

Archaeological Evidence of Eagles on the California Channel Islands

MARLA DAILY

Santa Cruz Island Foundation, 1010 Anacapa Street, Santa Barbara, CA 93101; marla@scifoundation.org

*Historical records show that bald eagles (*Haliaeetus leucocephalus*) once inhabited all eight California Channel Islands. Golden eagles (*Aquila chrysaetos*), however, do not appear in historical records as island residents. This study presents results of a search for prehistoric evidence of eagles in archaeological materials excavated from the California Channel Islands, along with brief biographical notes about the archaeologists who found them. Thirteen eagle talons from three islands were found in archeological collections of four institutions and identified as to species. Ten talons were from Santa Cruz Island, two were from San Nicolas Island, and one was from Santa Rosa Island, and they proved to be a mix of both bald eagle and golden eagle talons. They were found in materials excavated between 1875 and 1928 by Paul Schumacher, Steven Bowers, David Banks Rogers, George Albert Streeter, and Ronald Leroy Olson. One talon was decorated with asphaltum and olivella shell beads; five were drilled with a hole for wearing as adornment; seven appeared to be unmodified. An eagle talon presence in archaeological remains cannot be assumed to be evidence of prehistoric eagle occupation of these islands, as island dwellers had well-developed trade networks through which talons may have been traded. Additional talons and other eagle remains undoubtedly will be identified in the future in faunal remains from Channel Islands archaeological sites.*

The bald eagle (*Haliaeetus leucocephalus*) is the largest North American bird of prey. It was first described by Linnæus in 1766, and sixteen years later (1782) became the national bird of the United States, symbolizing freedom, power, and majesty. Eagles have been found to be of great significance in the rituals of some California Native American groups (Kroeber 1925; Miller 1956). James G. Cooper noted that “Dr. Gambel states that they [bald eagles] were held sacred by the Indians, which will in a measure account for their abundance

and protection by the natives” (Cooper 1870a:452). It is, therefore, not surprising that eagle talons are represented in cultural materials from archaeological excavations on the California Channel Islands.

Historical records show that bald eagles once inhabited all eight California Channel Islands, although specimen data are lacking for San Nicolas Island¹ (Daily n.d.a). No golden eagles are recorded as historically occupying any of the eight California Channel Islands. Eagles are commemorated in early island place names: Eagle Rock on San Miguel Island; Eagle Rock on Santa Rosa Island; Eagle Canyon on Santa Cruz Island; Eagle Rock on San Nicolas Island; Eagle’s Nest and Eagle Reef on Santa Catalina Island; and Eagle Ranch on San Clemente Island. The earliest historical notice of a bald eagle on the California Channel Islands was recorded by William Gambel on his trip to Santa Catalina Island in February, 1843 (Gambel 1846); he reported bald eagles nesting on “precipitous cliffs.” James G. Cooper (1870a, 1870b) reported bald eagles as being common and numerous along inaccessible cliffs during his visits to Santa Catalina Island in 1861 and 1863. Cooper noted (1870a) that thirty bald eagles were seen at the north end of Santa Catalina Island on July 9, 1873. Almost three decades after Gambel’s first sighting of bald eagles, two specimens were shot on San Miguel Island by George Davidson, Superintendent of the U.S. Coast Survey, and deposited at the Academy of Natural Sciences in Philadelphia in 1871.² Just over a century after Gambel’s first bald eagle observations, egg-collector Lucien R. Howsley removed the last known set of bald eagle eggs from Santa Rosa Island in 1949.³ The last known active bald eagle nest was photographed by Alden H. Miller on Santa Rosa Island in March, 1950 (Miller 1950), after which only occasional bald eagle sightings were reported.

STUDY AREA AND METHODS

There are eight islands located off the coast of southern California that comprise California’s Channel Islands (Fig. 1). They are divided into two separate groups: the Northern Channel Islands (San Miguel, Santa Rosa, Santa Cruz, and Anacapa islands), and the Southern Channel Islands (San Nicolas, Santa Barbara, Santa Catalina, and San Clemente islands). They extend in



Figure 1. California's eight Channel Islands are located off the coast of Southern California.

a northwest to southeast direction for about 160 miles from Point Conception to San Diego, and lie from eleven to sixty miles offshore. The islands range in size from 96 square miles (Santa Cruz Island) to one square mile (Santa Barbara Island), and collectively total approximately 350 square miles of land offshore. These islands, and their accompanying offshore rocks and pinnacles, served as a natural range for the bald eagle until the mid twentieth century (Daily n.d.a). The islands also served as home to a variety of indigenous peoples for more than 13,000 years (Glassow 1977).

Since the nineteenth century, archaeological explorations and excavations have occurred on all eight California Channel Islands, and cultural materials from them have been deposited in museums around the world (Blackburn and Hudson 1990). Until now, however, little mention has been made of eagle remains from island archaeological sites. The search for such evidence was made as an ancillary part of a larger research study on the history of bald eagles on the California Channel Islands.

While visiting ornithological and oological collections across the United States in search of eagle specimen material, the opportunity was taken to also examine archaeological collections from the California Channel Islands. In all cases where eagle talons were located in island archaeological materials, none had been correctly identified as to genus and species, and in one case the accession record identification was incorrect.⁴ Paul Collins, Curator of Vertebrate Zoology at the Santa Barbara Museum of Natural History, provided all identifications. By using contemporary sets of comparative left/right talons from both bald eagle and golden eagle specimens, positive talon identifications were made.

ARCHAEOLOGICAL FINDS OF EAGLE TALONS ON THE CALIFORNIA CHANNEL ISLANDS

Thirteen eagle talons from three California Channel Islands were located and identified during the course

of the study. These talons were located in the following museum collections: Santa Barbara Museum of Natural History, Santa Barbara (6 talons); Phoebe Hearst Museum of Anthropology, University of California, Berkeley (4 talons); American Museum of Natural History, New York (2 talons); and the National Museum of Natural History, Department of Anthropology, Suitland (1 talon). Given the fact that the historical range of bald eagles included all eight islands, one might expect to find bald eagle talons. However, five of the thirteen talons found in archaeological sites on the Channel Islands were from golden eagles.

The thirteen eagle talons were collected on their respective islands between 1875 and 1928. Ten came from Santa Cruz Island, two from San Nicolas Island, and one from Santa Rosa Island (Table 1). The earliest three were collected in 1875 (1 talon) and 1879 (2 talons) by Paul Schumacher and the Reverend Stephen Bowers, respectively. The remaining ten were collected in 1927 (7 talons) and 1928 (3 talons) by David Banks Rogers, his field assistant George A. Streeter, and Ronald L. Olson.

Five of the ten raptor talons found on Santa Cruz Island between 1875 and 1928 were identified as golden eagle, four were bald eagle, and one was probably bald eagle. (The latter specimen was small and somewhat worn, thus making positive identification difficult.) The earliest talon was found by Paul Schumacher (1844–1883) (Fig. 2), who had developed an interest in archaeology

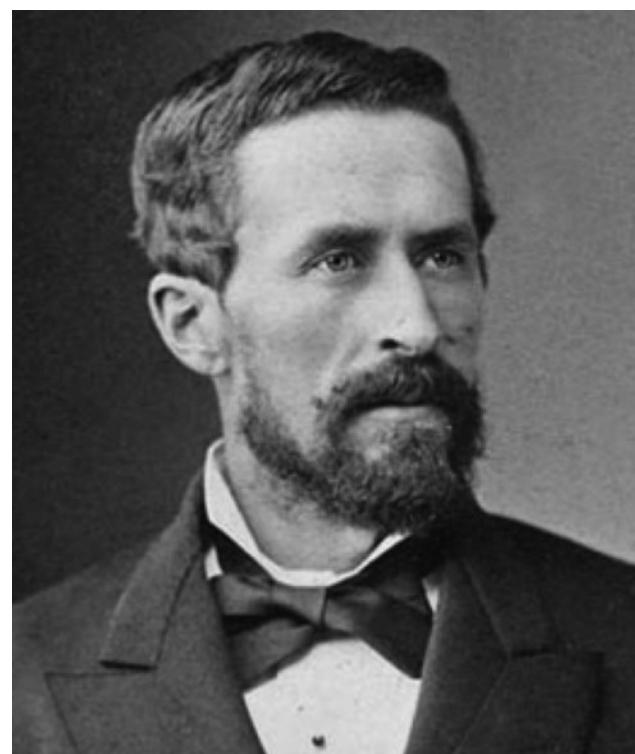


Figure 2. Paul Schumacher (1844–1883). Courtesy of the History Center of San Luis Obispo County.

while working on the West Coast as an employee of the U.S. Coast Survey. Between 1872 and 1879, Schumacher collected artifacts on at least four of the eight California Channel Islands, and sold portions of his collections to the Smithsonian Institution and to Harvard University's

Table 1
PREHISTORIC EAGLE TALONS FROM THE CALIFORNIA CHANNEL ISLANDS

Figure	Island	Location	Site	Type	Collector	Excavation Year	Excavation Date	I.D. Number
1. Fig. 3	Santa Cruz Island			Bald eagle	Paul Schumacher	1875		NMNH A18192-0/004199
2. Fig. 5	Santa Cruz Island	Coches Prietos		Bald eagle		1927		SBMNH I.1710
3. Fig. 5	Santa Cruz Island	Coches Prietos		Golden eagle		1927	5/15	SBMNH I.1200
4. Fig. 5	Santa Cruz Island	Coches Prietos		Bald eagle		1927	5/16	SBMNH I.1131
5. Fig. 5	Santa Cruz Island		Christies Site #3 Pit N	Golden eagle	David B. Rogers	1927	6/17	SBMNH I.1137
6. Fig. 5	Santa Cruz Island		Christies Site #3 Pit N	Golden eagle	David B. Rogers	1927	6/17	SBMNH I.1137
7. Fig. 7	Santa Cruz Island	Forney's	CA-Scri-1-3	Bald eagle	Ronald L. Olson	1927	7/2-8/13	PHMA 1-30531
8. Fig. 7	Santa Cruz Island	Forney's	CA-Scri-1-3	Bald eagle likely	Ronald L. Olson	1927	7/2-8/13	PHMA 1-30531
9. Fig. 7	Santa Cruz Island	Scorpion Harbor	CA-Scri-138	Golden eagle	Ronald L. Olson	1928		PHMA 1-37069
10. Fig. 7	Santa Cruz Island	Scorpion Harbor	CA-Scri-138	Golden eagle	Ronald L. Olson	1928		PHMA 1-36872
11. Fig. 10	San Nicolas Island			Bald eagle	Steven Bowers	1879		AMNH 14460
12. Fig. 10	San Nicolas Island			Bald eagle	Steven Bowers	1879		AMNH 14461
13. Fig. 11	Santa Rosa Island	Ranch House		Bald eagle	David B. Rogers	1927	8/8	SBMNH I.1577

newly completed (1877) Peabody Museum (Daily n.d.b). In 1875 Schumacher worked on Santa Cruz Island, and a bald eagle talon he collected was among items sold to the Smithsonian.⁵ This is the earliest collected talon identified from an archaeological site on the California Channel Islands (Fig. 3). Unfortunately, Schumacher did not provide specific site information. The talon had been drilled with a hole for possible use as an ornament. It is an interesting coincidence that Schumacher excavated this bald eagle talon on Santa Cruz Island in the same year (1875) that Henry Weatherbee Henshaw collected the earliest known bald eagle egg from the California Channel Islands from a nest on Santa Cruz Island.⁶

In 1927, some fifty-two years after Schumacher's Santa Cruz Island bald eagle talon find, anthropologist David Banks Rogers (1868–1954) (Fig. 4) excavated an additional four eagle talons on Santa Cruz Island, three of which were identified as golden eagle (Fig. 5). Rogers had worked for both the Smithsonian Institution and the Heye Foundation in New York before moving to Santa Barbara, where he established the Anthropology Department at the Santa Barbara Museum of Natural History in 1923 (Daily n.d.b). He made his first of many field trips to San Miguel, Santa Rosa, and Santa Cruz islands in March and April of 1927. An Island Fund was established at the museum to support Rogers' island excavations. On May 15, 1927, while working at Coches Prietos (CA-SCRI-1) on the south side of Santa Cruz Island, Rogers found an eagle talon decorated with asphaltum and olivella shell beads in "debris in bank." It was identified as golden eagle.⁷ The following day, Roger's field assistant, Santa Barbara native George A. Streeter (1871–1946), found a second talon, this one undecorated (Fig. 5). It was identified as bald eagle.⁸ A third talon, also identified as bald eagle, was recovered during the May, 1927 excavations at Coches Prietos.⁹ A month later, on June 17, 1927, while working at Christy Ranch (CA-SCRI-257) towards the island's west end, Rogers recovered two additional undecorated and undrilled talons. Both were identified as golden eagle (Fig. 5).¹⁰

Ronald Leroy Olson (1895–1979) (Fig. 6), joined David Banks Rogers' 1927 excavations on Santa Cruz Island, and spent a total of eleven weeks in the field. He returned to the island for an additional six weeks in 1928 (Olson 1930). Olson worked at a number of sites, including Prisoners' Harbor, Coches Prietos,



Figure 3. Bald eagle talon collected on Santa Cruz Island in 1875 by Paul Schumacher [NMNH A18192-0/004199].
Courtesy of the National Museum of Natural History, Smithsonian. Photo by Brian Burd. Talon identification courtesy of Paul Collins, November 8, 2006.



Figure 4. David Banks Rogers (1868–1954). Photo courtesy of the Santa Barbara Museum of Natural History

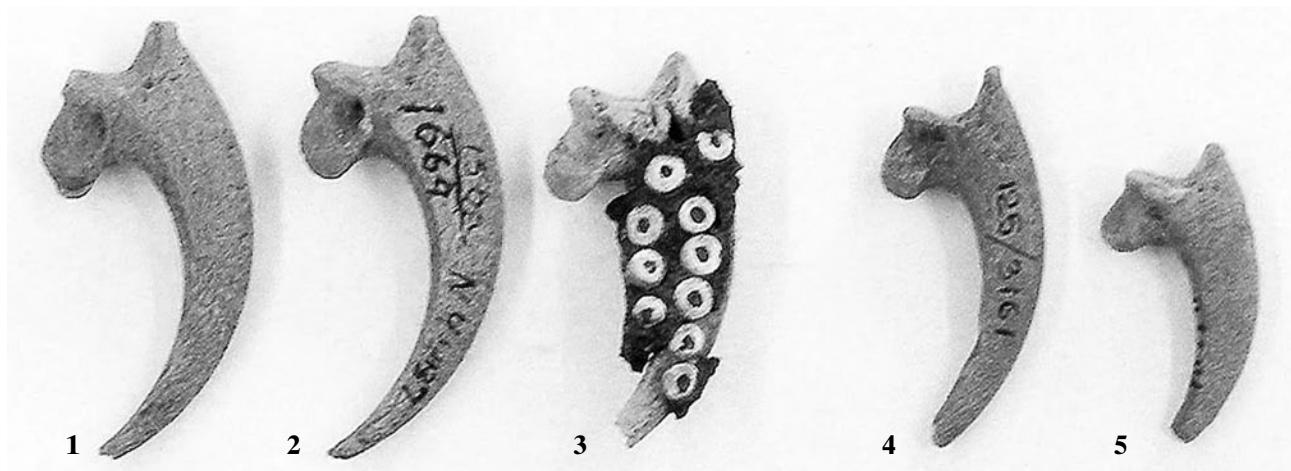


Figure 5. Talons from Santa Cruz Island sites, SBMNH, left to right:

1. Golden eagle, (CA-SCRI-257), excavated by David B. Rogers on June 17, 1927. "Dual burial." [SBMNH I.1137].
2. Golden eagle, (CA-SCRI-257), excavated by David B. Rogers on June 17, 1927. "Dual burial." [SBMNH I.1137].
3. Golden eagle, Coches Prietos (CA-SCRI-1), excavated May 15, 1927. Talon with asphaltum inlaid with olivella beads found in "debris in bank." [SBMNH I.1200].
4. Bald eagle, Coches Prietos (CA-SCRI-1), excavated on May 16, 1927. "Streeter near garden." [SBMNH I.1131].
5. Bald eagle, Coches Prietos (CA-SCRI-1), excavated May 1927. "Unprepared material from various test pits near the garden." [SBMNH I.1710].

Courtesy of the Santa Barbara Museum of Natural History, Santa Barbara. Photo by Brian Burd, Santa Cruz Island Foundation. Talon identification courtesy of Paul Collins, March 27, 2006.



Figure 6. Ronald Leroy Olson (1895–1979).

Courtesy of the Santa Cruz Island Foundation.

Willows, Cañada Cebada, Christy Ranch, Forney's Cove, Johnson's Landing, Morse Point, Poso Creek, between Fry's and Platts harbors at Orizaba, in the Central Valley, and on the east end of the island at both Scorpion Anchorage and Smugglers Cove. His Santa Cruz Island collections were deposited at the Phoebe Hearst Museum of Anthropology, University of California, Berkeley. Olson discovered four eagle talons on Santa Cruz Island (Fig. 7), two at Scorpion Harbor on the island's east end,¹¹ and two at Forney's Cove on the island's west end.¹² The two talons from Scorpion Harbor were identified as golden eagle. Both were drilled for suspension, and (according to Paul Collins) may have been from the same bird. One talon from Forney's Cove was identified as bald eagle, and the second as likely being bald eagle. Neither was modified.

On November 8, 1879, two eagle talons were excavated on San Nicolas Island by the Reverend Stephen DeMoss Bowers (1832–1907) (Fig. 8), Methodist minister, newspaper publisher, and self-taught archaeological collector. Bowers recognized that prehistoric cemeteries "were rich in archaeological treasures," and thus began excavating burials on various Channel Islands and selling



Figure 7. Golden eagle and bald eagle talons collected by Ronald Olson on Santa Cruz Island in 1927 and 1928. PHMA, left to right:

1. **Golden eagle, Scorpion Harbor, excavated in 1928 by Ronald L. Olson; site CA-Scri-138 [PHMA 1-37069].**
2. **Golden eagle, Scorpion Harbor, excavated in 1928 by Ronald L. Olson; site CA-Scri-138. Gifford (1940) type specimen "VV." Talons possibly from the same bird [PHMA 1-36872].**
3. **Bald eagle, Forney's, excavated July 2–August 13, 1927 by Ronald L. Olson; site CA-Scri-3. Possibly female [PHMA 1-30531, larger talon].**
4. **Likely bald eagle, Forney's, excavated July 2–August 13, 1927 by Ronald L. Olson; site CA-Scri-3. Possibly male [PHMA 1-30531, smaller talon].**

Courtesy of the Phoebe A. Hearst Museum of Anthropology, University of California, Berkeley.

Photo by Brian Burd, Santa Cruz Island Foundation. Talon identification courtesy of Paul Collins, June 28, 2006.

archaeological specimens and skulls to interested buyers (Benson 1997). He collected heavily on San Miguel, Santa Rosa, Santa Cruz, and San Nicolas islands. One of Bowers' customers was a wealthy private collector, James Terry (1844–1912) (Fig. 9). Terry bought a number of San Nicolas Island items from Bowers, including the two talons from San Nicolas Island.¹³ Twelve years later, when Terry was named Curator of Anthropology at the American Museum of Natural History in New York, he sold his collection of more than 25,000 artifacts, many of them from California, to the museum. The two San Nicolas Island bald eagle talons were accessioned in 1891 as "bear claws," one of which was "pierced to string for necklace."¹⁴ Terry remained curator for three years (1891–1894), until he had a falling out with the institution's president. The San Nicolas Island talons he had purchased from Bowers remained accessioned in the museum catalogue as bear claws until 2006, when they were positively identified for the author by Paul Collins as bald eagle (Fig. 10).

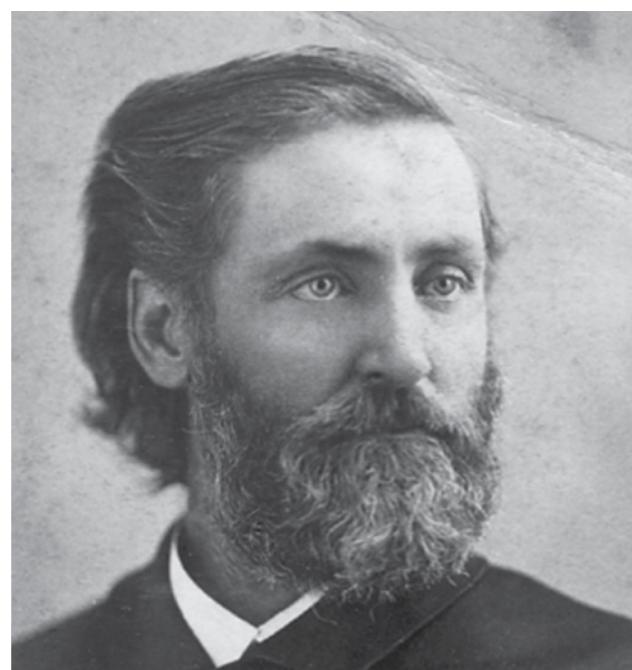


Figure 8. Stephen DeMoss Bowers (1832–1907).

Courtesy of the Santa Cruz Island Foundation.



Figure 9. James Terry (1844–1912) [PH1/88].
Photo courtesy of the American Museum of Natural History.

On August 8, 1927, Santa Barbara Museum of Natural History archaeologist David Banks Rogers excavated an infant burial at the “Ranch House” on Santa Rosa Island. At a depth of ten feet on the north side of the site, Rogers found a long necklace composed of a number of species of seashells and a drilled eagle talon.¹⁵ The talon was identified as bald eagle (Fig. 11). Much of Rogers’ work along the Santa Barbara Channel was described in his 1929 book, *Prehistoric Man of the Santa Barbara Coast*, published by the Santa Barbara Museum of Natural History.

Of the thirteen eagle talons found in archaeological materials from Santa Cruz, Santa Rosa, and San Nicolas islands, five were positively identified as golden eagle. One of the golden eagle talons from Coches Prietos on Santa Cruz Island was decorated with asphaltum and olivella shell beads. Two additional golden eagle talons from Scorpion Harbor on Santa Cruz Island were drilled for stringing, as were two bald eagle talons, one from an unspecified location on Santa Cruz Island and the other



Figure 10. Bald eagle talons collected on San Nicolas Island in 1879 by Stephen Bowers and sold to collector James Terry. [AMNH T/14461, T/14460]. Courtesy of the American Museum of Natural History. Photo by Brian Burd, Santa Cruz Island Foundation. Talon identification by Paul Collins, September 8, 2006.



Figure 11. Bald eagle talon on necklace from infant burial, Ranch House, Santa Rosa Island. [SBMNH Rogers I.1577]. Courtesy of the Santa Barbara Museum of Natural History, Santa Barbara. Photo by Brian Burd, Santa Cruz Island Foundation. Talon identification by Paul Collins, March 30, 2006.

from Santa Rosa Island. Because golden eagles do not appear as a resident species in the historical records of the California Channel Islands, it is likely these talons arrived through mainland-island trade. Further research and better identification of talon artifacts are warranted.

NOTES

¹Howell 1917 listed bald eagles as “abundant” on the California Channel Islands, and noted that C. B. Linton collected a set of bald eagles from San Nicolas Island (Willett 1912). The specimen has yet to be found.

²George Davidson, ca. 1871. Two adult bald eagle specimens from San Miguel Island, ANSP #33149; ANSP#33150, Academy of Natural Sciences, Philadelphia.

³Lucien R. Howsley, 1949. Last known set of bald eagle eggs from Santa Rosa Island, WVFZ22562.

⁴The misidentified talon was a grizzly bear (*Ursus arctos*) terminal phalange recovered from a site on San Nicolas Island — a rare and significant find.

⁵NMNH A18192-0/004199.

⁶BMNH 1891.3.1.488.

⁷SBMNH I.1200.

⁸SBMNH I.1131.

⁹SBMNH I.1710.

¹⁰SBMNH I.1137; SBMNH I.1137.

¹¹PHMA 1-37069; PHMA 1-36872.

¹²PHMA 1-30531; PHMA 1-30531.

¹³AMNH 14461; ANMH 14460.

¹⁴AMNH 14461.

¹⁵SBMNH I.577.

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