

Kwakwaka'wakw Traditional Ecological Knowledge

Clams were and are a vital food source of many First Nations in BC. The information below is shared with permission by the Member Nations of the Nanwakolas Council – North Vancouver Island, and provides some background about the Nations and clam gardens.

First Nations' Culture, Communities & Governance

The Kwak'wala, Lik'wala and K'omoks speaking peoples were a highly stratified bilineal culture of the Pacific Northwest. Today, fifteen remaining Nations comprise the grouping known as the Kwakwaka'wakw . Each Kwakwaka'wakw Nation has its own history, culture, and governance, but remains collectively similar. Seven of these fifteen First Nations are represented through this Ha-ma-yas Marine Plan: the Mamalilikulla Qwe'Qwa'Sot'Em, Tlowitsis, Da'naxda'xw Awaetlatla, Gwa'sala-'Nakwaxda'xw, Wei Wai Kum, Kwiakah and K'omoks.

Each of the member First Nations has its own stories, songs, dances, and masks that tell of who they are and their origins. The Nations have extremely strong ties to their territories, dating back to the beginning. For example, each Nation has its own version of the great flood and how some members survived. The K'omoks First Nation tells the story through the **Legend of Queneesh (Figure 1)**:

"Long ago there were big cedar planked houses, totem poles and canoes in the K'omoks Valley. The nights were very quiet, except for the sounds of the water, sea birds and of hooting owls. One night an old man, Quoi Qwa Lak, had a dream. In that dream a voice told him that he must tell the chief and the K'omoks people to prepare for a great flood. Quoi Qwa Lak passed this message on and the K'omoks built canoes and packed them full of food and clothes. The young men made a strong cedar rope and took it to the top of the glacier and fastened it tightly. The people tied their canoes to the rope. Not long after, it began to rain; it rained and rained for many days. Soon there was only a little of the glacier showing. The K'omoks people were afraid. Then all of a sudden the glacier began to move. The people began to cry "White Whale, White Whale! Queneesh, Queneesh." The glacier had taken the form of a whale and saved our people. The rain stopped, and Queneesh still stands guard over the K'omoks people to this very day."

Figure 1. K'omoks Legend of Queneesh



Similarly, each Nation has its own territory, traditions, crests, privileges, and names for its important members. Potlatches and winter ceremonial feasts are still used to conduct social, cultural, economic and political business. The Kwakwaka'wakw still have ties to their winter villages, and the clan/family seasonal camping sites, fishing places, hunting and gathering areas.

Marine resources were, and are still today, traditionally utilized through time and space cycles, reflecting Kwakwaka'wakw socio-political structures and former settlement patterns. The Kwakwaka'wakw economic life was and is (where still possible) characterized by a regular series of seasonal occupations during which marine resources are gathered and processed. The **Seasonal Use Cycle of the Kwakwaka'wakw*** illustrates the seasonal cycle and the types of resources harvested and processed at the various time of the year. Although specific activities and movements vary from one First Nation to another, in general the cycle involves a sequence of three key movements: a) from winter villages to the eulachon fisheries in the spring; b) the use of 'other' resource procurement sites during the summer and fall; and c) the return to the winter villages (now modern, permanent settlements in the case of most member Nations).

Following the two month eulachon season, people disperse to a variety of resource procurement sites. The most important are salmon fisheries sites, occupied (according to site and species) until late fall. During this period, people also harvest a range of resources from both land and sea. Some, such as berries, ground fish, rock fish and shellfish, are widely distributed and often can be gathered near the fishing stations. Occasional visits to the principle village would occur during this period of gathering, but the onset of winter completes the cycle. About the end of November, the village would be re-occupied on a full-time basis and clams and other shellfish become key sources of fresh protein. The removal of member Nations from village sites, and the effects of modern technology have altered many components of this traditional cycle. **Table 1** provides a example of resources used by Kwakwaka'wakw and Nanwakolas Member First Nations.

Table 1: Partial List of Resources Used by Kwakwaka'wakw and Nanwakolas Member First Nations

Fish Species	Shellfish and Invertebrates	Marine Mammals, Plants and Birds
Salmon (all species)	Dungeness Crab	Harbour Seal/Hair Seal
Steelhead	Snow Crab	Northern Fur Seal
Cutthroat Trout	Pacific Crab	Sea Otter
Eulachon	Clams	Dall's Porpoise
Halibut/Pacific Halibut	Horse Clam/Geoduck/Gaper/ Pacific Coast Gaper	Humpback Whale
Cod	Butter Clam/Smooth Wash- ington Clam	Minke Whale/Pike Whale/Little Piked Whale
Ling Cod	Mussels (California/Sea Mussel/Blue Mussel)	Edible Seaweed
Red Cod	Barnacle/Giant Acorn Barnacle	Kelp/Sea Wrack
Red Snapper	Basket Cockle/Heart Cockle	Bull Kelp/Bottle kelp
Black Rockfish	Abalone (Northern/Japanese)	Common Eelgrass
Yelloweye Rockfish	Prawns	Rockweed/Bladderwrack
Shiner Perch	Shrimp	
Starry Flounder	Sea Urchins	
Black Cod/Sablefish	Chitons (Black Katy/Black Leather/ Giant Pacific Chiton/ Gum Boot Chiton)	
Tuna	Octopus	
Dogfish	Sea Cucumber	
Great Sculpin/ Bullhead		
Herring/Herring Roe		
Sardines		
Eels		
Keip Greenling/ Tommy Cod		
Spotted Ratfish		

Clam Gardens

Loxiwe, or clam gardens, are a unique feature found throughout the Kwakwaka'wakw territory. Loxiwe means "place of rolling rocks together" to create a terrace or clam garden. These places of rolling rocks together create incredibly productive shellfish growing sites. The concentration of Loxiwe found in the area now called the Broughton, allows for a reliable source of protein during the difficult winter months.

Loxiwe were first created by the Elders, women and young children who would roll boulders and rocks to the edge of the lowest tide mark. Sand and silt would fill up behind the terracing toward the beach and create perfect clam habitat. This allowed clams to be easily harvested with a digging stick and the areas tended to by the owners of that specific beach.

This form of clam aquaculture began producing abundant quantities of clams as seen through shell middens along the coast. Those families who did not have rights on streams would have to rely more heavily on clams and share, trade or barter for salmon. Although salmon are critical to First Nations life, clams are a staple and the part of everyday life. There is little mention of their importance compared to salmon, but the Elders have informed us that clams have always been critical in sustaining the Kwakwaka'wakw .

"Productivity of clam gardens was carefully monitored and managed. To maintain the clam gardens, the sand was turned over every year or the clams at the bottom would die. The smell of a clam garden is an indicator of its health. In the past, there were guardians for each First Nation and one of their duties was to ensure the health of their First Nation's Loxiwe. If a shellfish bed was severely depleted or not suitable for harvest the guardian would speak to the chief and a ceremonial copper would be posted to warn others not to harvest from this Loxiwe."