

Contributions to the Archaeology of Florida — Number One

THE GOODNOW MOUND
HIGHLANDS COUNTY, FLORIDA

CONTAINING A REPORT ON THE
SKIPPER SITE, HIGHLANDS COUNTY

By

JOHN W. GRIFFIN

Archaeologist

and

HALE G. SMITH

Assistant Archaeologist

Florida Park Service



STATE OF FLORIDA
FLORIDA BOARD OF FORESTRY AND PARKS
FLORIDA PARK SERVICE

LEWIS G. SCOGGIN, *Park Director*

TALLAHASSEE

1948

INTRODUCTION

The present report is the first of a contemplated series of technical papers on Florida archaeology to be published by the Florida Park Service.

The area of the state with which this report deals is little known, archaeologically speaking. The sites are located in what has recently been called the Kissimmee Area (Goggin, 1947 b). This area is tentatively defined as the drainage of the Kissimmee river from Lake Okeechobee on the south to Lake Tohopekaliga on the north (see Fig. 1). The present report adds to our knowledge of the area, but does not, of course, solve all of the problems involved.

Since one of the sites described in this report dates from the historic period, as evidenced by quantities of trade goods of European derivation, it is not amiss to summarize the known historic contacts with southwest Florida in early days.

The Indians of southwestern Florida, from the time of the discovery until the relatively late arrival of the Seminole, seem by and large to have been the Calusa. The precise limits of the Calusa toward the area with which we are concerned is not known, but there is some suggestion that they spread, at least politically, northward in the region near Lake Okeechobee in late times. We cannot, however, be absolutely certain that the inhabitants of the Kissimmee area were Calusa.

The first documented contact with the Calusa occurred in 1513 when Ponce de Leon landed briefly. Both the fact that he was met with hostility and that he reported gold among the Indians leads to the belief that earlier contact had been established by Spanish slave-traders and through shipwreck. Miruelo in 1516 and Cordova in 1517 did nothing to improve relations with the Calusa, and it is not surprising that Ponce de Leon received the wound which caused his death at their hands on the occasion of his second visit in 1521. Passengers and cargoes were cast up on Calusa shores during the next two decades, and sometime between 1545 and 1551 Fontaneda was cast away among the Calusa, remaining for a period of seventeen years. Following his release, Fontaneda wrote the memoir that is practically the only source on the aboriginal culture of this region.¹

¹The most recent edition of Fontaneda's memoirs was published by the Historical Association of Southern Florida (True, 1944).

In 1566, the year after he founded St. Augustine, Pedro Menendez de Aviles visited the Calusa country, rescued twelve prisoners, and married the sister of the Calusa chief in an attempt to establish good relations. In the same year he sent Francisco de Reynose with thirty soldiers to build a fort at the main Calusa town. The following year Menendez visited the fort and brought with him a Jesuit missionary, Father Rogel. Plotting, counter-plotting and assassination soon developed, and the Indians burned the town and left. The mission was withdrawn sometime between 1568 and 1571.

In 1612, 1680 and 1697, attempts were made to missionize the Indians, but all attempts met with failure. During this same period and later there were doubtless many short term contacts with fishermen from Cuba, and perhaps traders as well. Romans states that the last of the Calusa left Florida with the Spaniards in 1763, but other reports of the Calusa in Florida are encountered until as late as 1847.

Seemingly, then, the only permanent establishment in the Calusa region in early historic times was the ill-fated mission established by Menendez in the late sixteenth century. Despite this meagre amount of documented contact the mounds of the region have consistently disclosed trade materials. No doubt occasional traders touched the coast, and no doubt the Calusa had trade relations with other Indian tribes to the north and east who were in more intimate contact with the Spaniards.

From the brief sketch given above it is apparent that what we are to learn of the early historic inhabitants of the region will be through the discipline of archaeology to a greater extent than through the related discipline of history.

As in all such reports, the results are not due to the efforts of the writers alone. The owners of the sites, Mr. Henry C. Goodnow and Mr. Jack Skipper, were most cooperative. Mr. William C. Orchard kindly consented to examine our glass trade beads, and Mr. John M. Goggin provided us with copies of his unpublished manuscripts and notes. Mr. E. M. Murphy, Jr., was of great help, both in the field and in the laboratory. Photographs on Plates II, III and IV were taken by Mr. William Z. Harmon, Florida Park Service. Other photographs are by the writers. The figures were executed by Miss Florence Bogar, Florida Park Service. Mr. A. R. Janson, Florida Park Service, did the drawings of the silver ceremonial tablet and fish effigy.

Burials were poorly preserved (Pl. I, A and B). Some skulls were sufficiently intact to give a few measuring points. The physical anthropological description has, however, been deferred.

At the close of excavations all pits and trenches were refilled, and relocation shots were made with the transit.

OBJECTS RECOVERED IN THE GOODNOW MOUND

GLASS BEADS:

The reported finding of glass beads led us to the Goodnow Mound in the first place, and during the excavation over 6200 of these beads, of various colors, sizes and shapes, were recovered. They were found practically throughout the mound, their scattered condition probably being due to the great amount of digging which had taken place. When the relatively undisturbed portions of the mound were reached, it was found that concentrations of beads accompanied burials.

We were fortunate in obtaining the expert opinion of Mr. W. C. Orchard, formerly of the staff of the Museum of the American Indian in New York, and author of the standard reference work on Indian beads and beadwork (Orchard, 1929). In addition to Mr. Orchard's personal examination of a sample collection of the beads, information was gleaned from published sources.

The most numerous type of bead was the small seed bead, still commonly used in beadwork. Colors included blue, both dark and light; white; amber; purple; yellow; green; red; black and clear. Of a sample of 4299 seed beads from the site, 2039 were blue and 1951 were white, making the two colors account for approximately 97 percent of the total. Whether this proportion was due to preference or availability is not known.

All of the small opaque red glass seed beads were colored black around the rim of the perforations, presumably with a paint which had worn off in places revealing the red glass beneath. Superficially these beads closely resemble the type of bead known as the "Cornaline d'Aleppo" or "Hudson's Bay bead". However, this latter type is always made of glass of two colors, with one color of glass, usually dark green, in the core, and the opaque red glass outside it (Orchard, 1929, p. 87). Mr. Orchard suggested that these Goodnow Mound specimens were intentionally made to resemble the Cornaline d'Aleppo, which was a more costly bead to manufacture and had a correspondingly higher trade value.

Monochrome glass beads of larger sizes were also found, ranging up to 13 mm. in length. In shape these are both oblate-spheroid and elongated-spheroid.⁵ In color they are clear, dark blue, light blue, blue-green and green. One group of rather large beads, 7 to 11 mm. in length, are opaque light blue of a light friable glass with considerable iridescence (Pl. V A, center row, bottom). These beads, according to Orchard, are attempts at the simulation of pearls by the early manufacturers.

One bugle bead, or tubular bead, of blue glass was found. Beads of this type were made from broken segments of a glass tube, elongated while hot (Orchard, 1929, p. 83). The specimen is 31 mm. long and 3 mm. in diameter (Pl. V A, left specimen). Another blue glass bead in the collection is approximately the same diameter and about 4 mm. long. This bead may have been made from a bugle bead, with the edges of the ends smoothed by revolving in a metal drum.

Three small oblate-spheroid beads, about 3 mm. in diameter, of clear glass with longitudinal white stripes were found. This type of bead has been called the "gooseberry" because of its resemblance to that berry.

Five longitudinally striped polychrome beads came from the excavations. One is a seed bead, dark blue in color, with two red and two white stripes, placed alternately and quadrilaterally. One is an oblate-spheroid dark blue glass bead with six white stripes, and with two very thin white lines between each white stripe. Another is a light blue bead, 9 mm. long and 6 mm. in diameter, with three equally spaced white stripes. The remaining two beads of this decoration type are elongate-spheroid in shape and about 5 mm. in diameter. Both of these beads, which are of dark blue glass, are striped alternately with three red and three white lines, but one of the specimens has its three white stripes, and one of its red stripes, divided into close pairs (Pl. V A, right bottom). Orchard regards these beads as Venetian in origin, and not very common.

There is another polychrome bead of oblate-spheroid shape which has its stripes at the ends, rather than longitudinally (Pl. V A, right row, second from top). This bead is of a bright blue color and has a thin white line around the bead, with black inside this to the perforation. Neither the black nor the white colors

⁵The terms descriptive of the bead shapes are taken from Orchard (1929) and Quimby (1942).

continue through the bead as in the Cornaline d'Aleppo, but the coloring appears to be in the glass, rather than painted on as in the case of the small red pseudo-Cornaline d'Aleppo beads discussed above.

One "Star" or "Chevron" bead was found (Pl. V A, right row, top). This specimen is 6 mm. long and almost as large in diameter, and is cylindrical. Chevron beads are made of superimposed layers of colored glass, and the decorative effect is achieved by cutting through until the various layers show. The bead from the Goodnow Mound has four layers of glass, pale green, red, white and blue, in that order from inside to outside. Orchard (1929, pp. 83-85) describes the manufacture of these beads and on Plate XII illustrates some in color.

A bead of cut crystal, 12 mm. in diameter, is embellished with four rows of seven facets each (Pl. II A, second row from top, left hand specimen). Both ends are rough and concave, with one showing a sharp fracture, perhaps where the piercing agent broke through. Beads of this type do not appear to be common, but appear in Florida more frequently than elsewhere.

METAL BEADS:

One tubular bead of rolled sheet silver, 35 mm. long and about 6 mm. in diameter, was screened from the disturbed surface (Pl. II A, third row from top, left hand specimen).

Several small silver beads, about 3 mm. in diameter, were apparently cut from a perforated silver rod. They are about the size of seed beads with flat ends. An irregular copper or brass bead (Pl. II A, third row from top, second specimen from left) was found.

Three coin beads were found. These beads are made by pounding on a piece of metal, usually a coin, until the desired shape is achieved. The perforation always shows a small hole through the center, with a wider one to each side. This is evidently caused by the instrument around which the bead was pounded, with the center being perforated later. One of these beads (Pl. II A, third row from top, right hand specimen) is 19 mm. in diameter in the middle and 10 mm. in diameter on the ends. It is barrel shaped. The large holes in each end are about 6 mm. in diameter and 3 mm. deep; the center hole, connecting these two, is about 3 mm. in diameter. A somewhat smaller bead of silver of the same type is shown in Pl. II A, third row from the top, second specimen from

the right. A somewhat similar bead, seemingly of lead, is 12 mm. in diameter and 9 mm. in height (Pl. II A, second row from the top, center specimen).

AMBER BEAD:

An irregular bead, 14 mm. long, of a translucent amber color, was apparently made from amber, or some other resin-like substance (Pl. II A, second row from top, right hand specimen).

GLASS MIRRORS:

Eleven pieces of flat glass, from 1.5 to 3.0 mm. in thickness, were found scattered in the excavations. One of the fragments still retained a "silvered" coating on one side, and it is probably safe to assume that all of the fragments represented pieces of mirrors.

MISCELLANEOUS GLASS:

Seven small fragments of glass, apparently originally all of a green color, were found. All of these fragments displayed concavo-convex surfaces, and doubtless came from glass bottles.

METAL BELLS:

Five specimens of hawk's bells were found. Four of these are fragmentary examples of copper or brass (Pl. V B, right, top). These appear to have been about 15 mm. in diameter, and appear to have had the customary bottom formation of two holes joined by a slit. In two of the specimens rusted iron strikers were found inside the bells. The suspension rings were broken in all cases, but a fragmentary cord, preserved by the copper salts, remained at the top of one.

The fifth bell is of silver, and is in the form of a flattened sphere 22 mm. across and 17 mm. in height (Pl. V B, right, bottom). The suspension ring is 6 mm. in height. The bottom has the customary two hole and joining slot arrangement. The rusted iron striker is present in the bell.

BRASS BUTTON:

A flattened spheroid object, probably of brass, 20 mm. in diameter and 15 mm. in thickness, is probably a button (Pl. II A, top specimen). The remnants of two protrusions, probably the ring for attachment, are present on the back of the object.

SILVER CHAIN:

A silver chain of eleven links was screened from the surface (Pl. II A, bottom specimen).

The is no absolute proof that the aboriginal pottery at the Goodnow Mound is contemporaneous with the historic burials. The scattered distribution of the sherds would probably argue against contemporaneity, but the great amount of pitting may be responsible for this distribution. The argument that they represent inclusion in a mound built before the historic burials were placed in it is largely negated by the fact that so far as could be determined there was no previous use of the mound. Test-trenching around the mound disclosed no village debris from which the sand of the mound could have come bearing earlier sherds, and the vessel sizes suggested by the sherds are too small to have been carrying receptacles used in building the mound. When all possible explanations are weighed it seems probable that the sherds do belong to the same time period as the burials.

ASSOCIATIONS

Burials in the Goodnow Mound were of two types, primary extended and secondary bundle. Along the initial trench and at other places, areas were encountered that showed evidence of burials. In many cases, however, the previous pitting made it difficult to say whether the remains were those of bundle burials or represented the throwing back of unwanted bones by treasure seekers. In several instances, however, the evidence seemed to indicate the actual presence of bundle burials.

There were six extended primary burials with which the greater portion of the associated cultural material was found. These burials were surrounded by a dark stained area of sand. Part of this discoloration, at least, seemed due to decomposed palmetto leaves or bark, evidence of which was preserved by the iron oxide of the celtiform axes and the knife. In the general area of the burials were red ocher stained sand concentrations.

Burial No. 5: Fragments of the occipital bone and mastoid processes only. In association, a copper disc in fragmentary condition.

Burial No. 9: A heavy concentration of fragmentary bones in an area about four feet square. More than one individual represented. In association, a large portion of the body whorl of a conch and Spanish sherds.

Burial No. 14: Cranium, fragments of clavicle and scapula, femur fragment and most of the bones of both feet. In association, iron scissors over clavicle and a few inches from skull, a

necklace of blue beads ran under the skull and through the scissors handle. Apparently the scissors had been suspended around the neck of the individual.

Burial No. 15: Skull, fragments of clavicle and scapula, humerus, radius and ulna of both arms and the bones of the right hand, portions of the pelvis, right and left femura, portions of the tibiae, and discolored areas showing location of vertebral column. In association, beneath the bones of the right hand was a knife blade, and iron rod and a celtiform iron axe (Pl. I D). Near the axe were the silver bell and a copper disc in such a position that the suspension ring of the bell protruded through the center hole of the disc. About the lower ends of both arms were found large concentration of blue seed beads, and a similar concentration was found beneath the skull. The shears were found near the iron rod.

Burial No. 16: Fragments of occipital bone and mandible. In association, a fragmentary copper bell a few inches from the mandible. The long copper strip, perhaps a "plume" was found above the occipital fragments. Aboriginal sherds occurred.

Burial No. 19: Portions of the occipital and maxillary bones and the mandible. The left femur was found in association with a celtiform iron axe and some unidentified copper pieces.

Burial No. 21: Scattered fragments of two burials, including the occipital and frontal bones of one skull and the stained outline of another, radius and ulna fragments and two femur sections. In association, the silver ceremonial tablet lying on a mass of over 1500 white seed beads together with one large blue bead.

In view of the fragmentary nature of the skeletal material, even in those areas known to be undisturbed, it is suspected that some burials, or portions of burials, had so disintegrated that they were not found. This would account for some of the objects which do not appear to be near burials.

In a few instances beads were found which gave some idea of the way that they were worn and the patterns in which they were used.

74 beads, a portion of a string, were found wrapped around the shears associated with Burial 15 (Pl. IV B, middle). Beads of five colors, purple, green, blue, white and yellow were found. The purple beads, which are ovoids of a larger size than the seed beads, give the only consistent pattern, being strung in groups of nine or more. Between these purple beads are found

the others. There is some suggestion of alternation of two green and three yellow beads between the purple ones, but this is not certain due to the fragmentary condition of the strand.

A necklace of large blue beads of opaque iridescent glass was found with Burial 14. Forty beads were found. The strand ran around the neck and through the scissors handle, which latter artifact lay on the chest. The small shield-shaped silver pendant lay on the scissors handle.

Underneath a fragment of femur, and conforming to the contour of the bone, a pattern of blue seed beads was found. The design consisted of two long vertical strings of beads about three-quarters of an inch apart. The vertical strings were connected at one inch intervals with cross strings. From the quantity of beads found outside this remaining pattern, indications are that the bead work was fairly extensive and probably represents a beaded clout or apron, since such a net-like pattern would hardly be used without being sewn on leather or fabric.

Beneath the cranium of Burial 18 was a necklace of blue beads. The beads were of two shapes, round and ovoid. The necklace was small, probably fitting closely around the neck, and the pattern consisted of two ovoid beads alternating with one round bead for the length of the strand. The centerpiece of this necklace, found just below the mandible, was the one chevron bead found in the excavations.

In two cases, one mentioned above under Burial 21, large concentrations of beads of a single color were found beneath silver pendants. Although no pattern was seen the association was obvious.

In several instances concentrations of beads around the bones of the wrist or ankle gave indication of bracelet strings of beads. Usually these were blue seed beads.

TRAIT LIST, GOODNOW MOUND

The trait list presented below is intended to serve as a summary of the descriptive materials already presented. Since it is not intended to be interpretive, it is not cast in terms of complexes or activities, but rather in terms of materials and types.

MOUND STRUCTURE

- Oval sand burial mound
- Mound built on natural ridge
- Red ocher stained areas

BURIALS

- Extended primary burial
- Secondary bundle burial.
- Mass secondary burial
- Extended burials oriented roughly northwest-southeast, heads northwest (?)
- Bark or leaf-lined graves

BEADS

Glass:

Seed Beads:

Monochrome:

- Dark blue
- Light blue
- White
- Yellow
- Clear
- Green
- Amber
- Black

Polychrome

- Longitudinally striped
- Pseudo Cornaline d'Aleppo

Elongate-spheroid shape:

Monochrome:

- Blue
- Iridescent light blue
- Blue-green
- Green (small)
- Amber
- Purple

Polychrome:

- Longitudinally striped
- Chevron or Star

Oblate-spheroid shape:

Monochrome:

- Blue (2 shades)
- Clear
- Iridescent light blue

Polychrome:

- Longitudinally striped
- Striped at ends
- "Gooseberry"

Tubular shape:

Monochrome: Dark blue

Faceted:

Monochrome: Clear or crystal

Metal:

- Tubular rolled silver
- Small silver cut from rods
- Silver coin beads
- Lead (?) "coin bead"
- Copper or brass, irregular

Miscellaneous:

- Amber bead

BEADS, PATTERN AND OCCURRENCE

- Mixed color strands of glass beads
- Monochrome strands of glass beads
- Beaded net-like areas
- Necklaces
- Concentrations at wrists and ankles
- Wrapped around scissors
- Concentrations with pendants

MISCELLANEOUS GLASS

- Glass mirrors
- Glass bottle fragments

METAL BELLS

- Hawk's bells of copper
- Hawk's bell of silver
- Iron strikers in bells

SILVER PENDANTS

- Ceremonial tablet, incised
- Fish effigy, incised
- Rectanguloid, incised and punctated
- Shield shaped, plain
- Triangular, plain

IRON ARTIFACTS

- Scissors
- Celtiform axes
- Knife blade
- Pointed rod

MISCELLANEOUS METAL

- Brass button, plain
- Silver chain
- Copper discs, center hole
- Copper "plume" (?)
- Rectangular, painted (?), copper piece
- Miscellaneous unidentified copper fragments
- Miscellaneous unidentified iron fragments

SHELL

- Busycon* dippers or cups (?)
- Fragments of *Busycon* shells

POTTERY

- Spanish olive jar
- Belle Glade Plain
- Biscayne Plain
- One smooth, plain sherd

THE GOODNOW MOUND—COMPARISONS

Sites containing historic materials have been found many times in Florida, but scientific excavation and detailed reporting is the exception rather than the rule. This comparative section will do little more than indicate some of these sites and the materials which have been recovered. In some cases we know of objects similar to those recovered from the Goodnow Mound, but do not know the complex with which they were associated.

Perhaps the most interesting artifact found was the small silver ceremonial tablet (Pl. III A and B).⁶ Similar objects have been found in quite a few mounds, the majority of which are in the Glades Area (see Fig. 1). The distribution of these objects will be fully discussed by Goggin in a forthcoming publication (Goggin, 1947a), and will not be given here. With the exception of a specimen from the Thomas Mound in Hillsborough County, and one from a site in the St. Marks National Wildlife Refuge in Wakulla County all specimens known are either from the Glades Area or the Kissimmee Area (Goggin, 1947c).

These ceremonial tablets are frequently associated with crested bird ornaments of metal (Goggin, 1947c) and seem to belong to a cult largely confined to South Florida.⁷ Sites containing these two cult items consistently reveal trade materials of European derivation and, of course, the metal from which the objects are made is itself European derived material, although the workmanship is native. The dating is problematical, although Goggin leans toward a sixteenth century interpretation (Goggin, 1947c).

The importance of the ceremonial tablet at Goodnow is that it occurs with a considerable amount of trade material carefully excavated. Any suggestions of dating from this other material tend to date the cult with which the ceremonial tablet belongs. Before attempting to arrive at the probable date, however, we will

⁶One of the writers (Griffin, 1946) has interpreted the design on these tablets as a spider motif, related to the spider found in the Southern or Buzzard Cult farther north, but he no longer holds that they necessarily indicate contemporaneity with the Cult. Goggin (1947a) considers the design represents the alligator, and derives the metal tablets from the wood and stone examples found by Cushing (1896) at Key Marco.

⁷It may, however, owe its impetus to the Southern or Buzzard Cult and may represent either a marginal variation of this cult, or a late marginal survival. The latter would almost certainly be the case if the early datings now being given the Cult are correct.

briefly discuss a few sites which contain materials similar to those found at the Goodnow Mound.

Moore (1905, pp. 305-308) describes a mound on Pine Island in Lee County. The mound was of sand, about 60 feet in diameter and 5 feet high. Burials were flexed, both loose and close, and several masses of disconnected bones were found. This latter feature occurs at Goodnow, but so far as is known no flexed burials occur at Goodnow. Much of the trade material from this mound is very reminiscent of Goodnow; iron "celts", tubular rolled silver beads, glass beads, though seemingly not in the quantity found at Goodnow, scissors, knives, and a long square steel rod, pointed at one end, which seems practically identical in form with the one from Goodnow, though longer and of larger diameter. Two silver pendants were found by Moore; one kite-shaped with a cross repousse, the other long and concavo-convex with no ornamentation. Neither of these are specifically like the Goodnow specimens, but do appear to belong to the varied silver pendant tradition of South Florida. Other objects found by Moore in this mound which have no counterparts at Goodnow include: two pendants of glass, one a cross, the other tear-drop shaped; steel chisels and a pruning knife.

Considerably more aboriginal material was present at the Pine Island mound than at Goodnow. Projectile points, a perforated fossil shark's tooth, Busycon cups and pottery were found. The pottery was mostly plain according to Moore; only three check-stamped sherds were encountered, and three or four fragments of one vessel appear to be Safety Harbor Incised (Moore, 1905, Fig. 6). Loop handles, similar to those found on Pinellas Incised or Lake Jackson Plain were found in two instances. What little pottery evidence there is from the site indicates affiliations with the Safety Harbor Period of the Gulf Coast.

The trade goods at the Pine Island site suggests a complex very similar to that at Goodnow, with the exception that glass beads were less frequent. Aboriginal work in silver is present, but nothing distinctly related to the South Florida Cult was found. The aboriginal pottery belongs to the late horizon of the region.

Walker (1880, pp. 401-403) describes a mound at John's Pass south of Clearwater. The mound was oval, 50 by 25 feet, and made of sand obtained by cutting away the ridge on either side of the mound. This feature is similar to Goodnow. All of the burials in the mound were extended, a form of burial noted at

Goodnow but absent at Pine Island. The only ornaments were a glass bead and a tubular rolled silver bead. Bushnell (1937, p. 34) has examined the glass bead in the U. S. National Museum and states that it is a faceted cut crystal bead with eight facets around the perimeter. Although everything known about this mound is very similar to the Goodnow Mound, there does not appear to have been the amount of material that we found at Goodnow.

A collection of material in the Florida State Museum, Gainesville, made by L. J. Mixson in 1938 from a mound in Seminole County is of interest.⁸ A leaf-shaped embossed silver pendant and several other metal items were found. A Busycon gouge is labeled as having come from the site. Glass beads include about 130 seed beads of blue, white, turquoise, yellow and clear. Larger beads of white, green and blue glass were found, as were two pale blue beads with a finely ribbed surface. One shell bead is with the collection.

Another group of materials in the Florida State Museum, from the Seven Oaks Mound in Pinellas County, includes quite a few bead types found at Goodnow; seed beads, bugle beads, gooseberries, chevrons, longitudinally striped polychromes, cut glass beads, a silver coin bead and a tubular roller silver bead to mention them.⁹ There are also several types at Seven Oaks which did not appear at Goodnow. Metal objects from this mound include a copper disc with central perforation, as at Goodnow, and a brass object of unusual design.

The sites mentioned above do not exhaust the list of historic sites in Florida by any means. They have been mentioned to indicate the sort of evidence available for comparative purposes, and as can readily be seen the comparative material is none too good. All that we can say with certainty is that there are other sites which resemble Goodnow in many respects, and that these sites cross-cut the aboriginal cultures as represented by the pottery; Pine Island would seem to be Safety Harbor, although knowledge of the nature of the plain pottery might change this interpretation, while Goodnow is intimately related to the culture of the Glades Area in late times.

We will now turn to comparative data on particular artifacts in an attempt to arrive at some conclusions regarding their time span.

⁸Information from notes of John M. Goggin.

⁹Information from notes of John M. Goggin.

The striking chevron or star bead is our first departure. Two chevron beads were found at the former Zuni pueblo of Hawikuh in New Mexico; this pueblo was first visited by the Spaniards in 1539, and was abandoned after Navajo and Apache depredations in 1670 (Orchard, 1929, pp. 83-84). Cadzow (1936, p. 131) reports a bead of this type from the Washington Borough site in Lancaster County, Pennsylvania; this site has been estimated to date from the latter part of the sixteenth century to about 1640. Quimby (1938, 1939, 1942) mentions no beads of this type from the historic sites in Michigan and Louisiana with which he deals, all of which are post 1673. Other known specimens of chevron beads from Florida are not mentioned in this report since they add nothing to our search for dates. The material presented above would tend to indicate that the chevron bead belonged to the early trade period—our dates on the sites cited are 1539-1670—were it not for the fact that Orchard (1929, p. 83) mentions that chevrons have been found in the possession of living Indians.

The cut crystal beads are a type largely confined to Florida, and numerous examples have been noted by Bushnell (1937, pp. 33-34). He discovered a cache of beads near Leedstown on the Rappahannock River in Virginia containing a number of cut crystal beads identical in form and size to the Florida examples (Bushnell, 1937, pp. 27-35). Bushnell believes that his Virginia specimens are Spanish in origin and date from the latter half of the sixteenth century. Jennings (1941, p. 185) found a variety of cut glass beads, both clear and colored, with only ten surfaces, including the ends, in historic Chickasaw sites in Mississippi.

Gooseberry beads are not common. Quimby (1942) mentions them from Ft. St. Joseph, near Niles, Michigan, established and maintained by the French from soon after 1700 until 1760, as well as from the Angola Farm Site, a historic site in West Feliciana Parish, Louisiana. These beads appear, from the unscaled illustrations, to be approximately the same size as the Goodnow specimens. Orchard (personal communication) says he can find no place for the gooseberry among the Venetian beads, but that he has a specimen almost 1 cm. in diameter found on the site of a glass foundry at Jamestown, Virginia. The date of establishment of the glass foundry was 1607, with a second glass house erected in 1622 for the manufacture of glass beads. It may be that our specimens are from this source, but in view of the clear indication of Spanish contact in other items, this seems unlikely.

None of the other beads even give us a suggestion of dating at the present time.

The small hawk's bells would not seem to be valuable in dating. They were part of the Indian trade material in late times, and as early in the history of European-Indian relations as October 12, 1492, Columbus traded them to the aborigines of the Bahama Islands (Morison, 1942, pp. 229-230).

The silver pendants and other pieces of metal work which are aboriginal products on European derived metal are of no help in and of themselves. Metal, from shipwrecks, was available to the Indians of South Florida from the sixteenth century onward.

That the materials found at the Goodnow Mound represent the type of material traded to the Indians is emphasized by the Calderon letter of 1675 (Wenhold, 1936, p. 13). "The most common articles of trade are knives, scissors, axes, hoes, hatchets, large bronze rattles,¹⁰ glass beads, blankets which they call *congas*, pieces of rough cloth, garments and other trifles." This listing agrees rather well with the type of material found at the Goodnow Mound.

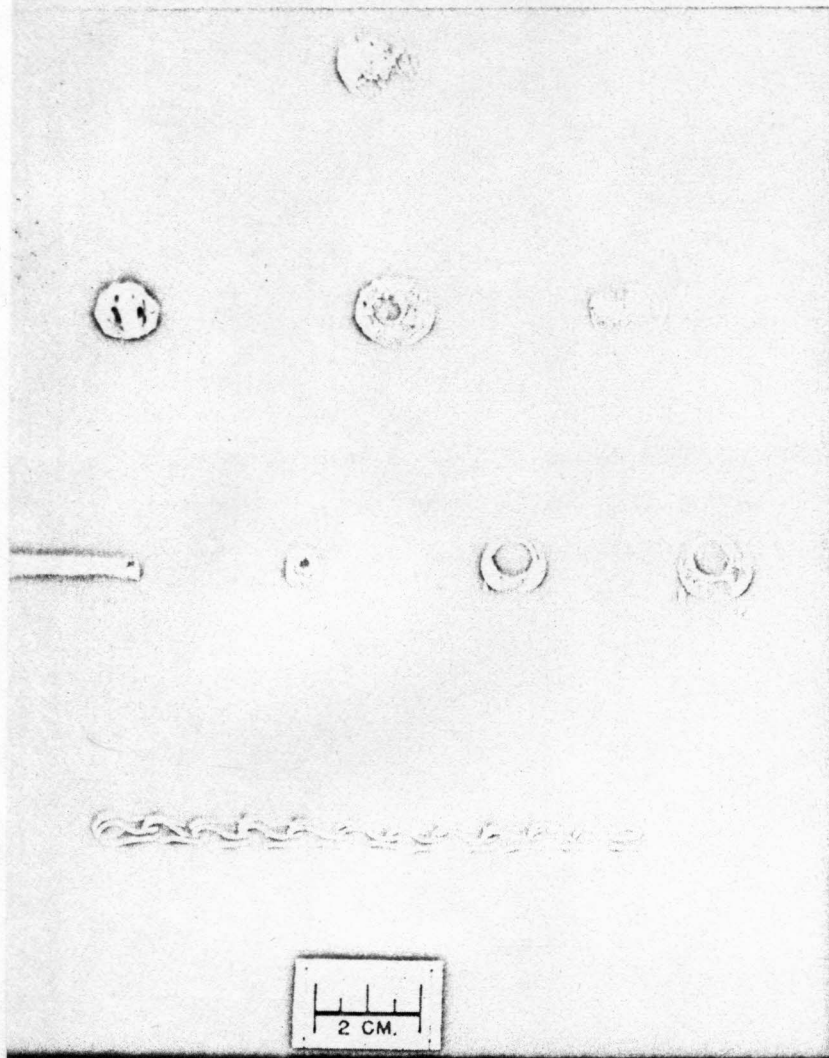
Taken all together the artifacts found at Goodnow suggest trade rather than salvage from shipwreck; this is particularly true of the quantities of small glass beads. The silver may, however, represent salvaged material. It is probable that most of the precious metal cast on Florida shores by shipwreck, particularly that of the various Plate Fleets, was back in Spanish hands through trade in a very short time. It is possible, then, that Spanish trade along the South Florida coast preceded the establishment of the missions and settlements of northern Florida.¹¹

¹⁰Wenhold notes that the Spanish reads *cascabeles grandes de bronce*, and that *cascabeles* are properly small bells of the type used on harness. The reference could be to hawk's bells, in which case the translation as "large bronze rattles" would be misleading. On the other hand, some larger bronze bells, similar in pattern to the small hawk's bells, have been found in Florida.

¹¹With the possible exception of St. Augustine, founded 1565.

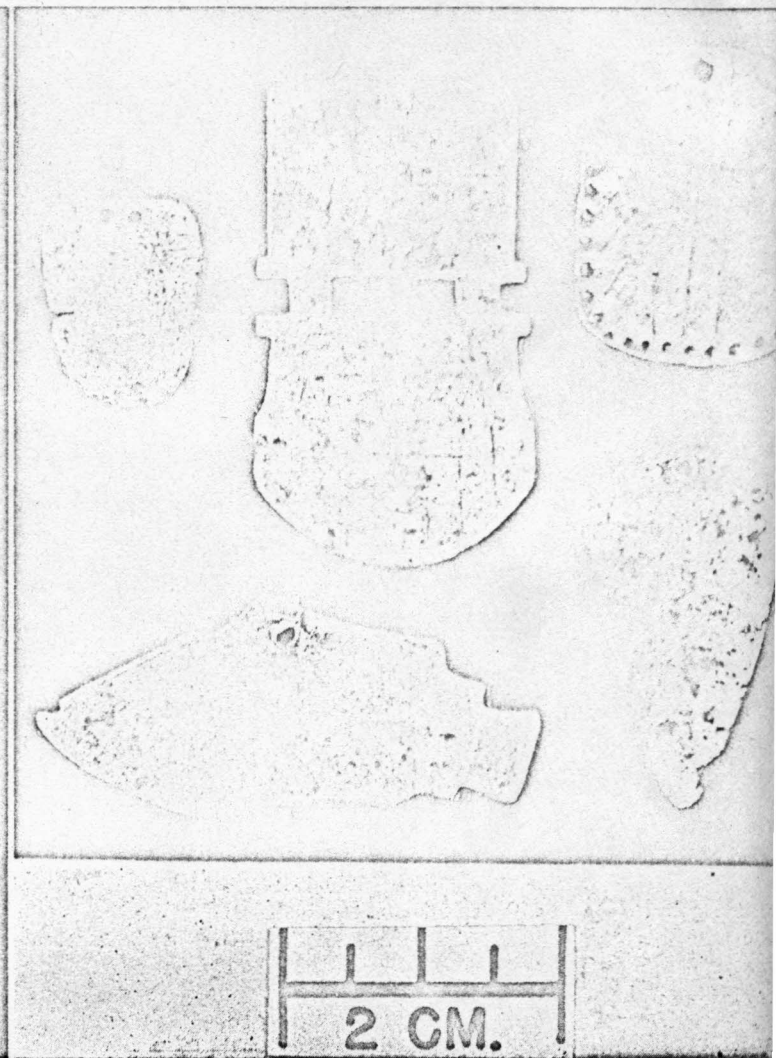
PLATE DESCRIPTION

- PLATE I A. Excavation of Burial 11, Goodnow Mound.
 B. Burial 15, Goodnow Mound.
 C. Scissors, pendant and copper disc *in situ*. Goodnow.
 D. Celtiform axe, knife and iron rod *in situ*. Goodnow.
- PLATE II A. Brass button, beads and silver chain, Goodnow Mound.
 B. Silver pendants from the Goodnow Mound.
- PLATE III A. Enlarged photograph of silver ceremonial tablet. Goodnow.
 B. Drawings of silver ceremonial tablet and fish effigy. Goodnow.
- PLATE IV A. Celtiform iron axes, Goodnow Mound.
 B. Iron scissors and knife blade, Goodnow Mound. Note glass beads on scissors.
- PLATE V A. Glass beads from Goodnow Mound.
 B. Copper disc, silver and brass hawk's bells, Goodnow Mound.
 C. Spanish olive jar, Goodnow Mound.

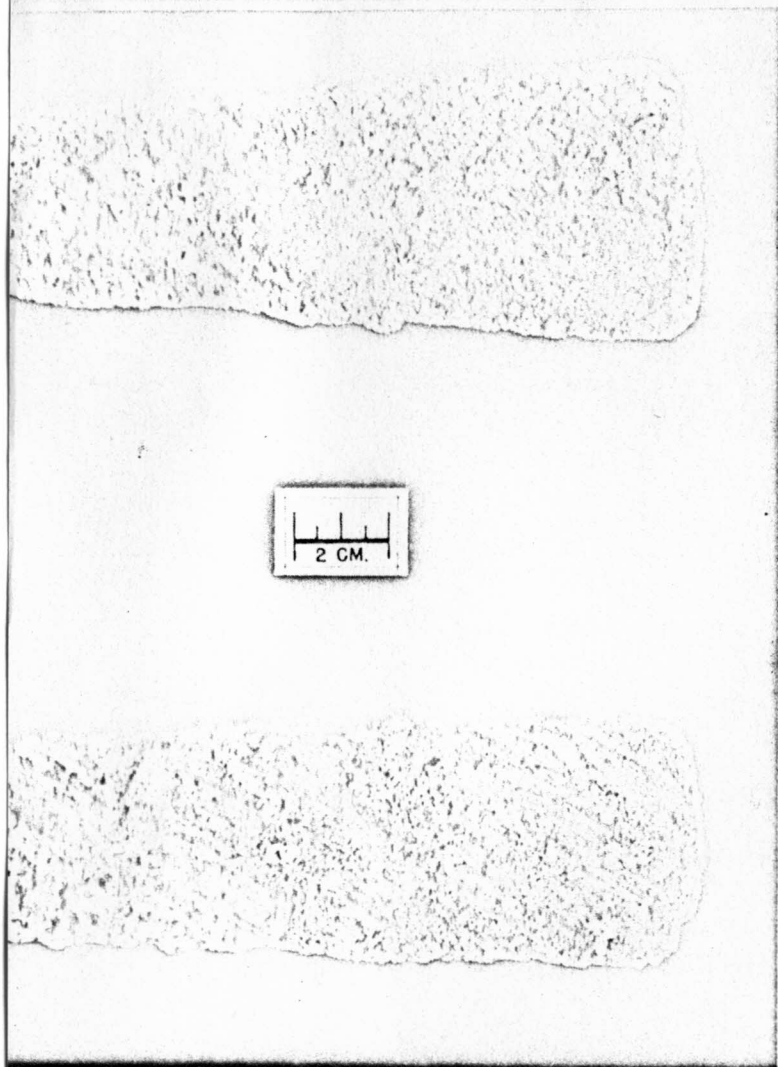


A

PLATE II

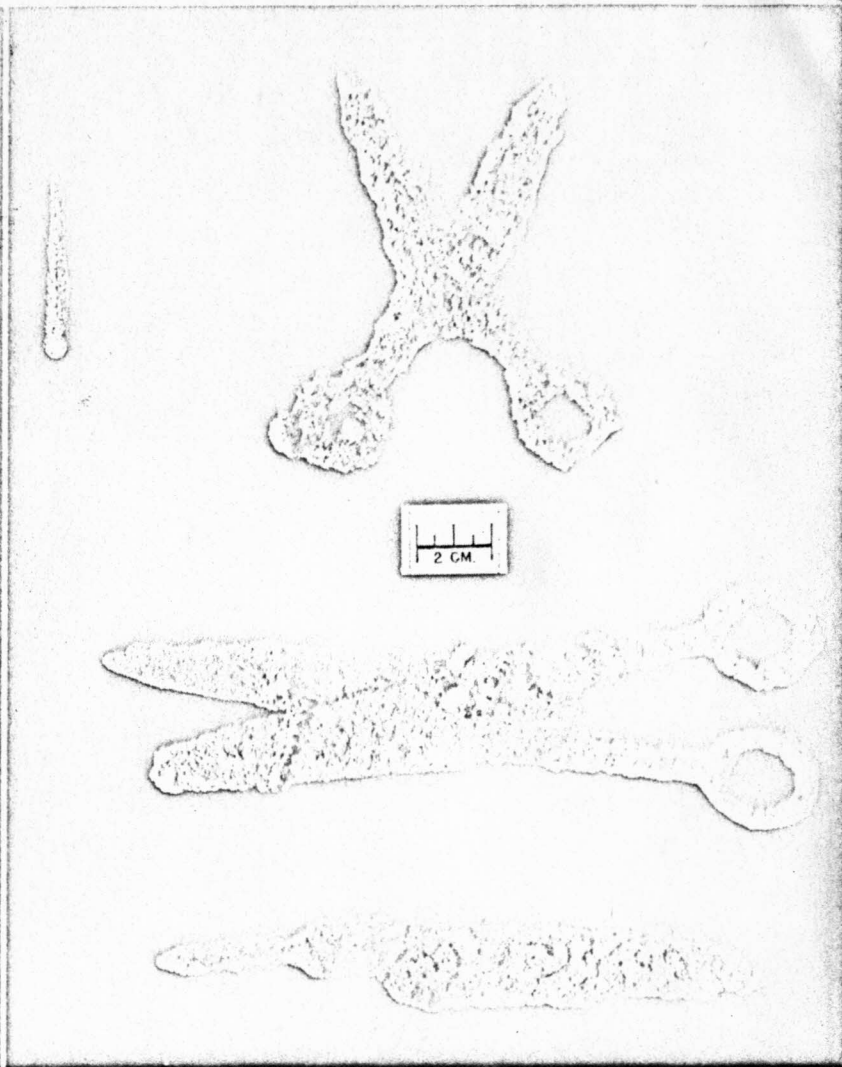


B



A

PLATE IV



B

A

B

PLATE V

C

