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ARCHAEOLOGICAL EXCAVATIONS OF THE
OLD AND NEW RUSSIAN MAGAZINS
FORT ROSS STATE HISTORIC PARK
SONOMA COUNTY, CALIFORNIA
FINAL REPORT

prepared for

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CHAPTER 1 INTRODUCTION

An archaeological excavation was undertaken at the planned location of the Old Magazin Reconstruction Project by Anthropological Studies Center (ASC) personnel at the request of the California Department of Parks and Recreation (DPR). The proposed project consists of the reconstruction of the Old Magazin (often referred to as the Old Fur Warehouse or Fur Barn in previous studies), a Russian-period building originally constructed between 1812 and 1814. The original structure was probably torn down after damage by the 1906 earthquake (Farris 1990: 482). The property studied for this project is owned by DPR; DPR architects have designed the reconstructed buildings, with DPR Historian Dan Osanna acting as archaeology Project Manager. This study was conducted to address research questions regarding the location and nature of foundation remains of two buildings, the Old and New Magazines, prior to the reconstruction of the Old Magazin. The study consist of a local natural, archaeological, ethnographic, and historical context (Chapters 2-4), methods employed for and results and interpretations of the 2003 excavation efforts (Chapters 4-6), and recommendations for further management and further research (Chapter 7). Appendices have been attached that consist of tables illustrating the quantity and types of artifacts (Appendix A), the overall artifact catalog and context concordance (Appendix B), and a summary, with newspaper articles, of outreach efforts involved with the project (Appendix C).

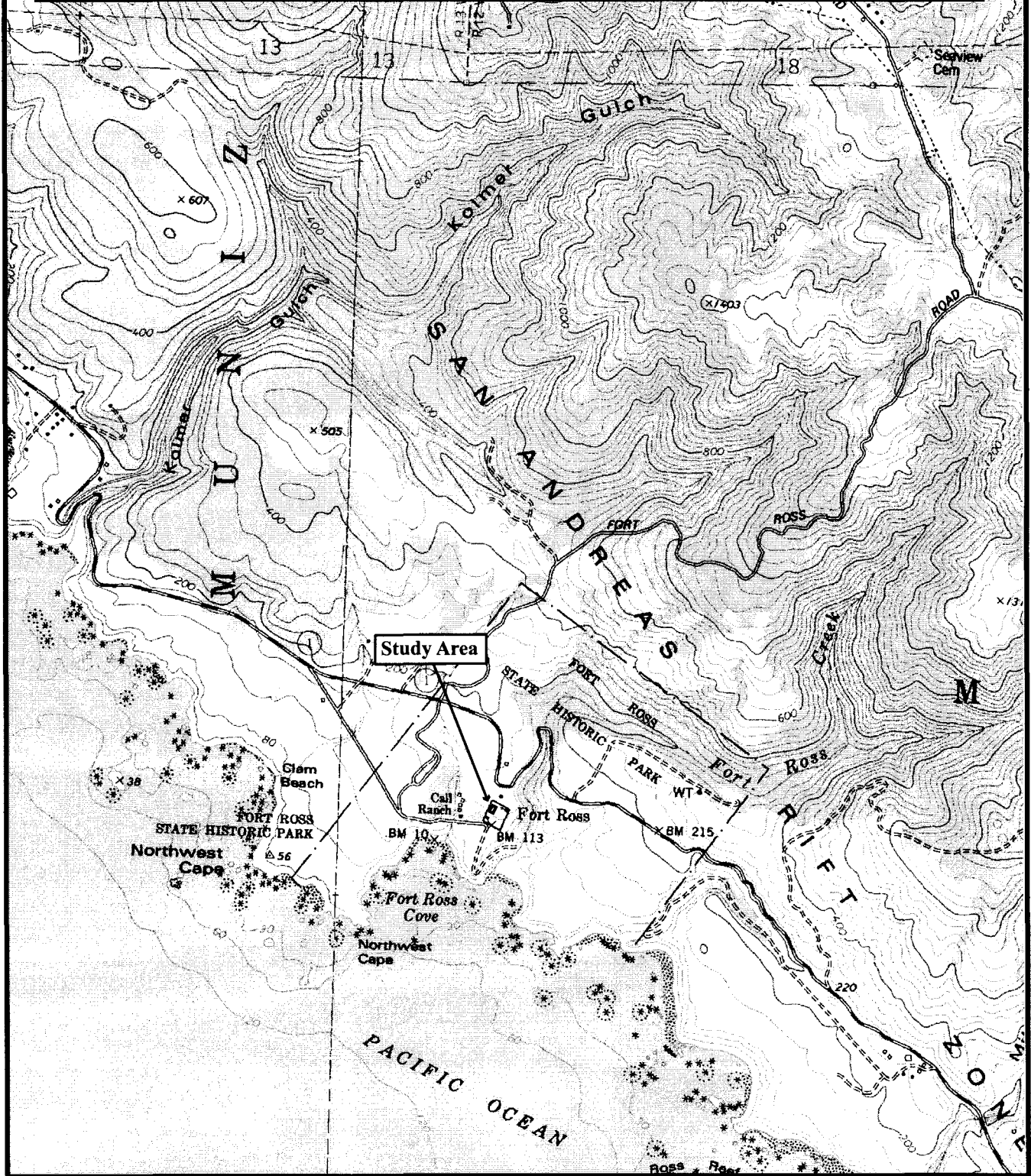
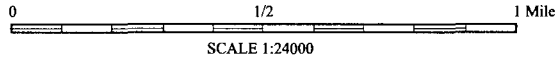
THE NATURAL ENVIRONMENT OF FORT ROSS

Fort Ross is located on a cleared coastal terrace overlooking the Fort Ross Cove, north of Jenner in Sonoma County, California. The site is situated in Township 8 North/ Range 12 and 13 West (Mount Diablo Base and Meridian), within the Muniz Rancho (see Figure 1). Because of its location on the curved cove the ocean and rocky coastline are to the south and southwest of the fort, the gently sloping coastal terrace continues southeast, east, and west of the fort, and a 1,400-foot-tall ridgeline is to the northeast.

The site is located on the German Rancho Formation, a Tertiary marine sandstone and mudstone sedimentary deposit that underlies the coastal terrace from Stewart's Point to just south of Fort Ross (Chapman and Bishop 1988). The site is within the San Andreas Rift Zone, whose geologically frequent tremors have wreaked havoc in the area, particularly the 1906 quake which destroyed portions of the fort (see Chapter 4 below).

Soils in the project area consist of the Rohnerville loams, moderately to well drained loams overlying sandy clay, and Terrace escarpments, rocky areas of steep cliff faces and narrow sandy beaches. The Rohnerville loams are found on 9 to 15 percent slopes, with the subsoil typically 30 to 40 inches below surface (Miller 1972). Slopes in the immediate area are relatively unstable, particularly the cliff faces (Huffman 1980). Though this portion of the California coastline is highly susceptible to landslides, the project area appears to have been relatively free of landslides for at least 100 years. Some of the earliest regular documentation of weather phenomena was recorded by George Call during the 1870s, when he recorded over 24 inches of rain in 24 hours. Call noted that buildings related to an old sawmill down in Fort Ross Creek were buried in a wall of mud and gravels (McKenzie 1974).

Figure 1: Project Location
2003 Fort Ross Magazin Excavations
Fort Ross State Historic Park
Sonoma County, California.



Vegetation within the project area consists of a coastal prairie-scrub mosaic, an ecotone between coastal prairie and coastal scrub communities. Coastal prairie is comprised of a dense grass community of bunchgrasses, primarily red fescue and oat grass with lower layers of perennial species, including bromegrass, reedgrass, hairgrass, ryegrass, and fescue. Coastal scrub is comprised of an open-to-dense, broad-leaved evergreen shrub community, primarily coyote brush, with a dense lower layer of subshrubs, vines, and perennial forbs, including sagebrush, California lilac, rye grass, cow-parsnip, yerba buena, and figwort (Küchler 1978:31; Munz 1959).

At the time of the current study, the project area was covered in low grasses, bare, hard-packed soil, and portions of exposed bedrock. The excavation area receives a great deal of foot traffic, being within the stockade walls and between the north sallyport and the western palisade. The area is regularly mowed by DPR maintenance staff. Considerable rodent disturbance was noted on the surface, and was repeatedly observed during both the current excavation and past excavation efforts (Farley and Edwards 1976).

CHAPTER 2 NATIVE AMERICAN LAND USE AND OCCUPATION

THE FIRST OCCUPANTS

The Fort Ross area can be included in the analytic framework for the interpretation of the North Coast and central California prehistory constructed by Fredrickson (1974), who divided early human history in California into three broad periods: Paleoindian, Archaic, and Emergent. This scheme used sociopolitical complexity, trade networks, population, and the introduction and variations of artifact types to differentiate between cultural units. With minor revisions (Fredrickson 1994), the structure remains the dominant framework for prehistoric archaeological research in this region. Lightfoot, Wake, and Schiff (1991, 1997) have recently added substantially to the understanding of local variations of the cultural chronology and material culture of the tribal groups within twenty miles of Fort Ross.

While the first known occupation of the Fort Ross area dates to the Lower Archaic, very early use of the nearby coast at Duncans Landing has been found to date to the Pleistocene–Holocene transition (Schwaderer 1992). This begins at the time of Fredrickson's Paleoindian period (10,000-6000 B.C.), which was characterized by small, highly mobile groups occupying broad geographic areas. During the Archaic period, consisting of the Lower Archaic (6000-3000 B.C.), Middle Archaic (3000-500 B.C.), and Upper Archaic (500 B.C.-A.D. 1000), geographic mobility may have continued, although groups began to establish longer-term base camps in localities from which a more diverse range of resources could be exploited. Obsidian hydration dates from CA-SON-1454/H, a multi-component site a mile north of the project area, and from obsidian artifacts found within excavations of the Fort Ross stockade wall building trenches date from the Paleoindian-Lower Archaic transition (Lightfoot, Wake, and Schiff 1991:111; Purser, Beard and Praetzelis 1990: 45). Two other sites, CA-SON-228 and SON-1453 have dated to the Lower Archaic (Lightfoot, Wake, and Schiff 1991:110). These few sites along the coastal terrace appear to be the only sites of such antiquity, though recent findings by Parkman (2002) near Shell Beach might add to the list. The sites in general are represented by diffuse lithic scatters containing tool production and reduction flakes, with few bifacial tools, consisting of both chert and Annadel and Borax Lake obsidian (Lightfoot, Wake, and Schiff 1991:82-83; Purser, Beard and Praetzelis 1990:45). Slab and handstone milling equipment and battered cobbles have also been identified (Bramlette and Dowdall 1989:143). Sea-level rise beginning at the end of the Pleistocene may have inundated much of the archaeological record dating to this time period.

Sites dating to the Middle Archaic period are also relatively scarce, with only two (SON-228 and -1880) of thirty nearby sites containing artifacts datable to this time (Lightfoot, Wake, and Schiff 1991:111). The shoreline had stabilized by the Middle-Upper Archaic transition, and the first evidence of the exploitation of shellfish has been dated to the Lower Archaic, though earlier evidence of shellfish collection may have been preserved in the acidic soils along the coast or may be inundated (Bramlette and Dowdall 1989:144). Bramlette and Fredrickson (1990:5) suggest that earliest dates for the general introduction of shellfish procurement in the area begin within the Middle Archaic. Napa, Annadel, Mt. Konocti, and Borax Lake obsidian sources appear to have been in wide use (Lightfoot, Wake, and Schiff 1991:82-83; Purser, Beard and Praetzelis 1990:45).

While the population of the area no doubt increased during the Upper Archaic, it is during the Lower Emergent that significant changes in settlement and land use have been documented. Site density increases dramatically, though it appears that the coastal terrace of Fort Ross was

never as intensely occupied as the coastal strip along Salt Point (Lightfoot, Wake, and Schiff 1991: 112). Lightfoot, Wake, and Schiff argue that central-based villages located on coastal slopes and on the first ridge tops inland from the coast become the predominant settlement strategy during this time (1991:112). The majority of sites that have been identified as such have access to year round fresh water and wide views of the coast and surrounding areas (Lightfoot, Wake, and Schiff 1991: 113). A variety of local resources could be obtained from each of these areas, and from satellite sites representing various types of sea-food-processing stations, quarries, and residential or camp spots above the fog belt. Lightfoot, Wake, and Schiff also attribute local petroglyph clusters to the Emergent period, though they acknowledge that dating such features is tenuous at best (1991: 114-115). At the time of the Russian arrival, the Kashaya Pomo were long-time inhabitants of the area.

THE KASHAYA POMO

The name Kashaya is most likely derived from the Pomo term kahsa, meaning “agile” or “nimble”. They are the only Pomo linguistic group with a name for themselves as a linguistically and culturally distinct population, and unlike most of the other native groups in the region, their first direct contact was with the Russians rather than the Spanish or Euro-Americans (McLendon and Oswalt 1978:277; Stewart 1943: 49). The proximity of the Russian fort, the Russian need for Kashaya labor, and the distance from the missions appears to have protected them from the direct ravages of the mission system that the other local groups suffered. At the time of contact, the Kashaya population probably ranged from 800 to 1200 individuals in a little over a dozen villages (Stewart 1943:51).

At the time of contact, the Kashaya occupied a coastal stretch of about 30 miles, roughly centered on Fort Ross and stretching inland from 5 to 13 miles (McLendon and Oswalt 1978: 278). There is some discussion as to whether the Kashaya were unified under one leader or were divided geographically into two or more groups with separate leaders, specifically Toyon and a chief named Helebutkin from the village of Hibuwi northeast of Metini (Gifford 1967:8; Lightfoot, Wake, and Schiff 1991:149; Stewart 1943:50). It appears likely that Toyon, who was positioned at Metini by Fort Ross, became the sole leader by default: as resources became slim, the surrounding Kashaya appear to have moved to Metini family by family (Lightfoot, Wake, and Schiff 1991: 149). It has been suggested that the specific location of Metini may have changed slightly over time, having once occupied the current location of the Fort Ross Stockade and moving later some distance from the fort (Smith in Lightfoot, Wake, and Schiff 1991:76).

The Kashaya had an abundant range of natural resources in their area, and had developed a variety of skills to obtain them. Several methods for procuring plant subsistence resources were used, as were methods for increasing suitable habitats for these resources. Kashaya people collected seeds from at least 15 different grass species, as well as roots, bulbs, berries, mushrooms, edible greens, and nuts (Bean and Theodoratus 1978:290; Gifford 1967:20; see also Goodrich, Lawson, and Parrish Lawson, 1978). Fields were burned to create open areas for seed and bulb growth, as were sophisticated processes of leaching and processing acorn and buckeye (Kniffen 1939:388; Bean and Theodoratus 1978:290). The Kashaya also utilized maritime plant resources, collecting and drying seaweed and kelp, which were considered delicacies (Bean and Theodoratus 1978:290). The mortar and pestle and the bottomless basketry hopper mortar were used for processing seeds (Bean and Theodoratus 1978:291).

As with the flora species, Kashaya made use of the wide variety of fauna found along the coast and inland valleys. Deer, elk, and antelope were hunted, as were smaller game like rabbits, squirrels, a number of bird species, and insects (Bean and Theodoratus 1978:290). Seal and sea lion were also hunted. Several tools were used to hunt or catch game, including spears, clubs, and bows and arrows, bolas, as well as game-diverting and capturing devices such as brush fences, snares, and basketry traps. Shellfish and tide pool animals were a major source of protein for the Kashaya—80% of Native American archaeological sites recorded near Fort Ross have shellfish remains (Kniffen 1939:387; Lightfoot, Wake, and Schiff 1991:73). Abalone, clams, mussels, snails, barnacles, limpets, sea urchins, crabs, octopi, and even sea anemones were all part of the Kashaya diet (Gifford 1967:20).

Three different types of structures were utilized by the Kashaya: the dwelling house, the sweathouse, and the dancing and ceremonial roundhouse. Dwelling houses were single-family residences roughly 8 to 15 feet in diameter, constructed of redwood bark slabs. The subterranean sweathouses were constructed in the spring and were a gathering place for men to take daily sweat baths. The ceremonial dance roundhouse was also subterranean and could measure 70 feet in diameter (Bean and Theodoratus 1978:292-293). A ceremonial roundhouse and at least 12 to 15 housepits, representing the dwelling houses, have been archeologically documented at Metini (Gifford 1967:9; Lightfoot, Wake, and Schiff 1991: 76).

The Kashaya appear to have had friendly relationships with neighboring tribal groups, who were permitted to enter their territory and collect salt at Salt Point and collect seafood at Kashaya fishing spots (Kniffen 1939:385; Stewart 1943:50). As with all Pomo peoples, trade was an extremely significant economic endeavor that culminated in trading and feasting events. Food and non-food durable items, such as quarried obsidian and jewelry, could be exchanged, marriages arranged, services bartered for, and ceremonies, dialects, games, customs, and stories could be passed between groups. Kashaya traders would travel into the territory of the Clear Lake Pomo to trade for magnesite and obsidian (Kniffen 1939:385). Like their Coast Miwok neighbors to the south, the Pomo used shell beads as currency (Bean and Theodoratus 1978:292-293). At the time of Russian contact, several individuals from the Coast Miwok to the south were living with the Kashaya, perhaps representing refugees from mission raids and/or epidemics in the Bodega and Marin areas.

NATIVE AMERICAN CONTACT WITH NON-NATIVE EXPLORERS AND SETTLERS

European exploration of the Sonoma coast began with Vizcaíno's 1602-1603 voyage up the coast of Alta California. Bodega Bay was encountered by Vizcaíno on the northern part of the trip, though it was explorer Juan Francisco de la Bodega y Cuadra who, nearly 175 years later, gave the bay its current name and provided the Spanish government with maps and observations that facilitated Spain's northern expansion (Hoover et al. 1992: 474). Two decades after Bodega's exploration of the bay, Archibald Menzies arrived at what is probably Bodega Rock in 1793. A naturalist with the Vancouver expedition, it was Menzies who made the first documented contact with the local Pomo; this appears to be the last of the exploration efforts by non-native peoples until the arrival of the Russians (Hoover et al. 1992:474).

The Kashaya viewed the Russians arriving in 1811 as "undersea people", as their ships were seen "coming from under the water" across the horizon (Oswalt 1964). The newcomers appear to have been welcomed by the Kashaya and Coast Miwok peoples, and in 1817 officially

obtained "permission" to build on the land from the Kashaya through a document signed by local tribal leaders (Lightfoot, Wake, and Schiff 1991:24; Okun 1979:128). The Russian American Company (RAC) had foreseen, in its expansion into California, the inevitable complaint by the Spanish that the Russians were trespassing and illegally placing a settlement on Spanish soil. The RAC intended to argue that the land did not belong to Spain but rather the local Native American groups; the signatures of the leaders of these groups on documents bequeathing the land to the Russians was evidence enough of their right to create a settlement (Okun 1979:128). It was a politically risky argument that failed to win over the Spanish (see Chapter 3 for further information regarding the Spanish reaction to the fort) but the Russians apparently felt that they had Kashaya approval to build at the chosen site. Naval officer and governor of the RAC's settlements in North America, Lieutenant-Captain Hagemeister, sealed the deal for the RAC with the exchange of some medals and trade goods (Lightfoot, Wake, and Schiff 1991:24; Okun 1979: 101, 128). During the first decade of occupation of the fort the Russians and the Kashaya appear to have had a relatively amicable relationship, for the RAC had a relatively enlightened view of Native Americans for the time.

It was abundantly clear from the start that the Company could never recruit enough ethnic Russians to work in the American colonies, and those that were convinced to go rarely stayed (Lightfoot, Wake, and Schiff 1991:14). Working conditions were miserable, wages low, food intermittent, and epidemics frequent throughout the settlements. The Company charged high prices for material goods through its stores, often resulting in a form of indentured servitude for the workers, most of whom were in debt to the Company (Lightfoot, Wake, and Schiff 1991:14). As a result, the RAC needed Native American labor to make their various enterprises work. Native labor was paid less and was relatively self-sufficient. Native Alaskans were expert fur hunters, and often provided foodstuffs for the settlements. The Tsar and the board of directors repeatedly set in the organization's charters that native peoples were to be treated equitably, compensated fairly, and educated at RAC expense. However, as implementation of these charters was left to the chief managers, it appears that they were never enacted fully in the North American settlements (Lightfoot, Wake, and Schiff 1991:14).

Russian and Aleut men married Kashaya women and established kinship ties with the surrounding populations (Parkman 1996-1997:359). It appears that mistreatment of the Kashaya women was not tolerated by the Russian authorities, and their families were welcome to visit them in colony Ross (Parkman 1996-1997:359). Kashaya and Coast Miwok peoples appear to have gradually abandoned the ridge top village sites, and pulled away from the coastal resource sites, to locate around the fort (Lightfoot, Wake, and Schiff 1991:115-116). The degree to which this was a choice on the part of the tribes or more the result of forced labor is a subject of current debate (Parkman 1996-1997). The local native peoples do appear to have moved into the area around the fort, however, and it is likely that some of their traditional hunting or gathering places may have been restricted by crop fields. In addition, shellfish processing might also have been done at the new fort-centered sites rather than traditional processing stations near the water; therefore, evidence for shellfish procurement may have moved to a different location. It is also possible that new food sources introduced by the Russians lessened the need of the groups to gather their inter-tidal resources (Lightfoot, Wake, and Schiff 1991:115-116). The exchange network for obsidian likewise appears to have been dramatically disrupted during this time. Changes in obsidian frequency suggest that the local Kashaya and Coast Miwok peoples may have been cut off from the Annadel obsidian source, though the Napa obsidian source appears to have been

used consistently throughout the duration of the Russian occupation. This was possibly a result of continuing expansion of the mission system, particularly the Sonoma and San Rafael missions, and the subsequent impact on native lifeways (Lightfoot, Wake, and Schiff 1991:115-116).

The socio-economic hierarchy at the fort appears to have been essentially based on race, with four major classes of workers: "Russians", "Creoles" (mixed Russian and native descent), "Aleuts", and "Indians" (Lightfoot, Wake, and Schiff 1991:21). The Kashaya peoples at the fort, being relegated to the bottom of the hierarchy, were paid less and were not given promotions to better-paying positions. While Kashaya labor was typically not involved directly with sea-mammal hunting, it was utilized extensively transporting wood to Fort Ross Cove for ship building, hauling clay for brick making, and in particular, for all aspects of cultivating crops from the various agricultural fields (Lightfoot, Wake, and Schiff 1991:18-20).

By 1833, the amicable relationship between the Russians and the Kashaya began to dissipate. The decimation of the sea mammal population forced a change in purpose for the fort, and the RAC increased its agricultural production (Lightfoot, Wake, and Schiff 1991: 24). The Russians found themselves with a labor shortage; native laborers who did work for them suffered longer hours and bad food. Russian mounted soldiers began to mimic the Spanish and started capturing more distant Pomo peoples and forcing them into temporary service (Lightfoot, Wake, and Schiff 1991:26; Parkman 1996:362). Epidemics also took their toll on the population and reduced the numbers of available workers. When crops failed, native workers were held responsible and had to stay and work off the debt incurred by the lost crops (Parkman 1996:362).

Parkman (1996) suggests that the Kashaya may have mounted resistance to this treatment. Horse killings had started to take place in the 1830s, and documents from the time period expressed concern about uprisings initiated by Native Americans who had had made an escape from the San Rafael Mission (Parkman 1996-1997:360). Inland, Satiyomi Pomo waged a series of raids against the Russians, that included destroying crops and stealing cattle (Parkman 1996: 362) The hostilities from the inland tribes may have also been precipitated by the increased encroachment of Vallejo and other Californios (Parkman 1996:362).

By the beginning of the 1840s, the Russians decided that their economic ventures were unprofitable and subsequently sold the fort to John Sutter. This left the Kashaya unprotected from the raids of the rancheros. Two Kashaya women and hundreds of inland Pomo peoples were captured in 1845 during the "Castro and Garcia Raid" and were taken to work in various ranchos (Farris 1989; Parkman 1996:362). Kashaya people worked for Benitz when he purchased the fort from Sutter and expanded ranching and agricultural enterprises in the area, but when Charles Fairfax and James Dixon bought the property in 1867 and converted the property to lumber production, Dixon evicted the Kashaya from the land ((Tomlin and Rudy 1995b:23-24).

The Kashaya returned to one of their pre-invasion village sites on the ridgeline, about three miles from the fort. The spot was now the property of German immigrant Charles Haupt, who had married a Kashaya woman named Molly. The village had a year-round spring, and by 1870, all the Kashaya from the fort had moved there permanently (Huffman 1995:18). Surrounded by neighboring farmers who accepted the presence of the village, the ranch site insulated the Kashaya from further raiding and was close enough to permit continued access to their coastal resources. Men from the village worked at local lumber operations while the women worked in local ranch houses (Huffman 1995:47-48). Following the death of Molly Haupt in 1901 and Charles Haupt in 1903, tensions between the Kashaya and Charles' son, Charles Jr., increased. The community

was slowly falling apart and suffered episodes of violence. A Kashaya shaman, Annie Jarvis, urged the villagers to persuade the Bureau of Indian Affairs to purchase land near Stewarts Point (Huffman 1995:53). When Charles Jr. died in 1919, his widow increased the pressure to remove the group. In 1920, the community performed their last ceremony on the property and moved to the Stewarts Point site that is still occupied by their descendents (Huffman1995:53).

CHAPTER 3 RUSSIAN AND EUROAMERICAN LAND USE AND OCCUPATION

THE ARRIVAL OF THE RUSSIANS

The Russian settlement of Fort Ross represents one of the most researched and discussed periods of California history, perhaps because of its unique nature, the heavy-timbered architecture of the reconstructed stockade, and the beauty of the fort's surroundings. Numerous histories of the fort and its inhabitants have been written that give the reader a perspective on 19th century occupation. Their subjects range from the Russian fur hunters to American-period lumber and ranching activities (Kalani 1995a), to diaries and personal accounts of visitors and residents from different periods of the fort's long and varied use (Khlebnikov 1976, Duflot De Mofras 1844; Carr 1987), to academic and cultural resource historical and archaeological studies (Farris 1981; Lightfoot, Wake, and Schiff 1991; Parkman 1996; Pritchard 1991, 1992; Purser, Beard, and Praetzellis 1990; Selverston 2000; Wilson 1998; and Watrous 1992, to name a few).

The first Russian forays into North America began with Ivan Fedorov's sighting of Alaska and contact with the local native group in 1732. This discovery is usually attributed to Danish explorer Vitus Bering; however, his 1731 attempt to locate the upper reaches of North America and identify fur hunting opportunities ended in failure (Fedorova 1973:1; Wilson 1998:8). Bering's second voyage in 1741, sailing under orders from Tsarina Anna, resulted in both the sighting of the mainland of Alaska, and, as he struggled through fierce winter storms of the northern seas, the wreck of Bering's ship the *St. Peter* and the loss of the lives of several of its crew, including Bering himself (Wilson 1998:8).

Despite these disasters, Bering's remaining crew returned with tales, and proof, of the abundance of fur-bearing sea mammals around Alaska and the Aleutian Islands (Fedorova 1973:2). Lured by their stories, several explorers launched different expeditions to the region, identifying several new islands, including Kodiak Island (Fedorova 1973:2). Four decades of continued exploration and mapping followed; permanent Russian settlements within the islands began to be established by the 1770s, and, as the fur trade expanded, onto the Alaskan mainland (Fedorova 1973:15). Grigorii Shelikhov, his brother Mikhail, and Ivan Golikov founded the Northwestern American Company in 1781, a fur-trading company that quickly became one of the most dominant (Wilson 1998:8). Merging with a competitor to form the United American Company, it finally emerged with an official charter by Tsar Paul I as the Russian American Company in 1799 (Fedorov 1973:130; Wilson 1998:9).

The RAC enjoyed several privileges of exploration, including open fur hunting in all of Russia's territories, the identification and claiming of new lands for Russia further south along the coast of North America, the right to set up new settlements and ports where it deemed necessary to ensure safe navigation and trade with other countries, and finally, the ability to do so without competition (Fedorova 1973:130-131). The RAC was not simply established as a money-making venture; it was the tsar's attempt to "create under the direct control of the government a powerful monopoly amalgamate for successful resistance to foreign expansion and firm possession of northwestern America" (Fedorova 1973:131). Backed now by the government and having free rein to pursue exploration, fur hunting, and settlement, the operation pushed south, establishing colonies in New Archangel and Yakutat Bay (Fedorova 1973:133-134).

It is worth noting that Shelikov saw the expansion of the RAC, and Russian settlements in America in general, as an expansion of the glory of Russia. Shelikov wrote detailed instructions and layouts for the construction of settlements, the architectural styles and placements of the buildings, and the general image he wanted these settlements to project to foreign traders, Russian nationals, and local tribal groups (Senkevitch 1987:167-170). Shelikov's personal letters to his second-in-command, Aleksander Baranov, reveal a vision of the settlements that was not simply one of economic venture but of a defining Russian architectural style and urban planning that covered everything from churches to fortifications to houses to family gardens (Senkevitch 1987:167-168). Shelikov had a grand vision for the settlements; he wanted to build an imperial St. Petersburg of the east, a new eastern Russian capital in America (Senkevitch 1987:166).

With Shelikov's death in 1795, Baranov was left to fulfill Shelikov's wishes. While being an expert manager, and clearly sharing Shelikov's drive to expand the holdings of the RAC, it appears that Baranov lacked Shelikov's love of and interest in style (Senkevitch 1987:193-194). Though Shelikov often requested that Baranov use the planners and architects that Shelikov hand-picked for the purpose of designing the settlements, it appears that these individuals were either transferred away from the settlements or murdered during one of the frequent raids on the fortifications (Senkevitch 1987:194).. Under Baranov, the outposts were business ventures only; they were utilitarian in nature, and the employees were there for the benefit of the company, not for presenting the beauty and subtlety of Russian style and culture ((Senkevitch 1987:194-195).

Although the fur trade boomed, maintaining peaceful relations with local Native American groups and keeping the settlements stocked with food and supplies were considerably more difficult. Attacks on New Archangel in 1802 and Yakutat Bay in 1805 reduced both fortifications to ashes. Nikolai P. Rezanov, chief executive of the RAC, visited New Archangel in 1805 and found that several of the settlers who survived the attack had later died or were sick from malnutrition (Fedorova 1973:134; Wilson 1998). Rezanov decided to pursue alternate means of supplying the settlements.

The idea of looking to California to supply the Alaskan settlements had actually been first posed by Shelikov in 1786, prior to the establishment of the RAC. Shelikov believed that the western expansion by the Americans needed to be checked, and that such settlements would benefit the Russian monarchy (Fedorova 1973:134). Following his grim trip to New Archangel, Rezanov set out to establish trade with the Spanish in San Francisco in 1806, who were officially banned from trading with foreigners (Wilson 1998:9). Nevertheless, not only did Rezanov succeeded in establishing trade relations, he also discovered that the Spanish had no permanent settlements further north (Fedorova 1973:134; Wilson 1998:9). Though Rezanov did not survive the trip home to Russia, he passed this new information on to Chief Manager Baranov in Sitka (Fedorova 1973:134).

Shortly after Rezanov's trip, Baranov sent Ivan Alexandrovich Kuskov and several Russian hunters to Bodega Bay, which they named Rumiantsev Bay, where they hunted sea otters and began exploring the area. In 1811, the schooner Chirikov sailed into the harbor with Kuskov, 25 Russian workers and craftsmen and a team of Aleuts in 40 baidarkas, or hunting canoes (Fedorova 1973:135; Wilson 1998:9). Kuskov attempted to find a place within the bay to build a settlement, however, the area around the bay was treeless and was therefore unsuitable for building a fortification. He headed north and discovered a high cliff surrounded by dense forest some 18 miles north of Bodega Bay, and it is here that the fort's location was set. Timber preparation began

in the early part of 1812; on August 30th of that year, the colony was formally dedicated and named "Ross", an archaic term for "Russian" (Fedorova 1973:135; Gudde 1998:136).

The original buildings within the stockade include Kuskov's residence, barracks, and a Magazin, and most if not all of these appear to have been completed by 1814 (Wilson 1998:9; see Figures 2 through 4). It is quite possible that the fort's layout and building plans were created either by the Russian Department of Military Settlements or an in-house planning department within the RAC. The Department of Military Settlements was formed in part as a response to events leading up to Napoleon's invasion of Russia in 1812, and was already designing and constructing settlements in western Russia by 1810 (Senkevitch 1987:185). The layout of the colony at New Archangel resembles military settlements designed by the department (Senkevitch 1987:166). With its fortifications, orderly placement of buildings, and open central thoroughfare, it is possible that Ross was likewise designed by the military. It is unknown whether the RAC simply utilized existing plans created by the Department of Military Settlements or created new ones; regardless, approval for the buildings and the settlement layout would have had to have been obtained prior to construction (Senkevitch 1987:186-187).

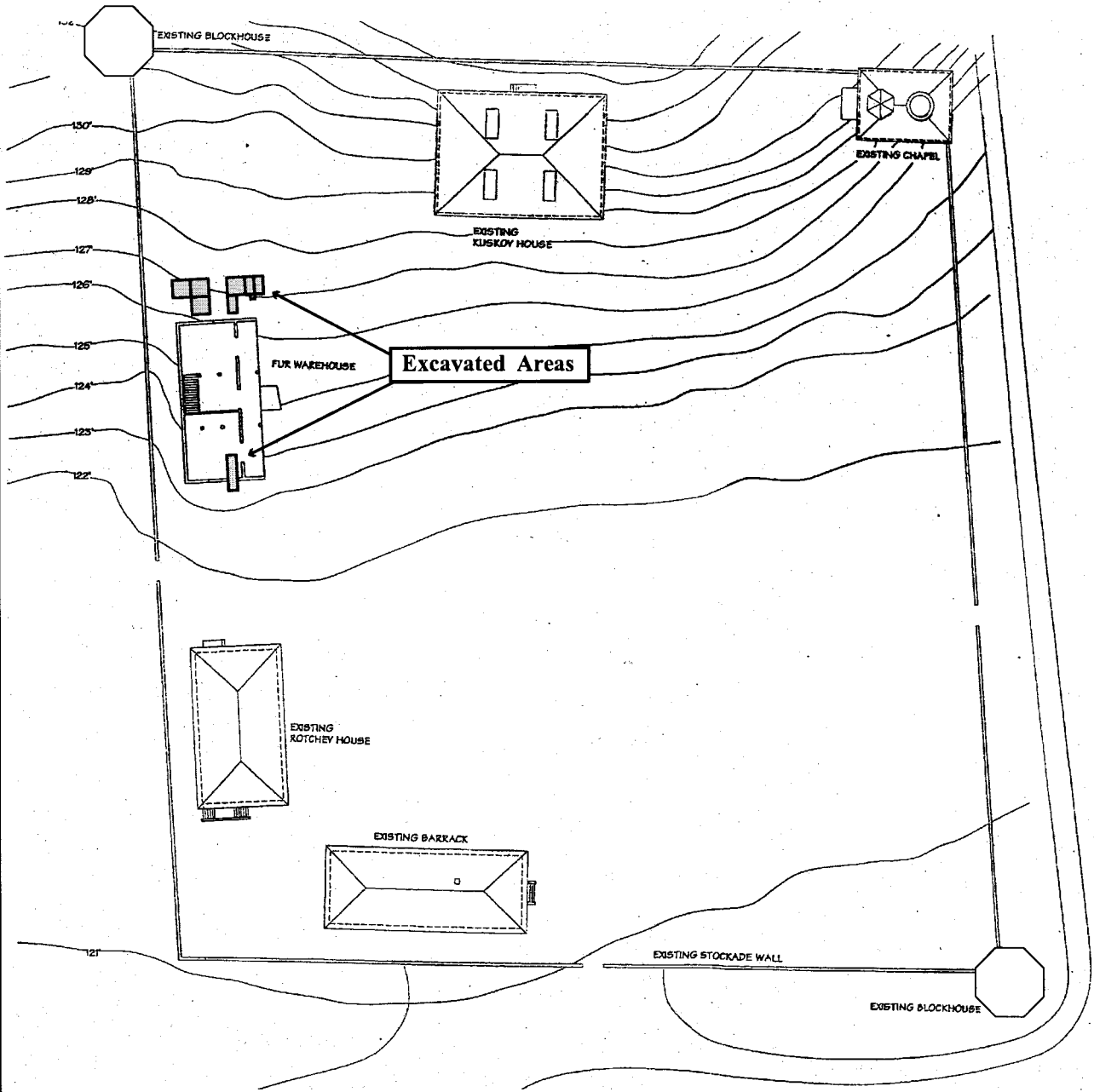
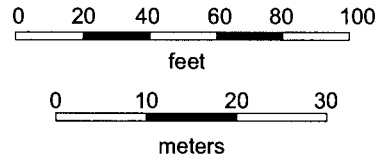
The management of the RAC seems to have had doubts about the strategic advantages of the location of Fort Ross. The fort's proximity to Spanish San Francisco and its distance from the closest decent harbor at Bodega Bay appeared to the company as troubling liabilities (Okun 1979:122). However, Baranov and Kuskov had grander designs for the fort than for it to be a simple granary for the Alaskan settlements. Baranov shared Shelikov's vision of Russian expansion—the fort's position was strategic, a launching point for spreading inward to California with the hopes of eventually bringing all of California under Russian rule (Okun 1979:122). From this standpoint, the fort's location appears ideal as both a defensible position and as a springboard for further expansion (Okun 1979:122). However, the Russian government made its own strategic move in 1818 by effectively seizing control of the company, removing Baranov from the governor's position, and putting Lieutenant-Captain L.A. Hagemester in his place (Okun 1979:101). The direction of Russian expansion into North America thereby transitioned from the merchants to the military.

Several economic endeavors were initiated that were designed to both support the fort and feed the Alaskan settlements. Farming and ranching efforts were started as were lumber and shipbuilding enterprises. A foundry, a coppersmithing workshop, and a blacksmith workshop were successful endeavors early on, as they represented one of the few places in Northern California capable of such work (Wilson 1998:10). The settlers traded with the Americans, Spanish, English, and French, as well as local Kashaya Pomo and Coast Miwok groups (Dmytryshyn, Crownhart-Vaughan, and Vaughan 1989:20-22; Duflot de Mofras 1844; Duhaut-Cilly 1828:179).

The Russians occupied the fort for nearly 30 years. Five managers were responsible for trade and production at the fort: Kuskov (1812 to 1821); Karl Schmidt (1821 to 1826); Paul Shelikov (1826 to 1829); Peter Kostromitinov (1829 to 1838); and Alexander Gavrilovich Rotchev (1838 to 1841). The settlement expanded and became increasingly more populated even as the yield of pelts declined (Fedorova 1973:139; Lightfoot, Wake, and Schiff 1991:22). While Kuskov's original group of Russian workers remained fairly constant in number, the number of Native Alaskan hunters increased during the first decade (Lightfoot, Wake, and Schiff 1991:22). By 1820, Kashaya Pomo and Coast Miwok women began to live at the settlement, and by 1833, nearly as many Pomo and Miwok men had moved in.



Figure 2: Excavation Overview
2003 Fort Ross Magazin Excavations
Fort Ross State Historic Park
Sonoma County, California.



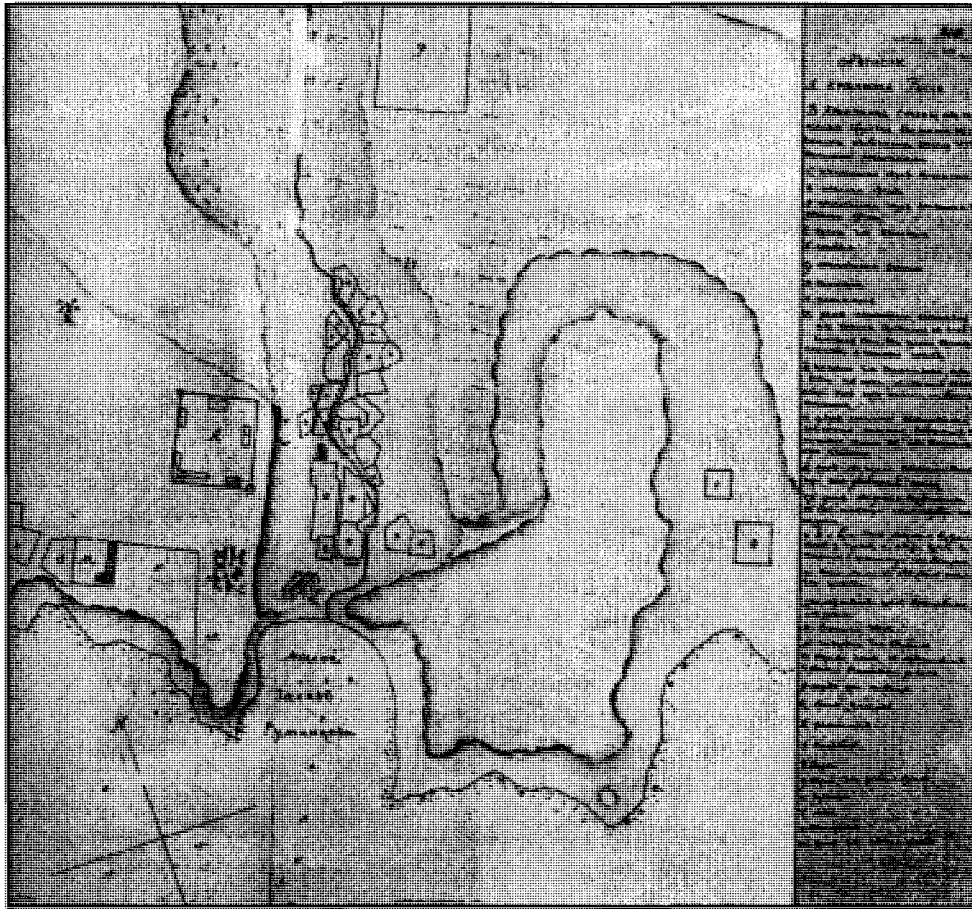


Figure 3. Plan of Fortress Ross, 1817.

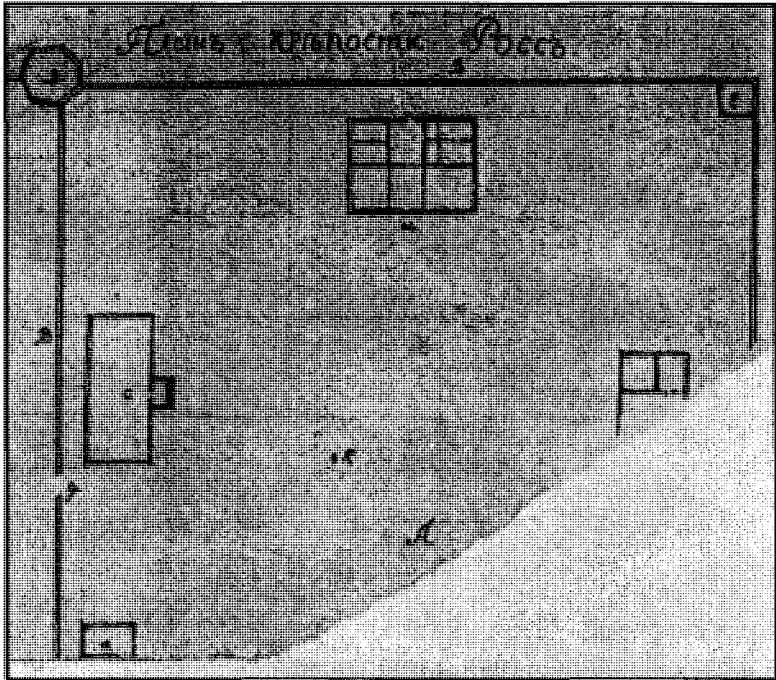


Figure 4. Partial map depicting Old Magazin (Building "C"), 1817.

Mexico's successful revolution and independence from Spain could have been a substantial boon to Fort Ross. Formally rejecting the trade restrictions that the Spanish government-imposed on the missions, a secularized Mexican California would have opened an entirely new local market to the Russian craftsmen. Russian policymakers were unsure what to make of the revolution but thought that the change in government could greatly benefit the RAC. However, the new emperor, Nicholas I, despised all revolutions on principle and forbade any contact with the Mexican government (Dmytryshyn, Crownhart-Vaughan, and Vaughan 1989:21).

As the population and different economic endeavors at the fort increased, the Alaskan fur hunting trade decreased. By 1819 Anglo-American expansion and over-exploitation of the sea otters and sea lion pelts forced the Russian hunters to look ever northwards. Even Fort Ross, which at the time was only seven years old, had ceased to be a significant source of pelts (Fedorova 1973:136).

The loss signaled the beginning of the end of Russian expansion into North America; through a series of leases, the Hudson's Bay Company had already acquired much of the Russian territory by the late 1820s; a final attempt by the RAC was made in 1858 to establish a fortification at what is now Taral on the Copper River (Fedorova 1973:146). The RAC finally withdrew entirely with the sale of Alaska to the United States in 1867.

There are several possible reasons, or a combination of reasons, for the colony's failure. First and foremost, the local sea otters and sea lions were hunted to near extinction, thereby negating one of the primary reasons for the RAC's presence in California and ending its largest source of income (Fedorova 1973:136, Khlebnikov 1976:108).

The agricultural endeavors seem to have never yielded much, despite years of effort. Poor weather, rodents, lack of experience, and, towards the end of the Russian occupation of the fort, lack of access to more productive inland areas, doomed the settlement's long term agricultural goals (Gibson 1976:125-137; Wilson 1998:12). An interesting contradiction to the reported failure of the agriculture, however, is provided by de Mofras. He suggests that the agricultural efforts were successful and financially lucrative, and intimates that the real blame of the fort's collapse can be placed on what might best be described as embezzlement:

Within the past few years two Russian agents, whom I cannot name, carried on their private affairs to the detriment of those of the Imperial Company. They derived lavish profits from the settlements in California, and caused such disorder and turmoil by exploiting the sale of wheat to Spanish missions and private individuals that the company found itself facing a deficit (Dufлот de Mofras 1844).

August Duhaut-Cilly, a French sea captain who visited the fort in the late 1820s, reiterates the success of the Russian's agricultural efforts, stating that Ross became independent of the Spanish in their ability to supply their own grain (Duhaut Cilly 1828:169). Duhaut-Cilly also comments that the settlement's dairy efforts were likewise very successful, claiming that "with only six hundred cows [the settlement] was producing more butter and cheese than all of Alta California with its countless herds" (Duhaut Cilly 1828:185).

Shipbuilding, however, proved unprofitable. Baranov pushed for shipbuilding at the fort when it became obvious that fur yields were beginning to dramatically drop, believing that the local oak would provide excellent construction material (Khlebnikov 1976:116). A shipwright

by the name Grudin in who was stationed at the fort and who had worked with an American shipwright in Alaska, volunteered to lead the operation. Despite his Alaskan experience, he appeared to be still somewhat a novice in the profession, using unseasoned wood and building four ships that fell apart from rot within four years of construction (Khlebnikov 1976:116). After only six years of operation, shipbuilding was shut down in the mid 1820s (Gibson 1976:120).

The lumber operations were apparently the only moderately successful industrial efforts aside from blacksmithing. Shelikhov stated that the settlement sold lumber in California and the Sandwich Islands; Duhaut-Cilly notes, however, that the wood was of poor quality in that it was brittle and lacked resin (Duhaut-Cilly 1828:186). Presumably this is in reference to redwood's characteristics in relationship to shipbuilding rather than other forms of construction, as he also notes how well-built and well-maintained the fort structures were, all of which were made of redwood.

Brick making was another enterprise for the fort. Brick kilns had been in use at the fort by 1824 to supply the Alaskan outposts with stove-making material; the operation was moved to Bodega Bay in 1833 (Farris 1990:493; Wilson 1998:28). The bricks were larger than American bricks and were used as ballast on ships.

The opening of Mexican ports to free trade after the revolution cleared the way for foreign merchants in California. After 1821, American and English ships began to pour into the region, bringing goods to barter. Not only did the Russians suddenly find themselves inundated with competition, they were severely restricted in participating in the trade themselves by their own emperor (Dmytryshyn, Crownhart-Vaughan, and Vaughan 1989:21). While relations with the Americans seemed generally amicable and mutually beneficial, the Russians were continually, and begrudgingly, dependent on the British, who seemed to be constantly undermining their settlement efforts by supplying aggressive Alaskan native groups with ammunition and guns while simultaneously providing transport for Russian furs to China (Dmytryshyn, Crownhart-Vaughan, and Vaughan 1989:21-22).. British ships often rescued the Russian outposts from slaughter at the hands of the hostile native groups, from starvation, or from economic disaster; at the same time, British ships slipped in and out of Russian waters poaching wherever they could, and leasing hunting rights where they could not. The British openly rejected attempts to restrict their access to foreign waters, and as Russia was not in a position to adequately enforce any such restrictions, the government was often forced to concede or compromise to British terms (Dmytryshyn, Crownhart-Vaughan, and Vaughan 1989:21). The RAC completed an agreement with the Hudson Bay Company in 1825 that gave its outposts access to trade goods at reasonable prices (Dmytryshyn, Crownhart-Vaughan, and Vaughan 1989:21). With such an agreement in place, Fort Ross's importance to the Alaskan colonies began to fade.

The withdrawal of the Russian occupation from Alaska left Fort Ross isolated and without support. Governor Baron von Wrangell visited the fort in 1833 and had noted that the stockade walls and buildings were in a state of complete disrepair (Farris 1981:4). The RAC tried to sell the fort to the Spanish in 1820 as soon as it appeared that the fort was no longer profitable, in exchange for lifting of trade restrictions (Wilson 1998:12). The company tried again in 1836 to sell the fort, this time to the Mexican government. Neither the Spanish nor the Mexican government recognized Russia's ownership of the land, and both declined the offer (Wilson 1998:12). Mexico in particular was offended at the refusal of Tsar Nicholas to recognize Mexico's independence from Spain, and may have rejected the offer on these grounds alone (Stephen Watrous 2003 pers.

comm.). In 1839, the RAC formally applied to the Ministry of Finance for permission to sell the fort off and withdraw from California altogether (Fedorova 1973:144). The RAC found a buyer in John Sutter of Sacramento, and in July 1841, the fort was abandoned by the Russians (Wilson 1998:12).

THE AMERICAN PERIOD

Sutter purchased the fort from the RAC for \$30,000 to be paid over four years in both cash and trade goods (Duflot de Mofras 1844). The RAC promised to transport stripped structural materials, buildings, equipment, and boats from Ross to Bodega Bay for transport back to Sutter's Fort, constructed in the same year as the sale, in what is now Sacramento. Two of the ranches, Kostromitinov and Khlebnikov, were left untouched; the cattle from the ranches were sent to Sutter's Hock farm in Marysville (Duflot de Mofras 1844; Tomlin 1995a:10). Much of the lumber went into the construction of the fort, just as the cannons and uniforms went to the Indian soldiers Sutter had hired or conscripted to defend it (Hurtado 1988:50; Rawls and Bean 1993:65;).

After a series of agents, Sutter hired William Benitz in 1843 to manage the deserted fort (Wilson 1998:13). Two years later, Benitz and a business partner, Major Ernest Rufus, leased the property from Sutter, though the lease was complicated by Mexican Governor Micheltorena's simultaneous granting of the property to Manuel Torres (Tomlin 1995a:12-13). New lease agreements were arrived at, and Benitz and Rufus began several ranch enterprises, resurrected the Russian orchards, planted wheat, oats, and potato crops, rebuilt the Russian sawpit, constructed a stone wharf, and eventually expanded their enterprises to include a coal mine and brewery (Tomlin 1995a; Wilson 1998:13). Benitz built a home as an addition to the Rotchev house. Rufus left the partnership, and after six years of leasing, Benitz bought the ranch from Torres and became partners with a man named Meyer for four years, at which point Benitz again bought his partner out (Tomlin and Rudy 1995a:20). Benitz's entrepreneurial efforts increased to encompass lumbering and quarrying, and by 1858 Benitz was the fourth richest man in Sonoma County (Wilson 1998:13).

In 1867, after over 20 years of ranching, farming, and lumbering, Benitz bowed out of ownership of the fort and sold the north half of his property to James Dixon and the south half to Charles Fairfax (Tomlin and Rudy 1995b:23). The two entered a partnership, with Dixon acting as the local manager (Tomlin and Rudy 1995b:23). By this time small lumber operations were already cutting trees from the forests overlooking the fort (Tomlin and Rudy 1995b:20). Dixon and Fairfax expanded Benitz's old lumbering operation, building a lumber chute for loading ships from a cliff north of the fort and hauling Dixon's mill operation up from Nicasio in Marin County. When Fairfax died of tuberculosis in 1868, his widow took over his half of the partnership, and the two continued to extract lumber until selling the fort in 1873 (Tomlin and Rudy 1995b:26; Wilson 1998:13).

With the switch from ranching and farming to lumber, the need for local Kashaya Pomo labor ceased. Dixon ordered the Kashaya off their ancestral summer home of Metini in the early 1870s; several left to stay at their traditional winter homes in Tobacco and Elk creeks, while others departed to nearby ranches to live with relatives (Tomlin and Rudy 1995b 1995:24). Ironically, Dixon and Fairfax logged themselves out of business within a few years; Fairfax's widow sold her share of the partnership, and Dixon had to move his operation up the coast to Mendocino County, where it is thought that he died in a logjam accident (Tomlin and Rudy 1995b:24-26).

George Washington Call, a miner, logger, teacher, showman, and railroad builder, purchased the fort from Dixon and Fairfax and moved his family into it in 1873 (Tomlin 1995b:29). At the time of the purchase, many of the Russian buildings remained intact or had been remodeled; the Calls moved into the two-story Benitz addition (Tomlin 1995b: 30). Call continued to use the lumber chute to load wood from his own lumber operations, and began shipping dairy products and tan bark by sea from the fort as well (Wilson 1998:14). The Call family had a new house built in 1878, and converted the Rotchev house into a hotel, leasing its operation out to the Morgan brothers who ran the hotel for nearly 25 years (Tomlin 1995b 31). The Morgans converted the Officials' Quarters to a saloon and laundry and were thought to have turned the Old Magazin into a dancehall. Other buildings on the property were converted into a store, a post office, and telegraph office (Tomlin 1995b 32). Call built a wharf and warehouse next to the Dixon/Fairfax lumber chute, increasing the economic utility of Fort Ross Cove (Tomlin 1995b 33). Fort Ross became a port and stage stop that was consistently busy and profitable (Tomlin 1995b:31; Wilson 1998:14).

Senator Joseph K. Knowland, Chairman of the California Historical Landmarks League, took interest in the fort and began fundraising efforts to purchase it in 1903 (Wilson 1998:14). William Randolph Hearst also thought the fort worthy of preservation, publishing an article in his Examiner and contributing \$500 of his own money to the Fund for Preservation of California's Landmarks to further the cause (Wilson 1998:14). A deal with the Call family was reached in July of 1903, when the Landmarks League purchased the fort itself comprising the stockade area which amounted to 2.45 acres. At the time, only the old Magazin was still in use, serving as a community dancehall; the rest of the buildings had been abandoned (Wilson 1998:15). The League in turn transferred the property to the State of California in March of 1906, just a few weeks before the fort, along with most of northern California, was hit by the 1906 earthquake (Wilson 1998:15).

The quake caused severe damage to the fort. The chapel collapsed, wrecking the floors, walls, and foundations, and nearly a decade would pass before serious reconstruction efforts could take place (Pritchard 1972:5). The barracks were torn down during this period to provide lumber for the reconstruction (Pritchard 1972:6). During this time, Samuel and Bell McKean served as caretakers of the fort, though the buildings continued to decline (Wilson 1998:15). A second reconstruction was made in 1956, and it is believed that this reconstruction more accurately reflected the original church (Pritchard 1972:7-8).

It is during the early 1920s that the Magazines were demolished, a decision made by the ranger in charge of the fort. There does not appear to be any documentation of the demolition process (Farris 1990:482).

The Call family continued to run the ranches and dairy operations immediately around the fort until the 1920s, at which point the family abandoned cattle and moved into sheep ranching (Tomlin 1995b::39). When World War II began, a Coast Guard station was established at the fort and manned round-the-clock until its closure in 1945 (Tomlin 1995b::39). Public interest in state parks increased after World War II, and the California Department of Beaches and Parks began efforts to acquire the fort. Call's will stated that the family could not sell the remaining property during the lifetimes of his children. The State, unable to buy the land outright, condemned it in 1961 and expanded the park by 353 acres (Tomlin 1995b: 38; Wilson 1998:15). The park continued to grow with the purchase of 239 additional acres in 1976 and 143 acres in 1977 (Wilson 1998:15).

The 1970s and 1980s saw major reconstruction of the stockade's interior. After arsonists burned the church to the ground in the fall of 1970, the church was rebuilt for the third time, this time preceded by archaeological investigation into the chapel's original alignment and construction details. During the 70s and 80s, the Kuskov house and the Officials' Quarters were also rebuilt (Glenn J. Farris 2003, pers. comm.) along with several portions of the stockade wall were likewise rebuilt. The current study, focused on the Old and New Magazins, reflects continuing efforts in building reconstruction and educational interpretation within the fort.

THE TWO MAGAZINS

The Magazin, or "Magazin", was, as the name implies, initially designed to hold the sea mammal furs obtained by the Aleut hunters stationed at the fort. Farris (1990) provides a complete description of the historic documentation of the original Magazin, or Old Magazin and a later addition, the New Magazin.; a summary of his discussion is provided here.

It appears likely that the Old Magazin was one of the first buildings constructed in the fort. A Spanish officer, Lieutenant Gabriel Moraga, describes a building that is most likely the Magazin in 1814, two years after the fort's construction; an 1817 diagram of the fort depicts a building in the location of the Magazin foundations (Farris 1990:477-478; see figures 3 and 4). According to Moraga, the lower portion appears to have served as a barracks, while the upper was the storehouse (Arguello, in Farris 1990:477). Another map, prepared in 1817 by the Russians in order to placate Spanish concerns over Russian encroachment, depicts the building as a "two-story storehouse, built of logs containing two storerooms on lower floor and three above" (Fedorova 1973:359; see Figure 3). At the time, the Old Magazin and the lower floor of the Kuskov house, which was used as food storage, appear to be the main storage areas within the fort. A drawing by Duhaut-Cilly from 1828 depicts the building as having a hipped roof with a pair of dormer windows on the east side (Farris 1990:479; see Figure 5). By the 1820s the fur populations had declined dramatically and use of the Magazin for other supplies would have increased. It is interesting to note that in one of the versions of the 1841 inventory the "New Magazin" was called the "magasin de blé" or wheat Magazin (Glenn J. Farris 2003c, pers. comm).

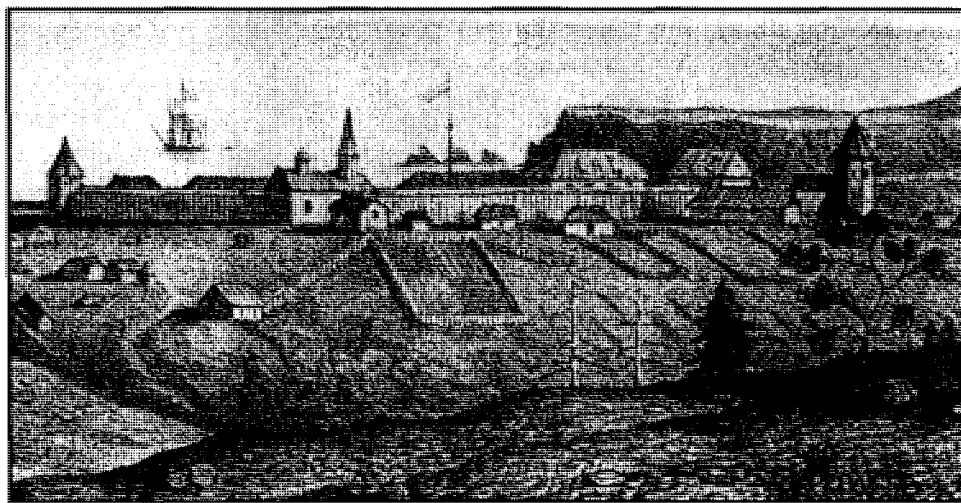


Figure 5. Drawing of Fort Ross by August Duhaut-Cilly, 1828 (detail).

The first, and truly only, mention during the Russian period of the construction of the New Magazin is a listing in the two inventories of sale prepared for Vallejo and Sutter. A drawing and a painting from the period, both attributed to Voznesenskii, depict a separate building in the location of the New Magazin (Farris 1990:480-481; see figures 6 and 7). It is presumed that the building was constructed by Rotchev as part of an effort to improve the appearance of the fort and to keep the local population busy (Farris 1990:480-481).

At the close of Russian occupation of the fort, the Old Magazin had a gallery; the gallery was not depicted in the Duhaut-Cilly drawing and may have been a later addition (see Figure 5). It is unknown if the New Magazin had such a feature (Farris 1990:480). Several historic-period photos from the 1860s to the 1890s show buildings in the locations of the Old and New Magazines (figures 8-11); whether or not these photos actually represent buildings of Russian construction is discussed in Chapter 7: Recommendations for Management and Further Research. However, the photos do indicate that the New Magazin was removed no later than 1890, if not several decades earlier. The Old Magazin, or a building in its location continued to be used during the American Period as a dance hall and wagon barn until the early 1920s, at which time the ranger in charge of Fort Ross dismantled it (Carr 1987:2-3; Farris 1990:482; see figures 12 and 13).

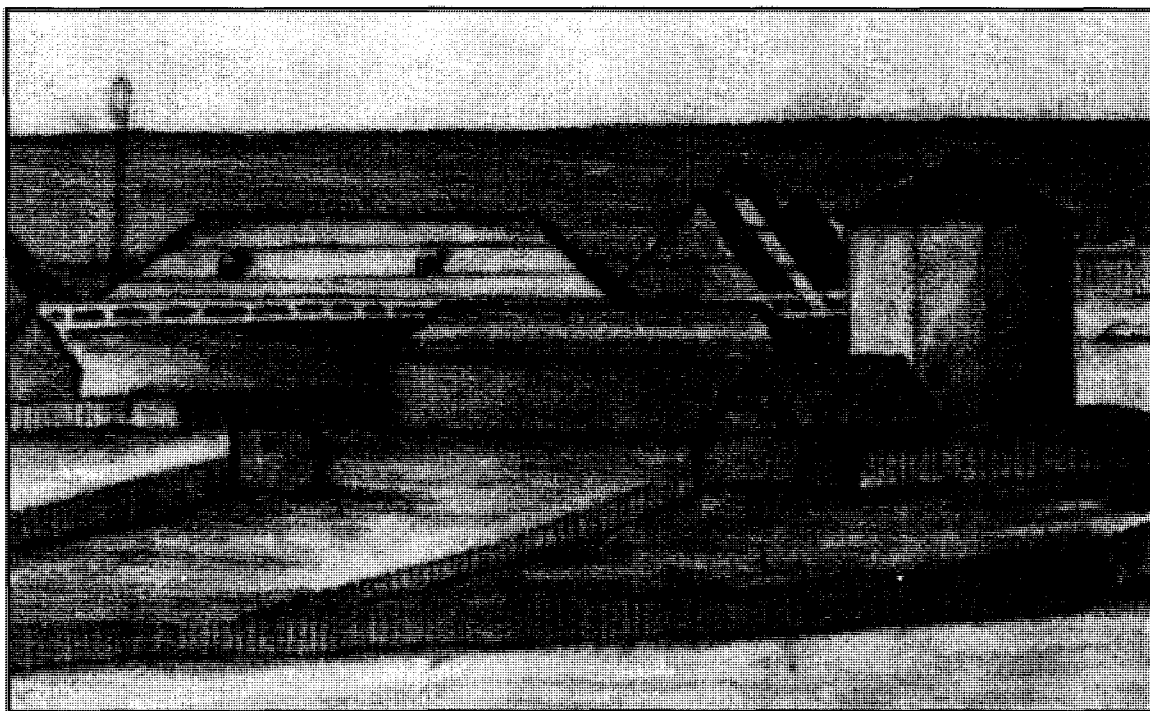


Figure 6. Watercolor of Fort Ross by Gavillovich Voznesenskii, ca. 1841 (detail).

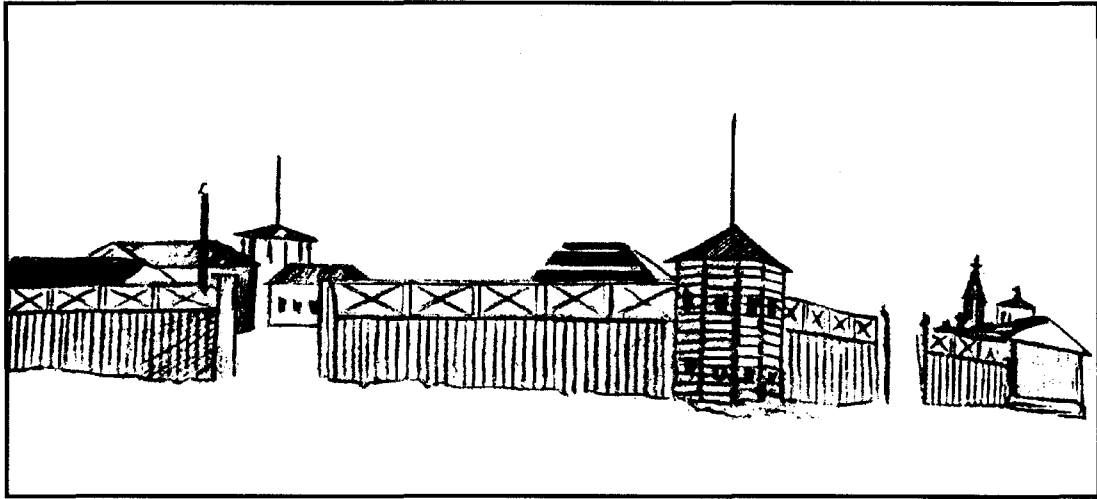


Figure 7. Drawing of Fort Ross Stockade by Voznesenskii, ca. 1841.



Figure 8. First known photo of Fort Ross, 1865.

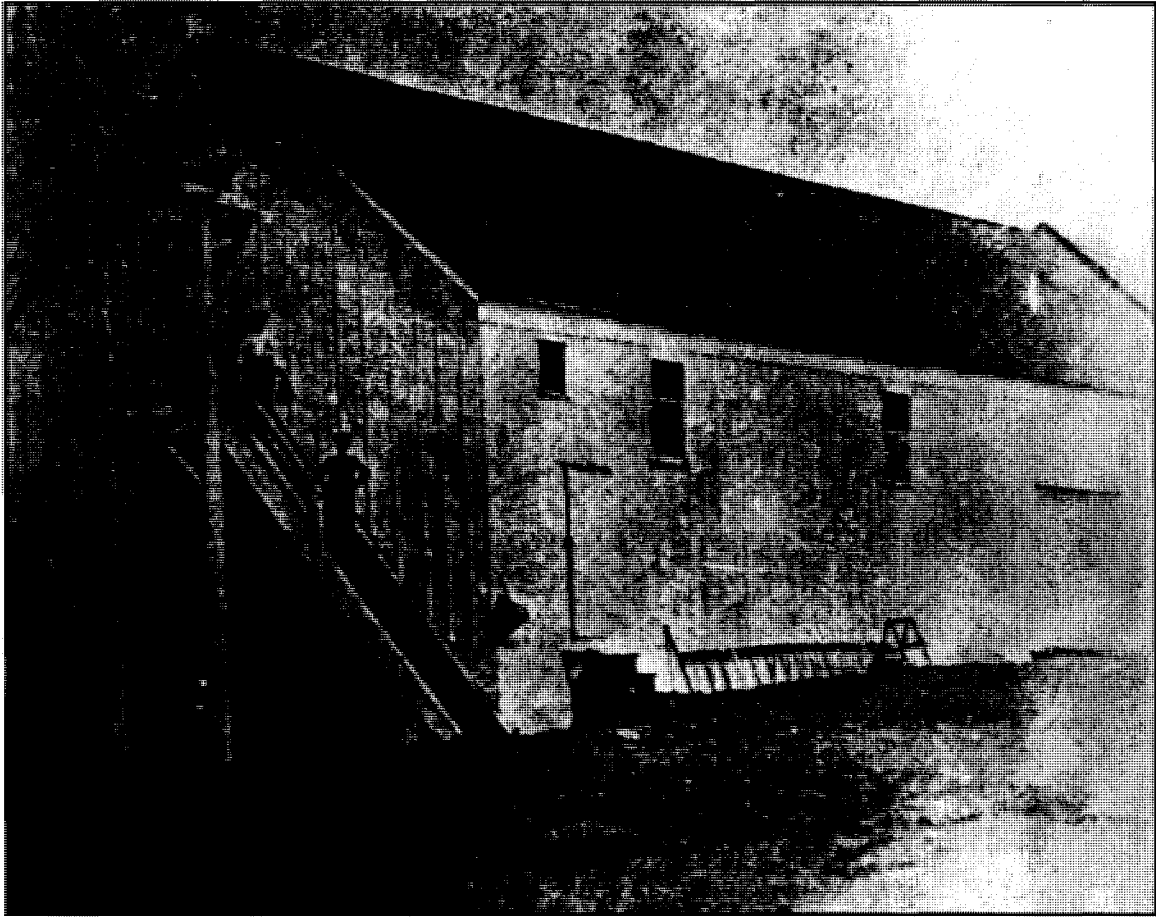


Figure 9. Photo of Old Magazin (?), ca. 1866.



Figure 10. Old Magazin (?) with adjacent building, ca. 1866.



Figure 11. Old Magazin (?), ca. 1890.

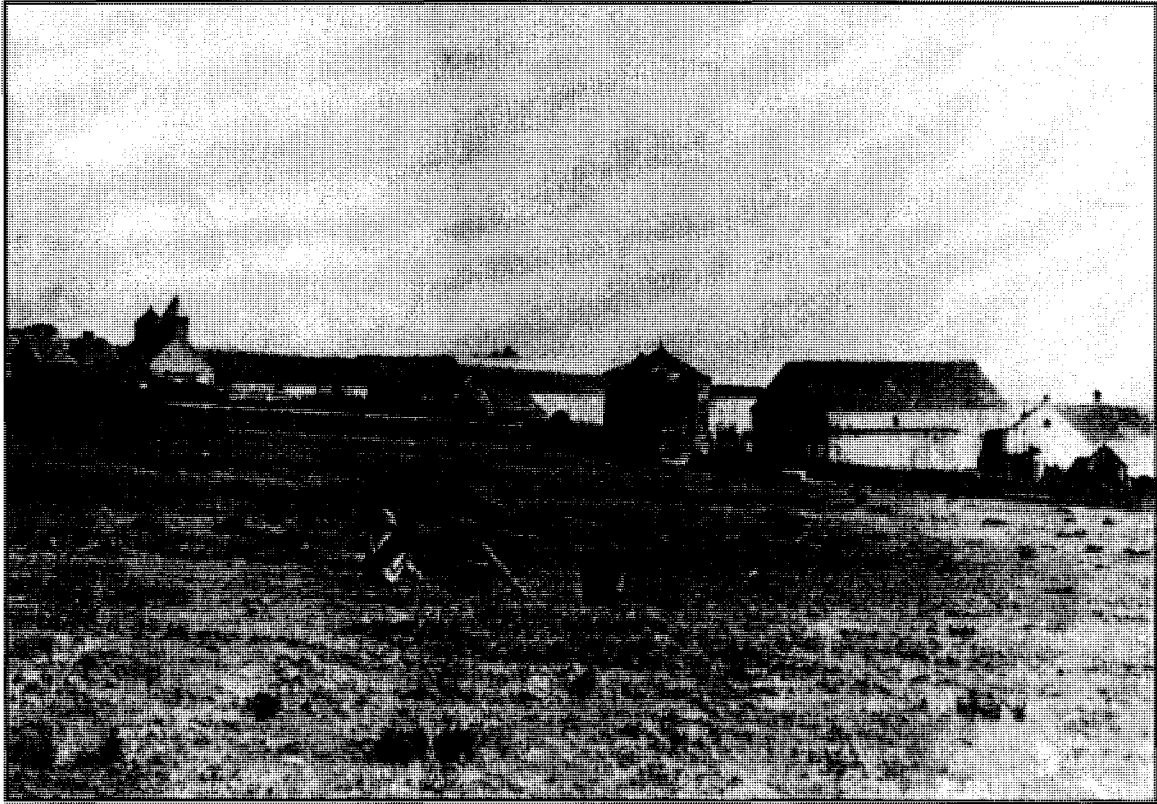


Figure 12. Photo of Fort Ross, pre 1906. Old Magazin (?) is right of Blockhouse.

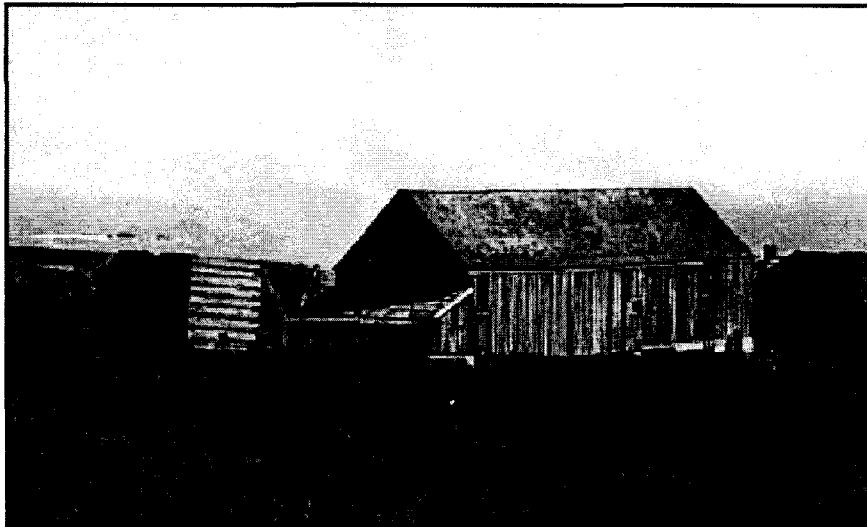


Figure 13. Old Magazin (?), post 1906. Note Blockhouse is partially collapsed from earthquake.

CHAPTER 4 ARCHAEOLOGICAL OVERVIEW AND CURRENT STUDY

PREVIOUS ARCHAEOLOGICAL WORK

Archaeological Study Outside the Stockade

Several recent archaeological surveys have been conducted in the vicinity of Fort Ross. Breck Parkman of DPR and Heather Price of UC Berkeley have recently completed a survey and archaeological site recordation of six petroglyph sites near Salt Point, Fort Ross, and Willow Creek, as part of their Kashaya Petroglyph Project (Price 1999). Their study included both field survey and ethnographic interviews with Kashaya Pomo elders, and resulted in the identification of new sites and insight into the functions of cupule petroglyphs, particularly in their use by poisoners, and of petroglyph arrangement, suggesting that groupings of four might have significance to the Kashaya (Price 1999:40-41).

Kathy Dowdall of the California Department of Transportation has conducted survey of 8 miles of Meyers Grade, at the top of the ridgeline overlooking the fort (Dowdall 1996). Dowdall identified two archaeological sites, CA-SON-2169, a lithic scatter, and CA-SON-2170, a multi-component site containing debitage and midden. In addition, four cultural properties associated with village sites, traditional plant collection locations, pigmented soil, and tool-making material, were identified and documented, identified by Dowdall in consultation with Kashaya Pomo elders Violet Chappell Otis Parrish, and Vivian Wilder. Dowdall also surveyed a portion of Highway 1 and an adjacent parcel (Dowdall 1995). The study resulted in the identification of one historic-period homestead, the Schroyer Ranch complex.

Gary Reinoehl and Jeffery Bingham conducted an archaeological augering program in 1978 to study possible subsurface deposits at the location of what is now the Visitor's Center, and in what is now the path leading from the latter to the stockade (Reinoehl and Bingham 1978). Over 436 core samples were taken and one test unit excavated. Three areas were identified that contain cultural resources; an area just west of the stockade, a midpoint along the path, and the site of the Visitor's Center.

Reports by Allan Bramlette and Dave Fredrickson(1990) and by Bramlette and Katherine Dowdall (1989), resulted from cultural resource management surveys conducted in 1987-88 in preparation for a burn management plan in Salt Point State Park, five miles north of the fort. Nearly 140 sites were identified in a mixed-strategy survey covering 5,000 acres of parkland. Of the 134 sites recorded, 108 are prehistoric spanning 4,500 years of Native American occupation in the area; the remaining 25 sites represent predominately late-19th-century farmsteads, lumber mills, and stone quarries.

Hannah Ballard analyzed unreported or under documented excavations within the vicinity of the Metini ethnographic Kashaya Pomo village site (Ballard1995). Ballard identified three unreported additional excavations near the fort. The first was conducted by Donald Wood and is described below. The second was conducted by Eric Ritter of DPR in 1972, and consisted of a series of 5 by 5 foot units within the Caltrans right-of-way along Highway 1. It resulted in the identification of Native American artifacts associated with Metini (Ballard 1995:17-18). Glenn Farris and Waltraud Taugher, also of DPR, conducted the third excavation, digging a single unit within the Metini village site in preparation for underground cable installation in 1983; they also recovered Native American artifacts associated with Metini (Ballard 1995:19-20).

The largest effort at compiling and synthesizing Native American archaeology of the Fort Ross area is *The Archaeology and Ethnohistory of Fort Ross, California* by Kent Lightfoot, Thomas A. Wake, and Ann M. Schiff of the Archaeological Research Facility at the University of California at Berkeley, published in two volumes, the first in 1991. The second volume, published in 1997, focused on the Native Alaskan Neighborhood of the colony. In Volume 1, Lightfoot, Wake, and Schiff review nearly 400 new and previously recorded site records to develop a local model of subsistence and settlement based on site location, vegetation zones, elevation, and site composition, as well as change through time, particularly at the time of Russian contact with the Kashaya Pomo. Their work represents the most recent and comprehensive work to date on the subject and provides most of the background for the summary of prehistoric settlement within the area presented in this report. (correct??)

Volume 2 of Lightfoot's work is a systematic study of the Native Alaskan village site south of the stockade wall and within Fort Ross Cove. Surface collections and nearly 40 excavation units resulted in the recovery of thousands of artifacts associated with the Native Alaskan population at the Fort, including lithics, mammal bone, ceramics, shell, trade beads, metal, and fire cracked rock. Their study shows the interethnic cooperation and adaptation of the Native Alaskan community to Russian material culture, as well as maintenance of their own cultural traditions despite removal from their extended culture network of Alaska (Silliman 1997:171-175).

Excavations Inside the Stockade

Treganza (1954) conducted the first systematic excavations in and around the Fort Ross stockade. Hoping to relocate the locations of the original stockade walls and the location of the original Russian well, Treganza opened nineteen excavation areas. Treganza appears to have been very close to his approximations of wall locations, as has been shown by subsequent work, though slight misalignments resulted in the preservation of a few subsurface features of the old wall (Treganza 1954:19; Purser, Beard and Praetzelis 1990:50; see discussion of the latter study below).

Treganza was also able to relocate the Russian era well with the help of Carlos Call (Treganza 1954:19). The well, exposed after years of being closed off and covered with grass and sediment, was partially excavated by Treganza in 1953 to a depth of 10 feet and further excavated by McKenzie to 35 feet, at which point the well reached bedrock (McKenzie, 1953). Interestingly, the top of the well was filled with Native American midden taken from one of the local sites; it is unclear which site the midden was taken from, however, it is possible that a review of ranch records, which reportedly contain a record of the well's filling, could assist in answering this question (McKenzie 1953). It is likewise unknown where the well excavation backdirt was discarded.

The 1970s saw almost continuous excavation within the fort. No fewer than twelve excavations took place during this decade; unfortunately, only one of the excavations has a final report, and only two others have draft or preliminary reports available. Considerable effort clearly went into the excavations; notes, detailed maps and stratigraphic profiles, and artifacts are on file with the California Department of Parks and Recreation archives and await analysis, synthesis, and publication.

Portions of the remains of the Officials' Quarters were excavated on five separate occasions by five different archaeologists: John McKenzie in 1956; Donald Wood in 1970; William E. Pritchard in 1971; Karl Gurcke in 1975; and Bryn Thomas in 1975 (Thomas 1976:5-6). The final excavation

by Thomas resulted in a draft report summarizing the previous excavations, all of which appear to lack excavation reports.

McKenzie's 1956 excavation appears to be the first attempt to identify the foundations of the Officials' quarters (Thomas 1976:6). McKenzie identified structural timbers and timber fragments, and fill (Thomas 1976:33).

Wood's 1970 excavation was a Sonoma State College field school that opened eleven excavation units on a north-south transect through the Officials' Quarters foundations. Wood identified an American-period privy/trash pit and a water pipe. (Thomas 1976:25, 32)

Pritchard's 1971 excavation was also a Sonoma State College field school, and continued Wood's research from the previous year (Thomas 1976:6). The privy was re-opened and appears to have been completely excavated. Pritchard's crew also identified a flower-bed box located on the west side of the Officials' quarters that also appears to date to the American period.

Gurcke and Thomas identified several other features associated with the Officials' quarters. Post holes, brick, rock, and ceramic concentrations, the base of an American-period chimney, and foundation trenches associated with both the Russian- and American-period occupations of the fort were identified (Thomas 1976:25-33). Thomas concludes that the Officials' Quarters originally served multiple purposes as a kitchen, foundry, and workshop, and was converted to living quarters by 1833. The American-period saw more changes to the building as it was converted into a saloon; privies were excavated, and the building received a new porch, a shed attachment, and a new gabled and shingled roof.

The Officials' Quarters were again looked at in 1979, this time by Felton, in preparation for and in the process of monitoring the construction. Felton identified five new features, including postholes and sandstone cobble concentrations, as well as relocated several features identified during earlier excavations.

The foundations of the Kuskov House were apparently excavated twice by DPR personnel, in 1972 and again in 1975, presumably in preparation for the reconstruction of the Kuskov House. No reports for these studies were written; however, plan maps of the excavations indicate that substantial rock fill and rock structural features were identified, all looking very similar to the foundation for the old Magazin (Felton 1975; see Magazin Excavations below). As the two appear to be contemporaneous in construction, and both are on the same slope within 100 feet of each other, it is likely that similar construction techniques would have been used for both.

The foundations of the "Barn", or "Barracks", located in the northeastern corner of the fort, just south of the chapel, were also excavated in 1975 by DPR. Like the Kuskov House, grid drawings, excavation records and stratigraphic profiles are on file with DPR; no report was written. A cursory look at the plan drawings suggests that the barracks were built much in the same way as the new Magazin, i.e., without the benefit of a substantial rock foundation. Wood timbers are shown placed directly into the soil, and preservation, as with the wood in the new Magazin, seems generally compromised, with only small segments remaining.

Pritchard (1972) conducted an archaeological excavation of the chapel in the northeast corner of the stockade. While the exact date of the chapel's original construction has not been determined, it is known to have been built by 1825 (Pritchard 1972:3). The chapel, one of the most recognizable historic buildings in California, was gutted by fire in October of 1970. The DPR planned an immediate reconstruction of the chapel, as part of which archaeological investigations

were conducted to provide architectural details. The chapel had in fact already been partially destroyed once as a result of the 1906 earthquake and subsequently rebuilt twice already, and the excavation provided a unique opportunity to construct a building that more accurately reflected the original. An important discovery of the excavation was that, as with the Kuskov House and the Old Magazin, the chapel was built on a rock fill foundation deposited directly onto the decomposing sandstone bedrock, and utilized a substantial post construction (Pritchard 1972:12-13). It would appear, when compared to both contemporaneous buildings and those constructed later in the Russian Period that the use of a rock fill and heavy timber post construction are indicative of early construction techniques within the fort.

Continuing the study of the Stockade wall started by Treganza (1954), the Anthropological Studies Center at Sonoma State University opened several trenches along the southeastern edge of the enclosure in 1989 (Purser, Beard and Praetzellis 1990). The excavation was conducted prior to the replacement of the southeastern corner of the wall, and had three specific tasks: (1) to identify any historical structural features, particularly that of a possible blacksmith shop, through surface transects along the wall edge; (2) to identify possibly buried structural features during the monitoring of the removal of the wall; and (3) to open excavation units after the wall's removal in order to determine the accuracy of Treganza's conclusion that previous wall replacement efforts had destroyed any remnants of the original Russian stockade wall (Purser, et al. 1990:4-5).

Sonoma State's study indicated that intact remains of the stockade wall still existed, that Treganza had missed sections of these remnants, and that the 1917 and 1956 wall reconstructions were offset from the Russian-period alignment by about a foot. Additionally, while no features associated with the blacksmith shop were recovered, artifacts associated with smithing, including slag and metal fragments, were identified (Purser, Beard and Praetzellis 1990:33-34, 50). After Sonoma's excavation, the wall was re-built along the 1917/1956 alignment to avoid destroying the wall's Russian-era features (Purser, Beard and Praetzellis 1990:50).

In addition, several pieces of debitage, obsidian tool fragments, and ground and battered stone tools were identified as a result of Sonoma's study. Obsidian hydration analysis yielded a wide spread of dates ranging from the Lower Archaic to the Upper Emergent periods. No evidence of historic-period use of the site by Kashaya Pomo was discovered in the artifact sample (Purser, Beard, and Praetzellis 1990:50).

Excavation of the Magazines

Prior to the current study, three other excavations had focused on the Magazines: McKenzie in 1963; Edwards in 1975, 1976, and 1977; and Farris in 1981. Of these, only Farris prepared a formal paper summarizing the results of his field efforts. This study will attempt to incorporate portions of the earlier research and address some of their findings in relation to the current investigation.

In general, there are two major concerns for archaeological work on the Magazines: the difficulty in attributing specific artifacts to Russian construction or manufacture and severe disturbance of soils by rodents. Farris (1990:493) states that the artifacts found during the excavation of the Old Magazin "hardly differ from ones found at California's Spanish mission sites of the same era". The Russians, finding it less expensive to trade for goods than to make it themselves or try to acquire them through the RAC, imported items like everyone else in the region. The regular trade with the Spanish, American, and British traders homogenized the artifact concentrations, making it difficult, with the sparse number of artifacts found at the Magazin, to identify a definitively Russian pattern of artifacts (Farris 1990:493).

The rodent problem has been noted by nearly every researcher at Fort Ross, and, as a phenomenon, is visible even in site overview photos (see Figure 14). Burrowing rodents were at least partially responsible for crop damage during the Russian era, and archaeologists have found them equally as destructive to the archaeological record. Rodents continue to chew away or burrow through post holes, timbers, and building trenches, and have disturbed many of the features from both Magazines (Farley and Edwards 1976:6; Felton 1981).



Figure 14. Archaeological excavations of Old and New Magazin, 1975.

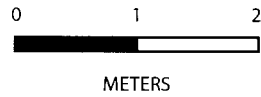
John McKenzie, State Park Ranger and Curator of the Fort Ross Museum, conducted the first preliminary archaeological exploration of the Old Magazin foundation. In the early 1960s, McKenzie found a large timber fragment that corresponded to a structural feature later identified and recorded by Farris (1981:15). Portions of a rock wall, which Farris attributed to the rocky fill found under the Old Magazin, were also identified (Farris 1981:15).





Over a decade later, Rob Edwards and three summer field schools from Cabrillo College proceeded to excavate portions of both the Old and New Magazines. The purpose of the excavation was to acquire archaeological information regarding the Magazines prior to reconstruction of the Old Magazin. While no formal report of their efforts has been finalized, an interim report was prepared that describes the findings of the 1975 season and suggests research hypotheses for the 1976 season (Farley and Edwards 1976). The unanalyzed maps, field forms, and daily field notes, as well as the artifacts, artifact catalogue, and two preliminary artifact analysis reports have been submitted to DPR and are on file at the State Archaeological Collections Research Facility in Sacramento.

The 1975 field season was the first systematic excavation of the New Magazin (see Figure 15). Four units were opened, all within the foundation perimeter of the New Magazin (Farley and Edwards 1976:4; see Figure 16). The excavation resulted in the identification of dressed boulders used as foundation supports, sandstone cobble fill, postholes, and rock-lined trenches with

Figure 15. Identified Structural Remnants, New Fur Magazin
 Combined 1975-1977 Excavations, Fort Ross State Historic Park,
 Sonoma County, California

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 GRID NORTH



-  Posthole (inner circle) and post mold (outer circle)
-  Angular sandstone cobble
-  Wood
-  Edge of excavations

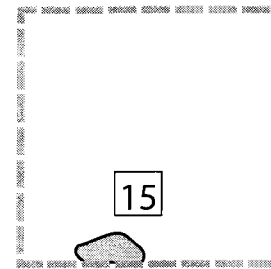
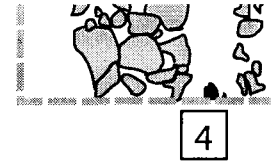
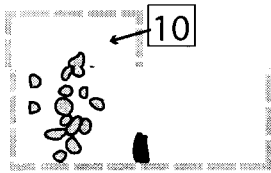




Figure 16. Overview of California Department of Parks and Recreation Excavation, 1981.

timber fragments still in them. Artifacts were collected, sorted and catalogued, and plan maps made of the excavation units.

Edwards, in conjunction with Bryn Thomas of DPR, constructed a research hypothesis for the 1976 season. Edwards and Thomas believed that the Magazin consisted of two abutting structures sitting on dissimilar foundations. From the placement of subsequent units for both the 1976 and 1977 seasons, it appears that Edwards tested this hypothesis over two years time, opening up an additional 14 units over an area that exposed portions of the foundations for both the Old and New Magazins as well as areas on the perimeter or just outside of the foundations. Detailed plan drawings showing each unit's location and features were prepared. It appears that, in general, the excavation strategy was to dig in 10 cm arbitrary levels using 1/4 inch screens. An exception to this may have been Feature I, a posthole in Unit 5 that may have been excavated stratigraphically (Guilbert, Jackson, and Franklin 1977).

A report on the ceramics recovered during the three field seasons was prepared by Zaldivar (1977) as part of a special studies course at Cabrillo. In sum, the fragmentary nature and lack of identifiable makers' marks left little to work with. Zaldivar associated what could be identified with five basic ceramics types: Common White, Common Yellow, Stone China, and Granite Ware, all produced 1848-1858 by Fenton Potteries; and Blue Willow China ware (Zaldivar 1977:np).

An artifact summary was prepared by Damrosch in 1977 of the 1975 and 1976 field seasons. Incomplete records and lack of provenience information from the 1975 season complicated the processing effort. Seeds, faunal remains, shell, redwood, charcoal, buttons, and leather were identified (Damrosch 1977:3-4). Bone and shell were found near the intersection of the two buildings; wood and carbonized wood tended to be distributed within the remains of the Old Magazin. A non-diagnostic concentration of bone was found in Unit 5 that corresponds to the edge of the New Magazin (Damrosch 1977:4).

Glenn Farris of DPR conducted an extensive excavation of the Old Magazin in 1981, in preparation for its planned reconstruction. Farris and his team essentially exposed what remained of the foundation and portions of the surrounding soil using trowels and vacuum cleaners in 2x2 meter grid units (Farris 1981:14; see Figure 17). Farris set his grid based on the one previously established by Karl Gurcke (in 1975) and was able to do so with little difficulty (Farris 1981:12).



Figure 17. Overview of Anthropological Studies Center excavation, 2003.
View to the south.

The 1981 excavation and related historical research resulted in the identification of a number of key architectural details of the Magazin and artifact distributions above the foundations that have implications for other excavations within the stockade, as described below in Chapter 7. These findings include:

1. The exact placement, width, and alignment of the Old Magazin. The Magazin was determined to be 57 feet 9 inches long (north-south) by 27 feet 8 inches wide (east-west). The Magazin was placed 10 feet 10 inches from, and runs parallel to, the west stockade wall (Farris 1981:33-34).

2. Construction details. Through the archaeology, historic-period documents, comparisons with studies of the architecture of RAC buildings in Alaska, and the analysis of a few historic-period photos of the Magazin, Farris was able to determine that it was two stories in height, had a hipped roof with dormer windows on the east side, had an exterior gallery on the east side, and probably had two entrances on the east side to each of two rooms that had been identified on the bottom floor of the Magazin (1981:33). Through excavation, Farris found that the construction materials and features included a packed-rock foundation with redwood sleepers, chipped bedrock used as foundation support, depressions built into the rock to support columns, and rock-lined trenches used for redwood sleepers (1981:29, 32-33).

3. Bead Distribution. By studying artifact distribution throughout the foundation, one pattern was identified that may provide insight as to the purposes of individual rooms within the Magazin. Glass trade beads were part of the original payment for the “purchase” of the land for the Fort Ross settlement that Kuskov brokered in 1811, and were therefore some of the first

Russian artifacts on the site (Parkman 1996:359). Farris found a relatively tight cluster of beads on top of the packed rock foundation, in the northern half of the Old Magazin foundation. Farris hypothesized that the small beads fell through the Magazin floorboards (Farris 1990:492). This would seem to indicate, given that well over 200 beads were recovered, that the northern room of the Magazin held trade beads, the only such assignment of room function for the Old Magazin to date (Farris 1990:492).

4. Brick. A small concentration of Russian brick was recovered from the extreme northeast corner of the foundation, incorporated into the rubble fill (Farris 1990:493).

5. Nails. Several large wrought-iron and brass nails were recovered that appear to date to the Russian period. Similar nails were found at the Russian Bishop's House in Sitka. The nails can be differentiated from American square nails of the time, as they were hammered on all four sides rather than just the two sides as was the American practice (Farris 1990:493).

In sum, the most interesting and diagnostic feature of Farris's excavation was the foundation itself, as it could be concretely identified as a Russian construction and could be dated to within a few years of the initial founding of the fort (Farris 1990:477, 493). While Farris did not dig through the foundation, by exposing it in its entirety he set the stage for the current work on the New Magazin, in that he essentially established the location of the southern wall of the New Magazin (which shared the north wall of the Old Magazin). He also completed and published the first complete map of an early building within the stockade, providing subsequent researchers with a frame of reference for comparison with their own findings.

CHAPTER 5 THE CURRENT STUDY

The current study was conducted for DPR as part of their preparation to reconstruct the Old Magazin. Previous work by Edwards in 1975-1977 and Farris in 1981 showed that foundation remains were present in the location proposed for reconstruction, and that the area should be considered highly sensitive for potentially containing unrecorded buried cultural resources. The purposes of the project were: (1) to investigate below the rock fill placed prior to the construction of the Old Magazin in the hope of discovering an intact Russian-era ground surface; (2) to expand on Edwards' investigation of the New Magazin site with the goal of creating a reliable and accurate description that could be used in the future reconstruction of this building; and (3) to provide DPR with mitigation recommendations for any potentially negative effects that the reconstruction might have on sensitive archaeological remains.

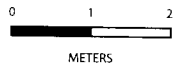
METHODS





The field component of the current study was conducted 27 May to 13 June 2003 by Sonoma State University staff and volunteers (see figures 2, 17 and 18). Eleven archaeological trenches were opened; one trench (Trench 100) in the Old Magazin (see Figure 19) and ten (trenches 101-110) in the New Magazin (see figures 20-23). Every attempt was made to align the trenches within the grid system used by Edwards and continued by Farris. The units were excavated using a combination of stratigraphic and arbitrary levels, using the former where stratigraphy or discrete features could be delineated, and the later where stratigraphic levels continued for more than 10 centimeters.

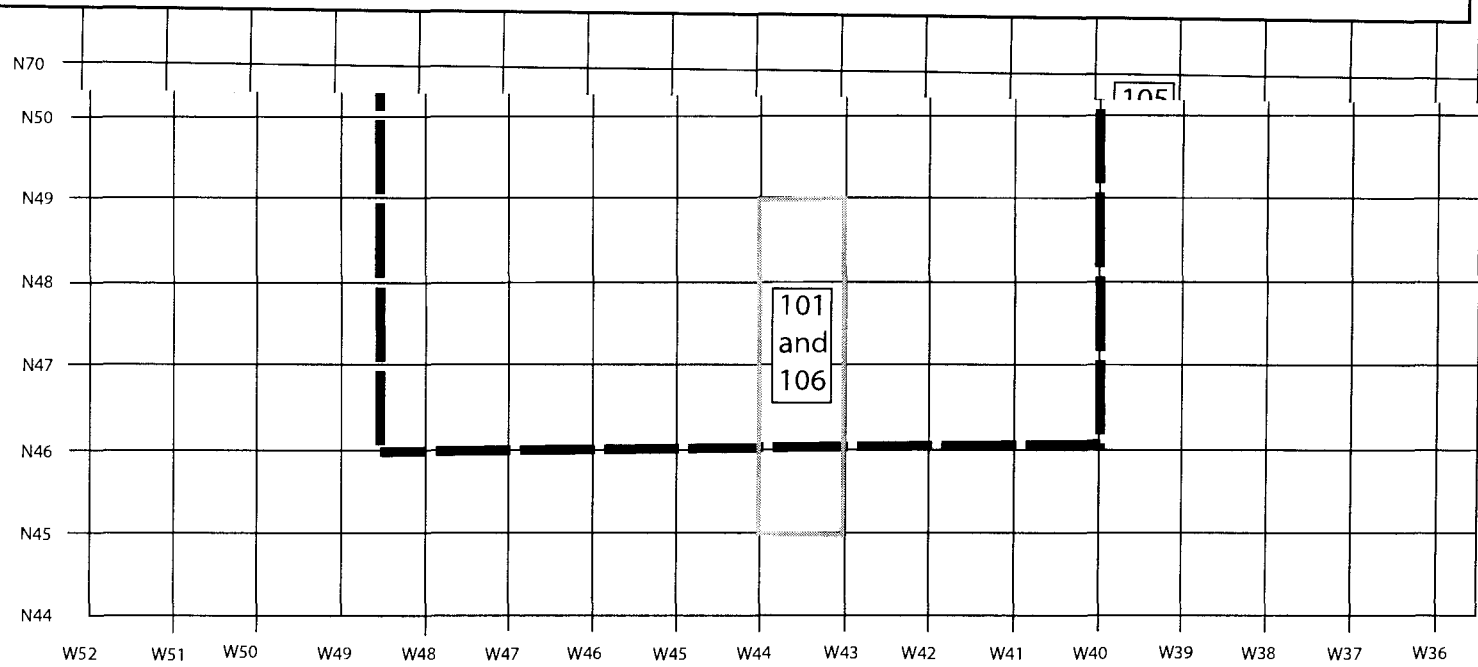
Using a transit and stadia rod, considerable difficulty was encountered while endeavoring to re-establish the grid used by Edwards and Farris via the brass United States Geological Survey (USGS) datum in the southeastern corner of the stockade, near the southern sallyport. The results were incompatible. Pritchard's X, a datum point chipped into bedrock within the excavation with a known grid coordinate, appeared buried and was therefore unusable to align the 2003 grid; other efforts resulted in skewed or offset grids in relation to the western stockade wall and the Rotchev House. The ASC field crew finally established a close grid by working off the north wall of the Rotchev House. After several attempts to overlay the grid using the methods described by Farris (1981) failed, he was contacted for further information. Farris stated that the baseline should fall on the east wall of the Kuskov house. The field crew was unable to locate a secondary datum, a nail at the midpoint in the base of the wall, which may have been removed during two decades of maintenance and repair to the building. As the alignment issue could not be resolved, the USGS marker was abandoned as a datum. An old excavation photo depicting Pritchard's X was used to determine its location. The grid coordinates were then identified from a site map and the grid placed parallel to the west palisade wall using the shortest perpendicular distance to set a baseline.

After two days of excavation an old grid nail and portions of previously excavated areas were identified and the grid shifted 60cm to the north. The location of the grid was verified by peeling off the top 10cm of the northwest corner of a previously excavated unit (ASC Trench 110, Edward's Unit 4). This exposed the clearly delineated remnants of a section of plastic sheeting that Edwards had used to cap his excavations. Confident in the trench placement, the crew continued the excavation.

Figure 18. Archaeological Excavations of Old and New Magazines, 2003 Excavations, Fort Ross State Historic Park, Sonoma County, California



-  Posthole (inner circle) and post mold (outer circle)
-  Angular sandstone cobble
-  Wood
-  Edge of excavations



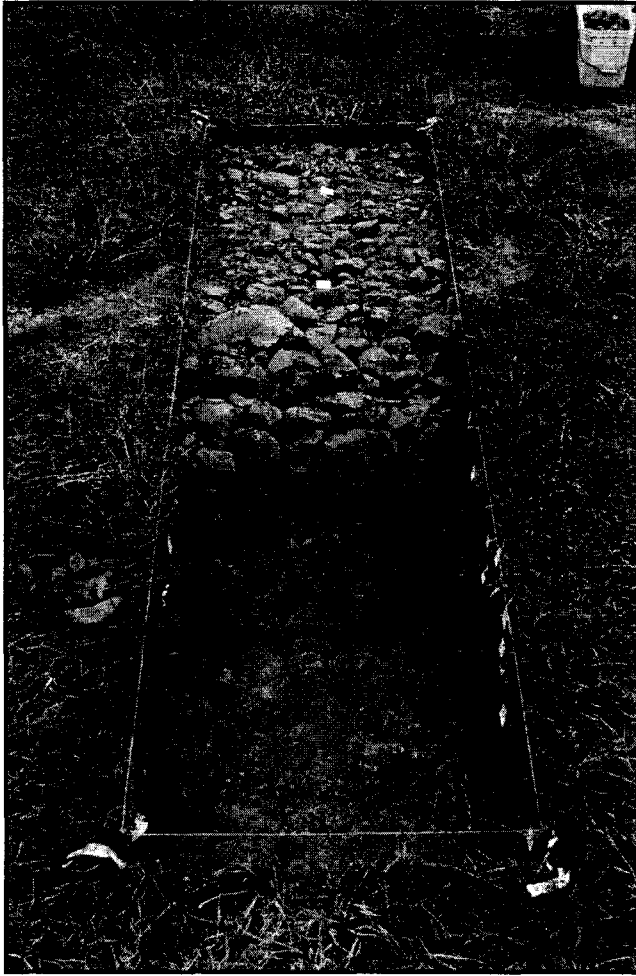


Figure 19. Overview of Trench 100.
View to the north.



Figure 20. Overview of New Magazin excavation, 2003. View to the north.



Figure 21. Eastern half of New Magazin excavation, 2003. View to the south.

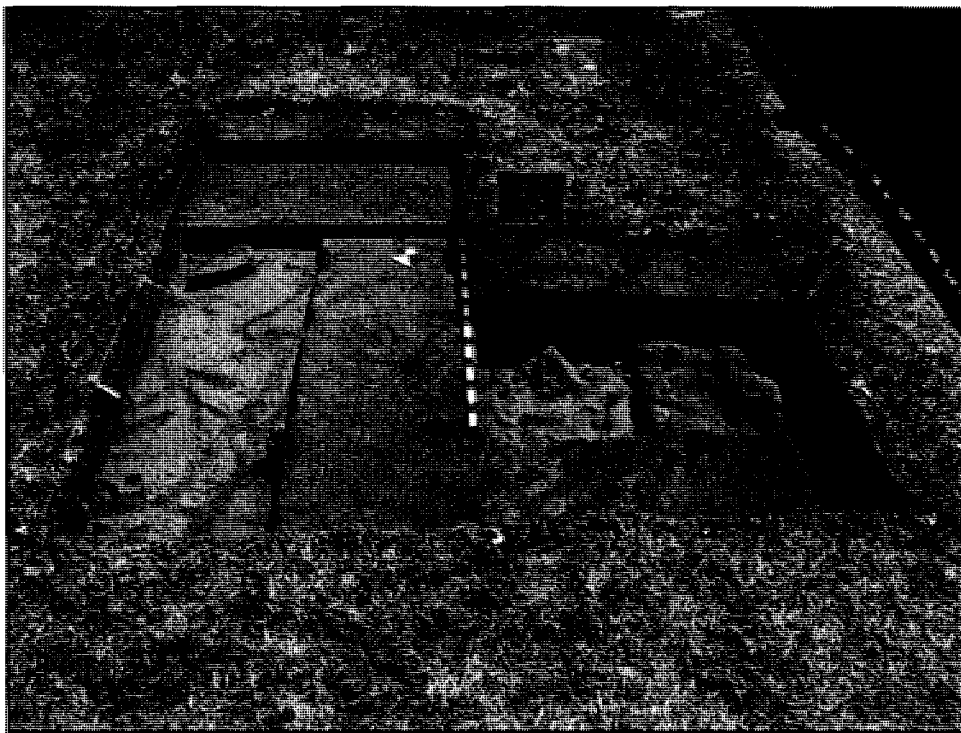
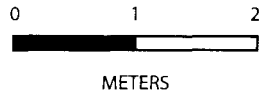






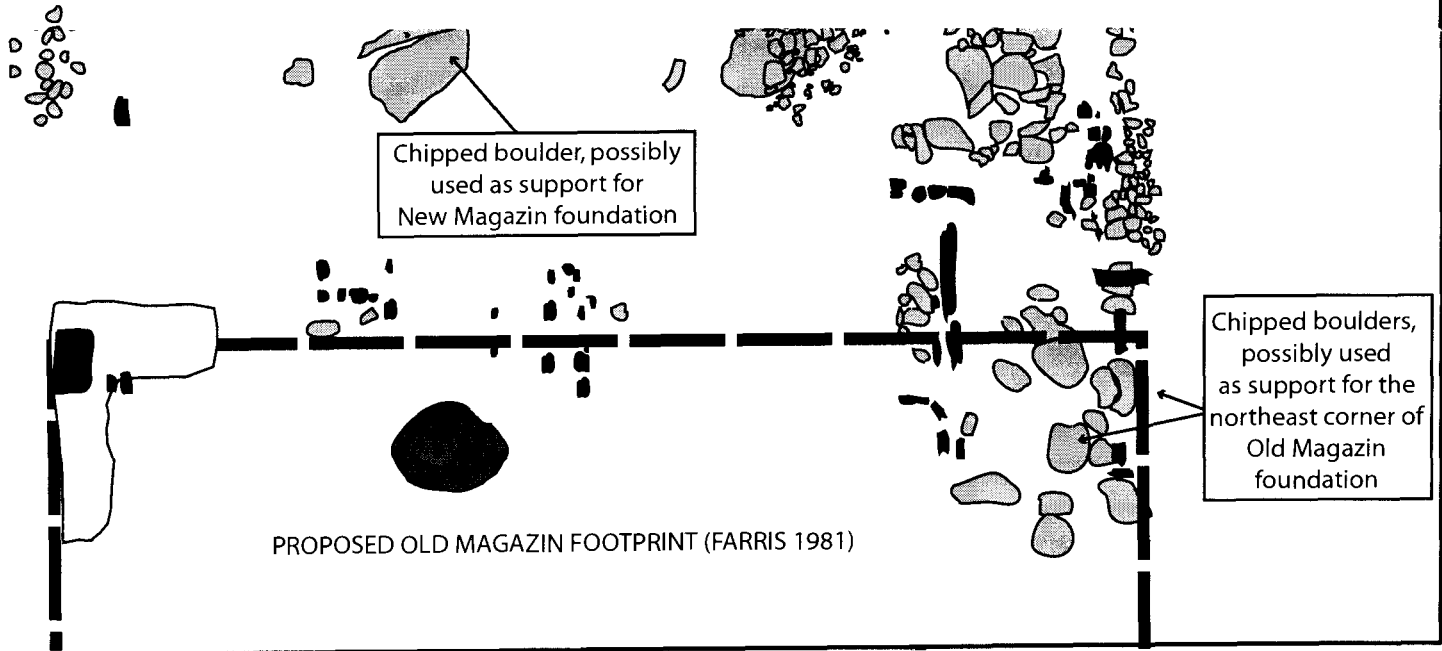
Figure 22. Western half of New Magazin excavation, 2003. View to the south.

Figure 23. Total Identified Structural Remnants,
New Fur Magazin, 1975-2003 Excavations,
Fort Ross State Historic Park, Sonoma County, California

↑
GRID NORTH



-  Posthole (inner circle) and post mold (outer circle)
-  Angular sandstone cobble
-  Wood
-  Edge of excavations



Field Methods

Excavation was conducted using shovels to remove the grass and rootmat of the top 5cm, and trowels, handpicks, whisk brooms, and dustpans for the remaining work. As recommended in Farris's report, excavators used a wet and dry Emerson Stinger vacuum cleaner during work on the Old Magazin foundation. Screen size was 1/8 in. throughout. One-gallon soil samples were taken from nearly every level of every unit excavated from the New Magazin to process through 1/32 inch screens, in an attempt to recover trade beads.

Digital, black and white, and color slide photographs were taken pre- and post-excavation of all of the trenches. Feature photos were also taken. As with the 1981 excavation, a 10 ft. ladder was used for all excavation photos. Film cameras were equipped with 135mm lenses.

Half of the trenches were excavated in 2x2 m units, in order to complete unexcavated areas in and around previously excavated units. Other trenches of various sizes were excavated to address specific research questions within more limited areas. The 2003 excavation units were numbered consecutively, beginning with Unit 100 to avoid confusion with earlier excavations, and the Harris Matrix system was used to identify relationships between stratigraphic layers. They were excavated based on priority as determined by Farris (pers comm. 2003a). Information was recorded on Context Sheets developed for earlier SSU projects and customized for the Magazin excavation. Trenches 100 and 106, both of which were part of a 1x4 m trench excavated at the south end of the Old Magazin, were opened to explore the depth of the Old Magazin rock cobble foundation (see Figure 20). Trench 105, which was a 1x2 m trench located along the eastern edge of the New Magazin that was specified as a smaller unit by DPR prior to fieldwork, with the intent to identify the east wall of the New Magazin. Trench 107 was opened as a separate excavation of a rock and dirt fill packed in a sleeper trench. Trench 109 was opened to explore a bedrock outcrop that appeared to be dressed to form steps. Finally, Trench 110 was a 50x50 cm scrape that was opened to verify the location of a previously excavated area and thereby confirm correct placement of the excavation grid as a whole (see figures 19, 21-22).

Laboratory Methods

Historic Artifact Cataloging and Analyses Methods

Historic materials were washed, (as appropriate), cataloged, classified, measured, and numbered following professional standards, and as required by DPR's curation facility. A provenience-based, lot cataloging system was used to classify artifacts. Lot cataloging is a method of inventorying artifacts with shared characteristics in groups or "lots." The catalog number, which was marked on each object or at least each tag with the artifact, was made up of three elements: the accession number, the provenience reference, and the item (or lot) number. For example, all the cut nails from a single context would receive a single lot number with count and description of sizes in the catalog entry. The lot numbers are sequential and begin at number 1 within each provenience. The catalog was organized according to the general functional categories devised by South (1977) as modified and expanded for other researchers for later periods and western U.S. contexts (e.g., Hardesty 1988; Praetzellis and Praetzellis 1990; Tordoff 1987). The materials are separated into broad Group divisions, and then further subdivided into Class and Subclass or Type. These categories or groups include the following:

ACTIVITIES: This category serves mainly to bring together minimally represented functional types that might otherwise be lost. It includes subcategories such as Commerce, Entertainment,

Farming, Hunting, Ranching, Transportation, and Writing. Archaeology was included in this category to record bits of plastic and tarp used to cover prior excavations. No effort was made to separate wire nails from prior archaeological excavations, and they are cataloged with the Structural nails.

DOMESTIC: A generic category intended to group items that would have been used specifically in a domestic household context. Sub-categories include Food (e.g., retail food containers such as pickle jars and mineral water bottles); Food Preparation and Consumption (e.g., serving vessels, tableware, and flatware); Food Storage (e.g., canning jars, crocks, and jugs); Furnishings (e.g., furniture, decorative objects, or flower pots); Heating and Lighting (e.g., lamps, lanterns, fuel containers, and candles); and Clothing Maintenance (e.g., darning eggs, thimbles, and needles) when not associated with commercial sewing which would fall under the category of Activities.

INDEFINITE USE: This category is used for items that can be identified, but for which more than one potential original use can be assumed. A good example is a nondescript bottle that could have contained anything from an alcoholic beverage to a condiment, to a medicine.

PERSONAL: These are items associated with individual, as opposed to household, use. Sub-categories include Accoutrements (e.g., purses, eyeglasses, jewelry); Clothing (e.g., buttons, studs, buckles, or fabric); Footwear (e.g. shoes, eyelets); Grooming and Health (e.g., medicine bottles and toiletry items); Social Drugs—Alcohol and/or Tobacco; and Toys (e.g., doll, gaming pieces, marbles, etc.).

NATIVE AMERICAN: This category includes those traditional items produced by the Native population both predating the Ross Colony and during occupation, the latter of which may include Kashaya Pomo, Southern Pomo, Coast or Bodega Miwok, native Alaskans and possibly Creoles of mixed native and Russian ancestry. For this project these items are primarily flaked or ground-stone. The methods of analysis are described below.

STRUCTURAL: This category brings together those items that may have been part of the building within which the people lived or worked. Sub-categories include Fixtures (e.g., sinks, toilets, etc.); Hardware (e.g., nails, door knobs, hinges, etc.); and Material (e.g., window glass, brick, asbestos, etc.).

UNIDENTIFIED USE: This category includes all items for which no specific use could be identified (e.g., amorphous lumps of metal, melted glass, etc).

Minimum Number of Items (MNI) was calculated for many classes of materials. Counts were made on the basis of major site formation events (i.e., analytical units) rather than for each individual context or for the site as a whole. The MNI was calculated on the basis of unique items. For example, bottle glass was counted as follows: bases that were at least 50 percent complete or were unique were counted first. Finishes that exceeded the number of bases were added to the count, as were body fragments that differed significantly in color or manufacture technique from any of the bases or finishes already counted. Ceramic vessels were counted in a similar manner. Mended vessels and bases at least 50 percent complete were counted first. Material types and decorated patterns that did not match any base fragments already counted were added to the count. All marked items that could not be associated with other fragments were counted. Nails were counted by the number of heads present, and lamp chimney glass was counted on the basis of rim decoration (or lack thereof). No attempt was made to arrive at an MNI for artifacts such as window glass, strap metal fragments, amorphous lumps of metal, etc.

Artifact Analysis

Artifacts recovered from the Magazin excavations were analyzed with two goals in mind: to allow the investigators to address research questions and to generate comparative data for other researchers to use. The methods associated with the most common artifact classes are presented below.

Ceramic artifacts were sorted and tabulated by fabric, form, functional type, decorative treatment, and, where possible, place of origin. The MNI represented was calculated as was the proportion of each type of the total class represented. Makers' marks and identifiable patterns were researched to ascertain origin and date range.

Glass was sorted by color, functional category, and type. The definitions and methods developed by Parks Canada (Jones and Sullivan 1985) were employed. Design elements and makers' marks were researched to ascertain origin and date range. The material for each provenience was described by vessel part, body form, possible function or contents, technological characteristics, size, and decorative detailing. The MNI was calculated, as was the percentage of each type of the total class represented. Chronologically sensitive aspects of glassware were noted. Russian window glass can be identified by its composition, so none of the window glass was labeled directly on the artifact. And instead are bagged with paper labels.

Buttons were sorted by size (in British lines and in inches), form, construction, and material type. Design elements, as well as patent and makers' marks, were also noted. Metal artifacts are often the most problematic archaeological finds since they are generally fragmentary, in poor condition, and bulky. These materials were sorted by function and material. Tin canisters were identified and described according to the recording system developed by J. Rock (1987).

Artifact Tabulation

Once all artifacts were cataloged and analyzed, they were entered into a computer database in Microsoft Access. Each lot was entered separately, indexed by provenience. Information included the artifact's functional Group, Category, Type, and Description (e.g., "Domestic," "Food Prep/Consumption," "Tableware," "Plate"). The artifact material type (e.g., colorless glass, stoneware, etc.) was entered as was the condition of the artifact (whether it was complete or a fragment). If the item was marked or datable in any way, that information was entered along with the maker, origin, beginning and end date, and reference. For each entry the count of whole items, fragments of items, and MNI was entered. For example an intact champagne bottle and a finish would be entered as 1 whole, 1 fragment, with an MNI of 2. Any additional remarks were entered. These included, but were not limited to, artifact dimensions, volume, decoration, crossmending, etc. If the artifact was discarded, a discard weight (in grams) was entered.

A series of tables was generated for each analytical unit, which in the case of the Fort Ross Fur excavation were the Old Magazin and New Magazin (See Appendix A: Tables). An Artifact Descriptive List (tables 1, 9), which quickly summarized the Artifact Catalog is the first of these tables. In addition, two summary tables—one based on artifact Group and the other on artifact Category—were created (tables 2, 3, 10 and 11); these do not include structural items (e.g., window glass, nails) or items of undefined use, because these tend to skew the results. A series of three tables concentrating on glass and ceramic food preparation and consumption artifacts were also generated (tables 4-6, 12-14). These focus on function, fabric, and decoration. A single table on Social Drugs was also generated (tables 7 and 15). In addition, a date table of all marked and/or

datable items was created (Table 16). This table is grouped by material types: ceramic, glass, and other. These tables were used to help summarize the contents of the excavated deposits.

Analysis of Historic Zooarchaeological Remains

Only a few faunal remains recovered, most of which were rodent. After initial review of the collection, the faunal analyst determined there was an insufficient quantity of faunal remains for meaningful analysis.

Native American Artifact Cataloging and Analysis Methods

Prehistoric materials or artifacts that would be most likely be associated as produced by Native Americans were washed(as appropriate) cataloged, classified, weighed, measured, and numbered following professional standards, and as required by DPR standards. Generally, all materials were processed and tabulated according to unit, level, component, and any other relevant organizational structure. Basic morphological and functional attributes were documented, assemblage characteristics defined, and data evaluated according to chronological indicators. At a minimum, the following analytical studies were used to address research issues pertaining to chronology, technology, settlement-subsistence, and exchange activities.

Time-Sensitive Artifacts.

No time-sensitive artifacts (e.g., projectile points) were identified.

Flaked-Stone Tools.

Where possible, flaked-stone tools are discussed using accepted typologies based on the work of Crabtree (1972) and Gramly (1992). The flaked-stone analysis is designed to define the pattern(s) of stone-tool acquisition, use, and discard. Functional and morphological attributes are identified. Each item was separated by material and morphological group and was measured and weighed, and the condition of the artifact (e.g., whole, end, marginal) noted. Bifaces were further subdivided on the basis of reduction stage. The distribution of flaked stone is summarized by unit and depth, and used to infer material acquisition and discard behavior, material trade or exchange patterns, and site function.

Flaked-Stone Debitage.

A technological analysis of flaked-stone debitage from the site was performed. An attempt has been made to identify the tool-manufacturing techniques (e.g., direct free-hand percussion, pressure flaking), repair, and material-acquisition strategies. All debitage was counted, weighed, and sorted by material type. The technological analysis included separation of debitage into various debitage categories (e.g., primary reduction, early biface thinning, etc.). All the debitage from the excavation units, features, and surface collection was analyzed. Debitage counts and weights were summarized by unit, depth, and material type..

Battered-stone and Groundstone Artifacts.

Where possible, battered and groundstone artifacts were classified and discussed using accepted regional typologies. Items were separated into appropriate functional categories (e.g., millstone, handstone, pestle, mortar, hammerstone). Tool morphology was described, including measurements, modifications, and fragment type. All items were summarized by unit, depth, and site component. Distribution data were used in conjunction with other data to infer site function, define artifact assemblages, and identify cultural components.

Modified Stone.

A single piece of steatite is in this category as the manufacture techniques probably represent carving and polishing as part of its manufacture rather than use.

Obsidian Studies.

Obsidian was visually sourced and placed into groups with similar characteristics. No pieces were sent for hydration analysis or X-ray fluorescence spectroscopy.

FINDINGS

Eight archaeological trenches were opened on the site, one in the area of the Old Magazin foundations, the other seven in the area of the New Magazin, all covering a total area of 23.25 square meters. The units were placed between previously excavated areas, the end result being the complete exposure of the southern 36 square meters of the New Magazin between the 1975-1977 and the 2003 excavations. Excavation depths range from 20 to 70 centimeters below surface.

Architectural Features

The only features identified during the excavation were associated with either the Old or New Magazin foundations. These features are depicted in Figure 18, and shown in conjunction with features exposed during previous excavations in figures 23 and 24.

Old Magazin

Trenches 101 and 106 were dug to approximately 70 cm below surface and did not yield any artifacts that could be attributed to the Russian period of occupation with any certainty. The excavation revealed that the rock cobble and dirt foundation exposed by Farris in 1981 is, at its southern end, 45 cm thick. A distinct edge of the foundation was identified, consisting of a wedge of larger cobbles that may have buttressed the foundation. South of this edge were loose rocks and large pieces of late 19th-century bottles and ceramics.

One hypothesis that was explored as part of the current study was that a buried ground surface, exposed during the time of early Russian construction within the fort, might exist under the Old Magazin foundation and might therefore contain artifacts associated with either the early Russian period or early occupation of the area by the Kashaya Pomo.

The trench excavation suggests that the presence of such a buried land surface is unlikely. It appears that the area was grubbed prior to placement of the sandstone cobble fill. Vegetation and top soil was removed within the building footprint, and may have done so to prevent soil heaving in a freeze. Although this is unlikely to occur at Fort Ross, such a measure to overcome the effects of soil heaving would have been a necessary building practice in Siberia and Alaska. Clearing to subsoil or bedrock would also limit the amount the building would settle. This was a small investment in labor relative to that expended on constructing the log Magazin. This would indicate that all cultural deposits would have been removed along with the overburden prior to the Magazin's construction, except for those artifacts that might have been dropped on the exposed bedrock prior to the placement of the sandstone cobbles.

The southern end of the Old Magazin foundation was grubbed to a depth of at least 45 cm below what is believed to be the original ground surface and backfilled with locally quarried

Figure 24
 2003 Excavation Season Overlay with
 Architectural Features Identified by
 Edwards (1975-1977) and Farris (1981)

Key



Pritchard's X-excavation datum for
 1975-1977 and 1981 field seasons



post hole(interior)



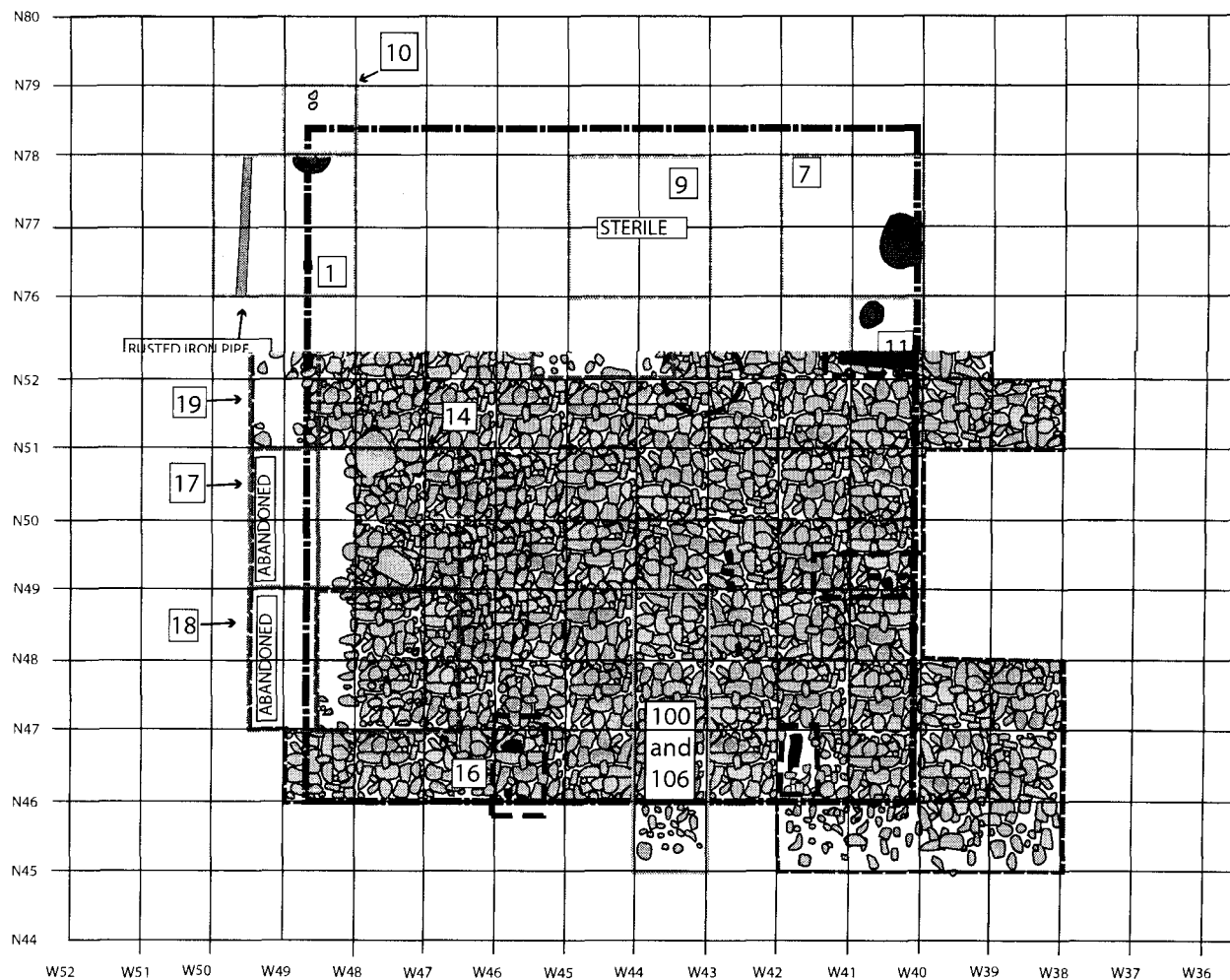
Wood fragment



GRID NORTH



METERS



sandstone. The rock appears buttressed at this end and continues at unknown depths throughout the entirety of the foundation.

New Magazin

The New Magazin appears to have had a different foundation than the old Magazin. No post holes were identified during excavation, however, sleeper trenches with wood still in place, and dressed bedrock outcrops, possibly used as supports for steps for redwood posts, were found. Rock-lined trenches were found that lined up with redwood timber fragments and with similar trenches exposed by Edwards during the 1975 excavations (See Figure 15). Timbers and trenches running north-south and east-west were identified, including one which is believed to correspond to the eastern edge of the New Magazin foundation. Timber fragments were identified that are thought to represent the western edge of the building; other wood fragments were found that appear to be the remnants of interior sills that helped support the main structure. No other features were noted.

Artifact Deposition

All of the artifacts recovered came from disturbed deposits. At the Old Magazin, the upper soils consisted of redeposited material from the 1981 excavation. There was also disturbance from demolition of buildings and from rodents, although there were few places to burrow in the sandstone cobble fill. The same could not be said for the New Magazin, which had rodent burrows into the deepest excavated levels. Gopher disturbance was a persistent problem during the excavation and had destroyed many of the buried timbers since the 1970s. This was quite noticeable when comparing the size of timbers in units adjoining the earlier excavation. In the area of the New Magazin, it appeared that some backdirt from previous excavation had spilled or been placed onto the surface layer of units excavated in 2003.

In one portion of the New Magazin, Unit 103, the differences between artifact depositions on each side of a timber defined the building edge. Timber 267 was oriented parallel to the stockade wall and believed to be the building edge. Layer 270, closest to the stockade, contained a higher concentration of artifacts apparently deposited against the outside building wall, unlike Layer 271, on the opposite side of the timber.

CHAPTER 6 INTERPRETATION AND DISCUSSION

DISCUSSION OF ARTIFACTS

Native American Lithic Material

All lithic artifacts were inspected by SSU lithic specialist Dave Bieling and were cleaned and catalogued. The majority of the lithic material appears to be tool reduction or retouching debitage. Nearly all was recovered from the top 20cm of the units. No temporally diagnostic tools were identified; eight edge-modified flakes of different materials were recovered, as was one chert core. One piece of heat-affected rock was also recovered. Chert is by far the best represented material at 425 flakes found over the 20 square-meter area excavated as part of the New Magazin exploration. Several obsidian sources were represented by a total over 650 recovered flakes, including Napa Valley, Annadel, Konocti, and Franz Valley. A few pieces of quartz and quartzite debitage were recovered, as was one piece of worked colorless bottle glass. One small piece of worked steatite may be from a pendant broken at the bore hole.

Previous archaeological investigations within the fort have identified chert and obsidian tool fragments and debitage, some of it dating back to the Lower Archaic, suggesting that the coastal terrace on which Fort Ross rests has been a location of resource procurement and at least intermittent occupation for millennia (Purser, Beard and Praetzellis 1990:45). The proximity of the ethnographic village site of Metini, both in its pre-Russian phase and its expansion north of the fort's stockade during and after the Russian occupation may very well be responsible for much of the obsidian found within the fort, simply through the traffic, rodent disturbance, and building construction. No midden was noted in any of the excavation units; however, the authors of the current study noted the increasing darkness of exposed soil surface the further one goes upslope to the edge of the north stockade wall.

Lightfoot, Wake, and Schiff have analyzed the spatial organization of the settlement based on ethnicity, and determined that the stockade itself was only occupied by the "honorable" Russian military officers and administrators. The rest of the Russian community lived south and southwest of the stockade, the Native Alaskan hunters directly south of the south sallyport, and the Pomo and Miwok peoples north of the fort in Metini and its related loci (Lightfoot, Wake, and Schiff 1991:22-24).

With this in mind, it would seem unlikely, given the elite Russian inhabitants of the fort during occupation, that the lithic material was deposited by people actually practicing tool manufacturing and retouching during the Russian period. However, the proximity of the Pomo/Miwok and Alaskan settlements would provide a constant source of such material. One piece of worked glass was recovered during the current study, indicating that not all of the material necessarily predates the Russian occupation. It is worth re-emphasizing that Native American occupation of the area continued past the departure of the Russians, and only ended with their eviction by Dixon in 1870. In sum, lithic materials from this excavation and others within the stockade cannot be presumed to be pre-Russian without further analysis—Native American occupation continued during, and decades after, the Russian presence. It can be said that the presence of Annadel obsidian, which Lightfoot hypothesizes was a resource that was unavailable to the Kashaya after the Russian occupation, would indicate that at least some of the lithic material recovered during the current study predates the fort (Lightfoot, Wake, and Schiff 1991:115-116).

Trade Beads

The beads are classified using an expanded version (Karklins 1985) of the taxonomic system devised by Kenneth and Martha Kidd (1970). Varieties that do not appear in the Kidds' lists are marked by an asterisk (*); two asterisks (**) denote a previously unrecorded type. Color names are those provided in the Color Harmony Manual (Container Corporation of America 1958). Both the Color Harmony Manual code and the Munsell (1976) equivalent are provided after the color name. Diaphaneity is described using the terms opaque (op.), translucent (tsl.) and transparent (tsp.). Opaque beads are impenetrable to light except on the thinnest edges. Specimens that are translucent transmit light but diffuse it so that an object (such as a pin in the perforation) viewed through them is indistinct. A pin in the perforation of a transparent bead is clearly visible.

All of the recovered beads are of forms and sizes that are commonly referred to as "embroidery beads" and may have been used to adorn garments and other items. With two possible exceptions, the beads are all of varieties that were common for a long period of time on the West Coast but all would fit well in the period from about 1770-1880. Of the two exceptions, the tubular (Ic4) bead looks like it might date to the late 19th or early 20th century. The Prosser bead also looks more like a 20th-century product. The bulk of the beads have equivalents at Fort Vancouver, Washington (Ross 1976, 1990).

Most of the beads are similar, at least in type if not color, to beads found at the Fort Ross Native Alaskan Neighborhood (NAN) excavations (Ross 1997). A total of 563 glass beads were recovered from the NAN of which 268 or 47.6% were Kidd's type IIa. Of the 22 Russian era glass beads recovered from the current Magazin excavation 19 or 86.4% were type IIa. The remaining three glass beads were the same redwood colored over pale apple green type IVa. These are similar to Ross's variety 3 which was the most common color of that type recovered from the NAN. Within the NAN there was a total of 224 type IVa beads or 39.8% of all beads. Within the type that color combination accounted for 86 beads or 38.4% of the total followed closely by Ross's variety 1, a white on white color, at 78 beads. Like the Magazin excavation, a single Prosser-Molded Ceramic bead was recovered from the Beach Site of the NAN.

Regarding the country of origin, it is likely that the glass beads were produced in either Venice or Bohemia. The Prosser bead could have been made in either Bohemia or France.

Ceramics

Most of the ceramics recovered from the 2003 Magazin excavation were white improved earthenware typical of the mid- to late-19th century, the American period at Fort Ross. These were predominately tableware and presumed to be associated with the hotel, restaurant and bar, when the Magazin was used as a ballroom and for storage.

Those ceramics likely dating to the Russian period included sherds of broad-floral blue hand-painted pearlware, cream-colored earthenware (CC ware), hand painted white-porcelain, and Asian porcelain. While these items may date to the Russian period of occupation, the pearlware and CC ware probably have British origin and arrived on American ships (O'Connor 1984:78-84). The pearlware sherds were from a hollow-form vessel, either a cup or bowl. They are similar to a sherd excavated from the Officers' Barracks in 1971 (O'Connor 1984: photograph 8i, 105). Underglaze floral blue painting on pearlware was most commonly produced between 1775 and 1830 (Miller 2000:12). The CC ware sherds are the light glaze color that was produced beginning in the late 18th century and carried on through the 19th century, different than the

earlier produced creamwares. CC ware was the cheapest of the refined earthenwares after 1790. The one identifiable sherd is a plate rim, which would have been rare on tea wares after 1812. This ware was more commonly produced as toilet wares (Miller 2000:12). Like most of the artifacts, the porcelain sherds were small. The white porcelain has a heavy body with an overglaze, hand-painted floral design. The colors are green and burgundy red with gilding. The Chinese porcelain sherds are typical of "Canton ware," the cheapest type of export porcelain, underglaze painted in blue with a bluish tint to the glaze. The ware is most common between 1800 and 1830, however the California Gold Rush of 1849 revived the market (Miller 2000:9, Mudge 1986:179-193). Although a lesser form of export ware, these porcelain vessels were superior in durability to soft-paste earthenwares from England. Porcelain was also available from the Russians' original fur-trading partner, China.

The reliability of vessel size estimates as done by O'Connor in 1984 is inversely proportional to the size of the sherd -- exponentially so when measuring sherds less than one quarter of the vessel rim in diameter. Artifacts from the 1970s excavations of the new Magazin were reviewed. After this review it was clear that those artifacts should be re-identified and re-cataloged before any further analysis. As with the current investigation, a majority of the ceramic and glass items recovered during the 1970s date to the American period. Pearlware, CC ware and Asian porcelain are found in the assemblage. Several sherds of pearlware or CC ware exhibited signs of extreme water wear.

Glass

One molded glass body fragment may be of the Russian era. The fragment may be from a narrow tumbler or other small hollow vessel. The glass is a pale green-aqua and the molding is alternating thumbprint and quatrefoil. The fragment appears to be at the heel of the vessel with a portion of mold seam on the bottom. Although the color is more typical of a 19th century U.S. or British bottle, the molding is not. Tableware of the U.S. or British origin would more likely be colorless. Further analysis may determine the origin of this artifact.

While fragments of other bottles, such as olive green wine bottles, may date to the Russian period, without markings it is difficult to determine the age and association. All of the marked bottles recovered date from the American period.

Rimlock

One rimlock, a form of door lock, was recovered during the Cabrillo College excavations. The rimlock is a "Carpenter's lift up lock" and of sufficient age to have been used on the new Magazines, although due to the extended period of manufacture and persistent use of this type of lock, it may have extended late into the century. The lock was marked "(No [eagle over branch] 60/ IMPROVED RIM LOCK". In 1830 patent 5880 was taken for an improved lock design. James Carpenter of Willenhall, England used the design for rim locks while his partner John Young of Wolverton built mortise locks. In 1888 the lock was still popular enough to be copied (Evans 2003).

DISCUSSION OF BUILDING MATERIALS

Brick

Brick-making kilns had been constructed at the fort by 1824 and were later moved to Bodega Bay by 1832. The bricks were shipped to Alaska where they were used to build stoves (Wilson 1998:28). It is interesting to note that brick fragments have been incorporated into both the old and new Magazin foundation fills, and that the bricks appear unmortared. It is also interesting to note that a few Russian brick fragments were identified in the reconstructed wall trench along the southeastern stockade wall (Purser, Beard and Praetzellis 1990:65, 72, 74; Treganza notes that brick was used as part of the foundation for post supports for the original stockade wall (1954: 8). A few pieces of mortar have been identified in a disturbed area containing diagnostically post-Russian occupation artifacts, and may therefore be American period. A cursory review of excavations within the stockade suggests that no mortared brick has been found; similarly, it does not appear that bricks were arranged or stacked to provide a formal foundation for any of the buildings within the fort.

The artifact evidence seems to suggest that brick was not used for construction unless it was treated as loose rock to be thrown in as fill. The bricks that have been recovered were found in pieces—no intact bricks were identified. If the bricks were used for stoves within the fort, then the bricks we see within the archaeological record either do not represent the stoves, the stoves were unmortared (which would seem unlikely), or the mortar used is easily erodable and has worn off or dissolved from the brick fragments that have been identified. A review of historic-period paintings and photos do not suggest that any chimneys were built in any of the buildings during Russian occupation. It seems more likely that the bricks were used as hearths to protect wooden floors and structures from embers falling from metal stoves. It would also seem to follow that, given the lack of use of brick within the fort, either substantial brickwork might be found outside of the fort or that the brick kilns were entirely an export business to Alaska and contributed little in the way of building materials for the fort.

It is also possible that the Alaskan settlements were producing their own brick and sending it to the fort early on, as the Kodiak settlement had its own brickmaking facilities (Wilson 1998: 28). Treganza (1954:7) suggests that brick was packed in around timber features associated with the original Russian stockade wall. The stockade wall was one of the first structures built at the fort, and, if the bricks are associated with that first construction, then some of the earliest ships may have carried brick as ballast. Another possibility is that sections of the wall were removed and repaired during the later parts of the Russian occupation and backfilled with brick made locally. Given the stylistic changes in construction techniques witnessed elsewhere within the fort, it gives rise to the question as to whether sections of wall may at one point have represented different types of construction used by the Russians, or even whether all of the stockade walls are in their original 1812 locations.

To summarize, it is hypothesized that the Fort Ross settlement was either making bricks for an Alaskan settlement such as Sitka that did not have brick-making facilities, or that sections of the wall were removed and replaced during Russian occupation of the fort. The archaeological record does not suggest that bricks were used in any capacity other than fill for the construction of the buildings within the stockade. It is possible that brick was used to construct stoves, however, no evidence of this practice has been identified. However, bricks may have been used extensively

in areas outside of the fort that have not been archaeologically studied yet. Bricks may have been used as paving or for construction elsewhere on buildings that have yet to be identified.

Window Glass

The Kuskov House appears to have been one of the first buildings, if not the first, to have had glass windows in California (Clar, in Wilson 1998:26). Flat glass was used elsewhere in the Russian colonies, and by the time of Sutter's purchase, many of the windows in other buildings in the fort appear to have had glass windows (Wilson 1998: 26-27). The window glass was supposedly well-crafted, and this may account for the specific mentioning of them in the contract of sale with Sutter (DuFour 1933:271). Wilson argues that earlier assignments of the window glass at the fort to purchases from the Hudson's Bay Company are probably incorrect, as the contract with the British company did not specifically mention glass and was not in effect until 1839, at the end of the Russian occupation (1998:27). Interestingly, Wilson notes that Baranov, the first manager of the RAC, was in fact a co-owner of a glass factory that produced windows, trade beads, bottles, lamps, and dinnerware. His knowledge of the glass industry was likely to have influenced the early use of glass at the fort.

Wood

All of the buildings within the fort were primarily constructed of wood, particularly redwood. In general, two types of construction styles were used, a timber construction using a system of interlocking logs, and post-and-sill construction utilizing planks. The former consisted of using large stripped logs that were then notched and fitted together as with a log cabin. This method is durable and provides excellent protection against the weather. The latter method required the cutting of planks, used less wood and was easier to transport, but was less durable and provided less insulation. Posts were set into the ground, horizontal sleepers, or sills that have been set in the dirt, were placed as the foundation frame, and the combination of the two carried the weight of the building. The posts were grooved horizontally, and plank siding was slid into the grooves (Wilson 1998:22-23).

With the upper framework of the buildings long since removed, only fragments of wood foundation pieces remain. Large redwood timber fragments have been noted within the boundaries of the Old Magazin by McKenzie, Farris, and Edwards (Farris 1990: Farley and Edwards 1976) smaller pieces, and portions of redwood posts, have been identified within the New Magazin foundations during the current study and by Edwards (Farley and Edwards 1976).

Previous excavations revealed the presence of both redwood and pine timber fragments (Farris 1981:32-33). During the current study, only redwood fragments were identified, and none in sufficient size to be differentiated between planks or timbers, both of which appear to have been cut by the Russians and used within the fort (Wilson 1998:24).

Stone

Stone was used in two ways within the foundations of both the Old and New Magazines. The first use of stone was in the form of a rock cobble "bed" into which redwood sleepers were placed. Rock cobble was also packed in and around sleeper trenches in the New Magazin. A second use of stone is the modification or dressing of bedrock outcrops to serve as either piers for redwood posts or as structural supports along the building perimeter. Units 104 and 109 contain a large dressed outcrop that may have served as either foundation support for the building perimeter or

as a base for a step or ramp. Unit 101 contained a portion of outcrop at a depth of about 40 cm that similarly appears dressed, and may have been used to support a post.

Stone does not otherwise appear to have been used in construction. The stone fireplace within the Rotchev house was probably constructed by Benitz by 1866 (Wilson 1998:40).

Nails

Wilson (1998:26) has hypothesized that brass or copper nails recovered during the 1981 excavations may represent fasteners for metal roofing, based on observations noted by the National Parks Service that a sheet of iron that was found nailed, with a large brass nail, to the wall of a layman's room in the Russian Bishop's House in Sitka (in Farris 1990:493)(see below for further discussion regarding metal roofing materials).

Large, hand wrought iron nails were recovered during excavation. As the fort had its own blacksmith, these may have been made locally. Russian nails can be differentiated from American-made nails of the later 19th century in that the Russian nails are hammered on all four sides, rather than the two sides of the American nail (Farris 1990:493).

Metal

Towards the end of the occupation of the fort, it appears likely that the roofs of at least some of the buildings may have been metal (Rickman, in Wilson 1998:25). Sheet metal was shipped to Ross during the later years of occupation, and metal was used to roof buildings in Alaska. The metal was painted red, probably with an iron-oxide pigment, to prevent rusting. Voznesenskii's 1841 painting of the fort depicts the chapel, the Rotchev House, and the Kuskov House with red roofs, while the other buildings are grayish-brown. If Voznesenskii's painting is accurate, then neither the Old Magazin or the New Magazin should have had sheeting, and all the metal artifacts should represent fasteners, other metal objects, or sheeting from other buildings. The fact that brass fasteners, which Wilson suggests were used to hold down the sheets (see below), have been found in association with the Old Magazin, would seem to indicate that the painting is incorrect and that the Old Magazin, and possibly the New Magazin, had metal roofs or that they stored such fasteners in the Magazin.

DISCUSSION OF ARCHITECTURAL FEATURES

Old Magazin Foundations

The Old Magazin must have been a substantial building. The ground was prepared by clearing vegetation, excavating at least 45 centimeters of soil, and then backfilling with a cobble and clay fill of local material. The front of the foundation was buttressed with larger rocks to prevent movement of the fill. Depressions and trenches were incorporated into the fill that allowed the placement of redwood timber sleepers and support posts. On top of this foundation was constructed a well-built two-story, log Magazin. Farris (1990:487) noted redwood timber fragments that measured at least 6 inches in diameter. The building is described in 1817 as being built of logs, with three rooms on the top floor and two on the bottom. Some thirty years later, a partner of Benitz described the Magazin as being made of very large, heavy timbers, many of which were 12 inches square, with pine log rafters 6 inches in diameter (Munro-Fraser, in Farris 1990:481-482).

A gallery had been added to the front of the building by 1841 that consisted of thick planks. It is unclear whether this was an original feature or a later addition, as the first description of the gallery appears late, but, as noted by Farris, it would have been entirely consistent with buildings of similar purposes found in Alaska (Farris 1990:480). Dendrochronological study of a timber removed from portions of the foundation found that reconstruction/repair efforts were already underway on the Old Magazin by 1836 (Farris 1990:488).

The Old Magazin shared this construction method of heavy timbers and rock cobble foundation with two other early buildings within the fort: the Kuskov House and the Chapel. Excavations of the Kuskov house foundation prior to its reconstruction revealed not only dense rock fill but also depressions and post supports as identified by Farris in 1981. Pritchard's Chapel excavations of 1972 also identified a dense cobble layer; however, maps of his excavation were not located during the course of the current study and cannot be compared against the Magazin foundations.

It is hypothesized here that, of the two main architectural styles of the fort, the timber construction and the post-and-sill construction, the former would have been in accord with the activities of the RAC during the early 1810s (whereas the latter would not?). RAC founder Shelikov, his assistant and later manager Baranov, and the fort's first manager, Kuskov, appear to have had long-term plans in California prior to the fort's construction. Considering the harsh winters and formidable native resistance that the Alaskan RAC settlements had withstood (or had been destroyed by, in many cases) for decades, it is no surprise that the first buildings were built to last. That Baranov, Kuskov, and the RAC may have seen the settlement as part of a larger California expansion would have only made the construction of impressive fortifications and buildings an imperative. Having spent little time in California, it seems unlikely they could have grasped the nature of the comparatively mild winters and the considerably different relationship that they would have with the local Kashaya as opposed to the Tlingit.

Additionally, they may have been creating an imposing stockade that would impress Spanish and British American traders and military personnel. While it is still unknown whether Baranov, the RAC, or the Russian Ministry of Defense created and distributed building plans to be implemented at the fort, or the buildings were the designs of Siberian architect/carpenters stationed there, it seems likely that the former was the case. The RAC, essentially a military-operated imperial monopoly, intent on moving into California, would have dictated the design of the fort, and they did so elsewhere in the Alaskan settlements and even on the Russian mainland.

Using the rock cobble as a foundation may have been a common practice for building a level building pad in early 19th-century Russia. Three blueprint drawings of reconstructed 19th-century Russian buildings, including a granary, a bath house, and a barn, all feature rock cobble foundations (Karelian Construction 1979, 1981; see Figure 25). Interestingly, none of the foundations exposed during excavations conducted by Wendell Oswalt at the Kolmakovsky Redoubt, an Alaskan inland RAC settlement founded in 1844 along the Kuskowim River, have the rock cobble foundation (Oswalt 1980). Considering the different time period, different purposes for the redoubt, different kinds of buildings, and different locations, it may be of little value to compare the two; however, the paucity of detailed archaeological records of Russian American building foundations necessitates working with what is available. Oswalt notes that the first group of Russian craftsmen at the site were quickly dismissed due to unruly behavior (Oswalt

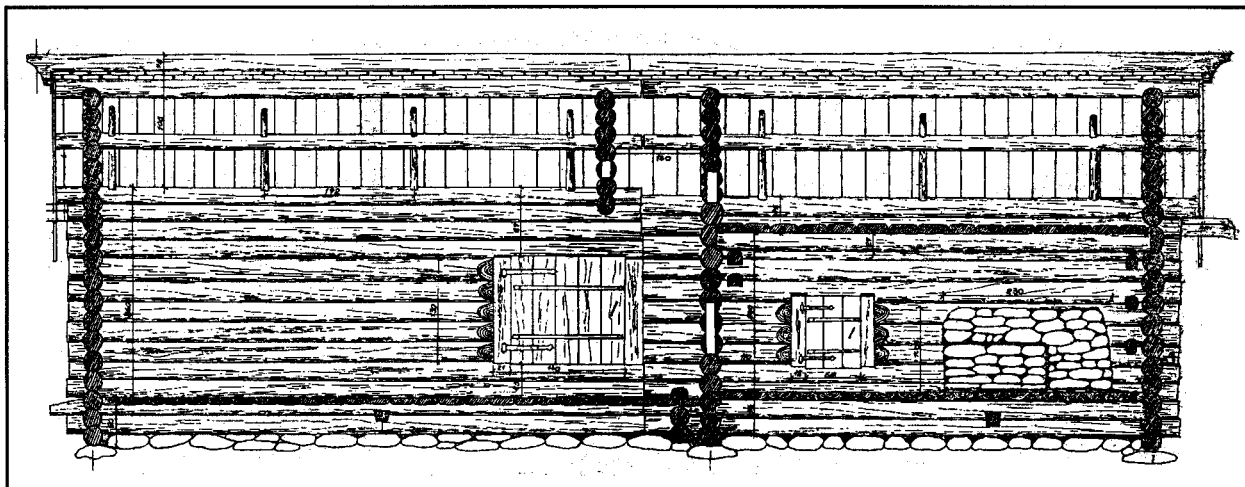


Figure 25. Russian Bath House Reconstruction (Karelian Construction 1981).

1980:60). It is unclear how many of the buildings were constructed by them versus the group of creole craftsmen that replaced them later. Late 19th-century photos and paintings of the redoubt depict it as a substantially smaller, both in terms of building size, number of structures, and areal coverage, than Fort Ross (Oswalt 1980:188-190).

Both plank and timber construction styles were used in the fort, and both have their benefits and drawbacks. Timber construction is more weather tight and durable. It was, however, much more difficult to transport and to set in place as the walls are built. The use of log construction may have been more feasible, if not in fact necessary during the first construction phases, as unlogged redwood stands would still be close to the fort, and proper sawing equipment for preparing planks may not have been in place yet.

New Magazin

In contrast to the Old Magazin, the New Magazin appears to have been constructed with much less effort. Rock was used to line wood sleepers that supported the structure, but no attempt to dig out and fill a large foundation with quarried cobbles is apparent. Rather than placing the wood posts onto bedrock or cobble piers, the posts were sunk directly into the dirt. No wood fragments of comparable size as those recovered by Farris or Edwards in the Old Magazin were noted.

There are several possible reasons for the dearth of wood in the New Magazin foundations. One is that rodent activity has simply destroyed much of what remains. The lack of a thick cobble fill makes the area more conducive to rodent disturbance; an additional 20-25 years of rodent activity since the 1975-1977 excavations may have inflicted considerable damage to what little wood was left.

Another possibility that could account for the lack of wood members is the use of a different construction technique: a post-and-sill method of construction as opposed to the frame construction using logs construction. The post-and-sill method was originally developed in Viking Age Denmark and over the centuries was adopted by France, Canada, and the Pacific Northwest. This architectural style was used extensively by the Hudson's Bay Company for their company buildings, so much so that it became known as the Hudson's Bay Style" (Wilson 1998: 23).

Rather than a traditional system of interlocking logs, as used with the older buildings, the post-and-sill method consisted of several different pieces of hand-cut lumber:

Also known as *piece sur piece*, this system consisted of posts with grooves on their sides and tenons at each end. These posts were spaced evenly and secured to a sill. Planks were slid horizontally into the post grooves to form the walls (Wilson 1998:23).

The style presented problems in the bitter climate of the northwest—one Hudson's Bay Company official complained that, because unseasoned wood was often used to construct the buildings, the wood shrank when it dried, opening gaps in the walls and placing the full weight of the roofs on the posts rather than plank siding (Ritchie, cited in Wilson 1998:23).

Several other buildings within the fort had been constructed using the post-and-sill system, including the employee barracks, clerks office, provisions Magazin, many of the Aleut yurts, and a grain Magazin (Wilson 1998:23). The post-and-sill system would, like the log system, still require the bulk of the weight of the building to be carried by supporting posts and sleepers, but the post-and-sill structure, utilizing planks, would be much lighter and not require the kind of formal rock cobble foundation found within the Old Magazin. The rock that was used was found typically packed along the side, not under, the sills, suggesting that the rocks served more to keep the sills in place during construction rather than to provide vertical load-bearing support. Similarly, the wood posts were set directly into the ground and not surrounded by, or set on, rock cobbles, though some of the posts were found to have been set deep enough to rest directly on bedrock, which is typically within 70 cm of the surface (Farley, and McNabb 1976).

INTERPRETATIONS

A Fort in Decline

It seems likely that Rotchev was sent to Fort Ross in 1838 to prepare the fort for sale. Multilingual, well educated, and a well-known poet and writer, Rotchev and his wife were noted to be sophisticated hosts with an extensive library and a stock of French wines (Wilson 1998:11). Rotchev appears to have ordered many improvements to the fort, including the construction of a new kitchen and his own house, which still stands in the stockade as the only extant Russian period building (Wilson 1998:12). Given the RAC's acknowledgement that the fort was failing and its desire to sell it off, it would appear unlikely that these improvements were much more than window-dressing to make the fort look more appealing, and busywork to keep the workers occupied. Rotchev, worldly, affable, and an able translator, may have been sent to broker a sale as much as manage the property.

It is somewhat puzzling that the new Magazin was built at all; Farris notes that it "seems strange that [the RAC] should have invested any more funds in maintaining the settlement" (Farris 1990:479). The New Magazin seems clearly to have been built during Alexander Rotchev's management during the last few years of Russian occupation of the fort. The fur enterprise had ceased to be profitable nearly two decades before. The New Magazin may not have been used as a Magazin at all.

At the time of Rotchev's arrival in 1838, Mexican California had been through a series of crop failures that, in conjunction with the death of General Figueroa and subsequent disruption of the

Mexican establishment, reduced the inflow of food supplies to one-quarter of what they were in 1834 (Tikhmenev 1978:218). The crop failures also hit the Russian farms, which suffered three years of poor production. Immediately following Rotchev's arrival, the amount of grain exported to the Russian colonies dramatically increased, exceeding all earlier supply amounts (Tikhmenev 1978:219). Rotchev personally obtained a large amount of wheat from the missions in 1840, and two years after his arrival, crops rebounded from the crop failures ten-fold, producing twice the normal annual production (Gibson 1976:121; Tikhmenev 1978:219). Khlebnikov's tallying of wheat produced by the first three managers between 1815 and 1829 indicates a yearly increase in crop yield from both private, and company, tilled fields around the fort—and this is before the founding of three ranches. Manager Kostromitinov opened a ranch, the Kostromitinov ranch, along the Russian River in 1831 and the Khlebnikov Ranch north of the Estero Americano in 1833 (Gibson 1976:117). Yegor Chernykh continued ranching efforts by creating the Chernykh Ranch near the current town of Freestone (see below)(Gibson 1976:118). It is probable that that several other unnamed farms were established throughout the area. Vallejo noted that the Russians had seven other farms in operation, while Sutter claimed that there were "a great many farms in the vicinity all belonging to the Russians" (Gibson 1976:118).

Farris's questioning of the RAC's investment in buildings is well founded. The RAC had already tried repeatedly to sell the fort. The sea mammal hunts were long since gone, and the Company had formally given up on the outpost being an agricultural powerhouse in 1828, when years of poor yields from the fort failed to meet even 50% of Company's needs (Gibson 1976:125). Rotchev was most likely there to sell the fort and be done with it, getting what money he could for the place from whomever he could get to buy it. However, it is clear that he loved California, and he appears to have had high hopes for the settlements success.

It is argued here that the New Magazin was essentially not the RAC's investment, but, in fact, Rotchev's, who used company resources to further personal interests, despite indications that the RAC wanted to unload the property as quickly as possible. The authors of this study propose four reasons for Rotchev's construction of the New Magazin: to accommodate his personal efforts to increase wheat production; to keep the personnel of the fort busy; to improve the appearance of the fort for himself and his wife; and to give the fort an air of prosperity, a façade, that would improve the chances of sale. These reasons are explored below.

The Last-Minute Wheat Push

Rotchev had inherited one year of disastrous crop failure and was looking at two more when he took over as manager, but he had an advantage over all other previous managers: Yegor Chernykh. Chernykh, a graduate of the Moscow Agricultural School and a former director of the Kamchatka Agricultural Company, arrived at the same time Rotchev did. After Chernykh introduced new machinery, rotating different crops, and improving tilling techniques, the fort had its best year ever in 1838 (Gibson 1976:131). The colony built the Chernykh Ranch and planted over 200 acres of vineyards, corn, peas, and beans (Gibson 1976:118). By 1839, farming accounted for 65% of the fort's assets. A year later, Rotchev brokered a large wheat deal with the missions. Though the RAC had formally thrown in the towel on agricultural efforts a decade earlier, Rotchev appears to have been exerting every effort to still make it work (Fisher 1971:146; Gibson 1976:124).

Despite Rotchev's efforts, it appears that the agricultural production boom was too little too late. Production still was not enough to meet the needs of the Alaskan colonies, and rather than

wait until Rotchev and Chernykh had worked the problems out, the Company abandoned the effort all together. There is every reason to believe that ongoing problems, including poor weather, persistent understaffing, lack of access to truly productive land, lack of expertise, and conflicts between private and company farming efforts, would have remained difficulties for some time, if they ever could have been resolved (Gibson 1976:125-137). Though Rotchev tried to make it work, the company itself simply was not interested. In the end, the RAC could buy grain from Mexico cheaper than it could grow it (Gibson 1976:138). In 1838, Governor Kupreyanov told the main RAC office that the cost of the keeping the fort solvent far outweighed the benefits the colony provided to the company; in 1840, the company directors sealed a contract with the Hudson's Bay Company to supply enough grain for the Alaskan colonies, effectively ended agricultural production at, and the remaining interest in maintaining, Fort Ross.

Busywork for the Promyshlenniks

Rotchev was in the unenviable position of having the largest staff the fort had seen, massive crop failure, an extinct hunting enterprise, and little in the way of incoming funds and supplies. He had to have known that the company was trying to sell the property, and it seems likely, given his personality and experience, that he was in fact hired to carry this out. It would appear that during his performance as manager a new wave of construction and repairs took place at the fort, including the construction of his new house and a kitchen, the Chernykh Ranch, a summer cottage for himself and his wife, and the New Magazin. Wrangell had noted in his 1833 visit how decrepit the settlement appeared; Rotchev seems to have set about cleaning the place up in general upon his arrival (Farris 1990:479). With no truly successful enterprises to occupy his personnel, he gave them tasks that would keep them out of trouble. The earliest settlers of the fort were deemed the "worst of the worst" consisting of "Siberian criminals, malefactors, and adventurers of various kinds" and "all kinds of riff-raff" (Gibson 1976:129-130). Though attempts were made to send professionals to facilitate true improvements to the fort, they were never sent in enough numbers to make much of a difference (Gibson 1976:130). Rotchev was left to do the best with what he had, and keep the disreputable group busy while he tried to negotiate a sale.

Aesthetic Improvements

The story of Alexander Rotchev is one of the more romantic ones in the fort's history. A multilingual poet, he was a man of education and status, married to the equally talented and musically inclined Princess Gagarin. The presence of a family and Rotchev's congenial personality and high social class, set him apart from both his predecessors and his staff. Not surprisingly, he saw fit to build his own house rather than stay in the barracks, and in fact built a four-room retreat for his wife north of the fort, in the Russian orchards, above the morning fog-belt fog and in a cooler climate during hot days (Farris 1990:479). It seems unlikely that the RAC would have seen the economic benefits of a summer retreat for the manager.

Despite the pressures that the RAC must have placed on Rotchev, it is apparent that he truly loved Fort Ross. As he recalled later in life:

What a magic place California is! For eight months of the year the sky is clear and cloudless. During the remaining months, beginning with the end of November, it rains from time to time. The heat never exceeds 25 degree Réaumur in the shade. In January everything comes to life: plants are in full growth, the air is fragrant and the cheerful humming-bird sways and glitters on a stalk or quivers

like a precious stone over a flower. The virgin soil of California produces remarkable harvests. I have seen wheat harvests of 150! The best years of my life were spent there; I reverently carry the memory of them in my soul (Bezyazychny, in Wilson 1998:11).

Rotchev may have ordered improvements to the property for his own aesthetic reasons. He entertained often, housing ships' captains, scientists, diplomats, travelers, and various other individuals during his five-year stay, and he may not have been in the greatest of hurries to depart. He was good friends with General Vallejo and exchanged expensive gifts with him (Pritchard 1992:30). He was noted for his library, piano, and fine French wines; it would seem reasonable that, given his background, his fondness for the place, and his interest in impressing guests and being a proper host, he would have had buildings improved, repaired, and built to flesh the fort out and make it appear to be prospering and expanding, even though this was clearly not the case.

Selling the Façade

The lack of effort put into the New Magazin construction, as compared to the Old Magazin, can be seen in another important building within the fort—Rotchev's own house. The only extant building from the Russian era, the Rotchev house has been recently studied as part of a Master's thesis and Historic Structures Report by Richa Wilson (1998). In her study, Wilson notes that the RAC encouraged the use of hewn rather than round logs, and in fact, the east and north walls, both of which are by far the most visible, have hewn wood walls. However, the south and west walls, both relatively hidden from view, were built out of round logs—essentially unfinished—and many of the construction details indicate a quicker, less finished construction (Wilson 1998: 54). Interestingly, the foundation has a similar story. When Call repaired the foundation and rebuilt the roof of the Rotchev house, he noted that half of the foundation had been built on the rock and half on the wood (Wilson 1998:42). Given that Rotchev knew that the fort was soon to be sold off, he may have had the house built as to appear to be built to RAC standards, but actually cutting corners wherever he could. The building itself is not nearly as grand as the Kuskov house, also possibly indicating the RAC's intention to depart.

Built quickly with a minimum of effort, the energy expended on the New Magazin foundation does not come close to approximating the level of effort that went into preparing that of the Old Magazin. It is quite likely that the post-and-sill technique was more widely adopted throughout the fort; however Rotchev's house was still constructed using the log construction and at least partially with a rock base like the Old Magazin, Kuskov House, and Chapel. It is clear that Rotchev could have built the New Magazin in the manner of the other more substantial buildings around the fort had he chosen to.

We argue that, as well as serving a utilitarian purpose, the construction of the New Magazin, as well as perhaps many of the other repairs, new building constructions, and elements of these new buildings, was designed to make the fort look prosperous, of good craftsmanship, and worthy of purchasing. With Rotchev's personal connections and regular entertaining, record wheat production, new construction, and reconditioning of older buildings, the fort must have seemed a hive of activity and profitability. It is not surprising that, after trying to sell the property to both Spain and Mexico who declined on principle for twenty years, and offering it to the Hudson's Bay Company, who passed on the deal, the place finally looked good enough to buy, this time to Sutter (Okun 1951:129). Rotchev's window-dressing of the fort may have cinched the

deal—had the fort continued to decline even further after Wrangell's visit in 1833, by which time the RAC had all but given up on the fort, there may have been little to interest Sutter. Rotchev's personal efforts to improve the place was probably done without the interest of, and perhaps, even without the permission of, the RAC, who could have been expected to react negatively to the additional investment in new construction on a settlement they were trying to palm off.

CONCLUSION

The current study concludes that hypothesis posed by Farley and Edwards (1975) that the remains of the Old Magazin and the New Magazin were structurally different and represented two different building techniques, appears to be correct. The Old Magazin appears to have been a log construction, built with heavy timbers on foundation of a packed rock and clay with redwood timber sleepers and thick redwood posts set on rock piers. Our excavations indicate that the foundation was at least 40 cm thick, was buttressed along the southern edge with larger rocks, and had been grubbed down to sterile soil. The New Magazin appears to have been a post-and-sill construction, with redwood sills set in rock-sided trenches with dirt bottoms, and posts set directly into the ground or occasionally set on bedrock. The effort put into the construction of the New Magazin does not appear to be anywhere near that of the Old Magazin. While the post-and-sill method was commonly used at the fort, log construction was also in use and would probably have been the preferred construction method for anything that was intended to last.

Alexander Rotchev, manager of the fort between 1838 and 1841, may well have been assigned the task to sell it. Rotchev engaged in a concerted effort to make the settlement appear successful, by dramatically increasing the wheat production, initiating new construction, keeping his staff busy, and, in general, giving the place an air of prosperity and activity. The RAC had all but given up on the settlement and appeared uninterested in investing further. We argue that efforts to make improvements to the fort, the New Magazin included, are primarily attributable to Rotchev's own interests in projecting a façade of success and well being, both for personal prestige and to facilitate the sale of the fort, perhaps even against the immediate interests of the RAC.

CHAPTER 7 RECOMMENDATIONS FOR MANAGEMENT AND FURTHER RESEARCH

PROBLEMS WITH ALIGNMENT AND CONSTRUCTION

The 2003 excavations began with two assumptions, one or both of which now appear to be incorrect. The first is that the two Magazin buildings were of the same width and were aligned, parallel and contiguous, with the south wall of the New Magazin built flush against the north wall of the Old Magazin. The second assumption is that the buildings were the old Russian structures with new siding added.

Before exploring the pros and cons of these two assumptions, a few comments should be made regarding the photos. Figure 9 has been dated to both 1900 (as a probable postcard) and 1866 (date given at the Fort Ross Interpretive Center [Tomlin 1995:38]) to 1878-1900s (Farris 1990: 496). On the right hand side of the 1866 photo is a ladder, set sideways on the ground and leaning against the house, with a small stepladder or saw horse next to it. Part of the adjacent building's roofline can be seen in the upper right corner.

In the 1878-1900s photo, the adjacent structure can be seen in its relationship to the building to the south. In the bottom left hand corner, a ladder and step stool are resting in the same position as they are in the 1866 photo. Either this is an odd coincidence, the ladders have not moved in at least twelve years, or both of these photos were taken at the same time. It would appear that the simplest answer is the latter, and that through the decades one or the other became mislabeled.

But were the photos taken in 1866, 1878-1900, or 1900? If 1866, then any changes to them since the Russian departure can be attributed to solely to Benitz. If 1878 or later, then the buildings would have passed through Benitz, Fairfield and Dixon, and to the Call family; any changes or construction could be attributed to any of these parties.

The 1900 date can be ruled out immediately. The northern building appears in another 1865 overview of the fort but not in an 1892 photo of the southern building. A roof/porch is visible on the left side of Figure 9 that appears to have been either an attachment to the Rotchev house or a separate building; this structure is not in the 1885 photo of the Rotchev house nor in the 1890 photos of the Magazin or the Fort Ross Hotel ((Kalani 1995:61; Tomlin 1995:33). While we can, at least, tighten the 1878-1890s date to 1878-1885 with this information, it is unclear which of these is correct. We do know that the northern building is in the 1865 overview, and we have identified no photos or evidence that would rule out the 1878-1885 date. At this point, the date range for the photos is 1865-1885.

Problems with Alignment

If one examines Figure 10, it is clear that the New Magazin is offset by several feet to the west of the Old Magazin. A bin, pen, coop, or other small wood construction is attached to the north end of the Old Magazin that distorts the picture somewhat to make it initially look as though the two buildings were flush. However, careful examination of the photo shows the line and elevation of the New Magazin as continuing south behind this small construction, presumably to meet the Old Magazin north wall, though this intersection is blocked from view by the Old Magazin east wall. More visibly, the roofline between the two buildings is also offset. Voznesenskii's 1841

painting appears to confirm this, as it depicts the New Magazin as a clearly separate building with a different roofline (Figure 8).

This presents some problems with excavation findings to date. What was thought to be the east wall of the old Magazin was identified by Farris in 1981. Within the foundations of the New Magazin, several redwood posts and a rock-lined sleeper trench, with wood was initially identified as its east wall by Edwards in 1975 and 1976 and further defined by the current excavation. The two walls appear to line up exactly.

If the photo represents the New Magazin, then its east wall cannot be flush with the Old Magazin east wall, and the apparent alignment of the two, as based on the foundation remains found during excavation, is false. What has been identified as the eastern faces of one or the other, or both, buildings appear to be incorrect.

Problems with Construction

Another possibility is that the buildings in the photos do not represent either the Old or New Magazin. Looking at the south wall of building in Figures 9 and 11, one can see a small window about one foot above the doorway, then the peak of the roof after another 4 feet or so. From the top of the door to the roof peak cannot be more than six or seven feet. Reconstruction plans for the Old Magazin, based on research of similar structures, puts the roof peak at 18 feet over the top of the doors found on this floor. The only way for the building in the photos could be related to the reconstruction drawing, is by removing the roof, the front gallery in its entirety, and rebuilding the roof ten feet lower. The attic is simply not big enough to match the reconstruction drawings.

One study that proves critical to this analysis was conducted by Kathleen Roscoe who in 1981 researched the reliability of the photos for use in reconstructing the Old Magazin. As part of Roscoe's study, she recorded an oral history with one of the Call daughters, Mercedes Stafford. Stafford attended the dances in the building as a child. Stafford provides construction details that suggest the building was built by Benitz, on the foundations of the Old Magazin.

According to Stafford, the interior of the building was very plain. The building layout consisted of two rooms downstairs, the ballroom in the southern two-thirds of the building, and a storage room/garage in the northern one third. Upstairs was a hay loft left over from when Benitz used the building as a barn (Roscoe 1981:2). The lower floor windows, partition between the two first-floor rooms, a dance floor, and a new set of steps for the first floor entrance were installed after the Call family purchased the property. Stafford recalls that the structural components of the walls of the building interior were exposed:

The boards on the inside were horizontal as I remember. You could see vertical posts going up on the inside and then you could see the horizontal siding (Roscoe 1981:8).

In addition, flooring on the first floor consisted of 4-inch-wide boards that were "like the boards you would see in the kitchen floor of a house" (Roscoe 1981:5). Stafford believed that a board floor made from large timbers lay underneath the dance floor (Roscoe 1981:5).

There were two doors that led into the dancehall: one was the main entrance, on the south side of the west wall, the other from the storage room and found in the northeast corner of the ballroom. The latter door was sealed off during dances to control who came in and out (Roscoe

1981:3). Men who started to fight or those who wished to drink were ushered out main door; as one of the uncles was a teetotaler, alcohol was forbidden inside the building.

Roscoe completes her study with the conclusion that evidence exists that both argues for and against the building in the photos being the Old Magazin. However, Roscoe did not have the benefit of the results of the archaeological excavations to work with. With the testimony of Mercedes Stafford in mind, it would appear that the simplest resolution would appear to be that the building in the photos is not the Old Magazin. From the reconstruction drawings and the photos we can see that the building is not large enough, had a different roof, and no gallery. According to Stafford, the interior was originally open and was divided by Call; the original building had been divided into two rooms on the bottom floor and three on the top. The walls were not hewn log beams but horizontal planks with post supports. The only evidence that suggests any remnant of the Old Magazin might have been part of the building comes from Stafford's observation that large timbers may have been under the dance floor. The rest of the building appears to be post-Russian.

Regarding the New Magazin, considerable construction lumber was removed by Sutter when he purchased the fort. It is possible that, at the time of sale, the New Magazin was simply dismantled and shipped away. If this is true, the building in the photo is not the New Magazin but a later addition by Benitz. The roofs between the two buildings are quite different. That of the New Magazin is of wood shake and while it is difficult to determine what the Old Magazin roof is constructed of, it is possible that it may be cut shingles from the Russian occupation. The siding also looks considerably different; it appears that several bays may have opened to the east at one time; it is difficult to determine whether these are sealed or simply closed doors. A small fence on the east side of the central doorway into the New Magazin appears to form an animal pen or corral in conjunction with the stockade wall behind it. In short, the building looks more like a stable or animal pen than a Magazin.

Evidence can be presented that both contradicts and supports the possibility of the location of the east wall, as identified during the 1981 excavations, as being correct. Contradicting this interpretation, a 5 ft.-long section of redwood, Farris's Feature 19, extending from what Farris identified in 1981 as the southeast corner of the Old Magazin, that would seem to indicate that the south wall did not stop at that location, but continued east an unknown distance. Farris (1981: 26) hypothesized that the wood might be a remnant of the staircase on the south wall of the Magazin, as it appears to be too small in cross-section to be part of the Russian structure (Glenn J. Farris 2003c, pers. comm.).

Looking at photos of the Magazin with the staircase in place, this seems unlikely; the wood section directly extends east from the east wall, and is not south of building, where any structural material related to the staircase would be expected. If this is correct, what is now delineated as the east wall is probably the structural support for an interior wall or the edge of the main building and the interior wall of the gallery.

Farris used the presence of hard-packed soil and artifacts dating to the late 1800s to delineate the eastern wall edge (1990:486-487). If we assume that the Old Magazin was replaced, the artifacts could be associated with the eastern edge of the barn/dancehall. Participants in the dances were known to have to go outside and drink and mingle, so it would not be surprising to find late 19th-century American bottle glass and dinnerware along this edge of the building. Additionally, similar artifacts may have accumulated as a result of daily life at the fort.

Photos and maps of the 1981 excavation depict the rock foundation continuing over 3 meters east of W40.30, what was then considered the eastern wall (see figures 16 and 24). Farris noted that the hard-packed soil was in the northern corner of this wall. Figure 11 shows a wagon entrance into the north end of the building, in the same location of the hard-pack. There is also a ramp leading up to the wagon entrance. It is possible that the hard-packed area was not the natural ground surface but a constructed ramp. As Farris did not excavate through the packed soil, it is possible that foundation remnants of the Old Magazin continue underneath it to the east, as it does along the rest of the wall.

In support for the argument for a correct wall placement is the observation that excavated foundations of both buildings line up. The buildings were supposedly of the same width of 28 feet ; the width of the foundations identified during excavations is 27 feet 8 inches (Farris 1990: 480; Farris 1981:34). If one accepted that the photos of the barn/dancehall are in the same location as the Russian building, then we can accept that the late 19th-century artifacts and area of hard-pack as evidence of the correct east wall. In the absence of structural materials to support an argument for the eastern wall, the presence of the collection of artifacts and the hard-packed area was used to determine wall placement (Farris 1990:486-487). Such a concentration of artifacts was noted in the south end of the Old Magazin during the current excavation, along the outside of what was determined, with what the current authors feel to be a high degree of confidence, to be the southern edge of the rock foundation. Both the 1866 and the 1890 photos show the barn base (between the floor joists and the ground) sealed with boards. It seems unlikely that any great number of large artifacts would be deposited under the building unless floorboards inside the structure were missing, and materials regularly dropped through.

Turning to the possibility that Figure 10 represents a modified New Magazin, the Voznesenskii painting shows the New Magazin in roughly the same location, and with roughly the same roofline. Voznesenskii's drawing, however, shows a rectangular building extending east of the Old Magazin, facing north-south instead of east-west and unconnected to it whatsoever, placing the New Magazin somewhere between the Kuskov House and the currently hypothesized location of the New Magazin. Interestingly, the roofline of a building appears in this location in the 1865 photo of Fort Ross (see Figure 8). If Voznesenskii's drawing is accurate, then the New Magazin foundation represents a different building entirely that was removed and replaced by the time of the 1866 photo, a new, still undetermined building of unknown size. If Voznesenskii's painting is the more accurate of the two, then the building in the 1866 photograph could be the same one, though perhaps heavily modified.

TWO POSSIBLE SCENARIOS AND THEIR IMPLICATIONS ON RECONSTRUCTION

This study concludes that the building that appears in the location of the New Magazin in Figure 10 is not of Russian construction. If Figure 9 represents the Old Magazin, then the purported New Magazin building is too small. If Figure 9 is not the Old Magazin, then, based on the roofline and height of the building, the New Magazin building would still be too small. The only data that remain are the Voznesenskii painting and drawing, the dimensions at the time of sale, and the excavations of the foundations. There are clearly problems with scale and position of buildings with the fort in the painting, but it is sufficiently accurate to determine a general location of the Magazin (Glenn J. Farris 2003b pers. comm.) The field data roughly match the dimensions given for the Magazin in the sale inventory. The east, south, and west walls appear

to have been determined for the New Magazin. What remains are two possible scenarios for the Old Magazin and their implications on the planned reconstruction.

Scenario 1

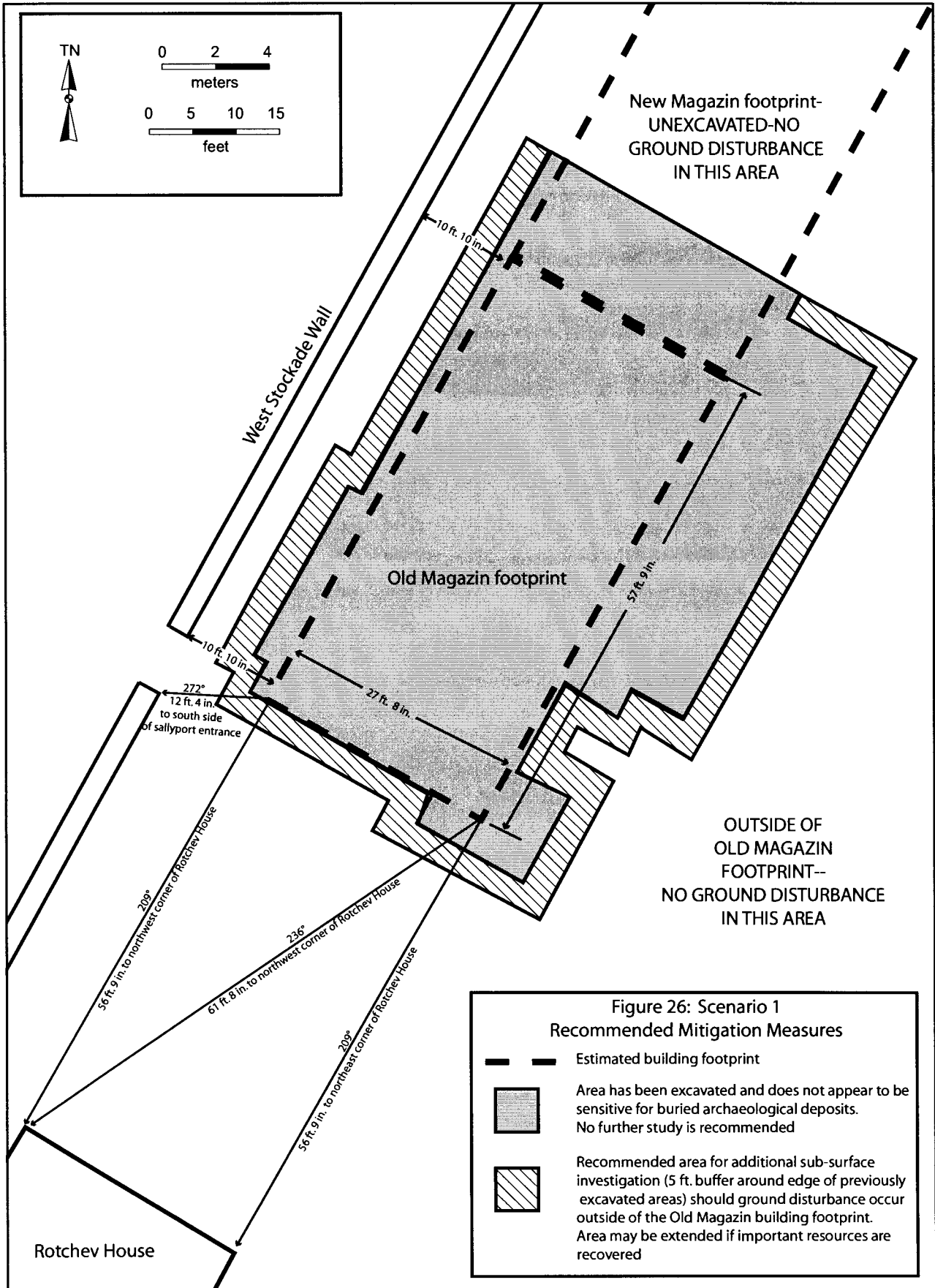
1. The eastern wall of the Old Magazin has been correctly identified.
2. The barn/dancehall shares the alignment and plan dimension of the Old Magazin, thereby accounting for the late 19th-century artifacts and hard-packed dirt along the east wall of the Old Magazin.
3. Farris's Feature 19, a redwood timber segment extending from the southeast corner of the foundations, belongs to a step built by Call that led up to the first floor and does not represent remnants of the Old Magazin.
4. The rock cobble extending beyond the edge of the foundation was simply overzealous preparation on the part of the Russian builders.
5. The sleeper timber represented by Feature 3 of Farris's excavation was a later addition to the outside of the gallery in the 1830s.
6. The sale invoice for Vallejo contains a measurement of the building that includes the gallery.
7. No cultural materials were identified under the foundations that would suggest sensitivity for buried deposits.

Implications for Reconstruction

In this scenario, if construction is restricted to areas already excavated by Farris (1981), no further archaeological study is recommended. The reconstruction drawings are correct, the eastern wall has been clearly identified. If ground disturbance takes place outside of the areas excavated by Farris, then additional archaeological study may be warranted to identify concentrations of artifacts that might pinpoint portals into the Old Magazin. The proposed areas of sensitivity and areas where ground-disturbing activities can occur without further study have been delineated in Figure 26.

Scenario 2

1. The eastern wall of the Old Magazin has not been correctly identified.
2. Farris's Feature 19 represents a real extension of the building.
3. The rock cobble foundation is part of a building that continued at least another 3 meters to the east of the proposed wall.
4. The late-19th-century artifacts represent the edge of the barn/dancehall, not the Old Magazin
5. The hard-pack dirt in the northeast corner was piled on top of the old foundation to make a ramp.
6. The measurements given for the building at the time of sale represented the measurements of the building itself, not the building and gallery combined.
7. As with Scenario 1, the foundation does not appear to be sensitive for containing buried cultural resources under the rock.



Implications for Reconstruction

In this scenario, further archaeological study is warranted. The reconstruction drawings are based on a width that may be in error. The original building may have been at least 4 feet, and perhaps more than 10 feet, wider. The eastern edge of the building should be delineated, through excavation of the hardpack in the northeast corner, through excavation along what was proposed as the east wall from N48-52, W38-40, and through open area excavations east of the W37 line. These excavations should be cut in a 45 degree angle from the building, as excavating parallel to the building may mask or complicate the identification of building alignment. The goal of this excavation would be to either establish a solid east wall, find additional structural features, or obtain evidence that the rock fill is simply displaced material from demolition or a wider foundation than was necessary for the original building.

As with Scenario 1, the location of the west wall may be sensitive for containing buried features that could provide information regarding portal location, about which nothing is known. Ground disturbance west of the areas excavated by Farris should be discussed with DPR archaeological staff to determine whether further excavation or archaeological monitoring are warranted. These areas have been delineated in Figure 27.

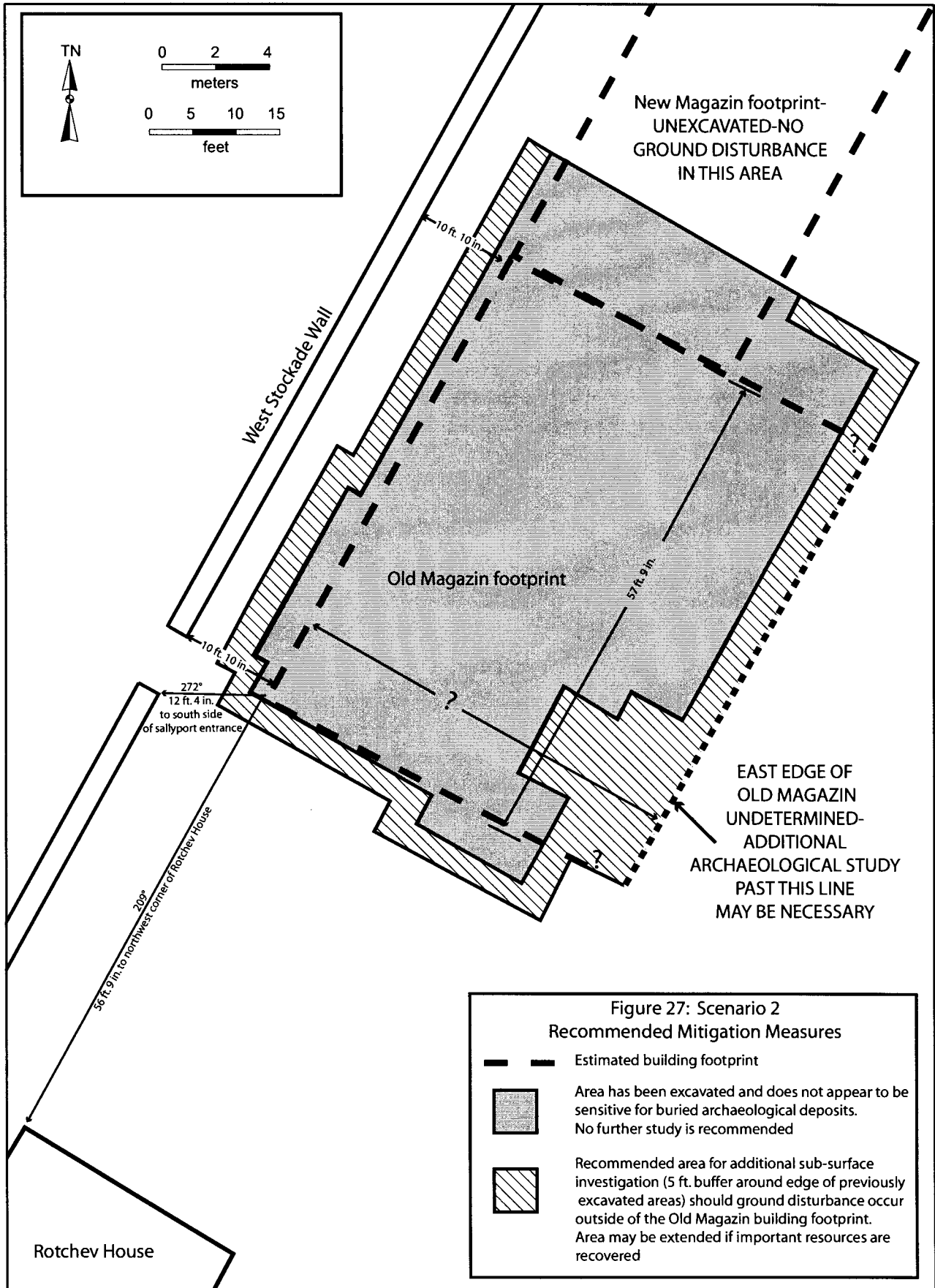
FURTHER RESEARCH

Several avenues of further research are suggested for both the New Magazin and the interior of the Fort Ross stockade. This research includes both additional archival research, field excavation, and lab analysis.

Native American Resources

The study conducted by Purser, Beard and Praetzellis (1990) suggests that Native American occupation of the area in and around Fort Ross began no later than the Lower Archaic and continued on to the Upper Emergent, and, as the historical record shows, well into the historic period (Purser, Beard and Praetzellis 1990:45). However, it is interesting to note that, of the 30 Native American archaeological sites reviewed by Lightfoot, Wake, and Schiff(1991), only one site—CA-SON-1454/H—was found to contain evidence of Lower Archaic occupation. This would suggest that the area in and immediately adjacent to the fort may in fact be one of the earliest areas of occupation along this section of the California coast. Of the 53 pieces of obsidian sampled, two fragments of Borax Lake obsidian hydration bands indicated dates from 5,000 to 5,200 years B.P.

While it is expected that the integrity of the soil samples recovered from the current study, as those recovered during the 1989 Stockade Wall excavations, has been affected by rodent activity and decades of traffic and construction, additional obsidian hydration may prove useful in verifying the early dates identified by Purser, Beard and Praetzellis and in providing additional data regarding this poorly represented period of occupation in the region. In addition, the artifact density and material composition could be compared to other sites in the area to determine whether information regarding Native American obsidian procurement could be gleaned from the data based on the hydration results. It would appear unlikely, considering the nature of the rodent disturbance noted in the area, that depth or provenience would be of much assistance in this matter; however, should future identification of intact features could conceivable be found.



Old Magazin

Two different scenarios were posited as part of the Management Recommendations of this study (see above). To test whether Scenario 1, (where the east wall of the Old Magazin is correct) or Scenario 2, (where the east wall is incorrect and lies more to the east) further excavation would be necessary. The hardpan identified in the northeast corner of the foundation should be excavated, to determine whether foundations exist underneath. Additional excavation, either in the form of areal exposure or exploratory trenches to identify potential building edges to the east of the 1981 excavation edge, could be conducted to verify which of the two scenarios is correct.

Additional excavation could be conducted west of the foundation, in the area between what has been identified as the Old Magazin west wall and the west stockade wall. Careful excavation could potentially identify artifact concentrations that would indicate building portals, thereby aiding in the accurate reconstruction of the Old Magazin.

New Magazin

The results of the current study suggest that additional timbers, rock alignments, chiseled bedrock, and other architectural features might remain in other unexcavated areas within the interior of the New Magazin floorplan. In particular, it would be beneficial to identify either intact timbers or planks to compare with those segments removed from the Old Magazin. Buried timbers continue to degrade, particularly from rodent activity, and none were found that were comparable to the rather well preserved specimens uncovered by Farris in 1981. Glenn J. Farris (2003a pers. comm.) has suggested that a switch from using large timbers within the Old Magazin to plank construction within the New Magazin may have occurred. It would be useful for reconstruction of the New Magazin to find an intact segment of plank to verify Farris's hypothesis. The present authors agree with Farris's hypothesis that post-and-sill rather than the log construction method was used. No substantial timbers suggesting log construction were identified during the current excavation. As plank segments could be expected to be smaller than timbers, their preservation may be even more tenuous, suggesting recovery of intact pieces may require excavation techniques geared to recovering extremely fragile, fragmented sections of wood.

An attempt to identify additional postholes should also be made, as it appears that the postholes identified by Edwards were not excavated stratigraphically, and therefore information regarding the date of construction of the New Magazin based on artifacts purportedly associated with these features may have been lost. Stratigraphic excavation of additional postholes, and subsequent identification of associated diagnostic artifacts, might resolve the date for the construction of the New Magazin. Finally, as with the Old Magazin, excavation around the perimeter of the building may yield concentrations of artifacts that indicate where portals were located in the building, providing additional information for reconstruction efforts.

Glenn Farris (2003b, pers. comm.) has also suggested that additional research into the possible existence of Russian military architectural design books could prove fruitful to the understanding of building techniques used for both the Old and New Magazin.

Other Buildings

In the process of reviewing photos, maps, and other archaeological materials for this study, two other buildings have been identified that warrant additional study. The first is a building that appears to have been located between the Kuskov House and the northern Blockhouse, inside the

stockade wall. This building appears in both the Voznesenskii drawing and the 1865 photo of the fort, and appears to be a Russian-period building. No other information about this structure was identified during the current study.

The second are foundation remains identified by Lightfoot, Wake , and Schiff. Their excavations in 1991 and 1992 uncovered a thick rock-cobble foundation outside of the stockade, in the Native Alaskan Neighborhood. The hypothesis of this study is that such a foundation was prepared for the construction of large, Russian log buildings built during the first years of the fort. The presence of such a structure outside of the fort in what has been determined to be a non-Russian neighborhood raises questions regarding the kinds of structures the Native Alaskans used and the construction histories and locations of major buildings in and around the fort.

Additional Brick Analysis

Since brick appears to be incorporated into the earliest foundations of the fort, it could prove useful to analyze brick fragments found in these foundations and attempt to identify the clay source used. Local clay sources would indicate that kilns would have had to have been built almost immediately upon arrival, and would suggest the importance of local brickmaking to the Russian settlers (unclear how the clay sources indicate this). Bricks originating from Alaska and used as ballast suggests that Alaska was probably self-sufficient in their brick making facilities and that the supply from Ross may have been merely secondary. Thermoluminescence could also be used to obtain dates from the bricks and thereby identify periods of building construction or repair.

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APPENDIX A

Tables

**Table 1. Artifact Descriptive List
Old Magazin, Fort Ross**

Group and Category	Description	Count	MNI
ACTIVITIES			
Archaeology			
Unit Liner	Plastic Sheeting	2	0
<i>Subtotal Archaeology</i>		2	0
Firearms			
Ammunition	Copper-alloy Shell Casing	1	1
Ammunition	Lead Bullet	1	0
<i>Subtotal Firearms</i>		2	1
DOMESTIC			
Food Preparation/Consumption			
Drinking Vessel	Colorless Glass Tumbler	3	2
Drinking Vessel	Colorless Glass Tumbler?	1	1
Tableware	Colorless-Amethyst Glass Stemware	4	1
Tableware	Pearlware Hollow	2	1
Tableware	White Improved Earthenware Hollow	1	1
Tableware	White Improved Earthenware Saucer	10	3
<i>Subtotal Food Preparation/Consumption</i>		21	9
Food Preparation/Heating			
-	Cast-iron Stove lid	2	1
<i>Subtotal Food Preparation/Heating</i>		2	1
Food/Food Storage			
Container	Aqua Glass Soda-water Bottle	7	1
<i>Subtotal Food/Food Storage</i>		7	1
Indefinite			
Tableware?	Colorless-Amethyst Glass Hollow	1	1
<i>Subtotal Indefinite</i>		1	1
INDEFINITE USE			
Indefinite			
-	Aqua Glass Flat Glass	14	0
-	Black Glass? Indefinite	2	1
-	Colorless Glass Hollow	1	1
-	Cotton String/Yarn	1	0
-	Earthenware Hollow	1	1
-	Glass Flat Glass	111	0
-	Opaque Porcelain Body	1	0
-	Opaque Porcelain Hollow	4	1

Table 1. Artifact Descriptive List - continued

Group and Category	Description	Count	MNI
Indefinite - continued			
-	Pearlware Hollow	2	1
-	Porcelain Body	1	1
-	Porcelain Rim	1	1
-	White Improved Earthenware Base	1	1
-	White Improved Earthenware Body	14	0
-	White Improved Earthenware Hollow	7	5
<i>Subtotal Indefinite</i>		161	13
Miscellaneous Beads			
-	Black Glass Bead	1	1
-	Olive and Red Glass Bead	1	1
-	Peach glass Bead	1	1
<i>Subtotal Miscellaneous Beads</i>		3	3
Miscellaneous Containers			
-	Amber Glass Bottle/Jar	22	1
-	Amethyst Glass Bottle/Jar	2	1
-	Amethyst Glass Jar	1	1
-	Aqua Glass Bottle	2	1
-	Aqua Glass Bottle/Jar	138	3
-	Brown Glass Bottle	2	1
-	Brown Glass Bottle/Jar	52	4
-	Colorless Glass Bottle/Jar	1	0
-	Colorless Glass Jar	2	1
-	Colorless/Amethyst Glass Bottle/Jar	394	0
-	Colorless/Opaque-white Glass Bottle/Jar	1	0
-	Colorless-Amethyst Glass Bottle	1	1
-	Colorless-Amethyst Glass Bottle/Jar	21	2
-	Green Glass Bottle/Jar	1	0
<i>Subtotal Miscellaneous Containers</i>		640	16
Miscellaneous Metal Items			
-	Aluminum Foil	1	0
-	Copper-alloy Sheet Metal	1	1
-	Ferrous Can?	2	1
-	Ferrous Sheet Metal	1	0
-	Lead Metal	3	1
<i>Subtotal Miscellaneous Metal Items</i>		8	3
Worked Bottle Glass?			
-	Aqua Glass	1	1
-	Dark-olive Glass Flake?	1	0
<i>Subtotal Worked Bottle Glass?</i>		2	1

Table 1. Artifact Descriptive List - continued

Group and Category	Description	Count	MNI
NATIVE AMERICAN			
Flaked Stone			
Debitage	Crypto-crystalline	16	16
Debitage	Igneous	3	3
Debitage	Obsidian	3	3
Debitage	Obsidian - Annadel	1	1
Debitage	Obsidian - Napa Valley	9	9
Debitage	Obsidian/Crypto-crystalline	1	1
Debitage	Quartz	1	1
Edge-modified Flake	Crypto-crystalline	1	1
Possible Debitage	Crypto-crystalline	2	2
Retouched Flake	Obsidian - Franz Valley	1	1
<i>Subtotal Flaked Stone</i>		38	38
PERSONAL			
Clothing			
Fastener	Copper-alloy Button?	1	1
Fastener	Porcelain Button	1	1
Footwear	Leather Shoe/Boot?	1	1
<i>Subtotal Clothing</i>		3	3
Footwear			
-	Ferrous Shoe/Boot Tack	1	0
<i>Subtotal Footwear</i>		1	0
Miscellaneous Containers			
-	Cobalt Glass Bottle/Jar	14	1
<i>Subtotal Miscellaneous Containers</i>		14	1
Social Drugs - Alcohol			
Container	Amethyst Glass Alcoholic-beverage Bottle	1	1
Container	Amethyst Glass Flask	3	0
Container	Green Glass Alcoholic-beverage Bottle	2	1
Container	Olive Glass Alcoholic-beverage Bottle	21	1
<i>Subtotal Social Drugs - Alcohol</i>		27	3
STRUCTURAL			
Hardware			
Fastener	Copper-alloy Washer	1	1
Fastener	Ferrous Cut Nail	59	12
Fastener	Ferrous Finishing Nail	1	1
Fastener	Ferrous Nut	1	1
Fastener	Ferrous Scaffolding Nail	1	1

Table 1. Artifact Descriptive List - continued

Group and Category	Description	Count	MNI
Hardware - continued			
Fastener	Ferrous Spike?	2	1
Fastener	Ferrous Wire Nail	1	1
<i>Subtotal Hardware</i>		66	18
Materials			
-	Asphalt	6	0
-	Brick	6	2
-	Concrete	1	0
-	Redwood Wood	9	0
<i>Subtotal Materials</i>		22	2
UNDEFINED USE			
-	Ferrous Amorphous	1	0
<i>Subtotal Undefined use</i>		1	0
TOTAL		1,021	114

**Table 2. Summary of Artifacts by Group
Old Magazin, Fort Ross**

Description	Total Count	MNI	Percent of MNI
Activities	4	1	1.1
Domestic	31	12	12.8
Indefinite Use	814	36	38.3
Native American	38	38	40.4
Personal	45	7	7.4
Total	932	94	100.0

**Table 3. Summary of Artifact by Category
Old Magazin, Fort Ross**

Description	MNI	Percent of MNI
Clothing	3	3.2
Firearms	1	1.1
Flaked Stone	38	40.4
Food Prep/Consumption	9	9.6
Food Prep/Heating	1	1.1
Food/Food Storage	1	1.1
Indefinite	14	14.9
Misc. Beads	3	3.2
Misc. Containers	17	18.1
Misc. Metal Items	3	3.2
Social Drugs - Alcohol	3	3.2
Worked Bottle Glass?	1	1.1
Total	94	100.2

**Table 4. Food Preparation/Consumption Vessel Function
Old Magazin, Fort Ross**

Function	MNI	Percent
Tableware (plates, bowls, saucers, etc.)	6	66.7
Stemware and Tumblers	3	33.3
Total	9	99.9

**Table 5. Food Preparation/Consumption Vessel Fabric
Old Magazin, Fort Ross**

Fabric	MNI	Percent	Total MNI	Total Percent
Ceramic			5	56
White Improved Earthenware	4	80		
Pearlware	1	20		
<i>Ceramic Subtotal</i>	5	100		
Glass			4	44
Total			9	100

**Table 6. Food Preparation/Consumption Vessel Decoration
Old Magazin, Fort Ross**

Fabric	Description	Type of Decoration	Decorated MNI	Undecorated MNI
Ceramic				
Pearlware	Hollow	Handpainted blue floral, Blue rim band	1	
White Improved Earthenware	Hollow	Molded	1	
White Improved Earthenware	Saucer			1
White Improved Earthenware	Saucer	Molded	2	
<i>Ceramic Subtotal</i>			4	1
Glass				
Colorless Glass	Tumbler			2
Colorless Glass	Tumbler?			1
Colorless-Amethyst Glass	Stemware			1
<i>Glass Subtotal</i>				4
Total			4	5

**Table 7. Social Drugs Summary
Old Magazin, Fort Ross**

Social Drug	Description	MNI	Percent
Alcohol	Alcoholic-beverage Bottle	3	100

**Table 8. Date and Origin of Marked/Datable Items
Old Magazin, Fort Ross**

Catalog #	Material	Description	MNI	Mark	Maker	Origin	Date Range	Reference
<i>Marked Ceramic Items</i>								
240 005	White Improved Earthenware	Base	1	Printed mark: . . . RO[YAL] . . .			-	
265 002	White Improved Earthenware	Saucer	1	Printed mark: . . . [CO]			-	
<i>Marked Glass Items</i>								
200 025	Colorless-Amethyst Glass	Bottle/Jar	0	(amethyst sun-tint)			1880 - 1920 ca	Lockhart 2002, 10 June
200 026	Colorless-Amethyst Glass	Bottle	1	(amethyst sun-tint)			1880 - 1920 ca	Lockhart 2002, 10 June
214 018	Colorless-Amethyst Glass	Bottle/Jar	0	(amethyst sun-tint)			1880 - 1920 ca	Lockhart 2002, 10 June
215 020	Brown Glass	Bottle/Jar	1	. . . [O,R,S?]T[H] . . .			-	
215 027	Colorless-Amethyst Glass	Bottle/Jar	0	(amethyst sun-tint)			1880 - 1920 ca	Lockhart 2002, 10 June
215 028	Colorless-Amethyst Glass	Bottle/Jar	0	(amethyst sun-tint)			1880 - 1920 ca	Lockhart 2002, 10 June
215 029	Colorless-Amethyst Glass	Bottle/Jar	0	. . . [R or P?] . . .			1880 - 1920 ca	Lockhart 2002, 10 June
215 030	Colorless-Amethyst Glass	Stemware	0	(amethyst sun-tint)			1880 - 1920 ca	Lockhart 2002, 10 June
215 032	Amethyst Glass	Alcoholic-beverage Bottle	1	(amethyst sun-tint)			1880 - 1920 ca	Lockhart 2002, 10 June
226 007	Colorless-Amethyst Glass	Bottle/Jar	0	(amethyst sun-tint)			1880 - 1920 ca	Lockhart 2002, 10 June
226 008	Colorless Glass	Bottle/Jar	0	. . . [S]ALE . . . / . . . [L]E[R OR P?] . . .			-	
227 020	Brown Glass	Bottle/Jar	1	[P]CGW	Pacific Coast Glass Works	San Francisco, CA	1902 ca - 1924	Toulouse 1971:415-416
227 025	Colorless-Amethyst Glass	Bottle/Jar	0	(amethyst sun-tint)			1880 - 1920 ca	Lockhart 2002, 10 June
227 027	Colorless-Amethyst Glass	Bottle/Jar	1	(amethyst sun-tint)			1880 - 1920 ca	Lockhart 2002, 10 June
227 028	Colorless-Amethyst Glass	Stemware	1	(amethyst sun-tint)			1880 - 1920 ca	Lockhart 2002, 10 June
227 030	Amethyst Glass	Flask	0	(amethyst sun-tint)			1880 - 1920 ca	Lockhart 2002, 10 June
288 017	Brown Glass	Bottle/Jar	1	. . . [R,A?] . . .			-	

Table 8. Date and Origin of Marked/Datable Items - continued

Catalog #	Material	Description	MNI	Mark	Maker	Origin	Date Range	Reference
288 023	Colorless/Amethyst Glass	Bottle/Jar	0	(amethyst sun-tint)			1880 - 1920 ca	Lockhart 2002, 10 June
288 024	Colorless Glass	Tumbler	1	(anchor closure)			-	Jones and Sullivan 1985:143
288 025	Amethyst Glass	Bottle/Jar	1	(amethyst sun-tint)			1880 - 1920 ca	Lockhart 2002, 10 June
288 027	Amethyst Glass	Flask	0	(amethyst sun-tint)			1880 - 1920 ca	Lockhart 2002, 10 June
240 018	Colorless/Amethyst Glass	Bottle/Jar	0	(amethyst sun-tint)			1880 - 1920 ca	Lockhart 2002, 10 June
240 019	Colorless-Amethyst Glass	Stemware	0	(amethyst sun-tint)			1880 - 1920 ca	Lockhart 2002, 10 June
240 020	Colorless-Amethyst Glass	Bottle/Jar	1	(amethyst sun-tint)			1880 - 1920 ca	Lockhart 2002, 10 June
260 010	Colorless/Amethyst Glass	Bottle/Jar	0	(amethyst sun-tint)			1880 - 1920 ca	Lockhart 2002, 10 June
260 011	Colorless-Amethyst Glass	Bottle/Jar	0	(amethyst sun-tint)			1880 - 1920 ca	Lockhart 2002, 10 June
260 012	Colorless-Amethyst Glass	Hollow	1	(amethyst sun-tint)			1880 - 1920 ca	Lockhart 2002, 10 June
260 013	Amethyst Glass	Jar	1	(amethyst sun-tint)			1880 - 1920 ca	Lockhart 2002, 10 June
263 003	Colorless-Amethyst Glass	Bottle/Jar	0	(amethyst sun-tint)			1880 - 1920 ca	Lockhart 2002, 10 June
263 004	Colorless-Amethyst Glass	Bottle/Jar	0	(amethyst sun-tint)			1880 - 1920 ca	Lockhart 2002, 10 June
264 003	Colorless/Amethyst Glass	Bottle/Jar	0	(amethyst sun-tint)			1880 - 1920 ca	Lockhart 2002, 10 June
265 006	Colorless-Amethyst Glass	Bottle/Jar	0	(amethyst sun-tint)			1880 - 1920 ca	Lockhart 2002, 10 June
Marked Other Items								
227 009	Cast-iron	Stove lid	1	... B ...			-	
288 008	Copper-alloy	Shell Casing	1	US	United States Cartridge Co.	Lowell, MA	1869 - 1945	Hogg 1982:151

**Table 9. Artifact Descriptive List
New Magazin, Fort Ross**

Group and Category	Description	Count	MNI
ACTIVITIES			
Animal Husbandry			
-	Wrought-iron Horseshoe	3	1
<i>Subtotal Animal Husbandry</i>		3	1
Archaeology			
Provenience Info	Plastic Flagging	9	0
Unit Covering	Plastic Tarpauline	1	0
Unit Liner	Plastic Sheeting	71	0
<i>Subtotal Archaeology</i>		81	0
Commerce			
-	Copper-alloy Penny	1	1
-	Copper-alloy and Ferrous Weight?	1	1
Advertising	Paper Label?	1	1
<i>Subtotal Commerce</i>		3	3
Entertainment			
Music	Copper-alloy Harmonica	3	1
<i>Subtotal Entertainment</i>		3	1
Firearms			
Ammunition	Copper-alloy Shell Casing	1	1
Ammunition	Lead Shot	3	3
<i>Subtotal Firearms</i>		4	4
Writing			
Container	Teal Glass Ink Bottle	15	1
<i>Subtotal Writing</i>		15	1
DOMESTIC			
Food Preparation/Consumption			
Drinking Vessel	Amethyst Glass Tumbler	4	1
Drinking Vessel	Colorless Glass Tumbler	11	2
Drinking Vessel	Porcelain Cup	2	1
Drinking Vessel	White Improved Earthenware Cup	3	3
Drinking Vessel?	Aqua Glass Tumbler?	1	1
Kitchen	Yellowware Hollow	1	1
Tableware	CC Ware Plate	2	1
Tableware	White Improved Earthenware Bowl	1	1
<i>Subtotal Food Preparation/Consumption</i>		25	11

Table 9. Artifact Descriptive List - continued

Group and Category	Description	Count	MNI
Food/Food Storage			
Container	Aqua Glass Jar	3	1
Container	Aqua Glass Soda-water Bottle	2	0
Container	Aqua Glass Spice Bottle	4	2
Container	Blue Glass Soda-water Bottle	1	1
Container	Stoneware Crock	1	1
<i>Subtotal Food/Food Storage</i>		11	5
Furnishings			
Decorative Item	Porcelain Figurine	2	1
<i>Subtotal Furnishings</i>		2	1
INDEFINITE USE			
Electric			
-	Plastic Electrical Tape	2	1
<i>Subtotal Electric</i>		2	1
Electric?			
-	Plastic Fitting/Cap?	1	1
-	Plastic Fitting?	1	1
<i>Subtotal Electric?</i>		2	2
Indefinite			
-	Charcoal	0	0
-	Wood	2	1
-	Amethyst Glass Hollow	1	1
-	Aqua Glass Body	11	1
-	Aqua Glass Bottle Base/Possible Scraper	1	1
-	Aqua Glass Flat Glass	12	0
-	Aqua Glass Hollow	1	1
-	Asbestos? Indefinite	1	1
-	Asian Porcelain Hollow?	3	1
-	Blue Glass and Ferrous Bead	1	1
-	CC Ware Base?	2	0
-	CC Ware Hollow?	1	0
-	CC Ware Indefinite	6	0
-	CC Ware Rim	2	2
-	Colorless Glass Flat Painted Glass	7	1
-	Colorless/Amethyst Glass Hollow	8	1
-	Copper-alloy Covering/Cap?	1	1
-	Earthenware Hollow	2	1
-	Earthenware Indefinite	2	1
-	Ferrous Corner?	1	0
-	Glass Flat Glass	276	0

Table 9. Artifact Descriptive List - continued

Group and Category	Description	Count	MNI
Indefinite - continued			
-	Green Glass Body	3	1
-	Laytex? Paint?	1	0
-	Opaque Porcelain Hollow	2	1
-	Opaque-white Glass Body	2	2
-	Plastic Indefinite	1	0
-	Plastic Ring?	1	1
-	Plastic and Alluminum Foiled Plastic?	1	0
-	Porcelain Hollow	3	2
-	Porcelain Indefinite	3	0
-	Porcelain Pitcher?	1	1
-	Porcelain Rim	1	1
-	Slate Slate	2	1
-	Stoneware Hollow	1	1
-	White Improved Earthenware Base?	2	0
-	White Improved Earthenware Body	1	0
-	White Improved Earthenware Hollow	7	3
-	White Improved Earthenware Hollow?	1	0
-	White Improved Earthenware Indefinite	8	0
-	White Improved Earthenware Rim	1	1
-	Yellowware? Indefinite	1	1
	<i>Subtotal Indefinite</i>	384	31
Miscellaneous Beads			
-	Aqua Glass Bead	3	3
-	Black Glass Bead	1	1
-	Brown Glass Bead	2	2
-	Cobalt Glass Bead	1	1
-	Colorless Glass Bead	1	1
-	Green Glass Bead	2	2
-	Olive and Red Glass Bead	2	2
-	Opaque-white Glass Bead	9	9
	<i>Subtotal Miscellaneous Beads</i>	21	21
Miscellaneous Closures			
-	Aluminum Pull Tab	1	1
	<i>Subtotal Miscellaneous Closures</i>	1	1
Miscellaneous Containers			
-	Amber Glass Bottle	2	1
-	Amethyst Glass Bottle	2	2
-	Amethyst Glass Bottle/Jar	1	0
-	Aqua Glass Bottle	26	9

Table 9. Artifact Descriptive List - continued

Group and Category	Description	Count	MNI
Miscellaneous Containers - continued			
-	Aqua Glass Bottle/Jar	1152	4
-	Aqua Glass Bottle/Jar Finish	4	2
-	Brown Glass Bottle	1	0
-	Brown Glass Bottle/Jar	77	3
-	Colorless Glass Bottle	6	1
-	Colorless Glass Bottle/Jar	54	0
-	Colorless/Opaque-white Glass Bottle/Jar	1	
-	Green-Brown Glass Bottle/Jar	7	1
<i>Subtotal Miscellaneous Containers</i>		1,332	24
Miscellaneous Containers and Closures			
-	Ferrous Can or Lid	13	1
<i>Subtotal Miscellaneous Containers and Closures</i>		13	1
Miscellaneous Fasteners			
-	Copper-alloy Rivet	3	3
<i>Subtotal Miscellaneous Fasteners</i>		3	3
Miscellaneous Metal Items			
-	Aluminum Foil	4	0
-	Aluminum Tag/Strap?	1	1
-	Aluminum and Plastic Foil Plastic	1	0
-	Aluminum? Fitting/Cap?	1	1
-	Cast-iron Hinge?	3	3
-	Cast-iron Wheel? Pulley?	1	1
-	Copper-alloy Rod?	1	0
-	Copper-alloy Sheet Metal	2	0
-	Ferrous Can?	12	0
-	Ferrous Coil	1	1
-	Ferrous Flat	26	0
-	Ferrous Handle with plate	4	1
-	Ferrous Handle?	1	0
-	Ferrous Indefinite	24	0
-	Ferrous Rod?	1	0
-	Ferrous Sheet?	6	0
-	Ferrous Wire	11	0
-	Ferrous Wire?	1	0
-	Ferrous and ? Indefinite	1	0
<i>Subtotal Miscellaneous Metal Items</i>		102	8

Table 9. Artifact Descriptive List - continued

Group and Category	Description	Count	MNI
NATIVE AMERICAN			
Flaked Stone			
Core	Crypto-crystalline	2	2
Debitage	Chert Flake	1	1
Debitage	Crypto-crystalline	400	400
Debitage	Crypto-crystalline Flake	1	1
Debitage	Dark-olive Glass	1	1
Debitage	Igneous	1	1
Debitage	Obsidian	17	17
Debitage	Obsidian - Annadel	8	8
Debitage	Obsidian - Annadel?	5	5
Debitage	Obsidian - Konocti	2	2
Debitage	Obsidian - Napa Valley	127	127
Debitage	Obsidian - Napa Valley?	10	10
Debitage	Quartz	25	25
Debitage	Quartzite	1	1
Debitage	Quartzite?	1	1
Debitage	Unidentified	5	5
Debitage?	Crypto-crystalline	1	1
Debitage?	Quartz	1	1
Edge-modified Flake	Crypto-crystalline	2	2
Edge-modified Flake	Obsidian	1	1
Edge-modified Flake	Obsidian - Napa Valley	2	2
Edge-modified Flake	Obsidian - Napa Valley?	1	1
Edge-modified Flake	Unidentified	1	1
Possible Debitage	Igneous	1	1
Sample	Obsidian	1	1
<i>Subtotal Flaked Stone</i>		618	618
Flaked Stone?			
Debitage	Crypto-crystalline	1	1
<i>Subtotal Flaked Stone?</i>		1	1
Manuport			
-	Igneous	1	1
Heat-affected Rock	Igneous	1	1
<i>Subtotal Manuport</i>		2	2
NATIVE AMERICAN - ADAPTIVE			
Indefinite			
Tool	Aqua Glass Scraper	1	1
<i>Subtotal Indefinite</i>		1	1

Table 9. Artifact Descriptive List - continued

Group and Category	Description	Count	MNI
NATIVE AMERICAN?			
Modified Stone			
-	Steatite	1	1
<i>Subtotal Modified Stone</i>		1	1
PERSONAL			
Clothing			
Fastener	Ferrous Button	1	1
Fastener	Porcelain Button	1	1
<i>Subtotal Clothing</i>		2	2
Grooming/Health			
Container	Aqua Glass Medicine Bottle	2	1
Container	Colorless Glass Medicine Bottle	1	1
<i>Subtotal Grooming/Health</i>		3	2
Indefinite			
-	Cobalt Glass Body	4	1
<i>Subtotal Indefinite</i>		4	1
Miscellaneous Containers			
-	Cobalt Glass Bottle	16	1
<i>Subtotal Miscellaneous Containers</i>		16	1
Social Drugs - Alcohol			
Container	Brown Glass Alcoholic-beverage Bottle	1	1
Container	Dark-olive Glass Ale/Beer Bottle	35	1
Container	Olive Glass Alcoholic-beverage Bottle	17	1
Container	Olive Glass Bottle	130	0
Container	Olive Glass Wine/Champagne Bottle	7	1
<i>Subtotal Social Drugs - Alcohol</i>		190	4
Social Drugs - Tobacco			
-	Synthetic Cigarette Filter	4	3
<i>Subtotal Social Drugs - Tobacco</i>		4	3
Toys			
-	Glass Marble	1	1
<i>Subtotal Toys</i>		1	1

Table 9. Artifact Descriptive List - continued

Group and Category	Description	Count	MNI
STRUCTURAL			
Electric			
-	Chrome plate Ferrous Fuse Cap	1	1
-	Olive Glass Insulator	1	1
<i>Subtotal Electric</i>		2	2
Hardware			
-	Ferrous Barbed Wire	2	1
-	Hard-rubber Handle	1	1
Fastener	Copper-alloy Cut Nail	5	5
Fastener	Copper-alloy Screw	3	1
Fastener	Copper-alloy Square Nail	1	1
Fastener	Copper-alloy Washer	2	2
Fastener	Copper-alloy Wood Anchor	1	1
Fastener	Copper-alloy Wood Screw	1	1
Fastener	Copper-alloy and Wood Wood Screw	2	1
Fastener	Ferrous Bolt	3	2
Fastener	Ferrous Bolt and Washer	2	2
Fastener	Ferrous Bolt?	1	0
Fastener	Ferrous Carriage Bolt	2	1
Fastener	Ferrous Cut Nail	427	111
Fastener	Ferrous Nail	9	1
Fastener	Ferrous Nail heads?	2	0
Fastener	Ferrous Nail/Spike?	1	0
Fastener	Ferrous Nail?	3	0
Fastener	Ferrous Nails?	5	0
Fastener	Ferrous Scaffold Nail	3	3
Fastener	Ferrous Spike	10	8
Fastener	Ferrous Spike?	6	1
Fastener	Ferrous Tack?	1	1
Fastener	Ferrous Washer	2	2
Fastener	Ferrous Wire Nail	80	38
Fastener	Galvanized Ferrous Shingle Nail	1	1
<i>Subtotal Hardware</i>		576	185
Materials			
-	Asphalt	0	0
-	Brick	7	2
-	Concrete	0	0
-	Mortar	4	0
-	Redwood Wood	5	0
<i>Subtotal Materials</i>		16	2

Table 9. Artifact Descriptive List - continued

Group and Category	Description	Count	MNI
Miscellaneous Metal Items			
-	Ferrous Hardware?	1	0
<i>Subtotal Miscellaneous Metal Items</i>		1	0
Undefined Use			
-	Ferrous Amorphous	2	0
-	Melted Glass Amorphous	1	0
<i>Subtotal Undefined Use</i>		3	0
TOTAL		3,448	945

**Table 10. Summary of Artifacts by Group
New Magazin, Fort Ross**

Description	Total Count	MNI	Percent of MNI
Activities	109	10	1.3
Domestic	38	17	2.2
Indefinite Use	1,861	92	12.3
Native American	621	621	82.1
Native American - Adaptive Reuse	1	1	0.1
Native American?	1	1	0.1
Personal	220	14	1.8
Total	2,851	756	99.9

**Table 11. Summary of Artifact by Category
New Magazin, Fort Ross**

Description	MNI	Percent of MNI
Animal Husbandry	1	0.1
Clothing	2	0.3
Commerce	3	0.4
Electric	1	0.1
Electric?	2	0.3
Entertainment	1	0.1
Firearms	4	0.5
Flaked Stone	618	81.9
Flaked Stone?	1	0.1
Food Prep/Consumption	11	1.5
Food/Food Storage	5	0.7
Furnishings	1	0.1
Grooming/Health	2	0.3
Indefinite	31	4.1
Manuport	2	0.3
Misc. Beads	21	2.8
Misc. Closures	1	0.1
Misc. Containers	25	3.3
Misc. Containers and	1	0.1
Misc. Fasteners	3	0.4
Misc. Metal Items	8	1.1
Modified Stone	1	0.1
Social Drugs - Alcohol	4	0.5
Social Drugs - Tobacco	3	0.4
Toys	1	0.1
Writing	1	0.1
Total	754	99.8

**Table 12. Food Preparation/Consumption Vessel Function
New Magazin, Fort Ross**

Function	MNI	Percent
Tableware (plates, bowls, saucers, etc.)	2	18.2
Cups and Mugs	4	36.4
Kitchen	1	9.1
Stemware and Tumblers	4	36.4
Total	11	100.1

**Table 13. Food Preparation/Consumption Vessel Fabric
New Magazin, Fort Ross**

Fabric	MNI	Percent	Total MNI	Total Percent
Ceramic			7	67
Porcelain	1	14		
White Improved Earthenware	4	57		
Yellowware	1	14		
CC Ware	1	14		
<i>Ceramic Subtotal</i>	7	99		
Glass			4	36
Total			11	100

**Table 14. Food Preparation/Consumption Vessel Decoration
New Magazin, Fort Ross**

Fabric	Description	Type of Decoration	Decorated MNI	Undecorated MNI
Ceramic				
Porcelain	Cup	Paneled	1	
White Improved Earthenware	Bowl			1
White Improved Earthenware	Cup			3
Yellowware	Hollow			1
CC Ware	Plate			1
<i>Ceramic Subtotal</i>			 1	 6
Glass				
Amethyst Glass	Tumbler			1
Aqua Glass	Tumbler?	Pressed - 4-leaf clover and oval design	1	
Colorless Glass	Tumbler	Etched scroll/floral design	1	
Colorless Glass	Tumbler	Paneled	1	
<i>Glass Subtotal</i>			 3	 1
Total			 4	 7

**Table 15. Social Drugs Summary
New Magazin, Fort Ross**

Social Drug	Description	MNI	Percent
Alcohol			
	Alcoholic-beverage Bottle	2	
	Ale/Beer Bottle	1	
	Wine/Champagne Bottle	1	
<i>Subtotal Alcohol</i>		4	57
Tobacco			
	Cigarette Filter	3	
<i>Subtotal Tobacco</i>		3	43
Total		7	100

Table 16: Bead Manufacture by Type and Quantity

Glass Beads	Quantity
Ic4. Tubular hexagonal; op. black; p; N 1/0); the facets are slightly convex longitudinally	1
Ila7. Short barrel (circular); op. black (p; N 1/0); glass exhibits a burgundy hue when held up to a strong light	3
Ila*. Short barrel (circular); tsp. light gray (c; N 7/0)	1
Ila*. Short barrel (circular); tsl. light gray (c; N 7/0)	1
Ila12. Short barrel (circular); tsl. oyster white (b; N 8/0); flashed with clear glass	8
Ila*. Standard barrel (circular); tsp. bright blue (16 lc; 5.0B 5/7)	3
Ila56. Short barrel (circular); tsp. bright navy (13pg; 7.5PB 2/7)	1
Ila*. Standard barrel (circular); tsp. turquoise green (20 nc; 5.0BG 4/8)	2
IVa6. Short barrel (circular); op. redwood (6 ne; 10.0R 4/8) outer layer; tsp. pale apple green (23 ic; 10GY 6/6) core	3
Prosser Molded Bead	Quantity
PM**. Globular with a slightly raised medial band; tsl. copper (5 lc; 2.5YR 5/10); one end is smooth; the other is rough	1

**Table 17. Date and Origin of Marked/Datable Items
New Magazin, Fort Ross**

Catalog #	Material	Description	MNI	Mark	Maker	Origin	Date Range	Reference
Marked Glass Items								
232	007	Amethyst Glass	Bottle	1	(amethyst sun-tint)		1880 - 1920 ca	Lockhart 2002, 10 June
238	005	Aqua Glass	Spice Bottle	1	(2-piece mold)		- 1880 ca	Jones and Sullivan 1985:26-27; Toulouse
238	009	Brown Glass	Bottle/jar	1	(open pontil)		- 1870s	Jones and Sullivan 1985:45
250	004	Green-Brown Glass	Bottle/jar	1	(Turn molded)		1870s - 1920s	Jones and Sullivan 1985:31
251	008	Amethyst Glass	Bottle	1	(amethyst sun-tint)		1880 - 1920 ca	Lockhart 2002, 10 June
258	003	Cobalt Glass	Bottle	1	...[O/B I/E]...		-	
258	012	Dark-olive Glass	Ale/Beer Bottle	1	(open pontil)		- 1870s	Jones and Sullivan 1985:45
259	001	Aqua Glass	Medicine Bottle	1	[AYERS // LOW]ELL / [MA]SS	Ayer	Lowell, Mass	1865 ca - Jones 1971:10; Wilson and Wilson 1971:19, 105
259	010	Amethyst Glass	Tumbler	0	(amethyst sun-tint)		1880 - 1920 ca	Lockhart 2002, 10 June
283	005	Olive Glass	Insulator	1	...[C]O...		-	
284	001	Aqua Glass	Spice Bottle	1	[J.]W. HUNN[EWELL & CO]	Hunnewell, J. W.	Boston, MA	1870 ca - Fike 1987:167; Zumwalt 1980:253
291	005	Amethyst Glass	Hollow	1	(amethyst sun-tint)		1880 - 1920 ca	Lockhart 2002, 10 June
291	006	Amethyst Glass	Bottle/jar	0	(amethyst sun-tint)		1880 - 1920 ca	Lockhart 2002, 10 June
303	009	Amethyst Glass	Tumbler	0	(amethyst sun-tint)		1880 - 1920 ca	Lockhart 2002, 10 June
305	009	Aqua Glass	Bottle/jar	1	...18...		-	
319	007	Amethyst Glass	Tumbler	1	(amethyst sun-tint)		1880 - 1920 ca	Lockhart 2002, 10 June
Marked Other Items								
212	010	Copper-alloy	Penny	1	IN GOD WE TRUST/ LIBERTY (Lincoln's Portrait) / 1974 / D // UNITED STATES OF AMERICA / (Lincoln Memorial) / ONE CENT	US Treasury	Denver, CO	1974 - 1974
248	005	Paper	Label?	1	BR...AN / ...		-	
255	006	Aluminum	Pull Tab	1	6P		1963 - 1965	Martell 1976:15
262	010	Copper-alloy	Shell Casing	1	(in Banner) SUPER	Super Cartridge Co.	Melbourne, Australia	- Hogg 1982:147
284	009	Aluminum	Tag/Strap?	1	...28...		-	

APPENDIX B
Artifact Catalog
and Feature Concordance

Fort Ross Artifact Catalog

Catalog No.	Group	Category	Type	Material	Description	Wh Frg	MNI	Mark?	Comments	
New Magazin										
Unit 101, NE Quad										
211	001	Unused Catalog - Number	-	-	-	0	0	0	Unused entry	
211	002	Domestic	Food/Food Storage	Container	Blue Glass	Soda-water Bottle	0	1	1	Base.
211	003	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	6	0	Body, 2 sided
211	004	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	10	0	2.2g
211	005	Indefinite Use	Misc. Beads	-	Black Glass	Bead	1	0	1	Spheroid/annular shape. Height 0.11, width 0.2", bore 0.08"
211	006	Indefinite Use	Indefinite	-	Opaque-white Glass	Body	0	1	1	Neck?
211	007	Indefinite Use	Indefinite	-	White Improved Earthenware	Indefinite	0	1	0	
211	008	Floral	Seed	-	Seed	Peach/Nectarine	0	1	0	
211	009	Structural	Hardware	Fastener	Copper-alloy and Wood	Wood Screw	1	1	1	Domed standard head. Length 1 1/4", Diam 3/16". Screwed into wood.
211	010	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
211	011	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
211	012	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	2	0	
211	013	Indefinite Use	Indefinite	-	-	Wood	0	2	1	Milled round wood, dowel? Saw-cut end. Mends.
211	014	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	2	0	2	
211	015	Native American	Flaked Stone	Debitage	Obsidian - Annadel	-	1	0	1	
211	016	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	3	0	3	
220	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	6	0	Body, 1 sided
220	002	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	4	0	2.2g
220	003	Personal	Social Drugs - Alcohol	Container	Dark-olive Glass	Ale/Beer Bottle	0	1	0	Miscellaneous
220	004	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	1	0	
220	005	Indefinite Use	Indefinite	-	Asian Porcelain	Hollow?	0	1	0	Associated with 266-2
220	006	Indefinite Use	Indefinite	-	White Improved Earthenware	Indefinite	0	2	0	
220	007	Indefinite Use	Indefinite	-	CC Ware	Hollow?	0	1	0	
220	008	Indefinite Use	Misc. Metal Items	-	Aluminum	Foil	0	2	0	
220	009	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
220	010	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
220	011	Structural	Materials	-	-	Mortar	0	0	0	Sample
220	012	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	7	2	
220	013	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	1	1	Length ~2 1/2"
220	014	Indefinite Use	Misc. Metal Items	-	Ferrous	Flat	0	2	0	Sheet? Can?
220	015	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	2	0	2	
220	016	Native American	Flaked Stone	Debitage	Obsidian - Annadel	-	1	0	1	

Fort Ross Artifact Catalog - continued

Catalog No.	Group	Category	Type	Material	Description	Wh Frg	MNI	Mark?	Comments	
220	017	Native American	Flaked Stone	Edge-modified Flake	Unidentified	-	1	0	1	Modified on the margin of frag. Basaltic? Igneous?
242	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	2	0	
242	002	Personal	Social Drugs - Alcohol	Container	Dark-olive Glass	Ale/Beer Bottle	0	3	0	Miscellaneous
242	003	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
242	004	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	2	0	
242	005	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	1	0	1	
250	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	12	0	1 sided bottle.
250	002	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	1	0	0.45g
250	003	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	2	0	Miscellaneous
250	004	Indefinite Use	Misc. Containers	-	Green-Brown Glass	Bottle/Jar	0	1	1	Glass Body. Associated with 324-4, 291-9, 322-6, 306-15, 304-10, 327-7.
250	005	Floral	Seed	-	Seed	Peach/Nectarine	1	0	0	
250	006	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
250	007	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
250	008	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	1	0	
250	009	Faunal	Shell	-	Shell	Abalone?	0	1	0	
250	010	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	4	0	4	1 large flake - not RTF, flaking on dorsal platform is pre-detachment
250	011	Native American	Flaked Stone	Debitage	Obsidian - Annadel	-	1	0	1	
250	012	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	2	0	2	
256	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	2	0	Sided
256	002	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	1	0	0.22g
256	003	Structural	Materials	-	Redwood	Wood	0	1	0	Sleeper timber sample
256	004	Structural	Materials	-	Redwood	Wood	0	3	0	Sleeper timber sample
256	005	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
256	006	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	1	0	
261	001	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	2	0	1.5g
261	002	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
261	003	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
261	004	Structural	Hardware	Fastener	Ferrous	Nail	0	1	1	
261	005	Structural	Hardware	Fastener	Ferrous	Wire Nail	1	0	1	Length 2 1/2", diam 3/8"
261	006	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	3	0	3	
261	007	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	1	0	1	
268	001	Indefinite Use	Misc. Containers	-	Colorless/Opaque-white Glass	Bottle/Jar	1	1		Body. Associated with 227-26.
268	002	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
268	003	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
268	004	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	2	0	2	

Fort Ross Artifact Catalog - continued

Catalog No.	Group	Category	Type	Material	Description	Wh	Frg	MNI	Mark?	Comments
Unit 101, NW Quad										
207	001	Indefinite Use	Indefinite	-	Aqua Glass	Flat Glass	0	12	0	2.5g
207	002	Indefinite Use	Indefinite	-	Aqua Glass	Body	0	1	0	Associated with 305-7
207	003	Domestic	Food Prep/Consumption	Tableware	CC Ware	Plate	0	1	0	Associated with 321-5
207	004	Faunal	Shell	-	Shell	Oyster	0	2	0	
207	005	Structural	Hardware	Fastener	Copper-alloy	Screw	0	1	1	Brad-type head, diam 1/8". Associated with 274-6
207	006	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
207	007	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
207	008	Structural	Hardware	Fastener	Ferrous	Wire Nail	0	1	0	
207	009	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	7	0	
207	010	Indefinite Use	Misc. Metal Items	-	Ferrous	Wire	0	1	0	Barbed?
207	011	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	3	0	3	1 flake with cortex, 1 flake patinated?
207	012	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	6	0	6	Possible/probable flakes
207	013	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	7	0	7	
207	014	Indefinite Use	Misc. Beads	-	Olive and Red Glass	Bead	1	0	1	Black heart bead, cylindrical, irregular shape. Height 0.135", width 0.16", bore 0.068"
221	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/jar	0	4	0	Body, 1 sided
221	002	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	7	0	1.9g
221	003	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/jar	0	1	0	Base
221	004	Indefinite Use	Indefinite	-	Opaque Porcelain	Hollow	0	1	1	Rim
221	005	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/jar	0	1	0	Body, thick
221	006	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
221	007	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
221	008	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	6	2	
221	009	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	2	0	2	
221	010	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	2	0	2	1 flake - larger with cortex on platform
249	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/jar	0	2	0	
249	002	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	1	0	0.3g
249	003	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
249	004	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	2	1	
249	005	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	1	0	1	
257	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/jar	0	9	0	Body, 3 sided
257	002	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/jar Finish	0	1	0	Associated with 317-5
257	003	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	3	0	Miscellaneous
257	004	Indefinite Use	Indefinite	-	Stoneware	Hollow	0	1	1	Base, flat
257	005	Indefinite Use	Indefinite	-	Porcelain	Rim	0	1	1	
257	006	Structural	Hardware	Fastener	Copper-alloy	Cut Nail	1	0	1	Round flat head. Length 1 3/16". Head diam 7/16"

Fort Ross Artifact Catalog - continued

Catalog No.	Group	Category	Type	Material	Description	Wh	Frg	MNI	Mark?	Comments
257	007	Indefinite Use	Indefinite	-	Wood	0	0	0		Sample
257	008	Structural	Hardware	Fastener	Ferrous	0	2	1		
257	009	Structural	Hardware	Fastener	Ferrous	0	1	1		Length ~2 1/4", diam 1/4"
257	010	Structural	Hardware	Fastener	Ferrous	0	6	0		
257	011	Structural	Hardware	Fastener	Ferrous	0	2	0		
257	012	Native	Flaked Stone	Debitage	Obsidian - Napa Valley	1	0	1		
		American								
257	013	Native	Flaked Stone	Debitage	Obsidian - Annadel	1	0	1		
		American								
262	001	Indefinite Use	Misc. Containers	-	Aqua Glass	0	7	0		1 sided bottle.
262	002	Personal	Social Drugs - Alcohol	Container	Olive Glass	0	1	0		Miscellaneous
262	003	Indefinite Use	Misc. Containers	-	Brown Glass	0	2	0		
262	004	Indefinite Use	Indefinite	-	White Improved Earthenware	0	1	0		
262	005	Faunal	Shell	-	Shell	0	2	0		
262	006	Indefinite Use	Indefinite	-	-	0	0	0		Sample
262	007	Indefinite Use	Indefinite	-	Wood	0	0	0		Sample
262	008	Structural	Hardware	Fastener	Ferrous	0	7	0		
262	009	Structural	Hardware	Fastener	Ferrous	0	5	0		
262	010	Activities	Firearms	Ammunition	Copper-alloy	0	1	1	Other	.22 caliber, rimmed , straight
262	011	Native	Flaked Stone	Debitage	Crypto-crystalline	4	0	4		
		American								
262	012	Native	Flaked Stone	Debitage	Obsidian - Napa Valley	1	0	1		
		American								
262	013	Native	Flaked Stone	Debitage	Obsidian	1	0	1		Franz Valley or Annadel
		American								
275	001	Indefinite Use	Misc. Containers	-	Aqua Glass	0	4	0		
275	002	Indefinite Use	Misc. Containers	-	Colorless Glass	0	1	0		
275	003	Indefinite Use	Indefinite	-	-	0	0	0		Sample
275	004	Structural	Hardware	Fastener	Ferrous	0	1	1		
275	005	Native	Flaked Stone	Debitage	Obsidian - Napa Valley	1	0	1		
		American								
275	006	Native	Flaked Stone	Possible	Igneous	1	0	1		
		American		Debitage						
318	001	Indefinite Use	Misc. Containers	-	Colorless Glass	0	1	0		Mends with 259-9
Unit 101, SE Quad										
205	001	Personal	Social Drugs - Alcohol	Container	Olive Glass	0	1	0		Miscellaneous
205	002	Native	Flaked Stone	Debitage	Crypto-crystalline	1	0	1		Shatter from cobble, problematic
		American								
223	001	Indefinite Use	Misc. Beads	-	Olive and Red Glass	1	0	1		Black heart bead, cylindrical, irregular shape. Height 0.1", width 0.142", bore 0.05"
223	002	Domestic	Food/Food Storage	Container	Aqua Glass	0	2	0		Body
223	003	Indefinite Use	Indefinite	-	Glass	0	4	0		1.3g
223	004	Indefinite Use	Misc. Containers	-	Colorless Glass	0	1	0		Sided
223	005	Indefinite Use	Indefinite	-	CC Ware	0	1	0		
223	006	Indefinite Use	Misc. Containers	-	Brown Glass	0	1	0		Body

Fort Ross Artifact Catalog - continued

Catalog No.	Group	Category	Type	Material	Description	Wh	Frg	MNI	Mark?	Comments
223	007	Personal	Social Drugs - Tobacco	-	Synthetic	Cigarette Filter	0	1	0	
223	008	Structural	Hardware	Fastener	Ferrous	Wire Nail	0	1	1	
223	009	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	2	0	2	
223	010	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	2	0	2	
223	011	Indefinite Use	Misc. Beads	-	Blue Glass and Ferrous	Bead	0	1	1	Shanked, round shape. Diameter 0.112".
224	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	3	0	1 sided bottle.
224	002	Indefinite Use	Indefinite	-	White Improved Earthenware	Indefinite	0	1	0	Body
224	003	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	1	0	1	
Unit 101, SW Quad										
204	001	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	1	0	1	
229	001	Native American	Flaked Stone	Debitage	Obsidian - Annadel?	-	1	0	1	Possibly CCS
229	002	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	1	0	1	
230	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	2	0	
230	002	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	1	0	0.24g
230	003	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle	0	1	0	Mends and associated with 274-3.
230	004	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	1	0	Miscellaneous
230	005	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	2	0	2	
239	001	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	4	0	1.2g
239	002	Personal	Social Drugs - Alcohol	Container	Olive Glass	Wine/Champagne Bottle	0	1	0	Mends and associated with 278-1
239	003	Indefinite Use	Indefinite	-	Colorless/Amethyst Glass	Hollow	0	1	0	Associated with 320-7
239	004	Domestic	Food Prep/Consumption	Tableware	White Improved Earthenware	Bowl	0	1	1	London shape
239	005	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
239	006	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	2	1	
239	007	Structural	Hardware	Fastener	Ferrous	Wire Nail	0	1	0	
239	008	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	1	0	1	
239	009	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	1	0	1	
Unit 102, North										
209	001	Unused Catalog - Number	-	-	-	-	0	0	0	Unused entry
209	002	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	15	0	1 sided bottle.
209	003	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	14	0	3g
209	004	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	1	0	Base, circular. Associated with 289-3, 304-6, 252-8.
209	005	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	3	0	Miscellaneous
209	006	Personal	Social Drugs - Alcohol	Container	Olive Glass	Wine/Champagne Bottle	0	1	0	Mends and associated with 278-1
209	007	Indefinite Use	Misc. Containers	-	Colorless Glass	Bottle/Jar	0	2	0	

Fort Ross Artifact Catalog - continued

Catalog No.	Group	Category	Type	Material	Description	Wh	Frg	MNI	Mark?	Comments
209	008	Domestic	Food Prep/Consumption	Drinking Vessel	Colorless Glass	Tumbler	0	1	0	Mends and associated with 305-15
209	009	Activities	Archaeology	Unit Liner	Plastic	Sheeting	0	1	0	Edwards 1974-1977/Farris 1981
209	010	Indefinite Use	Misc. Metal Items	-	Aluminum	Foil	0	1	0	
209	011	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
209	012	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	2	0	
209	013	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	2	0	2	
209	014	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	2	0	2	
209	015	Indefinite Use	Misc. Beads	-	Opaque-white Glass	Bead	1	0	1	Spheroid shape. Height 0.09", width 0.14", bore 0.05"
222	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	9	0	
222	002	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	3	0	1.0g
222	003	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	2	0	Miscellaneous
222	004	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	1	0	
222	005	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	1	1	Base
222	006	Structural	Hardware	Fastener	Copper-alloy	Washer	0	1	1	Diam 3/8", bore diam 3/16"
222	007	Activities	Archaeology	Unit Liner	Plastic	Sheeting	0	2	0	Edwards 1974-1977/Farris 1981
222	008	Indefinite Use	Misc. Metal Items	-	Aluminum	Foil	0	1	0	
222	009	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
222	010	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
222	011	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	2	0	
222	012	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	1	0	1	
222	013	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	4	0	4	
222	014	Native American	Manuport	Heat-affected Rock	Igneous	-	1	0	1	
Unit 102, South										
208	001	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	1	0	1	
212	001	Indefinite Use	Misc. Beads	-	Aqua Glass	Bead	1	0	1	Cylindrical shape, 0.1" x 0.15"
212	002	Personal	Misc. Containers	-	Cobalt Glass	Bottle	0	2	0	Associated with 258-3
212	003	Indefinite Use	Indefinite	-	Colorless Glass	Flat Painted Glass	0	1	0	Associated with 304-1
212	004	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	20	0	Body, 3 sided
212	005	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	6	0	4.6g
212	006	Personal	Social Drugs - Alcohol	Container	Olive Glass	Alcoholic-beverage Bottle	0	1	0	Base
212	007	Indefinite Use	Indefinite	-	Green Glass	Body	0	2	1	Associated with 235-4
212	008	Indefinite Use	Misc. Containers	-	Colorless Glass	Bottle/Jar	0	1	0	Miscellaneous
212	009	Personal	Social Drugs - Alcohol	Container	Brown Glass	Alcoholic-beverage Bottle	0	1	1	Tooled brandy finish
212	010	Activities	Commerce	-	Copper-alloy	Penny	1	0	1	Other
212	011	Activities	Archaeology	Unit Liner	Plastic	Sheeting	0	6	0	Edwards 1974-1977/Farris 1981
212	012	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
212	013	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	2	0	

Fort Ross Artifact Catalog - continued

Catalog No.	Group	Category	Type	Material	Description	Wh	Frg	MNI	Mark?	Comments
212	014	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	1	0	1	
212	015	Native American	Flaked Stone	Debitage	Obsidian - Annadel	-	1	0	1	
212	016	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	3	0	3	
Unit 102 F107										
102	001	Activities	Archaeology	Unit Liner	Plastic	Sheeting	0	2	0	Edwards 1974-1977/Farris 1981
102	002	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
102	003	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
102	004	Structural	Hardware	Fastener	Ferrous	Nail	0	2	0	
232	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	11	0	Body, 2 sided
232	002	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	11	0	5.8g
232	003	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle	0	1	0	Mends and associated with 258-7
232	004	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	2	0	Miscellaneous
232	005	Indefinite Use	Misc. Containers	-	Colorless Glass	Bottle/Jar	0	2	0	
232	006	Domestic	Food Prep/Consumption	Drinking Vessel	Colorless Glass	Tumbler	0	1	0	Mends and associated with 305-15
232	007	Indefinite Use	Misc. Containers	-	Amethyst Glass	Bottle	0	1	1	Glass Packer finish
232	008	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	3	0	
232	009	Indefinite Use	Indefinite	-	White Improved Earthenware	Indefinite	0	1	0	
232	010	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
232	011	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	2	1	
232	012	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	3	0	3	
232	013	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	3	0	3	
269	001	Native American	Flaked Stone	Debitage	Crypto-crystalline	Flake	1	0	1	Possible flake
269	002	Activities	Writing	Container	Teal Glass	Ink Bottle	0	1	0	Associated with 319-2
269	003	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	7	0	
269	004	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	3	0	0.2g
269	005	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	1	0	Miscellaneous
269	006	Indefinite Use	Misc. Containers	-	Colorless Glass	Bottle/Jar	0	1	0	
269	007	Domestic	Food Prep/Consumption	Drinking Vessel	Colorless Glass	Tumbler	0	1	0	Mends and associated with 305-15
269	008	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
269	009	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
269	010	Structural	Hardware	Fastener	Ferrous	Spike	0	1	1	Segment length 4 1/2", width 1/2"
269	011	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	3	1	
269	012	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	1	0	1	
Unit 103, NE Quad										
217	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	1	0	
217	002	Native American	Flaked Stone	Sample	Obsidian	-	1	0	1	
234	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	1	0	

Fort Ross Artifact Catalog - continued

Catalog No.	Group	Category	Type	Material	Description	Wh	Frg	MNI	Mark?	Comments
234	002	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	3	0	Miscellaneous
234	003	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley?	-	1	0	1	
234	004	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	6	0	6	
276	001	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	1	0	Miscellaneous
276	002	Personal	Social Drugs - Alcohol	Container	Dark-olive Glass	Ale/Beer Bottle	0	2	0	Miscellaneous
276	003	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	2	0	
276	004	Indefinite Use	Indefinite	-	Porcelain	Hollow	0	1	1	Rim
276	005	Domestic	Food Prep/Consumption	Drinking Vessel	White Improved Earthenware	Cup	0	1	1	Handle base
276	006	Faunal	Shell	-	Shell	Abalone	0	1	0	
276	007	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
276	008	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	3	1	
276	009	Structural	Hardware	Fastener	Ferrous	Wire Nail	0	1	0	
276	010	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	2	0	2	Larger flake might be CCS
276	011	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	6	0	6	
277	001	Indefinite Use	Misc. Containers	-	Colorless Glass	Bottle/Jar	0	1	0	
277	002	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	8	0	
277	003	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	3	0	0.8g
277	004	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	2	0	Miscellaneous
277	005	Personal	Social Drugs - Alcohol	Container	Dark-olive Glass	Ale/Beer Bottle	0	2	0	Miscellaneous
277	006	Unused Catalog - Number	-	-	-	-	0	0	0	Unused entry
277	007	Unused Catalog - Number	-	-	-	-	0	0	0	Unused entry
277	008	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	3	0	
277	009	Domestic	Food Prep/Consumption	Drinking Vessel	White Improved Earthenware	Cup	0	1	1	Rim
277	010	Indefinite Use	Indefinite	-	CC Ware	Rim	0	1	1	
277	011	Faunal	Bone	-	Bone	Bone	0	1	0	
277	012	Structural	Hardware	Fastener	Copper-alloy	Cut Nail	0	1	1	
277	013	Activities	Archaeology	Unit Liner	Plastic	Sheeting	0	1	0	Edwards 1974-1977/Farris 1981
277	014	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
277	015	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
277	016	Structural	Materials	-	-	Mortar	0	0	0	Sample
277	017	Structural	Hardware	Fastener	Ferrous	Wire Nail	0	1	0	
277	018	Structural	Hardware	Fastener	Ferrous	Tack?	1	0	1	Shoe tack?, length 5/8"
277	019	Structural	Hardware	Fastener	Ferrous	Wire Nail	1	0	1	Length 2", diam 1/4"
277	020	Indefinite Use	Misc. Metal Items	-	Ferrous	Indefinite	0	13	0	Flat and amorphous
277	021	Structural	Hardware	Fastener	Ferrous	Wire Nail	0	1	0	
277	022	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	12	4	
277	023	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	15	0	15	

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Catalog No.	Group	Category	Type	Material	Description	Wh	Frg	MNI	Mark?	Comments
277	024	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	2	0	2	
277	025	Native American	Flaked Stone	Debitage	Obsidian - Konocti	-	1	0	1	
277	026	Native American	Flaked Stone	Debitage	Quartz	-	6	0	6	
299	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	4	0	Body, 2 sided
299	002	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	2	0	Miscellaneous
299	003	Personal	Social Drugs - Alcohol	Container	Dark-olive Glass	Ale/Beer Bottle	0	1	0	Miscellaneous
299	004	Activities	Archaeology	Unit Liner	Plastic	Sheeting	0	2	0	Edwards 1974-1977/Farris 1981
299	005	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
299	006	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
299	007	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	5	0	5	
299	008	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	3	0	3	
299	009	Soil Sample	1/16" Fraction	Native American	Obsidian	Debitage	1	0	0	
314	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	2	0	
314	002	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	1	0	1.2g
314	003	Indefinite Use	Indefinite	-	Aqua Glass	Body	0	1	0	Associated with 305-7
314	004	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	1	0	Miscellaneous
314	005	Indefinite Use	Indefinite	-	Opaque Porcelain	Hollow	0	1	0	Body
314	006	Indefinite Use	Indefinite	-	CC Ware	Indefinite	0	1	0	
314	007	Faunal	Bone	-	Bone	Bone	0	1	0	
314	008	Activities	Archaeology	Unit Liner	Plastic	Sheeting	0	1	0	Edwards 1974-1977/Farris 1981
314	009	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
314	010	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
314	011	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	5	0	
314	012	Indefinite Use	Misc. Metal Items	-	Ferrous	Flat	0	1	0	
314	013	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	5	0	5	
314	014	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	3	0	3	
314	015	Native American	Flaked Stone	Debitage	Quartz	-	2	0	2	
Unit 103, NW Quad										
216	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	1	0	
216	002	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	3	0	0.7g
216	003	Indefinite Use	Indefinite	-	Asbestos?	Indefinite	0	1	1	
216	004	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	2	0	2	
235	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	7	0	1 sided bottle.
235	002	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	1	0	0.1g
235	003	Personal	Social Drugs - Alcohol	Container	Olive Glass	Alcoholic-beverage Bottle	0	1	1	Body. Associated with 316-4, 296-7, 259-8, 305-12.

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Catalog No.	Group	Category	Type	Material	Description	Wh	Frg	MNI	Mark?	Comments
235	004	Indefinite Use	Indefinite	-	Green Glass	Body	0	1	0	Associated with 212-7
235	005	Indefinite Use	Misc. Containers	-	Colorless Glass	Bottle/Jar	0	2	0	
235	006	Indefinite Use	Indefinite	-	White Improved Earthenware	Base?	0	1	0	
235	007	Personal	Clothing	Fastener	Porcelain	Button	1	0	1	Dish type, 4 hole, sew through, 17 lines
235	008	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	1	1	Length 3 1/8", diam 3/16"
235	009	Native	Flaked Stone	Debitage	Crypto-crystalline	-	18	0	18	
		American								
235	010	Native	Flaked Stone	Debitage	Igneous	-	1	0	1	
		American								
236	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	3	0	
236	002	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	4	0	1.3g
236	003	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	2	0	Miscellaneous
236	004	Personal	Social Drugs - Alcohol	Container	Dark-olive Glass	Ale/Beer Bottle	0	1	0	Miscellaneous
236	005	Indefinite Use	Indefinite	-	Colorless/Amethyst Glass	Hollow	0	1	0	Associated with 320-7
236	006	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	1	0	
236	007	Indefinite Use	Indefinite	-	White Improved Earthenware	Hollow	0	1	1	Rim
236	008	Indefinite Use	Indefinite	-	Asian Porcelain	Hollow?	0	1	0	Associated with 266-2
236	009	Structural	Hardware	Fastener	Copper-alloy	Wood Screw	1	0	1	Flat head. Length 3/4", diam 3/16"
236	010	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
236	011	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
236	012	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	6	1	
236	013	Native	Flaked Stone	Debitage	Crypto-crystalline	-	2	0	2	
		American								
236	014	Native	Flaked Stone	Debitage	Quartz	-	1	0	1	
		American								
236	015	Native	Flaked Stone	Debitage	Unidentified	-	1	0	1	Mineral?
		American								
236	016	Native	Flaked Stone	Debitage	Obsidian	-	2	0	2	Franz Valley?
		American								
238	001	Unused Catalog - Number	-	-	-	-	0	0	0	Unused entry
238	002	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	2	0	
238	003	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	4	0	1.2g
238	004	Domestic	Food Prep/Consumption	Drinking Vessel?	Aqua Glass	Tumbler?	0	1	1	Pressed thick glass, circular body, 4-leaf clover and oval design. Russian?
238	005	Domestic	Food/Food Storage	Container	Aqua Glass	Spice Bottle	0	1	1	Glass Fluted rectangle with concave corners, 2-piece mold, 2 5/16" x 1 3/8" diam
238	006	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	11	0	Miscellaneous
238	007	Personal	Social Drugs - Alcohol	Container	Dark-olive Glass	Ale/Beer Bottle	0	1	0	Miscellaneous
238	008	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	5	0	
238	009	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	1	1	Glass Base, open glass pontil.
238	010	Indefinite Use	Indefinite	-	Porcelain	Hollow	0	1	1	Thick porcelain. Hand painted floral design. Russian? Associated with 291-10.
238	011	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample

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Catalog No.	Group	Category	Type	Material	Description	Wh	Frg	MNI	Mark?	Comments
238	012	Structural	Hardware	Fastener	Ferrous	Carriage Bolt	0	2	1	Length 2 1/2", head diam 1 1/8". Washer diam 1 3/8".
238	013	Structural	Hardware	Fastener	Ferrous	Spike?	0	1	1	Oval head, diam 3/4" x 1/2"
238	014	Indefinite Use	Misc. Beads	-	Opaque-white glass	Bead	1	0	1	Burnt? Spheroid/cylinder shape. Height 0.09", width 0.135", bore 0.04"
238	015	Structural	Hardware	Fastener	Ferrous	Spike	0	1	1	Length ~ 31/2", diam 1/2"
238	016	Structural	Hardware	Fastener	Ferrous	Spike	1	0	1	Length 5 1/2", head diam 1/2"
238	017	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	4	3	
238	018	Structural	Hardware	Fastener	Ferrous	Wire Nail	0	2	0	
238	019	Indefinite Use	Misc. Metal Items	-	Cast-iron	Hinge?	0	1	1	Rectangular body, domed with flat lip on one side, length 4", width 1 1/4", 3/4" thick
238	020	Indefinite Use	Misc. Fasteners	-	Copper-alloy	Rivet	1	0	1	Diam 5/16"
238	021	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley?	-	1	0	1	
270	001	Unused Catalog - Number	-	-	-	-	0	0	0	Unused entry
270	002	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	6	0	1 sided bottle.
270	003	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	3	0	Miscellaneous
270	004	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	4	0	
270	005	Faunal	Shell	-	Shell	Abalone	0	1	0	
270	006	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
270	007	Indefinite Use	Misc. Metal Items	-	Ferrous	Flat	0	3	0	Can?
270	008	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	9	2	
270	009	Structural	Hardware	Fastener	Copper-alloy	Cut Nail	0	1	1	Round head, diam 1/4" Russian?
270	010	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	2	0	2	
270	011	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	3	0	3	One flake with cortex
271	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	6	0	
271	002	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
271	003	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	3	1	
271	004	Indefinite Use	Misc. Metal Items	-	Ferrous	Can?	0	2	0	
271	005	Native American	Flaked Stone	Edge-modified Flake	Obsidian - Napa Valley?	-	1	0	1	
327	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	4	0	
327	002	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	2	0	0.2g
327	003	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	2	0	Miscellaneous
327	004	Personal	Social Drugs - Alcohol	Container	Dark-olive Glass	Ale/Beer Bottle	0	1	0	Miscellaneous
327	005	Indefinite Use	Misc. Containers	-	Colorless Glass	Bottle/Jar	0	1	0	
327	006	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	1	0	Body
327	007	Indefinite Use	Misc. Containers	-	Green-Brown Glass	Bottle/Jar	0	1	0	Associated with 250-4
327	008	Structural	Materials	-	Redwood	Wood	0	1	0	Sleeper timber sample
327	009	Activities	Archaeology	Unit Liner	Plastic	Sheeting	0	1	0	Edwards 1974-1977/Farris 1981
327	010	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample

Fort Ross Artifact Catalog - continued

Catalog No.	Group	Category	Type	Material	Description	Wh	Frg	MNI	Mark?	Comments
327	011	Indefinite Use	Misc. Containers and Closures	-	Ferrous	Can or Lid	0	13	1	Possible friction closure. ~2 3/4" diam
327	012	Structural	Hardware	Fastener	Ferrous	Spike?	0	3	0	Diam 3/8"
327	013	Structural	Hardware	Fastener	Ferrous	Bolt and Washer	0	1	1	Square washer, diam 1", thick 1/2". Bolt diam 3/8"
327	014	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	3	0	3	
Unit 103, SE Quad										
219	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	1	0	
219	002	Indefinite Use	Misc. Containers	-	Colorless Glass	Bottle/Jar	0	2	0	
219	003	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	3	0	
219	004	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	1	0	1	
237	001	Indefinite Use	Misc. Beads	-	Cobalt Glass	Bead	1	0	1	Spheroid shape. Height 0.1", width 0.13", bore 0.042"
237	002	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	11	0	1 sided bottle.
237	003	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	3	1	
237	004	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	1	0	
237	005	Native American	Flaked Stone	Debitage	Dark-olive Glass	-	1	0	1	"Use-wear" on lateral fracture faces - don't match weathering on interior & exterior
237	006	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	2	0	2	
237	007	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	4	0	4	
237	008	Native American	Flaked Stone	Debitage	Quartz	-	2	0	2	
237	009	Native American	Flaked Stone	Debitage	Unidentified	-	1	0	1	Possibly Gabbro or Metamorphic - fine grain black with whit flecks
253	001	Unused Catalog - Number	-	-	-	-	0	0	0	Unused entry
253	002	Domestic	Food/Food Storage	Container	Aqua Glass	Spice Bottle	0	1	0	Associated with 284-1
253	003	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	7	0	1 sided bottle.
253	004	Personal	Social Drugs - Alcohol	Container	Dark-olive Glass	Ale/Beer Bottle	0	1	0	Miscellaneous
253	005	Indefinite Use	Misc. Containers	-	Colorless Glass	Bottle/Jar	0	1	0	
253	006	Indefinite Use	Indefinite	-	White Improved Earthenware	Indefinite	0	1	0	Body
253	007	Faunal	Shell	-	Shell	Abalone	0	2	0	
253	008	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
253	009	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
253	010	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	7	2	
253	011	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	2	0	2	
253	012	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	1	0	1	
253	013	Unused Catalog - Number	-	-	-	-	0	0	0	Unused entry

Fort Ross Artifact Catalog - continued

Catalog No.	Group	Category	Type	Material	Description	Wh	Frg	MNI	Mark?	Comments
253	014	Unused Catalog - Number	-	-	-	0	0	0		Unused entry
253	015	Unused Catalog - Number	-	-	-	0	0	0		Unused entry
253	016	Indefinite Use	Misc. Beads	-	Opaque-white Glass	1	0	1		Spheroid shape. Height 0.1", width 0.145", bore 0.035"
255	001	Indefinite Use	Misc. Containers	-	Aqua Glass	0	5	0		1 sided bottle.
255	002	Indefinite Use	Indefinite	-	Aqua Glass	0	1	1		Raised spiral ribbing
255	003	Personal	Social Drugs - Alcohol	Container	Olive Glass	0	1	0		Miscellaneous
255	004	Indefinite Use	Misc. Containers	-	Brown Glass	0	2	0		Body
255	005	Indefinite Use	Indefinite	-	Porcelain	0	1	0		
255	006	Indefinite Use	Misc. Closures	-	Aluminum	1	0	1	Other	
255	007	Indefinite Use	Indefinite	-	-	0	0	0		Sample
255	008	Indefinite Use	Indefinite	-	-	0	0	0		Sample
255	009	Indefinite Use	Misc. Metal Items	-	Ferrous	0	1	0		Sheet? Can?
255	010	Native American	Flaked Stone	Debitage	Crypto-crystalline	1	0	1		Retouched flake
255	011	Native American	Flaked Stone	Debitage	Obsidian	4	0	4		Thick flake, Napa Valley, heat affected; large flake Annadel?
255	012	Native American	Flaked Stone	Debitage	Crypto-crystalline	4	0	4		
266	001	Indefinite Use	Misc. Beads	-	Green Glass	1	0	1		Cylindrical with rounded edges. Height 0.1", width 0.12", bore 0.035"
266	002	Indefinite Use	Indefinite	-	Asian Porcelain	0	1	1		Blue underglaze. Associated with 236-8, 220-5.
266	003	Indefinite Use	Indefinite	-	-	0	0	0		Sample
266	004	Native American	Flaked Stone	Debitage	Crypto-crystalline	2	0	2		
273	001	Activities	Archaeology	Provenience Info	Plastic	0	1	0		Edwards 1974-1977/Farris 1981
273	002	Structural	Hardware	Fastener	Ferrous	0	3	1		
273	003	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	3	0	3		
273	004	Native American	Flaked Stone	Debitage	Crypto-crystalline	3	0	3		
Unit 103, SW Quad										
218	001	Indefinite Use	Indefinite	-	Glass	0	1	0		0.6g
218	002	Indefinite Use	Electric	-	Plastic	0	1	1		Diam 15/16"
218	003	Native American	Flaked Stone	Debitage	Crypto-crystalline	3	0	3		
274	001	Indefinite Use	Misc. Containers	-	Aqua Glass	0	13	0		
274	002	Indefinite Use	Indefinite	-	Glass	0	1	0		0.2g
274	003	Indefinite Use	Misc. Containers	-	Aqua Glass	0	1	1		Applied finish and neck. Mends and associated with 230-3, 331-4, 303-7.
274	004	Indefinite Use	Misc. Containers	-	Brown Glass	0	3	0		
274	005	Indefinite Use	Indefinite	-	White Improved Earthenware	0	1	1		Base

Fort Ross Artifact Catalog - continued

Catalog No.	Group	Category	Type	Material	Description	Wh	Frg	MNI	Mark?	Comments
274	006	Structural	Hardware	Fastener	Copper-alloy	Screw	0	1	0	Associated with 207-5
274	007	Activities	Archaeology	Unit Covering	Plastic	Tarpauline	0	1	0	Edwards 1974-1977/Farris 1981
274	008	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
274	009	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
274	010	Structural	Materials	-	-	Concrete	0	0	0	Sample
274	011	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	1	0	
274	012	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	5	0	5	
294	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	14	0	1 sided bottle.
294	002	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	7	0	2.9g
294	003	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	4	0	Miscellaneous
294	004	Personal	Social Drugs - Alcohol	Container	Dark-olive Glass	Ale/Beer Bottle	0	2	0	Miscellaneous
294	005	Indefinite Use	Misc. Containers	-	Colorless Glass	Bottle/Jar	0	1	0	
294	006	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	3	0	
294	007	Indefinite Use	Indefinite	-	Earthenware	Hollow	0	1	1	Rim, molded. Associated with 303-12
294	008	Indefinite Use	Indefinite	-	Yellowware?	Indefinite	0	1	1	Unglazed earthenware?
294	009	Faunal	Bone	-	Bone	Bone	0	2	0	
294	010	Indefinite Use	Misc. Fasteners	-	Copper-alloy	Rivet	1	0	1	Leather attached
294	011	Activities	Archaeology	Provenience Info	Plastic	Flagging	0	2	0	Edwards 1974-1977/Farris 1981
294	012	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
294	013	Structural	Hardware	Fastener	Ferrous	Bolt	0	1	1	Diam 1 1/4"
294	014	Structural	Hardware	Fastener	Ferrous	Nail	0	6	0	
294	015	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	20	8	
294	016	Indefinite Use	Misc. Metal Items	-	Ferrous	Wire	0	1	0	Barbed?, diam 1/4"
294	017	Structural	Hardware	Fastener	Ferrous	Wire Nail	0	1	0	
294	018	Indefinite Use	Misc. Metal Items	-	Ferrous	Wire	0	1	0	Barbed?
294	019	Soil Sample	1/32" Fraction	-	-	-	0	0	0	1 quartz crystal; 2 glass: colorless and olive
294	020	Native American	Flaked Stone	Core	Crypto-crystalline	-	1	0	1	Anvil reduction
294	021	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	6	0	6	
294	022	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	25	0	25	Couple flakes might not be CCS
294	023	Native American	Flaked Stone	Debitage	Quartz	-	8	0	8	Presumablydebitage
313	001	Indefinite Use	Misc. Beads	-	Colorless Glass	Bead	1	0	1	Soil sample, 1/32" fraction. Seed bead 0.055" x 0.03"
313	002	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	7	0	
313	003	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	1	1	Finish, wide mouth?
313	004	Indefinite Use	Misc. Beads	-	Aqua Glass	Bead	1	0	1	Cylindrical shape with rounded edges. Height 0.12", width 0.122", bore 0.048"
313	005	Domestic	Food Prep/Consumption	Drinking Vessel	Porcelain	Cup	0	1	1	Straight-sided, paneled. Mends with 315-4.
313	006	Indefinite Use	Misc. Fasteners	-	Copper-alloy	Rivet	1	0	1	Leather attached. Diam 1/4", 1/8" thick
313	007	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	1	0	
313	008	Structural	Hardware	Fastener	Ferrous	Wire Nail	0	3	0	

Fort Ross Artifact Catalog - continued

Catalog No.	Group	Category	Type	Material	Description	Wh Frg	MNI	Mark?	Comments	
313	009	Indefinite Use	Misc. Metal Items	-	Ferrous	Flat	0	7	0	Sheet? Can?
313	010	Undefined Use	-	Ferrous	Amorphous	0	1	0	Flat?	
313	011	Soil Sample	1/32" Fraction	-	-	0	0	0	1 grass seed; 1 fish scale, 1 olive glass frag, 1 bone frag	
313	012	Soil Sample	1/32" Fraction	-	-	0	0	0	3 glass frags; 1 seed; 1 plaster? frag; 2 bone	
313	013	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	11	0	11	
313	014	Native American	Flaked Stone	Edge-modified Flake	Crypto-crystalline	-	1	0	1	Minor edge modification on lateral margin - not as regular or intensive as would be
322	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	6	0	
322	002	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	2	0	0.4g
322	003	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	4	0	Miscellaneous
322	004	Personal	Social Drugs - Alcohol	Container	Dark-olive Glass	Ale/Beer Bottle	0	1	0	Miscellaneous
322	005	Indefinite Use	Misc. Containers	-	Colorless Glass	Bottle/Jar	0	1	0	
322	006	Indefinite Use	Misc. Containers	-	Green-Brown Glass	Bottle/Jar	0	1	0	Associated with 250-4
322	007	Indefinite Use	Indefinite	-	Wood	Wood	0	0	0	Sample
322	008	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	8	1	
322	009	Indefinite Use	Misc. Metal Items	-	Ferrous	Flat	0	3	0	Can? Sheet?
322	010	Soil Sample	1/16" Fraction	-	-	-	0	0	0	1 seed, 1 slag frag (322 - Ext)
322	011	Soil Sample	1/32" Fraction	-	-	-	0	0	0	Seeds
322	012	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	10	0	10	
325	001	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	1	0	0.2g
325	002	Indefinite Use	Misc. Metal Items	-	Ferrous	Indefinite	0	2	0	
325	003	Soil Sample	1/32" Fraction	-	-	-	0	0	0	1 chert; 3 seeds; 1 quartz/colorless glass
325	004	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	3	0	3	
328	001	Soil Sample	1/32" Fraction	-	-	-	0	0	0	1 seed
330	001	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	1	0	
330	002	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	3	0	1 sided bottle.
330	003	Faunal	Shell	-	Shell	Abalone?	0	1	0	
330	004	Structural	Materials	-	-	Brick	0	1	1	Russian?
330	005	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	7	1	
330	006	Structural	Hardware	Fastener	Ferrous	Cut Nail	1	0	1	Length 4", diam 3/8"
330	007	Indefinite Use	Misc. Metal Items	-	Ferrous	Flat	0	2	0	Sheet?
330	008	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	2	0	2	
330	009	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	6	0	6	
334	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	3	0	
334	002	Personal	Social Drugs - Alcohol	Container	Olive Glass	Alcoholic-beverage Bottle	0	1	0	Miscellaneous
334	003	Indefinite Use	Indefinite	-	Wood	Wood	0	0	0	Sample
334	004	Structural	Hardware	Fastener	Ferrous	Cut Nail	1	0	1	Length 1 1/8", diam 1/4"
Unit 104, NE Quad										
244	001	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	1	1	Tooled double ring/brandy finish

Fort Ross Artifact Catalog - continued

Catalog No.	Group	Category	Type	Material	Description	Wh	Frg	MNI	Mark?	Comments
244	002	Activities	Archaeology	Unit Liner	Plastic	Sheeting	0	1	0	Edwards 1974-1977/Farris 1981
244	003	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
244	004	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	2	0	
244	005	Indefinite Use	Misc. Metal Items	-	Ferrous	Flat	0	2	0	Can? Sheet?
295	001	Unused Catalog Number	-	-	-	-	0	0	0	Unused entry
295	002	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	33	0	Body, 5 sided
295	003	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	6	0	3.8g
295	004	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle	0	2	1	Base, circular with push-up.
295	005	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle	0	1	0	Associated with 324-3
295	006	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	3	0	Miscellaneous
295	007	Personal	Social Drugs - Alcohol	Container	Dark-olive Glass	Ale/Beer Bottle	0	3	0	Miscellaneous
295	008	Indefinite Use	Misc. Beads	-	Opaque-white glass	Bead	1	0	1	Spheroid/annular shape. Height 0.068", width 0.13", bore 0.05"
295	009	Personal	Social Drugs - Alcohol	Container	Olive Glass	Wine/Champagne Bottle	0	1	0	Mends and associated with 278-1
295	010	Indefinite Use	Misc. Containers	-	Colorless Glass	Bottle/Jar	0	1	0	
295	011	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	2	0	Body
295	012	Indefinite Use	Indefinite	-	White Improved Earthenware	Hollow	0	1	0	Body
295	013	Structural	Hardware	Fastener	Copper-alloy	Cut Nail	1	0	1	Round head, Length 7/8", Head diam 3/8"
295	014	Indefinite Use	Indefinite	-	Slate	Slate	0	1	1	
295	015	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
295	016	Structural	Hardware	Fastener	Ferrous	Wire Nail	0	1	1	Length 2"
295	017	Structural	Hardware	Fastener	Ferrous	Wire Nail	0	9	2	
295	018	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	2	1	
295	019	Structural	Hardware	Fastener	Ferrous	Wire Nail	0	2	1	Countersunk head, length ~2"
295	020	Native American	Flaked Stone	Debitage	Obsidian - Annadel?	-	1	0	1	
295	021	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	4	0	4	
295	022	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	1	0	1	Possible?
304	001	Indefinite Use	Indefinite	-	Colorless Glass	Flat Painted Glass	0	3	1	Flat glass, yellow paint w/ black tar-like back (adhesive?). Associated with 303-2, 212-3, 3.4g
304	002	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	3	0	
304	003	Domestic	Food/Food Storage	Container	Aqua Glass	Spice Bottle	0	1	0	Base, fluted rectangle, chamfered or concave corners.
304	004	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle	0	1	1	Packer finish. Associated with 306-10.
304	005	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	46	0	Body, 3 sided
304	006	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	1	0	Associated with 209-4
304	007	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	7	0	Miscellaneous
304	008	Personal	Social Drugs - Alcohol	Container	Dark-olive Glass	Ale/Beer Bottle	0	1	0	Miscellaneous
304	009	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	2	0	
304	010	Indefinite Use	Misc. Containers	-	Green-Brown Glass	Bottle/Jar	0	1	0	Associated with 250-4
304	011	Domestic	Food Prep/Consumption	Drinking Vessel	White Improved Earthenware	Cup	0	1	1	Base, 2" diam.
304	012	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample

Fort Ross Artifact Catalog - continued

Catalog No.	Group	Category	Type	Material	Description	Wh	Frg	MNI	Mark?	Comments
304	013	Indefinite Use	Indefinite	-	Wood	0	0	0		Sample
304	014	Structural	Hardware	Fastener	Ferrous	0	1	1		Length 2", countersunk head
304	015	Structural	Hardware	Fastener	Ferrous	0	6	1		
304	016	Structural	Hardware	Fastener	Ferrous	0	1	1		Length ~ 2 1/4", head diam 1/4"
304	017	Native American	Flaked Stone	Debitage?	Crypto-crystalline	1	0	1		
304	018	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	3	0	3		
304	019	Native American	Flaked Stone	Debitage	Crypto-crystalline	2	0	2		
319	001	Personal	Indefinite	-	Cobalt Glass	0	1	0		Associated with 251-2
319	002	Activities	Writing	Container	Teal Glass	0	1	1		Umbrella ink, folded lip finish, 2 1/4" diam. Associated with 252-1, 259-2, 317-1, 269-2,
319	003	Indefinite Use	Misc. Containers	-	Aqua Glass	0	1	0		
319	004	Indefinite Use	Indefinite	-	Glass	0	3	0		2.5g
319	005	Indefinite Use	Misc. Containers	-	Aqua Glass	0	1	1		Applied bead finish
319	006	Personal	Social Drugs - Alcohol	Container	Olive Glass	0	2	0		Miscellaneous
319	007	Domestic	Food Prep/Consumption	Drinking Vessel	Amethyst Glass	0	2	1		Glass In-set footed base. Associated with 259-10, 303-9.
319	008	Indefinite Use	Misc. Containers	-	Colorless Glass	0	1	0		
319	009	Indefinite Use	Indefinite	-	Colorless/Amethyst Glass	0	1	0		Associated with 320-7
319	010	Indefinite Use	Indefinite	-	-	0	0	0		Sample
319	011	Indefinite Use	Indefinite	-	-	0	0	0		Sample
319	012	Structural	Hardware	Fastener	Ferrous	0	3	1		
319	013	Native American	Flaked Stone	Core	Crypto-crystalline	1	0	1		Unifacial core
337	001	Indefinite Use	Misc. Containers	-	Aqua Glass	0	4	0		
337	002	Personal	Social Drugs - Alcohol	Container	Dark-olive Glass	0	1	0		Miscellaneous
337	003	Domestic	Food Prep/Consumption	Drinking Vessel	Colorless Glass	0	1	0		Associated with 320-6
337	004	Indefinite Use	Indefinite	-	-	0	0	0		Sample
337	005	Structural	Hardware	Fastener	Ferrous	0	1	1		Length 2 1/8", head diam 3/16"
337	006	Structural	Hardware	Fastener	Ferrous	0	1	0		
Unit 104, NW Quad										
296	001	Unused Catalog - Number	-	-	-	0	0	0		Unused entry
296	002	Indefinite Use	Misc. Containers	-	Aqua Glass	0	15	0		1 sided bottle.
296	003	Indefinite Use	Indefinite	-	Glass	0	2	0		0.4g
296	004	Indefinite Use	Indefinite	-	Aqua Glass	0	1	0		Associated with 305-7
296	005	Personal	Social Drugs - Alcohol	Container	Olive Glass	0	5	0		Miscellaneous
296	006	Personal	Social Drugs - Alcohol	Container	Olive Glass	0	1	0		Mends and associated with 278-1
296	007	Personal	Social Drugs - Alcohol	Container	Olive Glass	0	1	0		Associated with 235-3
296	008	Indefinite Use	Misc. Containers	-	Colorless Glass	0	2	0		
296	009	Indefinite Use	Indefinite	-	Colorless/Amethyst Glass	0	1	0		Associated with 320-7
296	010	Activities	Archaeology	Unit Liner	Plastic	0	5	0		Edwards 1974-1977/Farris 1981
296	011	Activities	Archaeology	Provenience Info	Plastic	0	1	0		Edwards 1974-1977/Farris 1981

Fort Ross Artifact Catalog - continued

Catalog No.	Group	Category	Type	Material	Description	Wh Frg	MNI	Mark?	Comments
296	012	Indefinite Use	Indefinite	-	Charcoal	0	0	0	Sample
296	013	Indefinite Use	Indefinite	-	Wood	0	0	0	Sample
296	014	Indefinite Use	Indefinite	-	Wood	0	0	0	Sample
296	015	Structural	Materials	-	Asphalt	0	0	0	Sample
296	016	Structural	Hardware	Fastener	Ferrous	0	4	1	
296	017	Indefinite Use	Misc. Metal Items	-	Ferrous	0	1	0	
296	018	Indefinite Use	Misc. Metal Items	-	Copper-alloy	0	1	0	Cylindrical, diam 1/16"
296	019	Structural	Hardware	Fastener	Ferrous	1	0	1	Square, diam 1", bore 3/8", thick 1/2"
296	020	Native	Flaked Stone	Debitage?	Quartz	1	0	1	
		American							
296	021	Indefinite Use	Misc. Beads	-	Aqua Glass	1	0	1	Cylindrical shape. Height 0.1", width 0.1" bore 0.045"
296	022	Native	Flaked Stone	Debitage	Obsidian - Napa Valley	1	0	1	
		American							
296	023	Native	Flaked Stone	Debitage	Obsidian - Annadel?	1	0	1	
		American							
296	024	Native	Flaked Stone	Debitage	Crypto-crystalline	7	0	7	One possible quartzite
		American							
303	001	Activities	Writing	Container	Teal Glass	0	3	0	Associated with 319-2
303	002	Indefinite Use	Indefinite	-	Colorless Glass	0	1	0	Associated with 304-1
303	003	Indefinite Use	Indefinite	-	Opaque-white Glass	0	1	1	Flat w/ rounded edge. Possible lid liner.
303	004	Indefinite Use	Misc. Containers	-	Aqua Glass	0	45	0	Body, 3 sided
303	006	Indefinite Use	Indefinite	-	Glass	0	10	0	3.5g
303	007	Indefinite Use	Misc. Containers	-	Aqua Glass	0	1	0	Mends and associated with 274-3.
303	008	Personal	Social Drugs - Alcohol	Container	Olive Glass	0	9	0	Miscellaneous
303	009	Domestic	Food Prep/Consumption	Drinking Vessel	Amethyst Glass	0	1	0	Glass Associated with 319-7.
303	010	Indefinite Use	Misc. Containers	-	Colorless Glass	0	2	0	
303	011	Indefinite Use	Indefinite	-	Porcelain	0	1	1	Flared rim
303	012	Indefinite Use	Indefinite	-	Earthenware	0	1	0	Associated with 294-7
303	013	Faunal	Shell	-	Shell	0	1	0	
303	014	Activities	Archaeology	Unit Liner	Plastic	0	24	0	Edwards 1974-1977/Farris 1981
303	015	Indefinite Use	Indefinite	-	-	0	0	0	Sample
303	016	Indefinite Use	Indefinite	-	-	0	0	0	Sample
303	017	Structural	Materials	-	Asphalt	0	0	0	Sample
303	018	Structural	Hardware	Fastener	Ferrous	0	2	1	Diam 3/8"
303	019	Structural	Hardware	Fastener	Ferrous	0	1	0	Diam 7/16"
303	020	Structural	Hardware	Fastener	Ferrous	0	10	5	
303	021	Structural	Materials	-	-	0	2	0	
303	022	Native	Flaked Stone	Debitage	Obsidian - Napa Valley?	5	0	5	
		American							
303	023	Native	Flaked Stone	Debitage	Crypto-crystalline	13	0	13	
		American							
331	001	Personal	Social Drugs - Alcohol	Container	Dark-olive Glass	0	1	0	
331	002	Indefinite Use	Misc. Containers	-	Aqua Glass	0	10	0	Body, 3 sided
331	003	Indefinite Use	Indefinite	-	Glass	0	2	0	0.6g

Fort Ross Artifact Catalog - continued

Catalog No.	Group	Category	Type	Material	Description	Wh	Frg	MNI	Mark?	Comments
331	004	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle	0	1	0	Mends and associated with 274-3.
331	005	Personal	Social Drugs - Alcohol	Container	Olive Glass	Alcoholic-beverage Bottle	0	3	0	Miscellaneous
331	006	Personal	Social Drugs - Alcohol	Container	Olive Glass	Alcoholic-beverage Bottle	0	1	0	Miscellaneous
331	007	Indefinite Use	Misc. Containers	-	Colorless Glass	Bottle/jar	0	2	0	
331	008	Activities	Archaeology	Unit Liner	Plastic	Sheeting	0	1	0	Edwards 1974-1977/Farris 1981
331	009	Personal	Social Drugs - Tobacco	-	Synthetic	Cigarette Filter	0	1	1	
331	010	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
331	011	Structural	Materials	-	-	Brick	0	1	0	Russian?
331	012	Structural	Materials	-	-	Asphalt	0	0	0	Sample
331	013	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	9	1	
331	014	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	2	0	2	
331	015	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	4	0	4	
Unit 104, SE Quad										
246	001	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/jar	0	1	0	
298	001	Unused Catalog Number	-	-	-	-	0	0	0	Unused entry
298	002	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/jar	0	63	0	1 sided bottle.
298	003	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	9	0	3.3g
298	004	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle	0	1	0	Associated with 258-9
298	005	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle	0	1	1	Finish, applied ring. Jamaica ginger? Associated with 320-4
298	006	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	2	0	Miscellaneous
298	007	Domestic	Food Prep/Consumption	Drinking Vessel	Colorless Glass	Tumbler	0	1	0	Mends and associated with 305-15
298	008	Indefinite Use	Indefinite	-	White Improved Earthenware	Rim	0	1	1	
298	009	Indefinite Use	Indefinite	-	Earthenware	Indefinite	0	1	0	Associated with 291-11
298	010	Indefinite Use	Indefinite	-	Porcelain	Indefinite	0	1	0	
298	011	Indefinite Use	Misc. Beads	-	Opaque-white Glass	Bead	1	0	1	Spheroid shape. Height 0.085", width 0.152", bore 0.06"
298	012	Indefinite Use	Indefinite	-	CC Ware	Rim	0	1	1	Molded, scalloped edge
298	013	Activities	Archaeology	Unit Liner	Plastic	Sheeting	0	3	0	Edwards 1974-1977/Farris 1981
298	014	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
298	015	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
298	016	Structural	Materials	-	-	Concrete	0	0	0	Sample
298	017	Structural	Hardware	Fastener	Ferrous	Wire Nail	1	0	1	Length 2", diam 1/8"
298	018	Structural	Hardware	Fastener	Ferrous	Wire Nail	0	2	1	Length ~2"
298	019	Structural	Hardware	Fastener	Ferrous	Wire Nail	0	2	0	
298	020	Structural	Hardware	Fastener	Ferrous	Spike?	0	1	0	
298	021	Soil Sample	1/32" Fraction	-	-	-	0	0	0	Seeds
298	022	Native American	Flaked Stone	Debitage	Quartz	-	1	0	1	
298	023	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	13	0	13	

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Catalog No.	Group	Category	Type	Material	Description	Wh Frg	MNI	Mark?	Comments	
298	024	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	8	0	8	One flake might be CCS
298	025	Native American?	Modified Stone	-	Steatite	-	1	0	1	Soapstone, worked, saw cut?, beveled on "tip", polished exterior
298	026	Native American	Flaked Stone	Debitage	Obsidian - Annadel?	-	1	0	1	
305	001	Activities	Writing	Container	Teal Glass	Ink Bottle	0	1	0	Associated with 319-2
305	002	Personal	Misc. Containers	-	Cobalt Glass	Bottle	0	1	0	Associated with 258-3
305	003	Indefinite Use	Indefinite	-	Colorless Glass	Flat Painted Glass	0	1	0	Associated with 304-1
305	004	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	63	0	Body, 3 sided
305	006	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	15	0	7.0g
305	007	Indefinite Use	Indefinite	-	Aqua Glass	Body	0	2	1	Frosted. Associated with 259-5, 316-2, 296-4, 306-6, 252-6, 297-3, 314-3, 321-2, 207-2.
305	008	Domestic	Food/Food Storage	Container	Aqua Glass	Jar	0	2	1	Raised molded design. Associated with 258-8.
305	009	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	1	1	Glass Base
305	010	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	1	1	Base, circular
305	011	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	1	0	Miscellaneous
305	012	Personal	Social Drugs - Alcohol	Container	Olive Glass	Alcoholic-beverage Bottle	0	1	0	Associated with 235-3
305	013	Indefinite Use	Misc. Containers	-	Colorless Glass	Bottle/Jar	0	1	0	
305	014	Indefinite Use	Misc. Containers	-	Colorless Glass	Bottle	0	1	1	Tooled finish
305	015	Domestic	Food Prep/Consumption	Drinking Vessel	Colorless Glass	Tumbler	0	1	1	Rim and body, pressed panels. Mends and associated with 209-8, 306-14, 269-7, 298-7,
305	016	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	1	0	
305	017	Indefinite Use	Indefinite	-	Slate	Slate	0	1	0	
305	018	Structural	Hardware	Fastener	Copper-alloy	Wood Anchor	1	0	1	Threaded male and female wood screw anchor. Diam 3/8", bore diam 3/16", thick
305	019	Activities	Archaeology	Unit Liner	Plastic	Sheeting	0	3	0	Edwards 1974-1977/Farris 1981
305	020	Activities	Archaeology	Provenience Info	Plastic	Flagging	0	1	0	Edwards 1974-1977/Farris 1981
305	021	Personal	Social Drugs - Tobacco	-	Synthetic	Cigarette Filter	0	1	1	
305	022	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
305	023	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
305	024	Structural	Materials	-	-	Asphalt	0	0	0	Sample
305	025	Indefinite Use	Misc. Metal Items	-	Ferrous	Handle with plate	0	4	1	Hinged D-shaped pull handle, 4 1/4" x 1 1/2", 7/16" thick. Rectangular plate 4 5/8" x 2 1/4", Diam 1/2" x 1/4"
305	026	Indefinite Use	Misc. Metal Items	-	Ferrous	Handle?	0	1	0	
305	027	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	5	3	
305	028	Structural	Hardware	Fastener	Ferrous	Wire Nail	0	1	1	Length 2", head diam 3/16"
305	029	Structural	Hardware	Fastener	Ferrous	Wire Nail	0	1	1	Length 2"+, head diam 1/4"
305	030	Soil Sample	1/32" Fraction	-	-	-	0	0	0	1 colorless glass frag; 24 seeds; 1 bone
305	031	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	15	0	15	
305	032	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	3	0	3	Larger flake might be heat affected

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Catalog No.	Group	Category	Type	Material	Description	Wh	Frg	MNI	Mark?	Comments
305	033	Native American	Flaked Stone?	Debitage	Crypto-crystalline	-	1	0	1	Possible meta-chert. Heat affected, not clearly flake stone
320	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	29	0	
320	002	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	11	0	2.7g
320	003	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle	0	1	1	Small, flared finish
320	004	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle	0	1	0	Associated with 298-5
320	005	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	1	0	Miscellaneous
320	006	Domestic	Food Prep/Consumption	Drinking Vessel	Colorless Glass	Tumbler	0	1	1	Straight sided rim frag, etched scroll/floral design. Associated with 285-5, 337-3.
320	007	Indefinite Use	Indefinite	-	Colorless/Amethyst Glass	Hollow	0	1	1	Thick frosted glass. Associated with 296-9, 236-5, 306-13, 239-3, 307-3, 319-9, 285-6.
320	008	Faunal	Bone	-	Bone	Bone	0	2	0	
320	009	Activities	Firearms	Ammunition	Lead	Shot	1	0	1	Diam 3/16"
320	010	Activities	Archaeology	Unit Liner	Plastic	Sheeting	0	2	0	Edwards 1974-1977/Farris 1981
320	011	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
320	012	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	11	1	
320	013	Structural	Hardware	Fastener	Ferrous	Wire Nail	0	1	0	
320	014	Structural	Hardware	-	Ferrous	Barbed Wire	0	1	1	
320	015	Indefinite Use	Indefinite	-	Laytex?	Paint?	0	1	0	
320	016	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	26	0	26	
320	017	Native American	Flaked Stone	Debitage	Unidentified	-	1	0	1	
320	018	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	3	0	3	Larger frag might be Annadale
Unit 104, SW Quad										
245	001	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	1	0	Miscellaneous
297	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	50	0	
297	002	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	9	0	3.0g
297	003	Indefinite Use	Indefinite	-	Aqua Glass	Body	0	1	0	Associated with 305-7
297	004	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	1	0	Base, circular
297	005	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	2	0	Miscellaneous
297	006	Personal	Social Drugs - Alcohol	Container	Dark-olive Glass	Ale/Beer Bottle	0	1	0	Miscellaneous
297	007	Personal	Grooming/Health	Container	Colorless Glass	Medicine Bottle	0	1	1	Tooled prescription finish
297	008	Indefinite Use	Misc. Containers	-	Colorless Glass	Bottle/Jar	0	2	0	
297	009	Domestic	Food Prep/Consumption	Drinking Vessel	Colorless Glass	Tumbler	0	1	0	Mends and associated with 305-15
297	010	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	1	0	
297	011	Indefinite Use	Indefinite	-	White Improved Earthenware	Hollow	0	1	1	Rim
297	012	Indefinite Use	Indefinite	-	White Improved Earthenware	Indefinite	0	1	0	Body
297	013	Activities	Archaeology	Unit Liner	Plastic	Sheeting	0	3	0	Edwards 1974-1977/Farris 1981
297	014	Indefinite Use	Indefinite	-	Plastic and Alluminum	Foiled Plastic?	0	1	0	Yellow on one side
297	015	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
297	016	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
297	017	Structural	Materials	-	-	Concrete	0	0	0	Sample
297	018	Structural	Materials	-	-	Asphalt	0	0	0	Sample

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Catalog No.	Group	Category	Type	Material	Description	Wh	Frg	MNI	Mark?	Comments
297	019	Structural	Hardware	Fastener	Ferrous	Wire Nail	1	0	1	Countersunk head, length 2 1/8", diam 3/8".
297	020	Structural	Hardware	Fastener	Ferrous	Wire Nail	0	6	2	Countersunk head
297	021	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	7	0	
297	022	Native American	Flaked Stone	Debitage	Unidentified	-	1	0	1	
297	023	Native American	Flaked Stone	Debitage	Quartzite	-	1	0	1	
297	024	Native American	Flaked Stone	Edge-modified Flake	Obsidian - Napa Valley	-	1	0	1	
297	025	Native American	Flaked Stone	Debitage	Obsidian - Annadel?	-	1	0	1	
297	026	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	4	0	4	
297	027	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	1	0	1	
306	001	Unused Catalog Number	-	-	-	-	0	0	0	Unused entry
306	002	Indefinite Use	Indefinite	-	Aqua Glass	Bottle Base/Possible Scraper	0	1	1	Thick aqua glass with one regularized edge, attributes of a scraper.
306	003	Indefinite Use	Indefinite	-	Colorless Glass	Flat Painted Glass	0	1	0	Associated with 304-1
306	004	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/jar	0	51	0	1 sided bottle.
306	005	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	3	0	1.6g
306	006	Indefinite Use	Indefinite	-	Aqua Glass	Body	0	1	0	Associated with 305-7
306	007	Indefinite Use	Misc. Beads	-	Opaque-white glass	Bead	1	0	1	Spheroid shape. Height 0.1", width 0.155", bore 0.035"
306	008	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/jar	0	1	0	Base, circular.
306	009	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/jar	0	1	0	Base
306	010	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle	0	1	0	Associated with 304-4.
306	011	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	1	0	Miscellaneous
306	012	Indefinite Use	Misc. Containers	-	Colorless Glass	Bottle/jar	0	6	0	
306	013	Indefinite Use	Indefinite	-	Colorless/Amethyst Glass	Hollow	0	1	0	Associated with 320-7
306	014	Domestic	Food Prep/Consumption	Drinking Vessel	Colorless Glass	Tumbler	0	1	0	Mends and associated with 305-15
306	015	Indefinite Use	Misc. Containers	-	Green-Brown Glass	Bottle/jar	0	1	0	Associated with 250-4
306	016	Indefinite Use	Indefinite	-	CC Ware	Base?	0	1	0	Flat body frag?
306	017	Faunal	Shell	-	Shell	Abalone?	0	1	0	
306	018	Activities	Archaeology	Unit Liner	Plastic	Sheeting	0	1	0	Edwards 1974-1977/Farris 1981
306	019	Indefinite Use	Misc. Metal Items	-	Aluminum and Plastic	Foil Plastic	0	1	0	Yellow
306	020	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
306	021	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
306	022	Structural	Materials	-	-	Asphalt	0	0	0	Sample
306	023	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	12	5	
306	024	Structural	Hardware	Fastener	Ferrous	Wire Nail	0	1	1	Length 2 1/2", head diam 3/8"
306	025	Structural	Hardware	Fastener	Ferrous	Wire Nail	1	0	1	Length 2 1/8"
306	026	Structural	Hardware	Fastener	Ferrous	Wire Nail	0	4	2	
306	027	Indefinite Use	Misc. Metal Items	-	Ferrous	Flat	0	4	0	

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Catalog No.	Group	Category	Type	Material	Description	Wh	Frg	MNI	Mark?	Comments
306	028	Structural	Hardware	Fastener	Ferrous	Bolt and Washer	0	1	1	Square washer, diam 1", thick 1/2". Bolt diam 3/8"
306	029	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	4	0	4	
306	030	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	1	0	1	
306	031	Native American	Flaked Stone	Debitage	Quartzite?	-	1	0	1	Might not be flaked stone, but probably cultural
321	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	7	0	1 sided bottle.
321	002	Indefinite Use	Indefinite	-	Aqua Glass	Body	0	1	0	Associated with 305-7
321	003	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	1	0	
321	004	Indefinite Use	Indefinite	-	CC Ware	Indefinite	0	2	0	
321	005	Domestic	Food Prep/Consumption	Tableware	CC Ware	Plate	0	1	1	Rim. Associated with 207-3
321	006	Activities	Archaeology	Unit Liner	Plastic	Sheeting	0	2	0	Edwards 1974-1977/Farris 1981
321	007	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
321	008	Structural	Hardware	Fastener	Ferrous	Spike	1	0	1	Round head. Length 4 3/4", diam 7/8"
321	009	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	1	1	Head diam 3/8"
321	010	Undefined Use	-	-	Ferrous	Amorphous	0	1	0	
321	011	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	3	0	3	
321	012	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	1	0	1	
Unit 105, North										
247	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	3	0	1 sided bottle.
247	002	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	1	0	Miscellaneous
247	003	Floral	Seed	-	Seed	Cherry	0	1	0	
247	004	Structural	Materials	-	-	Asphalt	0	0	0	Sample
251	001	Indefinite Use	Misc. Beads	-	Opaque-white Glass	Bead	1	0	1	Cylindrical shape with rounded edges. Height 0.11", width 0.15", bore 0.045"
251	002	Personal	Indefinite	-	Cobalt Glass	Body	0	1	1	Flat/rectangular. Associated with 287-1, 319-1, 258-1, 270-1.
251	003	Personal	Misc. Containers	-	Cobalt Glass	Bottle	0	1	0	Associated with 258-3
251	004	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	35	0	Body, 3 sided
251	005	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	13	0	7.4g
251	006	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	3	0	Miscellaneous
251	007	Personal	Social Drugs - Alcohol	Container	Dark-olive Glass	Ale/Beer Bottle	0	1	0	Miscellaneous
251	008	Indefinite Use	Misc. Containers	-	Amethyst Glass	Bottle	0	1	1	Glass Neck. Associated with 291-6
251	009	Indefinite Use	Misc. Containers	-	Colorless Glass	Bottle/Jar	0	3	0	
251	010	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	2	0	
251	011	Unused Catalog Number	-	-	-	-	0	0	0	Unused entry
251	012	Domestic	Furnishings	Decorative Item	Porcelain	Figurine	0	1	1	Base and body, molded. Associated with 316-8
251	013	Activities	Archaeology	Provenience Info	Plastic	Flagging	0	1	0	Edwards 1974-1977/Farris 1981

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Catalog No.	Group	Category	Type	Material	Description	Wh	Frg	MNI	Mark?	Comments
251	014	Indefinite Use	Electric?	-	Plastic	Fitting/Cap?	0	1	1	Molded, black plastic, hole in top, interior barbing. Diam 7/8", bore 5/8"
251	015	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
251	016	Activities	Archaeology	Unit Liner	Plastic	Sheeting	0	4	0	Edwards 1974-1977/Farris 1981
251	017	Structural	Materials	-	-	Concrete	0	0	0	Sample
251	018	Structural	Materials	-	-	Asphalt	0	0	0	Sample
251	019	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	5	3	
251	020	Structural	Hardware	Fastener	Ferrous	Nail heads?	0	2	0	
251	021	Structural	Hardware	Fastener	Ferrous	Wire Nail	0	7	3	Countersunk head
251	022	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	3	0	3	
251	023	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	2	0	2	
258	001	Personal	Indefinite	-	Cobalt Glass	Body	0	1	0	Associated with 251-2
258	002	Activities	Writing	Container	Teal Glass	Ink Bottle	0	1	0	Associated with 319-2
258	003	Personal	Misc. Containers	-	Cobalt Glass	Bottle	0	2	1	Glass Square/rectangular, chamfered corners. Associated with 317-2, 290-2, 251-3, 310-1, Associated with 258-3
258	004	Personal	Misc. Containers	-	Cobalt Glass	Bottle	0	2	0	Associated with 258-3
258	005	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	38	0	Body, 3 sided
258	006	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	3	0	2.0g
258	007	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle	0	4	1	Double inset pane, possible cathedral pickle. Mends and associated with 232-3, 288-7.
258	008	Domestic	Food/Food Storage	Container	Aqua Glass	Jar	0	1	0	Associated with 305-8
258	009	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle	0	3	1	Finish, laid-on ring. Associated with 298-4, 252-9
258	010	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	1	0	Mends with 290-5
258	011	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	2	0	Miscellaneous
258	012	Personal	Social Drugs - Alcohol	Container	Dark-olive Glass	Ale/Beer Bottle	0	1	1	Glass Base, sand pontil.
258	013	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	4	0	
258	014	Indefinite Use	Indefinite	-	CC Ware	Indefinite	0	1	0	
258	015	Faunal	Bone	-	Bone	Bone	0	1	0	Pig tooth
258	016	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
258	017	Structural	Materials	-	-	Concrete	0	0	0	Sample
258	018	Structural	Materials	-	-	Mortar	0	0	0	Sample
258	019	Activities	Animal Husbandry	-	Wrought-iron	Horseshoe	0	3	1	Resembles logging shoe. Diam 5 1/4" x 5"
258	020	Structural	Hardware	Fastener	Ferrous	Wire Nail	1	0	1	
258	021	Structural	Hardware	Fastener	Ferrous	Scaffold Nail	1	0	1	Length 3 1/2"
258	022	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	15	1	
258	023	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	3	0	3	
316	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	22	0	Body, 3 sided
316	002	Indefinite Use	Indefinite	-	Aqua Glass	Body	0	1	0	Associated with 305-7
316	003	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	3	0	Miscellaneous
316	004	Personal	Social Drugs - Alcohol	Container	Olive Glass	Alcoholic-beverage Bottle	0	1	0	Associated with 235-3
316	005	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	1	0	Body

Fort Ross Artifact Catalog - continued

Catalog No.	Group	Category	Type	Material	Description	Wh	Frg	MNI	Mark?	Comments
316	006	Domestic	Food/Food Storage	Container	Stoneware	Crock	0	1	1	Rim, handpainted cobalt blue number?, 7 1/2 diam.
316	007	Indefinite Use	Indefinite	-	White Improved Earthenware	Indefinite	0	1	0	
316	008	Domestic	Furnishings	Decorative Item	Porcelain	Figurine	0	1	0	Associated with 251-12
316	009	Indefinite Use	Indefinite	-	Plastic	Ring?	0	1	1	Diam 1/12"
316	010	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
316	011	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
316	012	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	2	2	
316	013	Structural	Hardware	Fastener	Ferrous	Wire Nail	0	2	1	Length 1 3/4", head diam 1/4"
316	014	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	4	0	4	
335	001	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	1	0	0.2g
335	002	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle	0	1	0	Associated with 324-3
335	003	Structural	Materials	-	-	Mortar	0	1	0	
Unit 105, South										
248	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	3	0	Sided.
248	002	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	1	0	Miscellaneous
248	003	Personal	Social Drugs - Alcohol	Container	Dark-olive Glass	Ale/Beer Bottle	0	1	0	Miscellaneous
248	004	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	2	0	
248	005	Activities	Commerce	Advertising	Paper	Label?	0	1	1	Other Grey, white and orange printing
252	001	Activities	Writing	Container	Teal Glass	Ink Bottle	0	1	0	Associated with 319-2
252	002	Personal	Misc. Containers	-	Cobalt Glass	Bottle	0	2	0	Associated with 258-3
252	003	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	24	0	Body, 3 sided
252	005	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	11	0	6.7g
252	006	Indefinite Use	Indefinite	-	Aqua Glass	Body	0	1	0	Associated with 305-7
252	007	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar Finish	0	1	0	Associated with 317-5
252	008	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	1	0	Associated with 209-4
252	009	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle	0	1	0	Associated with 258-9
252	010	Personal	Social Drugs - Alcohol	Container	Dark-olive Glass	Ale/Beer Bottle	0	2	0	Miscellaneous
252	011	Indefinite Use	Misc. Containers	-	Colorless Glass	Bottle/Jar	0	2	0	
252	012	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	2	0	
252	013	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	2	0	
252	014	Indefinite Use	Indefinite	-	White Improved Earthenware	Hollow	0	1	0	Body
252	015	Domestic	Food Prep/Consumption	Kitchen	Yellowware	Hollow	0	1	1	Rim
252	017	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
252	018	Structural	Materials	-	-	Concrete	0	0	0	Sample
252	019	Structural	Materials	-	-	Mortar	0	0	0	Sample
252	020	Structural	Materials	-	-	Asphalt	0	0	0	Sample
252	021	Structural	Hardware	Fastener	Ferrous	Wire Nail	1	0	1	Flat countersunk?, Length 2", diam 3/16"
252	022	Structural	Hardware	Fastener	Ferrous	Wire Nail	0	1	0	
252	023	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	2	0	
252	024	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	2	0	2	
252	025	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	2	0	2	

Fort Ross Artifact Catalog - continued

Catalog No.	Group	Category	Type	Material	Description	Wh	Frg	MNI	Mark?	Comments
252	026	Native American	Flaked Stone	Debitage	Obsidian	-	1	0	1	Annadel or Franz Valley
259	001	Personal	Grooming/Health	Container	Aqua Glass	Medicine Bottle	0	2	1	Glass Rectangular, recessed panel.
259	002	Activities	Writing	Container	Teal Glass	Ink Bottle	0	1	0	Associated with 319-2
259	003	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	101	0	Body, 3 sided
259	004	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	10	0	8.1g
259	005	Indefinite Use	Indefinite	-	Aqua Glass	Body	0	1	0	Associated with 305-7
259	006	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	10	0	Miscellaneous
259	007	Personal	Social Drugs - Alcohol	Container	Olive Glass	Wine/Champagne Bottle	0	1	0	Mends and associated with 278-1
259	008	Personal	Social Drugs - Alcohol	Container	Olive Glass	Alcoholic-beverage Bottle	0	1	0	Associated with 235-3
259	009	Indefinite Use	Misc. Containers	-	Colorless Glass	Bottle	0	1	0	Body, recessed panel. Mends with 318-1.
259	010	Domestic	Food Prep/Consumption	Drinking Vessel	Amethyst Glass	Tumbler	0	1	0	Glass Associated with 319-7.
259	011	Indefinite Use	Misc. Containers	-	Colorless Glass	Bottle/Jar	0	4	0	
259	012	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	2	0	
259	013	Indefinite Use	Indefinite	-	White Improved Earthenware	Hollow	0	1	0	Transfer print, red floral, on interior.
259	014	Faunal	Bone	-	Bone	Bone	0	2	0	
259	015	Activities	Commerce	-	Copper-alloy and Ferrous	Weight?	0	1	1	Double stepped shoulder, circular body. Weighs 0.25oz, possibly a 1oz weight.
259	016	Activities	Entertainment	Music	Copper-alloy	Harmonica	0	3	1	Key parts, mend.
259	017	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
259	018	Structural	Materials	-	-	Asphalt	0	0	0	Sample
259	019	Structural	Hardware	Fastener	Ferrous	Wire Nail	0	1	1	
259	020	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	13	3	Head diam 1 @ 5/16"
259	021	Native American	Flaked Stone	Debitage	Obsidian - Annadel	-	2	0	2	
259	022	Native American	Flaked Stone	Debitage	Obsidian	-	1	0	1	Napa Valley or Borax Lake?
259	023	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	1	0	1	
259	024	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	5	0	5	
317	001	Activities	Writing	Container	Teal Glass	Ink Bottle	0	1	0	Associated with 319-2
317	002	Personal	Misc. Containers	-	Cobalt Glass	Bottle	0	1	0	Associated with 258-3
317	003	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	57	0	Body, 1 sided
317	004	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	6	0	16.2g
317	005	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar Finish	0	1	1	Applied packer finish, 7/8" bore diam. Associated with 257-2, 252-7.
317	006	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	3	0	Miscellaneous
317	007	Personal	Social Drugs - Alcohol	Container	Olive Glass	Wine/Champagne Bottle	0	1	0	Mends and associated with 278-1
317	008	Indefinite Use	Misc. Containers	-	Colorless Glass	Bottle	0	3	0	Square/rectangular shape
317	009	Indefinite Use	Misc. Containers	-	Colorless Glass	Bottle/Jar	0	2	0	
317	010	Domestic	Food Prep/Consumption	Drinking Vessel	Colorless Glass	Tumbler	0	1	0	Mends and associated with 305-15
317	011	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	4	0	
317	012	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
317	013	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample

Fort Ross Artifact Catalog - continued

Catalog No.	Group	Category	Type	Material	Description	Wh	Frg	MNI	Mark?	Comments
317	014	Indefinite Use	Misc. Metal Items	-	Ferrous	Can?	0	5	0	
317	015	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	11	2	
317	016	Indefinite Use	Misc. Metal Items	-	Cast-iron	Hinge?	0	2	2	Rectangular plate, length 5 3/4", width 1", thick 7/16", one end extends at 90 degree Shaft
317	017	Structural	Hardware	Fastener	Ferrous	Nail/Spike?	0	1	0	
317	018	Structural	Hardware	Fastener	Ferrous	Wire Nail	0	4	3	
317	019	Structural	Hardware	Fastener	Ferrous	Spike?	0	1	0	Diam 3/8"
317	020	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	2	0	2	
317	021	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	1	0	1	
Unit 108, NE Quad										
278	001	Personal	Social Drugs - Alcohol	Container	Olive Glass	Wine/Champagne Bottle	0	1	1	Neck and applied champagne finish. Mends and associated with 259-7, 239-2, 296-6, Sample
278	002	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	
283	001	Native American	Flaked Stone	Debitage	Chert	Flake	1	0	1	Chert flake, possibly non-cultural
283	002	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	3	0	1 sided bottle.
283	003	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	3	0	0.2g
283	004	Personal	Social Drugs - Alcohol	Container	Dark-olive Glass	Ale/Beer Bottle	0	1	0	Miscellaneous
283	005	Structural	Electric	-	Olive Glass	Insulator	0	1	1	Glass Threaded with square dome, 2 1/2" diam. Similar to Munsey 1970:296
283	006	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
283	007	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
283	008	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	2	0	
283	009	Structural	Hardware	Fastener	Ferrous	Wire Nail	1	0	1	Length 2 3/4", head diam 5/16"
283	010	Indefinite Use	Misc. Metal Items	-	Ferrous	Indefinite	0	3	0	
283	011	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	4	0	4	Large flake might be retouched on short lateral margin (1-2 diagonal scars)
291	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	4	0	Body, 1 sided
291	002	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	5	0	1.6g
291	003	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	4	0	Miscellaneous
291	004	Personal	Social Drugs - Alcohol	Container	Dark-olive Glass	Ale/Beer Bottle	0	1	0	Miscellaneous
291	005	Indefinite Use	Indefinite	-	Amethyst Glass	Hollow	0	1	1	Glass Pressed fan and dots design. Decorative?
291	006	Indefinite Use	Misc. Containers	-	Amethyst Glass	Bottle/Jar	0	1	0	Glass Associated with 251-8
291	007	Indefinite Use	Misc. Containers	-	Colorless Glass	Bottle/Jar	0	1	0	
291	008	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	1	0	
291	009	Indefinite Use	Misc. Containers	-	Green-Brown Glass	Bottle/Jar	0	1	0	Associated with 250-4
291	010	Indefinite Use	Indefinite	-	Porcelain	Hollow	0	1	0	Associated with 238-10
291	011	Indefinite Use	Indefinite	-	Earthenware	Indefinite	0	1	1	Body, variegated brown glaze. Associated with 298-9.
291	012	Faunal	Bone	-	Bone	Bone	0	1	0	Rodent?
291	013	Indefinite Use	Misc. Metal Items	-	Aluminum?	Fitting/Cap?	0	1	1	Silver-colored, non-magnetic metal, D-shaped. Diam 1/8" x 1/8", 1/16" thick
291	014	Indefinite Use	Misc. Metal Items	-	Ferrous and ?	Indefinite	0	1	0	Ferrous and black glass or tar?

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Catalog No.	Group	Category	Type	Material	Description	Wh	Frg	MNI	Mark?	Comments
291	015	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
291	016	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
291	017	Structural	Materials	-	-	Mortar	0	0	0	Sample
291	018	Structural	Materials	-	-	Brick	0	5	1	Corner, 2 1/2" thick. Russian?
291	019	Indefinite Use	Misc. Metal Items	-	Ferrous	Wire	0	4	0	Barbed?
291	020	Structural	Hardware	Fastener	Ferrous	Scaffold Nail	1	0	1	Length 2 3/4"
291	021	Indefinite Use	Indefinite	-	Ferrous	Corner?	0	1	0	Hardware?
291	022	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	13	2	
291	023	Structural	Hardware	Fastener	Ferrous	Wire Nail	0	2	1	
291	024	Native American	Flaked Stone	Debitage	Unidentified	-	1	0	1	
291	025	Native American	Flaked Stone	Debitage	Obsidian	-	5	0	5	Napa Valley and Franz Valley
291	026	Native American	Flaked Stone	Debitage	Obsidian - Konocti	-	1	0	1	Could be biface remnant, no diagonal ventral face
291	027	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	7	0	7	
300	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/jar	0	5	0	
300	002	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	1	0	0.4g
300	003	Activities	Archaeology	Unit Liner	Plastic	Sheeting	0	1	0	Edwards 1974-1977/Farris 1981
300	004	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
300	005	Structural	Hardware	-	Ferrous	Barbed Wire	0	1	0	
300	006	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	1	0	
300	007	Structural	Hardware	Fastener	Ferrous	Wire Nail	0	1	0	
300	008	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	3	0	3	
300	009	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	1	0	1	
307	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/jar	0	2	0	
307	002	Indefinite Use	Misc. Containers	-	Colorless Glass	Bottle/jar	0	1	0	
307	003	Indefinite Use	Indefinite	-	Colorless/Amethyst Glass	Hollow	0	1	0	Associated with 320-7
307	004	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/jar	0	1	0	
307	005	Indefinite Use	Misc. Containers	-	Amber Glass	Bottle	0	2	1	Finish
307	006	Native American	Flaked Stone	Debitage	Obsidian	-	2	0	2	
311	001	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	4	0	4	
311	002	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	1	0	1	Possible
333	001	Personal	Social Drugs - Alcohol	Container	Olive Glass	Alcoholic-beverage Bottle	0	4	0	
333	002	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/jar	0	1	0	
333	003	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	2	0	0.2g
333	004	Activities	Archaeology	Unit Liner	Plastic	Sheeting	0	1	0	Edwards 1974-1977/Farris 1981
333	005	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	5	0	5	

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Catalog No.	Group	Category	Type	Material	Description	Wh Frg	MNI	Mark?	Comments		
Unit 108, NW Quad											
284	001	Domestic	Food/Food Storage	Container	Aqua Glass	Spice Bottle	0	1	1	Glass	Rectangular. Associated with 253-2
284	002	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	12	0		
284	003	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	1	0		1.0g
284	004	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	3	0		Miscellaneous
284	005	Personal	Social Drugs - Alcohol	Container	Dark-olive Glass	Ale/Beer Bottle	0	1	0		Miscellaneous
284	006	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	1	0		
284	007	Faunal	Shell	-	Shell	Abalone	0	8	0		
284	008	Faunal	Bone	-	Bone	Bone	0	4	0		
284	009	Indefinite Use	Misc. Metal Items	-	Aluminum	Tag/Strap?	0	1	1	Other	Cut and stamped sheet metal. Diam 1/2"
284	010	Activities	Archaeology	Provenience Info	Plastic	Flagging	0	2	0		Edwards 1974-1977/Farris 1981
284	011	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0		Sample
284	012	Structural	Materials	-	-	Concrete	0	0	0		Sample
284	013	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	5	1		Head diam 3/8"
284	014	Native	Flaked Stone	Debitage	Crypto-crystalline	-	4	0	4		
284	015	Native	Flaked Stone	Debitage	Obsidian	-	2	0	2		Small flake - Napa Valley; large flake - Franz Valley?
312	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	12	0		
312	002	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	8	0		2.3g
312	003	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	2	0		Miscellaneous
312	004	Personal	Social Drugs - Alcohol	Container	Dark-olive Glass	Ale/Beer Bottle	0	2	0		Miscellaneous
312	005	Indefinite Use	Misc. Containers	-	Colorless Glass	Bottle/Jar	0	1	0		
312	006	Indefinite Use	Indefinite	-	White Improved Earthenware	Hollow	0	1	0		Body
312	007	Indefinite Use	Indefinite	-	CC Ware	Base?	0	1	0		
312	008	Faunal	Bone	-	Bone	Bone	0	1	0		
312	009	Personal	Toys	-	Glass	Marble	1	0	1		Green Cats Eye, 4 vain, diam 9/16"
312	010	Structural	Hardware	Fastener	Copper-alloy	Screw	0	1	0		
312	011	Activities	Archaeology	Provenience Info	Plastic	Flagging	0	1	0		Edwards 1974-1977/Farris 1981
312	012	Indefinite Use	Electric	-	Plastic	Electrical Tape	0	1	0		
312	013	Personal	Social Drugs - Tobacco	-	Synthetic	Cigarette Filter	0	1	1		
312	014	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0		Sample
312	015	Indefinite Use	Indefinite	-	-	Wood	0	0	0		Sample
312	016	Structural	Materials	-	-	Concrete	0	0	0		Sample
312	017	Structural	Hardware	Fastener	Ferrous	Spike	0	1	1		Segment length 6", diam 9/16 x 1/2"
312	018	Indefinite Use	Misc. Metal Items	-	Cast-iron	Wheel? Pulley?	0	1	1		Diam 3"
312	019	Structural	Hardware	Fastener	Ferrous	Spike	0	1	1		Length ~ 5 1/2", diam 5/8"
312	020	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	27	9		
312	021	Indefinite Use	Misc. Metal Items	-	Ferrous	Can?	0	5	0		
312	022	Native	Flaked Stone	Debitage	Crypto-crystalline	-	16	0	16		
312	023	Native	Flaked Stone	Debitage	Quartz	-	5	0	5		
312	024	Native	Flaked Stone	Debitage	Obsidian - Napa Valley	-	5	0	5		

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Catalog No.	Group	Category	Type	Material	Description	Wh Frg	MNI	Mark?	Comments	
324	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	3	0	
324	002	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	3	0	1.3g
324	003	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle	0	1	1	Finish, applied laid-on ring. Associated with 335-2, 295-5.
324	004	Indefinite Use	Misc. Containers	-	Green-Brown Glass	Bottle/Jar	0	1	0	Associated with 250-4
324	005	Indefinite Use	Indefinite	-	CC Ware	Indefinite	0	1	0	
324	006	Faunal	Bone	-	Bone	Bone	0	1	0	
324	007	Structural	Hardware	Fastener	Copper-alloy	Washer	0	1	1	Diam 5/16', bore diam 1/8"
324	008	Activities	Archaeology	Unit Liner	Plastic	Sheeting	0	1	0	Edwards 1974-1977/Farris 1981
324	009	Indefinite Use	Electric?	-	Plastic	Fitting?	0	1	1	Molded, circular, 3 perforations - two small slats, and one round (5/16"). Diam 7/8"
324	010	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
324	011	Structural	Hardware	Fastener	Ferrous	Cut Nail	1	10	2	
324	012	Indefinite Use	Indefinite	-	Copper-alloy	Covering/Cap?	0	1	1	Cut and folded sheet
324	013	Native American	Flaked Stone	Edge-modified Flake	Crypto-crystalline	-	1	0	1	
324	014	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley?	-	3	0	3	
324	015	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	6	0	6	3 are quartz
Unit 108, SE Quad										
280	001	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
280	002	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	1	0	1	
285	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	10	0	
285	002	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	1	0	0.6g
285	003	Personal	Social Drugs - Alcohol	Container	Dark-olive Glass	Ale/Beer Bottle	0	1	0	Miscellaneous
285	004	Indefinite Use	Misc. Containers	-	Colorless Glass	Bottle/Jar	0	1	0	
285	005	Domestic	Food Prep/Consumption	Drinking Vessel	Colorless Glass	Tumbler	0	1	0	Associated with 320-6
285	006	Indefinite Use	Indefinite	-	Colorless/Amethyst Glass	Hollow	0	1	0	Associated with 320-7
285	007	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	1	0	Body
285	008	Structural	Hardware	Fastener	Copper-alloy	Square Nail	0	1	1	Cut body, wrought diamond head. Length 1 1/4" Head diam 3/8"
285	009	Activities	Archaeology	Unit Liner	Plastic	Sheeting	0	1	0	Edwards 1974-1977/Farris 1981
285	010	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
285	011	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
285	012	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
285	013	Structural	Materials	-	-	Mortar	0	0	0	Sample
285	014	Structural	Materials	-	-	Asphalt	0	0	0	Sample
285	015	Structural	Misc. Metal Items	-	Ferrous	Hardware?	0	1	0	Triangle shape, 1/4" thick
285	016	Indefinite Use	Misc. Metal Items	-	Ferrous	Rod?	0	1	0	Curved, 3/16" diam.
285	017	Structural	Hardware	Fastener	Ferrous	Scaffold Nail	1	0	1	Length 2 1/4"
285	018	Structural	Hardware	Fastener	Ferrous	Wire Nail	0	5	1	
285	019	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	2	1	Head diam 1/4" x 5/16". Heat treated?
285	020	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	25	1	

Fort Ross Artifact Catalog - continued

Catalog No.	Group	Category	Type	Material	Description	Wh Frg	MNI	Mark?	Comments	
285	021	Indefinite Use	Misc. Metal Items	-	Ferrous	Sheet?	0	4	0	
285	022	Soil Sample	1/8" Fraction	-	Porcelain	-	0	1	1	1 white porcelain frag, water-worn, triangular shape, shaped? Length 9/16", width 5/16"
285	023	Soil Sample	1/32" Fraction	-	-	-	0	0	0	20+ seeds; 2 shell; 2 glass frag; 3 lithic; 1 melted glass
285	024	Soil Sample	1/16" Fraction	-	-	-	0	0	0	1 colorless glass frag; 3 aqua glass frag
285	025	Native American	Manuport	-	Igneous	-	1	0	1	
285	026	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	8	0	8	
285	027	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	2	0	2	
301	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	6	0	
301	002	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	2	0	Miscellaneous
301	003	Personal	Social Drugs - Alcohol	Container	Dark-olive Glass	Ale/Beer Bottle	0	1	0	Miscellaneous
301	004	Indefinite Use	Indefinite	-	White Improved Earthenware	Body	0	1	0	Body, well worn
301	005	Structural	Hardware	Fastener	Copper-alloy	Cut Nail	1	0	1	Rectangular head (1/4" x 3/8"), Length 1 3/4"
301	006	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
301	007	Indefinite Use	Misc. Metal Items	-	Ferrous	Wire	0	1	0	Barbed?
301	008	Structural	Hardware	Fastener	Ferrous	Washer	0	1	1	Square, 3/4" x 3/8", bore 1/4"
301	009	Structural	Hardware	Fastener	Ferrous	Spike	0	1	1	Oval head, diam 1/2" x 3/8"
301	010	Indefinite Use	Misc. Metal Items	-	Ferrous	Indefinite	0	2	0	
301	011	Soil Sample	1/32" Fraction	-	-	-	0	0	0	1 colorless glass; 2 chert; 1 quartz; seeds
301	012	Soil Sample	1/16" Fraction	-	-	-	0	0	0	1 quartz crystal; 1 quartz; 1 seed
301	013	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	1	0	1	
301	014	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	2	0	2	
309	001	Native American -	Indefinite	Tool	Aqua Glass	Scraper	1	0	1	Unifacially modified bottle glass scraper, possible notching
309	002	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	3	0	0.5g
309	003	Indefinite Use	Indefinite	-	White Improved Earthenware	Hollow?	0	1	0	Burnt
309	004	Activities	Archaeology	Unit Liner	Plastic	Sheeting	0	1	0	Edwards 1974-1977/Farris 1981
309	005	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
309	006	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
309	007	Structural	Materials	-	-	Concrete	0	0	0	Sample
309	008	Structural	Materials	-	-	Mortar	0	0	0	Sample
309	009	Structural	Hardware	Fastener	Ferrous	Wire Nail	1	0	1	Length 1"
309	010	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	2	2	
309	011	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	2	0	2	
309	012	Native American	Flaked Stone	Edge-modified Flake	Obsidian	-	1	0	1	Franz Valley? Modified on distal margin bifacially - distal half of flake
309	013	Native American	Flaked Stone	Edge-modified Flake	Obsidian - Napa Valley	-	1	0	1	

Fort Ross Artifact Catalog - continued

Catalog No.	Group	Category	Type	Material	Description	Wh	Frg	MNI	Mark?	Comments
310	001	Personal	Misc. Containers	-	Cobalt Glass	Bottle	0	2	0	Associated with 258-3
310	002	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/jar	0	1	0	
310	003	Undefined Use	-	-	Metled glass	Amorphous	0	1	0	
310	004	Indefinite Use	Indefinite	-	Plastic	Indefinite	0	1	0	
310	005	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
310	006	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
310	007	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	1	0	
310	008	Structural	Hardware	Fastener	Ferrous	Bolt?	0	1	0	
310	009	Indefinite Use	Misc. Metal Items	-	Ferrous	Flat	0	1	0	
310	010	Native	Flaked Stone	Debitage	Obsidian - Napa Valley	-	1	0	1	Flake with cortex
		American								
315	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/jar	0	4	0	
315	002	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	1	0	0.7g
315	003	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/jar Finish	0	1	1	Applied patent finish, bore diam 7/8"
315	004	Domestic	Food Prep/Consumption	Drinking Vessel	Porcelain	Cup	0	1	0	Mends with 313-5
315	005	Native	Flaked Stone	Debitage	Crypto-crystalline	-	1	0	1	Heat affected
		American								
315	006	Native	Flaked Stone	Debitage	Obsidian - Napa Valley	-	1	0	1	Heat affected with cortex
		American								
332	001	Personal	Social Drugs - Alcohol	Container	Olive Glass	Alcoholic-beverage Bottle	0	2	0	
332	002	Native	Flaked Stone	Debitage	Obsidian - Napa Valley	-	1	0	1	Flake with cortex
		American								
336	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/jar	0	1	0	
336	002	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
Unit 108, SW Quad										
281	001	Indefinite Use	Misc. Metal Items	-	Ferrous	Wire	0	1	0	Barbed?
281	002	Structural	Hardware	Fastener	Galvanized Ferrous	Shingle Nail	1	0	1	Length 7/8", head diam 3/16"
281	003	Native	Flaked Stone	Debitage	Crypto-crystalline	-	1	0	1	
		American								
286	001	Activities	Writing	Container	Teal Glass	Ink Bottle	0	1	0	Associated with 319-2
286	002	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	1	0	0.5g
286	003	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	2	0	Miscellaneous
286	004	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/jar	0	1	0	
286	005	Faunal	Shell	-	Shell	Olivella	0	1	0	
286	006	Activities	Firearms	Ammunition	Lead	Shot	1	0	1	Diam 1/8"
286	007	Personal	Clothing	Fastener	Ferrous	Button	0	1	1	Hollow center. Diam 3/8", thick 1/8"
286	008	Activities	Archaeology	Unit Liner	Plastic	Sheeting	0	1	0	Edwards 1974-1977/Farris 1981
286	009	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
286	010	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
286	011	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	7	1	
286	012	Structural	Hardware	Fastener	Ferrous	Wire Nail	2	0	2	Length 3 3/4", 2". Diam 3/16"
286	013	Indefinite Use	Misc. Metal Items	-	Ferrous	Sheet?	0	2	0	
286	014	Structural	Materials	-	-	Mortar	0	1	0	
286	015	Native	Flaked Stone	Debitage	Crypto-crystalline	-	5	0	5	
		American								

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Catalog No.	Group	Category	Type	Material	Description	Wh	Frg	MNI	Mark?	Comments
286	016	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	2	0	2	
308	001	Personal	Misc. Containers	-	Cobalt Glass	Bottle	0	1	0	Associated with 258-3
308	002	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/jar	0	21	0	
308	003	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	1	0	0.5g
308	004	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	2	0	Miscellaneous
308	005	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/jar	0	1	0	
308	006	Faunal	Shell	-	Shell	Abalone?	0	5	0	
308	007	Faunal	Bone	-	Bone	Tooth	0	1	0	Feral pig mandible (Left molar)
308	008	Structural	Hardware	-	Hard-rubber	Handle	1	0	1	Door or gear-shift. Molded, rounded dome shape. 2" diam, 1" thick, Bore 5/16"
308	009	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
308	010	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
308	011	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	22	5	
308	012	Indefinite Use	Misc. Metal Items	-	Ferrous	Indefinite	0	4	0	
308	013	Indefinite Use	Misc. Metal Items	-	Ferrous	Wire	0	2	0	
308	014	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	9	0	9	
308	015	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	3	0	3	
323	001	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/jar	0	5	0	
323	002	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	1	0	Miscellaneous
323	003	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
323	004	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
323	005	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	3	1	
323	006	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	7	0	7	
323	007	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	3	0	3	
Unit 109										
282	001	Indefinite Use	Misc. Beads	-	Opaque-white glass	Bead	1	0	1	Spheroid shape. Height 0.095", width 0.14", bore 0.04"
282	002	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	1	0	0.9g
282	003	Activities	Firearms	Ammunition	Lead	Shot	1	0	1	Diam 1/8"
282	004	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	1	0	1	Flake with cortex
282	005	Native American	Flaked Stone	Debitage	Obsidian - Annadel	-	1	0	1	
282	006	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	2	0	2	
289	001	Indefinite Use	Misc. Beads	-	Brown Glass	Bead	1	0	1	Spheroid shape, 0.1" x 0.14", bore 0.04"
289	002	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/jar	0	6	0	
289	003	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/jar	0	1	0	Associated with 209-4
289	004	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/jar	0	2	0	Body
289	005	Indefinite Use	Indefinite	-	Porcelain	Indefinite	0	1	0	

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Catalog No.	Group	Category	Type	Material	Description	Wh	Frg	MNI	Mark?	Comments
289	006	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	9	0	5.5g
289	007	Faunal	Shell	-	Shell	Abalone	0	1	0	
289	008	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
289	009	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
289	010	Structural	Hardware	Fastener	Ferrous	Nail?	0	1	0	
289	011	Soil Sample	1/16" Fraction	-	-	-	0	0	0	Seeds
289	012	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	3	0	3	
290	001	Activities	Writing	Container	Teal Glass	Ink Bottle	0	3	0	Associated with 319-2
290	002	Personal	Misc. Containers	-	Cobalt Glass	Bottle	0	1	0	Associated with 258-3
290	003	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	40	0	1 sided bottle.
290	004	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	7	0	1.0g
290	005	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	1	1	Finish, applied packer. Mends with 258-10.
290	006	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	2	0	Miscellaneous
290	007	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	4	0	
290	008	Indefinite Use	Indefinite	-	-	Charcoal	0	0	0	Sample
290	009	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
290	010	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	7	2	
290	011	Structural	Hardware	Fastener	Ferrous	Spike	0	1	0	Tip
290	012	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	1	0	1	
Unit 110										
287	001	Personal	Indefinite	-	Cobalt Glass	Body	0	1	0	Associated with 251-2
287	002	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	3	0	1.1g
287	003	Indefinite Use	Misc. Containers	-	Colorless Glass	Bottle/Jar	0	1	0	
287	004	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	1	0	
287	005	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	1	0	1	
288	001	Indefinite Use	Misc. Beads	-	Green Glass	Bead	1	0	1	Cylinder shape, rounded edges. Height 0.1", width 0.12", bore 0.05"
288	002	Indefinite Use	Misc. Beads	-	Opaque-white glass	Bead	1	0	1	Spheroid shape. Height 1/16", width 1/8", bore 0.035"
288	003	Indefinite Use	Misc. Beads	-	Brown Glass	Bead	1	0	1	Annular shape. Height 0.065", width .138", bore 0.055"
288	004	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	31	0	1 sided bottle.
288	005	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	4	0	2.0g
288	006	Unused Catalog Number	-	-	-	-	0	0	0	Unused entry
288	007	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle	0	1	0	Mends and associated with 258-7
288	008	Indefinite Use	Misc. Containers	-	Colorless Glass	Bottle/Jar	0	1	0	
288	009	Structural	Electric	-	Chrome plate Ferrous	Fuse Cap	0	1	1	Car fuse part? Diam 1/4" x 1/4"
288	010	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
288	011	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	8	5	Head diam 3 @ 3/8", 2 @ 1/4"
288	012	Indefinite Use	Misc. Metal Items	-	Ferrous	Coil	0	1	1	Diam 3/8"
288	013	Indefinite Use	Misc. Metal Items	-	Copper-alloy	Sheet Metal	0	2	0	

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Catalog No.	Group	Category	Type	Material	Description	Wh	Frg	MNI	Mark?	Comments
288	014	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	4	0	4	
288	015	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	3	0	3	
293	001	Activities	Writing	Container	Teal Glass	Ink Bottle	0	1	0	Associated with 319-2
293	002	Personal	Misc. Containers	-	Cobalt Glass	Bottle	0	1	0	Associated with 258-3
293	003	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	37	0	
293	004	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	3	0	0.6g
293	005	Personal	Social Drugs - Alcohol	Container	Olive Glass	Bottle	0	3	0	Miscellaneous
293	006	Indefinite Use	Misc. Containers	-	Colorless Glass	Bottle/Jar	0	3	0	
293	007	Indefinite Use	Indefinite	-	-	Wood	0	0	0	Sample
293	008	Structural	Materials	-	-	Concrete	0	0	0	Sample
293	009	Structural	Materials	-	-	Asphalt	0	0	0	Sample
293	010	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	14	9	Head diam 1 @ 7/16", 4 @ 5/16"
293	011	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	4	0	4	
293	012	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	6	0	6	
Old Magazin										
Unit 100										
200	001	Unused Catalog - Number	-	-	-	-	0	0	0	Unused entry
200	002	Unused Catalog - Number	-	-	-	-	0	0	0	Unused entry
200	003	Unused Catalog - Number	-	-	-	-	0	0	0	Unused entry
200	004	Unused Catalog - Number	-	-	-	-	0	0	0	Unused entry
200	005	Unused Catalog - Number	-	-	-	-	0	0	0	Unused entry
200	006	Indefinite Use	Indefinite	-	Aqua Glass	Flat Glass	0	14	0	5g
200	007	Indefinite Use	Indefinite	-	Pearlware	Hollow	0	2	1	Body, hand-painted, blue wide-floral, interior blue band.
200	008	Indefinite Use	Indefinite	-	White Improved Earthenware	Hollow	0	1	1	Rim.
200	009	Indefinite Use	Indefinite	-	Porcelain	Rim	0	1	1	Thin cup, saucer, bowl?, Highly weathered.
200	010	Structural	Materials	-	-	Brick	0	4	1	
200	011	Structural	Materials	-	-	Concrete	0	1	0	
200	012	Indefinite Use	Misc. Beads	-	Olive and Red Glass	Bead	1	0	1	Black heart bead, cylindrical, irregular shape. Height 0.1", width 0.138", bore 0.05"
200	013	Indefinite Use	Misc. Beads	-	Black Glass	Bead	1	0	1	Hexagonal, cylindrical shape. Height 0.342", width 0.088", bore 0.025"
200	014	Structural	Materials	-	-	Asphalt	0	2	0	Sample
200	015	Faunal	Shell	-	Shell	Red abalone	0	3	1	
200	016	Faunal	Bone	-	Bone	Bone	0	1	0	
200	017	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	1	1	Head diam 3/8"

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Catalog No.	Group	Category	Type	Material	Description	Wh	Frg	MNI	Mark?	Comments
200	018	Structural	Hardware	Fastener	Ferrous	Nut	0	1	1	Hexagonal, 9/16" diam
200	019	Structural	Hardware	Fastener	Ferrous	Scaffolding Nail	1	0	1	Length 3 1/2", Head 1/4" diam
200	020	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	6	0	Body, 1 sided
200	021	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	6	0	Body
200	022	Personal	Social Drugs - Alcohol	Container	Olive Glass	Alcoholic-beverage Bottle	0	1	0	Associated with 228-20
200	023	Personal	Social Drugs - Alcohol	Container	Olive Glass	Alcoholic-beverage Bottle	0	1	0	Body
200	024	Indefinite Use	Worked Bottle Glass?	-	Dark-olive Glass	Flake?	0	1	0	
200	025	Indefinite Use	Misc. Containers	-	Colorless/Amethyst Glass	Bottle/Jar	0	45	0	Glass Body
200	026	Indefinite Use	Misc. Containers	-	Colorless-Amethyst Glass	Bottle	0	1	1	Glass Finish
200	027	Native	Flaked Stone	Possible	Crypto-crystalline	-	2	0	2	
		American		Debitage						
200	028	Native	Flaked Stone	Debitage	Igneous	-	3	0	3	
		American								
200	029	Native	Flaked Stone	Debitage	Crypto-crystalline	-	12	0	12	
		American								
200	030	Native	Flaked Stone	Debitage	Obsidian/Crypto-crystalline	-	1	0	1	Flake with cortex
		American								
200	031	Native	Flaked Stone	Debitage	Obsidian - Napa Valley	-	8	0	8	
		American								
200	032	Native	Flaked Stone	Debitage	Obsidian - Annadel	-	1	0	1	Flake with cortex
		American								
200	033	Native	Flaked Stone	Edge-modified	Crypto-crystalline	-	1	0	1	
		American		Flake						
214	001	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	4	0	2g
214	002	Indefinite Use	Indefinite	-	Opaque Porcelain	Body	0	1	0	Miscellaneous
214	003	Structural	Materials	-	-	Brick	0	1	0	
214	004	Structural	Materials	-	-	Asphalt	0	2	0	Sample
214	005	Structural	Materials	-	Redwood	Wood	0	6	0	Sample
214	006	Faunal	Shell	-	Shell	Shell	0	1	1	Weathered
214	007	Faunal	Shell	-	Shell	Shell	0	1	0	Burnt
214	008	Indefinite Use	Misc. Metal Items	-	Aluminum	Foil	0	1	0	Edwards excavation?
214	009	Indefinite Use	Indefinite	-	Cotton	String/Yarn	0	1	0	
214	010	Indefinite Use	Misc. Metal Items	-	Ferrous	Can?	0	1	0	Associated with 227-15
214	011	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	3	0	Body
214	012	Structural	Hardware	Fastener	Ferrous	Finishing Nail	1	0	1	Length 2", 1/8" diam
214	013	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	5	0	Body
214	014	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	1	1	Base
214	015	Indefinite Use	Misc. Containers	-	Amber Glass	Bottle/Jar	0	1	0	Body
214	016	Personal	Social Drugs - Alcohol	Container	Olive Glass	Alcoholic-beverage Bottle	0	1	0	Associated with 228-20
214	017	Personal	Social Drugs - Alcohol	Container	Olive Glass	Alcoholic-beverage Bottle	0	5	0	Body
214	018	Indefinite Use	Misc. Containers	-	Colorless/Amethyst Glass	Bottle/Jar	0	8	0	Glass Body
214	019	Domestic	Food Prep/Consumption	Drinking Vessel	Colorless Glass	Tumbler	0	1	1	Pressed, paneled, conical footing
214	020	Activities	Archaeology	Unit Liner	Plastic	Sheeting	0	2	0	Edwards 1974-1977/Farris 1981
214	021	Native	Flaked Stone	Debitage	Crypto-crystalline	-	2	0	2	
		American								

Fort Ross Artifact Catalog - continued

Catalog No.	Group	Category	Type	Material	Description	Wh	Frg	MNI	Mark?	Comments
214	022	Native American	Flaked Stone	Debitage	Obsidian - Napa Valley	-	1	0	1	
215	001	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	48	0	25.5g
215	002	Indefinite Use	Indefinite	-	Porcelain	Body	0	1	1	Molded
215	003	Indefinite Use	Indefinite	-	Opaque Porcelain	Hollow	0	4	1	Body
215	004	Indefinite Use	Indefinite	-	White Improved Earthenware	Hollow	0	2	0	Associated with 228-2
215	005	Indefinite Use	Indefinite	-	White Improved Earthenware	Body	0	4	0	
215	006	Indefinite Use	Indefinite	-	White Improved Earthenware	Hollow	0	1	1	Body, burned
215	007	Indefinite Use	Indefinite	-	White Improved Earthenware	Hollow	0	1	1	Rim, molded scalloped rim with scrolling design
215	008	Indefinite Use	Indefinite	-	Earthenware	Hollow	0	1	1	Body, molded, variegated brown glaze
215	009	Domestic	Food Prep/Consumption	Tableware	White Improved Earthenware	Saucer	0	5	1	Rim, body, and base. Molded, flared rim. Mends and associated with 228-6.
215	010	Structural	Materials	-	-	Asphalt	0	1	0	Sample
215	011	Faunal	Shell	-	Shell	Red abalone	0	1	0	
215	012	Faunal	Bone	-	Bone	Bone	0	8	0	4 calcine
215	013	Personal	Clothing	Fastener	Copper-alloy	Button?	0	1	1	Circular w/ domed top, shanked? 3/4" diam.
215	014	Indefinite Use	Indefinite	-	Black Glass?	Indefinite	0	2	1	Unidentified material
215	015	Indefinite Use	Misc. Metal Items	-	Lead	Metal	0	1	0	
215	016	Personal	Clothing	Footwear	Leather	Shoe/Boot?	0	1	1	Perforated edge
215	017	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	15	0	
215	018	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/jar	0	50	0	Body, 5 sided
215	019	Domestic	Food/Food Storage	Container	Aqua Glass	Soda-water Bottle	0	1	0	Associated with 240-13
215	020	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/jar	0	1	1	Glass Sided
215	021	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/jar	0	6	0	Body
215	022	Indefinite Use	Misc. Containers	-	Amber Glass	Bottle/jar	0	12	0	Body
215	023	Personal	Misc. Containers	-	Cobalt Glass	Bottle/jar	0	10	1	Body. Associated with 228-19, 240-16
215	024	Personal	Social Drugs - Alcohol	Container	Olive Glass	Alcoholic-beverage Bottle	0	2	0	Associated with 228-20
215	025	Personal	Social Drugs - Alcohol	Container	Olive Glass	Alcoholic-beverage Bottle	0	3	0	Body
215	026	Personal	Social Drugs - Alcohol	Container	Green Glass	Alcoholic-beverage Bottle	0	1	0	Associated with 228-22
215	027	Indefinite Use	Misc. Containers	-	Colorless/Amethyst Glass	Bottle/jar	0	78	0	Glass Body
215	028	Indefinite Use	Misc. Containers	-	Colorless/Amethyst Glass	Bottle/jar	0	34	0	Glass Body
215	029	Indefinite Use	Misc. Containers	-	Colorless-Amethyst Glass	Bottle/jar	0	1	0	Glass Body
215	030	Domestic	Food Prep/Consumption	Tableware	Colorless-Amethyst Glass	Sterware	0	2	0	Glass Mends and associated with 227-28
215	031	Domestic	Food Prep/Consumption	Drinking Vessel	Colorless Glass	Tumbler	0	1	0	Associated with 228-24
215	032	Personal	Social Drugs - Alcohol	Container	Amethyst Glass	Alcoholic-beverage Bottle	0	1	1	Glass Tooled/applied Brandy finish
215	033	Indefinite Use	Misc. Containers	-	Colorless Glass	Jar	0	2	1	Flat bead finish with cap seat.
215	034	Native American	Flaked Stone	Debitage	Obsidian	-	1	0	1	
215	035	Native American	Flaked Stone	Debitage	Quartz	-	1	0	1	
215	036	Native American	Flaked Stone	Retouched Flake	Obsidian - Franz Valley	-	1	0	1	
226	001	Structural	Materials	-	-	Asphalt	0	1	0	Sample
226	002	Structural	Hardware	Fastener	Ferrous	Wire Nail	1	0	1	Length 2", head diam 1/4"

Fort Ross Artifact Catalog - continued

Catalog No.	Group	Category	Type	Material	Description	Wh Frg	MNI	Mark?	Comments	
226	003	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/jar	0	2	0	Body
226	004	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/jar	0	1	1	Base
226	005	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/jar	0	1	0	Body
226	006	Personal	Social Drugs - Alcohol	Container	Olive Glass	Alcoholic-beverage Bottle	0	1	0	Body
226	007	Indefinite Use	Misc. Containers	-	Colorless-Amethyst Glass	Bottle/jar	0	2	0	Glass Body
226	008	Indefinite Use	Misc. Containers	-	Colorless Glass	Bottle/jar	0	1	0	Glass Body
226	009	Native American	Flaked Stone	Debitage	Obsidian	-	2	0	2	1 flake possibly Konocti, 2 Annadale or Napa Valley
227	001	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	15	0	13.5g
227	002	Indefinite Use	Indefinite	-	White Improved Earthenware	Body	0	4	0	
227	003	Indefinite Use	Indefinite	-	White Improved Earthenware	Body	0	1	0	
227	004	Indefinite Use	Indefinite	-	White Improved Earthenware	Hollow	0	1	1	Rim
227	005	Domestic	Food Prep/Consumption	Tableware	White Improved Earthenware	Hollow	0	1	1	Molded, flared cup/bowl rim, raised dots with lattice-like design below
227	006	Domestic	Food Prep/Consumption	Tableware	Pearlware	Hollow	0	1	0	Associated with 228-5
227	007	Indefinite Use	Indefinite	-	White Improved Earthenware	Body	0	1	0	
227	008	Structural	Materials	-	Redwood	Wood	0	0	0	Sample
227	009	Domestic	Food Prep/Heating	-	Cast-iron	Stove lid	0	2	1	Other 7" long.
227	010	Faunal	Shell	-	Shell	Shell	0	3	0	
227	011	Personal	Clothing	Fastener	Porcelain	Button	0	1	1	4 hole, sew through, 17 lines
227	012	Activities	Firearms	Ammunition	Lead	Bullet	1	0	0	MNI to casing
227	013	Indefinite Use	Misc. Metal Items	-	Copper-alloy	Sheet Metal	0	1	1	Cut sheet metal. Length 1 1/8"
227	014	Structural	Hardware	Fastener	Copper-alloy	Washer	1	0	1	1/2" diam
227	015	Indefinite Use	Misc. Metal Items	-	Ferrous	Can?	0	1	1	Folded/crimped sheet metal. Associated with 214-10.
227	016	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	13	4	Two at 5/16" diam, Eleven at 3/8" diam
227	017	Undefined Use	-	-	Ferrous	Amorphous	0	1	0	Possible rod?
227	018	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/jar	0	9	0	Body, 2 sided
227	019	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle	0	1	0	Associated with 228-15
227	020	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/jar	0	1	1	Glass Base, 3" diam.
227	021	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/jar	0	1	1	Base 3" diam
227	022	Indefinite Use	Misc. Containers	-	Amber Glass	Bottle/jar	0	3	1	Base and body
227	023	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/jar	0	7	0	Body
227	024	Personal	Social Drugs - Alcohol	Container	Olive Glass	Alcoholic-beverage Bottle	0	3	0	Body
227	025	Indefinite Use	Misc. Containers	-	Colorless/Amethyst Glass	Bottle/jar	0	47	0	Glass Body
227	026	Indefinite Use	Misc. Containers	-	Colorless/Opaque-white Glass	Bottle/jar	0	1	0	Associated with 268-1
227	027	Indefinite Use	Misc. Containers	-	Colorless-Amethyst Glass	Bottle/jar	0	1	1	Glass Finish, continuous thread
227	028	Domestic	Food Prep/Consumption	Tableware	Colorless-Amethyst Glass	Stemware	0	1	1	Glass Base. Mends and associated with 240-19, 215-30
227	029	Domestic	Food Prep/Consumption	Drinking Vessel	Colorless Glass	Tumbler?	0	1	1	Rim
227	030	Personal	Social Drugs - Alcohol	Container	Amethyst Glass	Flask	0	1	0	Glass Possible pumpkin-seed. Base, 1 3/16" x 2 1/16"
227	031	Native American	Flaked Stone	Debitage	Crypto-crystalline	-	2	0	2	
228	001	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	18	0	10g

Fort Ross Artifact Catalog - continued

Catalog No.	Group	Category	Type	Material	Description	Wh	Frg	MNI	Mark?	Comments
228	002	Indefinite Use	Indefinite	-	White Improved Earthenware	Hollow	0	1	1	Body. Associated with 215-4
228	003	Indefinite Use	Indefinite	-	White Improved Earthenware	Body	0	1	0	
228	004	Domestic	Food Prep/Consumption	Tableware	White Improved Earthenware	Saucer	0	1	1	Rim, 6 1/2" diam.
228	005	Domestic	Food Prep/Consumption	Tableware	Pearlware	Hollow	0	1	1	Cup/bowl rim, hand-painted blue wide-floral design, blue rim. Associated with 227-6.
228	006	Domestic	Food Prep/Consumption	Tableware	White Improved Earthenware	Saucer	0	3	0	Mends and associated with 215-9
228	007	Structural	Materials	-	Redwood	Wood	0	2	0	Knott
228	008	Activities	Firearms	Ammunition	Copper-alloy	Shell Casing	0	1	1	Other .22 caliber, rim fired
228	009	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	5	0	Body
228	010	Indefinite Use	Misc. Beads	-	Peach glass	Bead	1	0	1	Round shape. Height 0.13", width 0.143", bore 0.054"
228	011	Structural	Hardware	Fastener	Ferrous	Spike?	0	1	0	Body
228	012	Personal	Footwear	-	Ferrous	Shoe/Boot Tack	1	0	0	Possible shoe tack. Length 1/2", Head 1/8" diam
228	013	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	20	0	Body
228	014	Domestic	Food/Food Storage	Container	Aqua Glass	Soda-water Bottle	0	1	0	Associated with 240-13
228	015	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle	0	1	1	Applied bead finish. Associated with 227-19
228	016	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	1	1	Applied bead finish
228	017	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	1	1	Glass Body
228	018	Indefinite Use	Misc. Containers	-	Amber Glass	Bottle/Jar	0	4	0	Body
228	019	Personal	Misc. Containers	-	Cobalt Glass	Bottle/Jar	0	1	0	Associated with 215-23.
228	020	Personal	Social Drugs - Alcohol	Container	Olive Glass	Alcoholic-beverage Bottle	0	1	1	Associated with 215-24, 200-22, 214-16
228	021	Personal	Social Drugs - Alcohol	Container	Olive Glass	Alcoholic-beverage Bottle	0	1	0	Body
228	022	Personal	Social Drugs - Alcohol	Container	Green Glass	Alcoholic-beverage Bottle	0	1	1	Body. Associated with 215-26
228	023	Indefinite Use	Misc. Containers	-	Colorless/Amethyst Glass	Bottle/Jar	0	35	0	Glass Body
228	024	Domestic	Food Prep/Consumption	Drinking Vessel	Colorless Glass	Tumbler	0	1	1	Glass Rim, anchor closure. Associated with 215-31.
228	025	Indefinite Use	Misc. Containers	-	Amethyst Glass	Bottle/Jar	0	2	1	Glass Base
228	026	Indefinite Use	Indefinite	-	Colorless Glass	Hollow	0	1	1	Rim, thin
228	027	Personal	Social Drugs - Alcohol	Container	Amethyst Glass	Flask	0	2	0	Glass Base 1 1/8" x ?
240	001	Unused Catalog - Number	-	-	-	-	0	0	0	Unused entry
240	002	Unused Catalog - Number	-	-	-	-	0	0	0	Unused entry
240	003	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	22	0	13g
240	004	Indefinite Use	Indefinite	-	White Improved Earthenware	Body	0	2	0	
240	005	Indefinite Use	Indefinite	-	White Improved Earthenware	Base	0	1	1	Ceramic
240	006	Structural	Materials	-	Redwood	Wood	0	0	0	Sample
240	007	Faunal	Shell	-	Shell	Red abalone	0	20	0	
240	008	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	19	6	Head diam: one 3/16", one 1/4", two 5/16", two 3/8"
240	009	Structural	Hardware	Fastener	Ferrous	Spike?	0	1	1	Head, 5/8" x 3/8"
240	010	Unused Catalog - Number	-	-	-	-	0	0	0	Unused entry
240	011	Indefinite Use	Worked Bottle Glass?	-	Aqua Glass	-	0	1	1	Fragment has attributes of flaking
240	012	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	38	0	Body

Fort Ross Artifact Catalog - continued

Catalog No.	Group	Category	Type	Material	Description	Wh	Frg	MNI	Mark?	Comments
240	013	Domestic	Food/Food Storage	Container	Aqua Glass	Soda-water Bottle	0	5	1	Mends and associated with 215-19, 228-14
240	014	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle	0	2	1	Body, recessed panel
240	015	Indefinite Use	Misc. Containers	-	Brown Glass	Bottle/Jar	0	28	0	Body
240	016	Personal	Misc. Containers	-	Cobalt Glass	Bottle/Jar	0	3	0	Associated with 215-23.
240	017	Indefinite Use	Misc. Containers	-	Green Glass	Bottle/Jar	0	1	0	Body
240	018	Indefinite Use	Misc. Containers	-	Colorless/Amethyst Glass	Bottle/Jar	0	129	0	Glass Body
240	019	Domestic	Food Prep/Consumption	Tableware	Colorless-Amethyst Glass	Stemware	0	1	0	Glass Mends and associated with 227-28
240	020	Indefinite Use	Misc. Containers	-	Colorless-Amethyst Glass	Bottle/Jar	0	1	1	Glass Base
260	001	Unused Catalog - Number	-	-	-	-	0	0	0	Unused entry
260	002	Indefinite Use	Indefinite	-	White Improved Earthenware	Body	0	1	0	
260	003	Faunal	Bone	-	Bone	Bone	0	1	0	Calcine
260	004	Indefinite Use	Misc. Metal Items	-	Lead	Metal	0	1	1	
260	005	Indefinite Use	Misc. Metal Items	-	Lead	Metal	0	1	0	
260	006	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	1	0	
260	007	Indefinite Use	Misc. Metal Items	-	Ferrous	Sheet Metal	0	1	0	
260	008	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	5	0	Body
260	009	Indefinite Use	Misc. Containers	-	Amber Glass	Bottle/Jar	0	2	0	Body
260	010	Indefinite Use	Misc. Containers	-	Colorless/Amethyst Glass	Bottle/Jar	0	14	0	Glass Body
260	011	Indefinite Use	Misc. Containers	-	Colorless-Amethyst Glass	Bottle/Jar	0	1	0	Glass Associated with 263-4
260	012	Domestic	Indefinite	Tableware?	Colorless-Amethyst Glass	Hollow	0	1	1	Glass Pressed, geometric/fan design
260	013	Indefinite Use	Misc. Containers	-	Amethyst Glass	Jar	0	1	1	Glass Finish, bead with interior cap seat
263	001	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	1	0	
263	002	Personal	Social Drugs - Alcohol	Container	Olive Glass	Alcoholic-beverage Bottle	0	2	0	Body
263	003	Indefinite Use	Misc. Containers	-	Colorless-Amethyst Glass	Bottle/Jar	0	8	0	Glass Body
263	004	Indefinite Use	Misc. Containers	-	Colorless-Amethyst Glass	Bottle/Jar	0	1	0	Glass Body. Inset circular design.
264	001	Indefinite Use	Indefinite	-	Glass	Flat Glass	0	4	0	1.0g
264	002	Structural	Hardware	Fastener	Ferrous	Cut Nail	0	1	1	5/16" diam
264	003	Indefinite Use	Misc. Containers	-	Colorless/Amethyst Glass	Bottle/Jar	0	4	0	Glass Body
265	001	Unused Catalog - Number	-	-	-	-	0	0	0	Unused entry
265	002	Domestic	Food Prep/Consumption	Tableware	White Improved Earthenware	Saucer	0	1	1	Ceramic Base, molded, cup ring
265	003	Structural	Materials	-	-	Brick	0	1	1	
265	004	Structural	Materials	-	Redwood	Wood	0	1	0	Sample
265	005	Indefinite Use	Misc. Containers	-	Aqua Glass	Bottle/Jar	0	0	0	Body, 1 sided
265	006	Indefinite Use	Misc. Containers	-	Colorless-Amethyst Glass	Bottle/Jar	0	6	0	Glass Body

Feature Concordance, Fort Ross Old Magazin

Cut Concordance

Cut	Type	Cut Description
100	Archaeological Trench	South end, Old Magazin, 1 x 4 m trench N44-48/ W43-44
101	Archaeological Trench	South end, New Magazin, 2 x 2 m trench N65-67/ W45-47
102	Archaeological Trench	South end of New Magazin, 2 x 1 m trench N65-67/ W42-43
103	Archaeological Trench	South end of New Magazin, 2 x 2 m trench N67-69/ W47-49
104	Archaeological Trench	South end of New Magazin, 2 x 2 m trench N67-69/ W41-43 105
105	Archaeological Trench	South end of New Magazin, 2 x 2 m trench N67-69/ W40-41
106	Old Magazin Foundation	In Cut 100, rock cobble and dirt foundation
107	Sleeper Trench Feature	In Cut 102, rock cobble and dirt trench
108	Archaeological Trench	South end of New Magazin, 2 x 2 m trench N67-69/ W45-47
109	Archaeological Trench	South end of New Magazin, 2 x 2 m trench N67-69/ W39.5-40; excavated to investigate dressed stone step
110	Archaeological Trench	South end of New Magazin, 2 x 2 m trench N66-67/ W40-41; corresponds to NE corner of Edwards Unit 4. Reopened to verify grid placement.

Fill Concordance

Fill	Type	In Cut	Fill Description
200	Level (Sod)	100	Sod removal
201	Rock Fill	100	Unexcavated foundation of Old Magazin
202	Level (Sod)	101, NW 1/4	Sod removal
203	Level (Sod)	101, NE 1/4	Sod removal
204	Level (Sod)	101, SW 1/4	Sod removal
205	Level (Sod)	101, SE 1/4	Sod removal
206	Level (Sod)	102, N 1/2	Sod removal
207	Level 0-10 cmbs	101, NW 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
208	Level (Sod)	102, S 1/2	Sod removal
209	Level 0-10 cmbs	102, N 1/2	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
210	Level 0-10 cmbs	101, SW 1/4	Context not excavated
211	Level 0-10 cmbs	101, NE 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
212	Level 0-10 cmbs	102, S 1/2	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
213	Rock Fill	100	Unexcavated foundation of Old Magazin
214	Rock Fill	100	Unexcavated foundation of Old Magazin
215	Rock Fill	100	Unexcavated foundation of Old Magazin
216	Level (Sod)	103, NW 1/4	Sod removal
217	Level (Sod)	103, NE 1/4	Sod removal
218	Level (Sod)	103, SW 1/4	Sod removal
219	Level (Sod)	103, SE 1/4	Sod removal
220	Level 10-20 cmbs	101, NE 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
221	Level 10-14 cmbs	101 NW	Arbitrary level, abandoned with grid realignment

Fill Concordance - continued

Fill	Type	In Cut	Fill Description
222*	Level 10-20 cmbs	102, N 1/2	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
223	Level 0-10 cmbs	101, SE 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
224	Level 10-20 cmbs	101, SE 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
225	Level 10-20 cmbs	100	Unexcavated arbitrary level
226	Rock Fill	100	Old Magazin foundation
227	Rock Fill	100	Old Magazin foundation
228	Rock Fill	100	Old Magazin foundation
229	Rock Fill	101, SW 1/4	Old Magazin foundation
230	Rock Fill	101, SW 1/4	Old Magazin foundation
231	Level (Sod)	102, N 1/2	Sod removal
232	Level (Sod)	102, N 1/2	Sod removal
233	Level (Sod)	103, NW 1/4	Sod removal
234	Level (Sod)	103, NE 1/4	Sod removal
235	Level 0-10 cmbs	103, NW 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
236	Level 10-20 cmbs	103, NW 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
237	Level 0-10 cmbs	103, SE 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
238	Level 20-30 cmbs	103, NW 1/4	Silty clay loam; 5yr 2.5/1 wet, 7.5yr 3/2 dry
239	Level 14-40 cmbs	101, SW 1/4	Silty clay loam; 5yr 2.5/1 wet, 7.5yr 3/2 dry
240	Rock Fill	100	Old Magazin foundation
241	Level (Sod)	101, NE 1/4	Sod removal
242	Level 0-10 cmbs	101, NE 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
243	Level (Sod)	104, NW 1/4	Sod removal
244	Level (Sod)	104, NE 1/4	Sod removal
245	Level (Sod)	104, SW 1/4	Sod removal
246	Level (Sod)	104, SE 1/4	Sod removal
247	Level (Sod)	105, N 1/2	Sod removal
248	Level (Sod)	105, S 1/2	Sod removal
249	Level 14-20 cmbs	101, NW 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
250	Level 10-20 cmbs	101, NE 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
251	Level 0-10 cmbs	105, N 1/2	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
252	Level 0-10 cmbs	105, S 1/2	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
253	Level 10-20 cmbs	103, SE 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
254	Level (Sod)	101, NW 1/4	Sod removal
255	Level 20-30 cmbs	103, SE 1/4	Silty clay loam; 5yr 2.5/1 wet, 7.5yr 3/2 dry
256	Wood	101, NE 1/4	Redwood sleeper fragments
257	Level 0-10 cmbs	101, NW 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
258	Level 10-20 cmbs	105, N 1/2	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
259	Level 10-20 cmbs	105, S 1/2	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
260	Rock Fill	100	Old Magazin foundation
261	Level 20-30 cm	101, NE 1/4	Silty clay loam; 5yr 2.5/1 wet, 7.5yr 3/2 dry
262	Level 10-20 cmbs	101, NW 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
263	Rock Fill	100	Old Magazin foundation
264	Collapsed Rock Fill and Dirt	100	Outside edge of foundation with dirt and rock
265	Collapsed Rock Fill and Dirt	100	Outside edge of foundation with dirt and rock

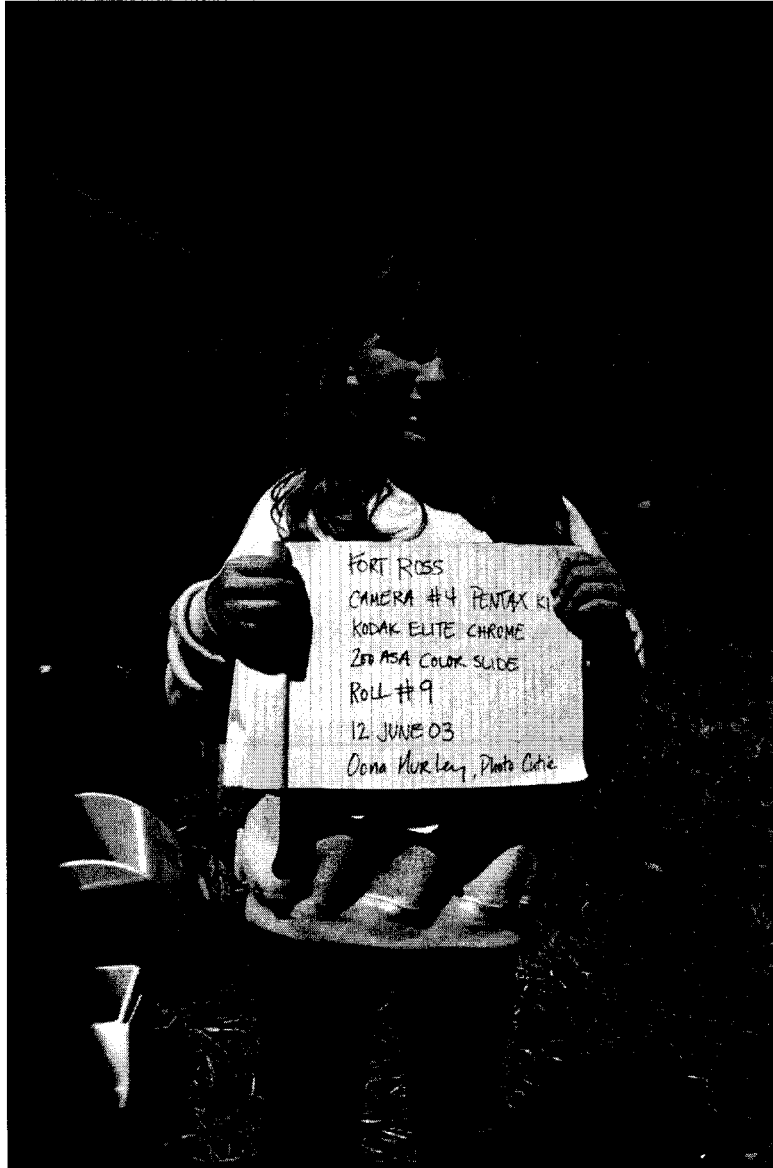
Fill Concordance - continued

Fill	Type	In Cut	Fill Description
266	Rock Fill	103, SE 1/4	Old Magazin foundation
267	Redwood Timber	103, NW 1/4	Redwood sleeper fragments
268	Level 30-40 cmbs	101, NE 1/4	Silty clay loam; 5yr 2.5/1 wet, 7.5yr 3/2 dry
269	Sleeper Trench Fill	102, N 1/2	Compact Silty clay loam; 5yr 2.5/1 wet, 7.5yr 3/2 dry
270	Fill Adjacent to Sleeper Trench Fill	103 NW 1/4	Loose silty clay loam; 5yr 2.5/1 wet, 7.5yr 3/2 dry
271	Sleeper Trench Fill	103 NW 1/4	Compact Silty clay loam; 5yr 2.5/1 wet, 7.5yr 3/2 dry
272	Wood Fragments	105, N 1/2	Redwood sleeper fragments
273	Level 40-50 cmbs	103, SE 1/4	Clay loam, 10 yr 3/2 wet, 7.5 yr 4/3 dry
274	Level 0-10 cmbs	103, SW 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
275	Level 20-30 cmbs	101, NW 1/4	Silty clay loam; 5yr 2.5/1 wet, 7.5yr 3/2 dry
276	Level 0-10 cmbs	103, NE 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
277	Level 10-20 cmbs	103, NE 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
278	Level (Sod)	108, NE 1/4	Sod removal
279	Level (Sod)	108, NW 1/4	Sod removal
280	Level (Sod)	108, SE 1/4	Sod removal
281	Level (Sod)	108, SW 1/4	Sod removal
282	Level (Sod)	109	Sod removal
283	Level 0-10 cmbs	108, NE 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
284	Level 0-10 cmbs	108, NW 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
285	Level 0-10 cmbs	108, SE 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
286	Level 0-10 cmbs	108, SW 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
287	Level (Sod)	110	Sod removal
288	Level 0-10 cmbs	110	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
289	Level 0-10 cmbs	109	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
290	Level 10-20 cmbs	109	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
291	Level 10-20 cmbs	108, NE 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
292	Level 0-10 cmbs	110	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
293	Level 10-20 cmbs	110	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
294	Level 10-20 cmbs	103, SW 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
295	Level 0-10 cmbs	104, NE 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
296	Level 0-10 cmbs	104, NW 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
297	Level 0-10 cmbs	104, SW 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
298	Level 0-10 cmbs	104, SE 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
299	Level 20-30 cmbs	103, NE 1/4	Silty clay loam; 5yr 2.5/1 wet, 7.5yr 3/2 dry
300	Level 20-30 cmbs	108, NE 1/4	Silty clay loam; 5yr 2.5/1 wet, 7.5yr 3/2 dry
301	Level 10-20 cmbs	108, SE 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
302	Rocky Fill	100	Old Magazin foundation
303	Level 10-20 cmbs	104, NW 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
304	Level 10-20 cmbs	104, NE 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
305	Level 10-20 cmbs	104, SE 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
306	Level 10-20 cmbs	104, SW 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
307	Level 20-30 cmbs	108, NE 1/4	Silty clay loam; 5yr 2.5/1 wet, 7.5yr 3/2 dry

Fill Concordance - continued

Fill	Type	In Cut	Fill Description
308	Level 10-20 cmbs	108, SW 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
309	Level 20-30 cmbs	108, SE 1/4	Silty clay loam; 5yr 2.5/1 wet, 7.5yr 3/2 dry
310	Level 20-30 cmbs	108, SE 1/4	Silty clay loam; 5yr 2.5/1 wet, 7.5yr 3/2 dry
311	Level 30-40 cmbs	108, NE 1/4	Silty clay loam; 5yr 2.5/1 wet, 7.5yr 3/2 dry
312	Level 10-20 cmbs	108, NW 1/4	Silty loam; 10YR 2/1 wet, 10yr 4/2 dry
313	Level 20-30 cmbs	103, SW 1/4	Silty clay loam; 5yr 2.5/1 wet, 7.5yr 3/2 dry
314	Level 30-40 cmbs	103, NE 1/4	Silty clay loam; 5yr 2.5/1 wet, 7.5yr 3/2 dry
315	Level 30-40 cmbs	108, SE 1/4	Silty clay loam; 5yr 2.5/1 wet, 7.5yr 3/2 dry
316	Level 20-30 cmbs	105, N 1/2	Silty clay loam; 5yr 2.5/1 wet, 7.5yr 3/2 dry
317	Level 20-30 cmbs	105, S 1/2	Silty clay loam; 5yr 2.5/1 wet, 7.5yr 3/2 dry
318	VOID		
319	Level 20-30 cmbs	104, NE 1/4	Silty clay loam; 5yr 2.5/1 wet, 7.5yr 3/2 dry
320	Level 20-30 cmbs	104, SE 1/4	Silty clay loam; 5yr 2.5/1 wet, 7.5yr 3/2 dry
321	Level 20-30 cmbs	104, SW 1/4	Silty clay loam; 5yr 2.5/1 wet, 7.5yr 3/2 dry
322	Fill Outside of Foundation Trench	103, SW 1/4	Clay loam, 10 yr 3/2 wet, 7.5 yr 4/3 dry
323	Level 20-30 cmbs	108, SW 1/4	Silty clay loam; 5yr 2.5/1 wet, 7.5yr 3/2 dry
324	Level 20-30 cmbs	108, NW 1/4	Silty clay loam; 5yr 2.5/1 wet, 7.5yr 3/2 dry
325	Level 30-40 cmbs	103, SW 1/4	Silty clay loam; 5yr 2.5/1 wet, 7.5yr 3/2 dry
326	VOID		
327	Level 30-40 cmbs	103, NW 1/4	Silty clay loam; 5yr 2.5/1 wet, 7.5yr 3/2 dry
328	Level 40-50 cmbs	103, SW 1/4	Silty clay loam; 5yr 2.5/1 wet, 7.5yr 3/2 dry
329	Level 28-50 cmbs	103, SW 1/4	Bulk removal-- no soil analysis
330	Rodent Fill	103, SW 1/4	jumbled silty loam, sandy loam, and organics
331	Rodent Fill	104, NW 1/4	jumbled silty loam, sandy loam, and organics
332	Rodent Fill	108, SE 1/4	jumbled silty loam, sandy loam, and organics
333	Rodent Fill	108, NE 1/4	jumbled silty loam, sandy loam, and organics
334	Rodent Fill	103, SW 1/4	jumbled silty loam, sandy loam, and organics
335	Rodent Fill	105, N 1/2	jumbled silty loam, sandy loam, and organics
336	Rodent Fill	108, SE 1/4	jumbled silty loam, sandy loam, and organics
337	Rodent Fill	104, NE 1/4	jumbled silty loam, sandy loam, and organics

*Note: context #s 200-222 represent levels excavated in an improperly aligned grid. The grid was reset 60 cm to the north. Context numbers assigned after 222 represent levels excavated on the properly aligned grid.



APPENDIX C
Education Outreach
and New Articles

APPENDIX C: EDUCATION OUTREACH

Fort Ross is one of the most popular and widely visited state parks in California. During the excavation, school groups were coming in weekly to spend the day, and often the night, at the fort, experiencing life in the stockade much as the Russians did, in period garb and cooking traditional foods that might have been served during the settlement's heyday. During a period of note writing, one of the authors overheard one of the young promyshlenniks tell his co-fire tender, "this is the sort of trip you remember the rest of your life".

During the summer of 2002, co-author Mike Newland taught a 2-week intensive summer course for gifted 6-10th grade students through Sonoma State University's Excel Program, funded through the Extended Education Department. As a former Interpretive Outreach Coordinator for the ASC, Mike worked the students hard for the class—some said it was the most difficult class they had ever had—and all of the students had to do artifact identification and illustration, draw stratigraphic profiles, read and analyze ethnographic records, and review and interpret the work of other archaeologists. The class concluded with a "professional" symposium, in which the students presented their findings in front of their peers, their parents, and other, professional archaeologists who dropped by. Mike was extremely impressed with the students, and began considering the idea of giving the students a chance to do the real thing.

The Fort Ross Fur Magazin excavation presented that opportunity. After arranging the go-ahead with California Department of Parks and Recreation, Mike contacted the parents of the ten students through the Extended Ed. Of the ten, seven volunteered to come out. An overnight stay was planned for the second weekend of the project, and the students came out with their parents, and worked hard clearing vegetation and excavating the top levels of several units. The volunteers were fed BBQ and spaghetti for dinner and pancakes for breakfast, saw a slide show of previous excavations at the magazin, and were taken on a tour of sites down in the cove.

The volunteer weekend turned out to provide some important data for the study, partially because the free labor gave us the opportunity to explore a few research questions that had popped up during the study but would have otherwise gone unexplored (see Figure C1). The first of these questions was the possibility that a bedrock outcrop might have been used as a step into the magazin. The excavation revealed that the bedrock did appear to be dressed and is right along the edge of the New Magazin, and would have been in an appropriate spot to serve either as a step or as part of the foundation. A second important exploration was the opening of a small portion of a previously excavated unit. As discussed in Chapter 5, there was some difficulty realigning the grid. Opening up the previously excavated unit allowed us to confirm that we were on the right track and that our grid was aligned properly, as there were several features that had been backfilled which were nevertheless visible in slides from the 1975-1977 excavations. The rest of the volunteers jumped in and continued on units started on the preceding day by the professional archaeologists, many of whom stayed on to help with the volunteer efforts.

The press was also contacted in the hopes of getting some good publicity for DPR and the Excel program, and several articles resulted, including the three presented here: a San Francisco Chronicle article by Cicero Estrella; a Bodega Bay Navigator article by Dan Murley, and a Sonoma Insights article by Jean Wasp. The timing was excellent, coming right before the 2003 Excel Program sign-ups.



Figure C1. Volunteers Denise Frazier (left) and Beatrice Cox (right) excavating a dressed stone threshold of the New Warehouse.

In addition, our excavation corresponded to an event held by the Russian Consulate of San Francisco (see Figure C2). We were generously invited to listen to some of the world-class musicians and dancers present at the event, and we took several of the consulate staff on a tour of the excavation. We will be sending the consulate a copy of our final report as a thank-you gift for their hospitality and good will.

We feel that this is as complete a public outreach experience as one could prepare—student involvement, family participation, hands-on training and education, and dissemination of the research questions and our field findings to a wider public. The results of the fieldwork will also be presented at the 2003 Society for Historical Archaeology and Society for California Archaeology meetings; articles will also be submitted to the Fort Ross Interpretive Association News Letter and local newspapers. The authors firmly believe that interpretive outreach should be a component of any major archaeological study, and thank DPR for supporting our efforts to bring archaeology to the public and vice versa.



Figure C2. Russian family in traditional costume attending event sponsored by the Russian Embassy, San Francisco.