

United States Department of the Interior  
National Park Service

MAR 14 1994

National Register of Historic Places  
Multiple Property Documentation Form

NATIONAL  
REGISTER

This form is used for documenting multiple property groups relating to one or several historic contexts. See instructions in *How to Complete the Multiple Property Documentation Form* (National Register Bulletin 16B). Complete each item by entering the requested information. For additional space, use continuation sheets (Form 10-900-a). Use a typewriter, word processor, or computer to complete all items.

☒ New Submission ☐ Amended Submission

**A. Name of Multiple Property Listing**

Archaeological Resources in the Upper St. Johns River Valley, Florida

**B. Associated Historic Contexts**

(Name each associated historic context, identifying theme, geographical area, and chronological period for each.)

Paleo-Indian	15,000 B.C.-8,500 B.C.
Archaic	8,500 B.C.- 500 B.C.
Woodland (Malabar I, I')	500 B.C.-A.D. 800
Mississippian (Malabar II)	A.D.800-A.D.1565

**C. Form Prepared by**

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date March 1994

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zip code 32399-0250

**D. Certification**

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this documentation form meets the National Register documentation standards and sets forth requirements for the listing of related properties consistent with the National Register criteria. This submission meets the procedural and professional requirements set forth in 36 CFR Part 60 and the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation. (☐ See continuation sheet for additional comments.)

Suzanne A. Walker / Deputy SHPO  
Signature and title of certifying official

3/8/94  
Date

Florida State Historic Preservation Officer, Division of Historical Resources  
State or Federal agency and bureau

I hereby certify that this multiple property documentation form has been approved by the National Register as a basis for evaluating related properties for listing in the National Register.

Edson H. Beall  
Signature of the Keeper

Entered in the  
National Register

4.14.94  
Date of Action

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Provide the following information on continuation sheets. Cite the letter and the title before each section of the narrative. Assign page numbers according to the instructions for continuation sheets in *How to Complete the Multiple Property Documentation Form* (National Register Bulletin 16B). Fill in page numbers for each section in the space below.

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**Paperwork Reduction Act Statement:** This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 *et seq.*).

**Estimated Burden Statement:** Public reporting burden for this form is estimated to average 18.1 hours per response including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Project (1024-0018), Washington, DC 20503.

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E. HISTORIC CONTEXTS

The upper St. Johns River valley has been occupied since the earliest Paleo-Indian stage to the present day, as shown in the cultural sequence chart in Table 1.<sup>1</sup>

PALEO-INDIAN STAGE (ca. 15,000 - 8500 B.C.)

The Paleo-Indian stage was the earliest period of human occupation of east-central Florida. Sea level was approximately 400 feet lower than today, and the upper St. Johns River valley was broad, relatively dry and shallow, with a few small catchment lakes. Artifacts characteristic of this stage include large, thin lanceolate projectile points, such as the Suwannee and Simpson, and stone tool kits of thumbnail scrapers, blades and flake knives and gravers.<sup>2</sup> Bone artifacts include antler hammers, slender pins, and awls.

Most Paleo-Indian sites in Florida have been found in wet contexts in north Florida rivers, or in central Florida adjacent to or in springs or spring fed streams. Recently, in west central Florida the terrestrial Paleo-Indian site, Harney Flats (8HI507), was located and excavated near Tampa.<sup>3</sup> From this and

<sup>1</sup>Campbell, L., J. Homburg, C. Weed and Jr. P. Thomas  
1984 Reconnaissance survey in the Upper St. Johns River Flood Control Project, Osceola, Brevard, and Indian River Counties, Florida. Work performed under Contract No. DACW17-84-C-0021. Jacksonville District Corps of Engineers.

Milanich, Jerald T. and Charles H. Fairbanks  
1980 Florida Archaeology. Academic Press, New York.

Milanich, Jerald T.  
1992 Florida's Historic Preservation Contexts. Draft Version. Submitted to the Florida Division of Historical Resources.

Rouse, Irving  
1951 A survey of Indian River Archeology, Florida.  
Yale University Publications in Anthropology No. 44, Yale University Press, New Haven.

<sup>2</sup>Milanich, Jerald T. and Charles H. Fairbanks  
1980 Florida Archaeology. Academic Press, New York.

<sup>3</sup>Daniel, I. R. and M. Wisenbaker  
1987 Harney Flats: A Florida Paleo-Indian Site. Baywood Publishing Company, Farmingdale, New York.

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other archaeological work, archaeologists are realizing that the Paleo-Indians had a relatively sophisticated adaptive economic strategy. It appears that Paleo-Indian subsistence involved hunting and collecting a wide range of floral and faunal resources. These investigations also suggest that Paleo-Indian peoples were more sedentary than previously believed.

Less is known about Paleo-Indian occupation in east-central Florida. The possible association of human skeletal remains, known as the "Vero Man" near Melbourne (8BR44), with Pleistocene fauna in Indian River County (8IR9) has long been debated.<sup>4</sup> Recent comparisons of these skeletal remains with crania from an Early Archaic context in Sarasota County reveal similarities and possible connections.<sup>5</sup> Two Paleo-Indian sites have been located in the upper St. Johns area. The Helen Blazes site (8BR27) has been tested and has yielded late Paleo-Indian artifacts, including lanceolate points, scrapers, graters, and retouched flakes.<sup>6</sup> The second Paleo-Indian site, Faxon-Holland (8IR48), is underwater in Blue Cypress Lake, and has been only identified, not investigated.<sup>7</sup> More Paleo-Indian sites are

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<sup>4</sup>Hrdlicka, Ales

1917 Vero Beach Skull. Smithsonian Miscellaneous Collections, 17:24, Washington, D.C.

1937 Early Man in America: What Have the Bones to Say? In Early Man ed. by George G. MacCurdy, pages 93-104. Sellards, E.H.

1940 Early Man in America, Index to Localities and Selected Bibliography. Geological Society of America, Bulletin 51:375-431.

<sup>5</sup>Cockrell, W. A. and Larry Murphy

1978 Pleistocene man in Florida. Archaeology of Eastern North America Vol. 6, Eastern States Archaeological Federation, Newark, Delaware.

<sup>6</sup>Edwards, W. E.

1954 The Helen Blazes Site of central-eastern Florida: A study in method utilizing the disciplines of Archaeology, Geology, and Pedology. Ph.D. Dissertation, Department of Political Science, Columbia University.

<sup>7</sup>Cockrell, W. A. and Larry Murphy

1978 Pleistocene man in Florida. Archaeology of Eastern North America Vol. 6, Eastern States Archaeological Federation, Newark, Delaware.

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probably buried or submerged in the marshy environment of the upper St. Johns River valley.

ARCHAIC STAGE (8,500-500 B.C.)

Early Archaic Period (8500 - 5000 B.C.)

The Early Archaic period was somewhat warmer than the Paleo-Indian period, and the sea level had risen to within approximately 100 feet below modern levels. Several temporally sensitive projectile points, such as the Bolen, Kirk and Hamilton, signal these Early Archaic components. The archaeological record indicates the continuation of a hunting and gathering economy with a hint of increased economic specialization. The basis for this interpretation is the fact that Early Archaic artifact assemblages have a wider variety of stone tools, some of which are specialized for performing single tasks.<sup>8</sup>

A landmark Early Archaic site has been located and partially excavated in the upper St. Johns River valley near Titusville: the Windover Site (8BR246, NR 1987). This is a submerged cemetery, located in a peat pond which yielded extraordinary information about the Early Archaic way of life.<sup>9</sup> The chemistry of the peat matrix into which the burials were interred was responsible for preserving brain tissue, textiles (cloth), and bones. The preserved brain tissue has provided the oldest human DNA in the world, and has been cloned by biologists and is currently being studied intensively. The large burial population is providing exceptional information on the biology, diet, textile industry, and environment of the period. Religious

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<sup>8</sup>Milanich, Jerald T. and Charles H. Fairbanks  
1980 Florida Archaeology. Academic Press, New York.

<sup>9</sup>Doran, Glen H.  
1986 The Windover Site - Physical Anthropology from saturated archaeological materials. Paper presented at the 1986 Annual Meeting of the American Association of Physical Anthropology, Albuquerque, New Mexico.  
Doran, Glen H. and David N. Dickel  
1986 Multidisciplinary investigations at the Windover archaeological site. Paper presented at the International conference on Wet Site Archaeology, Gainesville, Florida.

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paraphernalia associated with Windover burials suggest a well-developed religious ceremonialism.

**Middle Archaic Period (5000 - 4000 B.C.)**

During the Middle Archaic Period (ca. 5000-4000 B.C.), the sea level continued to rise and likely reached within 50 feet of the modern level. The upper St. Johns River valley was becoming wetter as the water table rose and the artesian springs from the western highlands drained into the valley. The climate reached the maximum post-glacial temperature, known as the Altithermal climatic period. During this hot, dry climatic period people and animals living in the dry interior were attracted to the wet environment of the St. Johns River valley in increasing numbers.

The societies of the Middle Archaic appear to have had an even more complex sociopolitical system and were more sedentary. Large villages were established along the St. Johns during this period. The Tick Island Site (8VO25) in Volusia County, for example, is an extremely large, dense shell midden and cemetery with deposits radiocarbon dated between ca. 4166 - 4375 B.C.<sup>10</sup> A Middle Archaic cemetery at the Gauthier Site (8BR193) has also been found and excavated near Cocoa. The graves at Gauthier were organized into discrete clusters which archaeologists interpret as reflecting the development of lineages (extended families). This cemetery also continued to be used during the Late Archaic period.<sup>11</sup>

<sup>10</sup>Jahn, Otto L., and Ripley P. Bullen

1978 The Tick Island Site, St. Johns River, Florida.

Florida Anthropological Society Publications 10.

<sup>11</sup>Sigler-Eisenberg, Brenda

1984 The Gauthier Site: A microcosm of biocultural adaptation in the Upper St. Johns River Basin. Paper presented at the 41st Southeastern Archaeological Conference, Pensacola, Florida.

1985 Archaeological site types, distribution, and preservation within the Upper St. Johns River Basin, Florida. Department of Anthropology, Florida State Museum, University of Florida, Florida State Museum Miscellaneous Project and Report Series Number 27, December 1985, Gainesville.

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Artifacts associated with this period include broad bladed, stemmed projectile points, such as the Newnan and Hillsborough types, and specialized tools such as microliths, burins, large chopping implements and an array of expedient tools.<sup>12</sup>

Late Archaic Period (4,000 - 500 B.C.)

The first two millennia of the Late Archaic, named Mt. Taylor, is the last preceramic period. Artifacts characteristic of this culture include stemmed projectile points such as the Newnan and Florida Archaic Stemmed, steatite hammerstones, and a wide variety of bone and shell tools.<sup>13</sup> The Mt. Taylor period of cultural development marks dramatic changes in subsistence strategies and in settlement systems. Among these changes were an increased reliance on freshwater shellfish collecting (though it was a relatively minor element of the diet), a shift of the population from the interior of the Florida peninsula into the St. Johns River valley, and increased sedentism. There was a marked increase in the number of villages located along the St. Johns. These sites are usually shell middens. The villages were the focus of the Indian use of the upper St. Johns and were occupied for the duration of Indian residence in the region. Mt.

1981 The Florida Anthropologist. Interview with C. Jones. Excavations of an archaic cemetery in Cocoa Beach, Florida. The Florida Anthropologist 34(2):81-89.'

<sup>12</sup>Sigler-Eisenberg, Brenda

1984 The Gauthier Site: A microcosm of biocultural adaptation in the Upper St. Johns River Basin. Paper presented at the 41st Southeastern Archaeological Conference, Pensacola, Florida.

1985 Archaeological site types, distribution, and preservation within the Upper St. Johns River Basin, Florida. Department of Anthropology, Florida State Museum, University of Florida, Florida State Museum Miscellaneous Project and Report Series Number 27, December 1985, Gainesville.

Jones, C.

1981 The Florida Anthropologist. Interview with C. Jones. Excavations of an archaic cemetery in Cocoa Beach, Florida. The Florida Anthropologist 34(2):81-89.'

<sup>13</sup>Milanich, Jerald T. and Charles H. Fairbanks

1980 Florida Archaeology. Academic Press, New York.

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Taylor period archaeological deposits are often the lowest stratum in the large shell midden sites, and there are scores of them in the upper St. Johns River valley. Archaeological research has indicated that the Mt. Taylor central villages were occupied during the warm months and interior highland sites were used during the colder months. Some of these Mt. Taylor village sites, such as the Tick Island site in Volusia County and the Gauthier site in Brevard County contained cemeteries with mass burials. These cemeteries indicated Mt. Taylor culture had developed a complex socio/religious system.

About 2,000 B.C., fired clay pottery appeared in the St. Johns River valley. Archaeologists use this artifact as a temporal marker and have labelled the crude fiber tempered pottery and the period "Orange". Orange pottery ceramics were made until 1200 B.C., and stylistic changes in it have allowed archaeologists to divide these eight centuries into several subdivisions.

It was during this period that the sea level reached the present height and modern climate was established. This climatic development was partially responsible for changes in the subsistence and settlement patterns of the Orange period Indians, and marks the first substantial occupations of the coastal environment along the Atlantic.<sup>14</sup> The people continued their economic pattern of hunting, collecting and fishing developed in the previous Mt. Taylor period, and they continued living in the same large settlements. However, archaeologists theorize that the fresh water shellfish resources in the St. Johns River had become depleted. They adapted to this situation by seasonally going to the Atlantic coast where they gathered marine foods, primarily shellfish such as coquina, oyster, and clam.

Archaeological evidence suggests that the settlement and subsistence patterns of the Orange people involved three seasonal migrations. They lived in the base camp settlements along the St. Johns River during the spring and fall, spent the winter on the coast gathering shellfish, and hunted and collected plant food in the interior highlands in the summer months. This seasonal round was an efficient and complex hunting, gathering, and fishing economy, and the population grew in size. Many

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<sup>14</sup>Milanich, Jerald T. and Charles H. Fairbanks  
1980 Florida Archaeology. Academic Press, New York.



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archaeological sites from this period have been documented in the upper St. Johns River valley.

Artifacts characteristic of the Orange culture include hand molded, fiber tempered pottery, such as Orange Plain, Orange Incised, and Tick Island Incised. The stone tool kit included Florida Archaic stemmed projectile points, shell picks and hammers, and bone awls and pins. Cane baskets and mats have also been documented for this period.

During the last seven centuries of the Late Archaic period (ca. 1200 - 500 B.C.), there were changes in pottery and projectile point types which are good temporal markers for chronological purposes.<sup>15</sup> In ceramics, there were two technological developments: the use of sand instead of fiber for a tempering agent, and the coiling method of vessel construction instead of hand molding. Projectile point styles were smaller than previous periods, and included basally notched, corner notched and stemmed types. The artifact changes may mirror a gradual transition from the settlement and subsistence strategies of the Orange period (hunting, gathering, and fishing) to an economic system marked by hunting, gathering, and fishing, possibly supplemented by limited agriculture.

**WOODLAND STAGE (500 B.C. - A.D.800)**

At the beginning of the Woodland Stage, the upper St. Johns Indian population was influenced from both the downstream St. Johns culture and the Glades culture in the Everglades. The result of this diffusion is called the Malabar Culture, and it is distinguished by its ceramics. People of the Malabar culture manufactured both sand tempered ceramics and the new soft clay ceramics which have a chalky feel, called St. Johns pottery. Other than their pottery, though, there are few discernable differences between the St. Johns and the Malabar cultures in the St. Johns River valley.

The key identifier of the Malabar I period is the introduction of St. Johns Incised pottery. Rouse<sup>16</sup> suggested that a second chronological period could be identified within the long Woodland stage. He called it Malabar I'. While this term

<sup>15</sup>Milanich, Jerald T. and Charles H. Fairbanks  
1980 Florida Archaeology. Academic Press, New York.

<sup>16</sup>Rouse 1951

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has received some criticism, the period is useful chronologically. This period is marked by the disappearance of St. Johns Incised ceramics and the appearance of St. Johns Plain, Belle Glade Plain, and Dunns Creek Red ceramics. Other artifacts include clay pipes and Busycon picks. The period also saw the initiation of mound burials.<sup>17</sup>

Malabar settlement and subsistence strategies were similar to the preceding periods (hunting, gathering, and fishing), although there have been suggestions that there was a greater reliance on the shellfish resources than before. There is no evidence of agriculture. The large village sites in the upper St. Johns marshy environment were extensively used during the Woodland Period. Other nearby locations were used for food and supplies by the residents of the large villages who lived there temporarily.

It was during this time that a distinctive settlement pattern developed in the marshes of the upper St. Johns River valley.<sup>18</sup> Characteristic of this settlement pattern was the central, permanent base camp. A large population, probably of related families, lived on the elevated village mounds in the marshes. Previous village sites continued to be used and new villages were also established. These large residential sites were located on well drained elevations with easy access by water and land to a variety of natural resources and environments. This was the period of maximum use and growth of the large shell midden mounds. Due to the similar needs of the populations of these villages, they were spaced far enough apart so that each community had access to adequate resource areas for collecting nuts, berries, roots, fish and shellfish. Within the resource area used by each residential village population were located numerous temporary satellite campsites used by particular segments of the community to gather specific food and supplies. Adjacent to some of the large villages were big burial mounds and cemeteries for the ritual burial of their dead.

<sup>17</sup>Seigler-Eisenberg 1985:31

<sup>18</sup>Sigler-Eisenberg, Brenda

1985 Archaeological site types, distribution, and preservation within the Upper St. Johns River Basin, Florida. Department of Anthropology, Florida State Museum, University of Florida, Florida State Museum Miscellaneous Project and Report Series Number 27, 1985, Gainesville.

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**MISSISSIPPIAN STAGE (A.D. 800 - 1565)**

The Malabar settlement and subsistence strategy continued without significant alteration through the Mississippian Stage to the historically documented Ais Indians. The Mississippian period culture is called Malabar II, and it is identified by a change in pottery types. There have been three periods identified within Malabar II.<sup>19</sup> Malabar IIa (A.D. 800-1300) is identified by St. Johns check stamped pottery and the increased use of burial mounds with caches of copies of Weeden Island pottery. Like Malabar IIa, Malabar IIb (A.D. 1300-1513) is marked by the presence of St. Johns check stamped pottery, but there also are trade vessels of other Florida cultures, such as Fort Walton and Safety Harbor. There are also Southeastern Ceremonial Complex status and ritual objects in Malabar IIb burial mounds. Malabar IIc (A.D. 1513-1565) is identified by the presence of European trade goods in association with the traditional Malabar cultural materials.

In the upper St. Johns River valley, the large villages in the marshes continued to be occupied. It has been suggested that there is less deposition of debris on the shell midden mounds during this period, but this is only tentatively documented. Burial mounds continue to be used and built. Smaller, special purpose satellite campsites continue to surround the large villages.

On the coast, the Malabar Indians built massive flat topped pyramid mounds out of shell next to large villages and burial mounds.<sup>20</sup> The ceremonial mounds contained special ritual objects associated with the Southeastern Ceremonial Complex of the larger Mississippian culture, such as embossed copper plates with falcon impersonators, green stone celts, and copper covered ear spools.

<sup>19</sup>Milanich and Fairbanks 1980:148

<sup>20</sup>Bullen, Ripley P. and Frederick W. Sleight

1960 Archaeological investigations of Green Mound, Florida.  
William L. Bryant Foundation for American Studies  
Report 2.

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**F. ASSOCIATED PROPERTY TYPES**

**F1.1 Name of Property Type:** ACCRETIONARY MIDDENS or  
MIDDEN MOUNDS

**F1.2 Description**

Accretionary middens or midden mound sites include the features, artifacts, ecofacts, and residues that built up from the residential activities of daily life. Site features include storage and refuse pits, posts and postmolds from structures, burials, and artifact concentrations. Artifacts usually consist of fragments of ceramic containers, shell tools, stone tools and stone debris. Ecofacts found in accretionary middens include animal bones and plant fragments (especially charcoal, nuts and seeds) that are visible with the naked eye, and microscopic plant pollen and phytoliths. Residues from blood and body fluids and food can be preserved on edges of stone tools.

Accretionary middens have a wide range of appearances because of differences in the degree of soil alteration and amount of cultural material. Some middens in the upper St. Johns River valley, especially the base camps, are 10 to 15 feet thick and have a black-brown, organically stained soil with abundant artifacts and shells. Other middens, such as those at short term activity campsites, have soil which is less organically stained. Usually these sites have few or no shells and sparse artifacts.

The internal stratigraphy between and within accretionary middens also varies from site to site. The stratigraphy of the thick black shell middens is usually quite complex. Individual strata range from less than two inches to over a foot thick. Strata usually do not encompass the whole site area because they have accumulated from specific activities or areas of refuse dumping. The section of the site with the greatest likelihood of having most of the depositional units present and in the correct stratigraphic order is the highest area of the site, usually near the center. The location of the highest point could have changed through time as the midden accumulated. At the smaller middens resulting from special activity sites, the stratigraphy is usually simpler. These sites are usually located on low ridges which parallel the edge of the marsh of the St. Johns.

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**F1.3 Significance:**

The accretionary middens in the upper St. Johns River valley are significant at the state level under National Register Criterion D. The related research topics include settlement and subsistence patterns, social organization, technology, foodways, and cultural ecology. Adding to the significance of the thick village shell middens is their extreme age. Several of these sites were continuously occupied for 6,000 years, from the Middle Archaic (5,000-4,000 B.C.) into the European contact period (A.D. 1600).

Midden mound sites are rare and have been studied as well as identified in only two other areas of the United States: the upper Tombigbee River of northeast Mississippi (Bense 1983a,b; 1987) and in the Poteau River of eastern Oklahoma (Galm 1978a,b,c). In both these areas, as a result of cultural resource management projects in the mid-1980s, the midden mounds were determined eligible for the National Register of Historic Places, despite much disturbance of the upper portion of many of the sites' archaeological deposits. The federally sponsored archaeological investigations of these midden mounds contributed significant information about culture history, internal site organization, subsistence, settlement patterns, and technology. It has long been suspected and was recently documented that midden mounds exist in the upper St. Johns River valley; the Twin Mounds Archaeological District (8OR457 & 8OR459) was listed in the National Register in 1992. The midden mounds in the upper St. Johns River valley are less disturbed than any of the previously excavated midden mounds, and have been sufficiently investigated to document that significant information about past ways of life are contained in them.

The degree of organic preservation associated with the deep, black earth, shell midden mounds in the upper St. Johns River valley places them in a very special category of archaeological resources in the United States. Archaeological excavations at Hontoon Island and Lake Monroe in Volusia County have documented that these sites usually have shell throughout the deposits, and often the lowermost and peripheral deposits are below the permanent water table. At both these sites, Purdy also has documented that refuse was intentionally thrown in the water.<sup>1</sup>

<sup>1</sup>Purdy, Barbara

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Through their work at the Windover Site, Doran and his colleagues have also demonstrated that water burials were also traditional in this area. The organic preservation in these permanently wet environments associated with these deep middens in the marshy St. Johns River valley dramatically increases their significance.

The presence of shell throughout the deposits has lowered the acidity of even the dry site matrix. This has preserved a great quantity of the bones from the food consumed by the residents of the settlements. Test excavations from several shell midden mounds have produced well preserved faunal remains from a wide range of animals including even small ribs and vertebrae of small fish. Consequently, the information potential of these sites for providing information about the subsistence patterns and cultural ecology developed by the prehistoric Indians of the upper St. Johns River valley is extremely high.

The upper St. Johns River valley was inhabited by stable and successful societies from the very early portion of the Archaic Stage that repeatedly occupied the same base camps in the wetlands. The archaeological remains of these base camps, the midden mounds, hold a great amount of information about the evolution of this vast wetland as well as the subsistence and cultural ecology of its human residents. It will be possible to address the issues of the prehistoric Indian diet, seasonal round, food procurement techniques, and food preparation methods from the faunal remains preserved in this type of site.

**F1.4 Registration Requirements:**

For accretionary middens to be eligible for nomination they must be associated with one of the periods described in Section E. Eligibility for individual or district nominations is not restricted to a specific type of accretionary midden. However, from the archaeological work that has been performed in the upper St. Johns River valley, it is expected that the deep dark earth shell middens from long term base camps will be eligible even if

1988 Wet Site Archaeology, CRC Press.

1991 Art and Archaeology of Florida's Wetlands, CRC Press.

Purdy, B. and L.A. Newsom

1985 The Significance of Archaeological Wet Sites: A Florida Example. National Geographic Research 1(4): 564-569.

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there has been a great deal of disturbance. Two good examples of the integrity and information value of remnants of large midden mounds which have been heavily disturbed are the Hontoon Island site (8VO202) near DeLand and the Lake Monroe site near Sanford. Both sites were heavily mined for their shells decades ago with heavy equipment. At Hontoon Island, the bulk of the center of the site was removed, leaving only a narrow rim 5-10 meters wide around the outside edge. Purdy<sup>2</sup> excavated a trench in this narrow rim and documented the presence of intact deposits and strata, some of them wet, and extremely well preserved organic artifacts from both the dry and wet strata of the site. At Lake Monroe, all the dry strata of the midden mound were removed down to the water table. Purdy has documented that there are almost two meters of midden deposits left at this site which are intact and contain artifacts and features. Because they are wet, the middens contain organic materials, such as seeds and wooden artifacts. Due to the large size of these middens (2-10 acres) and the depth of deposits (6-15 feet), they are hard to destroy, and despite serious disturbance, they usually will be eligible for listing in the National Register.

The strength of these large shell midden mounds should be kept in mind when determining their eligibility for the National Register. These sites can take substantial damage and still contain significant archaeological deposits in the lower or peripheral strata. The field information required for a determination of their eligibility should be able to be recovered with a thorough inspection of the site surface to determine the nature of any disturbance and limited testing. The depth and size of these mounds prohibits small, shallow test units, but sufficient information can be gathered with augers to document the size of the site, the nature of the midden contents (shells, organic preservation), and the depth of the deposits. This field method minimally disturbs the site, yet provides enough information to compare with middens, such as Hontoon Island, Duda

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<sup>2</sup>Purdy, Barbara

1988 Wet Site Archaeology, CRC Press.

1991 Art and Archaeology of Florida's Wetlands, CRC Press.

Purdy, B. and L.A. Newsom

1985 The Significance of Archaeological Wet Sites: A Florida Example. National Geographic Research 1(4): 564-569.

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Ranch Mound (8BR18)<sup>3</sup> or South Indian Field (8BR23),<sup>4</sup> which have been more extensively excavated and have demonstrated eligibility. The site description should include the extent of disturbances. However, reviewers should keep in mind that even what usually would be considered extreme disturbance, such as the mining of Hontoon Island, can leave extremely significant portions of the site intact.

Smaller midden sites are more greatly impacted by disturbance because they are shallower and smaller. In addition, their information may be somewhat repetitive. Therefore, their eligibility for nomination should include more extensive field documentation, such as test units in various areas of the site. If there is demonstrated integrity of the site contents, this will be sufficient for the smaller middens to be eligible. It is preferable, but not required, that the cultural components and base camp affiliation be determined. If this is possible, a base camp-satellite camp district should be nominated rather than a series of individual sites.

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<sup>3</sup>Sigler-Eisenberg, Brenda

1985 Archaeological site types, distribution, and preservation within the Upper St. Johns River Basin, Florida. Department of Anthropology, Florida State Museum, University of Florida, Florida State Museum Miscellaneous Project and Report Series Number 27, December 1985, Gainesville.



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F2.1 Name of Property Type: BURIAL MOUNDS

F2.2 Description

Mounds constructed by the prehistoric Indians in the upper St. Johns River valley were for burial. The mounds were constructed by piling basket loads of sand and shell into a conical or flat-topped shape, three to twenty-five feet high. The mounds were located on or near base camps (deep accretionary middens) throughout the upper St. Johns River valley. The bodies of important people were placed in the mounds with a range of grave goods, including ceramic pipes, whole or partial ceramic containers, shell beads, projectile points, and turtle shell rattles. Burials are both primary and secondary and include cremations.

F2.3 Significance

The burial mounds of the upper St. Johns River valley are significant at the state level under National Register Criterion D. The related research topics include social organization, political organization, and trade. Human burials, especially in purposefully constructed mounds, contain distinctive information. In the chronological view, it is possible to detect the evolution of prehistoric social organization through time by changes in the number, organization, and grave goods of the elite buried in mounds. In studies of burials elsewhere in Florida, such as the Mississippian Lake Jackson mound center (8LE1) near Tallahassee<sup>4</sup> or the Late Woodland McKiethen mound (8CO17) near Lake City,<sup>5</sup>

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<sup>4</sup>Rouse, Irving

1951 A survey of Indian River Archeology, Florida. Yale University Publications in Anthropology No. 44, Yale University Press, New Haven.

<sup>5</sup>Jones, B. Calvin

1982 Archaeology of the Southern Cult Mississippian Mound at the Lake Jackson Site, Florida. Midwestern Journal of Archaeology.

1991 High Status Burials in Mound 3 at Florida's Lake Jackson Complex: Stability and Change in Fort Walton Culture. Manuscript on File, Bureau of Archaeological Research, Florida Division of Historical Resources. Tallahassee.

<sup>6</sup>Milanich, Jerald

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archaeologists have been able to document whether the prehistoric social organization was ranked or egalitarian, and discern details of the rituals associated with the death of a member of the elite class and the transfer of sociopolitical and religious power and authority. Excavations in several burial mounds in the upper St. Johns River valley during the past 100 years<sup>6</sup> have documented that they contain similar information.

Burial mounds are expected to occur in the Woodland and Mississippian stages identified locally as the Malabar culture (I, I' and II). Burials in mounds with early European trade goods such as glass beads and silver have been identified in the upper portions of Malabar II mounds.

Charnel houses (similar to temporary mausoleums) have been documented in the Glades culture.<sup>7</sup> These structures could well be present on or near burial mounds in the upper St. Johns River valley.

F2.4 Registration Requirements:

The most important criterion for a mound to be eligible for the National Register is integrity. Mounds are prone to disturbance, primarily by people, due to the presence of human skeletons and high quality, often complete, exotic grave goods. Mounds were the target of early professional archaeologists such as C. B. Moore<sup>8</sup> and Jeffries Wyman<sup>9</sup> in the 1800s, amateur

1984 McKeithen Weeden Island: *The Culture of North Florida*. Academic Press, Inc. Harcourt, Brace and Jovanovich. Orlando, New York.

<sup>7</sup> See Section I for Moore's publications

Rouse, Irving

1951 A survey of Indian River Archeology, Florida. Yale University Publications in Anthropology No. 44, Yale University Press, New Haven.

<sup>8</sup> Sears, William H., Elsie O'R Sears, and Karl Steinen

1982 *Fort Center: An Archaeological Site in the Lake Okeechobee Basin*. University Presses of Florida, Gainesville, Florida.

<sup>9</sup> See Section I for Moore's publications

<sup>10</sup> Wyman, Jeffries

1868 An account of the fresh water shell mounds of the St. Johns River, East Florida. The American Naturalist 2(8-9):393-403.

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archaeologists such as Samuel Forry,<sup>10</sup> the Excavators Club in the 1940s,<sup>11</sup> and looters seeking Indian relics. Because of the possibility of disturbance, enough field work should be done to document the presence of intact deposits and features. The necessary fieldwork can be done with small test pits, positive cores, and/or trenches, as well as a careful inspection of the surface of the mound. It should be remembered that burial mounds were sometimes built in stages which were one to three feet thick, such as at the Mulberry Mound (8OR9 & 10) just north of Lake Poinsett.<sup>12</sup> Therefore, it is quite possible that the upper portion of mounds could be disturbed, while the lower portions could be intact and eligible for the National Register.

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1875 Fresh-water shell mounds of the St. Johns River, Florida. Memoirs of the Peabody Academy of Science, no. 4, Salem, MA.

<sup>11</sup>Forry, Samuel

1928 Letters Samuel Forry, U.S. Army Surgeon, 1837-1838, Part 3. Florida Historical Quarterly 7(1):757-787

<sup>12</sup>Dyson, Robert H., Jr. and Elizabeth Tooker

1949 The Palmer-Taylor Mound, Geneva, Florida. Cambridge, Mass.

<sup>13</sup>Rouse, Irving

1951 A Survey of Indian River Archeology, Florida. Yale University Publications in Anthropology No. 44, Yale University Press, New Haven.

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F3.1 Name of Property Type: CEMETERIES

F3.2 Description

Cemeteries of the upper St. Johns River valley are subsurface burials without mound construction. The documented cemetery types include: water or pond burials, such as the Early and Middle Archaic burial pond at Windover Farms near Titusville,<sup>13</sup> and terrestrial cemeteries, such as the Gauthier cemetery (8BR193) near Lake Poinsett.<sup>14</sup> Both of these cemeteries, discussed in Section E, were used for three to four thousand years.

F3.3 Significance

Cemetery sites are significant at the state and possibly national level under National Register Criterion D. The incredible preservation of brain matter, textiles and skeletons of the pond burials at the Windover site is one of the most significant documented historic discoveries in the United States.

<sup>14</sup>Doran, Glen H.

1986 The Windover Site - Physical Anthropology from saturated archaeological materials. Paper presented at the 1986 Annual Meeting of the American Association of Physical Anthropology, Albuquerque, New Mexico.

Doran, Glen H. and David N. Dickel

1986 Multidisciplinary investigations at the Windover archaeological site. Paper presented at the International conference on Wet Site Archaeology, Gainesville, Florida.

Stephenson, Frank

1985 The Windover archaeological project. Florida State University Bulletin: Research in Review. 79(4):3-10.

<sup>15</sup>Sigler-Eisenberg, Brenda

1985 Archaeological site types, distribution, and preservation within the Upper St. Johns River Basin, Florida. Department of Anthropology, Florida State Museum, University of Florida, Florida State Museum Miscellaneous Project and Report Series Number 27, December 1985, Gainesville.

Jones, B. Calvin.

1981 The Florida Anthropologist. Interview with C. Jones. Excavations of an archaic cemetery in Cocoa Beach, Florida. The Florida Anthropologist 34(2):81-89.

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This site has produced the oldest human DNA in the world. The textiles found there also are among the oldest ever found in the nation. The internal organization of the Gauthier cemetery into discrete clusters plus the excellent preservation provided highly unusual and significant data.

The research questions which can be addressed from these types of cemeteries are similar to those for burial mounds: social organization, political organization, and trade. However, there is an important difference between information of mound and cemetery burials: mounds usually contain only the elite, while cemeteries contain all classes of people. The discrete clusters of burials at the Gauthier cemetery have been inferred as reflecting lineages (extended related families). These two sites document that the cemetery sites in the upper St. Johns River valley contain very important information about the prehistoric societies in the upper St. Johns River valley from a very early point. Cemeteries are usually found near a base camp.

**F3.4 Registration Requirements**

For cemeteries to be eligible for nomination, they must have integrity. Cemetery sites are not as vulnerable to disturbance as mounds because they are not noticeable on the surface and, therefore, are difficult to locate. The two cemeteries mentioned above were accidentally found in construction; none has been located through archaeological surveys. Because cemeteries are likely to be found during modern construction, using mechanical equipment such as backhoes and draglines, it will be important to document the extent of the disturbance and the presence of still undisturbed burials in order for the cemetery to be eligible for listing. If the cemetery is in a wet pond or peat bog, the presence of only one undisturbed burial can make it eligible due to the excellent preservation potential. If the proposed cemetery is terrestrial, the boundaries should be at least estimated. Bounding the cemetery can be done through shovel tests or test units which identify but do not excavate human burials or burial pits.

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**G. GEOGRAPHICAL DATA**

The geographical area of this multiple property listing is within the watershed of the upper St. Johns River in Florida, from Titusville upstream to the headwaters in the vicinity of the southern boundary of Indian River County, including the Blue Cypress Lake and Fort Drum Creek drainages. Physiographically, the upper St. Johns River valley is bounded by the Talbot Terrace on the west and Ten Mile ridge on the east (See Figure 1), both of which are 25 feet high. The area lies west of and parallel to I-95. Portions of the following Florida counties are included in the multiple property area: Brevard, Indian River, Okeechobee, Orange, and Osceola (See Figure 2).

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H. SUMMARY OF IDENTIFICATION AND EVALUATION METHODS

The multiple property listing of prehistoric archaeological properties in the upper St. Johns River valley is based on over 160 years of archaeological work and publication, as well as professional work in the area by the preparer. More than 42 primary major bibliographic sources and at least 15 major secondary sources are available. Below is a summary of the archaeological work that has been conducted in the upper St. Johns River valley.

Archaeological research has been conducted in the upper St. Johns River valley since 1838 when Samuel Forry excavated at the Ft. Taylor burial mound near Lake Winder.<sup>1</sup> Formal archaeological investigations in east-central Florida, relevant to Brevard County, began in the late nineteenth century with excavations on the spectacular shell mounds and sand burial mounds along the St. Johns. As can be seen in Section H, there has been a wide variety of archaeology done in the upper St. Johns basin, and there are many publications available which provide a significant archaeological information base. The preparer of this National Register nomination performed a survey of portions of the upper basin in Brevard County and tested the Duda Ranch Mound (8BR18), a deep, dark earth, shell midden south of Lake Winder. Due to the amount of previous archaeological work done in the upper St. Johns River valley, it will only be summarized. For a detailed summary see Rouse,<sup>2</sup> Milanich and Fairbanks,<sup>3</sup> and Bense and Phillips.<sup>4</sup>

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<sup>1</sup>Forry, Samuel

1928 Letters Samuel Forry, U.S. Army Surgeon, 1837-1838,  
Part 3. Florida Historical Quarterly 7(1):757-787

<sup>2</sup>Rouse, Irving

1951 A survey of Indian River Archeology, Florida. Yale University Publications in Anthropology No. 44, Yale University Press, New Haven.

<sup>3</sup>Milanich, Jerald T. and Charles H. Fairbanks

1980 Florida Archaeology. Academic Press, New York.

<sup>4</sup>Bense, Judith A. and John C. Phillips

1990 Archaeological Assessment of Six Selected Areas in Brevard County: A First Generation Site Location Model. Report of Investigations No. 32, Institute of West Florida Archaeology, The University of West Florida, Pensacola.

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The early investigators in the second half of the 1800s were the first to document that the large shell heaps were man-made and not natural, as had been suspected. Jeffries Wyman observed differences in composition between the fresh water and coastal shell mounds, noted stratified depositional sequences within the shell mounds, and postulated that these sites represented long periods of occupation.<sup>5</sup> Andrew E. Douglass recognized that the sand burial mounds and the shell heaps were constructed by the same populations.<sup>6</sup> Sand burial mounds in Brevard County were examined by several other early investigators. J. Francis Le Baron,<sup>7</sup> for example, encountered skeletal remains at the Nauman mound (8BR77), located on the Indian River northeast of Titusville. Moore visited and revisited the St. Johns River valley and excavated several burial mounds and middens. His publications remain the archaeological baseline of this area.<sup>8</sup>

These early investigations, in combination with observations of N. C. Nelson<sup>9</sup> at Oak Hill and the efforts of Matthew W. Stirling, provided stratigraphic evidence of the temporal change

<sup>5</sup>Wyman, Jefferies

1868 An account of the fresh water shell mounds of the St. Johns River, East Florida. The American Naturalist 2(8-9):393-403.

1875 Fresh-water shell mounds of the St. Johns River, Florida. Memoirs of the Peabody Academy of Science, no. 4, Salem, MA.

<sup>6</sup>Douglass, A. E.

1885 Some characteristics of the Indian earth and shell mounds on the Atlantic coast of Florida. American Antiquities 7:74-82, 140-184.

1890 Mounds in Florida. American Antiquarian and Oriental Journal, Volume 12:105-107

<sup>7</sup>Le Baron, J. Francis

1884 Prehistoric remains in Florida. Smithsonian Institution, Annual Report for 1882, pp. 771-790. Washington, D. C.

<sup>8</sup>See Section H for a listing of Moore's many publications on St. Johns archaeology.

<sup>9</sup>Nelson, N. C.

1918 Chronology in Florida, Oakhill Shell Mound. Anthropological Papers of the Museum of Natural History 22(2):81-103.



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in ceramic styles which was published by John M. Goggin.<sup>10</sup> Fiber tempered ceramics occurred above a deposit without ceramics, which were followed in turn by plain ware, and finally by the appearance of check stamped pottery in the upper strata. These documented changes in pottery types provided a framework for developing a chronological sequence of aboriginal occupation in east Florida. These diagnostic pottery types also provided a tool for establishing a relative age for individual sites.

The next substantive archaeological work in the upper St. Johns River valley was in the late 1940s, led by Irving Rouse of Yale University. Rouse surveyed the entire area, tested many sites and excavated a dark earth shell midden, South Indian Field (8BR23). The publications of Rouse and his colleagues<sup>11</sup> refined the chronological sequence and ceramic temporal markers. Their work remains the most comprehensive modern archaeological research performed in the upper St. Johns River valley. The Yale research initiated progressively more refined chronological sequences for the area. For example, James B. Griffin<sup>12</sup> defined several pottery types and suggested that fiber tempered pottery represented a significant early occupation of the area; he also postulated that plain ware preceded check stamped ware. Work in the 1950s supported and refined the Yale chronology and added radiocarbon dates.<sup>13</sup>

<sup>10</sup>Goggin, John M.

1949 Cultural traditions in Florida Prehistory. In The Florida Indian and His Neighbors, J. W. Griffin, Editor, pp. 13-44, Rollins College, Winter Park, FL.

1952 Space and time perspectives in St. Johns Archeology, Florida. Yale University Publications in Anthropology 47. Yale University Press, New Haven.

<sup>11</sup>Rouse, Irving

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Ferguson, V.M.

1951 Chronology at South Indian Field, Florida. Yale Publications in Anthropology, Number 45. Yale University Press, New Haven.

<sup>12</sup>Griffin, James B.

1945 The significance of fiber-tempered pottery of the St. Johns area in Florida. Journal of the Washington Academy of Science. 35(7):218-223.

<sup>13</sup>Griffin, James B.

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Recent archaeological investigations have been prompted primarily by cultural resource management (CRM) compliance regulations or have been funded by Historic Preservation Grants-in-Aid from the Florida Division of Historical Resources. Urban development is progressing westward from the Atlantic coast into the upper St. Johns River valley at an alarming pace. Numerous residential subdivisions, administrative complexes and even whole new towns are being built to accommodate the rapidly increasing population. Examples of CRM work are the compliance surveys for the General Development Corporation done by D. N. Dickel<sup>14</sup> and the survey of the St. Johns Wildlife Refuge.<sup>15</sup> In 1985, Brenda

1948 Green Mound: A chronological yardstick. The Florida Naturalist 22(1):1-8.

Bullen, Ripley P. and Frederick W. Sleight

1960 Archaeological investigations of Green Mound, Florida. William L. Bryant Foundation for American Studies Report 2.

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<sup>14</sup>Dickel, David

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<sup>15</sup>Campbell, L., J. Homburg, C. Weed and Jr. P. Thomas

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Seigler-Eisenberg<sup>16</sup> did a research survey and testing project of the upper St. Johns River valley which integrated much of the previous work. This research incorporated for the first time the evolution of the landscape and environment of the unusual marshy upper St. Johns River valley. She also focused on settlement and subsistence patterns and site types in this region and constructed a preliminary model of site locations.

Several recent archaeological investigations in Brevard County merit special note. The Gauthier site (8BR193) is an aboriginal cemetery and multicomponent village. The cemetery was excavated by Calvin Jones of the State Division of Historical Resources,<sup>17</sup> while the village was excavated by the University of Florida. Excavations within the cemetery suggested an Archaic

1984 Reconnaissance survey in the Upper St. Johns River Flood Control Project, Osceola, Brevard, and Indian River Counties, Florida. Work performed under Contract No. DACW17-84-C-0021. Jacksonville District Corps of Engineers.

Swindell, David III, Mildred L. Fryman and James J. Miller  
1979 Cultural resource reconnaissance of the St. Johns National Wildlife Refuge. Final report submitted to Interagency Archaeological Services, Atlanta, in fulfillment of Contract No. A-5964(79) by Cultural Resource Management, Inc.

<sup>16</sup> Sigler-Eisenberg, Brenda

1985 Archaeological site types, distribution, and preservation within the Upper St. Johns River Basin, Florida. Department of Anthropology, Florida State Museum, University of Florida, Florida State Museum Miscellaneous Project and Report Series Number 27, December 1985, Gainesville.

<sup>17</sup> Jones, B. Calvin

1981 The Florida Anthropologist. Interview with C. Jones. Excavations of an archaic cemetery in Cocoa Beach, Florida. The Florida Anthropologist 34(2):81-89.

Seigler-Eisenberg, Brenda

1985 Archaeological site types, distribution, and preservation within the Upper St. Johns River Basin, Florida. Department of Anthropology, Florida State Museum, University of Florida, Florida State Museum Miscellaneous Project and Report Series Number 27, December 1985, Gainesville.

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association and continuous use for over 3000 years. Sigler-Eisenberg's excavations revealed that the main village area was a Woodland (Malabar) occupation and was not contemporaneous with the cemetery. Christopher T. Espenshade<sup>18</sup> conducted a ceramic analysis of materials excavated from the village area of the site which documented that the upper St. Johns shared closer ties to the Glades tradition.

Another important recent excavation is an Early Archaic cemetery, the Windover site (8BR246) near Titusville, excavated by Glen Doran and David Dickel.<sup>19</sup> This extremely significant archaeological site has produced new information about aboriginal biology, diet, textiles, and the environment of this period as reported by Frank Stephenson.<sup>20</sup>

In combination, the archaeological investigations undertaken over the last 160 years have produced much data on the prehistory and history of the upper St. Johns River valley. It was from this archaeological information the preparer's own investigations in the area that the methods for developing this multiple property listing were devised.

Four individual property nominations of archaeological resources in the upper St. Johns River valley accompany this Multiple Property Listing cover: the Duda Ranch Mound (8BR18), Indian Fields (8BR5), Persimmon Mound (8BR17), and Moccasin Island (8BR16). These sites were selected because they are

<sup>18</sup>Espenshade, Christopher T.

1983 Ceramic ecology and aboriginal household pottery production at the Gauthier Site, Florida. Master's thesis, Department of Anthropology, Gainesville.

<sup>19</sup>Doran, Glen H.

1986 The Windover Site - Physical Anthropology from saturated archaeological materials. Paper presented at the 1986 Annual Meeting of the American Association of Physical Anthropology, Albuquerque, New Mexico.

Doran, Glen H. and David N. Dickel

1986 Multidisciplinary investigations at the Windover archaeological site. Paper presented at the International conference on Wet Site Archaeology, Gainesville, Florida.

<sup>20</sup>Stephenson, Frank

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representative examples of several important features of the plethora of midden sites in the upper valley. First, they are representative of the two basic types of middens. Three of the sites are large base camp midden mounds (Duda Ranch, Moccasin Island, and Indian Fields), and one, Persimmon, is a typical small satellite camp midden. Second, the level of archaeological investigations varies at each of the four sites, but the Duda Ranch Mound (8BR18) has been well investigated by several archaeologists, and can be used as a basis of comparison for those sites which have had less testing. Third, all of these sites have been only minimally disturbed.

The methods used in gathering information from each of these four sites included gathering new information from the field and synthesizing information gathered from these sites from previous investigations. New information gathered at each site included mapping, photography, documenting disturbance, surface collecting, and subsurface testing. Information from previous investigations at these sites was obtained from technical reports and papers produced by the investigators.

Subsurface testing methods used in the current investigations were chosen to confirm previous observations, to complement previous investigations, or to compare with the results of investigations at similar sites. For example, extensive testing had been previously performed at the Duda Ranch Mound (8BR18); therefore, a test pit was excavated to confirm the stratigraphy, chronology, and depth of cultural deposits. In addition, several three-inch borings were excavated around the site to document the site boundaries and depth of deposits. At two other sites, the Persimmon Mound (8BR17) and Moccasin Island Mound (8BR16), several test units had been previously excavated and reported. Therefore, several borings were excavated to determine the depth of deposits and site boundaries which complemented these test pits. One site, Indian Fields (8BR5) is a large midden mound which had been tested almost a century ago by C. B. Moore, and had had no subsequent work. This site was very similar to the Duda Ranch and Moccasin Island Mounds and there has been very limited surface disturbance. Therefore, a series of borings were made to determine the site stratigraphy and profile. The borings revealed that the cultural deposits are up to eleven feet thick and there is a similar series of strata throughout the site. This information, when combined with that from other similar sites in the immediate area, is sufficient to document the presence of significant cultural deposits.

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The strategy behind the methodology used to gather information to evaluate these sites for nomination to the National Register of Historic Places was designed around the documented physical characteristics of midden mounds as a site type. As discussed in detail in Section F.1, midden mounds in the upper St. Johns River valley, as well as in other areas of the United States, are an especially stable type of archaeological site. They are large (2-10 acres) and deep (6-15 feet). The ability of these sites to withstand damage and still contain extensive significant information has been consistently documented.

The field methodology used for this Multiple Property Submission documented the integrity of three sites in the traditional method (test pits, photography, and mapping boundaries). These sites are the Duda Ranch Mound (8BR18), Moccasin Island Mound (8BR16), and Persimmon Mound (8BR17). The field work at the fourth midden mound, Indian Fields (8BR5), was limited to site mapping, photography, surface collection, and borings. Because this site has very little disturbance, boring documented up to eleven feet of cultural deposits, and the site boundaries were clear, it was decided that test pits would not be necessary to document integrity and significance. The borings provided diagnostic artifacts in the correct chronological position as well as samples of fauna, flora, and soil. The same type of methodology should be used for all future sites that are nominated under this cover.

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Table 1. Prehistoric Cultural Sequence for East-Central Florida.

<u>Historic Context</u>	<u>Date Range</u>
<u>Paleo-Indian</u>	15,000-8,500 B.C.
<u>Archaic</u>	
Early	8,500-5,000 B.C.
Middle	5,000-4,000 B.C.
Late Archaic	
Mt. Taylor	4,000-2,000 B.C.
Orange	2,000-1,200 B.C.
Transitional	1,200 - 500 B.C.
<u>Woodland</u>	
Malabar I	500 B.C.-A.D. 100
Malabar I'	A.D. 100-800
<u>Mississippian</u>	
Malabar IIa	A.D. 800-1300
Malabar IIb	A.D. 1300-1513
Malabar IIc	A.D. 1513-1565