The Persistent Potato

We did not know about this tasty potato until we moved to the Olympic Peninsula in Washington State. Now it is established in our garden where the plants produce small, slender, and somewhat gnarled, pale, yellow potatoes. They are especially delicious when roasted and keep well throughout the winter in our cool garage.

Flavorful Ozette fingerling potato

Introduction

In recent years, eighteenth century Spanish sailing incursions into the inland seas of the Pacific Northwest have been the subject of increased scholarly research, but in the past little if anything was taught in schools about the presence of Spanish ships north of the 45th parallel. Even fewer in-depth studies were made of the cultures of the people who had for thousands of years made the rim of the north Pacific their home. In hindsight, the impact of the European newcomers, initially few in number, was far-ranging, not only for its political intrigues and influence on the lives of the local indigenous people, but in a very practical way.

The Spanish came not so much for conquest (except for that which involved competition for land with their European and American counterparts) but rather for trade. However, this primary objective implied a secondary one — permanence. Land-based occupation, whether with permission or not, was part of the Spanish intent, as they sought to extend their nation's presence north of their California base. For both the purpose of trade, as well as the option of establishing enduring settlements as directed by their King, the Spanish brought provisions that could support more than a season or two in the northern latitudes. Offering desirable items as trade for food could supply some of their dietary needs, while the acquisition of furs, particularly the sea otter, would fulfill commercial goals. But trade was a two-way street, sometimes successful but always subject to the trader's skill, experience, and ultimately the availability of goods.

Acknowledging uncertainty as well as the possibility of successful acquisition of food supplies, stashed in the holds of the Spanish ships were the seeds to help support short term dietary needs and permanency as well. Engaging in negotiations with the native people, who had been present for

countless generations and had their own agendas, in their preliminary negotiations the Spanish hoped acquire land to build homes and communal structures, while at the same time finding property suitable for a garden. Whether or not the location would prove congenial to the seeds they carried was unknown, but at least one of the victuals was adaptable to a range of local conditions — a small lumpy potato which was both nutritious and versatile. Planted in a garden with other southern vegetables soon after the Spanish arrival could only confirm the local people's suspicions that these shipborne strangers intended to stay.

Their first permanent site situated on the western shore of a large island (although unknown to be so at the time), within a few years the Spanish would expand their influence on the wind-swept, southern coast of a long, wide strait. Along that saltwater stretch which defined the northern boundary of the resource-rich Olympic Peninsula, a small fortification was built on the shoreline of a seasonally protected bay. In 1792, the Makah people, residents at the bay as well as the open coast a few miles distant, watched as the Spanish came ashore, eager for trade, but also determined to show that their presence was intended to be permanent. The Makah had witnessed the arrival of European ships in the past, but some passed without pause and others stayed only briefly. The building of a fortification confirmed that these traders had a more complex agenda.

There were potential advantages for both. The Spanish eagerly sought the pelts of the sea otter while the Makah had their own objectives, such as the acquisition of nails and other manufactured products. Meanwhile, as the small fort was built, land was cleared for a garden. Here wide leaves would push through the soil, confirming that the tubers of a small potato responded well to the cool springtime climate. With its origins in a southerly land, this potato had indeed traveled far, carried in the hold of a foreign ship.

Whatever its history and local origin, at Neah Bay, close to the tip of what would become Washington State, nearly 200 years would pass before this fingerling potato, grown by the Makah for their own dietary needs, would become more widely known to the world as the Ozette.

THE OZETTE POTATO

Today, researchers tell us that these fingerling-type potatoes are most closely related to Mexican and Peruvian types or perhaps to a Chilean potato. They are most likely not descended from European or American varieties. In time, the potato grown by the Spanish on Makah land would acquire a name that reflected its new location rather than its origins. Designated the "Ozette," in acknowledgment of an ancient Makah village on the wind-swept Pacific coast, whether this hardy vegetable descended directly from the potato planted by the Spanish during their short stay at Neah Bay is not known with absolute certainty. But there are hints, both in its genetic makeup and in the cultural practices of the indigenous people who preceded the newcomers by thousands of years and would continue to call the tip of the peninsula bay "home" long after the strange ship and its worrisome occupants had departed.

One possible scenario for the presence of the potato is that the Makah continued its cultivation. Arriving in 1792 and staying for only a single season, on their departure the Spanish apparently "granted" the nascent garden to the tribe. The idea is reasonable if not directly supported. Already proficient at managing native plants for their dietary needs, the Makah might have quickly realized the nutritional and practical advantage to growing potatoes. If the potato did disappear with the departure of the Spanish, other possibilities for its presence in the tribe's diet two hundred years later include acquisition through trade with Vancouver Island tribes or possibly those along the mainland.

For Neah Bay was not the only location where the Spanish would establish a presence. Across the wide strait that defined the northern border of the Makah nation but not the full extent of their coastal influence, another land beckoned, this one a long island with abundant resources, particularly the furs so eagerly sought. They knew the land was home to other cultures; in fact, they counted on it. Prior to the establishment of a fort at Neah Bay, the Spanish had occupied land at what would become known as Nootka Sound, approximately 110 miles north along the shores of a great island. The desired permanence required keeping other sea-faring nations out, as behind the quest for territory was something of equal if not greater importance for the sailor and the officer alike — the acquisition of wealth. The Spanish did not come in ignorance, as they knew such exciting possibilities were possible in the pelt of a fur-bearing animal that thrived in the cool waters of the Northwest Pacific. This was their gold — brown, soft, and luxurious, but for its possible price, "gold" nonetheless. And, as with the metal, the newcomers were not the direct extractors. Rather the local people were, and they would set their own price, engaging in negotiations not for cash but for items carried in the holds of the Spanish ships. With care, the tentative relationship between two cultures could be put on more solid ground with such trade.

The potato was not intended as an item of trade. Rather it had a very practical aspect beyond symbolizing permanence. The Spanish needed sustenance, and the extent to which they could rely on trading for food could not be fully known. Perhaps such trade would begin upon arrival of the Spanish along the island coast. Yet planning for a permanent settlement, or at the very least obtaining enough food to survive for a season, was an immediate consideration. Scurvy, although its treatment was known, always stalked sea-faring ships, and the Spanish were no exception. Upon arrival at Nootka Sound, negotiations for land were begun, buildings planned, and gardens staked out. It was an ambitious dream, and whether the potato or any other vegetable would thrive was unknown. Seven years later the Spanish would be gone; whether the potato still grew, although a possibility, was not recorded.

THE SPANISH CLAIM

For most people, knowledge of the Spanish presence in the Pacific Northwest is limited to landmarks in the region whose titles seem exotic amongst the more common English and descriptive Native American-based names. As with the English names, however, many of the Spanish designations are for people, rather than geographic features. As an example, Fidalgo Island, located on the Salish Sea in Washington State, is named for Salvador Fidalgo, commander of the Spanish ship, the *Princesa*, that in 1792 rounded the westernmost tip of the coast and entered Neah Bay. The land that bordered the bay was the home of the Makah tribe, and in their short sojourn the Spanish would learn much about the bounty of the sea from this long-established group of people, completely at home in the fertile waters of the bay and the tempestuous strait beyond.

Fidalgo's ship was not the first European ship in the region, and his territorial attitude towards the North Pacific concerned not so much the indigenous people but rather other European nations as well as the energetic Americans who were relatively new on the scene. North of Neah Bay, along the coast of what would in time be named Vancouver Island, Nootka Sound was already the site of a Spanish settlement. Eighteen years earlier, under the command of Juan Perez, the frigate *Santiago* had entered the Sound where the crew traded for furs with the local tribes. Four years later, in March 1778, English ships, under the command of James Cook, established contact with the same purpose in mind. Thus,

both the Spanish and the British had traded for furs, but it was the Spanish who laid formal claim to the coastline. A few years before Fidalgo anchored in Neah Bay, the question of "ownership" had escalated sufficiently to raise the threat of war between Spain and Great Britain.

Thus, although less easy to measure in monetary terms than the potential value of furs, it was of extreme importance to the Spanish that a land claim be clearly specified. This would ultimately imply a permanence and indeed a dominance over the indigenous peoples, and the representatives of other sea-faring nations as well. Making a land claim with a planted flag, or a declaration signed by a ruler was a common enough practice by the end of the eighteenth century, but for Spain the "right" in the north Pacific to such formalities was justified with a treaty signed nearly three centuries before.

Written by a Spanish Pope — Alexander VI — the Treaty of Tordesillas was based on the Portugal King's bullish statement that the lands claimed by Christopher Columbus in the late fifteenth century were in fact Portugal's by previous treaties. The monarch could tread heavily upon the Spanish rulers Ferdinand and Isabella, for these sponsors of Columbus' voyage lacked the ships to take on the powerful Portuguese fleet. Ignoring Alexander's decree, the Portuguese succeeded in moving the strategically important north-south "line" to the west, regional at first but later expanded to a circumpolar division. This confirmed Portuguese claims to lands recently explored. Unenforceable from the start and written without the signatures of any other European nation, not to mention the native inhabitants of claimed lands, this Treaty of Tordesillas and the Treaty of Madrid that followed in 1750 would ultimately be invoked in the faraway lands of the Pacific Northwest.

Specified as a certain distance west of the Cape Verde Islands, most of the land on the two sides of the meridian had not been visited by either nation. Although measurement of longitude was subject to much uncertainty, the line fell to the east of the bulge of South America, denying Portugal its territorial claim. And, of course, only Portugal and Spain recognized this division of the planet.

By the late eighteenth century Spain's sphere of influence extended far north of South America and included a wide-ranging presence in the North American Southwest. Here the allure of easy riches in the form of hard metal was complicated by the reality of desert, separation from Europe, and the presence of non-Christianized people who had their own cultural values and practices. Gold was as often as not reduced to a dream, and while some departed as poor as when they had come, for others the challenges of making a living meant acquisition, not retreat. Laying claim to more land created the opportunity for a new source of income that was more constant than gold. This gritty reality resided in a four-legged animal — the ubiquitous cow. Introduced across the vast landscape, cattle were raised not so much for their meat as for their skin. With a ready market far from the dry coast, cowhides were exported by the thousands via waiting ships.

While the humdrum reality of cattle skins rather than shiny gold in California presented unique challenges, including the necessity of importing supplies, by the middle of the eighteenth century the sea-faring Spanish were heavily invested in trade with the Philippines. In part as support of this sea-based interchange that could indeed enrich the trader and his King, the Mexican governor established the port of San Blas on the western coast of central Mexico. Serving as a base, and close to a ready supply of timber for ship building, San Blas was the jumping off point for the ships that traveled north as well as west to the Philippines.

In time, these vessels would carry an even more lucrative hide than that of the lowly cow. Supremely warm and invitingly soft, the fur of the sea otter, an enigmatic animal perfectly at home in the cold Pacific, would become the dream of Spanish entrepreneurs. And the traders would not have to hunt the intelligent beast; the native peoples would acquire and process the furs. In return, they would

receive iron, copper, guns, and other preferred products of European culture. If land claims based on treaties were not sufficient to promote the expansion of the Spanish empire, this lucrative market for sea otter pelts would motivate the push into the northwest Pacific.

By the late eighteenth century, Spain's claim to the western coast of North America had already been challenged (or more likely, completely ignored) by the Russians who had persistently maintained a presence north of what would become Vancouver Island. At the time, this long stretch of land was not designated as an island on maps, nor did it bear either an English or Spanish name. It was home to numerous indigenous tribes who had developed the skills for extracting a living from the sea and land alike. The Russians were as actively engaged in trade, and enforced labor, as possible in such a hostile place. In response to the vicissitudes of the weather, the capabilities of their leaders, the constant need for sustenance and the lack thereof, and the volatile relationship with the native peoples, the Russian influence waxed and waned with regularity.

In part as a response to Russian presence, under the command of the pilot Juan José Pérez in 1774 the Spanish sailed north as far as Sitka, Alaska, stopping but not landing at Nootka Sound. Four years later in 1778, the Englishman James Cook, on his third and final voyage, would travel the northwestern coast as far north as the Aleutians, stopping for repairs and trade at the Sound.

Map of James Cook's voyage to the west coast of North America. Nootka Sound is labeled, but Vancouver Island is shown as part of the mainland; it was not known at that time as a separate island. This map was first published in 1784.

To secure its centuries-old claim and to dominate the growing fur trade, two Spanish ships arrived at Nootka Sound in 1789. There, the newly assigned Spanish governor, Esteban José Martínez, negotiated for land at Yuquot with the Mowachaht tribe. Maquinna, an important tribal chief, knew well from previous experience that the Spanish sought a fur trade with his people; the advantage to him and his tribe would be acquisition of desirable Spanish goods. The Spanish began constructing a fort, complete with gun emplacements; also added were a hut for shelter and a building for supplies. Named Santa Cruz de Nuca, this settlement persisted until 1795, ultimately making it the only permanent Spanish outpost in the region. There was a garden at the fort; here the potato brought north from central Mexico was planted along with other vegetables. Cultivation of a garden was a necessary attempt to provide a steady supply of carbohydrates to a crew often hungry and nutritionally deprived. However, it was this outpost of the empire and the poor leadership of Martínez that would lead to conflict with the English, and ultimately, with the signing of the Nootka Sound treaty the loss of all northern Pacific lands for the Spanish.

By this time, the people who lived there already had experience with the trade in otter pelts, particularly with Captain James Cook, and were adept at negotiating a price that a skin could bring, measured in goods that enhanced their own livelihoods and esteem within the tribe. Any foreign ship that visited the outer coast would of necessity carry within its hold those trading items, such as iron and copper.

The English were also present along the coast and the upstart Americans, seeking to expand the economy of their fledgling country while enhancing their own personal wealth, also plied the cold waters. It was the English, however, who presented the greatest worry. Treaties aside, they had placed their own claims on the territory based upon Cook's explorations along the western coast.

On March 23, 1792, three years after the establishment of Santa Cruz de Nuca, Lieutenant Salvador Fidalgo left San Blas on the west coast of Mexico with orders to sail directly for Neah Bay, located on the Strait of Juan de Fuca approximately 110 miles (as the crow flies) from Santa Cruz de Nuca. Lieutenant Fidalgo commanded the *Princesa*, a Spanish warship with 26 cannons, more than enough to demand respect from any people they might encounter. With him were 89 men of varying backgrounds. If Fidalgo was successful in procuring approval from the local tribe for land near the bay, he would not only establish a second settlement, but also provide a place for relocation of the small contingent at Nootka Sound, if the decision to leave that site was enforced.

Among the supplies intended at least in part to secure the Spanish presence on the Pacific coast were vegetables for a garden, including potatoes.

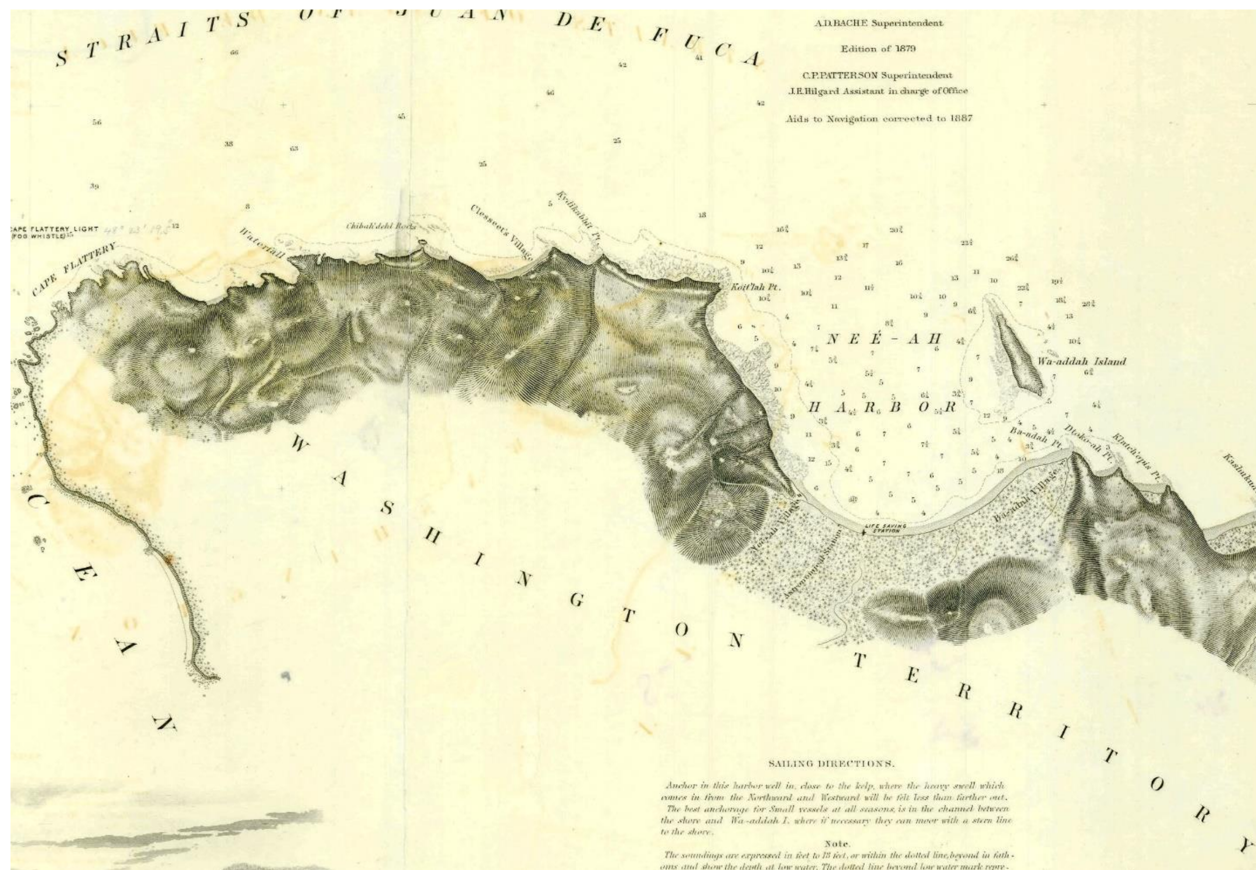
Fidalgo and his men were not the first Europeans to enter the strait. A year earlier, George Vancouver, the British captain of an entourage of two ships, had sailed by the coastal settlements. Vancouver declined to anchor but continued east and south, eventually plying the waters of Puget Sound.

By the end of May, Fidalgo and the *Princesa* had reached Neah Bay where they anchored and began work on plans for a settlement near the west end of the bay.

Things progressed swiftly. A field was cleared, a barracks and other buildings constructed, and significantly, a palisade was built and armed with cannons. A vegetable garden of "tomatoes, onions, garlic, turnips, radishes, corn, and cabbage" was planted, and an enclosure for cows and other domestic stock. Most importantly to Fidalgo and his men, a Cross was raised as a symbol of Spanish ownership.

The Makah, practical in their approach, began to trade food for metal, but from the beginning a relationship of trust between Fidalgo and the tribe was elusive. Each evening, the Lieutenant ordered a

cannon to be fired as a signal that the ship and settlement were not to be approached in the dark. Unfortunately for the newcomers, their ship was anchored sufficiently far out in the bay to limit the effectiveness of onboard cannons. And what started as a congenial interchange between Makah and Spanish had, by the end of the summer, turned sour, as Fidalgo reacted to the killing of his second-in-command, Antonio Serantes, by retaliation against a vulnerable group of innocent native people. The relationship between Makah and Spanish was now defined by guns and death.



Map of Neah Bay, home of the Makah people. Salvador Fidalgo entered the bay in 1792. Map produced in 1853.

To the north, Fidalgo's commander in Nootka Sound, Juan Francisco de la Bodega y Quadra, kept a cooler head, at least from a distance, and commanded Fidalgo to avoid revenge and keep his relations with the Makah on a friendly basis. The settlement at Neah Bay was intended to be permanent and Bodega wanted nothing to jeopardize that hope. In July, Bodega ordered Alonso de Torres y Guerra to head south with dispatches for Mexico City; significantly Torres also carried most of the cannon from Fort San Miguel at Nootka Sound. Under a treaty negotiated with the British, Bodega would be forced to abandon the settlement at Nootka. Torres was directed to examine the state of the settlement at Neah Bay, still with the hope that the fort and its surroundings would provide an alternative to Nootka Sound.

While defending his command of what he considered a very difficult situation, Fidalgo also related to Torres that one of the disadvantages of the bay was the distance ships had to anchor from shore; thus defense, if necessary, was possible only at the fort itself. Fidalgo also expressed the belief that strong winds in winter would necessitate leaving the bay during those stormy months. And partly because of his own actions, he was aware that the relationship with the Makah was fragile.

Meanwhile, at Nootka Sound, Bodega and Vancouver failed to come to an agreement about transferring land to the British, and Bodega decided to sail south. However, although Bodega had been successful in developing amicable relationships with the indigenous people of Nootka Sound, he apparently decided that given the tentative nature of the Spanish presence at Neah Bay, including the volatility of the relationship with the Makah, that withdrawing from Nootka to the southerly bay would not be in Spain's best interests. Thus, he directed Fidalgo to dismantle the fort and bring personnel and salvageable supplies north to Nootka. By the end of September, Bodega was at Neah Bay. Fidalgo was dispatched to Nootka, and Bodega opened a hearing concerning the death of Serrantes as well as Fidalgo's retaliatory actions. Significantly, Bodega transferred ownership of the gardens to the Makah, but nevertheless the departure of Fidalgo and the *Princesa* was undertaken in an atmosphere of uncertainty and distrust. After a stay of four months, the Spanish were gone, taking their animals and equipment with them. Left behind was a garden, where a plant from a warm southern land grew. What would become of the potatoes and other vegetables?

THE RUSSIAN CONNECTION

In 1824, the William & Ann*, a Hudson Bay ship, anchored at the Queen Charlotte Islands (now Haida Gwaii) for the purpose of fur trade with the Haida. Onboard the vessel as physician and naturalist, Dr. John Scouler wrote extensively of the Haida potato cultivation. The efforts of the tribe in raising potatoes were lauded by Scouler, who held a superior attitude towards all native peoples. Scouler does not address the origin of the Haida potato, but from his writing it is clear that a sufficient quantity was grown to permit trade. Did the potato grown by the Haida owe its origins from trade with the people of Nootka Sound? Or could it possibly have been acquired from a different European source?*

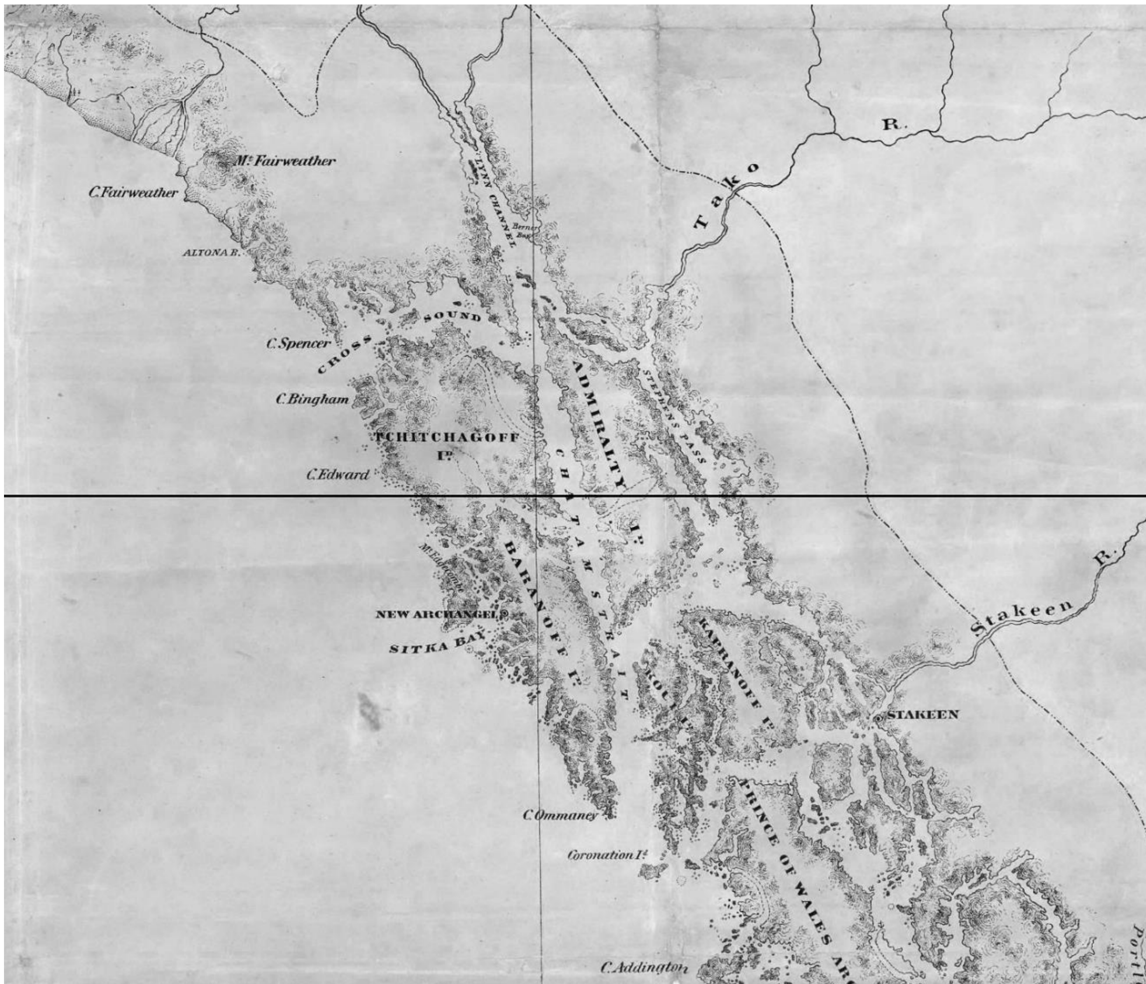
Twenty-five years before Scouler's visit on the *William & Ann*, a Russian army officer and businessman, Nikolai Petrovich Rezanov, was granted a charter by the mentally unstable emperor Paul I for the creation of the Russian-American Company as the colonization arm for Russia in North America. At this time, the Russians claimed all lands north of the 55th parallel, north of the present city of Prince Rupert in British Columbia. At first profitable, within a few years mismanagement and a lack of food for its workers placed the Alaska branch of the Company at the brink of failure. After undertaking a circumnavigation of the globe, one of Rezanov's goals was to secure a consistent food supply line for the American outposts.

In 1805, this capable administrator was ordered to tour the Russian establishments in the Aleutian Islands, where he attempted to institute reforms. His efforts thwarted by the harsh conditions, the scarcity of food, widespread scurvy, and starvation, in 1806 Rezanov departed for California where he hoped to buy food from the Spanish. Successful in his mission, Rezanov returned to Sitka. By 1812, in part due to Rezanov's good relations with the Spanish, Fort Ross was established in California, its mission to provide the struggling Alaskan settlements with food. At the fort in California, potatoes were

grown; in fact, they were one of the few successful crops. But the fort did not thrive, and by 1841 it was sold to John Sutter.

The potato had been grown in Russia since the early years of the eighteenth century, but not in quantity until after the rule of Catherine the Great who decreed its cultivation in 1746. By this time the hardy vegetable was cultivated as far east as Kamchatka, truly a harsh environment for farming. Catherine's order for widespread planting was not enforced until several years later by Czar Nicholas I, who came into power in 1825. When the explorer Ferdinand Wrangel was ordered to take command of the Russian-American Company and sail to Alaska, he would take the potato with him.

An explorer of the Siberian coast and a diplomat, in 1829 Wrangel arrived at the Russia-American Company headquarters on Baranof Island. Established in 1804, Novo-Arkhangelsk (New Archangel) was the second Russian settlement in the region. The first, built in 1799 and named Redoubt St. Archangel Michael (now Sitka), the settlement been destroyed in what was known as the Battle of Sitka, a conflict between the local Tlingit and the Russians. As with Rezanov's attempts at placing the Russian outposts on a sustainable footing, when Wrangel arrived he was intent on reforming the administration and on improving conditions for both the Russians and the native people. As part of his efforts, Wrangel also introduced potatoes to the gardens of the fort. A capable administrator, Wrangel departed in 1834.



Baranof Island with New Archangel (Sitka), home of the Tlingit people.
Wrangel arrived here in 1829. Map produced in 1867.

Was it possible that the Tlingit, a widespread tribe with territory along the coast, obtained their potatoes from the Russians after 1799, perhaps during Wrangel's tenure? If the Tlingit did acquire the potato from the Russians, it would most likely have been earlier than Wrangel's tenure; by the early nineteenth century, the Tlingit, Haida, and Tsimshian had access to sufficient potatoes for trade. Although the potato had been grown by employees of the Russian-American Company several years before Wrangel's arrival, the cultivation was local in the more northerly settlements. Such efforts were recorded in 1785 by Martin Sauer, secretary and interpreter for Joseph Billings, an English explorer.

Billings had previously accompanied James Cook and was subsequently employed by Catherine the Great. Ordered to sail to the Chukchi Sea in an attempt to navigate the Northeast Passage, Billings failed in this directive but did turn east to Alaska, where Catherine sought an update on the Russian settlements. Reaching the Aleutian Islands, Billings sailed the coast, visiting Russian-American Company outposts as he did so. Much of the information about this sojourn, including frequent position updates, comes from a journal written by Martin Sauer who served in the role of secretary and interpreter. Following the expedition, which was completed in 1794, Sauer returned to England where he published an account in 1802.

As the ship approached the Aleutians, Sauer wrote extensively of the journey through the tempestuous island chain, providing some details of both the small Russian settlements and the culture of the native Aleutian people. Life was extreme for Russians and Aleuts, but in different degrees of severity. The Russians, although experienced in the harsh conditions of a northern life, were new to the region and thus its specific demands, while the indigenous people benefitted from generational knowledge of resource acquisition. Russian workers were permitted to bring families with them, and as an attempt to recreate their culture while at the same time holding off possible starvation, small gardens were planted near Russian-style huts.

In July, the Billings expedition reached Stikalidak Island, located in the Kodiak Island chain. Here some 50 Russians were living, and Sauer reported on their small colony: "Several of the Russians have their wives with them, and keep gardens of cabbages and potatoes, four cows and twelve goats." It was hoped that corn could be grown. The latitude of this settlement was north of 56 degrees.

Although by the early nineteenth century potatoes were grown in small gardens in at least one of the Russian's settlements, the primary pursuit was the fur trade, not farming. At locations north of the Tlingit lands, it seems most likely that vegetables were for local consumption and always in short supply. Nevertheless, cultivation may imply dispersion and it is possible that the Aleut people acquired them. At this latitude however, sustenance for the native people was primarily oriented towards the sea.

Another Russian outpost, Yakutat, was established near the mouth of Yakutat Bay in 1794 by the Shelikhov-Golikov Company. Always a marginal establishment, when the Russian-American Company acquired the small settlement, conditions were extraordinarily harsh, and the colony cost the company more than it extracted in trade. Garden potatoes were grown there, but at a location north of 60 degrees, the region could never be described as an agricultural paradise. And the colony itself always seemed on the brink of extinction. However, it is possible that the Tlingit peoples of the region would have learned of the potato.

Thus, although it is known that the potato was introduced by Wrangel at Sitka, but at a date too late to explain the indigenous trade with the British in the early nineteenth century, most of the other Russian-American Company settlements, where potatoes were sometimes grown, were located a considerable distance north of the fort at Sitka. Expanding the cultivation in a harsh land beyond these small communities would be exceedingly challenging. Yet the northern tribes, such as the Tlingit and

Haida, did acquire the potato. The question of origin would be more fully addressed in the 21st century by a genetic study, rather than a strictly historical one.

POTATOES AND THE HUDSON'S BAY COMPANY

By the beginning of the nineteenth century, the Spanish presence was becoming memory at Nootka Sound, but its legacy remained, not only with names and structures but with the possibility of vegetables persisting in well-kept Spanish gardens. The uncertainty over whether the cultivation of potatoes was continued by the indigenous people would remain the subject of ongoing research, but what was known was that by the 1840s potatoes were widely grown along the coast of the Salish Sea, where they were a dietary supplement as well as a trading item.

Some researchers have postulated that these potatoes were acquired from fur trading companies, such as Hudson's Bay Company. For many years, this company dominated the British landed presence in the Pacific Northwest, providing goods, trade opportunities, land, and protection. In 1824, the company established a fort near the mouth of the Columbia River, the great waterway that would in later years define a boundary between Oregon and Washington states. Named for the captain who had sailed the northern waters nearly 50 years before, Fort Vancouver was intended as a permanent settlement. A vegetable garden was established for fort personnel, but it was also advantageous to trade food with the local tribes, and the cultivation of potatoes was thus encouraged. Within a few years, the native people were growing the vegetable for their own use and for barter.

In Canada, trade in introduced potatoes was well established amongst the tribes by the time Fort Nass (later renamed Fort Simpson) was built on the Nass River in 1832. Following the ceremonial opening of the fort with a five-gun salute and the hoisting of the British flag, trade in furs commenced within a week. But the exchange was not limited to furs alone. Potatoes were also an important trade item with the tribes; several communities of Tsimshian, Nisga'a, and Haida people were represented at the fort. And the settlers were not the first to benefit from local cultivation. An active exchange network was already in place. Thus, the potato had been grown in the region before 1832.

The question of where this northern potato was acquired is not fully answered. Possibly the vegetable was obtained from Russian traders through a more northerly connection. Meanwhile, personnel at the fort cultivated their own garden, in part to reduce dependence on the uncertainties of the trading network between the tribes.

If the tribes actively trading around Fort Nass acquired their potato from the Russians, its origins would have been European. Old World potatoes were originally transported from South America in the mid sixteenth century, and through modification over two hundred years any genetic relationship with the central American potato brought by the Spanish to the Pacific Northwest was much more distant. European potatoes were introduced to North America early in the history of European settlement, and eventually these potatoes would be brought to the western half of the continent. They were, however, at least in appearance quite different than the fingerling potatoes grown by the Makah and other northwestern tribes. Thus, two origins for these northwestern potatoes, one to the east via Europe, and the other a legacy of the Spanish, remain a possibility.

Fort Langley: a second introduction?

Established in 1828 alongside the Fraser River, over 400 miles southeast of Fort Nass, Fort Langley was a Hudson's Bay Company post, built in part as a center for trade with the local native people. In 1828, a schooner *Cadboro* brought potatoes to the fort and in less than a year the harvest was sufficiently bountiful to pay native employees with the vegetable, which was apparently preferred over other trade items that had been offered in exchange for furs and fish.

As a new vegetable for the local tribe, the value of the potato was quickly recognized and within a short time it was being grown near the fort. Yet less than five years later potato cultivation was noted as far north as the Haida lands and potatoes were also traded at the more northerly located Fort Nass with the Tsimshian and Nisga'a people. It seems unlikely that the potato introduced at Fort Langley could have been so widely grown and an extensive trade of the vegetable in place within five years.

Back to the Spanish

Thus, given the time frame of potato introduction and availability for trade with the tribes before 1830, the possibility that northwestern potatoes were derived from two — and possibly more American or European sources — seems likely. Certainly, the vegetable was grown by the Spanish in the latter decades of the eighteenth century, and by the Russians in their more northerly settlements.

When the Spanish naturalist Jose Mariano Mociño visited Nootka Sound in 1790, he stated that the native peoples did not take readily to cultivation. However, Chief Maquinna had moved his people when the first Spanish governor, Esteban Jose Martínez, negotiated for land, and by Mociño's own admission, the new location was not as amenable as the old. Motivation for growing the introduced potato at this time may well have been dictated by many factors other than availability, including usable land.

Maquinna was an important leader of the Mowachaht, one of 15 tribes of the Nuu-chah-nulth, a group that traditionally lived along the west coast of Vancouver Island. They were the indigenous people encountered in 1778 by James Cook when he entered Nootka Sound; later Spanish explorers would establish a fur trade in the Mowachaht territory. The Nuu-chah-nulth speak a language of the Wakashan family; this group includes the Makah. Most other tribes along the Strait of Juan de Fuca and the Salish Sea speak Salishan family languages. Extensive trade relationships existed between the two groups long before the arrival of European ships; contact strengthened cultural and familial ties as well.

Because of a conflict with the British that resulted in the seizing of two British ships, and the killing of Maquinna's brother, the governor Martínez left in October 1789, abandoning the buildings and a fort garden as well. In 1790, this disgraced leader was replaced by Francisco de Eliza who brought Pedro de Alberni and 76 volunteers with him. Alberni built barracks, a house for commanding officers, and began serious gardening efforts. He held the natives in high regard, particularly the chief Maquinna, for whom he wrote a song. Alberni also wrote a Nootkan-Spanish dictionary, and exhibited leadership needed for rebuilding the Spanish colony.

Mociño had indicated that grain and corn production seemed unlikely, although these important agricultural food stuffs were deemed most important to the Spanish for a healthy, self-sustaining colony. As Alberni worked hard to fence gardens for vegetables and successfully established an excellent relationship with the native people, he nevertheless faced the hard reality of the quantity of food he could grow. Despite his unceasing efforts, five soldiers died during the winter of 1791 and 32 others

were sent to California for recovery. Within two years, Alberni left with his weary companions when Bodega assumed command in April of 1792. Bodega himself had nothing but praise for the ambitious, capable Alberni, for not only were vegetable gardens in place, but Alberni had also overseen the construction of crew quarters, officer's residences, and a dining hall large enough to entertain both the local people and visitors from ships.

Friendly Cove (Yuquot), 1792, site of the Spanish settlement at Nootka Sound. Evidence of fenced gardens, probably established by Alberni, and fish-drying racks as well can be seen in this drawing.

Later, Archibald Menzies, physician and naturalist on Vancouver's ship the *HMS Discovery* describes the gardens but indicated the native people showed little interest in doing likewise. What he does not say is what Maquinna and his people might have observed. They held Alberni in high regard and certainly would have noted his gardening efforts. Since the Spanish departed by 1795, documentation of what remained of Alberni's efforts ceased for the time.

Documents and science

Genetic clues

Trading relationships among the tribes proceeded with or without the Spanish presence, and within a few years of the end of their occupation the potato was available in quantity for barter by the more

northerly peoples. Thus, whether of English, Spanish, or Russian origins, clearly by the first quarter of the nineteenth century potatoes were cultivated by at least a few tribes.

In 1951, Wayne Suttles published a paper titled "The Early Diffusion of the Potato Among the Coast Salish" that would become the prevailing argument in support of potato introduction to the indigenous peoples by a European or American source. In particular Suttle's research concluded that the Pacific Northwestern tribes had either acquired potatoes from the Russians in the late eighteenth century or from the English and Americans in the early nineteenth. The paper points to the introduction along the mainland by 1827 at Fort Langley on the Fraser River, as well as to a report in 1839 of widespread potato cultivation made by James Douglas, the first governor of British Columbia.

Although at the time, the conjecture of a European route seemed sufficient to explain Northwest potato origins, there were a couple of problems with the idea. One was the proposed date of introduction at Fort Langley. As mentioned above, potatoes were a trade item with the Haida and other northern tribes as early as the 1832 at Fort Nass. The commander of the fort reported that the cultivation was well-established, as a trading network for potatoes was in practice before the fort was built. In fact, it was debated at first as to whether Fort Nass could be a part of that network, demand having to be first met with previous customers. It seems a bit of a stretch that in less than five years such native trading practices could be so extensive. Thus, the timeline for potato introduction and the observation of widespread trading by the first decade of the nineteenth century continued to be problematic for researchers. It would take the application of a genetic approach in the 21st century to offer clues that could in part answer the question.

In 2009, a paper published by Linhai Zhang and her colleagues addressed the question of Pacific Northwest potato origins by utilizing DNA tools to compare local cultivars with those with origins in Mexico and South America. The research indicated that at least three tribes —the Makah (the "Ozette" potato), the Tlingit ("Maria's Potato"), and the Haida ("Kasaan") — grew potatoes closely related to a Chilean or Mexican potato, with the Mexican possibly being a cultivar of a Chilean potato. These close genetic links suggests that the three were brought to the Pacific Northwest on Spanish ships. Yet another local Northwestern potato — the "To-Le-Ak" — historically grown by the Quileute people of the Pacific coast of Washington state is not directly related to the other three, but rather to a different Chilean or perhaps a European cultivar. If potatoes had only been introduced via eastern North America, or from Europe, it would be expected that the Ozette, Maria's, and the Kasaan should be related to European sources. This is not the case.

All three potatoes are of the fingerling type and considered well-adapted to the cool, wet climate of the region, but it is the genetic relationship, not the physical appearance, that seems to confirm the close relationship of the Makah, Tlingit, and Haida potatoes to each other and with either a Mexican or Chilean potato. This study provides weight to the argument that the potatoes established along the northwest coast descend from those brought by the Spanish. And, most importantly, it argues strongly for a continuous cultivation since the last decade of the eighteenth century.

HOW TO MAINTAIN A POTATO PATCH

It has been argued by some researchers that the single-season presence of the Spanish at Neah Bay makes it unlikely that their garden persisted after dismantling of their fort and departure in the autumn of 1792. Although it seems likely the potatoes were harvested by July, there is no indication that this dietary staple was traded. And the relationship between the Spanish and the Makah had deteriorated

with the killing of a Spanish soldier and Fidalgo's retaliatory strike. In fact, Bodega, the commandant at Nootka Sound, had apparently already decided to abandon the Spanish fort at Neah Bay. The gardens were now left behind, with whatever was growing there accessible to the tribe.

Did the Makah continue the cultivation of the potato? To answer this question, a couple of considerations come to mind — the nature of potato regeneration and the food gathering practices of the Makah, work most often undertaken by women.

For any gardener who has grown potatoes, the tendency of plants to emerge year-after-year is apparent. In fact, containment is on occasion not an easy task. Perhaps, in consideration of disease or other factors, the gardener may move or reduce the size of a patch for a growing season. Another vegetable might be sown where potatoes were previously grown. Yet all is not neat and pure in the former potato patch. Amongst the germinating lettuce (for example) the telltale leaves of potato plants reveal themselves, evidence of spuds beneath the ground. Pulling the leaves and stem is easy enough; expecting that effort to be the end of the potato outlier is a gardener's dream. In time, the potatoes will be reduced in size, but they tend to persist for several seasons, without the help of the human hand. Such could have easily been the case at Neah Bay or Nootka Sound.

As to their experience with harvesting, the Makah lived in a land rich in native plants. Although the tribe depended on the sea for much of its sustenance, the need for carbohydrates, not to mention the appeal of a diversified diet, called for exploitation of all the land and sea had to offer. Countless generations had utilized these resources and, with the passage of time, harvesting and preparation practices would undoubtedly have improved from experience and knowledge. The native people passed on such experience from generation to generation.

Available native plants included both those collected on stems and vines, such as berries, and many root crops as well. Nutritious camas bulbs were dug each year on the Olympic peninsula and the vigorous roots of ferns were collected. All of this was done to satisfy seasonal tastes for fresh food, but of equal if not greater importance in terms of survival, for the less bountiful seasons to come. Preparation went hand in hand with preservation, and techniques such as drying were seasonally employed, both for the protein-rich animals of the sea and rivers, and for the harvest of the land.

These were time-honored practices, sanctified with ritual, and replete with cultural knowledge and continuance. Yet as with many aspects of the natural world, inconsistency in plant availability was always a concern, and food could be scarce as well as plentiful. Availability of a new source of a familiar native plant would certainly be noted and utilized. This certainly seems possible with an exotic plant, such as the Spanish potato.

The story is told of the introduction of the potato to the Quileute people in the mid-nineteenth century. This potato was acquired by trade with American settlers who had claimed land and begun farming in the ancient territories of the Quileute. The tribe had a long history of native plant use, including utilizing the bracken fern (*Pteridium aquilinum*), a large and locally common deciduous, perennial fern. Bracken fern roots were ground into a paste and baked into a loaf; these could be stored for winter use. Still considered a traditional (and tasty) food, bracken bread was in time replaced with the potato, as well as the turnip and carrot. The yield in volume was greater; the acquisition of an excellent carbohydrate was a practical advantage, one not to be ignored.

In time, genetic studies would reveal the Quileute potato to be derived from a different source than the Ozette potato, again indicating the possible introduction of the vegetable by multiple avenues of acquisition amongst the tribes of the Northwestern coast.

While the Spanish potato may have been continuously present in the coastal prairies of the Makah nation, it is also possible that what would be named the "Ozette" potato was acquired through trade. The linguistic ties to the Vancouver Island tribes, including the Mowachaht of Nootka Sound, would have contributed to the ease of trade relationships. Within two years of the first Spanish occupation, the site would be effectively abandoned by the disgraced governor Martínez. However, continued presence for a short time was dictated by the Nootka Treaty between the British and Spanish, in which Vancouver and Bodega would attempt to come to an agreement. Prior to the detailed negotiations, the arrival of Alberni, the capable man who established a close relationship with the tribe, resulted in the successful cultivation of a vegetable garden. According to the naturalist Mociño, the Mowachaht did not copy Alberni's efforts at this time, and as the Spanish left as required by the Nootka Convention (although agreement on specific terms was not achieved by Bodega and the English trader and explorer, Vancouver), the garden would have remained. And as with the Makah lands to the south, the potato may have persisted in the cultivated land. Certainly when Bodega arrived to take command, the vegetables were thriving, thanks to Alberni.

The Nuu-chah-nulth people enjoyed a close trading relationship with the Nuchimanes of northern Vancouver Island and the southern Queen Charlotte Strait. They lived in a land perhaps less amenable to edible plants than the Makah and relied heavily on the bounty of the sea for their dietary requirements. However, native plants were collected and bartered with trading partners. The concept of kinship management of tracts of land for native food sources was also practiced at this time. It was recorded that the Mowachaht people traveled inland during the summer months for hunting purposes; Bodega himself acknowledges the reduced population at the coast. It is logical to conclude that plants would have been collected and processed at these summer camps. Unfortunately, the paucity of comments — early writers generally the women's contribution to food supply — by European and American fur traders concerning plant harvesting and possible modification to the landscape have made detailed knowledge of plant acquisition practices difficult to obtain.

John R. Jewitt, an armorer on the British ship *Boston*, was held captive by the Mowachaht chief Maquinna after the attack on the ship in March 1803. Jewitt, and a sailmaker, Thompson, were the only two survivors, being spared for their useful skills. During his two-year stay at Nootka Sound, Jewitt recorded many details of the culture, in particular the dependency on the sea for food, as well as his own efforts to adjust. Often discredited as racist in attitude, Jewitt does offer a few hints about the plants utilized by the Mowachaht and the trading relationships with other tribes, including the Makah. He speaks of "bramble" berry gathering and of collecting nettles during a summer when preserved stores were reduced and food collection was undertaken daily. Jewitt's fellow captive, Thompson, a sailmaker, collected onions and turnips at the remains of the Spanish garden, a significant event that took place ten years after the departure of the Spanish. Although Jewitt does not mention whether the garden was tended, it had apparently persevered. It is an interesting possible link between the Spanish and the continuance of their cultivation efforts amongst the native people. It is also worth noting that onions and turnips typically require care on a yearly basis, and the persistence of any garden would also have been difficult with the presence of native plant species that could easily invade. Was tending possibly undertaken during the ten years since the Spanish departure?

The gap between Jewitt's capture in the early nineteenth century and the evidence of trading amongst the northern tribes, including the Tlingit and Haida, is thus reduced to a couple of decades, or little more than a single generation. When the Haida brought potatoes to Fort Simpson in 1834 it was apparent that the local trade was well-established, enough to further motivate the fort commander to

plant potatoes. His concern of availability was well-founded as there were already customers for the nutritious vegetable. The argument is strong for a continued presence of the potato amongst the northern tribes, as both a food stuff and an item of trade.

To the wider world – an Idaho farm and Slow Food

In the late 1980s, David Ronniger, a farmer from Moyie Springs, Idaho, obtained the Ozette potato from a Makah grower at Neah Bay and offered it through his own seed catalog. With this introduction, this fingerling potato would become known to a much wider audience and within a few years the combination of unique taste and history begin to interest groups such as Slow Food, an organization with the mission of introducing tasty food with a historical context.

Begun in Paris in 1989, Slow Food is an organization created in part as a response to the fast-food market, where, as that name implies, the concept is more for a quick meal than necessarily a tasty one. Slow Food was particularly concerned over the loss of diversity due to large-scale agricultural production. The founders were interested in the connections that food represents in human culture, including the preserving of tradition, and the environment in which crops are grown. Represented in 160 countries today, the movement counts more than 150,000 members and is a non-profit organization. From its “Ark of Taste” program, the Presidia was created, a program that Slow Food would invoke to promote and preserve the Ozette potato. The Presidia project is committed to developing a working relationship with small-scale producers, with the goal of preserving foods that may be at risk of extinction.

In 2005, in a collaboration with the Makah the Slow Food organization began a campaign to grow the Ozette potato in quantity. By November of 2006, Slow Food Seattle proposed including the Makah potato as a Presidia candidate. With tribal agreement, several farms, a USDA Agricultural Research Station, and the Chefs Collaborative, the Slow Food Seattle organization bought 500 pounds of Ozette seed potato from Milk Ranch Specialty Potatoes. This was distributed and by autumn the potato was available for purchase. In 2008, the Ozette was an official Presidia project.

Milk Ranch, located in Colorado, would later merge with Ronniger Potato and begin production of Ozette seed. By 2019 Ronniger Potato no longer offered the Ozette, but growing on a large scale had been undertaken by Grand Teton Organics, located in Idaho Falls, ID.

Successful growing has been an up-and-down process, as floods, cold, and other uncontrollable forces of nature affect outcome, as they do with so many plants, both native and introduced. But the potato’s future seems more secure under the auspices of the dedicated growing program of Slow Food.

Not confined to an organizational approach for distribution, Ozette potatoes are grown locally outside the Makah Reservation, where its adaptation to local conditions, its taste, and its keeping qualities make the potato an excellent choice for local gardens. It can thrive outside the region as well. The future seems secure for this fascinating potato with a history linked to places far away and the local gardens maintained for generations.

Conclusion — Continuance and dispersion

The physical distance separating the northern peoples who were engaged in growing and trading potatoes and a timeline that reveals how early they were grown, are problematic for an American or European origin throughout the lands of the Pacific Northwest. It is possible — in fact quite likely — that the potato was introduced more than once. One of the most convincing introductions is that of the

Quileute people who record the availability of potatoes as a trade item with the local white settlers; the genetic background of this potato is distinctly different than the Ozette potato. And as a vegetable that could be readily harvested given the Quileute's previous knowledge of native root crops, the potato was easily added to the tribe's food supply.

Beginning in the second quarter of the nineteenth century, potatoes were unquestionably grown at forts established by the Hudson's Bay Company. At Fort Langley on the Fraser River, documentation of acquisition by the native people confirms the increased cultivation of the potato beyond the boundaries of the European and American gardens. Far to the south on the Columbia River, potatoes were grown near Fort Vancouver for both purposes of trade and sustenance.

Regarding the earlier availability of the Spanish potatoes, although the historical evidence may not be sufficient to prove that the Ozette potato descends directly from the potatoes at Neah Bay planted by the crew of the *Princesa*, who stayed for only a single summer season, neither can the idea be discounted. Sufficient documentation of continued presence at Nootka Sound also has gaps, but the presence of the potato amongst the northern peoples is an intriguing connection, particularly since indigenous trade was a time-honored practice. These northern potatoes have been recently studied with genetic tools not available in the past, research that has shown a close relationship between three, grown by the Makah, the Haida, and the Tlingit. In addition to a confirmation from scientific research, the practices of the indigenous people in tending native plants for the tribal food stores points to the possibility, if not likelihood, that an introduced vegetable would be equally adaptable to methods already in place.

Perhaps the Makah received the Ozette potato in trading with the Mowachaht of Nootka Sound or with more northerly tribes. In any case, whether continuous beginning with the Spanish presence at Neah Bay, or acquired from other native peoples, there seems little doubt that the Ozette potato has been grown on the northern Olympic peninsula for generations, enough to place it in a category along with the native plants utilized by these versatile, adaptive people.

Potatoes were definitely grown at forts and trading centers constructed by the Hudson's Bay company. Documentation of acquisition by the local native people at these outposts confirms the increased cultivation of the potato beyond the boundaries of the European and American gardens. Evidence of potato introduction is documented at Fort Langley, the Hudson's Bay establishment on the Fraser River, and along the Columbia River, potatoes were quickly adopted as a food source by native people. As white settler presence increased, so also did potato exchange and cultivation. The vegetable eventually became important enough to become part of ritual and celebration amongst several tribes; this elevation of the potato reflects local appreciation for its virtues as a dietary staple. In time, production would decrease as land use practices became increasingly subject to treaty and alteration. Yet the potato would remain. Honored today by local festivals, such as that by the Tlingit of Sitka, Alaska, each year, the small, nutritious potato stands as an important symbol for a long history of plant harvest by the indigenous people of the Pacific Northwest.