

## Historic Chumash Settlement on Eastern Santa Cruz Island, Southern California

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*Chumash consultants in the late nineteenth and early twentieth century named 10 historic villages on Santa Cruz Island, the largest of the Northern Channel Islands. Locational information for many of these villages is clear and archaeological sites with historic components substantiate their existence. Swaxil, reportedly the largest village on the Northern Channel Islands, was associated with Scorpion Anchorage on the eastern end of the island. Its existence has eluded archaeological detection and led to speculation that the historic locational information for this important village was incorrect. The authors recently recovered historic artifacts from archaeological deposits at the mouth of Scorpion Anchorage, substantiating the ethnohistoric claims of Swaxil's existence at this location. Furthermore, it is argued that the two archaeological sites at Smugglers Cove and Smugglers Point, located to the southeast of Scorpion Anchorage, are the remnants of Nanawani, the other village name associated with eastern Santa Cruz Island.*

**A**T the time of European contact (A.D. 1542), native peoples in the Santa Barbara Channel region lived in relatively large, permanent villages on the Northern Channel Islands, mainland coast, and interior (Johnson 1988; Gamble 1991; Arnold 1992). The largest population centers were on the mainland coast, but aboriginal populations on Santa Cruz, Santa Rosa, and San Miguel islands approached 3,000 people (Johnson 1982). Although the possible effects of Old World diseases introduced during the earliest Spanish exploration are still being debated (Johnson 1982; Walker and Johnson 1992, 1994; Erlandson and Bartoy 1995; Preston 1996), Chumash populations clearly declined and settlements started to disappear after missions were established in the central part of the Santa Barbara Channel region beginning with Mission San Buenaventura in 1782 (Johnson 1989; Walker and Johnson 1994).

The Island Chumash were missionized rela-

tively late compared to their contemporaries on the mainland coast and interior. The first islanders were baptized at mainland missions as early as 1783, but the vast majority of island people came to the missions between 1814 and 1816 (Johnson 1982). The last recorded island baptisms occurred in 1822. Rapid migration of islanders to mainland missions between 1814 and 1816 appears to have been driven by economic and social instabilities related to depopulation, active recruitment by missionaries, collapse of cross-channel exchange, and perturbations in marine and terrestrial environments (Johnson 1982; Larson et al. 1994).

Building upon previous work by Kroeber (1925), Brown (1967), and King (1975), as well as more recent studies by Johnson (1982, 1993), Arnold (1990), and McLendon and Johnson (1999), this article presents an evaluation of the archaeological evidence for historic settlements

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on eastern Santa Cruz Island. Until recently, eastern Santa Cruz Island was privately owned and inaccessible to archaeologists and other field scientists. However, the National Park Service recently purchased the property, which is now available for study. Two historic village names have been associated with the eastern end of the island: *Nanawani* and *Swaxil*. Ethnohistoric records indicate that *Nanawani* was a medium-sized Chumash village located on the eastern point of the island. It is generally associated with Historic Period archaeological deposits in the Smugglers Cove area (Johnson 1982; Arnold 1990).

The location of *Swaxil*, reportedly the largest village on the Northern Channel Islands, has been debated. Based on ethnohistoric accounts for settlement locations, Johnson (1982) originally placed the village at Scorpion Anchorage (CA-SCrI-423, -507). On the basis of archaeological field reconnaissance at Scorpion Anchorage and Smugglers Cove, Arnold (1990) suggested that *Swaxil* was located at Smugglers Cove (CA-SCrI-504 and -505)<sup>1</sup> and *Nanawani* at nearby Smugglers Point (CA-SCrI-506). Arnold (1990) placed *Swaxil* at Smugglers Cove based primarily on the absence of Historic Period material at Scorpion Anchorage and the impressive historic component at Smugglers Cove described by Olson (MS) in 1928 (also see Hoover 1971; Arnold 1990). This article documents the existence of historic material at Scorpion Anchorage (CA-SCrI-423) and the implications of this discovery for the distribution of historic Chumash settlements on eastern Santa Cruz Island.

#### HISTORIC SETTLEMENT ON SANTA CRUZ ISLAND

Much of the information regarding the locations and names of historic Chumash villages on the Northern Channel Islands was provided by Juan Estevan Pico (Heizer 1955; McLendon and Johnson 1999) and Fernando Librado (Harrington 1913; Johnson 1982; Arnold 1990). Pico's

information about island settlement originated from Santa Cruz Islanders living at Mission San Buenaventura in the late 1800s, while Librado, who moved away from San Buenaventura when he was a teenager, appears to have had less direct knowledge about where island villages had been situated (Johnson 1982). In general, mission register and archaeological data tend to support Pico's statements about island settlement locations (Johnson 1982).

Ten village names have been identified in mission records for Santa Cruz Island (Fig. 1). Of these, seven have been identified with a relative degree of certainty (Johnson 1982, 1993, Arnold 1990). The locations of *L'alale*, *Swaxil*, and *Nanawani* are less certain. Johnson (1982, 1993) placed the small village of *L'alale* in the vicinity of East Diablo Point on the north shore of the island, possibly CA-SCrI-436 (Cueva Valdez). Arnold (1990:117, citing a personal communication with J. Johnson) also associated *L'alale* with CA-SCrI-436; however, no Historic Period artifacts have been identified at the site. Johnson (1999) has recently suggested Fry's Harbor as another possible location for *L'alale*, but twentieth-century quarrying activities may have obscured the record in this area. The locations of *Swaxil* and *Nanawani* on eastern Santa Cruz Island are also questionable. Below, the ethnohistoric and archaeological data for these settlements are described.

#### SETTLEMENTS ON EASTERN SANTA CRUZ ISLAND

Pico and Librado associated two historic village names with eastern Santa Cruz Island: *Swaxil* and *Nanawani*. Baptismal records at Missions San Buenaventura and Santa Barbara substantiate the existence of these two villages. Their geographic position on the eastern end of the island is supported by patterns of intermarriage with people from nearby villages (Johnson 1982, 1993). Pico placed *Swaxil* at the eastern end of the island (*a la punta del este*), and Libra-

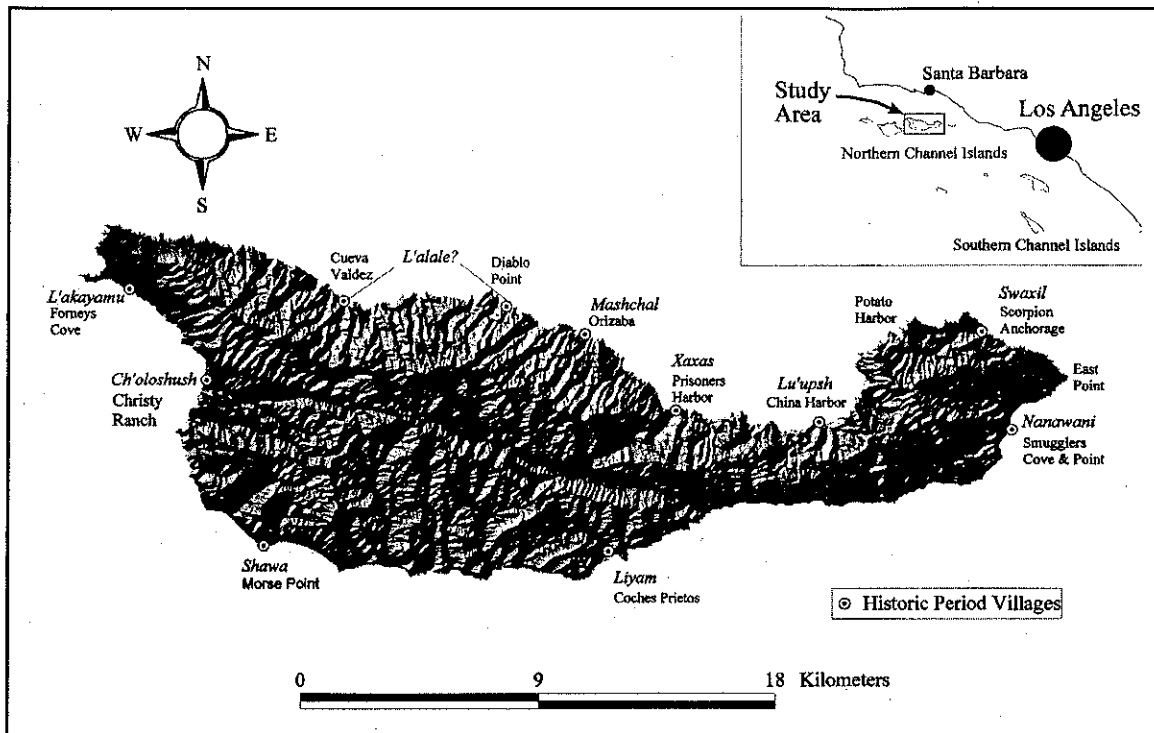


Fig. 1. Proposed distribution of Chumash villages on Santa Cruz Island.

do, whose mother was from this village, placed it more specifically at Scorpion Anchorage (Johnson 1999). Librado also visited Scorpion Anchorage when he worked as a sheep shearer for the ranching operation on the island. Pico placed the village of *Nanawani* between *Liyam* and *Swaxil* on the eastern point of the island, east of *Swaxil* (*masaleste*) (Heizer 1955; Johnson 1982).

Two hundred and five baptisms are reported from *Swaxil*, the largest number of baptisms from a single village on the Northern Channel Islands. A mission census of island village populations in 1804 listed 145 adults at *Swaxil* (Tapis 1805) and, based on a formula for reconstructed population decline, it has been estimated that 262 adults lived at the site in 1782 (Johnson 1982). One of the four named chiefs on Santa Cruz Island during the Historic Period was also from *Swaxil*. *Nanawani* was significantly smaller than *Swaxil* and moderate in size by island standards. Johnson (1999) documented 61 people from *Nanawani* in baptismal records at Mission San

Buenaventura and one from Mission Santa Bárbara. According to marriage register data, seven intervillage marriages were tabulated between *Swaxil* and *Nanawani* (Johnson 1982, 1993).

Based on ethnohistoric accounts and Olson's (MS) description of a remnant midden deposit at the mouth of the drainage, Johnson (1982) originally associated *Swaxil* with Scorpion Anchorage. Olson (MS) did not mention historic artifacts at this site complex, but did describe artifacts that clearly dated to the Late Prehistoric Period. Johnson (1982) hypothesized that a majority of the site had been destroyed by coastal erosion, flooding, and historic disturbances (e.g., bulldozing) associated with the ranch complex. Johnson (1982, 1993) placed *Nanawani* in the Smugglers Cove area, which is associated with two archaeological sites (CA-SCrI-504, -505) containing clear evidence for historic occupation (Olson MS; Schumacher 1875; Hoover 1971).

In 1990, Jeanne Arnold visited eastern Santa Cruz Island to document the locations of *Nana-*

*wani* and *Swaxil* (Arnold 1990). Her investigation was limited because of a complicated joint ownership agreement between the National Park Service and Francis Gherini, the former part owner (Gherini 1997). Nevertheless, Arnold (1990) visited both Smugglers Cove and Scorpion Anchorage, documenting Historic Period artifacts at Smugglers Point (CA-SCrI-506). She also documented substantial Middle and Late period components at Smugglers Cove, but did not identify historic artifacts at that location. Arnold (1990) did not find historic artifacts at Scorpion Anchorage, but documented Late Middle and Late period artifacts on the southeast side of the drainage (CA-SCrI-507). Based on the absence of historic artifacts at the mouth of Scorpion Anchorage, Olson's (MS) account of house depressions and glass trade beads at Smugglers Cove, and a clear Historic Period component at Smugglers Point, Arnold (1990) placed *Swaxil* at Smugglers Cove and *Nanawani* at nearby Smugglers Point.

#### CANDIDATES FOR HISTORIC VILLAGES ON EASTERN SANTA CRUZ ISLAND

The best archaeological indicators of Historic Chumash occupation on the Northern Channel Islands are glass trade beads and metal tools (e.g., scissors, needles, knives). All of these artifacts were introduced in relatively large quantities by the Spanish during the Mission Period (A.D. 1782 to 1825) and were important trade items throughout Chumash territory. Needle-drilled *Olivella* disk beads were also produced on the islands during the Mission Period and are excellent indicators of historic occupation (King 1990). Historic Period materials are often found at sites with distinct Late Middle and Late period artifact assemblages, suggesting some continuity in residential communities starting as early as A.D. 700 (Kennett 1998). Shell beads and the associated microblade/drill technology used to produce them are the most chronologically sensitive Late Pre-

historic Period artifact types. *Olivella* wall beads and trapezoidal microblades/cores dominate Late Middle Period (A.D. 900 to 1250) artifact assemblages. These artifact types were produced until historic contact, but prepared triangular microblades and callus cup beads dominate Late Period (A.D. 1250 to 1782) artifact assemblages (Arnold 1987).

Previous research indicates that the Scorpion Anchorage and Smugglers Cove drainages were the primary loci for Late Prehistoric Period occupation on the eastern end of the island (Olson MS; Schumacher 1875; Hoover 1971; Arnold 1990; Kennett 1997). In an attempt to solidify the locations of *Swaxil* and *Nanawani*, the authors revisited all the known archaeological sites in the Smugglers Cove area and conducted the first systematic archaeological work at the mouth of Scorpion Anchorage.

#### Scorpion Anchorage

Scorpion Anchorage is located on the northeast coast of Santa Cruz Island, east of Potato Harbor (Fig. 1). The cobble beach lining this small cove is oriented north-south, sheltered from the prevailing northwesterly winds that pound the coast throughout much of the year. Relatively steep canyon walls frame a flat, broad floodplain and a remnant marsh/estuary that may have been more prominent in the past. The Scorpion drainage basin is relatively large, flowing from the southwest and emptying near the center of the anchorage. The historic ranch complex sits on the northwestern bank of the creek, approximately 150 meters from the beach. Two coastal midden sites have been recorded at the mouth of the canyon, CA-SCrI-423 and -507. Road construction and river channel maintenance associated with the ranching operation have heavily impacted these two archaeological deposits, and periodic flooding and coastal erosion have also had a devastating effect.

**CA-SCrI-423.** CA-SCrI-423 is a large, multicomponent site on the northeast side of Scopi-

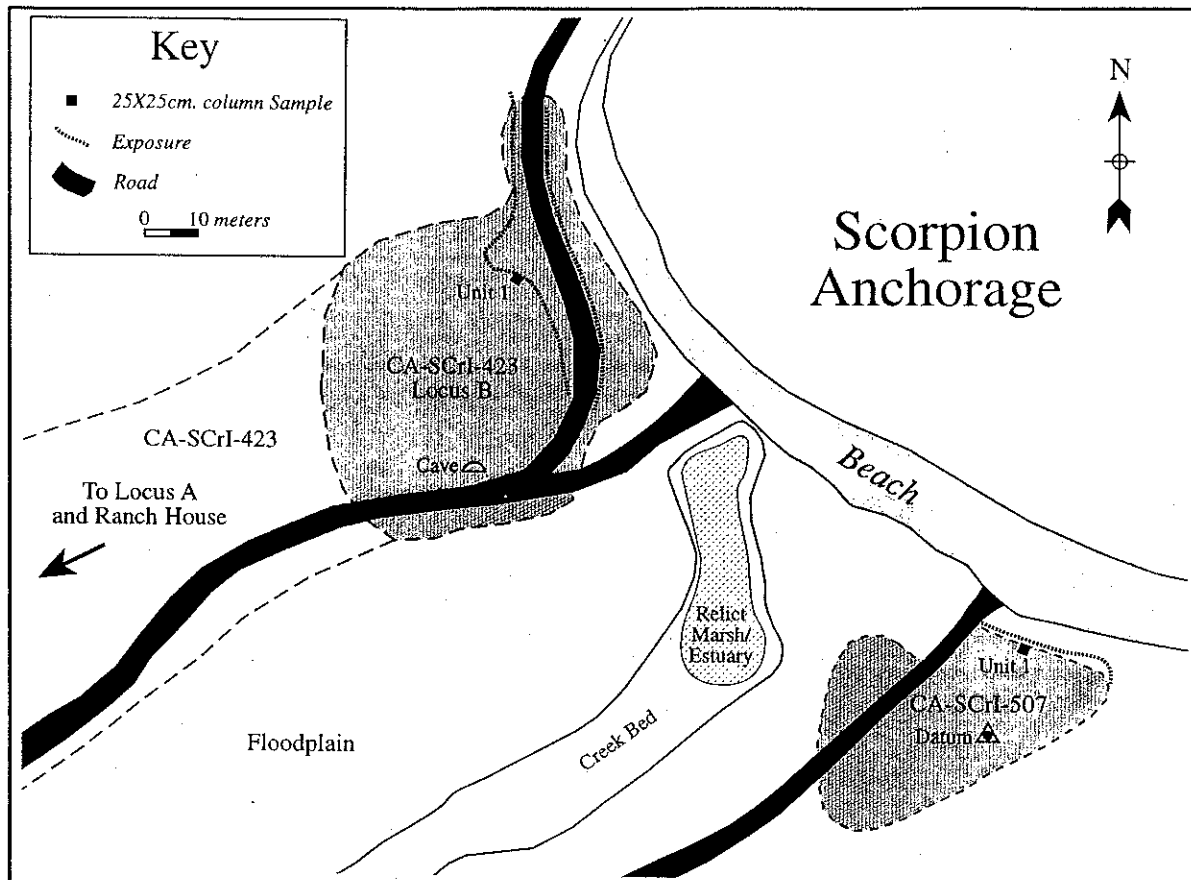


Fig. 2. Archaeological sites at Scorpion Anchorage. CA-SCrI-423 is the primary locus of Historic Period Chumash occupation at this location.

on Anchorage (Fig. 2). The site extends from the mouth of the drainage along the northern bank of the creek ca. 0.5 km. past the ranch complex. Shell is scattered across this area and several caves and rockshelters exist in the volcanic formations on the north side of the drainage. One small cave shows evidence of prehistoric use, while the others were used historically for storing cheese and wine. Two small patches of intact midden remain at the site, one in the vicinity of the historic ranch complex (Locus A) and one on a small bench just above the mouth of the creek (Locus B).

In 1982, Wilcoxon and Johnson (MS) surveyed the location of a proposed abalone farm near the Scorpion Ranch complex. They reported the presence of a shell midden and lithic scat-

ter approximately 122 m. west of the beach at Scorpion and 15 m. east of the historic two-story adobe building. Flakes and cores of Monterey chert were noted on the surface of the site, but chronologically sensitive artifacts were not recovered. Wilcoxon and Johnson's (MS) work was limited to the area being impacted, but they indicated that the midden was an extension of deposits evident behind the historic adobe building. Today, only a scatter of shell and lithic debitage occurs where they surveyed, but a large midden exposure is evident behind the historic adobe (Locus A). No diagnostic artifacts were found at this location, but radiocarbon dates from the exposed profile suggest occupation during the Early Middle Period (Table 1).

The best evidence for historic Chumash occu-

Table 1  
RADIOCARBON DATES FROM ARCHAEOLOGICAL DEPOSITS  
ON EASTERN SANTA CRUZ ISLAND<sup>a</sup>

| Sample No.      | Provenience                   | Lab No.     | Radiocarbon Age B.P. | <sup>13</sup> C/ <sup>12</sup> C | Calendar Age (B.C./A.D.) <sup>b</sup> | Phase <sup>c</sup> |
|-----------------|-------------------------------|-------------|----------------------|----------------------------------|---------------------------------------|--------------------|
| SCrI-423-SCOR-C | Locus A, 60 cmbs <sup>d</sup> | Beta-102798 | 1,650 ± 60           | 2.1 (450)                        | A.D. 445 (550) 635                    | M2                 |
| SCrI-423-SCOR-B | Locus A, 150 cmbs             | Beta-102797 | 2,170 ± 70           | 2.4 (450)                        | B.C. 165 (55) A.D.                    | M1                 |
| SCrI-423-SCOR-A | Locus A, 210 cmbs             | Beta-102796 | 2,350 ± 90           | 0.9 (430)                        | B.C. 380 (295) 130                    | M1                 |
| SCrI-506-A1     | SE exposure, 60 cmbs          | Beta-107348 | 1,090 ± 60           | 0.0 (410)                        | A.D. 1040 (1116)                      | M4                 |
| SCrI-507-A1     | Unit 1, 10-20 cmbs            | Beta-105490 | 320 ± 60             | 0.6 (430)                        | A.D. 1695 (1815)                      | L3                 |

<sup>a</sup> All dates are based on conventional (LSC) radiocarbon dating of marine shell (single valves).

<sup>b</sup> Calendar ages include midpoint (in parentheses) and age range at one sigma. Calibration via Stuiver and Reimer (1993),  $\Delta R = 230 \pm 35$ .

<sup>c</sup> Following King (1990).

<sup>d</sup> cmbs = centimeters below surface.

pation of Scorpion Anchorage comes from Locus B, a remnant midden located on the northern side of the drainage (Fig. 2). This midden has been disturbed by the road that once led to the historic pier. Midden exposures appear on each side of the road, but intact deposits remain on the terrace to the northwest. Historic artifacts, including two cobalt blue glass beads and 15 needle-drilled disk beads, were found on the surface of the intact midden deposit, along with a variety of other shell beads (Table 2). The needle-drilled beads are *Olivella* disks (ground, semi-ground, and rough; following Bennyhoff and Hughes [1987]) with perforations ranging between 0.24 and 1.13 mm. (Table 3). A 25 x 25 cm. column sample was also excavated from the roadcut exposure near the concentration of Historic Period artifacts on the surface (Fig. 2, Unit 1). In the upper 10 cm. of the deposit, two needle-drilled disk beads and a large number of trapezoidal microblades were encountered. Triangular microblades were also present in the upper 10 cm. of the deposit.<sup>2</sup>

**CA-SCrI-507.** CA-SCrI-507 is a small midden located on the southeast side of Scorpion Anchorage, separated from CA-SCrI-423 by the small marsh/estuary at the mouth of the canyon (Fig. 2). The surface of the site is relatively flat and a wave-cut exposure occurs at the interface

between the beach and the midden. The site has been disturbed by the construction of a road, periodic flooding, and wave action. What remains is a small, compact shell midden with large amounts of lithic debitage on the surface.

Arnold (1990) documented large numbers of Late Middle Period trapezoidal microblades and cores at this location, along with a limited number of Late Period triangular microblades and cores. Our recent work at the site substantiated the observations made by Arnold. Trapezoidal microblades dominated the surface assemblage, with smaller numbers of triangular microblades also present. Chert debitage was common across the site and both trapezoidal and triangular microblade cores were evident. A limited amount of beadmaking detritus was discovered, but *Olivella biplicata* beads appeared to be relatively rare. One needle-drilled disk bead was recovered from the surface of the site, along with a single *Olivella* wall bead. In addition, a 25 x 25 cm. column was excavated in the northwest section of the site (Fig. 2, Unit 1), and several *Olivella* wall beads were recovered (Table 2). Evidence for both trapezoidal and triangular microblade production was found throughout the deposit. Historic Period artifacts were not recovered in the column sample, but a single radiocarbon

**Table 2**  
**SHELL AND GLASS BEAD TYPES<sup>a</sup> FROM ARCHAEOLOGICAL**  
**DEPOSITS ON EASTERN SANTA CRUZ ISLAND**

|                                       | GB             | ND | CC  | CB | TL | WB | RD | SG | OP |
|---------------------------------------|----------------|----|-----|----|----|----|----|----|----|
| <b>Site/Provenience</b>               |                |    |     |    |    |    |    |    |    |
| CA-SCrI-423 (surface)                 | 2              | 15 | 14  | 6  | 1  | 10 | 1  | 1  | 1  |
| CA-SCrI-423 (0-10 cmbs <sup>b</sup> ) | --             | 2  | 4   | -- | 1  | 7  | -- | -- | -- |
| CA-SCrI-507 (surface)                 | --             | 1  | --  | -- | -- | 1  | -- | -- | -- |
| CA-SCrI-507 (0-10 cmbs)               | --             | -- | --  | -- | -- | 4  | -- | -- | -- |
| CA-SCrI-507 (10-20 cmbs)              | --             | -- | --  | -- | -- | 2  | -- | -- | -- |
| CA-SCrI-504 (surface)                 | --             | -- | --  | -- | -- | 0  | -- | -- | -- |
| CA-SCrI-504 (Olson MS)                | 912            | 16 | 948 | -- | -- | 16 | -- | -- | -- |
| CA-SCrI-506 (surface)                 | 7 <sup>c</sup> | 3  | 1   | -- | -- | 1  | -- | -- | -- |
| CA-SCrI-506 (Olson MS)                | 2              | 16 | 476 | -- | -- | -- | -- | -- | -- |

<sup>a</sup> GB = glass bead; ND = needle-drilled; CC = callus cup; CB = callus blank; TL = thin lipped; WB = wall bead; RD = red abalone disk; SG = spire ground; OP = *Olivella* punched.

<sup>b</sup> cmbs = centimeters below surface.

<sup>c</sup> Includes five glass beads recovered by Arnold (1990).

date on shell from 10 to 20 cm. below surface suggests a Historic Period occupation (Table 1).<sup>3</sup>

### Smugglers Cove

Smugglers Cove is located in the lee of Santa Cruz Island, just south of East Point (Fig. 1). Similar to Scorpion Anchorage, a satellite ranching outpost was established at this location in the late nineteenth century (Gherini 1997). The Smugglers Cove drainage is large relative to other watersheds on eastern Santa Cruz Island and water is seasonally available in the creek that runs east-west, emptying near the center of the cove. Three large prehistoric shell middens were observed in the Smugglers Cove region, one on each side of the creek (CA-SCrI-504 and -505) and one at Smugglers Point (CA-SCrI-506). Historic artifacts have been identified at CA-SCrI-504 and -506.

**CA-SCrI-504.** CA-SCrI-504 is situated on the northern side of Smugglers Creek, just above the beach. Portions of the site are exposed in the road that climbs out of the drainage at this location. The site has been heavily disturbed by

ranching activities and water erosion associated with the road. Early excavations and periodic looting have also impacted the site. A remnant midden remains (6,500 m.<sup>2</sup>), but intact deposits appear to be rare.

Schumacher (1875) visited Smugglers Cove in the late nineteenth century and removed 260 burials from the site at the mouth of the canyon. Little documentation is available for these excavations, but his collections are archived at the Smithsonian Institution (Glassow 1977). Olson (MS) also conducted large-scale excavations at CA-SCrI-504 in 1928 (Hoover 1971). This work is better documented, but the collections were lost in an ownership transfer in the late 1920s (Gherini 1997). Olson excavated 11 test pits of varying sizes, which encompassed approximately 30% of the site. Sixty-nine burials were exhumed and a variety of stone, bone, and shell artifacts was collected. These artifacts indicate occupation of this location during the Middle and Late periods (Hoover 1971). Eight burials also had historic materials associated with them, including a bronze sword grip embossed with a

Table 3  
MEASUREMENTS OF NEEDLE-DRILLED *OLIVELLA*  
DISK BEADS FROM CA-SCRI-423<sup>a</sup>

| Cat. No. | Type <sup>b</sup> | Description | Perforation |        | Diameter | Thickness |
|----------|-------------------|-------------|-------------|--------|----------|-----------|
|          |                   |             | Top         | Bottom |          |           |
| 144      | H1a               | ground      | 0.46        | 0.47   | 2.10     | 0.72      |
| 111      | H1a               | ground      | 0.24        | 0.63   | 2.14     | 0.80      |
| 108      | H1a               | ground      | 0.84        | 0.50   | 3.39     | 0.70      |
| 118      | H1a               | ground      | 0.94        | 0.96   | 4.35     | 1.07      |
| 141      | H1a               | ground      | 0.79        | 0.75   | 4.66     | 1.07      |
| 101      | H1a               | ground      | 0.84        | 0.82   | 5.63     | 1.34      |
| 139      | H1b               | semi-ground | 1.00        | 0.96   | 4.80     | 1.15      |
| 140      | H1b               | semi-ground | 0.86        | 0.94   | 6.76     | 1.90      |
| 145      | H1b               | semi-ground | 1.01        | 0.95   | 7.38     | 1.58      |
| 103      | H2                | rough       | 0.78        | 0.75   | 6.11     | 1.33      |
| 142      | H2                | rough       | 0.70        | 0.61   | 2.60     | 0.90      |
| 109      | H2                | rough       | 0.70        | —      | 2.99     | 1.11      |
| 110      | H2                | rough       | 0.55        | 0.47   | 3.44     | 0.78      |
| 117      | H2                | rough       | 0.76        | 0.86   | 4.36     | 1.42      |
| 104      | H2                | rough       | 0.61        | 0.52   | 4.87     | 1.30      |
| 105      | H2                | rough       | 1.13        | 0.93   | 5.63     | 0.83      |
| 143      | H2                | rough       | 1.01        | 0.85   | 6.19     | 1.16      |

<sup>a</sup> All measurements in mm.

<sup>b</sup> Following Bennyhoff and Hughes (1987).

lion figure (Lee 1982) and a copper spatulate with a rounded end. A total of 912 glass trade and 16 needle-drilled disk beads was also found with seven burials (Table 2).

Historic material has not been encountered during recent work at the site. Arnold (1990) briefly visited this location and documented Middle and Late period artifacts on the surface. Vegetation covering the site has made surface collection difficult, but water erosion caused by slope wash during recent storms has exposed large sections of the midden deposit (Kennett 1997). Both trapezoidal and triangular microblades and cores were collected from the surface and erosional cuts, but trapezoidal microblades dominated the assemblage. No *Olivella* beads or manufacturing debris were found on the surface.

**CA-SCrI-506.** CA-SCrI-506 is located to the south of CA-SCrI-504, at Smugglers Point. The site sits on a series of relatively flat terraces at

the end of this headland. Compared to CA-SCrI-504, the archaeological deposits at Smugglers Point are well preserved. Much of the midden is covered with a thick blanket of grass, but some cliff-face erosion is evident on the southern side of the site. Arnold (1990) noted five or six house depressions on the lower terrace at the site and an additional eight house depressions are evident on the upper terrace.

Olson (MS) excavated two test pits at Smugglers Point (position and size unknown). Twenty-two burials were removed from this location, along with an assortment of Late Prehistoric Period artifacts (Hoover 1971). Trapezoidal microblades and prepared triangular microblade cores dominated the assemblage. No glass trade beads or metal artifacts were associated with the burials, but 16 needle-drilled disk beads were recovered (Hoover 1971). Olson (MS) noted two glass beads from this location. Arnold (1990) identi-

fied five glass beads at the site in 1990 and the authors recently recovered two glass trade beads and three *Olivella* needle-drilled disks. A radiocarbon date from the base of the deposits on the south side of the site indicates occupation as early as the Late Middle Period (Table 1).

### SUMMARY AND CONCLUSIONS

Four candidates for *Swaxil* and *Nanawani* have been identified on eastern Santa Cruz Island, two sites in the vicinity of Scorpion Anchorage and two associated with Smugglers Cove. Three of these sites (CA-SCrI-423, -504, and -506) have clear historic components indicated by metal artifacts, glass trade beads, and needle-drilled *Olivella* disk beads. CA-SCrI-507 has indicators of Late Period occupation, and a possible Historic Period component is suggested by one needle-drilled *Olivella* disk bead and a single radiocarbon date.

Thus, two primary loci of Historic Period settlement can be delineated archaeologically on eastern Santa Cruz Island, one at Scorpion Anchorage and the other at Smugglers Cove. The presence of a Historic Period component at the mouth of Scorpion Anchorage appears to substantiate Fernando Librado's claim for *Swaxil*'s existence at this location. However, the extent of the Historic Period component is difficult to assess due to natural disturbances and destruction related to ranching activities. Historic Chumash occupation is best preserved on the north side of the creek (CA-SCrI-423), but it is likely that this component stretched across the mouth of the canyon to CA-SCrI-507. Our excavations have been limited at these locations because of burials associated with the remnant middens. Based on ethnohistoric and archaeological evidence, we argue that the Historic Period village of *Swaxil* was located at Scorpion Anchorage.

On the basis of Juan Estevan Pico's description of a village at the eastern end of Santa Cruz Island between *Swaxil* and *Liyam*, we associate *Nanawani* with Smugglers Cove. While historic

material has been identified at both Smugglers Cove (CA-SCrI-504) and Smugglers Point (CA-SCrI-506), we suggest that these two archaeological sites represent different loci of the same historic village complex. This is contrary to Arnold's (1990) placement of *Swaxil* at Smugglers Cove and *Nanawani* at Smugglers Point. The placement of two historic villages in such close proximity would be unusual for the Northern Channel Islands (Fig. 1).

The Santa Barbara Channel region has one of the best documented historical records of native peoples of California. Ethnohistoric accounts by Spanish explorers and mission records provide a rich source of data on the people who occupied the region. The archaeological deposits on the Northern Channel Islands provide a unique opportunity to identify named historic villages and document the material remains of the people that once lived at them. Our preliminary research on eastern Santa Cruz Island indicates that two primary loci of historic settlement existed, one at Scorpion Anchorage and the other at Smugglers Cove. This corroborates ethnohistoric accounts and mission register data for the presence of two main historic settlements on the east end of the island. However, more extensive archaeological work is needed to delineate the extent and nature of these island residential communities.

### NOTES

1. All of the sites discussed in this article have two trinomial designations, original University of California, Berkeley (UCB), trinomials and more recently assigned trinomials by the University of California, Santa Barbara (UCSB), Central Coast Information Center (CCIC). In this article, we use the trinomials assigned by the CCIC. UCSB trinomials—CA-SCrI-423, -507, -504, -505, and -506—correspond to UCB trinomials SCrI-B-141, -141, -138, -137 and -135, respectively.

2. Fragmented human bone was discovered at 10 cm. below surface in this unit and excavation was terminated after discussions with Diane Napoleone and Mark Pulido, the Chumash monitors on the project.

3. We encountered an intact burial at 28 cm. below surface in this unit and discontinued excavations after discussions with Diane Napoleone and Mark Pulido.

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