CALUSA NEWS

NEWSLETTER OF THE SOUTHWEST FLORIDA PROJECT

INSTITUTE OF ARCHAEOLOGY AND PALEOENVIRONMENTAL STUDIES

UNIVERSITY OF FLORIDA

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Calusa News has been written and assembled by William H. Marquardt and the Southwest Florida Project team. The purpose of **Calusa News** is to promote an appreciation of Southwest Florida's past and the useful lessons that can be learned by preserving and studying ancient remains. We are very grateful to the Gannett Foundation for making this first issue of the newsletter possible.


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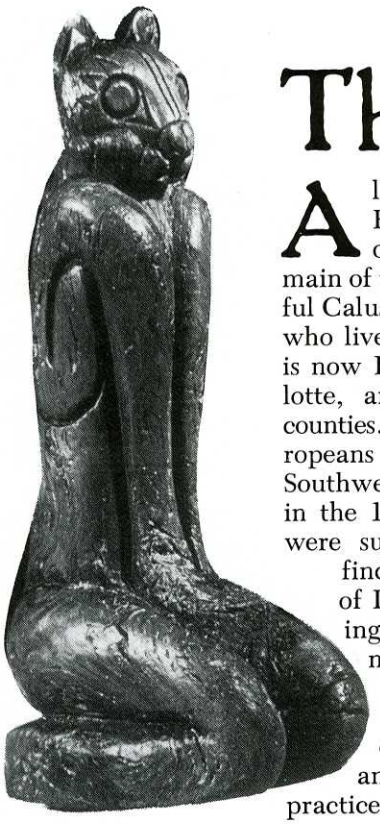
The Kingdom of the Calusa

INSIDE



The Kingdom of the Calusa

All of South Florida was once the domain of the powerful Calusa Indians, who lived in what is now Lee, Charlotte, and Collier counties. When Europeans arrived in Southwest Florida in the 1500s, they were surprised to find hundreds of Indians living in permanent towns. The Indians built earthworks and temples, practiced a complex religion, and traveled by canoe throughout South Florida and the Caribbean Sea.

Their head chief, or "king," was rich and powerful, and demanded payments of taxes, or tribute, from Indian groups as far away as Cape Canaveral, Lake Okeechobee, Miami, and the Florida Keys. The works of Calusa artisans, who painted, carved, and engraved, rank with the very best Indian artwork in North America.

The Calusa well understood the complex coastal environment and made ingenious use of South Florida's natural resources. The most advanced and powerful society in South Florida, they played an important role in both the prehistory and the subsequent European settlement of Florida. By the early 1700s, however, the once dominant Calusa had all but disappeared, the victims of European diseases, slavery, and

Continued on Page 2

The Calusa well understood the complex coastal environment and made ingenious use of South Florida's natural resources.

INSIDE

Josslyn Island begins to yield its secrets

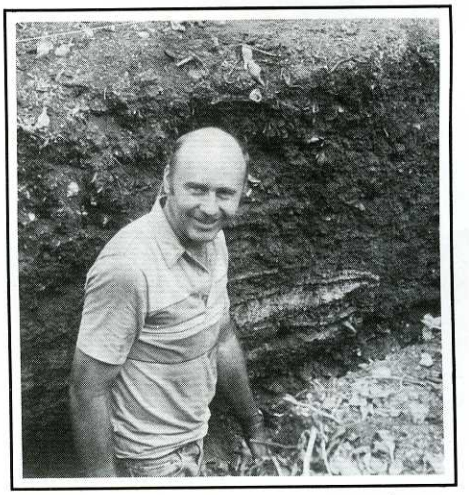
About 2½ miles from Pineland lies Josslyn Island. It is virtually pristine — almost untouched since prehistoric Indians lived there between 800 and 2200 years ago. And it is vast — about seven acres of platforms and mounds that rise almost 20 feet in several places, a large, rectangular plaza of unknown function, and remnants of canals that must have provided access to the village by canoe.

The Josslyn Island mound dominates the southern end of Josslyn Island.

Some of the high mounds are built almost entirely of whelk and conch shells, but much of the bulk of the island is what archaeologists call a "midden," in this case being dirt, shells, bones, ashes, and charred wood from cooking fires, scraps of broken pottery — in other words, hundreds of years of accumulated Indian garbage. Other things being equal, the older material will be deep, the more recent material just under the surface. When carefully excavated, sifted, and identified, such middens tell us a great deal about the daily lives of the Indians — what they ate, how they cooked, what tools and containers they used, and so on. Likewise, from such mundane materials as bones, shells, and charred wood and seeds, we can get a glimpse of past environments because certain plants and animals favor specific kinds of environmental conditions. Again, by digging and studying the material carefully, the archaeologist can move back in time by peeling back layer after layer of the midden.

Josslyn Island was mapped in 1983 by Bill Marquardt, Alan May, and volunteers from the Southwest Florida Archaeological Society of Naples. Bill returned in 1985 with a student crew to do some small excavations that would help find out the age of the site, see whether or not bones, shells, and charcoal were well preserved, and discover how the site was built up. We discovered that the midden is over 14 feet deep, two feet of which is today below the water level. The shells, bones, pottery, and other materials were deposited there between 200 B.C. and A.D. 1200, or about 800 to 2200 years ago. Geological cores taken in June, 1986, show that the oldest part of the 48 acre island is the 7 acre Indian site.

Middens tell us a great deal about the daily life of the Indians.



Steve Hale stands in a test excavation at Josslyn Island, March, 1985. Charcoal from the fire pit visible behind him dates to A.D. 830, or about 1150 years ago.

The work at Josslyn represents a very small sample of a vast and complicated site that was occupied for at least 1400 years. We hope to be able to return to Josslyn Island in the future to try to find out more about prehistoric Indian houses, temples, ceremonies, technology, and, eventually, about trade and political relationships between the Josslyn Island villagers and other Indian groups. Right now we have only opened a very small window on a valuable storehouse of information about Southwest Florida's past. What we can see so far is exciting indeed!

Kingdom of the Calusa Continued from Page 1

warfare. Today, we can observe only remnants of their remarkable society: heaps of shell and refuse, and mounds built for ceremonial purposes and for burying the dead.

Almost everyone is curious about the past, and rediscovering any information about the lost culture of the Calusa and their neighbors is certainly worthwhile. But ecological secrets are also to be found in the heaps of shells and bones, which makes the preservation and study of the ancient Indian mounds doubly important. By understanding how the Southwest Florida environment has changed — the effects of sea level, the influence of storms, the availability of fish and shellfish — we can be better prepared to cope with environmental changes in the future.

The purpose of this newsletter is to share the excitement and value of archaeology with everyone. We welcome your interest and hope you enjoy reading about some of the work that has been going on for the past two years.

* Front Page Photo

Seated feline figurine, about six inches high, found at the Key Marco site, Collier County. Photo: Smithsonian Institution.

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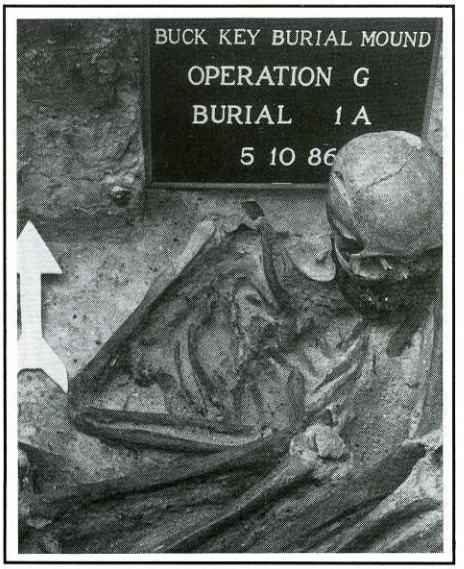
Beautiful, bountiful Buck Key

Today, hundreds of people live on and visit Captiva Island, but nearby Buck Key is home only to lush subtropical vegetation and small wildlife. At the turn of the century, Buck Key was occupied by early settlers, and there was even a school on the island from 1898 to 1903. Citrus groves and vegetable farms thrived until wiped out by the hurricanes of 1921 and 1926.

About 600 to 900 years ago Buck Key was the home of Indians who made use of the fish, shellfish, and turtles readily available in the shallow waters and deep channels near the island. Indians also buried their dead in a sand mound near the center of Buck Key.



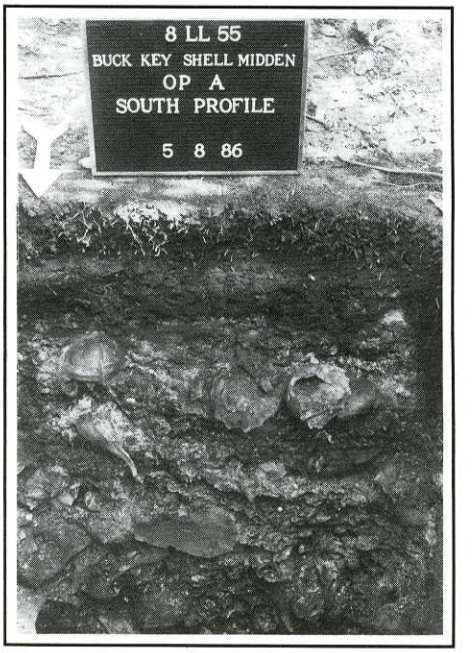
The central individual in the Buck Key burial excavated in May, 1986, was buried in a "flexed" position.

In March and May of 1986 crews of students and local volunteers dug small test excavations at the Buck Key midden, discovering undisturbed deposits dating about A.D. 1040 to 1350. One pit revealed evidence of a very hot cooking fire, which had left behind charred wood, ashes, and burned shells. In another pit were found the remains of posts, possibly of a house or cooking rack.

Buck Key offered many advantages to the Indians: fish, shellfish, animals, and plants.

Several test pits were dug into the sand burial mound, as well. Although much of the mound has been disturbed over the years, one intact burial with parts of five individuals was found. The central person, an adult female, was buried in a "flexed," or fetal-like position. The skulls and certain bones of four other individuals surrounded her. No other artifacts were found in the mound, and we do not know whether the mound was in use at the same time as the Buck Key village site.

It is clear that Buck Key offered many advantages to the Indians: fish, shellfish, animals, and plants were easily taken from the island, the Sound, and the nearby Gulf. Pottery found at Buck Key is of a type sometimes found in south central Florida, but it is possible that local coastal Indians also made this "Glades" pottery. More work must be done before we will know when Buck Key was first occupied and why it was abandoned. Few visitors who canoe from Captiva to enjoy Buck Key's natural beauty and tranquility are aware that Indians lived there nearly 1,000 years ago.

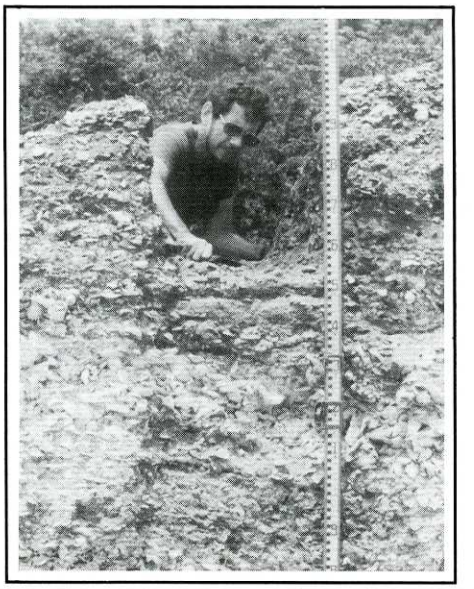


When carefully excavated, a test pit such as this one at the Buck Key shell midden can reveal a sequence of deposition through time.

Oysters and mussels galore

Cash Mound, located on a peninsula jutting eastward into Turtle Bay, was a thriving Indian village nearly 2,000 years ago. In 1985, with the help of Bob Edic (Boca Grande) and Don Cyzewski (Bokeelia), Bill Marquardt carefully removed samples from a remnant of the site left standing when much of the mound was removed for road fill in the earlier part of the twentieth century. Dating from about A.D. 200 to A.D. 700, the samples show that oysters, mussels, and a wide variety of fish were the main staples, but deer, raccoon, turtles, and birds were also eaten. Tools were skillfully made from animal bones and a plain but sturdy pottery was manufactured in quantity.

We feel fortunate that we were able to collect the information from Cash Mound when we did. A few months after our visit, a hurricane destroyed the remnant of the shell mound that had been left standing on the beach for so many years.



University of Florida archaeologist Bill Marquardt carefully removes a column sample at Cash Mound Beach, June, 1985.

Useppa's amazing heritage

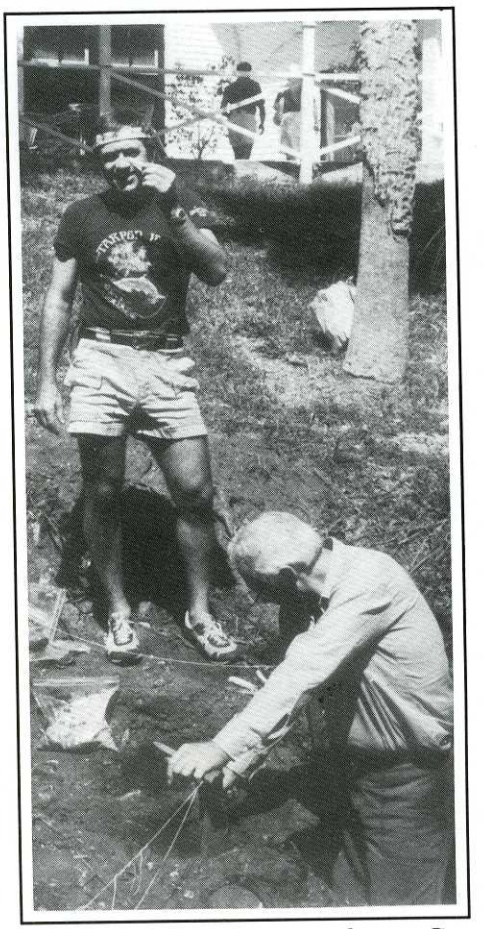
Local residents will sometimes ask the newcomer, "What's the highest land in Lee County?" It's a trick question, really. The pinnacle of Lee County is not in Fort Myers, or in the pine woods somewhere off State Road 80 going toward LaBelle, but on Useppa Island, some 20 miles west of Fort Myers in northwestern Pine Island Sound. What is not so well known is that a 10-acre prehistoric Indian site occupied for over 5,000 years accounts for a large measure of Useppa's impressive elevation.

Every place has a history, but some places just seem to have more history than others. Useppa oozes history. By 3700 B.C., some 500 years before the first pharoah would rule over Egypt, there were Indians living on Useppa Island. About 2160 B.C. a young person died and was buried on the eastern side of Useppa, facing the rising sun. Useppa was a bigger island then, and so were Pine Island, Josslyn, Sanibel, and the others, because ocean levels were lower. The familiar estuary ringed with mangrove trees, which would later provide the foundation for the Calusa kingdom, was just starting to form. Pottery was at the time unknown in Florida. Small groups of people moved from place to place making a living by hunting and gathering.

Test excavations on Useppa by Florida State Museum personnel in 1979-1980, coupled with a recent salvage excavation at the Collier Inn in the summer of 1985, show that Useppa was lived on more or less continuously up to the historic period. In the 1800s Spanish fishermen and their families made Useppa their home. Streetcar tycoon John Roach built a 22-room hotel there in 1902. A decade later Barron Collier purchased the island and constructed a home for himself and his family (today's Collier Inn), as well as several guest cottages. A mecca for the rich and famous throughout the 1920s and 30s, it fell into ruin after Collier's death in 1939. The island was purchased in 1976 by Garfield Beckstead, who financed and masterminded a complete restoration of the remaining buildings and landscape. About 100 homesites have been sold on the island, completing Beckstead's development plans. Rigid restrictions prevent unauthorized digging and disturbance of the massive Indian sites and historical sites in the island.

Useppa Island still has many stories to tell about its 5,700-year history, and we hope to have the opportunity to explore the island further in partnership with the Useppa Island Historical Society.

Useppa was lived on more or less continuously up to the historic period.



Useppa Island owner/developer Gar Beckstead (left) holds a stone projectile point just found by Ray Pottorf (right) at the Collier Inn excavations, September, 1985.

Janice Kemp (left) and Don Cyzewski (center) of Bokeelia and Ray Pottorf (right) carefully uncover Indian pottery at the Collier Inn excavations on Useppa Island, September, 1985.

Archaeology requires team effort

To say that archaeologists dig is like saying that firefighters ride on fire trucks. True, they do, but it's only a small part of the story. Like firefighters, archaeologists are problem solvers. Getting to the problem is important, but it's only the first step.

So little is known about Southwest Florida's 12,000-year past that archaeologists have a lot of problems to solve. How did the Calusa manage to support such a powerful and advanced society without the benefit of agriculture? When did this complex and sophisticated society develop? Where did the Calusa come from? Were they living in the 1500s where their ancestors had lived for centuries, or were they newcomers to the coast? How did the Calusa and their ancestors adjust to changes in climate, and what can we learn from them that will benefit our own society?

Many different kinds of information have to be brought together to answer such questions, so archaeology requires a lot of teamwork. First, there must be teamwork among archaeologists, private citizens, and public officials if archaeological sites are to be preserved long enough be be studied. Second, archaeologists rely on volunteers, who help with field and laboratory work, so that funds can be stretched as far as possible. Third, archaeologists need the help of other scholars, such as biologists, chemists, ecologists, geologists, soil scientists, and historians. Many more hours are spent in the laboratory, at the computer, and in the library than are spent digging holes, but the end product of the teamwork is well worth the effort.

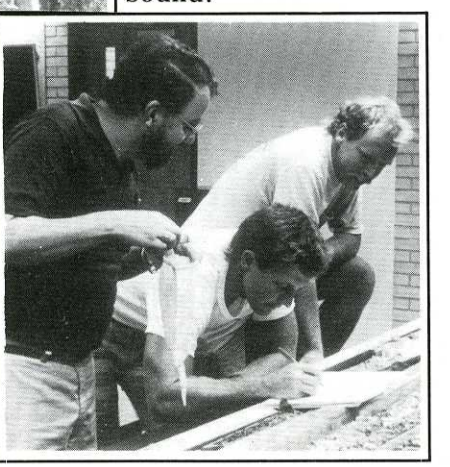
Mike Hansinger (left) and Ray Pottorf work carefully to expose pottery sherds while leaving them is place, while Gar Beckstead (right) looks on.

Charlotte Harbor: beneath it all

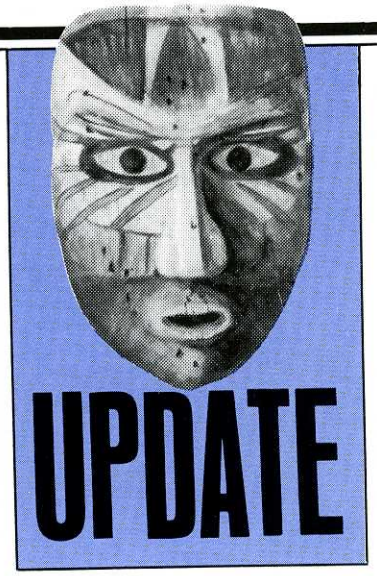
The natural history of Charlotte Harbor is written in its sediments. The rocks and shell, plants and pollen grains, sands and clays that have accumulated over hundreds of years form a record of changes in temperature, rainfall, storm frequency, and sea level. Such changes over the past 10,000 years or so — the Holocene — are of interest to archaeologists because of their concern with how humans have adjusted to changes in their surroundings. Archaeologists therefore depend on geologists who study such sediments as those under the waters and islands of Charlotte Harbor-Pine Island Sound.

The findings of archaeologists are of interest to Holocene geologists, too. For example, the position of ancient Indian villages in relation to current sea levels can help geologists track the rise and fall of the ocean. University of South Florida geologist Sam Upchurch and two advanced graduate students are studying core samples taken from near several archaeological sites in the Charlotte Harbor area in order to help us understand what the environment was like at the time the Indians were living there and what effects the Indians had on their environment. The application of earth science techniques to archaeology is called "geoarchaeology."

USF graduate students spent the last week of June, 1986, taking core samples near archaeological sites in Charlotte Harbor-Pine Island Sound.



Geologist Sam Upchurch (left) supervises research on the core samples by graduate students Pliny Jewell (center) and Eric DeHaven (right).



Here is a brief summary of what has been done over the past two years.

•**January 25, 1985:** Bill Marquardt attended a public hearing in Port Charlotte on Governor Graham's "State Plan;" he also conferred with Senator Frank Mann. Bill also visited the Museum of the Charlotte Harbor Indians at the Boca Grande Community House as the guest of Ron Fraser and Bob Edic.

•**January 27, 1985:** Bill Marquardt and Bob Edic took aerial photographs of some of the sites in the Cape Haze area, including Big Mound Key and Boggess Ridge.

•**February 2, 1985:** Bill Marquardt and Bob Edic visited several sites in the Cape Haze area, including Turtle Bay #2, Cash Mound, and John Quiet Mound.

•**February 19-21:** Joan Price (University of Florida Foundation) and Bill Marquardt sought advice about possible fund raising for the project in Boca Grande (with Robert King, Ron Fraser, Bob Edic), Pineland (Don and Pat Randell, Elaine Jordan), Sanibel (Charles and Joan Wilson, Stan and Nancy Johnson), Fort Myers (Terri Hopkins, Joan Kohlbry, Patti Bartlett, Lloyd Hendry), and Naples (Charlie Strader, Keith Waterhouse, John Beriault, Mark Benedict, Ed Johanson, Ron Jamro).

•**March 2-3, 1985:** Bill Marquardt, Michael Moseley, and Pat Essenpreis (all archaeologists at the University of Florida), along with TV and newspaper reporters from Sarasota, Boca Grande, Fort Myers, and Ron Fraser and Bob Edic from Boca Grande toured several sites in the Charlotte Harbor area.

•**March 9-11:** Bill journeyed to Boca Grande to give a talk at the Gasparilla Inn Beach Club about the Calusa Indians and their sites in Charlotte Harbor.

•**March 15, 1985:** Bill gave a talk to about 80 people in Pineland on the occasion of the Pine Island Centennial celebration.

•**March 16-23, 1985:** A crew composed of Bill Marquardt, Steve Hale, Claudine Payne, Donna Ruhl, and Karen Jo Walker excavated three test pits at Josslyn Island, including one that went down to three meters (about 10 feet).

•**May 11, 1985:** Bill and Karen Jo went to Ussepa Island to meet with Garfield Beckstead and get a tour of the island. Bill and Gar discussed plans for an archaeological and historical survey of Ussepa, and ways to fund the work in partnership with the Ussepa Historical Society.

•**May 12-15, 1985:** Bill and Karen Jo went to Josslyn to finish up the deep test pit. They excavated to 3.8 meters (12½ feet) before encountering the water level, some 60 centimeters (two feet) above the bottom of the midden. They also backfilled all units that had been excavated in March.

•**May 16, 1985:** Bill and Karen Jo went to Bokeelia to visit Bobby Knight and his father, Robert Knight, who showed them a number of aerial photographs, a prehistoric "great circle" site in Bokeelia, and the Howard Mound.

•**June 26, 1985:** Flotation of Josslyn Island levels was begun; analysis commenced on July 8.

•**June 28, 1985:** Bill, with the help of Bob Edic (Boca Grande) and Don Cyzewski (Bokeelia), excavated a column sample from the Cash Mound beach. Twenty-two 10 centimeter (four inch) levels were removed before water intruded.

•**June 29, 1985:** Bill and Bob visited the Boggess Ridge site, where looters had recently used a high-pressure hose to damage part of the mound.

•**July, 1985:** Work continued on Josslyn Island column sample levels 12, 22, and 32. Bill wrote a research proposal to the National Science Foundation.

•**August 21-26:** Bill went to Useppa Island to examine human bones and pottery disturbed by the removal of a tree. He found an early (preceramic) midden and a burial.

•**September 12, 1985:** The project received a major boost by receiving a grant of $20,000 from the Ruth and Vernon Taylor Foundation.

•**September 16-20, 1985:** Bill, assisted by Karen Jo Walker (9/16-9/20) and volunteer Julie Bahret (9/17-9/18), tested a site on Casey Key across from the Palmer site in Sarasota county.

•**September 20, 1985:** Bill addressed the annual meeting of the directors and volunteers of the Fort Myers Historical Museum.

•**September 21-28, 1985:** Bill conducted a salvage excavation at the Collier Inn site, Useppa Island, as guest of Gar Beckstead. He was assisted by many people, especially Ray Pottorf, Mike Hansinger, Gar Beckstead, Eileen Arsenault, Janice Kemp, Jim and Marilyn Schucker, and Stephen Brown.

•**October 13, 1985:** Bill presented a slide lecture at the Florida State Museum as the monthly "Museum Scientist" speaker. The topic was, "The Calusa and Their Ancestors: Archaeology and Environments in Southwest Florida."

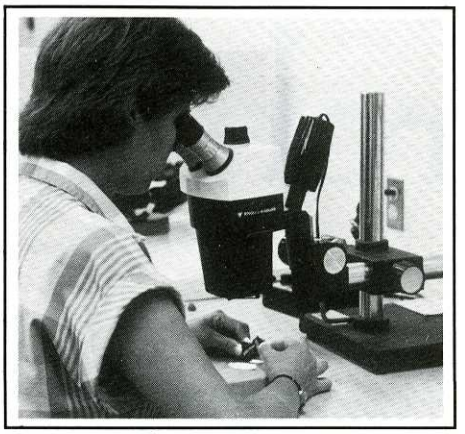
•**October 22-23, 1985:** Bill journeyed to Fort Myers to interview Leon Wilder and to receive his collection of artifacts from Granada on behalf of the Florida State Museum.

•**November 3, 1985:** Bill hosted a visit to Useppa Island by the Southwest Florida Archaeological Society of Naples, giving a slide show on the summer excavations. Gar Beckstead provided a tour of the island for the group. Bill also conferred with Mike Hansinger, and visited with Don and Pat Randell.

•**November 6-9, 1985:** The following papers were presented in Birmingham at the Southeastern Archaeological Conference: "Environmental and Cultural Change in Southwest Florida: Some Preliminary Results from Josslyn Island," by Bill Marquardt, Steve Hale, Margaret Scarry, and Karen Jo Walker, and "A Predictive Model of Settlement and Subsistence Patterns for the Charlotte Harbor/Pine Island Sound Estuaries, Southwest Florida, Based on Sea Level Fluctuation," by Steve Hale.

•**November 20, 1985:** Bill gave a talk at Seminole Community College in Sanford, entitled "Making A Living in Ancient Florida: The Calusa and their Ancestors."

•**November 21, 1985:** Bill and Charlie Wilson (Sanibel) went with Bird Westall (Sanibel) to look at the sites on Buck Key. With Chris Olsen (Ding



Ceramics technology expert Ann Cordell of the Florida State Museum observes the constituents of Indian pottery found at Buck Key.

Darling National Wildlife Refuge) they toured sites on Refuge property. Bill gave a talk at the Sanibel Civic Center to over 200 people.

•**November 22, 1985:** Bill visited the Sanibel Island Historical Museum as guest of Elinore Dormer.

•**December, 1985:** Ann Cordell began ceramic technological analysis of Useppa Island pottery excavated in September. Mike Hansinger finished the detailed analysis of the Useppa burials. Work continued on the archaeobotanical analysis and zooarchaeological analysis. Word came from the National Science Foundation that our grant proposal had been funded, but at only 40 percent of the amount that had been requested. A part-time assistant for Karen Jo in Zooarchaeology was hired, and work was begun on the Cash Mound samples. Bill went to the Smithsonian Institution in Washington, December 9-10 to examine collections from Lee, Charlotte, and Collier counties.

•**January 14, 1986:** Bill gave a talk to the Fort Myers Downtown Rotary Club.

•**January 15, 1986:** Bill and Mike Hansinger went with Jerry Myers (St. James City) to see the sites on Galt Island slated for development by Mr. Warsing. With the beginning of the semester, Guy Prentice began analysis of level 4 of Josslyn Island, Test Pit A, in the context of Elizabeth Wing's course in Zooarchaeology, and Nina Borremans began analyzing level 2 of Test C from the Collier Inn site on Ussepa.

•**January 24-25, 1986:** Bill went with Ray Hintz and his student assistant Mike McLaughlin, to Boca Grande, for a tour of the principal sites to be mapped by photogrammetry.

•**February 7-8. 1986:** The first of twelve scheduled monthly fish and shellfish collection trips was made. The crew was Marquardt, Hale, Quitmyer, and Walker, ably assisted by Bobby Knight (Bokeelia). We constructed clam pens near Bokeelia and Catfish Creek, collected fish for otolith studies and numbered, notched, and measured clams.

•**February 16, 1986:** Bill gave a talk at the Lee County Nature Center in Fort Myers.

•**February 17, 1986:** Bill went with Mike Hansinger and Ben Smoot (Fort Myers) to examine a stone structure that had been found on Smoot's property. In the afternoon Bill visited with Charlie Wilson, Bird Westall, Carol Allin, and William Webb at the Sanibel-Captiva Conservation Foundation, making plans for Spring Break work on Buck Key. Bill also consulted with Elinore Dormer about a large mammoth bone that had been found on Sanibel Island.

•**February 18, 1986:** Bill gave a talk to the "Questors," a historical preservation group, at the Fort Myers Historical Museum and met with the Museum's director, Patti Bartlett.

•**February 19, 1986:** Bill gave a public address at the Cohen Symphony Hall in Sarasota for the Comprehensive Environmental Education Program, funded by the Elizabeth Ordway Dunn Foundation. His topic was, "Rediscovering the Environment and Culture of Florida's West Coast."

•**March 7-8, 1986:** The second monthly fish and shellfish collection trip and the first quarterly plant collection trip as well as a clay collection trip were accomplished. Crews: Fish/shellfish: Irv Quitmyer, Janice Quitmyer, Guy Prentice, and Cheryl Claassen (visiting archaeologist from North Carolina); Plants: Margie Scarry, Donna Ruhl, Lee Newsom; Clays: Ann Cordell and Bill Marquardt.

•**March 20-22, 1986:** Bill went to Captiva Island to make advance preparations for the Buck Key work. With the help of Matty Matthiessen, Charlie Wilson, and Bird Westall (Sanibel), some brush was cleared on Buck Key so that equipment and people could easily move around on the island. Pits were staked out in anticipation of the crew's arrival on Saturday. On March 21 Charlie gave Bill a tour of the Wightman site, and Bill organized equipment and bought supplies. On March 22 Bill drove to Fort Myers to be on the morning WMYR call-in radio show, confer with Mike Hansinger, and borrow a john boat from Robin and Jan Brown.

•**March 23-29, 1986:** The shell midden and burial mound on Buck Key were test excavated by a crew of students from the University of Florida (Jim Cusick, Susan deFrance, Cherry Fitzgerald, Laura Kozuch, Claudine Payne, and Karen Jo Walker), ably assisted by local volunteers from Fort Myers (Phil and Sal Bracco, Linda Robinson, Mary Strong) and Sanibel (Ann Pappas, Emily Schofield, Charlene Timothy, and Charlie Wilson).

Visitors to the site included Kathy Boone (Sanibel-Captiva Conservation Foundation), who kindly provided a tour of the vegetation on the island, Scott Martel of the *Sanibel-Captiva Islander* newspaper, and Dorothy Robb (Captiva). Lodging was provided by Marie Kalman (Captiva) and by George and Louise Tuttle (Captiva).

The crew was treated to delicious dinners on March 26 by Tom and Bobbi Sharp and on March 27 by Marie Kalman. By the end of the week we had completed all test pits except A and B at the shell midden and had discovered undisturbed human burials in the mound. Using some plywood kindly donated by George Tuttle, we covered the pits until we could return at the end of the semester.

On March 23-26 the photogrammetry crew (Raymond Hintz, Mike McLaughlin from UF, assisted by

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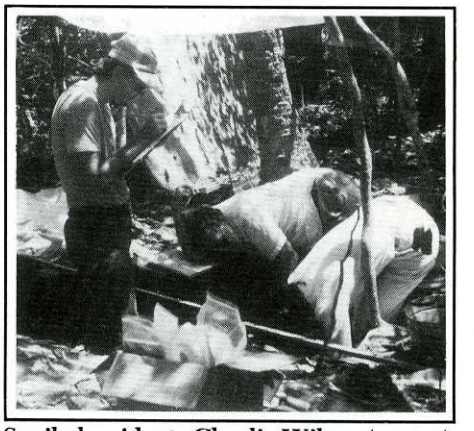

Sanibel residents Charlie Wilson (center) and Ann Pappas (right) find that there's really no comfortable position in which to excavate a burial, while Bird Westall (left) takes notes at Buck Key.

In search of

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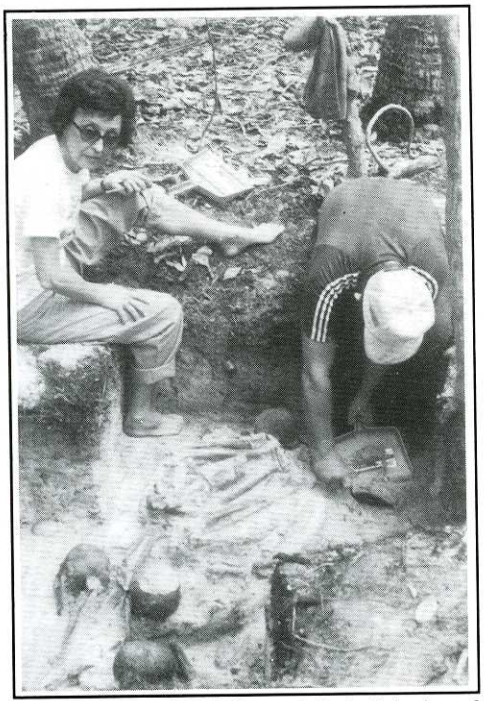
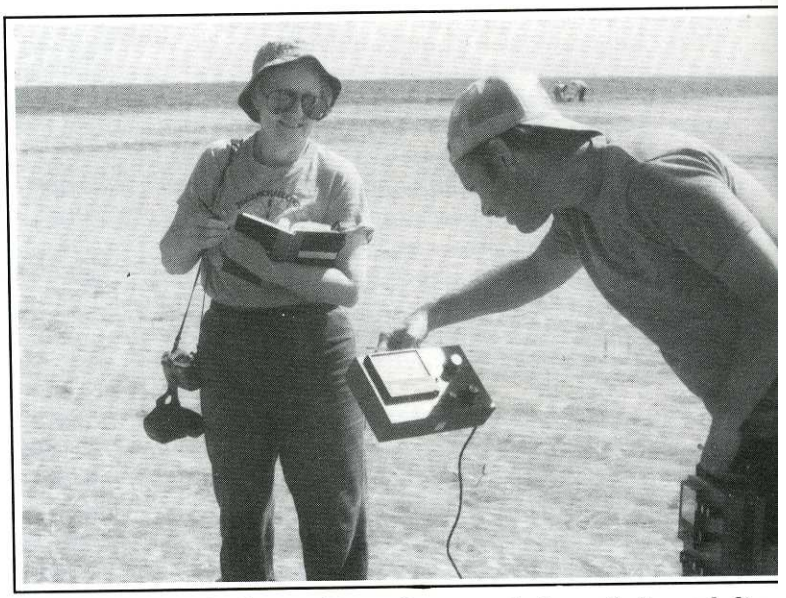
Volunteers Ray Pottorf (left), Gar Beckstead (center), and Eileen Arsenault carefully remove the top layer of a test pit at the Collier Inn Site, Useppa Island, September, 1985.



Corinne Schultz (left) and Bob Schultz of Fort Myers, at work at the Buck Key burial mound, May, 1986.



Liz Wing records data as Doug Jones reads the salinity and disso meters near Bookeelia, April, 1986.

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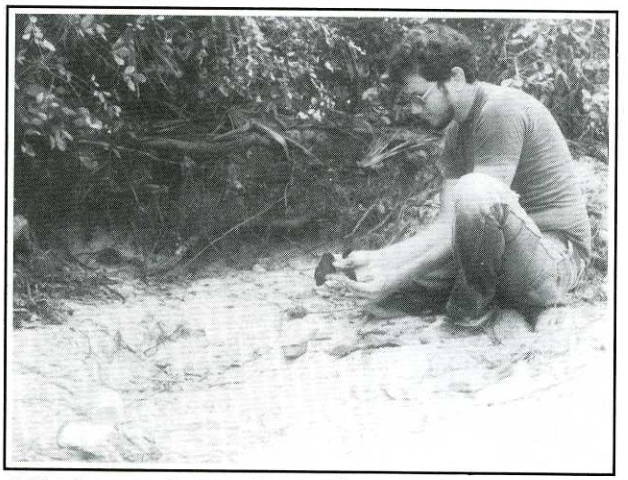
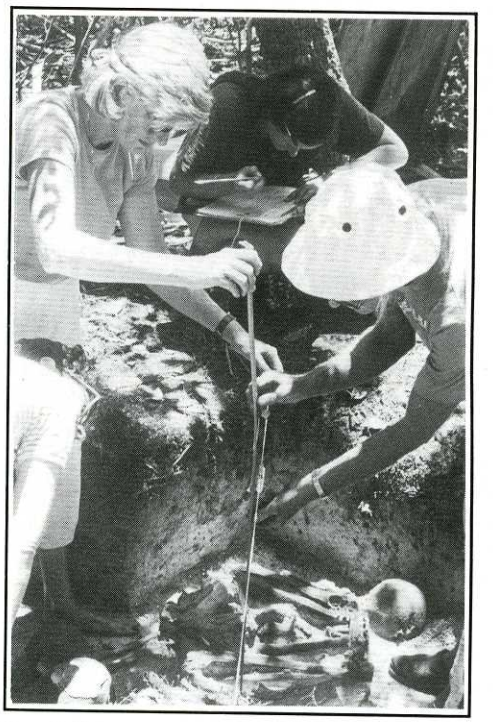
Calusa

Gar Beckstead (center, pointing) conducts a tour of the archaeological sites on Useppa Island for the Southwest Florida Archaeological Society.



Bill Marquardt examines Indian pottery discarded by looters who used a high powered water hose to plunder the Boggess Ridge site. The beer cans in the foreground were left by the looters.



Careful measurements of the Buck Key burials are taken by Mary Strong (upper left), Debbie Boots (right), and Nansy Matthews-Peck. In the backgroud Karen Jo Walker records the measurements on a sketch.

Graduate students Eric DeHaven (left) and Pliny Jewell (right, with sledge hammer) drive aluminum tubing into the sediments as George Luer looks on, June, 1986.

xygen

Continued from Page 7

Wayne Joiner and Bob Edic of Boca Grande and George Luer of Sarasota) took measurements on the sites to be mapped by aerial photography, and placed on the sites aluminum markers that would be visible from the air.

•**April, 1986:** Much of April was spent processing the materials excavated at Buck Key.

On April 12 Bill gave a paper at the annual meeting of the Florida Anthropological Society in Gainesville, entitled "Recent Archaeological Investigations in Southwest Florida."

The meeting provided an opportunity to confer with a number of experts about the pottery that had just been found at Buck Key, including John Beriault, Bill Burger, Bob Carr, John Griffin, and George Luer.

Several members of the Florida Anthropological Society toured the anthropology and zooarchaeology ranges at the Florida State Museum to get a first-hand look at the laboratory activities.

April 17-19 found Bill Marquardt, Liz Wing, Doug Jones, Karen Jo Walker, Irv Quitmyer, Steve Hale, and Ann Cordell in the Charlotte Harbor area for the third monthly fish/shellfish collection trip.

Liz and Karen Jo began the midden experiment, and Bill showed everyone some of the sites in the harbor. Ann and Bill took clay samples on Pine Island, Little Pine Island, and the mainland, stopping by on their way to visit with Don and Pat Randell.

Robin and Jan Brown showed Ann and Bill where clay could be collected in Hickey Creek, and several samples were collected there. The aerial photographs for our maps were taken.

•**May, 1986:** The highlight of May was a return to Buck Key, May 5-14, to finish up the work that had been done in March.

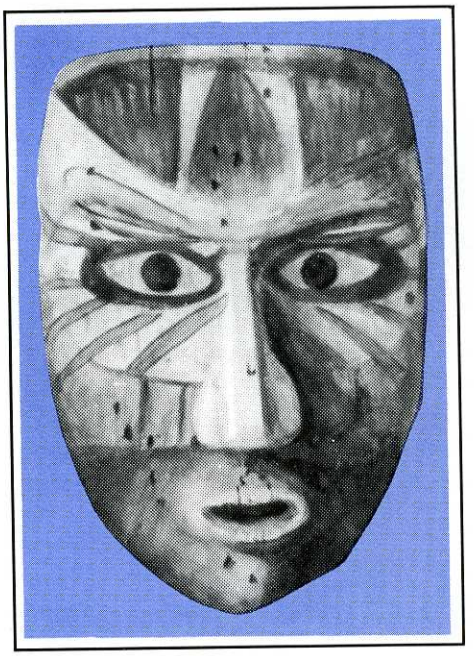
Bill and Karen Jo received invaluable help from Charlie Wilson, Bob and Corinne Schultz, Charlene Timothy, Ann Pappas, Mary Strong, Nansy Matthews-Peck, Reed and Barbara Toomey, Phil and Sal Bracco, Bird and Janie Westall, Debbie Boots, and Bob Edic.

Visitors were Pat Ball and Al Arsenault from Sarasota. Mary Strong cooked a great dinner for the crew on May 7, and Marie Kalman again provided lodging. Zooarchaeological analysis of the Buck Key materials was begun.

Steve Hale and Irv Quitmyer handled the fourth monthly fish and shellfish collection trip on May 17-18, and Bill Marquardt conducted a tour of Ussepa Island archaeological sites for a group of 31 people on behalf of the Lee County Nature Center, May 17.

Production of the photogrammetric maps was begun by Ray and Mike.

•**Summer, 1986:** The project continued operations throughout the summer, with daily zooarchaeological lab work by Karen Jo and Laura, ceramic research by Ann, drafting and cartography by Ray and Mike, grant proposal writing by Bill. Margie Scarry finished the botanical identifications for



Carved and painted wooden mask, found at the Key Marco site in 1896. Photo: Smithsonian Institution.

samples she had been sent, and Lee Newsom worked on wood identifications.

The geoarchaeology crew (Pliny Jewel, Eric DeHaven, assisted by George Luer and Bob Edic) spent a week taking core samples from several sites, and analysis of the cores was begun in August by Pliny and Eric, under the supervision of Sam Upchurch.

The fifth monthly fish/shellfish trip was completed June 13 by Irv and Steve, the sixth one on July 11. On the latter trip they were joined by Kurt Auffenberg, Eden LaGraves, and J.B. Miller (all of the Florida State Museum), who helped with the collecting and also gathered intertidal and lower estuarine mollusks (41 specimens were identified).

The August fish/shellfish trip was accomplished by Bill Marquardt, Irv Quitmyer, Janice Quitmyer, Karen Jo Walker, and Randal Walker, Karen's brother, who is a shellfish biologist at the Skidaway Institute of Oceanography in Savannah, Georgia.

On the way home the group visited the Mote Marine Lab in Sarasota to confer with their personnel and compare findings. Randy Walker was kind enough to give a talk for project members and others about his work with clams and other bivalves on the coast of Georgia.

With the help of several team members, Bill wrote a new proposal to the National Science Foundation for 1987 funding, basically asking for enough money to finish the work originally planned for 1986.

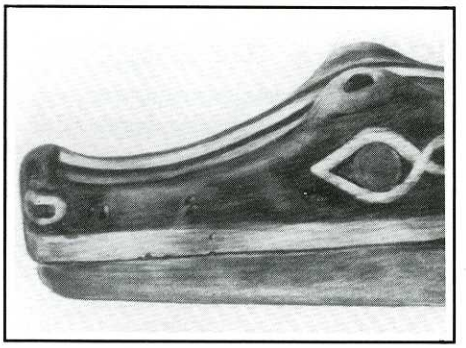
The proposal was mailed to NSF on June 30. Bill, Lee Newsom, and Margie Scarry spent July 7 and 8 collecting plant specimens (the second of four scheduled trips) from Buck Key, assisted by Kathy Boone, Ron Hight, and Chris Olsen, and at Hickey Creek, assisted by Jan Brown. Bill also consulted with Charlie Wilson, Ed Underhill, and Carol Allin in Sanibel.

On July 9-10 Bill went to Osprey to serve as a consultant to Spanish Point at the Oaks, joining George Luer, Marion Almy, Marvin Cook, and Linda Williams there to talk about outdoor archaeology exhibit development.

In August Bill worked on a paper about the late prehistoric and early historic period in Southwest Florida, then traveled to London where he presented the paper at the Fourth International Conference on Hunting and Gathering Societies.

•**September, 1986:** Analysis continued in the laboratory, especially in zooarchaeology, geoarchaeology, and ceramics. The eighth monthly fish/shellfish collecting trip was made September 13 by Steve Hale and Irv Quitmyer.

On September 25 and 26, George Luer came to Gainesville to confer about our planned analysis of a pit feature he had carefully excavated from the Big Mound Key site. We will analyze it in such a way as to be able to compare its contents with other sites we have tested, such as Josslyn Island, Cash Mound, Useppa Island, and Buck



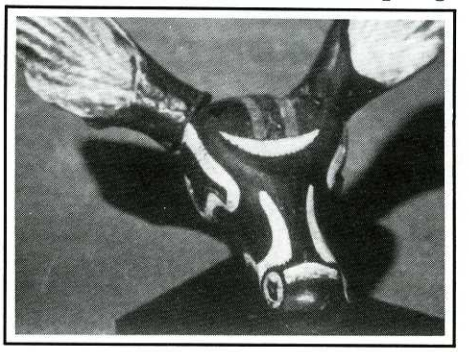
Carved wooden alligator head, found at the Key Marco site, Collier County. Photo: Smithsonian Institution.

Key.

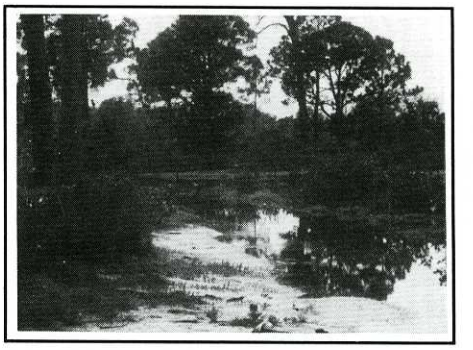
•**October, 1986:** Much of October was given to preparations for the Southeastern Archaeological Conference meetings, the preparation of the first issue of our newsletter, *Calusa News*, and continuing laboratory analysis. The ninth fish/shellfish trip was completed by Irv Quitmyer and Steve Hale on October 18.

•**November, December, 1986:** This newsletter went into production on November 3. The following papers were given at the Southeastern Archaeological Conference meetings in Nashville, November 5-8: Bill Marquardt, "Environment and Production in Prehistoric South Florida;" Karen Jo Walker, "Utilization of Animal Food Resources in the Calusa Area;" Elizabeth Wing and Irv Quitmyer, "A Modern Midden Experiment."

Bill gave two walking tours of archaeological sites at Spanish Point at the Oaks, Osprey, on November 21 and 22, and spoke at the Sanibel Community Center on November 20. On November 29 he addressed the Useppa Island Historical Society on Useppa Island, and on December 4 he presented a paper in Philadelphia at the annual meeting of the American Anthropological Association. The paper concerned the political development of the Calusa domain in southwest Florida. We also continued the zooarchaeological and archaeological analyses, as well as the geoarchaeological analysis of the core samples.



Florida State Museum reproduction of a carved and painted wooden deer head, found at Key Marco, Collier County.



Scene near Boggess Hole, summer, 1986.

Irv began to cross section the clam shells we have been gathering monthly, in preparation for analysis by him and Doug Jones.

A plant collection trip is scheduled for January, and fish/shellfish trips were accomplished November 22 and December 19.

Big Mound Key analysis begins

At the south end of the Cape Haze peninsula lies one of the world's largest archaeological sites: the 37 acre shell mound known as Big Mound Key. Its uneven surface rises to over 18 feet in several places, and from all appearances some of the higher areas were purposely built up and flattened out, probably so that temples or other community structures could be built on top.

Areas were built up and flattened out so that temples could be built.

Looters looking for pirate treasure seriously damaged the mound seven years ago by bulldozing massive trenches through it. They found no gold, but they did open the site to additional serious damage through erosion and vandalism. In 1982 Sarasota archaeologist George Luer made a drawing of some of the exposed layers and carefully removed dirt, shells, bones, and charcoal from an ancient fire pit. George has graciously provided part of this sample to us so that we can compare it to what we know about similar features at Josslyn, Useppa, Buck Key, and Cash Mound. Those interested in Big Mound Key will be interested in reading **Publication No. 12** of the Florida Anthropological Society, published in July, 1986, and available in most libraries.

Ron Fraser of Boca Grande shows Mike Moseley, Pat Essenpreis, and a TV reporter the bulldozed trench at Big Mound Key. The original surface of the shell mound towers over their heads (top center).

Fish: the Calusa staff of life

A Charlotte Harbor oyster is an oyster lover's delight. They are firm, sweet, and salty all at the same time. They are nutritious, but ounce for ounce, the meat of shellfish is not as nutritious as the meat of fish. Those who have visited a shell mound site in Charlotte Harbor-Pine Island Sound know that the Indians ate a lot of shellfish, but zooarchaeologist Karen Jo Walker is finding in most cases that fish provided much of the Indian's nutrition.

Zooarchaeology is the study of animal remains from archaeological sites. By identifying shells and tiny bones of fish, turtles, shellfish, crabs, and other animals, zooarchaeologists can estimate the amounts of meat consumed by the Indians. Karen Jo's study of the bones and shells is not finished yet, but so far it is clear that fish were very important sources of nutrition, with turtles, birds, and mammals such as deer and raccoon also being eaten. In addition to estimating diet, zooarchaeologists can also shed light on past environmental characteristics, help us understand what times of the year the Indians were living at various places, and explain how the Indians were making use of the harbor's resources.

Karen Jo Walker prepares to dump out a sample of shell and bone fragments retrieved by flotation and water screening.

Understanding the midden's message

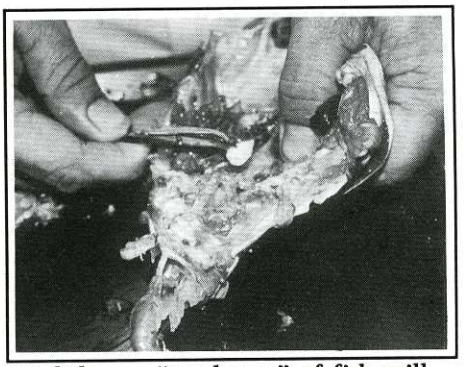
The bones and shells that archaeologists find probably represent only a fraction of the food actually consumed. Many things can happen to bones and shells once they have been discarded, so it is important to ask what is actually preserved and what disappears? What is hauled away by sea birds or raccoons and what is not? Do bones preserve better when they are cooked or uncooked? When deposited with shells or deposited alone?

Elizabeth Wing places a "fresh" supply of bones and shells on the modern "midden" experiment being conducted in Southwest Florida.

We are beginning to try to answer these questions by building our own modern "midden," an experiment in which we regularly place fish, shellfish, and other animal remains at a particular spot and then once a month observe what has happened to the deposited materials. After a year's time, we plan to excavate the area to see what has been preserved. We think this experiment will help us in interpreting our zooarchaeological findings.

What is an otolith and why should we care?

Some people call them "catfish pearls." Actually, many kinds of fish have them, and they may be of use to archaeologists. They are otoliths, or "earbones," a part of the fish's sensory organs associated with equilibrium, hearing, and perhaps perception of depth. Like a clam shell, a cross-sectioned otolith has alternating light and dark growth bands that relate to seasonal conditions.

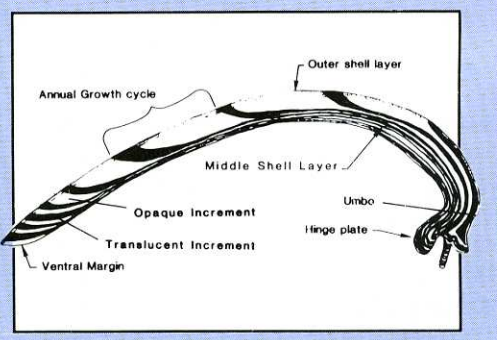


Otoliths, or "ear bones" of fish will prove helpful in determining the seasons during which prehistoric Indians occupied certain sites.

Each month we collect and cross section otoliths of sea trout, redfish, and sea catfish in order to determine when in the annual cycle the growth bands occur. Otoliths preserve very well in archaeological sites and are easily identified as to species. By comparing otoliths found in Indian sites to our modern specimens, we will be able to tell which fish were being used and in what season they were collected.

Confessions of a Quahog

The common quahog is not very communicative, but much of its life story can be read in its shell. In much the same way that tree rings tell the history of a tree's life, the light and dark bands of a clam's shell correspond to slow and fast growth periods. By collecting clams from Charlotte Harbor each month, recording information about their environs, and then cross-sectioning the shells to study the growth bands, we hope to be able to learn how to "read" environmental information from clam shells found in prehistoric Indian sites. The technique has been used successfully by Irv Quitmyer, Steve Hale, and Doug Jones in a study done on the coast of Georgia, and we have high hopes that the common clam will prove to be a reliable indicator of the season of harvest and of basic environmental conditions on the Gulf Coast of Florida, too.



What the fisherman sees

If you want to know how the Calusa fished, a good place to start is to ask a fisherman. Some of the senior fishermen now in their 60s and 70s know enough about the Charlotte Harbor-Pine Island Sound estuary to fill several volumes, but they're not going to write it down for you. You've got to take the time to listen and to try to begin, just begin to see what they see in the water, how they know when to strike.

Bob Edic of Boca Grande has been listening for the past five years or so, and he says he's just beginning to have some understanding of what it was like to be a fisherman in the harbor a generation or two ago. No high-powered boats, no nylon nets, no radios, no gadgets, just you and the harbor. Not fishing for sport, but fishing for a living. Bob has a college degree in cultural anthropology and an intense interest in the history of the harbor and its people. He also worked at the fish house in Boca for a few years and has seen a lot of fish come and go.

The name for the kind of listening and learning Bob is doing is "oral history." So far he has supported his study himself, although we have been able to help out in a very small way by paying a few of Bob's expenses for travel and tapes and batteries for his tape recorder. We would like to do more to help, not only because it is very important to record this invaluable knowledge before it is lost, but because the knowledge will help archaeologists understand how the Calusa solved some of the same problems. We will seek funding in 1987 to help Bob's study continue and to make a permanent record of his findings.

Charlotte Harbor, seen from the air, January, 1985.

Scientists can sometimes depend too much on their technology. Microscopes and computers and salinity meters are important, but if we don't also open our eyes and ears to what the harbor is telling us, interpreted by some of the people who know it best, then we are not good scientists, but fools. We're trying to see what the fisherman sees.

Calusa relied on plants

The Calusa did not grow corn as did their neighbors in north and central Florida, but they did depend on plants for many necessities. Wild plants, such as sea grapes, cactus fruits, cabbage palms, and certain roots and grass seeds were used for food. Firewood was needed for warmth, cooking, and pottery firing. Wood and thatch were used to construct houses and temples. Palm and yucca leaves were used to make mats. Wood and fibers were needed to make fish and turtle corrals and fish traps.

Archaeobotanists Lee Newsom (left, with saw) and Margie Scarry (center) confer with botanist Kathy Boone about plant life on Buck Key.

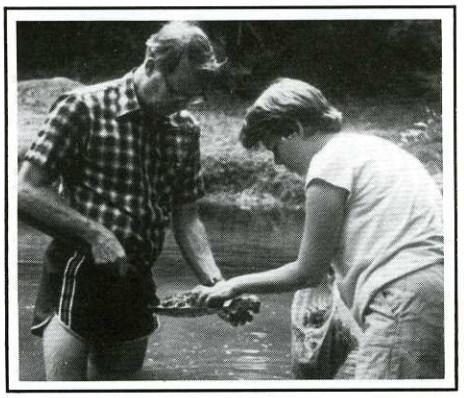
Large straight trees, probably cypress, were used for canoes. Wood was also needed for making canoe paddles, arrow shafts, harpoons, spears, and handles for tools. Fibers from palm and yucca were used to make strong twine for nets, fishing lines, ropes, and cords. Wood was carved into a variety of utilitarian and sacred items (boxes, mortars, pestles, seats, masks, etc.). In historic times palm oil was used on the hair. We can assume that numerous wild plants and other materials were gathered for medicinal purposes, as well.

In order to find out more about the plants used by prehistoric Indians, specialists called archaeobotanists carefully identify charred fragments of wood and seeds. The charred fragments are obtained by immersing some of the dirt from our test pits in water and retrieving the charcoal as it floats to the top (a process called "flotation"). To help identify the plants represented by such tiny fragments, modern plant specimens are collected, then purposely burned and fragmented in order to create a reference collection of known materials. Project archaeobotanist is Margaret Scarry, assisted by UF graduate students Lee Newsom and Donna Ruhl.

Archaeobotanist Margie Scarry collects plant samples for the comparative collection, July 8, 1986.

Calusa ceramics are a challenge

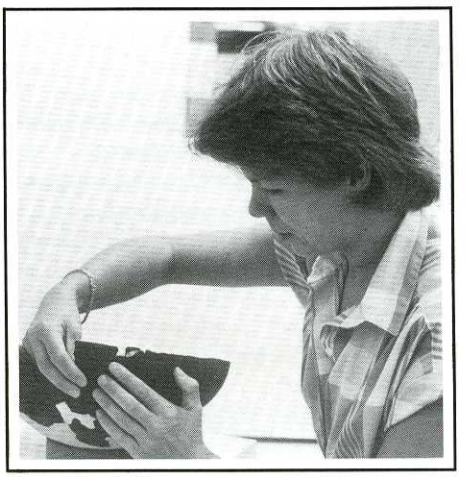
For the ceramics expert, Southwest Florida is one of the most perplexing challenges in Florida. After about 500 B.C. and up until the 1500s A.D., the pottery made by the Indians consists primarily of an undecorated, sandy-textured ware commonly called "Glades Plain," or simply "sand-tempered plainware." During its 2,000 year history of manufacture, this pottery appears to have changed little, and this hampers our ability to use the pottery to help tell how old the Indian sites are.



Robin Brown (left) shows Ann Cordell some of the clay that can be found in Hickey Creek, April, 1986.

Since the beginning of 1986 some 3,500 pottery fragments, or "sherds," have been analyzed, most from test excavations at Buck Key, Useppa Island, Cash Mound, and Josslyn Island. Ann Cordell has taken up the challenge of Southwest Florida's plainware by examining the sherds microscopically in order to discover the kinds of clays that were used by the Indians. She has sorted the sherds into categories on the basis of kind, size, and relative quantities of constituents in the clay. Preliminary findings show that the pottery has much greater variability than what is apparent just by looking at the sherds with the unaided eye. The pottery falls into categories based on the relative abundance of such constituents as sponge spicules and quartz sand found in the clay from which the pottery was made.

Also crucial to our understanding of pottery manufacture is determining whether the pottery was locally manufactured or imported from other regions. The most direct way to begin to answer this question is through the location and laboratory analysis of available clay resources for comparison with the Indian pottery. Ann forms the modern clay samples into briquettes, then fires them at varying temperatures in an electric furnace. She then compares the test briquettes to the Indian pottery in terms of color, texture, and composition. Her study is not finished, but the results are promising so far. As a result of Ann's work, we are closer than ever before to understanding the Southwest Florida plainware pottery.



Ann Cordell reconstructs a 600-year old Indian bowl in order to determine vessel shape and method of manufacture.

Contributions

1983

Sustaining Members ($5,000-19,999)
Col. and Mrs. Don Randell, Pineland

1984

Sustaining Members ($5,000-19,999)
Col. and Mrs. Don Randell, Pineland

1985

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Dr. Charles J. and Joan Wilson, Sanibel

1986

(through October 31, 1986)
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Dr. Richard A. and Dr. Patty Jo Watson, St. Louis
The Wentworth Foundation, Gainesville

Appreciation Page

On page 14 are listed those who have given financial help. We thank you for believing in this project and for helping make it possible in a very direct way. We also wish to offer our heartfelt gratitute to many others who have helped to get the project off to a good start.

Jan and Robin Brown have opened their hearts and home to our crews, and offered sound advice and encouragement. They also provide a completely furnished, rent-free house for our use when we are working in the area, literally saving us thousands of dollars in living costs.

Michael Hansinger has served as a local representative of our project in Fort Myers, introduced us to key local people, coordinated project publicity, and loaned us his boat and motor on numerous occasions. We have been made welcome many times at Mike and Ruth Hansinger's home, and we appreciate the hospitality.

Bob and Linda Edic of Boca Grande have been faithful supporters and hospitable hosts on many occasions.

Charles Wilson of Sanibel has helped immeasurably in our work in the Sanibel-Captiva area by introducing us both to people and to archaeological sites; he and his wife Joan have hospitably entertained our crews on several occasions.

Our work on Buck Key could not have been completed without the support of Marie Kalman of Captiva, who provided a furnished house for our crew during both the March and May field work in 1986.

Garfield Beckstead provided food and lodging on Ussepa Island for Bill Marquardt during the 1985 salvage excavations, and paid all expenses of the excavations.

Don and Pat Randell of Pineland were supporters from the very beginning, and in fact it was their gift that first allowed us to begin exploring Josslyn Island in 1983. We have enjoyed the hospitality of the Randells a number of times at Caloosa Mound Grove in Pineland.

George Luer has generously shared his knowledge of the archaeology of Charlotte Harbor on numerous occasions, volunteering his time and paying his own expenses in the interests of preservation and study of the Charlotte Harbor mounds.

During various visits to the area we have enjoyed the kind hospitality of Bob King (Boca Grande), Leslie Kowalski (Captiva), George and Louise Tuttle (Captiva), Robert and Bobby Knight (Bokeelia), Liz and Jeff Hoffman (Bokeelia), Stan and Lee Tracy (Bokeelia), Mary Strong (Fort Myers), and Tom and Bobbi Sharp (Sanibel).

During our work at Josslyn Island we were fortunate to have the kind assistance of Mickey O'Donoghue Jr. and Mickey O'Donoghue Sr. on many occasions.

Don Cyzewski of Bokeelia took time away from his fishing to pilot his boat to Cash Mound so that a column sample could be taken from the beach site there.

Bird Westall has freely shared his considerable store of knowledge about Buck Key with us, and assisted our efforts in numerous ways.

Kathy Boone of the Sanibel-Captiva Conservation Foundation has helped by sharing her extensive botanical knowledge with us.

We have also enjoyed the support of SCCF staff and volunteers, especially Carol Allin, William Webb, and Ed Underhill. Tollyn and Robina Twitchell of Sarasota kindly brought to our attention the archaeological site on Casey Key and helped make arrangements for our excavations.

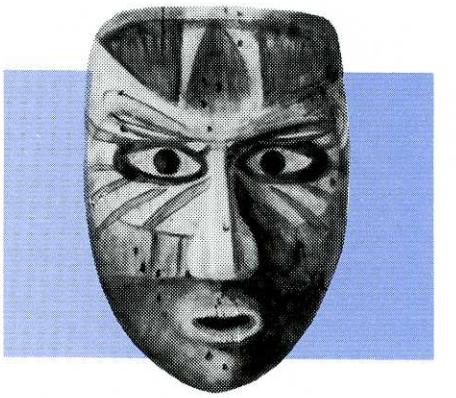
Property owner Donald Snyder gave permission for our tests on Casey Key, and Ted Watrous gave permission for our work on his Buck Key property.

Permission to work on Federal property has been granted by Ron Hight and Chris Olsen of the Ding Darling National Wildlife Refuge.

Our work in the Charlotte Harbor State Reserve has been facilitated by the courtesy of Will Sheftall and Bob Repenning.

Advice and assistance of the following people is gratefully acknowledged: Jeff Chapman, Vince Formosa, Ray Pottorf, David Draper, Elaine Jordan, Elinore Dormer, Terri Hopkins, Joan Kohlbry, Charlie Strader, John Beriault, John Griffin, Bob Carr, Bill Burger, Marion Almy, Pat Ball, Ron Fraser, and Danny Dodge.

Thanks also to Roswell King, whose smoked mullet is second to none, and who kindly conducted a tour of Demere Key for us in 1983.



I am very grateful to Jerry Milanich for initially making it possible for me to begin this project.

The Florida State Museum provides office and laboratory space, office supplies and equipment, and postage expenses.

The Department of Anthropology, College of Liberal Arts and Sciences, provides a vehicle and pays for our telephone and photocopying.

The College of Liberal Arts and Sciences provided $2,000 in expense money to cover travel costs at the beginning of the project, through the courtesy of Dean Charles Sidman.

Susan Williams of the Florida State Museum provided sound advice on the design and format of this newsletter.

Joan Price of the University of Florida Foundation helped with initial fund raising plans, and Debra Amirin designed our fund-raising brochure.

Thanks also to Christy Morris of the Foundation and Donna McMillan of the Department of Anthropology for valuable assistance with bookkeeping. We also acknowledge the financial support of the National Science Foundation, the University of Florida's Division of Sponsored Research, and the College of Liberal Arts and Sciences.

Finally, our heartfelt thanks to all volunteers who have helped in the field and in the laboratory. Field volunteers are mentioned elsewhere in this newsletter, but here we wish also to thank laboratory volunteers Claudine Payne, Karla Bosworth, Bob and Linda Edic, and Edith Marquardt.

We thank all of you for your friendship, and look forward to continuing to work with you in the preservation and study of Southwest Florida's past.

Bill Marquardt

Bill Marquardt
Project Director

Sixty Centuries in Time

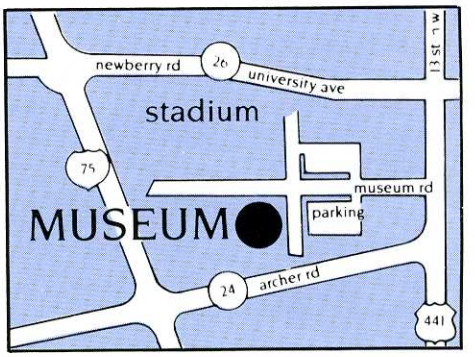
SOUTHWEST FLORIDA HISTORY		NOTABLE EVENTS IN WORLD HISTORY
Fort Myers incorporated, A.D. 1885		Atomic Age begins, A.D. 1945
		Louisiana Purchase, A.D. 1803
Menéndez meets Carlos, chief of the Calusa, A.D. 1566	A.D. 1500	Columbus reaches the New World, A.D. 1492
Buck Key occupied, ca. A.D. 1040-1350		
		Magna Carta signed, A.D. 1215
	A.D. 1000	Charlemagne crowned emporer in Europe, A.D. 800
Big Mound Key occupied, ca. 375 B.C.-A.D. 1330		
		Huari, Tihuanaco kingdoms in Peru, ca. A.D. 650
Josslyn Island occupied, ca. 130 B.C.-A.D. 1200	A.D. 500	Fall of the Roman Empire. ca. A.D. 410
		Classic Mayan civilization, A.D. 300-600
Cash Mound occupied, ca. A.D. 200-700		Jesus of Nazareth is born, ca. A.D. 0
	0 A.D./B.C.	Julius Caesar conquers Gaul, 52 B.C.
		War between Sparta and Athens, 431-404 B.C.
	500 B.C.	
		Iron Age begins in western Europe, ca. 700 B.C.
Indian villiage(s) on Useppa Island, ca. 2160 B.C.-A.D. 1700		
	1000 B.C.	Phoenician traders dominate the Mediterranean, ca. 1000 B.C.
		Stonehenge expanded, ca. 1300 B.C.
	1500 B.C.	Discovery of Iron in western Asia, 1500 B.C.
		Shang civilization in China, ca. 1800-1200 B.C.
	2000 B.C.	
Burial on Useppa Island at Collier Inn, ca. 2160 B.C.		Beginning of pottery making in North America, ca. 2000 B.C.
	2500 B.C.	Great Pyramid at Gizeh is built, ca. 2600 B.C.
	3000 B.C.	Bronze metallurgy in Anatolia, 3000 B.C.
Indians living on Useppa Island, ca. 3675 B.C.		Unification of Egypt, first pharaoh, 3200 B.C.
	3500 B.C.	Uruk temple-based society founded in Mesopotamia, ca. 3500 B.C.
	4000 B.C.	Ubaid culture in Mesopotamia, ca. 4700 B.C.-3500 B.C.

The Florida State Museum Welcomes You

The Florida State Museum is the museum of the University of Florida and the State of Florida, with research emphasis on the natural sciences and anthropology of Florida, the Caribbean Basin, and South America.

It is accredited by the American Association of Museums, and is open every day except December 25, Monday through Saturday 9:00 A.M. to 5:00 P.M., Sundays and holidays 1:00 P.M. to 5:00 P.M. Admission is free.

The Museum is located on the University of Florida campus in Gainesville, which is on Interstate 75, about 5 hours from Fort Myers, 4 from Boca Grande, and 6 from Naples.



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