs in the San Juans each year! We are enthusiastic about recovering a small amount of that local productivity. Kwiaht is working on developing camas as a dry-farmed specialty food crop in the San Juans, and that includes building a market for camas bulbs, cooked camas and value-added camas products. If you are interested in trying food camas, as a grower, producer market, restaurant, consumer or producer of value-added products, we'd be delighted to include you in the project and to insure that our work supports your ideas and interests. For more information contact us at kwiaht@gmail.com.

We are also dedicated to preserving the unique genetic diversity of camas in the San Juans; our food camas seed sources are regional and intended only for farm and garden use. If your interest is restoration rather than, or in addition to food production, we are always happy to work with you to source locally appropriate seed. Kwiaht researchers are also using genetic tools to investigate this local diversity and identify promising local varieties.

**Growing Food Camas**
Camas (Camassia spp.) was the most important plant food grown by native Coast Salish in the Salish Sea and San Juan Islands. As a drought tolerant, disease resistant native plant camas has great potential as a regionally unique, sustainable food crop for the San Juans.