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Late Archaic-Early Woodland Period Shell Rings of the Southeastern United States Coast: A Bibliographic Introduction

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LATE ARCHAIC-EARLY WOODLAND PERIOD SHELL RINGS OF THE SOUTHEASTERN UNITED STATES COAST: A BIBLIOGRAPHIC INTRODUCTION

and the first

RESEARCH MANUSCRIPT SERIES 207 BY DAVID R. LAWRENCE AND HILDA L. WRIGHTSON

Department of Geological Sciences and Institute of Archaeology and Anthropology University of South Carolina Columbia, SC 29208

August, 1989

BACKGROUND

With the onset of slow sea level rise some 6,000 years ago, coastal environments, as we know them today, began to develop in South Carolina and other parts of southeastern United States. Aboriginal humans must have continually exploited these environments, but the earliest record of this use has been lost because of the continuing rise of the sea. The oldest archaeological sites which document the more continuing use of South Carolina marshes and estuaries are assigned to the Late Archaic and Early Woodland periods of human history, and range between 3,000 and 4,300 years old. Accumulations of shellfish molluscs are prominent at many of these sites, and hundreds of these shellfish mounds or middens dot the southeastern United States coast.

A small subset of these Atlantic Coast middens has received special attention in the nineteenth and twentieth centuries-- those with arcuate geometries. About 20 of these shell rings are known from South Carolina, at least 11 have been found in Georgia, and the sites range into northern Florida. Written reports on these sites date from the earliest nineteenth century and the shell rings have been studied by natural historians for over 100 years.

The integrity of South Carolina's shell rings has seriously decreased in the past two centuries. Natural geologic processes, plowing, road material and other

constructional uses of the shells, and housing and other developments have all had a negative impact upon the sites; perhaps only two or three of these locales are now adequately protected and potentially most useful for archaeological research. The recognition and protection of these significant archaeological locations should become more important as seaboard populations and developmental pressures do increase in the future. Although the rings comprise but a small part of our earliest record of coastal habitations, information losses at a single place are very significant because the rings are not numerous. We need this potential information, because there is still much to be learned about the total culture of the aboriginal people who made these structures.

One essential part of any cultural management program is the assembly of data concerning the properties themselves. Here we begin this process of assembly for the aboriginal shell rings, by presenting an indexed bibliography of previous studies on the sites. The following introduction is primarily designed to be a summary of the nature and significance of the shell rings, for lay audiences, but is here included (without illustrations and detailed references) as a beginning for all who may read or use this work.

INTRODUCTION

Shell rings include arcuate ridges of shellfish remains, constructed by humans, which stood in positive relief (as original topographic highs). Where these ridges completely enclose a central area, the adjectives circular, ovate, elliptical, or donut-shaped are used to describe ring geometry; when closure is not complete, adjectives such as crescentic or lunate are more appropriate. Ring geometries are indeed quite diverse. Outer rim-to-rim diameters of the rings are generally 50 to 300 feet, with topographic relief of two to ten feet. Although the width of the ridges is variable, it is typically between 10 and 30 feet.

Outside of this region, the closest proposed shellfish ring has been found from Colombia in South America; some North American archaeologists doubt the true ringed nature of this more southerly occurrence. But since the Colombian site dates from several hundred years before the North American ones, the time difference has been used to suggest the northward transfer of culture, through Caribbean and Atlantic waters, long before the time of Columbus' "discovery" of the New World. This latter theory has not received widespread support. Even if the Colombian site is a true shell ring, archaeologists suggest that the rings in the two Americas could represent convergence in behavior, among unrelated peoples, when faced with the needs for life in the coastal zone. It is obvious, however, that the

rings do generate more than mere local or regional interest.

Postulated uses of the rings have been many, including ceremonial, religious, recreational, and as fish traps or weirs. However, these types of explanations have not been supported by convincing evidence. Recent work suggests that at least some of the rings were arced habitation sites, with the rings themselves gradually developing from kitchen refuse. But the detailed questions of ring use are far from completely answered.

Postholes, as evidence of occupation structures, have been found within the piled shell of the rings. Pits are common in the ring sites, and the original uses of these features were varied. At most rings there are pits that served for cooking. Those which yield ashes were most likely used for roasting while those with preserved charcoal were probably for steaming food. Other pits seem to have been used for underground storage only and not for cooking. One human burial has been reported from a Georgia site; however few, and scattered and fragmentary, human remains occur in the South Carolina shell rings.

Near the shell rings, invertebrate shellfish were likely the most consistently available food for the occupants. South Carolina rings are often composed primarily of the American oyster. Periwinkles, whelks, razor clams, ribbed mussels, and hard-shelled clams are also preserved. Some blue crab and stone crab claws have survived the thousands of years of decay,

and occasionally crab shell bits are evident. Shrimp were probably available to the aboriginal peoples, and their remains should be present. The shellfish were eaten both raw and cooked, but other details of their preparation as food need to be further analyzed.

Both skeletal and ear parts from fishes have been collected through careful screening of the ring sediments. At least 30 species of fish, including sharks and rays, have been recovered from shell ring sites. Terrapin, turtle, snake, lizard, and alligator remains have also been reported. Deer bones are always present, as are many species of birds. Raccoon, rabbit and opossum are found at most sites, and at least two locales have yielded the bones of domestic dogs. Plant remains have been less thoroughly analyzed. Macroscopically, they occur in the form of carbonized seeds and nutshells. Hickory remains are most common at the sites, and plants could have provided an important part of the diet of the people dwelling on these rings. The subsistence patterns of the aboriginal ring-dwellers need our closer attention.

The shell rings have yielded worked artifacts of ceramics, organic remains, and rock. Lithics are least common and include objects such as flaked stone tools and hammer stones. The organic artifacts were manufactured from three types of raw materials: bone, deer antler, and shell. As examples bone awls and pins, antler projectile points, and shell beads and scrapers have been recovered from the shell ring sites. The

ceramics are typically tempered with sand or fibers, and may be modeled, molded, or coiled. Punctations and finger pinching are among the most common ceramic decorations.

Here we present a bibliography and index of past studies of the shell rings. The site inventory records of various state agencies have been purposely excluded, yet we do include not only works in the public domain, but also reports and other papers which have been freely distributed over the years. The index by sites points out the lack of public information concerning many Georgia sites, and especially the Daws Island, South Carolina occurrences; data for these are essentially confined to site inventory records.

Our primary emphasis to date has been upon the rings which occur between the Santee River of South Carolina and Jekyll Sound in Georgia. We know that shell rings extend southward from Jekyll Sound, into Florida, and hope to assemble information concerning these sites in another document. Separation of South Carolina vs Georgia occurrences is impossible, because regional comparisons and contrasts of data are necessary in this type of research. Categories for indexing include the individual sites, absolute and relative (ceramics-based) age determinations, organic remains and artifacts present at the sites, site features and their bearing upon proposed uses of the areas, the role of shell rings in theories of cultural dissemination, and also a history of archaeological work upon the shell rings. For an initial

survey of these previous studies, we would recommend the works of Anderson (#1), Marrinan (#34, p. 1-13) and Trinkley (#57, p. 102-107). We welcome comments upon, and additions to, this bibliography so that it may most completely reflect our present-day knowledge of these fascinating and distinctive archaeological features.

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SHELL RING INDEX

9Ch14 (Oemler Marsh Midden North)- 6, 7, 13, 14, 17, 33, 34, 47 9Ch63-4, 32 9Ch75-4 9Ch77 (South Ring, Skidaway) - 4, 16, 17 9Ch111 (Ring near Skidaway) - 16, 17 9Ch203-15, 17, 33 9Ch377-17 9Gn53 (Bony Hammock) - 17, 34 9Gn57 (Cannon's Point Marsh) - 7, 11, 13, 14, 17, 33, 34, 35, 36, 43, 53, 57 9Gn76 (Cannon's Point Land) - 7, 11, 13, 14, 17, 33, 34, 35, 36, 43, 53, 57 9McI23 (Sapelo Island) - 1, 6, 8, 11, 12, 13, 14, 17, 24, 28, 33, 34, 37, 40, 43, 44, 45, 46, 47, 48, 50, 54, 57, 62, 63, 64, 65, 66 9McI87 (A. Busch Krick) - 11, 13, 14, 17, 33, 34 38Bu7 (Sea Pines)- 1, 8, 9, 10, 33, 34, 47, 52, 53, 54, 57, 62, 63, 64 38Bu8 (Skull Creek) - 8, 9, 10, 11, 33, 34, 47, 50, 52, 53, 54, 57, 63, 64 38Bu21 (Guerard Point) - 1, 11, 41, 45, 59 38Bu29 (Chester Fields) - 1, 6, 8, 11, 22, 27, 33, 34, 42, 45, 47, 48, 52, 54, 56, 57, 61, 62 38Bu300 (Daw's Island-Barrow's)-38Bu301 (Daw's Island-Patent)-38Bu302 (Daw's Island-Broad River)-38Bu303 (Daw's Island-Medicine)-38Bu475 (Bull Island Shell Ring) 41

38Ch7 (Hanckel) - 52, 62

38Ch12 (Lighthouse Point) - 1, 2, 20, 25, 31, 49, 50, 51, 53, 54, 55, 56, 57, 58, 59, 60, 62

38Ch14 (Horse Island) - 3, 6, 11, 52, 54, 62, 64

38Ch23 (Buzzards Island) - 2, 5, 26, 62

38Ch24 (Stratton Place) - 2, 5, 26, 53, 54, 57

38Ch41 (Auld/Yough) - 2, 26, 33, 47, 61, 62, 66

38Ch42 (Fig Island) - 1, 5, 11, 28, 29, 30, 33, 34, 50, 52, 53, 57

38Ch45 (Sewee) - 2, 10, 11, 21, 34, 50, 52, 53, 57

Absolute ages- 2, 8, 9, 10, 13, 14, 21, 23, 24, 29, 30, 32, 33, 34, 35, 36, 43, 44, 47, 48, 49, 52, 53, 54, 55, 59, 61, 62, 63, 64, 65, 66

Artifacts, ceramic- 1, 2, 3, 4, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 21, 22, 23, 24, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 61, 62, 64, 65

Artifacts, lithic- 2, 6, 8, 9, 16, 17, 21, 22, 23, 24, 26, 33, 34, 35, 36, 37, 44, 45, 46, 47, 48, 49, 50, 51, 52, 54, 57, 62, 63, 64, 65

Artifacts, organic-1, 5, 6, 8, 9, 12, 13, 14, 17, 21, 22, 23, 28, 29, 30, 31, 33, 34, 35, 36, 38, 39, 42, 44, 46, 47, 48, 49, 50, 51, 52, 54, 57, 58, 62, 64, 65

Ceramic (relative) ages-1, 2, 3, 4, 7, 8, 9, 11, 13, 14, 15, 16, 17, 21, 24, 27, 28, 32, 33, 34, 44, 46, 47, 48, 49, 52, 53, 54, 55, 61, 62, 65

Cultural significance-11, 12, 21, 22, 23, 24, 25, 28, 29, 30, 34, 38, 42, 44, 46, 48, 51, 52, 53, 54, 56, 57, 59, 63, 65

Invertebrates- 2, 5, 6, 8, 9, 12, 13, 14, 16, 17, 19, 21, 22, 26, 28, 29, 30, 31, 33, 34, 35, 36, 37, 43, 44, 46, 47, 48, 49, 50, 51, 52, 54, 56, 57, 58, 60, 62, 63, 65 Microstratigraphy- 8, 9, 13, 14, 15, 16, 17, 21, 22, 31, 32, 34, 38, 40, 42, 44, 46, 49, 51, 52, 54, 57, 58, 59, 60, 63, 65 Other traces- 8, 53, 57 Oyster uses- 1, 8, 17, 21, 28, 33, 34, 35, 36, 49, 54, 65 Pits- 2, 8, 17, 21, 22, 34, 46, 49, 50, 53, 54, 57, 58 Plant remains- 8, 16, 17, 21, 34, 35, 36, 38, 44, 45, 46, 49, 50, 52, 54, 56 Postholes- 8, 21, 49, 53, 54, 57, 58 Proposed uses- 2, 4, 8, 20, 21, 28, 29, 30, 33, 34, 35, 36, 37, 38, 39, 42, 44, 46, 47, 49, 56, 57, 58, 59, 60, 63, 64, 65

Vertebrates-1, 2, 3, 6, 8, 9, 12, 16, 17, 21, 22, 25, 26, 28, 29, 30, 33, 34, 35, 36, 38, 39, 40, 42, 43, 44, 46, 47, 48, 49, 50, 51, 53, 54, 56, 57, 58, 62, 63, 64, 65

Work history-1, 2, 8, 17, 21, 28, 29, 34, 35, 44, 46, 49, 52, 54, 65

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