

Sagittaria latifolia* Willd. var. *latifolia

Hənq̓əmiñəm name(s): ǰəq̓wəls, sqewth

English name: Wapato, Broad-leaved Arrowhead, Duck potato

Family: Alismataceae (Water-plantain)

Identifying characteristics:

Wapato is an aquatic or semi-aquatic herbaceous perennial originating from a tuber-producing rhizome that forms below a 20-50cm stem. Leaves are arrowhead-shaped and can be submerged, becoming emergent as water levels drop in summer. The stalked white flowers are arranged along a panicle (branch) and bloom in spring. The many one-seeded fruits occur in globular clusters and turn from green to brown on maturity.



Sagittaria latifolia var. *latifolia*

Distribution:

Found throughout Southern British Columbia, but almost totally absent from Haida Gwaii and the adjacent coastline. It is found eastwards to NB (also found in Europe), and is distributed south throughout the United States and to northern areas of South America, where it is considered an invasive plant.

Natural and Cultural History:

Habitat: *Sagittaria latifolia* prefers organically rich wetland soils in sloughs, wet ditches, ponds, lakeshores and lowland marshes.

Reproduction: The seeds are dispersed by wind, water, and gravity wind, and after germinating, form tubers that grow and thicken with age.

Interactions and Human interest: Wapato tubers are eaten by muskrats and beavers; the seed heads are also a choice edible for waterfowl such as ducks. The tubers can be eaten raw or cooked, but the texture and taste is best when roasted. The raw tuber skins are bitter in taste but left unpeeled add extra flavour when roasting. The roasted flavour is similar to potato (*Solanum tuberosum*) but has a much sweeter taste (corn or chestnut-like). Some Indigenous cooks would slice the boiled roots into thin sections and then string them on ropes to dry like apples. The dried tubers can also be ground into a powder and then mixed with cereal flours to make bread.



Ethnobotany:

“Wapato” is the Chinook trade word for potato. Chinook is a hybrid jargon of English, French and First Nations dialects used along the west coast of Turtle Island from the California/Oregon border to the Alaskan Panhandle and inland since first contact with Europeans.

Wapato grows in the wetlands around the Pitt River, to the north of the Fraser River where it was traditionally farmed and harvested by family groups of the ǵíǵǵ (Katzie) First Nation. It is considered a cultural keystone species for the ǵíǵǵ (Katzie Natural Resources 2016, Garibaldi and Turner 2004). In 2006 an ancient wapato wetland garden in ǵíǵǵ territory was discovered during surveying and construction of the new Golden Ears Bridge (Lyons et al 2018, Hoffman et al 2016). Archaeologists excavated and found 3,768 wapato tubers and wooden tools, which along with stone walls and pavement were radiocarbon dated to 3,800 years BCE (before common era), and evidence the garden but was abandoned 3,200 years ago (after 600 years of cultivation).

Cultivation:

Wapato is easily cultivated in shallow, slow moving water, with a muddy substrate. The tubers can be planted (well-spaced) before the end of May, or prior to the wetland drawing down for the summer drought period. They can be multiplied through seed collection and sowing, or division in July. Divided tubers can be planted in 10cm pots, and overwintered standing in water, for spring transplanting.

Harvesting:

The wapato tubers are gathered from October to early Spring because our mild climate is optimal for harvest at this time in the Pacific Northwest (Katzie Natural Resources 2016, Will 2010). Elsewhere on Turtle Island most ponds are long frozen over and harvest occurs before freeze-up in the fall. The tubers cannot be harvested by pulling out the plant since the tops have either died back, or break off

easily, leaving the tubers buried in the mud, hidden and covered with water. Harvesters must rely on knowledge of habitat, or mapped locations in summer. Tubers can be detached from the ground in various ways: with bare feet, a pitchfork, or a stick, and after digging up, the tubers usually float to the surface and then can be collected.

Recipe for Wapato Chips

.25 to .5 kg wapato tubers, peeled and sliced thin
About 475ml (2 cups) non-GMO cooking oil
Salt, finely ground if possible, from the sea
Smoked paprika, or other interesting spices or herbs

Peel the wapato corms and slice them thinly. You can do this by hand for more of a “steak fry” effect, or 1/8 inch (.125cm) thin for more of a potato chip effect. If you want, you can soak them in salty water to pre-season them while you do the rest.

Heat the oil in a fryer or a heavy pot to somewhere around 350°F (175°C). A flick of flour should sizzle instantly at this temperature. The arrowhead slices will want to stick to each other, so slide them into the hot oil as if you were dealing playing cards. Don’t overcrowd the pot. Fry until golden brown, about 2 minutes or so.

Remove the chips with a slotted spoon and let them rest on a paper towel. Salt them the moment they hit the paper towel. Add a little paprika, or another spice or herb. Repeat with the rest of the slices. Serve hot or at room temperature. They will stay crispy for a day or two (if they last that long).

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Images:

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