

HISTORIC INDIAN CONTACT AT LAGUNA GUERRERO NEGRO, BAJA CALIFORNIA*

ERIC W. RITTER

A handful of protohistoric Cochimí temporary residential bases and isolated finds along Laguna Guerrero Negro in central Baja California exhibit a minor set of artifacts largely related to Spanish exploratory, missionary, and colonial times, but also include exotic items brought to the locality by natural means such as in flotsam carried by the California Current. Durable goods presumably were acquired through trade, direct acquisition, scavenging, and as gifts, and served to replace or augment prehistoric technologies of a largely personal or utilitarian nature. Artifacts include items of glass, metal, ceramic, and wood. Inferences regarding chronology, contact, and behavior are presented with respect to the influences on the Cochimies of the central peninsula by the Spanish entrada and its material goods and other exotic introductions.

Europeans carrying gifts and trade goods to encourage friendly contact, discourse, exchange, and influence with native peoples has a history that goes back to Christopher Columbus' New World arrival and for centuries prior (Dubin 1987). The acquisition of non-Indian goods by the natives of Baja California during periods of exploration and missionization, whether by gift, trade/exchange, thievery, scavenging, or other means, and the anthropological issues relevant to such attainment, such as world and more-local economic/mercantile systems, status, gender, value systems, social opportunity and identity, production, use, meaning, and chronology (see Deagan 2002:4-5) are among topics that have been rather minimally broached in peninsular studies.

Research by the author during the late 1990s and early into the second millennium (Ritter 1999, 2002, and in progress) under permit from the *Instituto Nacional de Antropología e Historia* (INAH) in the vicinity of Laguna Guerrero Negro has resulted in the recovery of non-Indian goods from five presumed residential bases along the current lagoon's edge (Figure 1). The variety of these remains and their implications with regard to a number of the issues discussed above form the basis of this paper.

ENVIRONMENTAL AND ARCHAEOLOGICAL BACKGROUND

Research has demonstrated that Indians took seasonal advantage of the fertile coastal environment of Laguna Guerrero Negro for at least the last several thousand years, utilizing a specialized tool kit related to the maritime uses. This lagoon straddles the line between modern Baja California and Baja California Sur within the Vizcaíno Desert.

The study sites are characteristically aligned in a coastal strip of variable-sized patches of cultural materials dominated by shellfish and fish remains in the thousands to the millions (Figure 2). Features

include cremations and burials, cooking and food-processing areas, and flaked stone workshops. While somewhat variable by site, there is an abundance of flaked stone debitage, including obsidian. Other prehistoric artifacts include an array of imported and locally manufactured items including metates, manos, hammerstones and abraders; *chacuacos* or stone pipes/tubes; small to large cores and core tools; common flaked stone artifacts used for a variety of functions including scraper- and knife-like tools, unifaces and edge-modified flakes; burin-spall tools, gravers/perforators and small splitting tools; and a well developed biface industry. Projectile points include a wide variety of types. There are bone artifacts such as awls and harpoon tips present at some sites. Shell artifacts include presumed cutting/scraping tools, probable utensils, and beads and ornaments. Historic-period artifacts are discussed below.

It is thought that small family groups made visits on a part-time, perhaps regularized, basis to the lagoon from different montane locations in the central peninsula. Of relevance is the inclusion in the assemblage following Euro-American contact of non-native goods. Such evidence is highly localized in the locality.

HISTORICAL CHRONICLES REGARDING CONTACT GOODS

The Indians of Baja California were offered Euro-American gifts or goods for exchange (including goods by way of an expanding world trade network) from the earliest episodes of contact. Mathes (1992a:xiv), for instance, notes that there were 19 documented maritime expeditions between 1533 and 1697 along the coasts of Baja California, expeditions that familiarized at least the coastal Indians with Spanish customs, material goods, and so on. For purposes of examining the southern two-thirds of the peninsula, the transfer of technology and goods can be categorized into the pre-mission expedition period and the time of missionization and colonization. There was also the opportunity for the

*A longer version of this paper was presented at the V Bi-national Symposium of Balances and Perspectives of Baja California Prehistory and History, Rosarito Beach, Baja California, Mexico. To be reproduced on a CD by the Instituto Nacional de Antropología e Historia, México, Mexico.



Figure 1: Study area location map.

native inhabitants to obtain non-Indian goods from indirect trade or exchange, from salvage of beach debris, or even from happenstance discovery, seizure, or pilfering. During mission times goods were often distributed as rewards, prizes, incentives, and necessities for mission life, and bringing the flock into European principles largely according to Spanish standards.

Items carried by the Europeans for purpose of ameliorating the contact and any hostilities and “to hold the gentile attention” (Crosby 1994:191) are well documented in the various historic chronicles (see Table 1). While a number of references merely refer to such items as trinkets, gifts, trifles, barter goods, “other things,” and “toys,” a sampling of the literature indicates that there is more specificity in many documents. Such goods can be divided into (1) items of adornment or enjoyment, including glass beads (mentioned frequently), ribbons, earrings, bracelets, necklaces, mirrors, and bells; (2) items with religious connotations, including use as adornments, such as rosaries and crosses; (3) utilitarian durable goods such as knives, axes, “old iron,” nails, scissors, hooks, combs; (4) tobacco and food items including maize, wheat (cooked and uncooked), hardtack, biscuits, preserves, liquid sweetmeats (candied fruit), salt, meat, seeds, sugar, pozole, dried figs and grapes, and wine; and (5) items of clothing and cloth including rawhide moccasins and sandals, blankets, short undershirts, loincloths, woolen and cotton clothing (including trousers and coats), sackcloth, “all kinds of blue and white, coarse and rough cloth” (Baegert 1952:120), hats, other garments and pieces of taffeta, silken girdles of diverse colors, and napkins.

Even as the Spanish were leaving Baja California for the new mission fields of Alta California in 1769, in the Fernando de Rivera/ Fray Juan Crespí/José de Cañizares overland expedition from Mission San Fernando Velicatá to San Diego, they carried many items of gift and exchange similar to those in use for hundreds of years of European contact in the peninsula (see Crosby 2003:54-55).

THE HISTORIC-PERIOD ARTIFACTS

Utilitarian Ceramics

The most common historic artifact found at Laguna Guerrero Negro sites (LGN-1, LGN-30 and LGN-33) (Ritter 1999, 2002) are utilitarian ceramic bowl and olla sherds (350 specimens), including one whole bowl and one reworked sherd (Figures 3, 5b). There are about 40-50 vessels represented. Several of these sherds were analyzed by Williams (1997), who describes them as having a hard, smudgy black core with fiber and very fine sand- to silt-size inorganic temper. Williams (1997: 241) notes the resemblance to the Tizón Brown Ware, Santo Tomás type, Mission Series of May (1973).

Vessel manufacture appears to be mixed, with examples of paddle-and-anvil, coil-and-scrape and possibly hand-molded types. Interior and exterior smoothing is evident. These vessels are generally thick, with variability within a single vessel. Rim types include beveled; slightly expanding; expanding, flared, or rolled; straight and flat; tapered or rounded; slightly rolled or excurvate and flat; and slightly to



Figure 2: Guerrero Negro Lagoon, north end. Protohistoric site, 1986.

moderately rolled or excurvate (recurved rim) with either a rounded or tapered lip.

The whole bowl found at LGN-33 is slightly irregular in its opening, between 15.8 and 18.7 cm in diameter. The maximum vessel width is 21.7 cm, with a height of 14.4 cm, and the other bowls are similar in size based on extrapolations. A small, partial olla has a rim diameter of 11.9 cm, a bowl diameter of 16.0 cm, and a height of 15.5 cm.

Tuohy (1970:42) has noted that ethnohistoric accounts (cf. Massey 1947:345; Dunne 1952; Aschmann 1959:59) clearly demonstrate that pottery containers were unknown to pre-contact Indians living south of the 30th parallel. Crosby (1994:284) remarks, "Little pottery was made on the peninsula (in reference to Jesuit missions), partly because of the scarcity of suitable clay. Pottery vessels of all sorts were imported from Sonora missions." Venegas (1757:170) relates Padre Fernando Consag's discovery of pottery among Yuman speakers in the northern Gulf region, and his remark that pottery making was "a business unknown to the peninsula Californians farther to the south, neither heathen nor Christian, until they were taught by people from *la otra banda* (Yaquis?) at the instigation of the California missionaries." Clavigero (1937:93) relates an account by missionary Fernando Consag from 1746 regarding "earthen jars" found along the east coast of the peninsula, possibly from a northern source or from pearl fishermen.

In several other Jesuit missionary accounts there is a clear record of pottery manufacture by mission or mission-influenced Indians in the southern peninsula. In 1757 Father Johann Jakob Baegert remarks: "Close to the seashore the inhabitants, besides covered huts, could make some earthenware and containers as they see them made for me sometimes in the mission" (Schulz-Bischof 1982:195). Later, in his

1771 *Observations in Lower California*, Baegert notes that the missionary's kitchen included "two or three pots made of clay and goat manure, unglazed and only half baked on charcoal in the open air..." (1952:125).

The variety of utilitarian ceramics found at Laguna Guerrero Negro sites reflects mission influence. These ceramics could include wares manufactured in the mission setting and/or wares imported from mainland Mexico. There is likely a fiber-based ceramic tradition that had its roots among mainland Mexican Indians such as the Yaquis.

Chinese Ceramics

Chinese porcelain ceramics from one plate, two bowls, and four cups were found. They are undoubtedly shipwreck debris from the central western peninsula coast. These porcelains are underglaze blue-on-white wares and overglaze polychrome wares from ca. 1574-1576, during the early years of the reign of the Emperor Wan-Li (1573-1619) (Von der Porten 1999, 2004). Individual types are described as follows:

Among the 40 pieces, there are 28 sherds from an underglaze blue-on-white plate with "gentleman's purse with ribbons." Four of these sherds show unifacial edge flaking. There are four sherds and seven small flakes from one or more unidentifiable Chinese porcelain vessels (Figure 4). There is also a thin, blue-on-white underglaze sherd that has been pressure-flaked along the margin of a very slightly curved portion of a cup or bowl into a small projectile point that is missing its base (Figure 4).

Miguel del Barco (1973:253-254), José de Ortega and Juan Antonio Balthasar (1944 [1754]) and Homer Aschmann (1959:32) note that

debris from Manila galleons was found by the Indians along the central west coast of the Vizcaño Desert near the study sites. There are also a number of accounts of Chinese porcelain table settings among the Jesuit missionaries (Baegert 1952:130; Crosby 1994:264, 483; Schulz-Bischof 1982:153, 225-226), but the specimens found at Laguna Guerrero Negro sites appear too early to be from the missions unless by a round-about way long after they were beach-deposited.

Wood Artifacts

The author (Ritter 1999) has previously described a single wooden peg or pin (LGN-10) from the study area (Figure 5a). It is unknown whether this artifact is historic or prehistoric. The smooth, well-shaped item was manufactured from an unidentified hardwood with relatively thick growth rings (3.8-4.4 mm). This artifact is elongated and oval in cross-section. It measures 11.6 cm long, 4.1 cm wide, and 3.1 cm thick. It is possible this artifact came from a ship, and it may have been found along the beach where it floated in from elsewhere.

Two redwood artifacts were recovered from LGN-33. There were also other redwood fragments observed at several sites in the sample. The first object from LGN-33 is a smoothed wooden plank (LGN-33-1) (Figure 6) that currently measures 23.7 cm in length and was probably longer at one time, since one end is irregular. The specimen is 4.9 cm in width and 1.7 cm thick. In the center of the plank near one end is a remnant of an iron spike or nail that is 0.8 cm across. The second specimen (LGN-33-7) is a bi-pointed, slightly curved shaft tapered at both ends. This specimen is quite regular and measures 51.0 cm in length, 1.6 cm in width, and 1.0 cm thick. Both artifacts are somewhat sand-abraded and likely were collected from flotsam along the outer coast. This is the same coastal stretch where at least four Tolowa or other northwest California Indian canoes of redwood have been discovered (see Moriarty and Moriarty 1983).

Perforated Coin

A cuprous coin with an off-center perforation, possibly for decorative purposes, was found at LGN-1 (Figure 5c). This coin appears



Figure 3: Mission ware ceramic bowl from LGN-33.

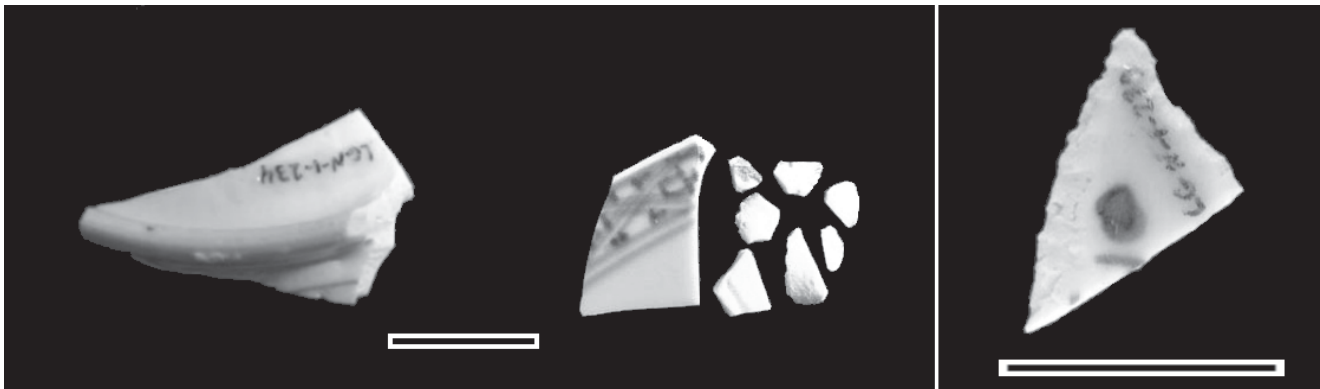
to be a one-quarter of a Kreuzer with letters representing Joseph II of Austria (JOSEPH US-II). This is a "current reign" type of small-denomination coin from about 1765-1790 (see Ritter 1999:230). The derivation of the coin from Austria is not surprising, since Jesuits from the Germany-Austria areas were among those serving at the missions in the nearby highlands.

Iron Artifacts

Over 200 mostly small (less than 2 cm) corroded iron artifacts were found (Figure 6). The vast majority of these small pieces may have splintered off a larger artifact. The flattish piece measures 4.5 cm in length, 3.2 cm in width, and 0.9 cm thick. A spike-like artifact is 7.5 cm long and 1.8 cm in thickness. The platy pieces are splitting horizontally, and several other pieces include single, small, fiber-like casts. Following Aston and Story (1939), these fragments are wrought iron.

The elongated spike-like objects may have served as perforators, flakers, harpoon or arrow points, etc. The flatter pieces may have served in cutting-like functions. Deagan (2002:31) has noted that blacksmiths were present in virtually all settlements in Spanish America from the

Figure 4: (A) Chinese porcelain plate with edge modification (scale in millimeters); (B) Chinese porcelain vessel sherd and flakes; (C) Broken Chinese porcelain vessel projectile point. Scale = 1 cm.



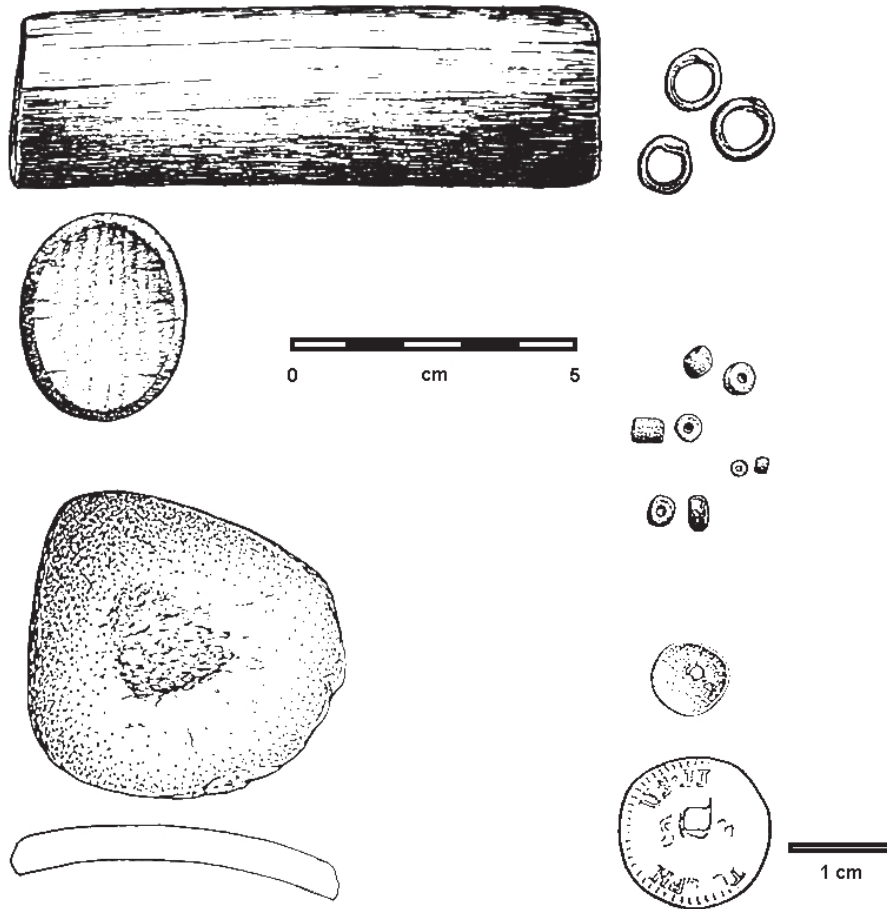


Figure 5:

a. LGN-10 (hardwood peg or pin).

b. LGN-1-193 (Mission pottery sherd with post-breakage edge smoothing).

c. LGN-1-180 - perforated coin, 1765-1790.

d. LGN-1-159 - Type 5 glass beads, (green).

e. LGN-1-163 - Type 1 glass beads, (turquoise).

f. LGN-1-161 - Type 3 glass beads, (Cornaline d'Allepo—red/green).

g. LGN-1-160 - Type 4 glass beads, (black).

earliest days of colonization, working with imported raw iron. These items may have been obtained from mission settlements or, more likely, historic-period wrecks on the nearby coast (or both).

Cuprous Artifacts

There were 118 cuprous artifacts or artifact fragments recovered from two sites. Stapp (1999) divides the artifacts into a miscellaneous assortment of copper-based wire and sheeting scraps (figures 7, 8). The various seasons' work includes 15 wire objects (Figure 8a), 76 sheet fragments, including rolled sheets (Figure 7), one possible eight-sided button with iron residue on one side (Figure 8b), and a short cuprous tube (Figure 8c). The possible button is 1.8 cm across and is similar in size and configuration to an eighteenth-century button illustrated and described by Deagan (2002:168, Fig. 8.13) as probably used on uniforms, ca. 1700-1750, found at St. Augustine, Florida. From the other side of the Spanish-American empire is the report by Blind et al. (2004:144) of several undecorated copper-alloy loop-back buttons from the Presidio of San Francisco.

The cuprous sheets include thinner and thicker pieces, from 1.4 to 2.5 mm thick. Some of the flat pieces could be re-cycled utensils such as kettle/cauldron fragments.

Some pieces of the cuprous wire (1.2-1.5 mm diameter) have a loop formed on one end or eyelets intertwined. At least one of these may be a clothing clasp. Deagan (2002:176) notes that copper-alloy hooks and eyes are found on Spanish colonial sites from the fifteenth through the nineteenth centuries and were used to fasten doublets, jerkins, bodices, and other clothing elements. These various Laguna Guerrero Negro artifacts could come from shipwreck debris off the coast and/or from mission sources in the mountains easterly.

Production of cuprous artifacts in Mexico started very early in the Spanish reign, in part a carryover from Indian metallurgical skills. Baegert (1952:125) explains that missionaries' kitchens would include a copper pan, a small copper vessel in which to prepare the chocolate, "both tinned for the first and last time when they were bought in Mexico..." Clearly cuprous items were abundant in the peninsula in Spanish times (cf. Crosby 2003:55) and these coast Indians valued such artifacts for uses like ornamentation and possibly as curiosities and sharp-edged tools.

Flaked Glass Artifacts

There are 14 olive-green glass artifacts recovered from site LGN-1. These include 10 small flakes, two edge-modified flakes, and two projectile points, one a Comondú-series specimen (Figure 6). Three of



Figure 6:

a. Redwood plank with spike.

a.

b. Cylindrical and flat iron artifacts.

c. Green glass Comondú projectile point and flakes.

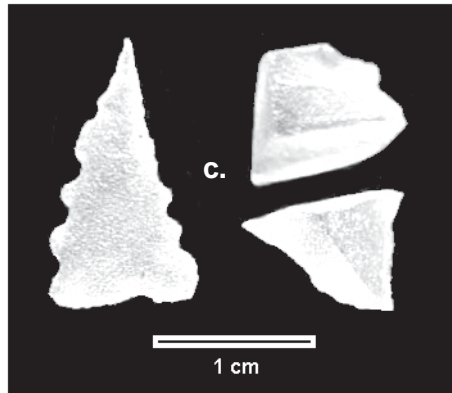
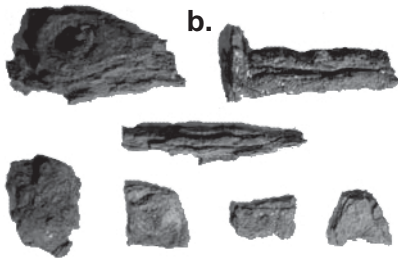
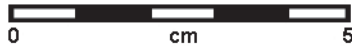


Figure 7: Rolled copper sheets from Laguna Guerrero Negro site LGN-1.

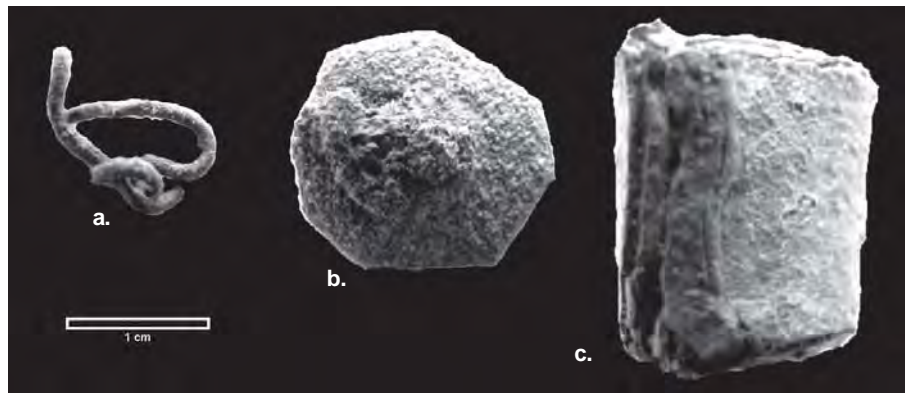
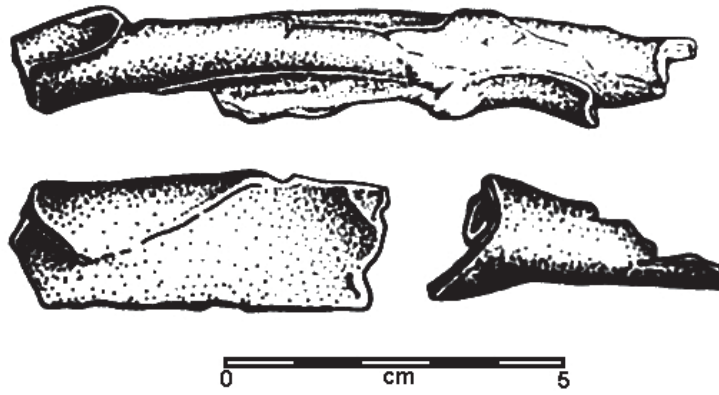


Figure 8: (A) Copper alloy wire; (B) Copper alloy button with iron remnants; (C) Copper alloy tube (scale in millimeters).

Table 1: Select References To Baja California Contact Goods Exploration And Mission Periods

| CONTEXT (Exploration Period) | CONTACT GOODS | REFERENCE |
|--|---|--|
| Hernan Cortés 1533 | pg. 47 certain barter goods pg. 49 any items of barter | Mathes 1973 |
| Francisco de Ulloa 1539 | pg. 217 beads, hats, hooks as gifts pg. 221 hooks, beads as gifts pg. 226 garments and pieces of taffeta as gifts pg. 244, 245 beads pg. 246 bells, beads—with feathers returned by Indians pg. 247 combs, fishing hooks, comfits, trifles pg. 248 strings of bells, great fishhook, certain beads, comfits, mariner's breeches and apparel, red hat pg. 249 crown of beads, trifles pg. 250 beads pg. 263 trifles pg. 265 drinking cup offered pg. 266 earrings, counterfeit diamonds | Haklyut 1904a |
| Francisco de Ulloa 1539-1540 | pg. 34 collar of tiger skin pg. 41 beads | Wagner 1929a |
| Fernando Alarcon 1540 | pg. 283 beads and other things pg. 284 silken girdle of diverse colors pg. 287 certain little napkins and other trifles pg. 295, 300 crosses pg. 314 seeds | Haklyut 1904b |
| Sebastián Vizcaino 1596 | pg. 136 corn, hardtack, meat, wine pg. 136 many gifts pg. 137 beads for pearls, mirrors, some knives | Mathes 1992b |
| Sebastián Vizcaino 1602 | pg. 159 hardtack and other things pg. 162 beads and food | Mathes 1992c |
| Sebastián Vizcaino 1602 | pg. 192 biscuit, glass beads, little looking glasses and other trifles pg. 226 colored glass, little bells and other trifles exchanged for fish, mescal, cords for fishing, and net bags pg. 233 (San Diego area) bead necklaces of colored glass, cords and ribbons to put around the neck for ornament, strings of glass beads and biscuit | Wagner 1929b |
| Francisco de Ortega 1633-1634 | pg. 229 aquamarine beads pg. 230 corn pg. 231 knives for pearls pg. 235 axes, knives and other trade goods for pearls | Mathes 1970 (page numbers from Mathes 1992d) |
| Pedro Porter y Casanate 1644 | pg. 95 "...some very large pearls which were traded for nails, glass beads and other toys." | Mathes 1976 |
| Francisco de Luconilla 1668 | pg. 43 knives for pearls | Mathes 1966 |
| Edward Cooke 1708-1711 | pg. 392 Peruvian conserves served pg. 398 sugar given to women and knives, old axes and old iron to men | Cooke 1712 |
| Woods Rogers 1708-1711 | pg. 65 "...tho' we had Glass Beads of several colours, and other Toys, they would accept none of them. The coveted nothing we had but Knives, and other cutting Instruments..." pg. 68 "...for when they exchang'd Fish with us for old Knives, of which we had plenty..." pg. 69 shirt provided which was tore into pieces to put seeds into | Andrews 1979 |
| William Betagh 1719 | pg. 111 "...that any man may lye with the women for a rusty knife, or a porringer of thick milk." | Andrews 1979 |
| George Shelvocke 1721 | pg. 76 liquid sweetmeats (candied fruit) and Peruvian preserves pg. 77 sugar and coarse blue baize (wool or cotton fabric) | Andrews 1979 |
| (Mission Period) | | |
| Admiral Don Isidro de Atondo y Artillo/Father Eusebio Francisco Kino 1684-1685 | pg. 24 small items of clothing and trinkets pg. 27 clothing, rawhide moccasins pg. 28 knives, bracelets, necklaces, earrings, bells, mirrors, scissors, long printed cotton vests, blankets, rawhide moccasins and other items of clothing and trinkets pg. 29 items of clothing and trinkets pg. 30 clothing, trinkets, rawhide moccasins, food pg. 33 trinkets, short undershirts, rawhide moccasins, long cotton vests pg. 34 rawhide moccasins, small items of clothing, trinkets pg. 39 items of clothing and trinkets pg. 40 gifts, clothing, short undershirts, rawhide moccasins pg. 47 small items of clothing, trinkets, rawhide moccasins pg. 49 short undershirts, earrings, bells pg. 52 small items of clothing and trinkets | Mathes 1969 |
| Father Juan María de Salvatierra 1699 | pg. 34 stealing or seizing provisions pg. 93, 129 rosary around neck pg. 106 earrings pg. 167 knife pg. 179 "Maize is the usual gift and a considerable part of the salary of the working Indian." | Burris 1971 |
| Father Francisco María Piccolo 1702 | only mentions gifts given by Kino | Hammond 1967 |
| Father Francisco María Piccolo 1716 | pg. 81 "I conferred the canes of Captain on the most important men of the settlements and gave each a blanket and a loincloth." pg. 83, 84 blanket, some coarse woolen cloth pg. 85 wheat to plant, cane of captaincy, corn, tobacco, other items | Burris 1984 |
| Father Clement Guillén 1719-1721 | pg. 35 tobacco, knives, blankets, sackcloth, and other things pg. 36, 37, 42 knives, blankets, sackcloth, tobacco, sandals and food pg. 48 knives, hardtack and other little things—Indians responded with feathers and deer skins pg. 52 gifts reciprocated with feathers, raw and roasted fish and other things pg. 58 blanket and knife given as reward pg. 82 food to women; "The headman received the bunches of feathers and other gifts, responding with ribbons, feathers, braided cord, and lances with flint tips, which they make." | Mathes 1979 |
| Father Ignacio María Nápoli 1721 | pg. 40 knives and other things which Indians value pg. 52 ornaments on ribbons, hats, sackcloth, blankets, knives, etc. pg. 54 salt pg. 55 corn meal mush pg. 61 food pg. 63 garments of sackcloth, pieces of sackcloth, rosaries pg. 65 blankets, sack and cloth covering, seaman's canvas bag and the sail | Moriarty and Smith 1970 |
| Father Sebastian de Sistiaga 1744 | pg. 122 cross around neck pg. 140 food and clothing | Burris 1984 |
| Father Johann Jakob Baegert 1751-1768 | pg. xvi cloth from missionaries or from trade with Spanish soldiers for tanned deer skins. pg. 71 refined sugar from soldiers as payment for debt; bulls for labor pg. 120 "...all kinds of blue and white, coarse and rough cloth to cover the naked californians." pg. 121 meat, bushels of Indian corn, dried figs and grapes "Similar foods or some piece of clothing were also distributed as prizes in games or shooting contests." pg. 122 cooked meat and Indian corn, three meals a day for laborers pg. 130 "At several others (missions) cotton was planted, from which summer clothes, stockings, caps, and other things were woven and knitted for the natives." pg. 144 clothes and provisions pg. 189 knife and meat; "Palmilla is the poorest blue cloth sent from Mexico to California. It was customary to give trousers and coats made of this material to native California officials and others whom one particularly wished to honor." | Baegert 1952 |
| Father Wenceslaus Linck 1765 | pg. 33 necklaces of glass beads, mirrors and other gifts | Burris 1967 |
| Father Wenceslaus Linck 1766 | pg. 59 cross | Burris 1966 |
| Jesuit mission supplies | pg. 143 "There were 64 short planting hoes (coas), 26 long hoes, 38 woodcutter's axes, 14 brush-clearing machetes, and 24 knives specified for neophyte use." | Crosby 1994 |
| Rivera/Crespi/Canizares Expedition 1769 | pg. 54-55 partial list of potential trade goods: Needles, rosaries, ribbons, rings, earrings, glass beads, coral, enamel beads, ivory-colored beads, cigars, knives, awls, agave-fiber twine, blue sackcloth, coarse cotton cloth, coarse blue flannel, coarse linen, white under-petticoats, baptismal caps, various food items | Crosby 2003 |
| Father Luís Jayme, O.F.M. 1772 | pg. 46 (Mission San Diego area) payment of tortillas and ribbons by soldiers to compensate women for rape | Geiger 1970 |

the flakes appear to be derived from a flat piece of glass such as a bottle, tumbler, or vial.

All glass artifacts appear to be derived from the same source, either historic beach debris from the nearby outer coast or glass originating from the missions to the interior dating anywhere from the mid-1500s to the early 1800s. The presence of glass Comondú-series projectile points again supports the late prehistoric-protohistoric dating of this point type in the central peninsula and the presence of bows and arrows in the tool assemblage of coastal visitors.

Glass Trade Beads

A common historic-period artifact found at three Laguna Guerrero Negro sites is the small glass trade bead. Eleven types were defined (Ritter 1999; 2002; work in progress) with 186 beads recovered. The most common bead is a turquoise type, making up 60% of the sample (figures 5e, 9). This is trailed more distantly by a dark-blue type (Figure 9), at 15% of the sample, in turn followed by the red and green *Cornaline d'Alleppo* (figures 5f, 9), black annular or ring beads (figures 5g, 10) and the dark-green type (figures 5d, 10), each accounting for 6% of the sample. Rare are the yellow (Figure 10), clear, black to very dark red/amber, and simple white beads, plus one tubular white bead (Figure 10). Each type is briefly discussed and described further below following Ritter (1999, 2002); measurements and further descriptions can be found in those references.

Type 1 (n = 112). Turquoise, simple small to relatively large cylindrical and oblate spheroid with infrequent torus, opaque to translucent, dull, tumbled (figures 5e, 9). Statistically, there appear to be a small and a large variety. Clement Meighan (Ms. On file, UCLA) dates turquoise beads to the early Spanish Mission Period of Alta California (1780-1810). Deagan (1987:171) found a broader dating range of circa 1575-1720 for this type in the Florida/Caribbean area.

Type 2 (n = 27). Dark blue, simple, oblate-spheroid to cylindrical, translucent, dull, and tumbled (Figure 9). The dark-blue beads appear to match Deagan's (1987:177) seventeenth- and eighteenth-century beads from the circum-Caribbean Spanish colonial sites.

Type 3 (n = 12). *Cornaline d'Alleppo* beads include mostly oblate spheroid specimens with several short, cylindrical examples (figures 5f, 9). These compound beads are dark green in the center, with a brick-red outer layer. They are translucent in the green center and opaque within the red. They are dull and tumbled. The *Cornaline d'Alleppo* bead type was found by Deagan (1987:168) on sites in the circum-Caribbean area as early as the 1500s, with common occurrence on sites from the late seventeenth century through the eighteenth century.

Type 4 (n = 11). Black annular or ring beads are slightly oval, wound, opaque, dull to shiny (figures 5g, 10). Most of these beads exhibit a small protrusion on the exterior where the glass was snapped off a rod or similar device. The black

annular beads resemble blue annular beads illustrated by Dubin (1995) from approximately the early 1800s. Deagan (1987:174) lists two amber wire-wound ring beads from the southeastern United States sites dating from 1700-1775.

Type 5 (n = 12). These dark-green beads include cylindrical, torus, and oblate-spheroid specimens (figures 5d, 10). The translucent beads are simple, tumbled. The beads resemble Meighan's Type 228 that he dates to the early Alta California Spanish Mission period, from 1780-1820 (unpublished manuscript on file at UCLA). Deagan (1987) does not list this bead type from sixteenth-eighteenth century Spanish colonial sites in the circum-Caribbean area, so it may be associated with sites of the western Spanish-American empire, possibly in later contexts.

Type 6 (n = 3). These are simple, dull, oblate-spheroid, opaque, tumbled, very dark-red or dark reddish-amber, almost black (without bright back lighting) glass beads. The very dark-red almost black beads may resemble glass beads described by Motz et al. (1986:119), who state these were popular from 1790-1910 in Alta California, with most examples recovered in 1850-1870 contexts. Deagan (1987:180) reports no similar beads in black, but she does mention a dark-red "seed" bead type of the later eighteenth century. Gregory and Webb (1965:29, 31, 35) report on opaque black, oblate-spheroid "seed" beads and larger donut-shaped black beads from sites in Louisiana attributable to French or Spanish sources of the 1714-1820 period. Overall the sources examined do not provide comfortable matches for this type.

Type 7 (n = 6). Five translucent and one opaque yellow glass beads were recovered (Figure 10). The translucent and opaque specimens may be two varieties or subtypes. The beads may be the same as those described by Deagan (1987:180) as occurring in large numbers in the circum-Caribbean Spanish colonial sites in the later eighteenth century. Gregory and Webb (1965:34-35) describe small oblate spheroid yellow beads from an early nineteenth-century French-American site in Louisiana. They may be a Venetian type secondarily traded or very time specific to the nineteenth century.

Type 8 (n = 1). The single clear glass bead that was recovered is oblate spheroid in shape. This tumbled bead may be a wire or wound bead. Deagan (1987:170) notes that "spherical or oval drawn beads of clear glass have also been found in sixteenth-century contexts." In Table 4 of Deagan (1987:174), wire-wound spherical clear beads are noted as dating from 1675-1800 in the Spanish colonial sites of Florida and the Caribbean.

Type 9 (n = 1). A white glass bead was found at site LGN-25. This is a simple, shiny, opaque bead. This may be a wire-wound bead with a torus or ring shape. Opaque white glass beads are reported by Deagan (1987:173) from sites of the 1500s and 1600s in Spanish Florida. She also reports opaque

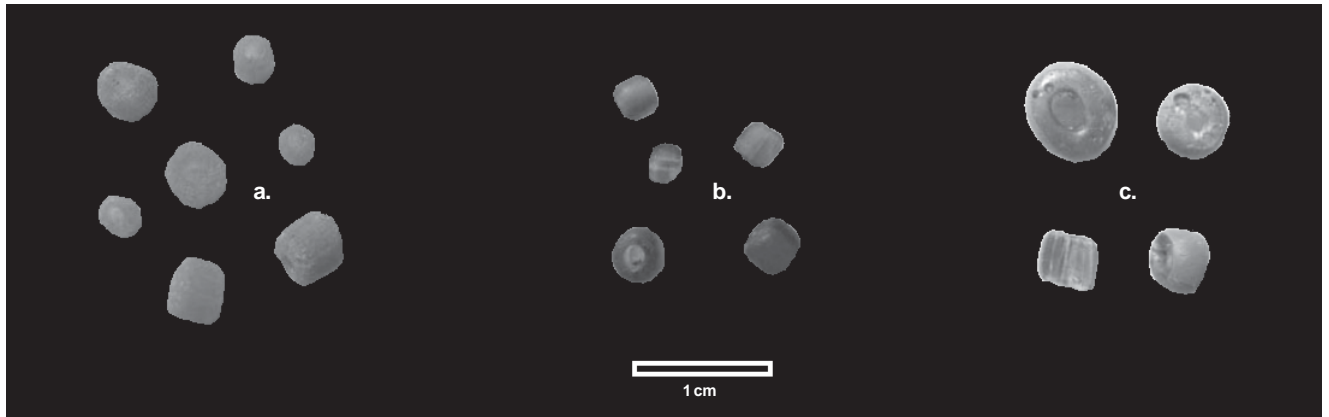


Figure 9: (A) Type 1 glass beads - turquoise; (B) Type 2 glass beads - dark blue; (C) Type 3 glass beads - Cornaline d'Alleppe (red and green).

wire-wound beads of shiny white color from the post-1780 period of the Florida-Caribbean area. It seems likely that this bead is a match, although it seems too small to have functioned as a rosary bead, as suggested by Deagan (1987:179) for this type.

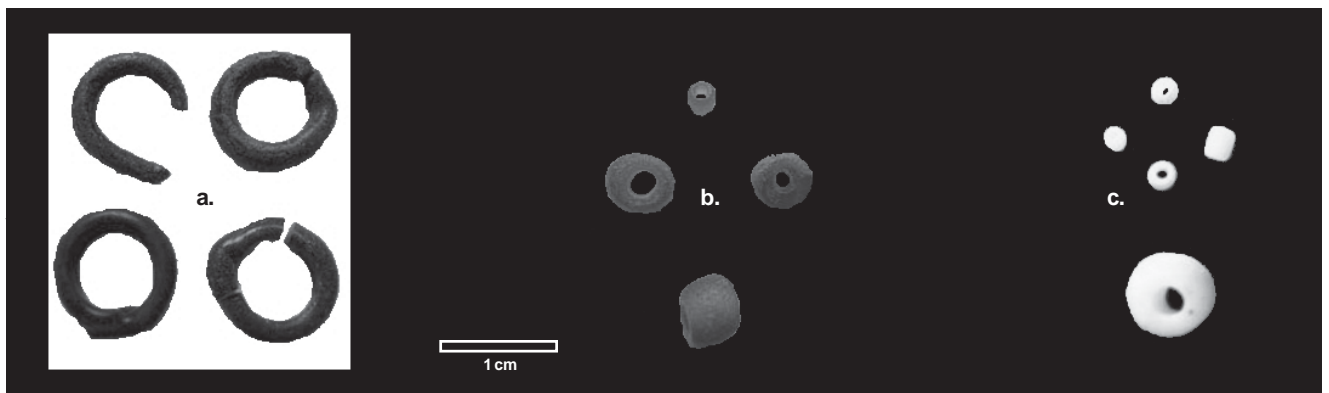
Type 10 (n = 1) This white bead is an un-tumbled, compound, short tubular or cylindrical bead with a gritty, bubbly, white interior and a thin clear exterior (Figure 10). It has been snapped on the ends. The cylindrical white bead finds a possible match with Gregory and Webb's (1965:32) small white tubular beads from a Spanish-French-contact Indian site in Louisiana dating from the early eighteenth to early nineteenth century. This bead type is not described by Deagan (1987) from circum-Caribbean contexts or by Smith (2002) from eighteenth-century French colonial sites in North America.

From the previous discussion it is quite apparent that glass beads were a popular trade item from earliest contact times in the peninsula until the extirpation of many central and southern peninsular Indian groups. Use of glass beads as a mechanism to enhance colonization and

missionization is evident in Crosby's (2002:55) list of Spanish goods carried into Alta California in 1769 and Johnson's (1989:366-367) discussion of their distribution among the Chumash Indians along the Santa Barbara Channel as a medium of exchange for goods and services. The account of Francisco de Ulloa on nearby Isla Cedros from 1540 exchanging glass beads for water is the closest record to the study area of contact and trade. More difficult is the task of assigning the various bead types to a specific time period or European source of origin. Deagan (1987:159), for instance, notes that during the eighteenth century the Venetian glass bead center produced at least 562 major categories of beads, including glass rosary beads common to Spanish colonial sites of that century.

The dating of these various Laguna Guerrero Negro glass beads seems to cover a broad range, with some variability depending on type. Almost none of the types appear to persist past the early 1800s, and some look to date primarily to the 1700s, the time of primary missionization to the east in the central mountains. It would seem that most of these beads represent Indian losses, discard, and/or offerings (as in burial/cremation contexts) derived from approximately a 1700-1800 context. The acquisition of these beads directly or indirectly from Spanish sources seems most likely. These beads were probably intended for

Figure 10: (A) Type 4 (black annular or ring) glass beads; (B) Type 5 glass beads—dark green; (C) Type 10 glass bead on bottom (white) and Type 7 glass beads on above (yellow).



decorative purposes, although a few of the larger specimens could have been rosary-related.

CONCLUSIONS

The items of historic contact found at sites along Laguna Guerrero Negro overall are not surprising considering the early Spanish and English chronicles of goods offered or available to the Indians of the peninsula. Certainly there was the serendipitous 1570s and later debris that could be salvaged and experimented with from the central peninsular Pacific beaches. The reaches of the Spanish colonial effort and associated goods offered or acquired by the Indians demonstrate many similarities to what was widely presented in the Americas by the Spanish colonizers, especially with regard to glass beads and copper and iron items. Some of these goods were also carried to the peninsula shores by Spain's detractors of the time, including the English. Many of the items are duplicated in durable goods recovered from the San Diego Presidio (Williams 2004:129) including the beads, Chinese porcelain, Tizón Brown Ware (Southern California Brown Ware), brass or copper vessel fragments, nails and spikes, hook-and-eye fasteners, copper braid, and coins, among a much longer list. Yet there is certain uniqueness to the historic-era assemblage at the Laguna Guerrero Negro sites, uniqueness evident in the multi-continent grouping and the unsurprising adaptability of the Indians to economy-serving advantages and cost-savings offered by the availability of the goods observed.

The historic goods generally include items that would preserve, including redwood. Furthermore, there were likely valued items carried relatively long distances (the closest missions—Santa Gertrudis and San Borja—are over 90 km distant) from inland locations to and from the presumed transitory camps along the Laguna Guerrero Negro shoreline. Transport distance, availability, and preference may partially explain the absence of such artifacts as mainland-style metates and manos, rosaries, crosses, bells, mirrors, metal knives, and thimbles. Furthermore, what is present for the most part is workshop debris, broken utilitarian vessels (including one possibly cached), small items that could be lost in the sands, possible mortuary offerings (although no cremations or burials were observed at the particular sites in question, only those nearby), and/or artifacts that were expedient and easily available (such as workable porcelain and iron from central-peninsula beaches). These goods may cross-cut gender, with such items as ceramic vessels and possibly ornaments being female-oriented and projectile points being male-oriented, judging by historic accounts (cf. Aschmann 1959). Workable copper, porcelain and iron could transcend gender in terms of workshop activities. The ornamental items may have had a special relationship with respect to status or prestige, but their placement in day-to-day refuse is not revealing in this regard. Similarly, the commonplace of the various goods does not appear to be related to any specific group. The literature suggests strongly that glass beads and knives were either the items most favored throughout the southern two-thirds of the peninsula, or the items most given that would preserve. Indeed, there is no disappointment in the variety of glass beads present.

Important metal knives may not have broken along the coast and were carried out.

The absence of religious items (unless some of the glass beads and cuprous wire came from rosaries) could indicate pre-mission contact, although the perforated coin and utilitarian ceramics strongly suggest otherwise. Furthermore, the lack of metal fishhooks that appear to be among explorer-period goods offered to the Indians (albeit with no indications in the literature of their value among the Indians) suggests mainly mission-era contact goods are present notwithstanding beach scavenged debris and curation elsewhere. Those items which are datable, aside from early historic-period beach debris, including the coin, some bead types, and possibly the copper button, suggest that acquisition of many goods occurred in the 1700s-early 1800s, a time of mission expansion and Spanish hegemony in the highlands to the east of Laguna Guerrero Negro, with eventual cultural and physical extinction of the Indians.

Many of the historic-period items can be viewed as substitutes for or upgrades of existing material goods, including new beads, trinkets, and ornaments that substituted or augmented the shell beads and ornaments found in regional sites; utilitarian pottery vessels transported from distant mountain mission locations that could be used in place of or to supplement baskets, shell containers, turtle-shell receptacles, and the like; glass and porcelain items that could be flaked to augment imported stone artifacts; and iron and copper pieces that had utility in cutting, perforating, knapping, and other tasks. It is not known whether any of these items served only as curiosities, or had an added element of curiosity. Far less certain is whether some of these artifacts were incorporated into ritual activities.

Overall the historic-era artifacts seem merely to have blended into the pre-European material assemblage that served these maritime-oriented visitors. They add evidence to a proposed wide-ranging, late prehistoric/proto-historic mobility pattern, one that directly or indirectly led to mission establishments (missions, *visitas*, etc.) several day's journey inland. Other than beach debris, the historic-period goods observed were likely largely obtained from mission-related settlements where such goods in part served as rewards and enticements from missionaries bent on saving souls and in other cases as a means for ensuring an adequate subsistence for the Indians. Indian neophyte diet could only be partially maintained by mission production, necessitating continued gathering of wild foods, or acquisitions from mainland Mexico (Aschmann 1959: 24, 234). The historic-era goods are a microcosm of the far-ranging Spanish empire of the sixteenth to the nineteenth centuries, with materials from Asia, mainland Mexico (and perhaps other locations throughout Ibero-America), and various European sources (Spain, Italy, Austria, etc.), as well. This developing world economic/mercantile system reached the extreme fringes of the Vizcaíno Desert by the 1500s, a location identified by Aschmann (1959: 43, Map 9) as having only transitory use. Certainly this base of historic-era data will find greater meaning as more historic-period Indian sites are studied throughout the peninsula and comparisons are made in the study of contact-era material-culture issues.

REFERENCES CITED

- Andrews, Thomas F.
1979 *English Privateers at Cabo San Lucas*. Dawson's Book Shop, Los Angeles.
- Aschmann, Homer
1959 *The Central Desert of Baja California: Demography and Ecology*. Ibero-Americana 42. Berkeley.
- Aston, James, and Edward B. Story
1939 *Wrought Iron*. A. M. Beyers, Pittsburg, Pennsylvania.
- Baegert, Johann Jakob, S.J.
1952 *Observations in Lower California*. University of California Press, Berkeley.
- Barco, Miguel del
1973 *Historia Natural y Crónica de la Antigua California (Adiciones y Correcciones a la Noticia de Miguel Venegas)*. Universidad Nacional Autónoma de México, Instituto de Investigaciones Históricas, Mexico City.
1981 *Ethnology and Linguistics of Baja California*, Translated by Froylán Tiscareño. Dawson's Book Shop, Los Angeles.
- Blind, Eric Brandan, Barbara L. Voss, Sannie Kenton Osborn, and Leo R. Barker
2004 El Presidio de San Francisco: At the Edge of Empire. *Historical Archaeology* 38(3):135-149.
- Burrus, Ernest J. S.J. (translator and editor)
1966 *Wenceslaus Linck's Diary of His 1766 Expedition to Northern Baja California*. Dawson's Book Shop, Los Angeles.
1967 *Wenceslaus Linck's Reports and Letters 1762-1778*. Dawson's Book Shop, Los Angeles.
1971 *Juan María de Salvatierra S.J., Selected Letters about Lower California*. Dawson's Book Shop, Los Angeles.
1984 *Jesuit Relations, Baja California 1716-1762*. Dawson's Book Shop, Los Angeles.
- Clavijero, Don Francisco Javier, S.J.
1937 *The History of [Lower] California*. Translated from the Italian by Sara E. Lake. Stanford University Press, Palo Alto.
- Cooke, Edward
1712 Cabo San Lucas: November-December 1709. In *A Voyage to the South Seas and Round the World, Perform'd in the Years 1708, 1709, 1710, and 1711 by the Ships Duke and Duchess of Bristol*. B. Lintot and R. Gosling, London.
- Crosby, Harry W.
1994 *Antigua California*. University of New Mexico Press, Albuquerque.
2003 *Gateway to Alta California, The Expedition to San Diego, 1769*. Sunset Publications, San Diego.
- Deagan, Kathleen
1987 *Artifacts of the Spanish Colonies of Florida and the Caribbean 1500-1800, Vol. 1, Ceramics, Glassware, and Beads*. Smithsonian Institution Press, Washington D.C.
2002 *Artifacts of the Spanish Colonies of Florida and the Caribbean 1500-1800, Vol. 2, Portable Personal Possessions*. Smithsonian Institution Press, Washington D.C.
- Dubin, Lois Sherr
1995 *The History of Beads from 30,000 B.C. to the Present*. Harry N. Abrams, Inc. New York.
- Dunn, Peter Masten, S.J.
1952 *Black Robes in Lower California*. University of California Press, Berkeley.
- Geiger, Maynard, O.F.M. (translator and editor)
1970 *Letter of Luís Jayme, O.F.M., San Diego, October 17, 1772*. Dawson's Book Shop, Los Angeles.
- Gregory, Hiram A., and Clarence H. Webb
1965 European Trade Beads from Six Sites in Natchitoches Parish, Louisiana. *The Florida Anthropologist* 18(3): 15-44.
- Hakluyt, Richard
1904a [1600] Relation of Francisco de Ulloa:1539. "A Relation of the Discovery... Taken out of the third volume of the voyages gathered by M. John Baptista Ramusio." In *The Principal Navigations Voyages Traffiques & Discoveries of the English Nation*, Vol. IX, pp. 206-278. James MacLehose and Sons, Glasgow.
1904b [1600] Relation of Fernando de Alarcón: May-September 1540. "A Relation of the Discovery... Taken out of the third volume of the voyages gathered by M. John Baptista Ramusio. The Relation of the Navigation and Discovery which Captaine Fernando Alarchon made..." In *The Principal Navigations Voyages Traffiques & Discoveries of the English Nation*, Vol. IX, pp. 279-318. James MacLehose and Sons, Glasgow.
- Hammond, George P. (translator and editor)
1967 *Informe on the New Province of California 1702, Francisco María Piccolo, S.J.* Dawson's Book Shop, Los Angeles.
- Johnson, John R.
1989 The Chumash and the Missions. In *Columbian Consequences, Vol. 1, Archaeological and Historical Perspectives on the Spanish Borderlands West*, David Hurst Thomas, ed., pp. 365-376. Smithsonian Institution Press, Washington D.C.

- Massey, William C.
1947 Brief Report on Archaeological Investigations in Baja California. *Southwestern Journal of Anthropology* 3(4):344-359.
- Mathes, W. Michael (editor, transcriber and translator)
1966 *The Pearl Hunters in the Gulf of California 1668 (Summary Report of the Voyage Made to the Californias by Captain Francisco de Lucenilla*, written by Father Juan Cavallero Carranco. Dawson's Book Shop, Los Angeles.
1969 *First from the Gulf to the Pacific, The Diary of the Kino-Atondo Peninsular Expedition*. Dawson's Book Shop, Los Angeles.
1970 Relations of Francisco de Ortega: 1633-1634. In *Californiana II: Documentos para la Historia de la Explotación Commercial de California 1611-1679*. W. Michael Mathes, ed., pp. 347-353, 436-452. Ediciones José Porrúa Turanzas. Madrid
1973 *The Conquistador in California: 1535, The Voyage of Fernando Cortés to Baja California in Chronicles and Documents*. Dawson's Book Shop, Los Angeles.
1976 A Spanish Voyage to California in 1644: The Report of Pedro Porter y Casanate, In *Brand Book Number Four: The San Diego Corral of the Westerners*, Abraham P. Nasatir, ed., pp. 91-99. The Westerners, San Diego.
1979 *Clemente Guillén, Explorer of the South: Diaries of the Overland Expeditions to Bahía Magdalena and La Paz, 1719, 1720-1721*. Dawson's Book Shop, Los Angeles.
1992a Introduction. In *Spanish Borderlands Sourcebooks*, W. Michael Mathes, ed., pp. xii-xvi. Garland Publishing Inc. New York.
1992b Relation of Sebastián Vizcaíno: August-November 1596 (1990). In *Spanish Borderlands Sourcebooks, 5, Ethnology of the Baja California Indians*, W. Michael Mathes, editor, pp. 135-144. Garland Publishing, Inc., New York
1992c Relation of Sebastián Vizcaíno: June-November 1602 (1990). In *Spanish Borderlands Sourcebooks, 5, Ethnology of the Baja California Indians*, W. Michael Mathes, editor, pp. 145-163. Garland Publishing, Inc., New York
1992d Relations of Francisco de Ortega: 1633-1634. In *Californiana II: Documentos para la Historia de la Explotación Commercial de California 1611-1679*. W. Michael Mathes, ed., pp. 347-353, 436-452. Ediciones José Porrúa Turanzas. Madrid. Reprinted in *Spanish Borderlands Sourcebooks*, W. Michael Mathes, ed., pp. 229-244. Garland Publishing Inc. New York.
- May, Ronald V.
1973 An Archaeological Survey of Mission Santo Tomás, Baja California. *Pacific Coast Archaeological Society Quarterly* 9 (1):48-65.
- Moriarty, James E. IV, and James R. Moriarty III
1983 Investigación de una Canoa de Madera Descubierta in la Laguna Ojo de Liebre, Baja California. *Calafia*, Revista de la Universidad Autónoma de Baja California 5(1):27-34.
- Moriarty, James Robert III, and Benjamin F. Smith (translators and editors)
1970 *The Cora Indians of Baja California, The Relacion of Father Ignacio Maria Nápoli, S.J., September 20, 1721*. Dawson's Book Shop, Los Angeles.
- Motz, Lee, Eric W. Ritter, and James Rock
1986 Glass Trade Beads from Two Shasta Sites in Siskiyou County, California. *Journal of California and Great Basin Anthropology* 8(1):116-128.
- Ortega, José de, and Juan Antonio Balthasar
1754 (Mexico City edition, 1944) *Apostólicos Afanes de la Compañía de Jesús: Escritos por un Padre de la Misma Sagrada Religión de su Provincia de México*. Barcelona.
- Ritter, Eric W.
1999 *Informe: Investigaciones Arqueológicas en Laguna Guerrero Negro, Baja California (Fase I)*. Report submitted to the Consejo de Arqueología, Instituto Nacional de Antropología e Historia, Mexico City.
2002 *Informe: Investigaciones Arqueológicas en Laguna Guerrero Negro y Laguna Manuela, Baja California, México (Fase II)*. Report submitted to the Consejo de Arqueología, Instituto Nacional de Antropología e Historia, Mexico City.
- Schulz-Bischoff, Elsbeth (translator)
1982 *The Letters of Jacob Baegert 1749-1761, Jesuit Missionary in Baja California*. Dawson's Book Shop, Los Angeles.
- Smith, Marvin T.
2002 Eighteenth-Century Glass Beads in the French Colonial Trade. *Historical Archaeology* 36(1):62-78.
- Stapp, Darby C.
1999 Reporte de Cobre de Laguna Guerrero Negro. Appendix 7 in *Informe: Investigaciones Arqueológicas en Laguna Guerrero Negro, Baja California (Fase I)*, by Eric W. Ritter, pp. 316-320. Report submitted to the Consejo de Arqueología, Instituto Nacional de Antropología e Historia, Mexico City.
- Tuohy, Donald R.
1970 The Aboriginal Containers of Baja California, Mexico, A Search for Origins. *Tebiwa* 13(2):41-51. Pocatello, Idaho.
- Venegas, Miguel
1757 *Noticia de la California y su Conquista Temporal y Espiritual... (abridged and rewritten by P. Andrés Burriel from Venegas' "Empresas Apostolicas")*. En la Imprenta de la Viuda de M. Fernadez, 1757. Madrid.

- Von der Porten, Edward (with Clarence Shangraw)
- 1999 Reporte sobre Fragmentos de Porcelana de Laguna Guerrero Negro, Baja California. En *Informe: Investigaciones Arqueológicas en Laguna Guerrero Negro, Baja California (Fase I)* by Eric W. Ritter, pp. 321-326. Report submitted to the Consejo de Arqueología, Instituto Nacional de Antropología e Historia, Mexico City.
- 2004 Report on Fragments of Porcelains from a Native-American Site near Laguna Guerrero Negro, Baja California. Manuscript in author's possession.
- Wagner, Henry R. (translator)
- 1929a Voyage of Francisco de Ulloa: July 1539-May 1540. In *Spanish Voyages to the Northwest Coast of America in the Sixteenth Century*, pp. 27-46. California Historical Society, San Francisco.
- 1929b Father Antonio de la Ascensión's Account of the Voyage of Sebastián Vizcaíno: 1602. In *Spanish Voyages to the Northwest Coast of America in the Sixteenth Century*, pp. 27-46. California Historical Society, San Francisco.
- Williams, Jack S.
- 2004 San Diego Presidio: A Vanished Military Community of Upper California. *Historical Archaeology* 38(3):121-134.
- Williams, Stephen L.
- 1997 Microanalysis de Tepalcates del Centro de Baja California. Appendix 7 in *Investigaciones de Ecología Social y Cambios entre Culturas Prehistóricas en la Región de Bahía de Los Angeles, Baja California (1995)* by Eric W. Ritter, pp. 238-241. Report submitted to the Consejo de Arqueología, Instituto Nacional de Antropología e Historia, Mexico City.

.