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Context

The archaeological site of Crystal River has been the target of speculation since at least 1859, when D. G. Brinton (1859:178–179; 1867:356–357) published the earliest known written description of Mound A. For perspective, this was two years before the onset of the Civil War and Abraham Lincoln’s election as president, at a point when archaeology was just emerging as a field of scientific inquiry. At the time, many people still believed that mounds like this were built by a mythical race—perhaps a lost race of giants or people from Europe—rather than Native Americans (Silverberg 1986). Unfortunately, a long history of attention to Crystal River has not automatically led to clarity of understanding; the site has remained, at least until recently, poorly understood. Roberts Island, which was first recorded as an archaeological complex comparatively recently (around fifty years ago), has remained even more of an enigma.

This book describes the fruits of recent research at Crystal River and Roberts Island. In this chapter we present an overview of the methods that we employed in our investigations at the sites. Our research builds on the work of earlier generations of archaeologists, from C. B. Moore in the early 1900s; to Gordon Willey, Hale Smith, and others in the middle twentieth century; and on to Ripley Bullen and others in the later twentieth century. We present a brief overview of this earlier work, which has been summarized elsewhere: first and in considerable detail by Brent Weisman (1995a), and more recently and succinctly by Pluckhahn et al. 2009 and Pluckhahn et al. 2010. However, we begin with a brief overview of the sites and their setting on the central peninsular Gulf Coast of Florida.

The Crystal River Site and Roberts Island Complex and Their Setting

Crystal River and Roberts Island are located in Citrus County, Florida, approximately 3 km (2 miles) west and 1.6 km (1 mile) north of the city of

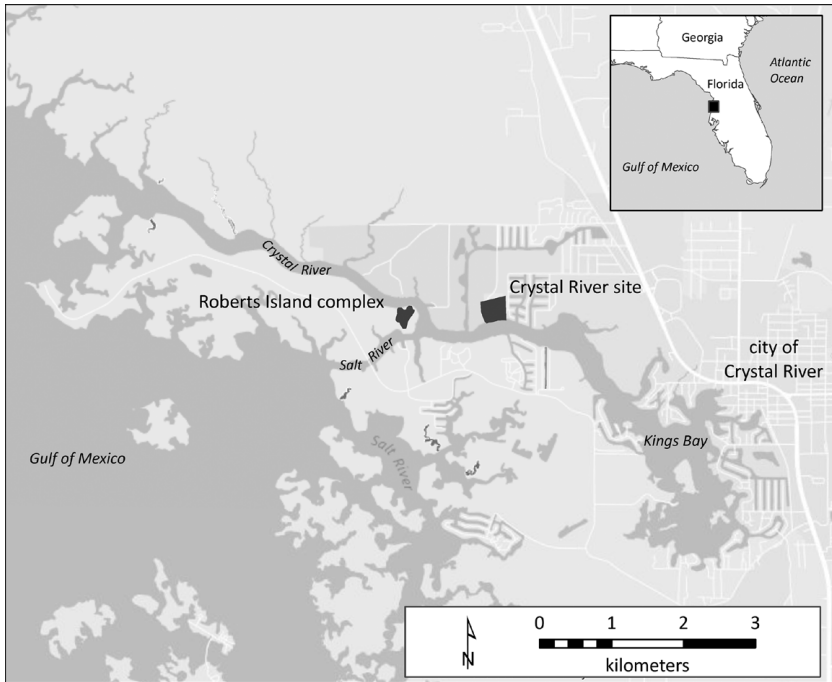


Figure 2.1. Location of Crystal River and Roberts Island.

Crystal River (Figure 2.1). The Crystal River, which directly borders the Crystal River site to the south, originates a short distance to the southeast at a series of springs in Kings Bay (Florida Department of Environmental Protection [hereinafter FDEP] 2000:14). The river flows west and slightly north for about 10 km (6 mi) before emptying into the Gulf of Mexico. The Crystal River site is located almost halfway between the river's source (at a series of springs at Kings Bay) and its mouth (at Crystal Bay and the Gulf of Mexico). Roberts Island is located only a short distance downstream, at the junction of the Crystal and Salt rivers.

Crystal River and Roberts Island lie in the Gulf Coastal Lowlands geomorphic division of the mid-Florida Peninsula, specifically at the interface between the coastal swamps and terraces (Cooke 1945; White 1970) (Figure 2.2). These lowlands, which border the entire Florida coast at elevations of less than 30 m (100 ft), are widest in southern Florida but narrow somewhat in the vicinity of the sites (Cooke 1945:10). To the east of the Coastal Lowlands in the vicinity of Crystal River site is the Brooksville Ridge section, part of the Central Highlands.

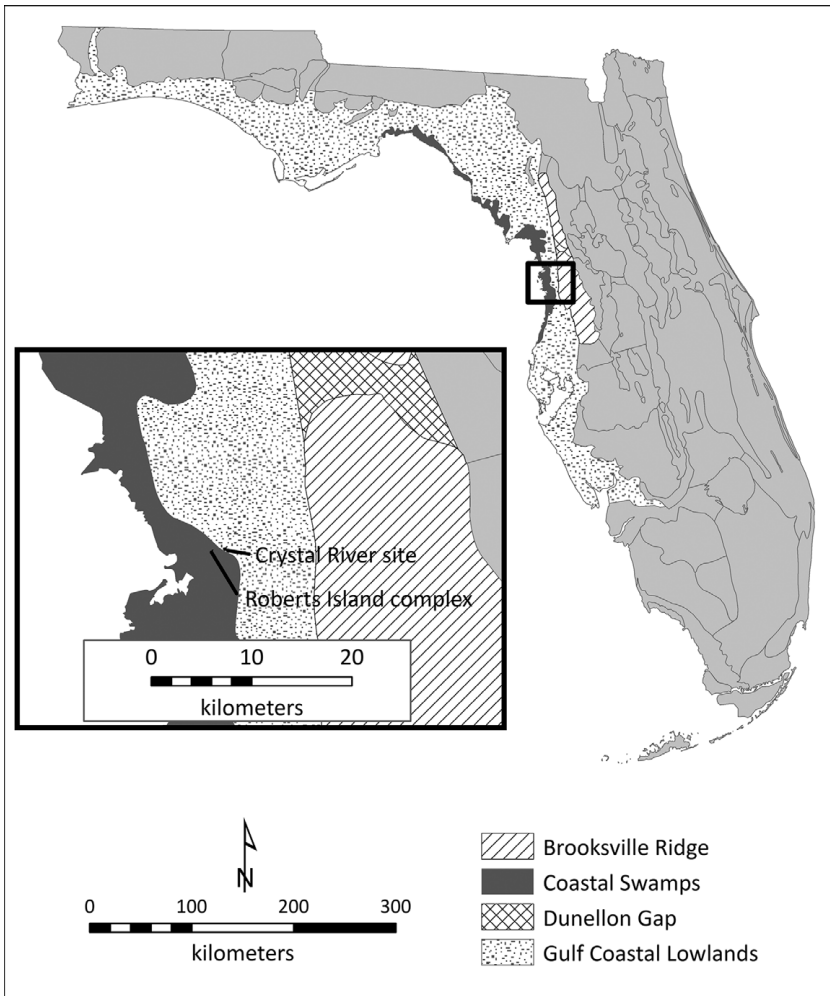


Figure 2.2. Location of Crystal River and Roberts Island with respect to major geomorphic divisions. Divisions based on White (1970), with GIS data provided by the Florida Department of Environmental Protection.

Composed of a series of marine terraces formed as Pleistocene shorelines, the Coastal Lowlands can be described as gently sloping plains with escarpments that face seaward (Cooke 1945:11; FDEP 2000:10). The Crystal River site lies on the Pamlico terrace, found at elevations less than 7.6 m (25 ft) above sea level. This is the most extensive plain in Florida, covering most of southern Florida, as well as broad strips along both coasts to the north. The Pamlico terrace is composed of sand and clayey sand,

and is underlain by limestone and dolomite of Eocene and Oligocene age (FDEP 2000:10). Specifically, the sites are situated on a substrate of undulating limestone known to geologists as the Williston member of the Ocala Group (Goodbred 1995:14).

In terms of hydrology, Crystal River and Roberts Island sites are located in an area of Florida known as the Springs Coast (Wolfe 1990:211). The spring rivers of this region flow across the shallow carbonate layer to produce an extensive marsh system. Indeed, the central Gulf Coast is one of the largest stretches of marsh shoreline in North America, extending more than 250 km (155 mi) (Goodbred 1995:2). Within this unique area, the region around Crystal River is further differentiated by its position between two physiographic divisions: to the south is the marsh archipelago, a salt marsh and mangrove swamp composed of hundreds of small islands, and to the north is the shelf embayment, a marsh-bound estuary characterized by extensive shore-parallel oyster bars (Hutton 1986:1).

The low elevations on which the Crystal River and Roberts Island archaeological sites reside are hydric hammocks (FDEP 2000:18). Hammocks are characterized by well-developed hardwood forests with a variable understory generally dominated by palms and ferns (FDEP 2000:Addendum 4). The understory typically includes sabal palm (*Sabal palmetto*) and saw palmetto (*Serenoa repens*). Tree species include red cedar (*Juniperus silicola*), and slash pine (*Pinus eliottii*), swamp bay (*Persea palustris*), sweet bay (*Magnolia virginiana*), and southern magnolia (*Magnolia grandiflora*), as well as live oak (*Quercus virginiana*) and other nut-producing species (Goodbred 1995:42; Hutton 1986:76). Soils are generally sandy with considerable organic material.

Crystal River and Roberts Island are both surrounded by wetland marshes (Cowardin et al. 1979; FDEP 2000:18) (Figure 2.3). Those nearest the sites are classified as freshwater emergent wetlands and freshwater forested shrub wetlands, both of which are tidal (Cowardin et al. 1979). These natural areas are composed of expanses of grasses, rushes, and sedges along coastlines of low-wave-energy rivers (FDEP 2000:Addendum 4). Typical plants include saltgrass (*Distichlis spicata*), cordgrass (*Spartina*), rushes (*Juncus*), marsh elder (*Iva annua*), cattail (*Typha*), and bulrushes (*Scirpus*). Animals characteristic of these environments include: various species of small terrestrial and marine snails; marsh clams (*Polymesoda caroliniana*), eastern oysters (*Crassostrea virginica*), and other bivalves; fiddler (*Uca pugilator*) and blue (*Callinectes sapidus*) crabs; American