

Anthropology 6146  
Sec 211G/ CBD 234  
Spring 2016  
sdef@ufl.edu

Dr. Susan D. deFrance  
1350-B Turlington Hall/1112 Turlington  
Office hours Tues & Thursday 2-3:30 pm  
and by appt.

## The Archaeology of Maritime Adaptations

### Course Objectives and Goals:

This seminar examines issues pertaining to human maritime adaptations in archaeological, ethnohistoric and ethnographic contexts. Issues to be examined include:

- 1) Definitions of Maritime Adaptations
- 2) History of Investigations
- 3) Characteristics of Marine Resources
- 4) Technology and Organization of Maritime Predation
- 5) Limitations on Maritime Subsistence
- 6) Ownership, Territory, and Resource Rights
- 7) Population, Settlement and Site Size
- 8) Economic and Political Organization
- 9) Complexity of Maritime Societies

Populations and cultures exhibiting maritime adaptations, among others, include: Jomon, Pacific Islands, Yagan, Andean Coast, Chumash, Northwest Coast, Eskimo/Aleut, Red Paint Archaic, Calusa, European Mesolithic, Coastal Maya

Readings are available on the course elearning/Sakai site.

### *Written Work and Class Presentations:*

- 1) Weekly Assignments: 1-2 page review (critique, evaluation – not summaries) of ALL weekly readings. These are due at the start of class; late papers are not accepted without prior permission.
- 2) Each session students will be assigned one reading to present in detail (max. 15 minutes). Oral presentations will rotate between students depending on the number of reading assignments per week. All students must be prepared to discuss all the weekly readings at class time.
- 3) Final Paper (due APRIL 25 AT 4 PM- NO late papers, No incompletes, emergencies excluded) – on an approved topic related to the Archaeology of Maritime Adaptations. Final Paper should follow *American Antiquity* format for bibliography with a minimum of 2 references per page.

### *Grading:*

***Class participation (20%)*** attendance (10%) and discussion (10%)  
(excused absences for illness and academic business only)

***Class presentations (15%)***

***Weekly written critiques (15%)***

***Final paper (50%)***

## **The Archaeology of Maritime Adaptations**

**Jan. 11**                      **Introduction, class structure, class themes**  
**Marine Habitats and modern degradation**

Visit <http://www.sms.si.edu/IRLSpec/index.htm>

The Smithsonian Marine Station at Fort Pierce, Indian River Lagoon, Florida  
view habitat and lagoon information in detail and other components in general

download NOAA publication: (read or print [it is better in color])

[http://www.nmfs.noaa.gov/habitat/habitatconservation/publications/EnglishWetlands\\_051404.pdf](http://www.nmfs.noaa.gov/habitat/habitatconservation/publications/EnglishWetlands_051404.pdf)

Cowardin, Lewis M., Virginia Carter, Francis C. Golet, and Edward T. LaRoe  
n.d. Classification of Wetlands and Deepwater Habitats of the United States

Jackson, J. B. C.

1997 Reefs since Columbus. *Coral Reefs* 16 (supplement):23-32.

Gedan, K. Bromberg. B.R. Silliman, and M.D. Bertness

2009 Centuries of Human-Driven Change in Salt Marsh Ecosystems. *Annu. Rev. Mar. Sci.*  
1:117–41.

**Jan. 18**                      **MLK Holiday**

**Jan. 25**                      **Marine and coastal environments and habitats, cont.**  
**Readings:**

Barber, R. T. and F. P. Chavez,

1983 Biological Consequences of El Niño, *Science* 222:1203-1210.

Salwen, Bert

1962 Sea Levels and Archaeology in the Long Island Sound Area. *Am. Antiquity* 28(1):46-55.

Sandweiss, Daniel H.

2003 Terminal Pleistocene through Mid-Holocene Archaeological Sites as Paleoclimatic Archives  
for the Peruvian Coast, *Palaeogeography, Palaeoclimatology, Palaeoecology* 194:23–40.

Scudder, Sylvia

2003 Sea Level Rise or Shallow-water Midden Deposition? Archaeopedology at the Seminole  
Rest Archaeological Site, Coastal East-Central Florida. *Journal of Archaeological Science* 30  
(12):1551-1557.

2001 Turks and Caicos – Coralie JAS

**Feb. 1                      Early View of Maritime Adaptations: Ethnography and Archaeology Readings:**

Barnett, Homer

1939 The Coast Salish of Canada. *American Anthropologist* 40:118-141.

Hewes, Gordon W

1948 The Rubric of "Fishing and Fisheries." *American Anthropologist* 50(2): 238-246.

Cook, S. H.

1946 A Reconsideration of Shellmounds with Respect to Population and Nutrition. *Am. Antiquity* 12:50-52.

Orssich, Adam and Elfriede Stadler Orssich

1956 Stratigraphic Excavations in the Sambaqui of Araujo II, Parana, Brazil. *American Antiquity* 21(4):357-369.

Roberts, H. H.

1932 The First Salmon Ceremony of the Karuk Indians. *Am. Anthropologist* 34:426-440.

Sauer, C. O.

1962 Seashore—Primitive Home of Man? *Proceedings of the American Philosophical Society* 106: 41–47.

Uhle, M.

1907 The Emeryville Shellmound. *American Archaeology and Ethnology (Berkeley)* 7:1–106.

ON RESERVE LIBRARY WEST

Nelson, N.C.

1909 Shellmounds of the San Francisco Bay Region. *U. California* 7(4).

ON RESERVE LIBRARY WEST - SKIM

**Feb. 8                      The Maritime Paradigm Readings:**

Arnold, J. E.

1995 Transportation Innovation and Social Complexity among Maritime Hunter-Gatherer Societies. *American Anthropologist* 97:733–747.

Cooney, Gabriel

2003 Introduction: Seeing Land from the Sea, Seascapes issue. *World Archaeology* 35(3):323-328.

Erlandson, Jon M.

2001 The Archaeology of Aquatic Adaptations: Paradigms for a New Millennium. *Journal of Archaeological Research* 9:287-350.

Jon M. Erlandson and Scott M. Fitzpatrick  
2006 Oceans, Islands, and Coasts: Current Perspectives on the Role of the Sea in Human Prehistory. *Journal of Island & Coastal Archaeology* 1(1):5-32.

Moseley, Michael  
Maritime Foundations: Preceramic Subsistence and ... and Multilinear Evolution: Retrospect and Prospect. *Andean Past* 3:5-42.

Yesner, D. R.  
1980 Maritime Hunter-Gatherers: Ecology and Prehistory. *Current Anthropology* 21:727-735.

Yesner, D. R.  
1987 Life in the "Garden of Eden": Constraints of Marine Diets for Human Societies. In *Food and Evolution*, edited by M. Harris, M., and E. Ross, pp. 285-310. Temple University Press, Philadelphia.

**Feb. 15                      Dietary Variation in Maritime Adaptations  
Fish, Shellfish, Crabs, Marine Mammals, Birds  
Readings:**

Akazawa, Takeru  
1988 Variability in the Types of Fishing Adaptation of the Later Jomon Hunter-Gatherers. In *The Archaeology of Coastlines*, edited by Geoff Bailey and John Parkington, Cambridge University Press, Cambridge. Selected chapters

Colten, R. H., and Arnold, J. E.  
1998 Prehistoric Marine Mammal Hunting on California's Northern Channel Islands. *American Antiquity* 63:679-701.

deFrance, S. D.  
2005 Late Pleistocene Marine Birds from Southern Peru: Distinguishing Human Capture from El Niño Induced Windfall. *Journal of Archaeological Science* 32:1131-1146.

Kozuch, Laura.  
1993 *Sharks and Shark Products in Prehistoric South Florida*. Institute of Paleoenvironmental Studies, University of Florida, Gainesville.  
EXAMINE SDEF COPY.

Marquardt, William H. 2010 Shell Mounds in the Southeast: Middens, Monuments, Temple Mounds, Rings, or Works? *American Antiquity* 75(3):551-570.

Parsons, Jeffery R.  
2005 The Aquatic Component of Aztec Subsistence: Hunters, Fishers, and Collectors in an Urbanized Society. *Subsistence and Sustainance* 15(1) (UM reprint of book chapter).

Losey, Robert J., Sylvia Behrens Yamada and Leah Largaespada  
2004 Late-Holocene Dungeness Crab (*Cancer magister*) Harvest at an Oregon Coast Estuary. *Journal of Archaeological Science* 31(11):1603-1612.

**Feb. 22**                      **Ethnographic background of maritime populations  
Alaska and Arctic regions, NW and California**  
**Readings:**

Boxberger, Daniel

1989 *To Fish in Common: The Ethnohistory of Lummi Indian Salmon Fishing*. University of Nebraska Press, Lincoln. selected chapters

Erlandson, Jon M.

1998 The Making of Chumash Tradition. *Current Anthropology* 39(4):477-485.

relates to Chumash self-identity and issues other than their uniqueness as a maritime peoples.

Moss, M. L.

1993 Shellfish, Gender, and Status on the Northwest Coast: Reconciling Archaeological, Ethnographic, and Ethnohistorical Records of the Tlingit. *Am. Anthropologist* 95:631-652.

Moss, M. L.

2008 Outer Coast Maritime Adaptations in Southern Southeast Alaska: Tlingit or Haida? *Arctic Anthropology* 45(1):41-60.

Wenzel, George W.

1995 Ningiqtuq: Resource Sharing and Generalized Reciprocity in Clyde River. *Arctic Anthropology* 32(2):43-60.

**February 29**                      **SPRING BREAK**

**March 7**                      **Ethnographic background of maritime (and lacustrine) populations  
Australia and Pacific islands, Caribbean, S. America**  
**Readings:**

Jones O'Day, Sharyn

2004 Past and Present Perspectives on Secular Ritual: Food and the Fisherwomen of the Lau Islands, Fiji, pp. 153-161. Proceedings of the 9<sup>th</sup> ICAZ Conference, *Behavior Behind Bones: The Zooarchaeology Ritual, Religion, Status, and Identity*, edited by S. Jones O'Day, W. Van Neer, and A. Ervynck. Oxbow Books, UK.

Lieber, Michael D.

1992 *More Than a Living: Fishing and the Social Order on a Polynesian Atoll*. Westview Press, Boulder. Chapters 1, 2, 9, 10

Levieil, Dominique and Benjamin Orlove

1990 Local Control of Aquatic Resources: Community and Ecology in Lake Titicaca. *American Anthropologist* 92:362-382.

McNive, Ian J.

2003 Saltwater People: Spiritscapes, Maritime Rituals and the Archaeology of Australian Indigenous Seascapes. *World Archaeology* 35(3): 329-349.

Price, Richard

Caribbean Fishing and Fishermen: A Historical Sketch. *Am. Anthropol.* 68 (6):1363-1383.

Titcomb, M.

1972 *Native Use of Fish in Hawaii*, 2nd ed., U. of Hawaii Press, Honolulu. pp. 1-56.

<http://www.harappa.com/fisher/index.html> View WEB site by William Belcher on Indus valley ethnoarchaeology of fisherfolk

Vono fishing video by Sharyn Jones – will show in class

**March 14                      Earliest use of marine resources, Paleolithic and Old World  
European Mesolithic, New World Late Pleistocene  
Readings:**

Mannino, Marcello A. and Kenneth D. Thomas

2002 Depletion of a Resource? The Impact of Prehistoric Human Foraging on Intertidal Mollusc Communities and Its Significance for Human Settlement, Mobility and Dispersal  
*World Archaeology*, 33(3):452-474.

C. B. Stringer, J. C. Finlayson, R. N. E. Barton, Y. Fernandez-Jalvo, I. Caceres, R. C. Sabin, E. J. Rhodes, A. P. Currant, J. Rodriguez-Vidal, F. Giles-Pacheco, J. A. Riquelme-Cantal

2008 Neanderthal exploitation of marine mammals in Gibraltar *Proceedings of the National Academy of Sciences*, 105 (38), 14319-14324 DOI: [10.1073/pnas.0805474105](https://doi.org/10.1073/pnas.0805474105)

Marean, Curtis W., Miryam Bar-Matthews, Jocelyn Bernatchez, Erich Fisher, Paul Goldberg, Andy I.R. Herries, Zenobia Jacobs, Antonieta Jerardino, Panagiotis Karkanas, Tom Minichillo, Peter J. Nilssen, Erin Thompson, Ian Watts, and Hope M. Williams

2007 Early Human Use of Marine Resources and Pigment in South Africa During the Middle Pleistocene. *Nature* 449:905-909.

Richards, M.P., R. Jacobi, J. Cook, P.B. Pettitt, C.B. Stringer

2005 Isotope Evidence for the Intensive use of Marine Foods by Late Upper Palaeolithic Humans. *Journal of Human Evolution* 49:390-394

Richards, M. P. and Schulting, R. J.

2006 Touch not the Fish: the Mesolithic- Neolithic Change of Diet and its Significance. *Antiquity* 80 (308): 444-456.

Dillehay, T., C. Ramírez, M. Pino, M. Collins, J. Rossen, J. Pino-Navarro.  
2008. Monte Verde: Seaweed, Food, Medicine, and the Peopling of South America. *Science* 320:784-786.

Erlandson, Jon R., Torben C. Rick, Todd J. Braje, Molly Casperson, Brendan Culleton, Brian Fulfrost, Tracy Garcia, Daniel A. Guthrie, Nicholas Jew, Douglas J. Kennett, Madonna L. Moss, Leslie Reeder, Craig Skinner, Jack Watts, Lauren Willis  
2011 Paleoindian Seafaring, Maritime Technologies, and Coastal Foraging on California's Channel Islands. *Science* 331, 1181-1185.

**March 21                      Bioarchaeology and Health of coastal foragers - Prehistory  
Readings:**

Arriaza, B. T.  
1995 Chinchorro Bioarchaeology: Chronology and Mummy Seriation. *Latin American Antiquity* 6(1):35-55.

Bathurst, Rhonda R.  
2005 Archaeological Evidence of Intestinal Parasites from Coastal Shell Middens. *Journal of Archaeological Science* 32(1):115-123.

Benfer, R. A.  
1990 The Preceramic Period Site of Paloma, Peru: Bioindications of Improving Adaptation to Sedentism. *Latin American Antiquity* 1:284-318.

Lambert, Patricia M.  
1993 Health in Prehistoric Populations of the Santa Barbara Channel Islands. *American Antiquity* 58(3):509-522.

Yesner, David R., Maria Jose Figuerero Torres, Ricardo A. Guichon and Luis A. Borrero  
2003 Stable isotope analysis of human bone and ethnohistoric subsistence patterns in Tierra del Fuego. *Journal of Anthropological Archaeology* 22(3):279-291.

**March 28                      Archaeology and Technology  
Methods of capture, technology, storage, transport  
Readings:**

Arnold, Jeanne E.  
2007 Credit Where Credit Is Due: The History of the Chumash Oceangoing Plank Canoe. *American Antiquity* 72(2):196-209.

Beheim, Bret and Adrian V. Bell  
2011 Inheritance, ecology and the evolution of the canoes of east Oceania. *Proceedings of Royal Society - Biological Sciences*, 278(1721):3089-3095.

Callaghan, Richard

2001 Analysis of Ceramic Age Seafaring and Interaction Potential in the Antilles. *Current Anthropology* 42(2):308-313.

Gamble, Lynn H.

2002 Archaeological Evidence for the Origin of the Plank Canoe in North America. *American Antiquity* 67(2):301-315.

Hudson, Jean L.

2004 Additional Evidence for Gourd Floats on Fishing Nets. *American Antiquity* 69(3):586-587.

Marcus, Joyce, Jeffrey D. Sommer, and Christopher P. Glew

1999 Fish and Mammals in the Economy of an Ancient Peruvian Kingdom. *Proceedings of the National Academy of Sciences of the United States of America* 96(11):6564-6570.

Walker, Karen J.

2000 The Material Culture of Precolumbian Fishing: Artifacts and Fish Remains from Coastal Southwest Florida. *Southeastern Archaeology* 19(1):24-45.

**April 4                      Archaeology of SE Asia, Pacific Islands, and Africa**  
**Readings:**

Breen, Colin and Paul J. Lane

2003 Archaeological Approaches to East Africa's Changing Seascapes. *World Archaeology* 35(3):469-489.

Fitzpatrick, Scott M.

2008 Micronesian Interregional Interaction: Deciphering Multi-Group Contacts and Exchange Systems through Time. *Journal of Anthropological Archaeology* 27(1):131-147.

Goff, J. R.; McFadgen, B. G.

2001 Catastrophic seismic-related events and their impact on prehistoric human occupation, coastal New Zealand. *Antiquity* 75(287):155-163.

Habu, Junko

2004 *Ancient Jomon of Japan*. Cambridge University Press, Cambridge, England.  
Selected chapters

Kirch, Patrick V.

1997 *The Lapita People: Ancestors of the Oceanic World*. Blackwell, Cambridge, Mass.  
Chapters 1, 6, and 7

**April 11                      Archaeology of Ancient Americas: Andean South America**  
**Readings:**

Haas, Jonathan and Winifred Creamer

2006 Crucible of Andean Civilization: The Peruvian Coast from 3000-1800 B. C. *Current Anthropology* 47(5):745-755.



Marquet, Pablo A., Calogero M. Santoro, Claudio Latorre, Vivien G. Standen, Sebastián R. Abades, Marcelo M. Rivadeneira, Bernardo Arriaza and Michael E. Hochberg  
2012 Emergence of social complexity among coastal hunter-gatherers in the Atacama Desert of northern Chile. *Proceedings of the National Academy of Sciences of the United States of America*, Vol. 109, No. 37:14754-14760

Moseley, M. E.

1975 *The Maritime Foundations of Andean Civilization*. Menlo Park, Cummings.

Quilter, Jeffrey, Bernardino Ojeda E., Deborah M. Pearsall, Daniel H. Sandweiss, John G. Jones, Elizabeth S. Wing

1991 Subsistence Economy of El Paraíso, an Early Peruvian Site *Science* 251(4991):277-283.

Sandweiss, Daniel H., Ruth Shady Solís, Michael E. Moseley, David K. Keefer, and Charles R. Ortloff

2009 Environmental change and economic development in coastal Peru between 5,800 and 3,600 years ago. *PNAS- Proceedings of the National Academy of Sciences of the USA*. 105(5):1359-1363.

Sandweiss, Daniel H., H. McInnis, R. L. Burger, A. Cano, B. Ojeda, R. Paredes, M. C.

Sandweiss, M. D. Glascock,

1998 Quebrada Jaguay: Early South Am. Maritime Adaptations, *Science* 281:1830-1832.

Shady Solís, Ruth

2005 Caral Supe, Perú: la civilización de Caral-Supe : 5000 años de identidad cultural en el Perú. Instituto Nacional de Cultura, Lima

2003 La ciudad sagrada de Caral-Supe: los orígenes de la civilización andina y la formación del Estado pristino en el antiguo Perú. Instituto Nacional de Cultura, Lima.

## **April 18**

### **Archaeology of Ancient Americas:**

### **Caribbean, Central America, and North America**

### **Readings:**

McKillop, Heather

1995 Underwater Archaeology, Salt Production, and Coastal Maya Trade at Stingray Lagoon, Belize. *Latin American Antiquity* 6(3):214-228.

Keegan, William F., Roger W. Portell and John Slapcinsky

2003 Changes in Invertebrate Taxa at Two Pre-Columbian Sites in Southwestern Jamaica, AD 800–1500. *Journal of Archaeological Science* 30(12):1607-1617.

Quinn, Rhonda L., Bryan Tucker, and John Krigbaum

2008 Diet and mobility in Middle Archaic Florida: Stable isotopic and faunal evidence from the Harris Creek archaeological site (8Vo24), Tick Island. *Journal of Archaeological Science*, 35: 2346-2356.

Rick, Torben C., Jon M. Erlandson, Rene L. Vellanoweth, and Todd J. Braje

2005 From Pleistocene Mariners to Complex Hunter-Gatherers: The Archaeology of the California Channel Islands. *Journal of World Prehistory* 19:169-228.

Stark, Barbara L. and Barbara Voorhies

1978 Prehistoric Coastal Adaptations: The Economy and Ecology of Maritime Middle America. Academic Press, New York. ON RESERVE LIBRARY WEST - SKIM

Thompson, Victor D. and John E. Worth

2011 Dwellers by the Sea: Native American Adaptations along the Southern Coasts of Eastern North America. *Journal of Archaeological Research* 19:51–101.

Reexamine Parsons and Marquardt

**April 25**

**Final Paper due – 4 PM TO MY OFFICE OR MAILBOX**