Portland State University PDXScholar

Anthropology Faculty Publications and Presentations

Anthropology

3-28-2008

Exploring the Chinook Culture Contact at Station Camp at the Mouth of the Columbia River

Douglas C. Wilson Portland State University, doug@pdx.edu

Let us know how access to this document benefits you.

 $Follow\ this\ and\ additional\ works\ at:\ https://pdxscholar.library.pdx.edu/anth_faccollege.$

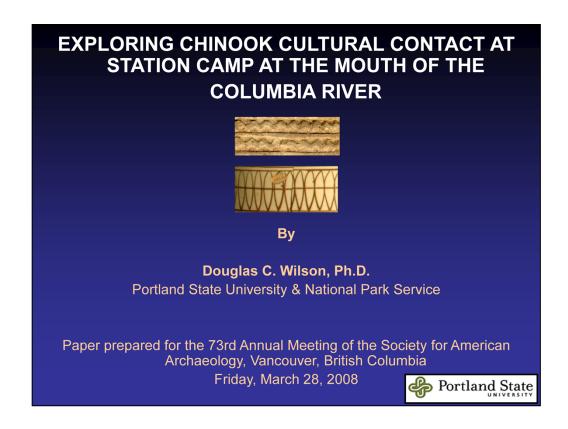


Part of the Archaeological Anthropology Commons

Citation Details

Wilson, Douglas C., "Exploring the Chinook Culture Contact at Station Camp at the Mouth of the Columbia River" (2008). Anthropology Faculty Publications and Presentations. 10. https://pdxscholar.library.pdx.edu/anth fac/10

This Presentation is brought to you for free and open access. It has been accepted for inclusion in Anthropology Faculty Publications and Presentations by an authorized administrator of PDXScholar. For more information, please contact pdxscholar@pdx.edu.



EXPLORING CHINOOK CULTURAL CONTACT AT STATION CAMP AT THE MOUTH OF THE COLUMBIA RIVER

By

Douglas C. Wilson, Ph.D.
Adjunct Associate Professor
Department of Anthropology
Portland State University
141 Cramer Hall, 1721 SW Broadway
Portland, OR 97201

Phone: (360) 921-5241

Abstract: The Station Camp/McGowan site, at the mouth of the Columbia River, contains the remains of a contact-period Chinook Indian village characterized by abundant fur-trade era goods and well-preserved architectural features associated with at least three plank structures. The Chinookan fur-trade site (identified as the "Middle Village" by Chinook people) contains an abundance of wealth items and a

dearth of productive tools and debris within traditional activity spaces. These data suggest the intensity and context of interaction between Native American groups at the coast and Euro-American traders.

Paper prepared for the 73rd Annual Meeting of the Society for American Archaeology, Vancouver, British Columbia

Friday, March 28, 2008

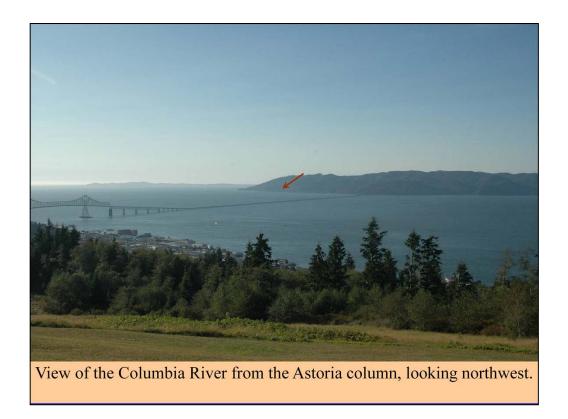
"Although not entirely mute, historical archaeological research has not played a major role in contributing to the process of remembering and thus, in helping to open new understandings of Native Americans during and after European contact." Rubertone 2000

INTRODUCTION

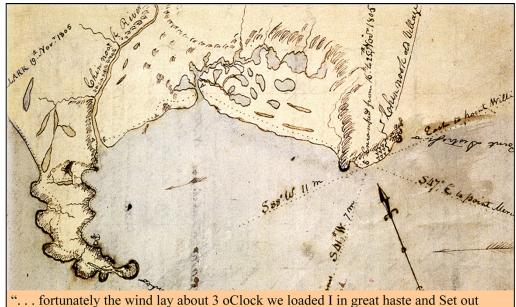
Archaeological studies of colonization and culture contact in the Pacific Northwest have explored fur-trading establishments and their multicultural colonial settlements, such as the extensive work at Fort Vancouver and the Hudson's Bay Company Village, initiated by Louis Caywood in 1947 (1955), and continuing today (e.g., Kardas 1971; Hoffman and Ross 1976; Cromwell 2006). Archaeologists have also conducted work at Christian missions, like the work by Judith Sanders (now Sanders Chapmen) and David Brauner (1983) at Jason Lee's Williamette Mission; or at major immigrant sites, like the extensive work by Oregon State University at Champoeg (e.g., Speulda 1988). Few historical archaeologists in the Pacific Northwest, however, have explored the fur trade from an American Indian perspective. As Rubertone (2000) has noted for American historical archaeology, we have not "played a major role in contributing to the process of remembering and thus, in helping to open new understandings of Native Americans during and after European contact." The ongoing work of Ames and his colleagues at the Cathlapotle and Meier sites (Ames, Raetz, et al. 1992, Ames, Smith, et al. 1999; Ames and Maschner 1999:112) and the papers of this symposium suggest that this focus in archaeology is shifting to the American Indian entanglements with English, Canadian, American, and other colonizers.



This paper describes a fur-trade-era Chinook village (ca. 1792-1825) near the mouth of the Columbia River. The descendants of the inhabitants of that village, the modern-day Chinook, have identified it as "Middle Village", a site that was advantageously placed upstream from the anchorages for maritime fur traders at Bakers Bay and across the river from the terrestrial fur trade post at Fort Astoria/Fort George. It also happens to be associated with Lewis & Clark's "Station Camp", where the Corps of Discovery spent ten days reconnoitering the area, collected a number of important bearings to distinctive geographic features, and as a group voted to winter at Fort Clatsop on the Oregon side of the river. Its scientific importance, however, is not with the short Lewis & Clark occupation, but because it contains an abundance of early fur trade artifacts within structural remains that exhibit traditional Chinookan attributes.



Excavations at Station Camp provide a new set of data for the mouth of the Columbia River, one of the centers of the British and American fur trade on the Pacific Coast during the critically important early fur trade period. Information on the architecture, artifacts, and structure of this site provide a unique and useful contrast with data from contact-period sites explored further upstream and elsewhere in the Pacific Northwest (e.g., Ames et al. 1999; Kaehler 2002; Marshall and Maas 1997). Likewise, these archaeological contexts provide a means to explore the nature of exchange across the lower Columbia River complementing (or perhaps contrasting) with the ethnohistoric record (e.g., Hayda 1984, 2005).



"... fortunately the wind lay about 3 oClock we loaded I in great haste and Set out passed the blustering Point below which is a Sand beech, with a Small marshey bottom for 3 miles on the Stard. Side, on which is a large village of 36 houses deserted by the Inds. & in full possession of the flees, a Small Creek fall in at this village, which waters the Country for a few miles back..."(Clark in Moulton 1990, 6:48).

THE PROJECT

Lewis and Clark described Station Camp as located near an "abandoned" village of 36 houses (Moulton 1990:48-51). The National Park Service and Portland State University excavated Station Camp to assist in the development of a park to commemorate the Lewis and Clark expedition and to interpret the indigenous Chinook culture at the mouth of the Columbia River. The park design involved a realignment of a portion of U.S. Route 101 to provide an area along the river in which to place park trails, parking areas, and interpretive materials. The project is a partnership between the Washington State Historical Society, Washington Department of Transportation, and the National Park Service.

Let me stress that there was no clear evidence of the Lewis and Clark camp during our excavations. Given its ephemeral nature and the abundance of fur-trade artifacts associated with the Chinookan contact-period component, it would be very difficult to identify any definitive archaeological traces of this campsite. While such a find would be valuable in a commemorative sense, placing the explorers directly within one of their more important campsites at a critical juncture, the archaeological significance of the site is not tied directly to the Lewis and Clark story.

Principal Investigator: Brian F. Harrison Field Technicians: Jenelle Varila, Leslie O'Rourke, Rachel Stokeld, Bob Cromwell, Carroll Hill, Danielle Gembala Cartography: Keith Garnett, Anthromaps Principal Investigator: Douglas C. Wilson, Ken Ames Field Directors: Robert Cromwell, Douglas C. Wilson, Cameron Smith Crew Leaders and Field Technicians: Brian F. Harrison, Eric Gleason, Jacqueline Cheung, Leslie O'Rourke, Bill Kirk, Dan Martin, Melissa Cole Darby, Rachel Stokeld, Danielle Gembala, Deborah Wood, Ray Depuydt, Lynne Johnson, Angela Suzak, Dan Crim, Ben Diaz, Deanna Dalton, Wendy Wright, William Gardner-O'Kearny, Sarah Davis; volunteers: Elaine Dorset, Kurt Johnson, Sean Johnson, Carroll Hill, PSU students Chinook Monitor: Charles Funk Backhoe: David DeLyria, Archaeological Services of Clark County Cartography: Keith Garnett, Anthromaps

On behalf of the partners, Brian Harrison conducted the archaeological survey and testing work at Station Camp between 2002 and 2004 within the right-of-way for the highway realignment and to the northern edge of the existing highway (Harrison 2002, 2004). National Park Service archaeologists conducted data recovery excavations at the site in two phases, with the first phase occurring during the winter of 2004/2005 under the direction of the author as Principal Investigator and Robert Cromwell as Field Director. The second phase occurred in the late summer of 2005 as a joint National Park Service/Portland State University project under the direction of the author. Kenneth Ames served as advisor and mentor in the second phase of the project. Washington Department of Transportation consulted with the Chinook Nation and other interested and consulting parties, and Charles Funk of the Chinook Nation acted as site monitor.

Report Preparation: Phase 3 work: 2005-2008 NPS and Portland State University

Report preparation and discussion: Douglas C. Wilson, Kenneth Ames Ceramics: Robert Cromwell

Avifaunal remains: Kristine M. Bovy

Fish and shellfish: Virginia Butle

Geoarchaeology: Loren G. Davis and Michele L. Punke

Glass Trade Beads: Christopher R. DeCorse

Environmental, historical and archaeological background:

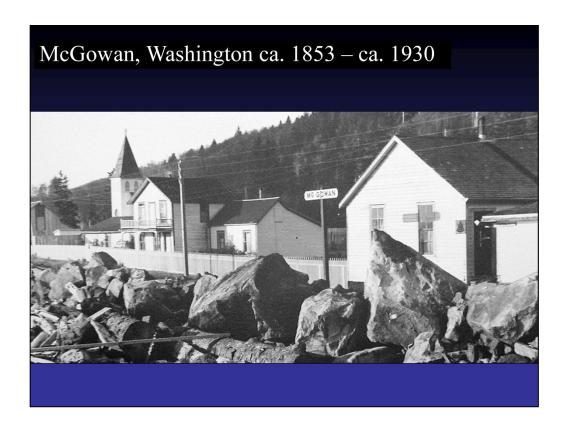
Brian F. Harrison

Faunal remains: R. Lee Lyman

Lithic tools and debitage: Cameron Smith

Archaeobotanical remains: Nancy A, Stenholm

Artifact photographs: John Edwards and Eric Gleason



Two components were identified, one associated with the historical 19th and early 20th century salmon cannery/townsite of McGowan and one, the subject of this paper, a contact-period Chinookan occupation.



The contact period component was evident from the presence of musket balls and gun flints, free-blown vessel glass, glass trade beads, argillite tobacco pipe bowl fragments, a lead bale seal, English-manufactured creamware ceramics and Chinese-made Cantonware ceramics, as well as Native-produced lithic artifacts, including a projectile point, girdled net weight, tabular and pumice abraders, and lithic debitage. The fur trade-era artifacts generally pre-date Hudson's Bay Company sale items (ca. 1821-1860). There is some evidence for a sparse precontact component dating to as early as the 14th century, but the majority of the deposits at the site were associated with late 18th and early 19th century trade goods. An earlier component within the broader site area or landform may exist outside of the circumscribed area of the project.



FEATURE TYPES AND HOUSE STRUCTURE

The features of Station Camp are one of the most significant aspects of the site. The features associated with the contact-period component provide valuable information on traditional Chinookan architectural elements, storage pits and systems, and hearths. There are few sites in the region that have been excavated with as well-preserved features that date to what appears to be such a short-term of occupation (primarily the early fur trade period). This aspect of the Middle Village component of the site is therefore unique and provides information useful in assessing the construction and uses of plankhouse structures in the Lower Columbia region at contact.

FEATURE TYPES AND HOUSE STRUCTURE

The features of Station Camp are one of the most significant aspects of the site. The features associated with the contact-period component provide valuable information on traditional Chinookan architectural elements, storage pits and systems, and hearths. There are few sites in the region that have been excavated with as well-preserved features that date to what appears to be such a short-term of occupation (primarily the early fur trade period). This aspect of the Middle Village component of the site is therefore unique and provides information useful in assessing the construction and uses of plankhouse structures in the Lower Columbia region at contact.

HEARTHS

Hearths ranged from fairly small 50-cm diameter features to the large 3-m complex of features in the central hearth area of the Area F plankhouse. Most of the time, the pits for the hearths were relatively shallow, but in some cases post holes were discovered in the hearths that extended much deeper below the basin of the hearth. Some hearths contained abundant fire-cracked rock. For example, Feature 19 in the Area B block contained over 16 Kg of fire-cracked rock (102 pieces) with an average rock size of 160 g. In contrast, many hearths contained few fire-cracked rocks in only small sizes. Most of the hearths contained concentrations of fish bones and most of these were identified as sturgeon. There were also hazel nuts, wapato, and camas represented from hearth contents.

PITS

Pits were generally deeper than hearths and did not contain as much fire-cracked rock, bone, or shell. Oxidized sediments and dense concentrations were absent but they tended to contain more artifacts. Pits ranged in size from very small (30 cm diameter) post-hole-like pits to ones that were 1 m and larger in diameter. Often the pit contents included debris that had fallen in from the occupation surfaces above, but in some cases intact artifacts suggest storage functions for these features.

POST HOLES

Post holes were identified on the basis of their diameter, often 20 cm or under, and their depth, often cutting 30 cm or more into the Stratum 5 and 6 deposits. Post holes were found throughout the site, sometimes in association with the edges and interior of hearths but also in linear arrangements that suggest platforms, walls, or other structural arrangements. Post holes occasionally contained a distinctive stain or remains of the wood post but in many cases the hole, if there was a distinctive hole, could not be distinguished from the post mold. It is likely that most of the posts were simply driven into the sand and no hole needed to be excavated for them. Some post holes contained fill suggestive that the degraded posts rotted in place, but some post holes contained fill that suggest that the post was removed and the void created filled up with camp debris from Stratum 3 and 4.

PLANK TRENCHES

Plank trenches were linear features associated with lines of planks that had been driven into the ground. There was substantial variability in the depth of these features, with some extending to one meter or more below ground surface and others extending barely below the intact cultural deposits. Plank trenches usually trended northwest to southeast and at right

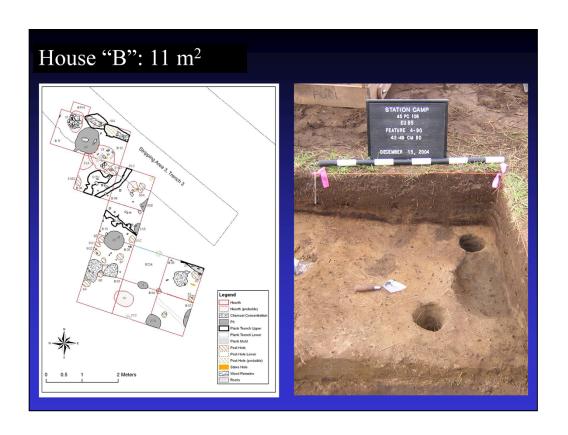
angles to this. Many times strings of plank trenches were identified in close proximity to one another suggesting the demolition and reconstruction of the wall a number of times. The floor of the plank trenches tended to be uneven and careful excavation often revealed the shape of the planks that had been driven into the sand. In some cases, darker stains hinted at a plank mold separate from the plank trench, but this was not always evident. Many times post holes were found within plank trenches or in close association, and often lines of post holes followed the same orientation of the plank trenches suggesting related functions. The ends of plank trenches often exhibited a decided 45-degree bend in one direction or the other.

The contents of plank trenches included much of the same debris that was present in pits and appears to represent the occupational surface debris that was backfilled behind the planks or that fell into the void when the plank was removed. In some cases, however, particularly in the Area F plank house, artifacts appear to have been intentionally deposited in the plank trenches. A ferrous sword or large dagger, and at least two of the knives recovered from the Area F trench appear to have been deliberately thrust into the plank trench. In some cases, concentrations of fire-cracked rock were found in association with plank trenches, and these are likely rocks reused to help stabilize walls of the plank house structures present at the site.

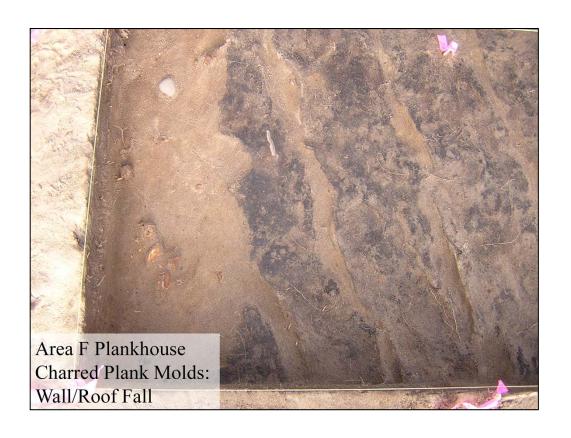
OTHER FEATURES

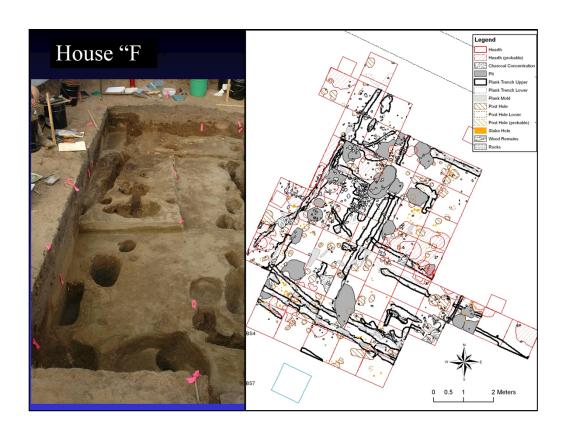
Other feature types include well-preserved plank molds and remains found at the top of the Area F Block that appear to represent a fallen roof or wall of the plank house. In some cases concentrations of fire-cracked rock were noted that do not appear to be hearths and in two cases, Feature 48 in the Area C Trench and the northern portion of the Area F Block, concentrations of artifacts, bones, and other debris are indicative of midden deposits. These aggregations of secondary refuse were apparently intentionally deposited outside of more highly used activity areas within and directly around the plank houses.

Three areas (A, B, and F) were identified as probable post-and-beam plank structures with a flexible central hearth complex, without a fixed hearth box, good evidence for periodic rebuilding of the structure on approximately the same site but without clear reuse of the exact same plank trenches, and the presence of small storage pits. These houses appear to be relatively small, seasonal structures that were periodically rebuilt and reused on about the same spots (see Ames [2005]).

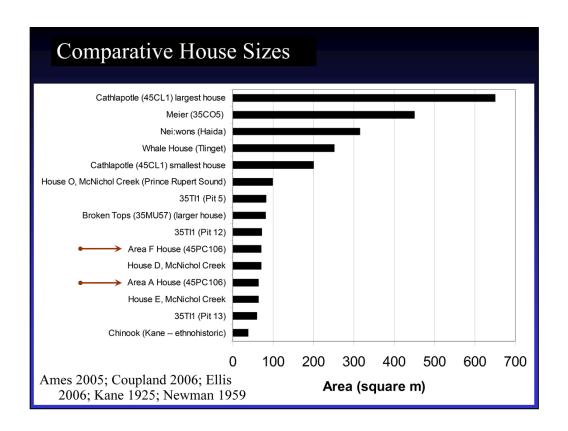




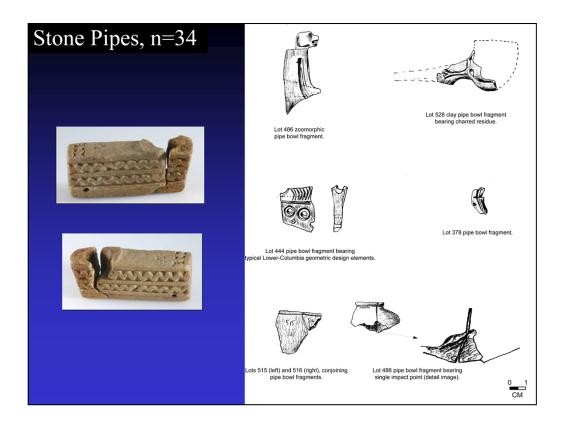








Estimated sizes of two of the structures suggest a range of 64 (Area A House) to 70 m² (Area F House), comparable to smaller coast houses, such as those recorded at 35TI1. It is much smaller than houses upriver (Ames 2005; Ellis 2006) and in the northern Northwest Coast (see Coupland 2006).

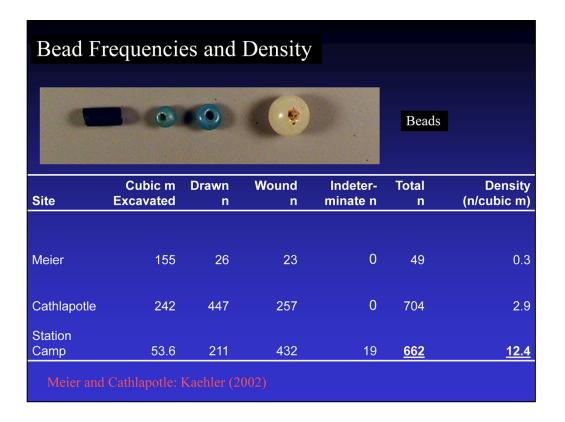


ABUNDANCE OF FUR TRADE ARTIFACTS

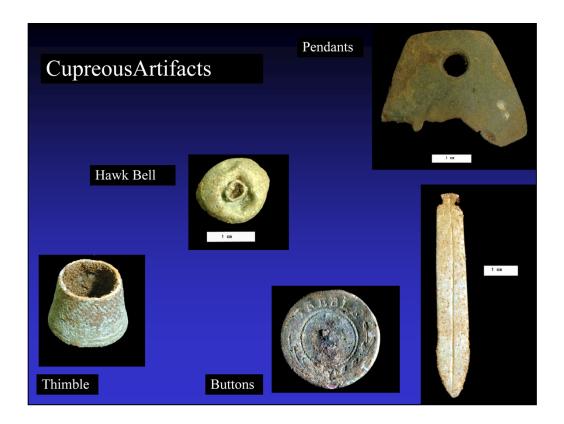
One of the unique elements of the Station Camp site is the abundance of rare traditional objects and fur trade items and the dearth of the more traditional types of stone tools commonly found at precontact archaeological sites. There were only 285 pieces of lithic debitage. In contrast, relatively rare stone artifacts, like stone pipes were relatively abundant at n=34 and usually very rare artifacts, aboriginal clay balls, were very abundant at n=267.



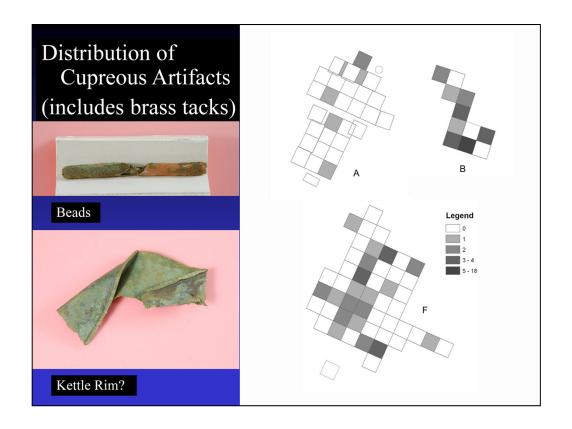
The contrast between stone projectile points and firearm-related items is particularly strong. Only 9 stone projectile points were recovered, most small arrow-sized triangular side-notched projectile points. In addition, 3 ferrous metal points and a flaked glass projectile point were recovered. There were more gun flints recovered, at 11, than there were stone projectile points and more lead musket balls, at 16, than projectile points. The firearm-related projectiles, including shot, buckshot, and ball totaled 75 pieces plus two pieces of sprue. Sites like Cathlapotle and Meier, which have few firearm-related artifacts have hundreds of stone projectile points, probably reflecting the long, precontact use of these sites but also the dearth of firearms in the contact period.



Glass trade beads are also very common at Station Camp. DeCorse's analysis indicates that there are 211 drawn and 432 wound beads. There are almost as many glass trade beads recovered from Station Camp as Cathlapotle (see Kaehler 2002), even though much less matrix was excavated at Station Camp. There are 4 times the density of trade beads at Station Camp compared with Cathlapotle and 39 times the density compared with Meier.



Traditional wealth items like copper are also very prevalent, primarily in forms of bracelet fragments, pendants, sheets and tubes. Excluding the hawk bell, thimble, and chain, there are 83 cupreous artifacts. There are three times the copper objects by density at Station Camp compared with Cathlapotle and 4.6 times the objects compared with Meier.

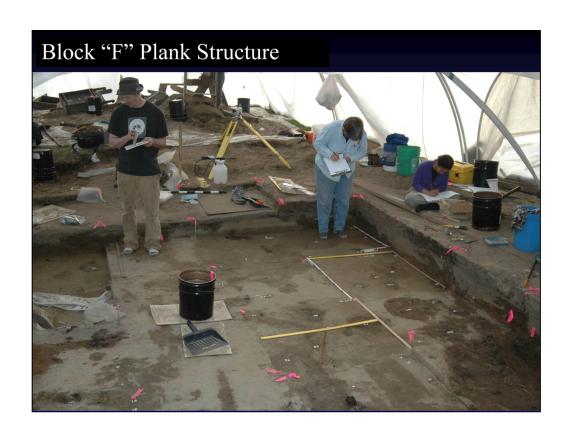


The distribution of cupreous artifacts, including ornaments, tools, buttons, and brass tacks for the Area A, B, and F Blocks is shown. Area A only contained seven cupreous artifacts, distributed relatively evenly across the principal block. In contrast, Area B contained a high density of cupreous artifacts, with the highest density associated with the copper bracelet fragments in the southern portion of the block in Unit B04. It also contained relatively large numbers of copper sheet/plate and ornaments, and both awl fragments originated in this area. The overall density of cupreous objects, even excluding the copper bracelet fragments (1.75 artifacts/m²) is the highest of anywhere at the site. The relative density of cupreous artifacts and the fact that many of them appear to represent debris from copper ornament manufacturing suggests that Area B could have been a manufacturing locus at the site.

The largest number of cupreous artifacts were found in the Area F Block with cupreous items concentrated in the area of the benches on the western and southern portion of the plank house. The midden and central hearth areas contained almost no cupreous artifacts. The artifacts also tended to represent finished forms with the hawk bell, buttons, chain, a coin, all of the obvious pendants, two of the rings, and the thimble represented. The location of these items within the plankhouse and their relative completeness suggests that they were lost or abandoned *in situ* during the use of the house. The contrast between Area B and F suggest that ornaments were manufactured in Area B but were actually worn (and sometimes lost) by the inhabitants of the Area F plankhouse.

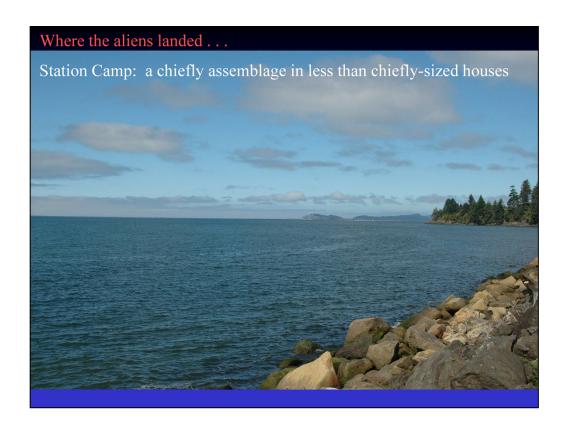








Cromwell's analysis of ceramics identified 364 ceramic sherds from the Middle Village component of Station Camp, 230 of which were English creamwares (most plain or hand-decorated), 65 were Chinese export porcelain (both Canton and Nanking types), and 36 were stoneware (both European and Chinese types). The number of ceramic sherds is nearly three times that found at Cathlapotl (Ames et al. 1999).

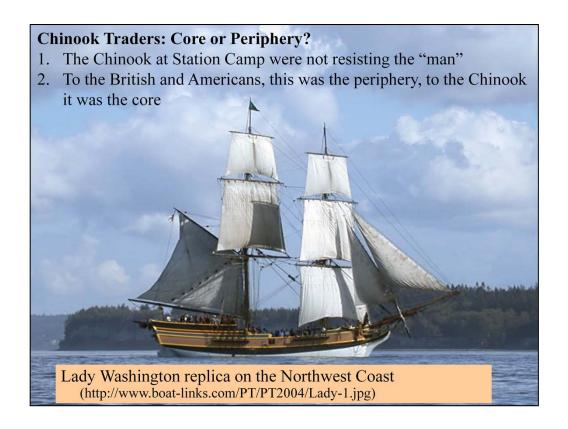


DISCUSSION AND CONCLUSIONS

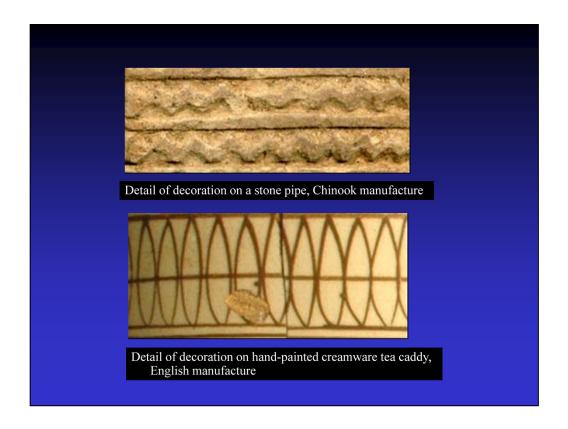
I sometimes get the impression that precontact archaeologists believe that the advent of the fur trade and subsequent and perhaps consequent American immigration makes study of contact and historical Native Americans somehow less worthy in terms of understanding past American Indian/First Nation culture. Many specialize in either historical or prehistoric archaeology with the cultural transformations and entanglements associated with the fur trade forming a dividing line between research domains. The impact of the industrial revolution and global trade, as characterized by the introduction of European and Asian manufactured trade goods, was sudden and profound. The rapid demographic shifts associated with introduced disease also affect our perceptions of what is appropriate to study. The narrowing of time depth due to the rapid changes occurring within the past 200 years also confounds our understanding of the past. Lightfoot's discussion of the waves of colonization in the west and his call to explore the later historic period, as well as the papers in this session, suggest that we should not shy away from the arbitrary boundary of the historic period.

The Station Camp site is situated at a unique time period – as one of the field technicians on the project, Daniel Martin said, "This is where the Aliens landed". However, like those archaeological studies that have focused on colonial and creole settlements, explanation of station camp in terms of purely Anglo or American imposition or dominance on the Native Chinook is not exactly a correct position. Station Camp contains traditional Chinookan post-on-beam plank structures,

probably seasonal, associated with large numbers and high densities of fur trade items. Compared with other Chinook and regional Pacific Northwest sites, Station Camp has a chiefly assemblage in a commoner-sized house. While this might reflect the seasonality and possibly more temporary nature of the houses at Station Camp, it is, in the absence of much comparative data still quite evocative.



It is clear from the ethnohistoric record that the Chinook were consuamate traders. If Ruby and Brown got anything right, it was the expressions of dismay of the fur trders to the ability of the Chinook to react effectively to market conditions, extracting every last bead, sword, musket or sheet of copper in exchange for clammons (elkskin armor) and furs. Therefore, far from patterns relating to the mid-19th century relations between the peoples of the lower Columbia and the Hudson's Bay Company and American settlers, which could probably be seen in terms of resistance to or exclusion from the dominant power, the Chinook at Station Camp appear to have been at the zenith of their power and influence.



In this sense, I reject the notion that the wealth and related power implied by the fur trade at the mouth of the Columbia was related to a few opportunists (e.g., Concomoly and his family) exploiting a new market. While there was undoubtedly some aspect of agency and opportunism playing during this period, the evidence from Station Camp allows us to begin to refine the nature of the trade in wealth items within a set of house sites. Notably, the density and variety of wealth items at Station Camp, including copper and weapons, suggest that it was either the residence of a chiefly person, perhaps even Concomoly himself or a close relative, or that the power aggrandized by the Chinook was being liberally spread through the elite of the villages. At this point, given our limited sample sizes, I have issues with both of these interpretations. Clearly, however, in comparing Station Camp with other Chinookan sites upriver and along the coast, there is a dramatic drop-off in the density of trade goods.

It should be clear that Station Camp has tremendous potential to address how the fur trade affected the Chinook people at the mouth of the Columbia River. It is a very unique site at a very unique time period in the history of the Pacific Northwest.

REFERENCES CITED

Ames, Kenneth M.

2005 Evaluation of Site 45-PC-106, McGowan/Station Camp. Report prepared

for the National Park Service, Pacific West Region, Seattle Office.

Ames, K. M., F.F. Raetz, S.C. Hamilton, and C. McAfee

1992 Household Archaeology of a Southern Northwest Coast Plankhouse. *Journal of Field Archaeology* 19(3): 275-290.

Ames, Kenneth M., Cameron M. Smith, William L. Cornett, Elizabeth A. Sobel, Stephen C. Hamilton, John Wolf, and Doria Raetz

1999 Archaeological Investigations at 45CL1 Cathlapotle (1991-1996), Ridgefield National Wildlife Refuge, Clark County, Washington: A Preliminary Report. *U.S. Department of the Interior, Fish and Wildlife Service Region 1 Cultural Resource Series*, No. 13. Portland, Oregon.

Caywood, Louis R.

1955 Final Report, Fort Vancouver Excavations. Ms., National Park Service, San Francisco.

Cromwell, Robert

2006 "Where Ornament and Function are So Agreeably Combined": Consumer Choice Studies of English Ceramic Wares at Hudson's Bay Company's Fort Vancouver. Ph.D. Dissertation, Syracuse University, New York.

Harrison, Brian F.

2002 Management Summary: Archaeological Survey and Test Excavations at Lewis and Clark's "Station Camp". Report to the National Park Service, Columbia Cascades Support Office, Seattle, Washington. Columbia Diachronic Services, Inc.: Astoria, Oregon.

2004 Preliminary Results of Archaeological Testing at McGowan/Station Camp (45 PC 106), June 2004. Report to the National Park Service, Columbia Cascades Support Office, Seattle, Washington. Columbia Diachronic Services, Inc.: Astoria, Oregon.

Hajda, Yvonne P.

1984 Regional Social Organization in the Greater Lower Columbia, 1792-1830. Ph.D. Dissertation, University of Washington.

2005 Slavery in the Greater Lower Columbia Region. *Ethnohistory* 52(3): 563-588.

Kardas, Susan

1971 "The People Bought This and the Clatsop Became Rich," a View of Nineteenth Century Fur Trade Relationships on the Lower Columbia between Chinookan Speakers, Whites, and Kanakas. Doctoral dissertation, Bryn Mawr College, Bryn Mawr, Pennsylvania.

Kaehler, Gretchen

2002 Patterns in Glass: The Interpretation of European Glass Trade Beads from Two Protohistoric Sites in the Greater Lower Columbia Region. M.A. Thesis, Portland State University, Portland, Oregon.

Lightfoot, Kent G.

1995 Culture Contact Studies: Redefining the Relationship between Prehistoric and Historical Archaeology. *American Antiquity* 60(2): 199-217.

Mission, Gold, Furs, and Manifest Destiny: Rethinking an Archaeology of Colonialism for Western North America. In Martin Hall and Stephen Silliman, eds. *Historical Archaeology*. Blackwell Studies in Global Archaeology.

Marshall, Yvonne, and Alexandra Maas

1997 Dashing Dishes. World Archaeology 28(3): 275-290.

Moulton, Gary E.

1990 *The Definitive Journals of Lewis & Clark: Down the Columbia to Fort Clatsop*, Volume 6 of the Nebraska Edition. University of Nebraska: Lincoln.

Sanders, Judith A., Mary K. Weber, and David R. Brauner

1983 Willamette Mission Archeological Project: Phase III Assessment. *Anthropology Northwest* No. 1, Department of Anthropology, Oregon State University, Corvallis.

Speulda, Lou Ann

1988 Champoeg: A Frontier Community in Oregon, 1830-1861. *Anthropology Northwest* No. 3, Department of Anthropology, Oregon State University, Corvallis.