SQUAMISH RIVERS & ESTUARY

Watershed Food Fest

Grades: K-7

Subject, Science, Language Arts; Social Studies

Time required:30 minutes research; 60 minutes cooking & eating

Key Concepts:

Everyday actions make a difference in watershed and estuary health.

Objectives:

It is expected that the student will:

- Learn about a variety of foods that grow in their watershed (native and non-native);
- Appreciate the importance of water and watersheds in lifestyle

Key Words:

Decision-making; sustainability; native plants; First Nations

Skills:

discussion; research; communication;

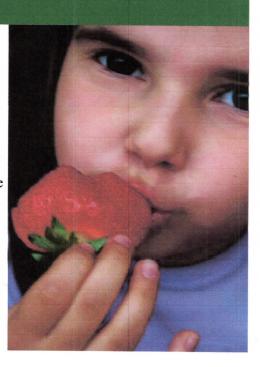
Background:

Today most of our food comes off the farm, often from far outside our own watershed. However, there are many plants and animals that grow, often wild, in our watersheds.

First Nation peoples made use of these foods to sustain their culture. Plants that grow wild naturally are called "native plants." These plants are adapted to live in a particular biogeoclimatic zone. Plants that have been introduced to an area but then self-seed are "naturalized" plants. These plants can also be "wild" foods of your watershed.

In British Columbia, animal life (birds, mammals, fish, and shellfish) formed the bulk of the aboriginal people's diet. Plants, however, formed an important part of their diet. We can look at foods that First Nations peoples used to gain an understanding of what foods are native to watersheds in British Columbia. While the traditional aboriginal diet of the Coastal peoples relied heavily on protein: fish, shellfish, and sea mammals, coastal peoples had extensive knowledge of native plants, using over 200 species for food, medicine and other purposes.

In the Squamish watershed, the Squamish First Nation have been



Materials

- Research materials
- Native Plant foods
- Local food samples



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Background continued:

harvesting and eating native foods for well over 4,000 years. They have an expression: "when the tide is out... the table is set." This refers to how important the food fishery is to their traditional diet. This continues to be true today.

Traditionally, the Squamish First Nation ate animal foods such as chum and Coho salmon (dried and fresh), herring spawn, clams, deer, goal, or other game animals as the mainstay of their diet. However, greens (shoots, stalks, young plants) and other vegetable dishes were eaten daily and provided necessary vitamins and minerals. Greens such as roots and bulbs were often prepared in steaming pits. Pit ovens can retain heat for several hours before cooling and are very efficient for preparing large quantities of foods. People also prepared foods such as soups and stews with meat or fish and vegetable combination using baskets and more recently kettles or pots. Drying berries and other fruits was an important way to preserve them for later use. Sometimes berries would be cooked first and then dried into berry "cakes." People ate dried berries and berry cakes such as the way modern people eat raisins or other dried fruit.

The basic types of food plants gathered and prepared fall into several categories: fruits (especially berries), green vegetables (sprouts, leaves, seaweeds), mushrooms, underground parts of plants (roots, bulbs, rhizomes) and cambium from certain trees. One component of the aboriginal diet was however in short supply: that of staples such as carbohydrates. In many areas, due to the lack of food sources for carbohydrates, this

rhizomes, and bulbs were scarce and often seasonal. Sometimes however, these products would be soaked overnight in water to plump them up prior to eating.

Today, we have growing and living in our watersheds a rich diversity of foods. Some are native plants and animals, while some have been introduced to our watersheds from elsewhere. We can learn about our local ecosystems and traditional customs using foods as a teaching tool. This is a powerful way to learn about your watershed.

Teaching Note:

Please use caution if exploring your watershed for native plants and be sure plants are identified as edible and safe to handle. Some native plants are extremely sensitive to disturbance: do not disturb sensitive sites.

Procedure:

- 1. Explain that today we can eat foods from around the world. However, in our own watersheds there is an amazing diversity of plant and animal life.
- 2. Brainstorm with students the names of plants, animals and foods that grow or could be harvested from their community. You could ask them if they have gone to a local Farmers Market: what did they see or what did their family buy there?
- 3. Make a list of these foods. Be sure to remember seasonal foods and native plants that may be important to the Squamish First Nation or other ethnic groups.

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- 5. Review the Watershed Food Fest by Season. Have student research the plants and animals. Are they native? Introduced? Where do they grow or live? What are some interesting facts about the plants or animals used as food?
- 6. Prepare food and sample!
- 7. Wrap up by discussing the choices we make to eat or not eat certain foods. Are they healthy choices for people? What is the impact of our choices for sustainability of our ecosystems? Or our local economy?

Extensions:

Evaluation:

Community Connections:

Bringing It Home

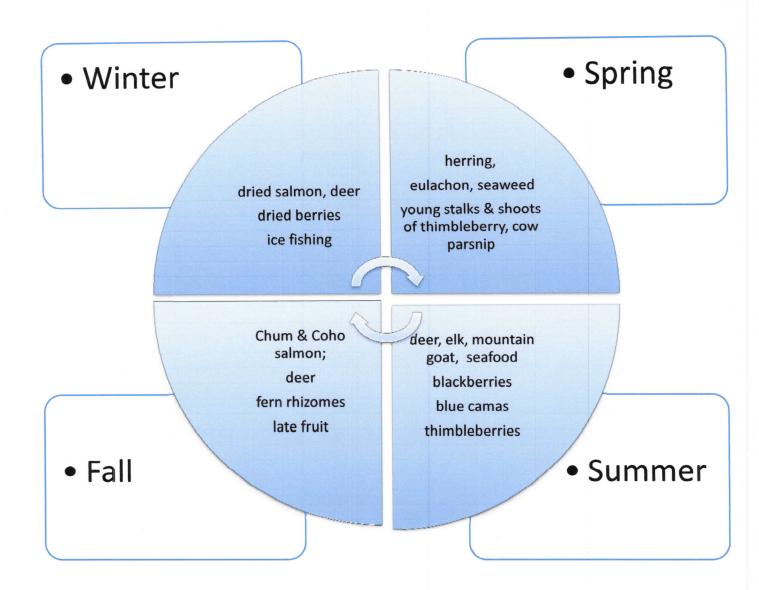
Resources:

Turner, Nancy J. 1987. Food Plants of British Columbia – Coastal Peoples. British Columbia Provincial Museum Handbook: Victoria, BC



Traditional Squamish Food Fest by the season





Some Common Food Plants of Coastal First Peoples

Bracken Fern (*Pteridium aqulinum*)
This is the largest and most common fern in the Province – it often grows to 2 m tall. The rhizomes, found about 20 cm below ground, were used as a food by most Coastal peoples. They were generally dug during the late fall or early winter and then dried. They could then be roasted in an open fire and then the inner part would be mashed and eaten with fish eggs or oil.

Salal (Gaultheria shallon)

Salal berries are probably the most plentiful and widely used fruit on the B.C. coast. All of the Coastal Indian groups used them in large quantities. This thick stemmed shrub usually grows up to 2 m tall and it has hairy, dark blue to black berries. The berries were picked in late summer and eaten both fresh and dried in cakes for winter use. Salal berries are still eaten today, usually in jams or preserves.

Blue Camas (*Camassia quamash*)
Camas bulbs were an important staple food

for many native peoples along the coast. It is usually found in meadows and grassy bluffs and the bulbs were usually dug sometime between May and August, just after the plant flowered. The bulbs were cooked in steaming pits: the pit was dug and lined with rocks and a fire was allowed to burn until the rocks were red hot. The ashes were then removed and then seaweed, blackberry, salal branches, fern fronds or fir boughs were placed in the pit. The bulbs (as much as 45kg at a time!) were then placed on top of the branches, then covered with more branches and finally soil, sand, and old mats. Finally, water was poured in through a hole and the bulbs were allowed to steam for at least one day. The bulbs are soft and sweet

when cooked and were eaten dried and also added to a variety of other foods.

Elderberry

Cow Parsnip (Heracleum lanatum)
This plant is sometimes called "Indian celery" or "Indian rhubarb" and was used by almost every Indian group in British
Columbia as a green vegetable. This plant grows to 1.8 m tall with distinctive very large leaves, and is usually found in wet, open areas such as meadows, ditches, and roadsides. The young stalks and leaf stems were peeled and eaten raw or sometimes boiled.

