

SHORELINE ETHNOGRAPHY

2020

This report succeeds “The Maps of the Early Shoreline Area,” specifically, the section “The Ethnographic Context,” submitted to the Shoreline Historical Museum on December 21, 1996. This report provides additional information about tools and methods used in fishing, gathering and hunting in the Shoreline area as well as information regarding two new trails. Beyond this the information in the earlier report remains valid.

ORTHOGRAPHY AND PRONUNCIATION

Native place names and words are written in the orthography developed to write the language identified as **Xwəljuscid** (Whul-joot-seed) hereafter written as Whuljootseed. Derived from the word **Xwəlj** (whulj), ‘saltwater,’ and **ucid** (oot-seed) ‘mouth,’ the composite identifies the major native language spoken on Puget Sound.

In parenthetic translations following highlighted native words, vowels are: ‘a’ as in hot; ‘e’ as in the ‘a’ in fate; ‘o’ as in hole; ‘u’ as in hoot; ‘ə’ (schwa) as in hug and ‘ai’ as in height. The ‘c’ and ‘s’ consonants are: s = s; š = ‘sh; c = ts; č = ch;. The λ (barred lambda) = is the ‘tl’ in Atlantic, and ɬ and ɭ (barred L) are sounded by placing the tip of the tongue on the palate and blowing around it. In the rounded consonants: g^w, q^w, k^w and t^w, the w is barely sounded, but rounds the lips to make the appropriate sound.

The ‘ʔ’ sign indicates that consonants are glottalized: that is, pronounced with something of an explosive sound. A full glottal stop, ʔ, raised and following a letter, is the gap in sound one hears in the phrase, “uh oh”.

SHORELINE

Bounded on the north by the Snohomish-King County line, on the south by the City of Seattle, on the west by Puget Sound and on the east by City of Lake Forest Park, the City of Shoreline rests on fluvial and lacustrine sediments deposited during the Vashon glaciation. Locally this represented the last pulse of the ice age defining the **Pleistocene**, ‘Most recent,’ the first geologic epoch of the Quaternary Period, lasting from about 2.3 million to 11,500 years ago. The Vashon glaciation, beginning about 20,000 years ago and ending about 12,500 years ago saw the advance and retreat of the Puget lobe, a tongue of the Cordilleran ice sheet that filled the lowland between the Olympic and Cascade mountains. Its motion created proglacial and recessional lakes that left a layered sequence of sediments: early transitional beds of sand and clay overlain by the thick Esperance Sand (an aquifer) and capped by till: a mix of clay, sand, gravel, cobbles and boulders compacted by the passage of ice and known locally as ‘hard pan’. Sandwiched between the transitional clay beds and the till, the Esperance sand holds water like an immense sponge.

THE TOPOGRAPHIC SETTING

Shoreline’s elevation does not exceed 600 feet, presenting a relatively level plain, but the passage of ice left a parallel series of low, north-south ridges called drumlins

that span the city like the corrugations of a washboard. Erosion in the intervening troughs that exposed the boundary between the Esperance Sand and the till give rise to springs and wetlands. Near Puget Sound exposure of the boundary between the lower transitional clays and the Esperance sand and have led to landslides leaving sheer bluffs. Stream erosion has cut canyons into the bluffs, most notably those of Storm Creek and Boeing Creek. To the east, Thornton, McAleer and Lyon Creeks have excavated larger and broader diagonal basins. The City's boundaries delimit but a small part of a geography that has been home to human groups for more than 13,000 years – 650 generations.

Most of the city lies within the Duwamish River watershed as it existed prior to dramatic engineering changes made at the beginning of the 20th century. Reaching from central Snohomish County to Mount Rainier, from Puget Sound to the Cascade Crest, this basin provided a rich life for thousands of people for thousands of years. Our focus is on its northwestern part.

WATER LINKS

A shallow estuary of the Sound, Salmon Bay is affected by the rise and fall of tides. Its resources were predominantly marine, but it was also connected by Ross Creek to nearby Lake Union. Native people views Lake Union, Lake Washington and Lake Sammamish as a single, concatenated watershed, apparent in the names of Lake Washington, **Xa'č'u** (KHAHT-chu), 'THE lake', Lake Sammamish: **Xa't-xač'u** (KHAHT-

kha-chu), ‘Smaller lake,’ and Lake Union, **Xa’ a’-čū** (khah-AH-chu), the diminutive of Xa’čū, meaning ‘Little lake’. All three underscore the unifying idea of connection.¹

Lake Sammamish empties into Lake Washington via the Sammamish River, but prior to the excavation of the Montlake Cut in 1916, the narrow Montlake divide separated Lake Washington from Lake Union. Springs on the divide’s western slope gave rise to a small stream in the Portage Bay marsh, but short trails connecting Portage Bay to Lake Washington provided the effective link.

The Montlake divide represented a feature native people called a **Jila’lič** (jee-LAH-leech) ‘Crossing-over place,’ distinguished from its diminutive form, **jijila’lič** (jee-jee-LAH-leech), ‘Little crossing-over-place,’ that identified the village in Seattle’s Pioneer Place Historical District. The singular term appears to have also identified the entire route between Salmon Bay and Lake Washington.²

THE PEOPLE:

GEOGRAPHIC IDENTITIES

Groups in the watershed derived names from its segments. The **Dxwdəw’a’bš** (dxw [whispered]-duw-AHBSH) – the ‘real’ Duwamish – lived on the Duwamish, Black and Cedar rivers, all considered one stream called they named **txwda’o** (txw [whispered] DAH-O). The **Xačua’bš** (Kah-chu-AHBSH), lived on Lake Washington, and the **Xa’ a’-čua’bš** (Khah-ah-chu-AHBSH) on Lake Union. The **Stsapa’bš** (s-tsah-PAHBSH) – Samamish – lived on the Sammamish river and the **Xa’t xačua’bš** (Khaht-Khah-chu-AHBSH) on Lake Sammamish. The **Skopa’bš** (sko-PAHBSH) lived on the

Green River. The White River, **Sba'lqo** (SBAHL-qo) 'split river,' divided into northern and southern flowing distributaries near the present town of Auburn. The **Stuq'a'bš** (stooq-AHBSH), 'log-jam people,' lived on the northern distributary, called the lower White River, while the **Stu'xabš** (STOO-khahbsh)—Stuck River people, lived on the southern distributary called the **Stux** (Stookh), 'plowed through,' that flowed into Commencement Bay. Those living on the White River above the division point were the **sbalqo'abš** (sbahl-QO-ahbsh, 'Split-River People'.

HABITATS

These bodies of water made up the Duwamish River watershed, the most complex drainage basin in western Washington and one possessing a rich and complex ecosystem. Ecologically it consisted of several habitats. The open water, beaches and tidal estuaries of Salmon Bay and Elliott Bay represent a marine or saltwater habitat. The watershed's lakes, their marshes, and its rivers: the Sammamish, Duwamish, Black, Cedar, White, Green and Stuck rivers, each with its own system of tributaries, represent an aquatic environment subdivided into lake and river habitats. The rivers heading in the Cascade Mountains--the White on distant Mount Rainier--drained a high country marked by broad parklands, kept open by repeated burning. This represented a terrestrial, inland habitat with its own unique plant and animal resources.³

ETHNIC IDENTITIES

Groups adapting to these varied habitats developed distinct material cultures. Citing the single example of canoe types, groups on Puget Sound needed large canoes

with a high prows and freeboards to avoid being swamped by waves. These were primarily the **ao'txs** (ah-OT-khs), 'war canoe,' and the **sti'wał** (STEE-wahlh), 'frieght canoe'. But their' added weight and draft meant they could not navigate shallow streams, and river groups developed the lighter **tl'ai** (TLH-ai) or 'shovelnose canoe' that could be easily poled over riffles or dragged over jams. Lake Washington could generate waves as large as those on the Sound, and groups living along its shores needed both types. Further inland, hunters travelled overland on trails as much they canoed on rivers, and the appearance of horses in the 1740s transformed their lives, but saltwater, lake and river people seldom made little of horses.⁴

The differences in tool sets and gathering strategies led to differing lifeways. Saltwater villages bordered the Sound in a radial pattern of settlement, and marital ties between them fostered trade and wealth, making them **x^walja'bš** (hwahl-JAHBSH), 'saltwater people,' because their life focused on the Sound. The Salmon Bay people were **x^walja'bš**

Like their saltwater kin, Lake people also lived in villages around the lake, where each village group fished the lake and maintained its own creek fishery or fisheries independently from the rest. The **Xačua'bš** of Lake Washington, the **Xa' a'-čua'bš** of Lake Union, plus the **słuwilabš** (s-lhu-weel-ahbsh) of Union Bay on Lake Washington and Ravenna Creek, and the **Tuobeda'bš** (tu-oh-beh-DAHBSH), of Thornton Creek, McAleer Creek and Lyon Creek were all **Xačuaabš** 'lake People'.

Intermarriage between groups up and down a river provided for the effective management of its fishery, the primary food source. Each village had a name, and those located on a particular segment were identified by that name as well, but all were **stoləgwəbš** (sto-luh-gwahbsh), 'River people'.

Those living up on Issaquah Creek flowing into Lake Sammamish and in villages on the upper waters of the Cedar, Green and White rivers in the mountain foothills lived in named villages, and had, like river groups, a river name, but their hunters commonly crossed into other watersheds in search of game. To facilitate agreements about the management of hunting ranges, an exercise aided and expanded by the introduction of the horse, they intermarried with hunting groups on neighboring watersheds both east and west of the Cascades. Because of their distinctive lifeway they developed, they were called **Laləbiux** (Lah-luh-biukh), 'Inland People'.⁵

ETHOS

The geographical setting and habitat adaptations that identified these groups also encouraged an ethos among each, a group consciousness sometimes expressed at the expense of others, not unlike, in our time, the determined support of rival athletic teams. For example, saltwater parents were wont to upbraid misbehaving children by accusing them of "...behaving like one of the Issaquah Creek people!" an inland group living at the back of the beyond. Conversely, the inland uncle of a man planning marriage told him repeatedly that if he ever married "...one of those damn saltwater Indians," he would kill him. The marriage did not go forward. But despite such

attitudes, kin connections among all groups in the watershed enabled the widespread sharing of resources. Each group had much to offer.⁶

This report focuses on the saltwater people of Salmon Bay and the Lake People of Lake Union and the northwestern shore of Lake Washington. But their Duwamish kin, and those from outside the watershed: the **dx^w səq^{wəb}** (dxw [whispered] suq-wub), Suquamish, the **sdohobš** (sdoh-hobsh), Snohomish, the **S.duk^walbixw** (sdu-kwahl-bixw [whispered]), Snoqualmie, and even groups from across the mountains also visited the camps to share resources. The roving lives of all bred familiarity.⁷

FOUR NAMED GROUPS

In early historic time (1792-1850), the natural resources of the Shoreline area were used primarily by four named groups: The **šilšola'bš** (sheel-shol-AHBSh), of Salmon Bay, the **xa' ačua'bš** (kha-ah-chu-AHBSh) of Lake Union, the **šluwilabš** (s-lhu-weel-ahbsh) of Union Bay on Lake Washington including Ravenna Creek and Green Lake, and the **Tuobeda'bš** (tu-oh-beh-DAHBSH), also known as **tuxubida'bš** (tu-hu-[whispered] bee-DAHBSH), of Thornton Creek, McAleer Creek and Lyon Creek.⁸

VILLAGE AND HOUSE GROUPS

Among records presented in 1927 as evidence in *Duwamish et. a. vs. United States of America*, in the U. S. Court of Claims, were two village lists, W-2 and Y-2. Village list W-2, "Number of Duwamish Villages on White River Valley," named fourteen villages starting at Salmon Bay and moving south to Elliott Bay and south to the Duwamish, lower White (Green) River and villages on the Black River. Village list Y-2, "Villages of

the Duwamish at Lac [sic] Washington, lists 14 villages named following a roughly circular pattern on the lake. Each list also counted the houses in each village and their dimensions: large houses measuring 10 by 20 fathoms, or about 60 by 120 feet, and medium houses of 8 by 16 fathoms or about 50 by 100 feet. A generic term for a shelter. **alt^u** (ahalt-u); included permanent houses made of planks, **tə'sbəd** (TUS-bud), 'winter house'. These were sturdy, wood frame and vertically planked structures with shed, gable or gambrel roofs covered by carved, overlapping boards set in the manner of Spanish tiles. In each house, families had their own living areas whose hearth, in a gabled house, were set beneath the roof axis, and in a shed or gambrel house, along the higher side. Before historic times, there appear to have been no windows. One door at the end provided access, and another facing the forest provided escape during a raid. A large bench bordering the walls served as a sleeping with storage underneath, and a side shelf hanging from rafters provided more storage. Living areas were surrounded by gear, wraps, boxes and baskets of preserved foods. Dried or smoked meat and fish hung from a large, rafter-hung rack extending the length of the house over the cooking fires.⁹

Like other native groups on Puget Sound, the Duwamish were semi-migratory. The onset of spring was marked by the "Red Tamanous" when the people decorated themselves with vermillion and donned new clothes. Myths about the lascivious figure of Mink were told as the world blossomed. Families cultivated gardens and begin leaving the longhouse to camp at favored gathering areas with kin, leaving the older people at home to care for the younger children. They returned periodically to store

food, and for celebrations like the arrival of the first salmon. Families followed a regular itinerary as food sources became available, and it was said that if you knew the family, you knew where they would be at any time during the year. In high summer and early fall, when food gathering was in full swing, nobles hosted potlatches, **sgwe'gwey** (SGWEY-gwey), 'Come! Come!,' in Whuljootseed, accompanied often by betrothals, marriages, athletic contests, gambling matches and secret society initiations. These were held in specially constructed houses called **sgwi'gwi-altu** (SGWEE-gwee-ahlt-u), 'distribution house,' that might be hundreds of feet long. As groups caught the last migrating fish or netted autumnally migrating waterfowl, hunters and gatherers returned from high mountain camps. When weather became inclement, families reassembled in longhouses, and winter villages hosted impressive winter dances as the peoples' guardian spirits returned. For these deeply religious events groups visited one another, exchanged gifts and held feasts. During winter solstice, creation myths were recited to rapt audiences; the road to the land of the dead lay open and lonely ghosts came to visit kin. Those who believed their souls had been kidnapped by ghosts hired ceremonialists to re-enact a journey to the land of the dead to retrieve them. These dramatizations, most highly developed among the Duwamish, often require many consecutive nights to complete. All these rites were intended to remind the forces of nature of covenants they made with humanity to nourish the people.¹⁰

A winter village represented a named, autonomous group that prized self-sufficiency. Marriages arranged into or out of the winter village kept this in mind.

Each winter village had one or more longhouses, each sheltering several closely related families that encouraged members to develop necessary specialized skills like fishing, weaving, hunting, carpentry, basketry, food preparation, oratory and storytelling. What individuals and families in the longhouse gathered or produced they shared. This vigorous and satisfying life and the human activity it generated over millennia enhanced the physical beauty of the region noted by early explorers.¹¹

THE SALMON BAY PEOPLE

The Šilšolabš lived in the village of **Dux šilšol** (dukh [whispered] sheel shol-- probably 'At the Sheelshol', at what is now the Carl M. English Botanical Garden at the Hiram M. Chittenden Locks in Ballard, Seattle. The native name for Salmon Bay, **šilšol**, meaning "threading a bead," described the action of canoes passing through the narrow inlet as a weaver would carefully thread a bead.¹²

Two medium-sized houses and a large house doubling as a distribution house, were located here. The latter structure, called a **he'qwal'al** (HEQW-al-al), 'big house,' when not being used for a sg^we'g^wey, was a house whose planks would be dismantled for use away as a noble family's summer home. A medium-sized house may have sheltered three or four families or between 15 and 20 people. A large house might shelter four to six families--about 20 to 30 people. If, as seems probable, the big house was normally occupied, we can estimate the population to have been between 50 to 70 people.

The presence of a big house indicates that this was a noble village, meaning that many if not most members belonged to the **sia'b** (see-AHB), 'Good', the nobility, also called Tyees in the Chinook Jargon. Nobles belonged to important families whose names were inherited, who were well married and had connection with powerful guardian spirits associated with wealth that enabled them to host sgwey'gwey. A Sia'b might have more than one wife and possess slaves that served the family. About one third of native people on Puget Sound are thought to have been noble, the rest being commoners and a small number of slaves. In historic times, when western-introduced diseases decimated populations and destabilized societies, ambitious commoners and even children of slaves who displayed capacity could gain status and wealth enough to host a sgwey'gwey.¹³

The burial ground for **Dux Šilšol**, west of the northern pier of the railroad bridge crossing Salmon Bay, has been obliterated by historical construction. The land of the dead was generally believed to be west of a person's birth village, hence the road souls took to reach it headed generally in that direction. Saltwater burial grounds commonly featured elevated canoes that held the dead, but they also buried remains in small roofed enclosures and even in elaborate stone cyst graves.

In the 1850s, Pioneer doctor Henry Allen Smith settled among the Salmon Bay people and described their recent history.

When I settled here in 1853, about a dozen families of the Shilshole tribe were still living on Salmon Bay, and I learned from them that within the recollection of their older men they numbered between 500 and 600 including children, and according to tradition their numbers once ran up into the thousands and they occupied the entire country from Smith's Cove and Lake Union to the Snohomish River. They claimed that the cause of their rapid decline was owing to

frequent raids made upon them by the northern or Stikeen Indians, who visited the Sound every year for the purposes of plunder.”

Disease also devastated them, and Smith opined that in his time their numbers continued to decline due to sickness brought on by an inveterate love of gambling. When a larger people they mingled with Snohomish and Snoqualmie at what is now Edmonds, and, with a greater population, likely made greater use of trails to gather resources.¹⁴

THE LAKE UNION PEOPLE

The xaʔ aʔčuaʔbšʔ had at least one winter house. In *Pig-tail Days In Old Seattle*, author Sophie Frye Bass (1867-1947), granddaughter of Arthur Denny, writes:

A large Indian camp built at the shore line of Lake Union near Westlake held several families, and, being made of cedar slabs and bark, it withstood the weather. An opening in the roof allowed the smoke to escape; poles were put across the room, and on these fish and clams were hung to dry over the fire. Mother could always tell where we had been from the odor that clung to us of smoke and drying fish. We children liked to go to the camp for there were so many interesting things going on.

There is also mention of a house on the southeastern shore destroyed in 1875 when an equinoctial storm blew a tree on it, and hearth fires ignited and consumed the damaged structure. I believe these habitations were not coeval but sequential as encroaching white settlement gradually drove the Lake People away from their homeland.¹⁵

Connected by Ross Creek to Salmon Bay, they were closely related to their saltwater kin. Like them they made use of a **tʔəʔkəp**, (TUH-kup), a duck-catching net erected on meadows between Queen Anne Hill and Denny Hill (the latter since removed). At night or on foggy days, waterfowl, ‘started up’ from the southern end of

Lake Union at night or on foggy days would habitually fly over the meadows where they became entangled in a large net hoisted between tall poles.¹⁶

Historical memory of a native burial ground located at the northeast corner of the Mount Pleasant Cemetery on Queen Anne Hill, is right where it should be if it served a winter village on the south end or east side of the lake. We do not know the sizes of village longhouses, but Bass's 'several families' suggests between 20 to 30 people lived on the lake. Trails from Portage Bay over the present University of Washington campus and the Montlake neighborhood connected the Salmon Bay and Lake Union peoples to Union Bay on Lake Washington, the home of the *Stuwilabš*.¹⁷

THE PEOPLE OF UNION BAY

The *Stuwilabš* took their name from a large marsh in Union Bay watered by Ravenna Creek heading in Green Lake. The word **Stuwil** describes holes canoe makers drilled in hulls during construction to measure thickness. A splint gave the measure, and the small hole, sealed with pitch, was watertight and nearly invisible. Stream current made barely subtle passages in the vegetation by which village women, by grasping reeds and pulling their slim lake canoes forward, could reach hidden gardens of cattails (*Typha latifolia*), and wapato (*Sagittaria latifolia*). The round fruiting stems of the cattail were used to make mats and springy mattresses; the roots were pulled up and steamed. The bulbs of wapato, a close relative of the Asian water chestnut, were separated from muddy bottoms by wiggling toes and eaten fresh or dried, powdered and stored as a kind of flour.¹⁸

This was a large group housed in five medium houses at a place called '**Thuwahl**' (a variant of *sluwil*), "a stone's throw," from the University campus, and probably three more at '**Tal-Eliso**', a Y-2 variant of the place name **λels** (Tlels), 'Minnows' (probably peamouth, *Mylocheilus caurinus*), on Wolf Bay. It is difficult to imagine so large a village not having nobles enough to host a *sg^we'g^wey*, but a place at Madison Point named **biskwi'kwit** (bees-KWEE-kweehl), 'where-(bis) Skate [lives],' a mythic figure noted for his wealth, suggests it may have been the site of a big house like the one used on Salmon Bay. A Y-2 village name, **Qui-Qui-Alough**, with one medium house, that includes Skate's name **kwi'kwi**, and the suffix, **Alough**, the anglicization of *alʔal*, 'shelter' — 'Skate's house', suggests that If this was a dual-use big house like its counterpart on Salmon Bay, the group may have numbered between 130 and 180 people, a large community.¹⁹

This group's burial ground was located on Foster Island, on the south shore of Union Bay, now obliterated by the State Highway 520 approach to the Evergreen Point Floating Bridge. The location would seem to contradict the notion that burial grounds were located west of villages. Most of the large rivers entering Puget Sound flow from east to west, and the direction of flow, underscoring the sunset location of the land of the dead, and the westward passage of the sun, moon and stars served as a metaphor for life. It is possible to talk about up-lake and down-lake people: the flow of Lake Washington's water coming largely from the Sammamish River in the north and exiting via its southern outlet may explain the location of the burial ground. Among modes of

burial, the Union Bay people hoisted the dead in boxes lashed to the branches of trees. As bindings and boxes gave way, the clatter of falling bones could be heard across the water.²⁰

THE THORNTON, MCALEER AND LYON CREEK PEOPLE

The **Tuobeda'bs̓** (tu-oh-beh-DAHBSH) wintered further north on the lake near the mouth of Thornton Creek in Matthews Beach Park. They took their name from **Tuxu'bid** (tu-HOO-bee), the native name for Thornton Creek. Another version of the name: **dx^w Xubəd** (dxw [whispered], hoo-bud), is translated as 'quiet place'. These are the same as the name of the village on list Y-2, **Dua-hoabun,**' where a single medium sized house stood. A map sketched by the legendary anthropologist and linguist John Peabody Harrington shows the **tlawetlab̓** (tlhah-wet-tlhahbsh – his version of Stuwilab̓) and the Tuobeda'bs̓ as the two named groups on Lake Washington's northeastern shore, but medium-sized houses, one each, also stood near the mouths of McAleer Creek and at Lyon Creek. The native name for McAleer Creek's mouth, **Sa'cucid** (SAH-tsu-tseed), 'Sa'tsu mouth' took its name from Lake Ballenger, **Sa'cu** (SAH-tsu), 'face'.²¹

I believe the anglicized Y-2 village name, **Sazo-chagin** is Sacucid. The same may also be true for Lyon Creek, **četčal** (chet-chal), and the Y-2 village name **Tho-chu-achel** (possibly **dx^w čət-čal** (dxw [whispered] chut-chal). A single medium house stood near the mouth of Lyon Creek, which, added to the houses at McAleer and

Thornton Creek, may have sheltered a total of between 45 to 60 people. Because each village on the lake maintained its own fishery, there was not the emphasis on connecting marital ties as among riverine groups, hence the lake identity seems not to have been as ardently maintained as it was elsewhere. Perhaps as a result, the up-lake people were considered 'poor,' at least by saltwater people. They were among the very first named groups to lose their habitat identity in the 1860s. A group living on May Creek on the eastern shore of the lake developed an ingenious trap to catch grouse on logs, and an unusual weir surfaced during the lowering of Lake Washington in 1916, but, but it was not studied or described. The people had disappeared before anyone interested enough recorded their culture.²²

Taken all together, the 16 houses of these three groups: 1 large and 15 medium-sized, probably sheltered between 140 to 270 people. The total would have reflected the carrying capacity of the land plus what people produced in their gardens and shared with other groups. The number would have varied with the fluctuations of animal populations: fish, shellfish, waterfowl, elk, deer, bear, smaller animals plus wild and cultivated crops. But given the wide range of available foods, successful food gathering and preserving methods and traditions of hospitality and generosity, the population probably would have remained relatively constant save for epidemics or violent raids.

NATIVE RESOURCE USE IN THE SHORELINE AREA

The 1996 report postulated a native trail system based on ethnographic and historical evidence. This report describes two more trails and provides more detail about how native people fished, hunted and gathered in the Shoreline area and

preserved foods for the winter months. Although Saltwater and Lake peoples made use of river and inland habitats, we focus on their activity in the Shoreline area.

Many saltwater people identified themselves as nobles intermarried with other noble saltwater families. They often built houses for visiting in-laws and had summer homes that sheltered extended gathering forays. To maintain their social status and host ceremonies for large numbers of people required a significant amount of resources, and large houses for storage and sea-worthy canoes, often decked as catamarans to haul bulky goods, were required to serve distant camps.

Fishing

The primary food sources for saltwater and lake people were five species of salmon. These were the Chinook or King Salmon (*Oncorhynchus tshawytscha*), Coho or silver salmon (*O. kisutch*), Sockeye or red salmon (*Oncorhynchus nerka*), Pink or humpbacked salmon (*O. gorbuscha*) and Chum or dog salmon (*O. keta*). Native names for these are: chinook = **yubəč** (yu-buch), coho = **sq^wa'hx^wis** (SQWAH-hweets), sockeye = **scəci** (SCHUT-tsee) and chum = **ł'xwa'i** (tlh-HWAI). Other important salmonids or salmon-like fish were Steelhead (*O. mykiss*) = **Qixw** (qeechw), Sea-run cutthroat trout (*O. Clarki*) = **Stəšəb** (stuh-shub), smelt = **tča'au**, and herring (*Clupea pallasii*) = **stu'ʔal** (STOO-ahl).²³

Salmon were netted or speared as they passed through Salmon Bay and ascended swift flowing Ross Creek into Lake Union. Near the lake's west end,

g^wa'x^wop (GWAH-hhwop) 'outlet', the people operated a weir on Ross Creek, likely a barrier maze that slowed fish down so they could be more easily caught.

On Puget Sound, hunters caught porpoise: **k^wəsyu** (kwus-yu), harbor seal: **sup'qs** (sup-qs) and large Chinook salmon using long-shafted double-headed harpoons with detachable barbed toggles. Lines made of Indian hemp (*Apocynum cannabinum*), imported from eastern Washington connected the toggles to duck-shaped floats with shallow, concave bottoms. When the animal dove, the float went down with an audible 'plump' that hunters could follow over long distances even in fog. Because seal meat was greasy, porpoise was preferred and because these were wary and intelligent animals, they were generally hunted at night where phosphorescence helped track the animals. The carcasses of both, minus entrails, fins and flippers, were baked in deep cobble pits heated by wood fires. Wrapped in fern fronds and placed on the cobbles, the meat was covered with more fronds and mats. Earth might also be piled on and water added to steam the seal meat. Baking took several days, and because neither meat preserved well, capture occasioned a feast.²⁴

Ling cod, *Ophiodon elongatus*, **t'tai'əb** (t-TAI-ub); rock cod, *Lotells rhacina*--**t'aliq^ws** (tah-hleekws); shark, **qwatštalitšu** (qwat-shtal-EET-shu); perch--**sabk^u** (sahbk-u), and smaller salmon were trolled with simple barbs, sometimes the spine of a ratfish (*Hydrolagus colliei*), tied at an angle to a short splint that, when swallowed, caught in the fish's throat. Halibut – **stšut'x** (s-tsh-OOTKH) were caught with larger 'U' shaped barbed hooks baited and hung in a horizontal position since the fish would

not bite on vertical lures. In shallow water, rockfish, bullhead **sxwa'di** (SKHWAH-dee), flounder **p'wa'I** (p-WAH-ee), sole **sxatš** (skhahtsh) and skate were speared, often by torchlight. On the rare occasions when salmon runs failed, brown bullhead (*Ameiurus nebulosus*) could be gathered at a place called **tət'a'iyəb** (tut-AI-yub), 'bullhead,' near the mouth of Meadowdale Creek north of Edmonds.²⁵

The bight between Meadow Point and Point Wells supported extensive kelp and eelgrass beds where crab – **bəsqw** (busqw), shrimp and squid were seasonally abundant. At spawning time, herring schooled in their silver millions to lay eggs on the leaves. In canoes paddled by their wives, husbands knelt in the bow holding an oar-like herring rake. With a broad sweep through the school, sharp hardwood pegs fitted into one edge of the blade impaled the fish and, bringing the rake behind him, the man shook the fish off into the hull. Herring were cleaned, roasted whole and cured in heavy smoke for winter use. Herring eggs were stripped from the eelgrass and eaten fresh (wonderful when they popped on back teeth), but also stuffed in deer intestines, smoked and aged like cheese. People also submerged fir branches near shore that the herring plastered with eggs. Anadromous smelt could be caught with rakes or dipnets and were roasted or smoked but did not cure well for later use.²⁶

Surf smelt (*Hypomemus pretiosus*) and Sand lance (*Ammodytes hexapterus*), caught and prepared like other forage fish (eaten by larger fish), still spawn on Shoreline beaches and their habits were well known to native groups. Both spawn on higher intermediate beaches where smelt often leave shallow 'paths' winding across sandy-

gravel beaches. Sand lance leave circular spawning pits. A variety of smelt, the eulachon or candle fish (*Thaleichthys pacificus*), so fatty that, dried at spawning time, it can be burned as a candle, still frequents Puget Sound but not in the numbers recorded further north.

The Salmon Bay people had beach camps from West Point north to Mukilteo, and their place names often identified the resource collected there. From these camps trails ascended stream canyons to gathering areas atop the bluffs. Several of these camps were in Shoreline.

The place name **x^wix^wədzi'ls** (hwee-hwud-ZEELS), 'sharp at the edges,' described the often angular boulders at Spring Beach, south of Shoreline. Ballard pioneer Margaret Isabel Wandrey describes an unusual manner of catching tasty little grunt sculpin, **sxwəd** (skhwud), (*Ramphocottus ruchardsoni*) at such rocks.

Old Juliana, an Indian, taught me another way to fish using nothing more than her cane. ...Juliana had watched the tides all morning. Now the water was far out from shore and huge rocks were seen all along the beach. ...As we approached a bed of smaller rocks, she stopped. Then her gaze found numerous rocks covered with green growth and barnacles. ...she walked to a boulder which she tapped vigorously with her cane. ...a noise came from under the rock; several little fish grunted a peculiar growl of protest, but Juliana with strength still in her old body toppled the rock and lifted four little fish into a basket which she intended filling from rocks along the beach.

It wasn't so long afterward that Juliana and I wandered back up the trail with a much larger catch of fish than many fishermen have had the good fortune to catch. And ours needed neither hook, line or sinker.²⁷

Clamming

Beach boulders provided anchorage for mussels, rock oysters, limpets, gooseneck barnacles and, in crevices, the octopus. **Sqibqw** (skeebqw) whose salty tentacles (loose salt came with white settlement) were popular. Beaches of cobble, gravel and sand

harbored extensive molluscan life. Mussels, **tulqw** (tool-qw), commonly formed huge mats from which they could be picked and roasted on coals.

Clam gardens also appear to have been developed in the area. People selected a rich clam bed in boulder or cobble fields and cleared rocks from a space as large as 40 by 30 feet that were piled on the sides. These were often boulders of considerable size and covered with barnacles that required a great deal of care and effort to move.

During the times raiding parties harried the people, gathering groups always included men of the village. With the help of wooden pry bars, skid longs, stout lines made of interwoven limbs and woven mats to protect skin, they could muscle out the larger boulders. When found clam predators like moon snails (*Euspira lewisii*) – **ka'mani** (KAH-mah-nee) and starfish (*Asteroidia*)--**q'wəla'či** (qwul-AH-chee), 'fingers' (how wonderful is that?), were removed. Several gardens have recently been found in the Shoreline area even though the building of the Great Northern sea wall has altered the beach by sharply reducing the normal influx of sand and rock from eroding bluffs.²⁸

To harvest burrowing clams, the people used the simple digging stick--a section of ironwood (*Holodiscus discolor*) **quatsa'gwats** (quat-TSAH-gwats). Called a dibber or dibble stick, it is a tool used by ancient hominids that has lost none of its efficacy for its profound antiquity. The early 20th century anthropologist Thomas Talbot Waterman provided a vivid description of a clam digging party using it.

The digging stick is a short piece of ironwood flattened at each end and pointed. It is carefully seasoned and its ends sharpened and hardened in the fire. For digging clams it is used just as it is.

Clam diggers loaf around camp and take things very easily until the tide is at its lowest ebb. When the best beds are exposed, they set to work and move with remarkable quickness, gathering a supply of the best clams before the tide returns.

The clam digger jams one end in the mud and gives the other a circular motion. It goes into the mud very rapidly. In this exercise the old women, who are very adept, flex their bodies at the hips, the head far down, as though they were trying to touch their faces with their feet. In this position they reach around very quickly and easily, and work with astonishing speed.²⁹

Shellfish were sometimes eaten raw, more often boiled, or dried for winter use.

The big clams: cockles (*Clinocardium nuttalli*)- **sxəpab'** (skhuh-pahb), butter clams

(*Saxidomus giganteus*)- **stxwub** (st-khwub), thin shelled littlenecks (*Callithaca*

tenerrima)-**st'absa** (stahb-sah) horse clams (*Tresus nuttalli*)- **ha'ac** (hah-ats), the similar

Trepax capax and geoducks (*Panope generosa*), were dried and traded. The horse clam

ha'ac, 'always good eating,' and the geoduck, **gwi'dəq**, 'he has hairs on his penis,'

preserve their native names. Cockles, butter clams and littlenecks were put on

hardwood sticks and baked before fires. Horse clams, *Trepax* and geoducks were dry-

roasted on cedar splints, but needed to be turned several times to be completely cooked.

Dried clams were indestructible, and large quantities strung on cedar bark strands were

widely traded. Homeward bound interior people looped them around their necks and

pulled them off to nibble on as travel snacks.³⁰

After drying, strings of smaller dried clams placed in a heap about 2.5 X 5 X 2

feet and interlayered with sword fern fronds to keep them from sticking together were

trodden until they were flat. Removing the ferns, nearly twice the volume of clams

could be stored in open weave baskets for winter use.³¹

Stream Runs

It took skill to clean and cut salmon before roasting and smoking it over a fire. Spring and summer salmon were better tasting than the fall 'dog salmon' (chum). It was plentiful, dryer (having less oil) and often fed to dogs, but was easily dried and traded. Through the miracle of modern marketing, American consumers have been similarly conditioned to appreciate the dog salmon of Alaska's Copper River. Eel grass sheltered juvenile salmonids and provided food for returning migrants as they adapted to estuarine and river conditions. Chinook, Coho and Chum salmon migrated up Boeing Creek along with sea run cutthroat trout. Large fish were speared and smaller ones caught at small fence weirs with dip nets. In local mythology, the hero **Sta'kub** (STAH-kub) could throw his great drag net made of cedar and hazel branches over **Lə'pləpL** (HLUP-luplh). 'hanging over', Four Mile Rock near West Point as the great transformation swept over the world, turning it into the rock whose upper half appears to overhang over the lower.³²

Lake Fishing

Home to anadromous fish, lakes also have their own resident stocks. One of the most valued in Lake Washington was the kokanee (*O. nerka*) **e'lalid** (EE-lah-hleed), a freshwater version of sockeye salmon that migrates from the lake up its tributaries. These were highly valued and groups from throughout the region joined lake kin to catch them. White sturgeon (*Acipenser transmontanus*)-**k'watš** (kwahtsh), Pacific lamprey (*Entosphenus tridentatus*), Char (*Salvelinus alpinus*), whitefish (*Coregonus clupeaformis*), shiners (*Cymatogaster aggregata*), peamouth (*Mylocheilus caurinus*),

minnows (*Ptychocheilus oregonensis*) and stickleback (*Gasteroseus aculeatus*) were also taken. The large surgeon was speared or taken by line, and smaller fish in weirs. On the Sammamish River large weirs were erected at fishing time.

The weir on Thornton Creek described by the Government Land Office deputy Surveyor, William H. Carlton in May, 1859, is noted in the earlier report. Probably a fence-maze weir, its existence was noted only because it was located on the line Carlton surveyed between sections 37 and 34 of T26N, R4E. No other weirs are described even though they surely existed on other streams. Located on the main branch of the creek, people reached this weir by a trail from the lake and probably via the creek, being less than a crooked, brush-crowded mile from the creek's mouth.

Even though there is no ethnographic data for native fishing in McAleer and Lyon creeks, we can assume nevertheless that since McAleer Creek drained Lake Ballinger, it had anadromous fish runs of salmon, kokanee, cut throat trout and possibly Dolly Varden (*Salvelinus malma*) and smelt, beyond the normal fresh-water stocks mentioned above. That there was a village at its mouth indicates that its people had at least one weir on the stream, probably near its mouth. They probably also gathered shellfish in its bed for food, particularly the fresh water mussel (*Anodonta oregonensis*, *Margaritifara falcata*), whose pearly interiors may also have been valued.

The discovery of stone sinkers at the Montlake divide indicates people used seine nets. They also used tube weirs woven from willow withes or cedar branches to place in streams, secured to guide logs that funneled fish into the tube. On Wolf Bay on Lake Washington people directed schools of fish toward the weirs by whipping the water

with branches. Once jammed with fish, the weirs were up-ended onto mats and processing began. Light and easily carried or made on the spot, tube weirs were used on Lake Union, Green Lake, Lake Ballinger and on smaller lakes and creeks.

River Fishing

River people were less extravagantly wealthy than saltwater kin, but if they lived in smaller villages and houses, they also developed and erected the great river-crossing tripod weir-**sc^olo'sid** (stsul-OH-seed). 'salmon trap,' every year. A single weir could effectively block all fish from migrating upstream, and myths dealt with such transgressions, but accepted protocols governed its use, Agreements assured that weir screens not in use were lifted to allow fish passage upstream, and screen members were calibrated to allow certain sized fish passage even during use. The fishery had been managed effectively for centuries and the runs could be spectacular.³³

These weirs were steadied by large log tripods. These supported screens that blocked upstream passage and walkways providing access. Men caught the fish milling at the screens with large dip nets and tossed to women in canoes who ferried them ashore to be cleaned and prepared. Men, women and older children worked largely at night by the light of flaming torches, and the glittering spectacles on sussurant rivers with splashing fish and exuberant participants must have been enchanting. River fisheries were successfully managed for millenia, but American greed overfished them in a few decades.

Plant Gathering

All winter village groups cultivated local and outlying gardens. In historic times, village gardens several acres in size were devoted primarily to potatoes introduced by the Spanish and the Hudson's Bay Company, but previously, 'wild' crops like nettles, whose tough fibers were used to make line and nets, braken, whose rhizomes were eaten, and fireweed, whose cottony down was used in weaving would have been cultivated.³⁴

Boeing Creek, **Qaa'dəb** (qah-AH-dub), still has large horsetails (*Equisetum telmatiai*) collected on its lower banks, one of the first green plants to appear in late winter. Early settlers heard the name for the rhizome bulb as 'hub hub'. People eagerly ate these and its juicy stem **sxalk'** (skhahlk) fresh or cooked. Its high silica content gives the plant's upper part its universal name and function: scouring rush.³⁵

South of Richmond Beach, the place name **q'eq'e'waidət** (qey-QEY-wai-dut), 'kinnikinic' (*Arctostaphos Uva ursi*), identified a narcotic ground cover. Its dried leaves were often mixed with tobacco to produce a daze, but there were cases where users stupefied by its smoke were severely burned and scarred falling into hearth fires.

In burned-over breaks on bluffs above the Sound (Buerge, 1996, p.), Using digging sticks women dug the starchy rhizome of the brake fern (*Pteridium aquilinum*). As was customary in his day Waterman used the male pronoun 'his,' in his description of their work, but we should read 'her'.

For digging roots, the digging stick is equipped with a cross piece of elk antler. This object has a perforation in the middle into which one end of the digging stick is driven. The operator puts his two hands on this cross piece and pushes against them with his chest. The Puget Sound people are short in stature and the stick is of the right length to make the operation

easy for them. For digging in the soft, damp earth, the apparatus is not as ineffective as it would appear to our eyes to be. When the point becomes broken, the stick is easily reversed, the dulled end being inserted in the handle.

The cross piece became so identified with its owner that at her death many were placed in her grave.³⁶

Fern rhizomes were roasted and ground into flour to make a black bread.

Women also scooped up cranberries from bogs and, as at clam digging, were remarkably quick at picking greens and berries. They also did remarkable things with their toes to uproot wapato bulbs (*Sagittaria cuneate*), from muddy swamps. Greens and berries were eaten fresh, dried or baked. Many roots and bulbs like camas (Camassia quamas) **q^wəlu'ʔəl** (qwulh-OO-ul), and wapato-**spako'ts** (spah-KOTS), known also as 'Indian potatoes,' were boiled and dried for later use.

In the Puget Sound region, native people are not thought of as farmers, but with dibble sticks and fire they successfully practiced what is known as dibble agriculture. On Whidbey Island many square miles of forest were regularly burned to reduce deadwood and thin trees to allow enough light to nourish herbage sought by browsing animals. People expanded gardens through cultivation and transplantation, and burned them off after harvest to prevent growth of unwanted plants like grass. The marks of repeated burns in open areas above bluffs in Shoreline suggests that these were also cultivated gardens where braken was cultivated. The camps were far enough away from home that for safety, men normally accompanied bands of women and children who did most of the gathering.³⁷

The first green shoots provided a welcome and healthy late-winter change to a diet of dried and smoked foods. Later, women and children picked a series of ripening berries, the major sources being salmonberries (*Rubus spectabilis*)-**st'a'gwad** (STAH-gwahd), red elderberries (*Sambucus callicarpa*), **sc'abta'c** (sts-ah-TAHTS), blackberries (*Rubus ursinus*), **gwa'dbiaq** (GWAHD-bee-ahq), thimbleberry (*Rubus parviflorus*) **hi'tak** (HLEE-hlahk), strawberry (*Frageria chiloensis*) **t'e'laqu** (TEL-aqu) and rose hips (*Rosa nutkana*) **yesta'd** (yes-STAHd), eaten fresh or dried. Looped around their necks, coiled gathering baskets enabled pickers to use both hands. A girl approaching menses or menstruating had a stick of soft wood placed between her teeth and checked periodically. If stained, she had eaten the fruit and broken a tabu that might dissuade berries from producing so generously in the future.³⁸

At forest margins or in thinned areas, people gathered Oregon grape (*Berberis aquifolium*) **qwə'bqwəč** (QWUB-qwubch), salal (*Gaultheria shallon*) **t'a'k'a** (TAH-kah) gooseberries (*Ribes divericatum*), **sa'xab** (SAH-khab), and blackcaps (*Rubus leucodermis*). **tšoko'ba** (tsho-KO-bah), Service berries (*Amalancheria*) **kola'stəb** (ko-LAHS-tub), and crabapple (*Prunus diversifolia*) **ka'ax** (KAH-ahkh) fruiting on bushes or trees up to 30 feet high could be pulled down or children sent up to collect them. Branches holding red and blue elderberries (*Sambucus glauca*)--also called box ender), were broken down and the berry clusters placed on mats where they were separated, mashed into a paste

and preserved in cold streams from which they were later extracted, mixed with fish oil and used as a dressing for greens and fish.³⁹

Gathering baskets were emptied into larger woven baskets lined with maple or thimbleberry leaves for haulage to camp. Spread over cedar bark mats elevated on racks, berries dried in the sun or dehydrated over slow-burning fires, protected in bad weather with woven mats. Baskets of dried berries weighing as much as 150 pounds were carried in large baskets supported by tumplines pressed against bearers' heads. Pioneer daughter Sophie Frye Bass captured the scene.

On their way home from digging clams, picking berries or cutting pitchwood, they would squat on the ground, remove the headbands that were attached to the baskets from their heads and rest. There was always a lummei (old woman) who was a leader among the women, and when she was rested and decided it was time to go, she would say "Ho-bil-ickt-te-dow-wah. Ho-bil-ickt" (move on). With many grunts and grumbling, first one and then another would slowly pick up her basket and ho-bil-ickt (move)⁴⁰.

The upper basins of Thornton, McAleer and Lyon creeks provided rich aquatic and terrestrial habitats. McAleer Creek saw runs of anadromous salmon, kokanee, cut throat trout and possibly smelt into Lake Ballinger, and all three supported resident stream and lake stocks mentioned above. Large weirs would have been erected on McAleer and Lyon creeks as at Thornton Creek, and smaller weirs would have been used farther up on creek and lake tributaries.

The burned-over areas adjacent to and south of Lake Ballinger and Echo Lake would have enhanced the population of browsers such as deer and bear and predating cougars (*Puma concolor*), lynx (*Lynx canadensis*), bobcat (*lynx rufus*), wolves (*Canis lupus*), coyotes (*Canis latrans*) and foxes (*Vulpes vulpes*), not to mention wolverines (*Gulo gulo*)

and other Mustelids: river otter (*Lontra canadensis*), weasel (*Mustela frenata* and *Mustela erminea*), mink (*Mustela vison*), fishers (*Pecania pennant*), and martin (*Martes americana*).. There were also beaver (*Castor canadensis*), muskrat (*Ondatra zibethicus*), racoons (*Procyon lotor*), rabbits (*Lepus americanus*), squirrels (*Spermophilus saturates*, *Glaucomys sabrinus*), and the 'three old women who dig': gophers (*Thomomys mazama*), moles (*Scapanus townsendi*) and the unique mountain beaver (*Aplodontia rupia*) whose soft pelt was valued. There were also avian predators and scavengers such as turkey buzzards (*Cathartes aura*), bald eagles (*Haliaeetus leucocephalus*), osprey (*Pandion haliaetus*), condors (*Gymnogyps californianus*) that may have nested at Matthew Beach Park, and even teratorns (*Teratornis woodburnensis*).

The creeks watered a rich floral ecosystem that bore the imprint of long human habitation. Salal was particularly dense at Lyon Creek and the northern boundary of shoreline with large Western red cedars (*Thuja plicata*), with diameters in excess of 60 inches. This was the mother tree, every part of which was useful, and large trees were the source of vast amounts of thin roots and bark that was cut at the base and pulled upwards, producing lengths of more than a dozen feet without harming the tree. Hardwoods like broad leaf maple, vine maple, red alder, black cottonwood, spirea, hardhack and wild cherry all provided useful materials and evidenced the practice of burning that resulted in the area being a mixed forest.

Permission to gather in certain areas depended on family or kin connections, but sharing, especially in times of need exemplified hospitality. Vast amounts of dried berries, roots, bulbs, fish, shellfish, and meats and smoked delicacies saw the people

through the winter until the next gathering season began. The goal of food gathering was not just to provide food for the day, but for future wellbeing and annual celebrations, feasts celebrating births, coming of age ceremonies, marriages, the assumption of noble names, or commemorating deaths called for gatherings in which attendees needed to be well fed. Feeding guests promoted good feeling, collaborative effort and realized supernatural favor. Supernatural tabus forbade waste in gathering and eating, and feasts celebrated the richness of the world and the ethic of stewardship.

Hunting

Deer-**Sqe'gwəc** (SQEG-wuch), bear-**sčə'tx'əd** (SCHUT-khwud), and beaver-**t'əq** (tuq), were hunted in the Shoreline, whereas elk-**kwa'gwičud** (KWAH-gwee-chud), who in winter crashed through swamps to forage brilliant yellow spathes of skunk cabbage, appear not to have been as frequent. Alone or in groups, hunters brought game back to camp to be gutted, skinned with fingers and butchered. If a carcass was too large to carry from the kill site, it might be butchered in place and parts wrapped in the animal's skin and cached high in a tree until the hunter could return for it. At camp meat would be filleted or chopped; boiled, steamed or roasted for eating or dried for transport and preservation which might take days. Like seal, bear meat was often greasy, and was wrapped in fronds, placed in a pit and covered with earth for roasting. Sometimes a stick embedded in the earth to the bottom of the pit, would be removed during roasting and water poured in to steam it. No dry salt was used to preserve meat until the arrival of American settlers.⁴¹

Every few years hunters would set fires to forests in summer, and early settlers said the smoke was so thick that it was impossible to navigate the Sound without a compass. In some areas of the lowlands around Seattle there were so few trees that surveyors were forced to raise piles of stone to mark section corners. The practice led to a preponderance of Douglas fir (*Pseudotsuga menziesii*), an open forest of healthy trees with a greater variety of understory vegetation and game and lessened the likelihood of destructive forest fires.⁴²

It also created a landscape marked by open lands as Vancouver noted in May, 1792 as HMS Discovery approached Discovery Bay: “As we advanced the country seemed gradually to improve in beauty. The cleared spots were more numerous and of larger extent.” The result was a richness and beauty that impressed the Captain who wrote with unintended irony.

The parts of the vegetable kingdom applicable to useful purposes appeared to grow very luxuriantly...the forests, which may be considered rather as encumbered, than adorned with underwood; although there were several places where, in its present state, the traveler might pass without being the least inconvenienced...”

The serenity of the climate, the innumerable pleasing landscapes, and the abundant fertility that unassisted nature puts forth, require only to be enriched by the industry of man with villages, mansions, cottages and other buildings to render it the most lovely country that can be imagined.”⁴³

Inland

Higher up on the rivers, hunters were acutely aware of the boundaries of their ranges and of the behavior of the game they hunted. The concept of hunting territories resembled settlers’ ideas of land boundaries, but the idea of private land ownership was foreign, and food acquired from a hunting range was shared in the house. Although Shoreline is not inland, those familiar with it also hunted with inland kin, and women

who gathered food, material and medicinal plants in the high country imparted their knowledge to the young, making sure they knew how to use and protect the plants which were traded widely. Additionally, their weaving of durable, useful and beautiful baskets from local materials made possible the mastery of food storage.

OTHER TRAILS

From Lake Union to Lake Ballinger

New information suggests that two previously undocumented trails accessed the Shoreline area. Green Lake, **du-tluš** (du- TLHUSH / dxw- TLHUSH), Licton Springs, **liq'təd** (liq-tud), 'red paint', the Denny Marsh cranberry bog, **slə'qq'ed** (SLHOQ-qed), 'bald head,' Haller Lake, **sisə'təb** (see-S AHLH-tub), 'quiet', Ronald Bog, Echo Lake and Lake Ballinger, **S'acu** followed a north-south valley between drumlins that almost surely featured a trail beginning at the north shore of Lake Union. A LIDAR map showing a consistently narrow and shallow defile about 50 feet wide extending much of the intervening distance would have served as an effective guide to knowledgeable groups. While there is no mention of a trailhead, a path from the lake to a small prairie north of the lake's shore, said to have been the haunt of a white deer, certainly existed, and, with paths from Ross Creek and Union Bay, converged on Green Lake and its fishery. From there it was a short distance to the Denny Swamp. Short distances between the camps argue for a continuous trail connection.⁴⁴

People waded into cranberry bogs and collected the surface berries with combs made of split cedar, elk antler or toothed scoops of mountain goat horn. With this in

one hand the picker flicked, raked or scooped berries into a gathering basket held in the other. When this filled, she adroitly tossed its contents over her shoulder into a larger basket on her back. Collection culled many surface vines that increased the amount of sunlight penetrating to plants beneath the surface, ultimately increasing the yield. Cranberry patches of many acres suggest that continued use kept them productive. A stone projectile point found nearby indicates hunting supplied the camp. A short distance northwest of the bog, mineral springs wearing a petroleum sheen produced residues of ferric (FeO₃) oxide that gave the site its name, **Liq̓təd** (LEEQ-tud), ‘colored’, that was collected, mixed with oil and used as a red paint base for objects used in the spirit canoe ceremony. White paint made from crushed shells covered large dolphin-shaped cedar boards, and on these images of the supernatural beings aiding the journey were outlined in red paint.⁴⁵

From here the trail reached Oak Lake, since filled in, located near the intersection of North 107th Avenue and Midvale Avenue North. This was the site of a relict forest of Garry Oak (*Quercus garryana*) **ča’adz** (CHAH-ahdz) whose existence is recalled in the names of the old Oak Lake school, Oak Tree Village and the Oaklake Apartments. Native people collected acorns in the area, preserving them in baskets made of maple bark and buried in mud for months to leach out the tannin. Another method involved digging a hole beside the longhouse entrance, filling it with acorns and covering it with loose grass and some earth. Longhouse residents regularly urinated on this, and after several months the ‘Chinook olives’ were ready to eat. According to Abilene (‘Abbie’)

Denny-Lindsley (1858-1915), the daughter of David and Louisa Denny, a shell midden bordered Oak Lake.⁴⁶

From there the trail reached Haller Lake, **sisə'ltəb** (see-S AHLH-tub), 'quieted'. Dr. Nile Thompson's translation suggests the quietness of the setting, presumably in contrast to wave action on Puget Sound and Lake Washington. Projectile points and a stone adze found near the lake and mineral springs, and the nearby Wedgewood Boulder, a locus of hunting trails, suggests hunting and the splitting of slow-to-burn skewers of dogwood (*Cornus nuttali*), **kʷəda'bidac** (kwuh-DAH-bewe-dahtch)- for roasting and drying deer meat. A fascinating connection between the wood's native use and the ancient ancestors of Euroamerican settlers is the first syllable in the dogwood tree's name, dog, coming from the ancient Sanskrit **dag**, describing its cut splints used to roast meat. We may speculate that **dac'** and **dag** are distant cognates. A clam shell midden at the lake identified the camp's location as well as the marine addition to the bill of fare.

The name of Bitter Lake, **čal'kwadi** (CH AHL-kwah-dee), 'black caps' (*Rubus spectabilis*)-**tcoko'ba** (tcho-KOH-bah), identifies these tart, delicious berries that are closely related to salmon berries and thimble berries, and also the invasive, blander-tasting Himalaya blackberry. Black caps were eaten fresh but also dried in the sun or baked over low fires into loaves, sometimes mixed with blackberries. This lake also had a shell midden.

Denny-Lindsley wrote that Oak Lake and Haller Lake were refuges where people fled to escape raiders from Vancouver Island. This may have represented an effort on the part of groups decimated by western epidemics, which appeared first on Vancouver Island in the 1780s, to reconstitute their populations. As Henry Smith described, they spread terror on Puget Sound, coming down in large, black canoes to capture slaves. Although she did not mention Bitter Lake, the known presence of a shell midden there, connects its history with the two. In 1906 she wrote:

The northern Indians would torment the Sound Indians till they would hide in the dense woods back of Haller Lake and Oak where the land buyer of today will be surprised to find clams shells left by them. Indians in hiding would creep out in the dusk of evening or feint light of early morning to dig clams and gather mussels.

Old Indian John of Lake Union [Čiši'axəð (Chee-SEE-ah-hud)], who is still living, has told of dodging arrows when he was a young boy while he went to gather muck-a-muck food from the beach.⁴⁷

That the trails leading from the beach to the camps are longer than those segments of the Lake Union / Lake Ballinger trail posited between the camps argues for the latter's existence. In fact, Henry Smith may have alluded to the north-south trail when he described an experience he had shortly after settling on Salmon Bay in 1853.

Deciding to test a revolver that had become somewhat rusty, I stepped out into the yard and fired five or six shots in rapid succession about 8 o'clock in the evening.

Three days after one of the Shilshohs came to my house in a very agitated frame of mind to inquire if I had seen anything of the Stickeens [northern raiders]. He said his folks had heard firing in the direction of my house three nights before and thought I had been attacked by the Northern Indians, perhaps killed, and to save themselves his people had all taken to the woods, where they were still in hiding. He had skulked around Lake Union and along near Salmon Bay and up to my house to learn if possible if the Stickeens had left Salmon Bay.

People certainly fled the raids, but it is plausible to think that the shells may also have been normal camp refuse generated during the days or weeks groups spent there

year after year. Having no shells, dried clams were a lighter carry, but shells kept clams fresh in the hour or so it took to bring them to camp.⁴⁸

No native name survives for the cranberry bog at Ronald Bog, located at NE 175th Street and Meridian Avenue, N. From the 1930s to the 1960s, peat was excavated from the site which later became a dump. Fortunately, Sound Transit is presently restoring it as a wetland. Neither has a native name been recorded for Echo Lake, which is not to say both did not have them. When he interviewed native people in his search for place names in the early 920s, T. T. Waterman estimated that he collected about half of the 10,000 used in the Puget Sound Region. Informants lamented that the old people who could have provided him with so many more were dead. Yet the name Echo Lake, like Haller Lake's native name, may with serendipity express the quiet felt in its tranquil corner of the great forest. It was surely visited.

Where the trail opened above Lake Ballinger, **Sacu**, 'face', the lake with its central islet and eastern, nose-like exit still somewhat resembles a face. The trail dropped down to shore camps where migratory salmon, konakee and trout spawned, and where resident peamouth, whitefish, perch and bass, deer and waterfowl made it a memorable named location. Beside this trail from Lake Union, others provided access from Puget Sound, Lake Washington and the interior.

From Edmonds to Kenmore

A second trail left a popular native gathering place on the beach near the Edmonds marsh and probably up Shell Creek to Lake Ballinger. It continued east, paralleling McCleer Creek, to the winter village of **łahwa'dis** (tlah-WAH-dees),

‘something growing or sprouting,’ near what is now the City of Bothell. This village was associated with the **stsapabš** (s-tsahp-AHBSH), ‘Willow people,” who gave their name to the Sammamish River and Lake Sammamish. The willow (*Salix lasiandra*), **sc’a’p** (STSAHP), grew profusely along the natural levees of this stream and formed graceful borders for its meandering channel.⁴⁹

Edmonds pioneer Etta Jones Brackett (1859-), wife of pioneering logger George Brackett (1821-1927), described a path between pioneer communities of Edmonds and Bothell.

The mail service to Edmonds in 1884 was a far cry...from that of today. Once or twice a week a lone horseman made his meandering way through the woods, along Indian paths, to Lake Ballinger, then Lake McAleer, and skirting the northern tip of lake Washington to the village of Bothell.

Like the trail between Lake Union and Lake Ballinger, this connected an encampment at Edmonds, possibly at Echo Lake, to Lake Ballinger and thence to camps on Lyons and McAleer creeks before reaching Lake Washington at the village of **ł’ahwa’dis** (Tlah-WAH-dees), ‘Something growing or sprouting,’ near the mouth of the Sammamish River. Brackett’s landing in Edmonds and Brackett’s landing in Bothell were both named after George Brackett who knew it well and traveled it often, having settled in Edmonds in 1876 while logging at the mouth of the Sammamish.⁵⁰

It is possible that this trail was used by Sammamish warriors to portage their shovel-nosed river canoes to Puget Sound prior to their attack on the people of the Skagit River delta. The Sammamish warriors had no firearms, only bows and arrows so it probably happened during the 1830s or ‘30s, during the prime of Snaetlum, an

influential Whidbey Island Skagit war-leader, trader and religious leader born probably in the 1770s who died on December 16, 1852. A 40 mile water route the length of Lake Washington and down the Black and Duwamish rivers to Elliott Bay, and another 15 miles on the open waters of the Sound could be avoided by taking the eight mile portage with a stop at Lake Ballinger, a heavy labor but a trip of less than six hours as opposed to several days. From Edmonds, only eight miles of open water need be crossed to get to Whidbey Island's lee, after which it was protected water all the way to the Skagit. Despite the effort, the river canoes swamped approaching Oak Harbor and the attackers had to cross to Mukilteo and walk trails home.⁵¹

Did the Lake Union/Lake Ballinger trail continue north? In December 1855, the Washington Territorial Legislature sent a memorial to the Federal Government asking that a military road be built connecting Fort Steilacoom on the south Sound to the planned Fort Bellingham on Bellingham Bay. Congress approved, and in 1857, U. S. military personnel surveyed the route, and sections were built, the work often contracted out to civilians. It was completed from Fort Steilacoom to Seattle, and from Fort Whatcom to Fort Bellingham, but the long stretch between Seattle and Fort Whatcom remained largely a trail. The 1859 Government Land Office Survey Map of T27N R4E, shows one of the very few completed stretches of road reaching from Section 33 east of Lake Ballinger to Section 1 east of Martha Lake. Following higher, drier elevations to facilitate wheeled traffic, the road skirted several swamps and wetlands as it rounded the two lakes, a route following the logic of the posited Lake Union / Lake

Ballinger trail, which very likely served as a valuable supply and labor conduit for the road project.

From the Lake Ballinger's northern wetlands, a shallow vale extends slightly east to Halls Lake and Scriber Lake, where branching routes would have led to cranberry bogs on the way to Martha Lake, Sliver Lake, Lake Serene and Lake Stickney. A knowledge of topography as well as burn patterns along the trail would have helped guide groups to those locales. At various points along its length, the trail would have been joined by others from the Sound and the Snohomish River valley.

I have proposed elsewhere that as the Puget Lobe disappeared from the Puget lowland, the topographic pattern of dryer drumlin crests paralleling marshy valleys affected the feeding and ranging patterns of prehistoric elephants. Prior to the emergence of forests, the grasses of the dryer ridges provided food for mammoths (*Mammuthus columbi*), whose 'washboard' molars had evolved to that purpose, while the roots and leaves of marsh plants favored mastodons (*Mammut americanum*), whose molars better masticated softer vegetation. Thus, the drumlins were likely traversed by mammoths and the intervening wetlands by mastodons. Humans followed them, and we know they butchered at least one mastodon near present day Sequim.⁵²

After the Pleistocene megafauna disappeared, humans continued to hunt as evidenced by Olcot period tools (9000 to 4000 BP) found in Richmond Beach and an atlatl point in Lynnwood that tipped a spear-thrower produced shortly after Olcott time.⁵³

A trail system connecting camps and resource areas would have persisted even as forests emerged around 5000 years ago. We can surmise that before epidemics devastated the population, trails would have been frequently used by hunting and gathering parties. But with fewer people to maintain long routes, only the connecting trails may have been used. Despite a paucity of data, a trail system must be regarded as an important feature of native life in the area and one deserving of further study.

On these two interesting trails and those described in the 1996 report, travel went in both directions, allowing us to see how resources in and around Shoreline were accessed and transported by saltwater and lake people and their neighbors. While the Shoreline area never supported permanent winter villages, the area's resources attracted people the year around, and the camps where food was collected and dried were occupied for days if not weeks at a time.

It is also worthwhile to imagine what life in them would have been like. We have grown beyond the opinion of individuals like the English Philosopher Thomas Hobbes (1588-1651), who in his extended essay *Leviathan*, described life before the blessings of central government as "...continual feare, and danger of violent death: and the life of man solitary, poor, nasty, brutish and short." Many skills had to be mastered and employed. The extended family with all its demands and joys provided the individual a place of challenge, belonging and meaning. Plants and animals mattered; their lives and welfare needed to be respected and understood in the light of human need and responsibility. Stories and action were how life's lessons were taught, and how the patterns of the world mirrored those of human endeavor.

We should not romanticize this migratory life, either, but dangerous and difficult as it undoubtedly was, we can imagine that a combination of hard work and holiday mood presided during high summer and golden September in those lovely camp settings, fresh and resplendent, full of birdsong and wonder, a tremendous world that humans had helped create and in which they held a honored place.

NOTES ON MAPS

Map 1 J. P. Harrington Map, 1910

John P. Harrington's map of native groups on Lake Union and Lake Washington, c. 1910. In the summer of 1910, anthropologist John Peabody Harrington (1884-1961) taught two courses at the University of Washington during the summer school session: "Indians of the Northwest," and "The Science of Language". He also interviewed many native informants and collected a great deal of linguistic and ethnographic information, including native place names. The map on frame 420 of his copious notes lists the native groups living around Lake Washington. On his sketch map, north is at the bottom.⁵⁴

Harrington used many orthographic styles on his maps. On this we see the barred L (ł), the 'l' sound said with breath expelled around the tongue, the tip of which is on the palate, and the ɭ which is the 'sh' sound, written as 'š' for Whuljootseed. The

small 'H' shape is a glottalized 'x' voiced as the 'ch' sound in the Scottish word, loch. It is written as 'x' for Whuljootseed.

The word **Tławetł** (tlhah-wethl) is a variant of Waterman's sluwitł, the prefixural 's' indicating that a noun is following. It described the marshlands of both Portage Bay on Lake Union, Union Bay on Lake Washington and Ravenna Creek, all related in that stream current had noodled narrow passageways through marsh reeds. **Tławetłabł** (tlhah-wetlh-ahbash), 'Tławetł people,' identifies both those of Portage Bay and Union Bay. They are the Stuwitabš.

North of them (below them on the map) are the **Tuobedabł** (tu-oh-beh-dahbsh), who 'get their name from creek). As mentioned above, the name is written as Tuxu'bid, Tuobed or Dia-hoa-bun. The slough just south of it is probably the wetland between Pontiac Bay and Mud Lake (since drained) at Sand Point. That Harrington locates no other named groups north of the Tuobedabł and west of the **stsababł** (stsa-bahbsh—Sammamish), indicates to me that the houses at Thornton, McAleer and Lyon Creek made up a single winter village group.

Map 2 Map of the State of Oregon and Washington Territory, 1859⁵⁵

This map shows the Military Road from Fort Steilacoom to Fort Bellingham (Fort Whatcom) on Bellingham Bay. I have highlighted the route in yellow. In December 1855 the Washington Territorial Council (legislature) memorialized the Congress for a

road leading from Steilacoom Barracks to Fort Whatcom on Bellingham Bay. In the summer and fall of 1857 army surveyors set the route and did some axe and shovel work, but most of the labor was contracted out to civilians. The goal was a carriage-way 16 ½ feet across and grubbed of rocks and roots to a depth of nine inches. Sections were corduroyed with planks and logs. By 1860 it was extended from Fort Whatcom five miles to Bellingham Bay, but most of the road remained in trail form. Money for the project ran out during the Civil War and it was never completed.⁵⁶

Map 3 Map Of Public Surveys In The Territory Of Washington, 1865

This map (highlighted in yellow) shows the route of the military road as it passed through townships and sections of the public survey carried out by the Government Land Office. The survey map of T27NR4E is one of the few that show a completed section of the road. As Map 4 shows, where its T26NR4E meets The T27NR4E, the road routes do not appear to conform. This is because the township sections in Map 3 are rectangles rather than squares. By the 1880s the wagon from Seattle to the Stillaguamish River was completed and early pioneers to south Snohomish County used it to travel to the interior. It was in use during the 1880 and until superseded by the the construction of the Interurban Railway. Even after the Pacific Highway was built, the route is recalled to have existed about a mile east of itl.⁵⁷

Map 4 The route of new trails and the military road through Townships T25NR3E, T26NR4E, T27NR3E and T27NR4E.

It must be said that no ethnographic data adds to my supposition that a trail ran generally north-south from Lake Union to Green Lake, Oak Lake, Haller Lake and Echo Lake to Lake Ballinger. Likewise, only a clause in a single sentence alludes to a trail from the Edmonds marsh to the Sammamish River mouth, but logic would argue that the trails existed as I describe.

There are the named camps that could be reached only by trails, and there are shells in lake middens that had to be carried there. The shells are not the result of isostatic rebound as Harlan Bretz argued.

Having said that, how can we know the trail's routes? Distance would argue that shorter paths between camps were preferable to longer trails to and from the Sound. To get from the Denny swamp to Haller Lake via a short path is obviously better than having to retrace one's route from the Denny swamp to the Sound and down Sound to another trail to Haller Lake. The same is true for the other campsites named and unnamed. Since it happens that, thanks to drumlins, the campsites on marshes and lakes follow a generally north-south direction, so must have the trail. We should imagine it existing prior to the expansion of forests around 5000 years ago. When the forests eventually obscured the sky and a broad view, the route remained and it and topography guided travelers.

There is little evidence describing native methods for marking or blazing trails. In the open Arctic landscape, the vestibule of North America, rock cairns marked routes. As groups moved south one surmises other methods were employed to mark pathways in the boreal forest. In the Puget Sound region, the only evidence I have about such methods comes from Hartstein Island where it was said native people altered young trees to form double trunks that marked trails.⁵⁸

The lack of data about trails here suggest the network was ancient and well known. Supporting evidence might be found in the study of Meridian Avenue. It closely approximates the line connecting the lakes and marshes. The meridian followed is 122° 20', an arbitrary choice but that suggests surveyors used a trail at this particular point to access interior sections of the Township. The boundary between ranges 3 and 4 East is located about a mile west, and the central axis of the land between the Sound and Lake Washington is about a half mile east, so without a trail, even the route would appear arbitrary. Meridian Avenue begins from the north shore of Lake Union, but I believe the trail began a few blocks north of Green Lake where, in fact, Meridian begins. I am inclined to think that ease of access led to several trails from the south converging on Green Lake and its fishery but that a single trail headed north from the lake. I would argue that south of the lake, Meridian simply followed the meridian.

The foot of the Edmonds to Sammamish began at the 'Bowl of Edmonds,' between the marsh and Shell Creek, the latter presumably named for middens on its lower banks. The trail led up Shell Creek, possibly to Clark Lake and then west to Lake Ballinger. From there it followed McCleer Creek down to Lake Washington, and most

likely skirted the lake shore to ʔahwa'dis. North of Lake Ballinger, an extension of the Green Lake trail probably headed northwest similarly connecting lakes and marshes. As far as we know no native place names for these small lakes and wetlands survive, but we can intelligently guess that they described the resources gathered at them.

An important aspect to consider for all trails is water, not just for the plant and animal resources lakes and wetlands supported, but for drinking. The route crossed drumlins at low places, and even though the elevation gain was small, the loads carried to and from campsites would have made drinking water essential.

Finally, I would sum these notes up by suggesting that today's modern routes between Seattle and Everett: I-5 and Highway 99, follow older routes: the Interurban and the Military Road. These in turn may follow the trail described, which itself likely followed ancient animal paths reaching back to the ice age.

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¹ Thomas Talbot Waterman. "The Geographical Names Used By The Indians Of The Pacific Coast," *The Geographical Review*, Vol. 12, Part 2 (1922), p. 169.

- ² Waterman. *Puget Sound Geography*, MS No. 1864 (Washington D. C., Smithsonian Institution, National Anthropological Archives, 1920), p.
- ³ Allan H. Smith. *Tahoma: Ethnography of Mount Rainier National Park* (Pullman, Washington: Washington State University Press, 2006), pp. 115-6.
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- ⁶ T. T. Waterman and Ruth Greiner. "Indian Houses of Puget Sound," in *Indian Notes and Monographs, Miscellaneous Series 9* (New York: Museum of the American Indian, Heye Foundation, 1921), p. 46-7. Marian Wesley Smith, 1940, *Ibid.*, p. 44.
- ⁷ The spellings come from the modern websites posted by the tribes.
- ⁸ Waterman. "Indian Names for Places About Seattle, Map 'A', 1920, *Puget Sound Geography*, Ms, (Washington D.C. Smithsonian Anthropological Archives, 1920), #64-87. John Peabody Harrington Papers, Alaska/Northwest Coast, Microfilm reel 15 (Washington D. C., National Anthropological Archives, Smithsonian Institution, 1940-42), frame 420. "Villages of the Duwamish at Lac [sic] Washington", In *The Court Of Claims Of The United States, The Duwamish et al., Tribes of Indians, Claimants vs. F-275, The United States Of America*, Defendant, Claims Exhibit Y-2, Earl E. Richards, Commissioner. Filed Oct. 3 1927 Court Of Claims.
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- ¹² Waterman. 1922, *Ibid.*, p. 187, #4.
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- ¹⁴ Smith, 1895, *Ibid.*, p. 86. Colin E. Tweddel. "A Historical and Ethnological Study of the Snohomish Indian People: A Report Specifically Covering Their Aboriginal and Continued Existence, and Their Effective Occupation of a Definable Territory". Pp. 475-694 in *Coast Salish and Western Washington Indians, II (American Indian Ethnohistory: Indians of the Northwest)*, New York, Garland, p. 96.
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- ¹⁶ Waterman, 1920, *Ibid.*, #3, 12.
- ¹⁷ "Historic gravesites bring area's past alive," *Queen Anne News*, Vol. 62, No. 21, May 27, 1981, p. 1, c. 1-5.
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- ¹⁹ Waterman., 1922, Op. Cit., p, 190, #64; p. 92, #109.
- ²⁰ *Ibid.*, #137.
- ²¹ *Ibid.*, p. 190, #51. Harrington, 1940-42, Op. Cit., frame 420. Nile Thompson in Coll Thrush. *Native Seattle Histories From The Crossing Over Place* (Seattle & London: University of Washington Press, 2007), p. 254, #122.

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- ²³ Where possible I include native names for specific fish taken from Bates, Hess & Hilbert. *Lushootseed Dictionary* (Seattle and London: University of Washington Press, 1994), pp. 315, 19. Smith. (1940), pp. 237-245 and Tulaliplushootseed.com / animals. When fish are named by genera or family, I do not include species names, but include the native names I can.
- ²⁴ Smith, Ibid., pp. 246-7.
- ²⁵ Tulaliplushootseed.com / animals, ibid. Smith, Ibidl, 1940, pp. 234-5. Waterman, 1973, Ibid., pp. 65-7. Waterman, "Indian Names for Places about Seattle," 1920, Ibid., p. 145, #1.
- ²⁶ Waterman. Ibid., 1973, p. 61-2. Smith, p. 235.
- ²⁷ Margaret Isabel Wandrey. *Four Bridges to Seattle old Ballard 1853-1907* (Seattle: 1948), kpp. 35-8
- ²⁸ During the months of June and July, 2020, and accompanied by Dr. Nile Thompson and his wife, Carolyn Maar, and others, I have searched the Shoreline area beaches and found a number of these clam gardens, some in excellent condition despite their obvious age. George Gibbs, M.D. . *Nisqually-English English—Nisqually Dictionary* (Contributions to North American Ethnology, 1876).
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- ³⁰ Tulaliplushootseed.com / animals, Op. cit. Professor Nile Thompson provides the translation of gwiduk, personal conversation and email in author's possession. Smith, 1940, Ibid., p.245.
- ³¹ Smith, Ibid, pp. 244-5.
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- ³³ Arthur Ballard. "The Salmon Weir On Green River In Washington. *Davidson Journal of Anthropology*, 3:37-53 (Seattle, 1957), p. 48.
- ³⁴ Richard White. *Land Use, Environment and Social Change The Shaping of Island County, Washington* (Seattle and London: University of Washington Press, 1980), pp. 14-25. White argues that the presence of nettles indicated to native people that the ground would support potatoes. (p. 20).
- ³⁵ T. T. Waterman. "Indian Names for Places About Seattle, Map A." *Puget Sound Geography*. Ms. 1864, Smithsonian Archaeological Archives, 1920, .p. 146. Abbie Denny-Lindsly. "When Seattle was an Indian Camp Forty-Five Years Ago." *Seattle Post Intelligencer*, April 16, 1906, Magazine Section, p. 6, c. 1-7.
- ³⁶ Waterman, 1973., p. 52.
- ³⁷ White, 1980, pp. 23-6.
- ³⁸ Smith., 1940, p 249.
- ³⁹ Smith, Ibid.. p. 248.
- ⁴⁰ Ibid., p 252. Sophie Frye Bass. *Pig-tail Days In Old Seattle* (Portland, Oregon: Binfords & Mort, Publishers, 1937), pp. 167-8.
- ⁴¹ Smith, 1940, Ibid., p.p. 231-2.
- ⁴² White, 1980, p. 24.
- ⁴³ George Vancouver. *Vancouver's Discovery Of Puget Sound*. Ed. Edmund S. Meany (Portland, Oregon, U.S.A: Binfords & Mort, Publishers, 1957), pp. 94,118, 128.
- ⁴⁴ Waterman, 1929, Op. Cit., p. 178. Buerge. Conversation with Lottie Fenton, June, 1977.
- ⁴⁵ Denny-Lindsley, 1906, Op. Cit. Sputudaq Personal communication
- ⁴⁶ Smith, 1940, Ibid., p. 211. Conversation with Dr. Ben Christiancy, Spring, 1999. Paul Kane. *Wanderings Of An Artist Among The Indians Of North America* (Toronto: The Radisson Society of Canada, Limited, 1925, p. 128.
- ⁴⁷ Denny-Lindsley. 1906., c. 2.
- ⁴⁸ Henry Smith. "The Extinct Shilshoh Tribe," in James Costello. *The Siwash Their Life and Legends*, Chapter XXVI (Seattle: Lowman and Hanford, 1996), pp. 86-7.' Denny-Lindsley. Ibid.
- ⁴⁹ Bates, Hess & Hilbert. 1994, p.367.
- ⁵⁰ Waterman, 1922, Ibid., p. 190. Ray V. Cloud. *Edmonds The Gem of Puget Sound: a history of the City of Edmonds* (Edmonds, Wash., Edmonds Tribune-Review Press, 1953), p. 9.

⁵¹ June M. Collins. "John Fornsbys: The Personal Document Of A Coast Salish Indian." in *Indians of the Urban Northwest*, Ed. Marian W. Smith (New York: Columbia University Press, 1949), pp. 287-341, p. 299.

⁵² David M. Buerge. "When Giants Walked Seattle's Streets, *Seattle Weekly*, September 21, 1994, pp. 17-23.

⁵³ I have been the fortunate recipient of many artifacts mailed to me by their finders. Also, students have contacted me to identify and record what are often found during construction projects at their homes.

⁵³ Harrington (1940-42), Ibid, Reel 15, frame 420.

⁵³ Department of Oregon Map of the State of Oregon And Washington Territory compiled in The Bureau Of Topog^L.Eng^{RS} chiefly for military purposes by order of Hon. John B. Floyd. Sec. of War 1859, in *Early Washington Atlas* (Portland, Oregon; Binford & Mort Thomas Binford, Publisher), Second Edition, 1981.

⁵³ Thomas W. Prosch. "The Military Roads of Washington Territory" in *Washington Historical Quarterly*, Vol. 2, No. 2 (January, 1908), pp. 118-126.

⁵³ *Lynnwood: The Land, The People, The City* (Seattle: Peanut Butter Press, 1990), pp. 2, 19, 41.

⁵³ Email from Dr. Nile Thompson, in author's possession, July 17, 2020.

INVOICE

From:

David M. Buerge
2632 122nd S.W. St.
Everett, WA 98204

To:

Vicki Stiles, Executive Director
Shoreline Historical Museum
18501 Linden Avenue, N.,
Shoreline, WA 98133

July 7, 2020

Please send check for the amount of Five Hundred Dollars and no cents (\$500.00) to David Buerge at the above address if this report, *Shoreline Ethnography*, meets with your approval. Thank you.

Sincerely,

David M. Burge

SHORELINE NOTES: PRE- AND EARLY HISTORY

To enter the traditional native world, we must answer basic questions about heat (fire), Wind (air), water and earth and their cycles.

To know the land we walk it from beach to bluff, over its *drumlins*, wetlands, stream basins (Thornton Creek) and know its flora and fauna and their changes.

What do we call Native Americans? Indians “...a people in Dios (**in God** – this definition I get from George Carlin, amazingly enough)”, First People, or, better, by their own particular names.

1. *dx^wdu²a’bš*, *dkhw du AH bsh* (Duwamish, Black & Cedar Rivers)
2. *cilcola’bš*, *Sheel shol AHBSH* (Salmon Bay. 2 houses, 1 *sg^we’g^wey* house)
3. *x²a’č^uabš*, *Kh AH chuahbsh* (Lake Union, 2 (?) houses, weirs on Ross Cr.
4. *xa’č^uabš*, *KHAH chu ahbsh* (Lake Washington, 14 villages)
5. *š^uwila’bš*, *slhu weel AHBSH* (Union Bay)
6. *’a’ciltal=bix^w*, *AH ceelh tahl beekhw* (a name used by Lushootseed speakers generally to identify Native Americans created from the earth of the Puget Sound region by *Doq^weba’hl*).

We need to know their yearly round from late February, *waq²waq²u’s*, *wahq wahq US*, “Frog’s face” (“Mind is coming ashore!”) to November, *sxcⁱ’tcēwa’s*, **SKHCHEE tche WAHS** (“Put your paddles away), and its winter dances: *sxpe’gpegwad*, **SKHPEG peg wahd** (“Time of singing power songs”).

From November until February, people stayed in longhouses – 3-5 closely related families constituting a vital self-sufficient community, an *autarchy*.

Although there were no winter villages in Shoreline, the area had named gathering sites connected by foot trails. Horses requiring pasture appear not to have been used. **Logistics**: canoes hauled gear to trailhead camps on shores and carried to camps. Hearths, drying racks, sheds, caches, gear storage, basket haulage.

Families traveled to traditional camps when seasonal resources appeared.

Gathering: mollusks, fish, birds, mammals, shoots, berries, roots, rhizomes, bulbs, corms, nuts

Preservation: drying (fire, smoke, sun and air), fermentation (underground storage, herring eggs in deer intestines), leeching (acorns in urine).

Preparation of hides, production of nets, weirs, baskets, spears, bows and arrows, snares, tackle and lures.

Specialization within house groups: fishers, hunters, gatherers, carpenters, fletchers, stone and bone workers, basketry and tapestry weavers, organizers, speakers, leaders, teachers, story-tellers, healers and thaumaturgists. **EXOGENOUS**, that is, marrying outside of one's longhouse house or village group.