# Introduction: New Directions in Channel Islands Archaeology

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#### Introduction

Southern California's Channel Islands contain a remarkable archaeological record that has attracted the attention of scholars and the general public for well over a century. In recent years, archaeological research on the islands has increased dramatically, resulting in a number of new articles, books, dissertations, monographs, and technical reports (e.g., Altschul and Grenda 2002; Arnold 2001; Glassow 1993a; Hollimon 1990; Kennett 1998; Lambert 1994; McLendon and Johnson 1999; Vellanoweth 2001a; Yatsko 2000). As a number of scholars have demonstrated, the Channel Islands contain an archaeological record capable of playing a role in research issues and questions of global significance to the social and natural sciences (see Arnold 1996; Colten and Arnold 1998; Erlandson, Rick, Vellanoweth 2002; Hildebrandt and Jones 1992; Jackson et al. 2001; Jones and Hildebrandt 1995; Kennett and Kennett 2000; Walker 1986).

The Channel Islands are situated roughly 20 to 98 km offshore between Point Conception and San Diego (Fig. 1). Never connected to the mainland during the Quaternary, the Channel Islands contain a unique terrestrial flora and fauna that stand in sharp contrast with the nearby mainland coast (Schoenherr, Feldmeth, and Emerson 1999). The largest island mammal during the Holocene, for example, was the island fox a diminutive relative of the mainland gray fox (Schoenherr, Feldmeth, and Emerson 1999:30,

32). Before the Historic period, large terrestrial herbivores and carnivores also were absent on the islands. Terrestrial plant communities are considerably less diverse than the mainland, with patchy woodland communities of oaks and pines relegated primarily to the larger islands of Santa Cruz, Santa Rosa, and Santa Catalina (Schoenherr, Feldmeth, and Emerson 1999; Timbrook 1993). Fresh water also has been indicated as a limiting factor for sustained human occupation on the Channel Islands, particularly the smaller islands of Santa Barbara, Anacapa, San Miguel, San Nicolas, and San Clemente (see Vellanoweth and Grenda 2002: 72-73). However, as island vegetation communities have regenerated in the absence of historical overgrazing, some fresh water sources also may be rejuvenating. Home to a wide variety of shellfish, fishes, and marine mammals (Schoenherr, Feldmeth, and Emerson 1999), the marine environment of the Channel Islands provided a wealth of resources for people to exploit and offset the relatively resourcepoor terrestrial environment. The next several decades on the Channel Islands should be exciting as island environments continue to stabilize and regenerate.

Ancient human occupation of the Channel Islands is extensive and diverse, including thousands of archaeological sites ranging from dense shell middens and housepit villages to small lithic scatters and camps (Fig. 2). Although claims by Orr (1968) and other early scholars that the Channel Islands were occupied for over 40,000 years remain unsubstantiated, recent

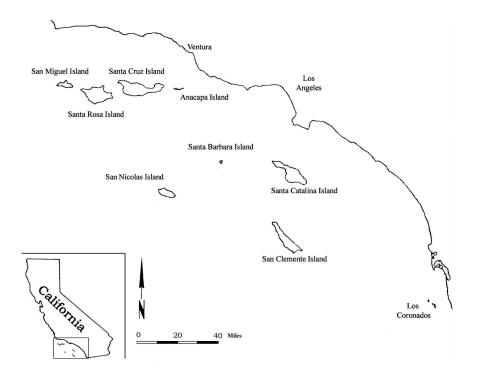


Fig. 1. Channel Islands and southern California coast.

research by scholars working on both the Northern and Southern Channel Islands has documented sites of considerable antiquity. The work of Jon Erlandson at Daisy Cave on San Miguel Island, for instance, has documented human occupation by boat-using peoples for over 11,000 calendar years, or roughly the same age as the Folsom culture (Erlandson et al. 1996). Nearby Cave of the Chimneys also has provided a record of human occupation spanning much of the last 8,000 years (Vellanoweth et al. 2002). Recent research by Erlandson and colleagues also has documented numerous additional open air sites dated to between 9,000 and 10,000 years old, illustrating that the islands were occupied by people who collected shellfish, fished, and conducted a variety of other activities (see Connolly, Erlandson, and Norris 1995; Erlandson and Rick 2002; Rick, Erlandson, and Vellanoweth 2001).

On adjacent Santa Rosa Island, John Johnson, Tom Stafford, and colleagues recently have conducted an extensive radiocarbon dating, osteological, and geoarchaeological analysis of the Arlington Woman Site discovered in 1959 by Phil Orr. Although the full report of their analysis is still pending, preliminary results suggest that the skeleton may be as old as 13,000 calendar years, making it one of the oldest in the Americas and among the earliest evidence of human use of boats on the continent (Johnson et al. 2000). Recent research on Santa Rosa Island also has documented several important shell middens or other sites dated between about 9,000 and 10,000 years old (Erlandson 1994; Erlandson and Rick 1999; Erlandson et al. 1999; Morris and Erlandson 1993).

On San Clemente Island, Mark Raab, Andy Yatsko, and others have recently reported the results of trans-Holocene occupation of Eel Point that appears to span at least 9000 years (see Porcasi, Jones, and Raab 2000; Raab and Yatsko 1992; Salls 1991). The Eel Point assemblage has provided additional details on the diverse maritime lifeways of early Channel Islanders. Collectively, this research suggests that the



Fig. 2. Dense stratified shell midden exposure on San Miguel Island.

Channel Islands currently contain one of the earliest, most extensive, and best preserved archaeological records of maritime peoples in the Americas.

As Glassow and others have suggested, the Middle Holocene (ca. 7000 to 3000 years ago) is one of the most poorly documented time periods on the California coast. Recent research on Middle Holocene sites across the Channel Islands, however, is rapidly increasing. Research on "red abalone middens"-a unique Northern Channel Islands site type with a high proportion of red abalone shells dated to between about 7500 and 4000 cal yr BP-suggests there may have been intervals of cooler sea surface temperatures during this period of time (Glassow 1993b, 2000; Glassow et al. 1994; Kennett 1998; Sharp 2000). On Santa Cruz Island, the Red Abalone Midden Project led by Mike Glassow includes extensive field and laboratory investigation of the Punta Arena Site (SCRI-109). Initial reports on this research have documented changes in human subsistence strategies

and landscape evolution (Glassow 1993b, 2000; Sharp 2000). Forthcoming data from SCRI-109 should provide important details on the strategies and lifeways of Middle Holocene peoples of the Channel Islands.

Research at the Little Harbor site on Santa Catalina Island is also providing unique evidence of human subsistence strategies and responses to possible warmwater marine events during the Middle Holocene (Raab et al. 1995). Faunal assemblages from Middle Holocene sites on the Southern Channel Islands contain a variety of unique animals such as giant ocean sunfish, dolphin, seals and sea lions, and albatross, suggesting complex and diverse foraging strategies by this early date (Porcasi 1999; Porcasi and Andrews 2001; Porcasi and Fujita 2000; Porcasi, Jones, and Raab 2000). For the Southern Channel Islands, Raab and Howard (2000), Vellanoweth (2001b), and others recently provided extensive evidence of a Middle Holocene exchange network of

Olivella grooved rectangle beads and other items extending to portions of Nevada and Oregon. As the data continue to accumulate, it is clear that the Middle Holocene contains a number of unique cultural developments.

Archaeological research during the Late Holocene is also on the rise. Jeanne Arnold, Roger Colten, and colleagues on Santa Cruz Island, for example, have reported a variety of data on the emergence of craft specialization and cultural complexity on the Northern Channel Islands (see Arnold 1992, 2001; Arnold, Colten, and Pletka 1997; Colten 1993). Arnold and others have correlated a period of drought and possible warm sea surface temperatures with increases in sociopolitical complexity, a model that has been heavily debated by a variety of scholars (e.g., Arnold 1992; Arnold, Colten, and Pletka 1997; Kennett and Kennett 2000; Raab and Larson 1997; Yatsko 2000). New and forthcoming data from a marine paleotemperature curve described by Kennett (1998) and Kennett and Kennnett (2000) will provide important insight on human responses to changing climatic conditions.

Finally, several researchers have recently provided new data on the Historic period Native American occupation of the Channel Islands (e.g., Arnold 1990; Kennett et al. 2000; Johnson 1999). The publication of the multi-volume report by McClendon and Johnson (1999) on the lineal descent and history of Chumash occupation of the Northern Channel Islands is a welcome contribution on this period of rapid cultural change. Chumash descendants are currently in the midst of a cultural revival that is a testament to the rich cultural heritage of the Chumash, Tongva (Gabrielino), and other local tribes. The 2001 voyage in a traditional tomol (plank canoe) to Santa Cruz Island by members of the Chumash tribe, along with other earlier voyages in the 1970s (see Hudson 1977), is one of the more prominent aspects of this revival.

The four papers in this volume are a collection of research that reflects the diversity of archaeology conducted on the islands. Erlandson, Rick, Kennett, and Walker present possible evidence for major demographic changes on the Northern Channel Islands during the Protohistoric period, perhaps caused by introduced diseases brought by early European explorers. Numerous researchers have speculated on possible Old World epidemics during the Protohistoric period, but the demographic and radiocarbon dates provided by Erlandson, Rick, Kennett, and Walker are among the few detailed data sets on this important and contentious topic. Rick, Skinner, Erlandson, and Vellanoweth provide a comprehensive analysis of obsidian exchange between Channel Islanders and interior portions of California and the Great Basin. This network spans much of the Holocene and crosses numerous tribal boundaries over vast distances. Erlandson, Vellanoweth, Caruso, and Reid describe a large assemblage of *Dentalium* shell artifacts from a 6600-year-old component at Otter Cave, San Miguel Island. This is one of the oldest and largest assemblages of *Dentalium* shell artifacts in southern California and provides evidence of another unique shell type used by peoples on the Channel Islands and coastal mainland. Finally, Rick provides an update on the status and history of archaeological research on Santa Barbara Island, including new radiocarbon dates and suggestions for future research. This overview provides new evidence on the diversity of activities conducted by the ancient occupants of this littleknown island.

The future of Channel Islands archaeology is bright with a number of ongoing projects sure to provide data of regional and global significance. The Channel Islands contain a generally well-preserved, lengthy, and continuous archaeological record of Native American occupation, providing an opportunity to investigate long-term cultural developments with generally high resolution (Glassow 1993c). However, a number of natural and cultural processes continue to

threaten Channel Islands archaeological sites. Marine and wind erosion are particularly destructive processes that indicate the need for accelerated radiocarbon dating, research, and preservation (see Erlandson and Moss 1999; Rick 2002). There also continue to be a number of gaps in research, particularly a dearth of data from the smaller islands of Anacapa and Santa Barbara-a factor that has often marginalized their prehistoric significance. Future research should target these areas and search for a more comprehensive and inclusive picture of ancient human occupation of the Channel Islands. The next several years should be exciting as our knowledge of the strategies and lifeways of the Island Chumash, Tongva, and their ancestors continues to grow, and Chumash and Tongva descendants play an increasingly significant role in the study, interpretation, management, and preservation of their past.

### Acknowledgements

I thank Beth Padon, the editorial board of the PCAS, and the production staff of the *PCASQ* for assistance in the layout and production of this manuscript. Jon Erlandson graciously provided a number of important comments on an earlier version of this paper.

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