

NIAQLA REVISITED: ARCHAEOLOGY AND ETHNOHISTORY OF A CHUMASH VILLAGE ON SANTA ROSA ISLAND, CALIFORNIA

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During the 1940s, '50s, and '60s, Phil Orr excavated portions of at least 10 houses and two cemeteries at the Chumash village of Niaqla (SRI-2), making it one of the most intensively excavated sites on the Channel Islands. Orr focused primarily on the burial and cemetery data he gathered, with comparatively limited attention given to the household materials recovered during his research. Recent reanalysis of Orr's collections from SRI-2, along with the excavation of three units during 2001, provides new insight into the chronology and organization of this important Chumash village.

INTRODUCTION

Since the late 1800s, the archaeology of California's Channel Islands has attracted the attention of antiquarians and archaeologists from around the world. Like many areas of North America, the Channel Islands played an important role in the 19th- and 20th-century antiquities trade, resulting in numerous archaeological collections that have largely gone unanalyzed (Blackburn and Hudson 1990). During the 1920s and '30s, archaeology in the Santa Barbara Channel region became more formalized with the research of D.B. Rogers and others. Working from the late 1940s through the 1960s, Phil Orr, Rogers' successor at the Santa Barbara Museum of Natural History (SBMNH), conducted numerous excavations on Santa Rosa Island. While the research of Rogers (1929), Orr (1968), and other early scholars was summarized in two monographs and several smaller publications, the extensive excavations they performed have left thousands of artifacts and pages of notes in museums unreported.

A number of archaeologists working in California and beyond have recently demonstrated the importance of museum collections in elucidating regional cultural developments and broad anthropological research issues (e.g., Broughton 1999; Erlandson 1991a, 1991b; Gamble 2002; Johnson et al. 2000; Rick 2001; Vellanoweth 2001). In this paper, I present preliminary data from my analysis of a large assemblage of artifacts excavated by Phil Orr at the Chumash village of Niaqla (SRI-2; Figure 1). SRI-2 is one of the most extensively excavated Chumash villages on the Channel Islands, but due

in part to Orr's focus on the earliest occupants of Santa Rosa, most of the SRI-2 collections remain poorly documented (but see Orr 1968). I provide detailed descriptions of Orr's archaeological research at SRI-2, summarize my own recent field and laboratory research, and offer new insight on the chronology of this important site. I begin with a discussion of Santa Rosa Island environments and current perspectives on Niaqla to contextualize my analysis.

ENVIRONMENTAL AND CULTURAL CONTEXT

Covering an area roughly 217 km², Santa Rosa is the second largest of the Northern Channel Islands. It is situated roughly 44 km off the mainland coast, about 5 km east of San Miguel and 9 km west of Santa Cruz. With a number of relatively well-watered streams, mountain peaks extending to roughly 508 m in height, and a number of distinct vegetation communities, Santa Rosa contains some of the greatest biological and environmental diversity on the Islands. It is currently dominated by introduced grasses, but it also contains unique coastal beach and dune vegetation, island chaparral, oak and riparian woodland, Bishop pine forest, and an island-endemic species of Torrey pine (*Pinus torreyana insularis*; Schoenherr et al. 1999:278).

Located on a marine terrace on the northwest coast of Santa Rosa, SRI-2 is a large village and cemetery complex dated to roughly the last 2,500 years, and ethnohistoric records suggest that it is the probable location of the historic Chumash village of Niaqla (also *Nyakla*, *Niakla*; Johnson 1999; Kennett 1998:219). Orr (1968:189)

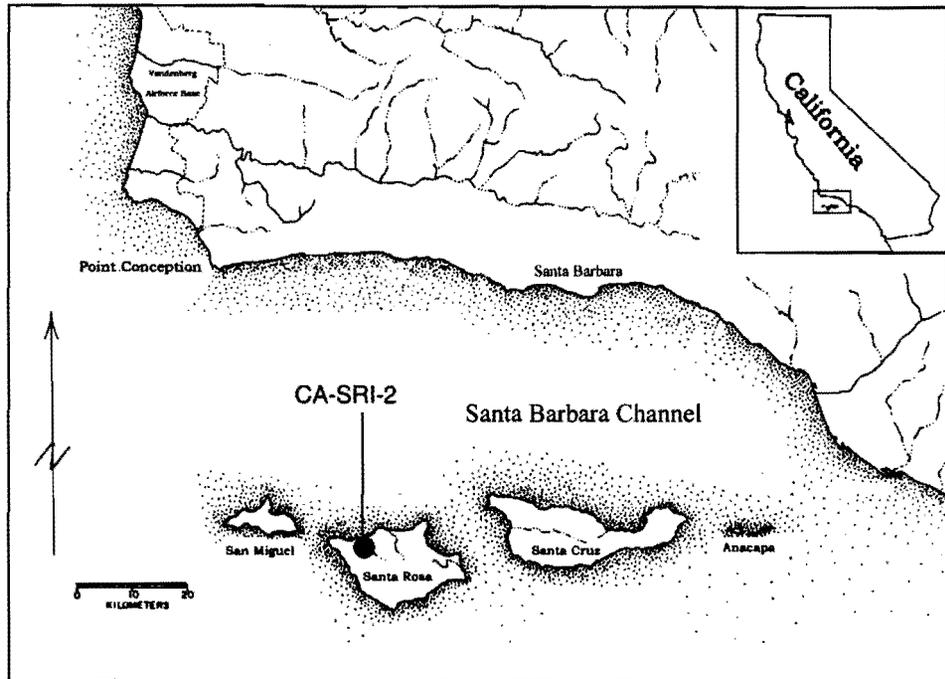


Figure 1. SRI-2 and the Santa Barbara Channel.

suggested that SRI-2 may contain as many as 70 housepits, making it one of the largest Chumash villages on the Channel Islands. Kennett estimated that only 15 of these were visible in 1998, and I recently identified roughly 20 housepits on the site surface. The estimate of 15-20 pits is more consistent with the size of other housepit villages in the area (Arnold 2001).

Determining the location of Niaqla and other historic villages has long been of interest to scholars. Information provided by Juan Estevan Pico in the 1840s indicates that there were at least seven historic villages on Santa Rosa, although mission records indicate there may have been as many as nine (Johnson 1999:56). Kroeber (1925) plotted the locations of these villages, indicating that Niaqla was located on the northwest coast of Santa Rosa. Orr (1951a:222) also argued that SRI-2 was the probable location of Niaqla, noting that he had recovered a "few glass beads" from the site. However, Orr (1968:191; see also Orr 1949:110) later suggested otherwise: "Radiocarbon dates indicate that the Skull Gulch site was inhabited from about 2000 BP to 400 BP. This latter date would indicate that the village may have been abandoned about the time of Cabrillo's visit to the island in 1542, but if it was occupied

later than that, no glass or metal found its way into the portions we have excavated."

In fact, Orr's collection from SRI-2 housed at the SBMNH contains a number of historic artifacts, including 12 glass beads, one broken metal disk, numerous needle-drilled shell beads, a few fragments of earthenware pottery that are probably Mission-era, and five fluorite beads that Graesch (2001:270) argues may have been obtained during the Historic period. It appears that during the 15-20 years Orr's excavation at SRI-2 and his publishing of his book, he failed to recollect the presence of these glass beads and other historic artifacts.

King (1990:41) analyzed portions of grave goods from nine burials at SRI-2, six from Cemetery A and three from Cemetery B. Relying on some of the site chronology established by Orr, King placed these artifacts into phase L1b (possibly L1c as well) of his Late period. These data suggest an occupation of A.D. 1250 to 1500, or just prior to European contact. King and Orr's chronologies, however, are based on uncalibrated radiocarbon dates that provide an inaccurate picture of the site chronology.

Recent work by Johnson (1982, 1999), Kennett (1998:219-220), and others has determined that Pico's and Kroeber's locational information was fairly accurate and that SRI-2 is probably Niaqla. Based on extensive analysis of ethnohistoric records, particularly Mission-register data, Johnson (1999:64) suggested that Niaqla's occupation was likely in decline by the Mission period, perhaps occupied by only a few families. Mission records suggest only 10 people who resided at Niaqla were baptized, and many of these people were apparently older in age. While current evidence points to SRI-2 as the location of Niaqla, the extent of this Historic-period occupation remains unclear.

Until recently, the only published radiocarbon dates for the site were obtained by primarily by Orr from wood or charcoal, with the possibility that "old wood" may have obscured much of the site chronology. Cybulski (1980) obtained a radiocarbon date for the site from human bone collagen, which also proved difficult for calibration (Walker et al. 2002). Preliminary artifact analysis by Kennett (1998: 220) documented nine glass beads and eight needle-drilled wall beads—two prominent markers of Historic-period sites—in Whale House, which Orr (1968) argued was roughly 1,200 years old. Recent re-dating of the site complex by Rick, Kennett, and Erlandson is creating a much clearer picture of the SRI-2 chronology, including evidence of a more extensive Historic-period occupation. My forthcoming analysis of several hundred artifacts from 10 trenches excavated by Orr and additional ¹⁴C dating will provide further details on the SRI-2 chronology. Preliminary data presented below illustrate some of the vagaries associated with ethnohistoric data and the need to use archaeology and ethnohistory as complements to one another (see Arnold 1990; Johnson 2000; Kennett et al. 2000; Raab 2000).

PHIL ORR AND CA-SRI-2

The following reconstruction of Orr's research is based on my analysis of his collections, photographs, field and lab notes, maps, and publications housed at the SBMNH. Orr's notes for the site are generally in good condition, but often provide incomplete details, and Orr himself cautioned to watch for errors and contradictions. I discovered several of these—most of which were

minor—during my analysis and will note these discrepancies when pertinent. A particular problem concerns a dearth of provenience information, with most of his household excavations, except Whale House, lacking any depth or other locational information besides the house they came from. Orr's techniques are also outdated and problematic, including much of his trenching done using his "jeep dozer" to blade through sites at roughly 1-inch intervals. However, he used 1/8-inch screens during some of the excavation, did much of the burial excavations and some of the house excavations by hand, and obtained at least seven radiocarbon dates from the site deposits (Table 1). Despite the flaws in Orr's techniques, the data he gathered constitute one of the largest available artifact assemblages from a single site on the Channel Islands. It remains up to present and future generations of archaeologists to make sure these collections do not go unreported.

According to Orr's notes and brief research reports (Orr 1949, 1951b, and 1952), he worked at the site over roughly 15 seasons between 1947 and 1952, and periodically visited the site into the 1960s. Orr divided Niaqla into three primary sections: Section I is the eastern portion of the site containing housepits; Section II also contains housepits and is located on the west side of the gulch; and Section III is defined as a knoll on the south side of the site. A map of Orr's excavation units also lists Section IV on the far eastern site margin, but apparently no research was conducted in this area.

His research at Niaqla occurred in three main phases focused on various portions of the site. These include excavation of Cemetery A during 1947 and 1948 (Section III); excavation of houses 1, 2, and 3 and trenches 2, 3, and 4 in 1949 (Section I and II); excavation of Cemetery B, Big Trench, and houses 4-10 during 1952 (Section II); and some additional research in 1950-51. These dates are the best possible estimates using his research notes, but in some cases multiple dates are listed for the same project.

Estimates from Orr's notes indicate that he dug at least 500 m³ at the site, of which only about 50 m³ (10%) were screened. Most of the area that was not screened was exhumed during the course of his excavation of the "Big Trench" (8 x 150 feet) in Section II, which was mainly a prospecting

Table 1. Radiocarbon Chronology for Niaqla.^A

Lab Number	Material	Provenience	Uncorrected ¹⁴ C Age	¹³ C/ ¹² C Adjusted Age	1 Sigma Calibrated Age Range (cal AD/BC)
Beta-158147	Black abalone	Unit 1: 63 cmbd (R)	170 ± 70	600 ± 70	AD 1690 (1820) 1950
Beta-158148	California mussel	Unit 1: 14 cmbd (R)	310 ± 80	740 ± 80	AD 1690 (1820) 1950
Beta 158146	California mussel	Unit 2: 12 cmbd (R)	420 ± 70	850 ± 70	AD 1630 (1680) 1720
UCLA-0134	Charcoal	Hearth, 56cm	330 ± 50	330 ± 50	AD 1480 (1570) 1640 ^B
Beta 120072	<i>Olivella biplicata</i>	Cem B, Burial 92	580 ± 60	1010 ± 60	AD 1460 (1510) 1620
OS-33373	California mussel	Unit 2: 60-61 cmbd (R)	--	1020 ± 35	AD 1470 (1500) 1540
UCLA-0104	Wood	House 1	400 ± 80	400 ± 80	AD 1430 (1470) 1630
S-1286	Human bone collagen	Burial 11, long bone	865 ± 65	865 ± 65	AD 1330 (1410) 1440
UCLA-0102	Seeds	Burial 13	600 ± 70	600 ± 70	AD 1300 (1360) 1410 ^B
UCLA-0178	<i>Olivella biplicata</i>	Tr. 4B, Level 2, Cem A	900 ± 100	1330 ± 100	AD 1210 (1300) 1390
OS-32373	Marine shell	Seacliff: 50-60 cm (K)	--	1420 ± 40	AD 1170 (1230) 1280
OS-32372	Marine shell	Unit 2: 20-30 cm (K)	--	1490 ± 30	AD 1070 (1160) 1210
Beta-158145	California mussel	Unit 2: 120 cmbd (R)	1190 ± 80	1620 ± 80	AD 920 (1020) 1070
UCLA-0103	Wood	Postholes, House 3	1230 ± 60	1230 ± 60	AD 690 (780) 890
UCLA-0135	California mussel	Midden over Cem A	1820 ± 90	2250 ± 90	AD 250 (370) 460
CT-038	Marine vegetation	Trench 4, 30 inches	1860 ± 340	2290 ± 340	BC 80 (AD 330) AD 680

^A All dates were calibrated using Calib 4.3 (Stuiver and Reimer 1993, 2000) and applying a ΔR of 225 ± 35 years for all shell samples (Kennett et al. 1997). Beta-158147 is just beyond the calibration range of Calib 4.3. The calibrated age range provided for Beta-158147 is the same as Beta-158148. ¹³C/¹²C ratios were either determined by the radiocarbon labs, or an average of +430 years was applied (Erlandson 1988). K indicates units excavated by D. Kennett and R denotes units excavated by T. Rick. The human bone date was calibrated using 50% terrestrial and 50% marine carbon, applying a ΔR of 225 ± 35 years (see also Walker et al. 2002).

^B Samples contain multiple intercepts. The average is provided.

trench that he used to search for burials. Unfortunately, the limited use of screens indicates that small artifacts are greatly underrepresented in the artifact assemblage—including glass beads. Orr (1968:195) recovered more than 64,000 shell artifacts (most of which were *Olivella* beads) from Cemetery A alone, indicating that tens of thousands of beads and other artifacts were probably lost in the areas that were not screened.

Due to Orr's focus on burial data, his household collections have never been adequately analyzed or published. In fact, the only data that have ever been published specifically on his household research are summarized in fewer than 10 pages of text (Orr 1968: 210-218; see also Gamble 1995). My analysis of Orr's household work indicates that there are more than 200 pages of notes and nearly 1,000 artifacts associated with these excavations.

On a related note, the cemetery data generated by Orr have attracted the attention of

scholars because of the possibility that two syphilitic individuals were buried at SRI-2 before European contact (Cybulski 1980). This raised questions about the origins of this disease and its possible role in Chumash population collapse (Erlandson and Bartoy 1995; Walker et al. 2002). Erlandson recently obtained a radiocarbon date for *Olivella* bead detritus from this cemetery that suggests its use about the time of Cabrillo's 1542-3 expedition to the Channel Islands (see Walker et al. 2002). While my analysis is not focused on the cemetery data, further dating, limited testing, and collections study may help determine whether protohistoric diseases impacted the site occupants.

MUSEUM ANALYSIS AND FIELDWORK DURING 2001

My analysis of Orr's collections and notes was focused on his household excavations. Orr (1968: 191, 212) excavated at least 10 houses at Niaqla (houses 1-10), indicating that all of houses 1 and 3 (Turtle and Whale House) were excavated, and

about half of houses 7 and 9 were excavated to uncover Cemetery B. Extensive artifact collections are present for houses 1 and 3, with smaller assemblages for houses 2 and 4-10, but no materials associated with the excavation of House 9 were located. The details of Orr's excavations in all of the houses, except for 1 and 3, did not make it into the final pages of his book. His portrayal of houses 1 and 3 provides interesting depictions of Chumash household organization and structure and also illustrates the complexity of excavating houses (rebuilding episodes, etc.). While Orr did not always use screens, artifacts and profile sketches are available from most of the houses. Forthcoming details of this research should be extremely valuable for understanding Chumash community and household dynamics.

To supplement my analysis of Orr's museum collections, I conducted additional fieldwork at Niaqla during the spring and summer of 2001 and plan to return in the summer of 2002. My research was focused on excavating units that would provide representative samples of faunal remains and small artifacts that are generally underrepresented in Orr's excavations. This research is also part of a project sponsored by the National Park Service and focused on understanding the impact of marine and stream erosion on the site. Two units were excavated in intact deposits, including a 1-x-0.5-m unit (Unit 2/3) in the midden berm next to House 3, and a 0.5-x-0.5-m unit (Unit 1) in the berm adjacent to House 1. These units produced a diverse assemblage of artifacts and faunal remains, and Unit 2/3 produced a unique, woven sea grass artifact that is quite similar to one recovered by Orr.

Radiocarbon dating of these two units suggest that they are roughly comparable in time to houses 1 and 3 dated by Orr, but also indicate occupation during the Protohistoric or Historic periods (refer to Table 1). Discrepancies between these dates probably result from Orr's dating of wood posts that may have been "old wood." My redating of Unit 2/3 near House 3 also indicates the presence of a multi-component deposit from the late Middle period to the Protohistoric period (A.D. 1020 to 1680). Orr (1968) argued that this house dated to about 1200 RYBP (A.D. 780).

DISCUSSION AND CONCLUSION

Recent museum analysis and fieldwork at SRI-2 are helping to document the rich cultural history of the Chumash peoples who visited and lived at Niaqla. This preliminary review of my ongoing SRI-2 project provides important details about the chronology and organization of this important village complex. Radiocarbon dating and artifact analysis suggest that the site's Historic occupation may have been more extensive than previously recognized. At least five radiocarbon dates from different portions of the site have calibrated age ranges extending into the Protohistoric or Historic periods (Figure 2). As stated previously, the presence of several glass beads, a metal disk, earthenware pottery, and numerous needle-drilled *Olivella* wall beads attests to a fairly sizable assemblage of historic-era artifacts. Orr's excavation techniques, which rarely included screens and never 1/16-inch mesh, would have greatly underestimated glass beads and other small historic artifacts.

Orr's (1968:191) comments about the site chronology in *Prehistory of Santa Rosa Island* also helped to obscure the age of the site, as he clearly stated that no historic artifacts were recovered, and that the site likely dated before the A.D. 1542 arrival of Cabrillo. His statements in earlier publications, however, suggest that SRI-2 was Niaqla. These ambiguous statements, along with Mission records of a small number of baptisms for Niaqla's inhabitants, led to the reasonable assumption that the site was probably in decline during the Historic period (Johnson 1999), like many Chumash villages in the area, as people were being ravaged by introduced disease epidemics and other aspects of colonial oppression. The ethnohistoric data, however, are not in total congruence with the archaeological data. My preliminary survey suggests that at least three houses (1, 3, and 7) have Historic-period components, indicating that the village may have had a more substantial historic occupation than previously recognized. This includes Protohistoric or Historic-period radiocarbon dates and artifacts located on both sides of the gulch (sections I and II). Since only 16 radiocarbon dates have been obtained from the site deposits, including dates from just two of the houses, it is likely that other portions of the site also date to the Historic period. Future radiocarbon dating and artifact

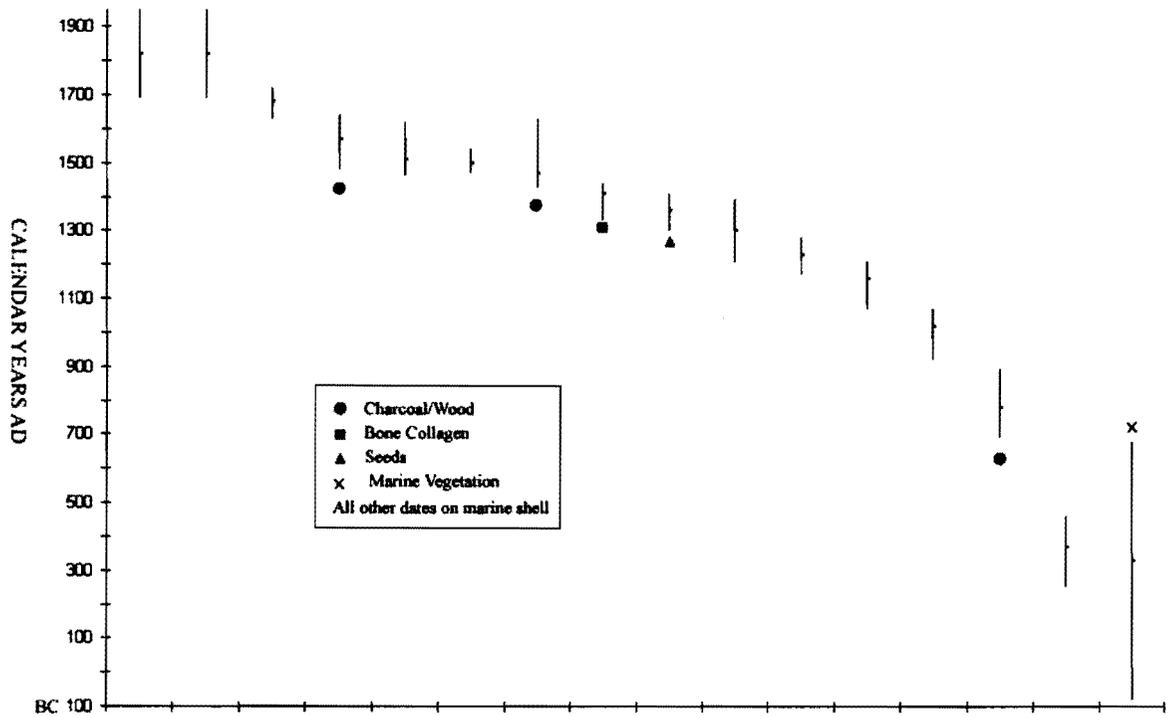


Figure 2. Distribution of Calibrated ¹⁴C Dates (1 sigma) from Niaqla (see Table 1).

analysis should help determine the extent of this Historic-period occupation and provide further information on the chronology and culture history of this important village complex.

My recent research at Niaqla offers a testament to the value of analyzing museum collections from excavations conducted over the last century or so. While the data gathered by Orr and others are often fragmentary and not of the caliber we would acquire today, they nonetheless provide extremely important and valuable information that can elucidate aspects of the human past. Ultimately, it is our ethical responsibility to analyze the vast museum collections housed around the world. I am delighted to see that many archaeologists in California and beyond are joining in this endeavor.

Notes

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