

**SARASOTA COUNTY WATER ATLAS
ORAL HISTORY PROJECT**

NEW COLLEGE OF FLORIDA — FALL 2014

Bill Burger spent his childhood living in Florida part-time during the year until he moved to Bishop Harbor before his junior year of high school. A New College of Florida alumnus, Bill would go on to dedicate his life as an archaeologist in Southwest Florida working on projects with the Southwest Florida Water Management District, the Florida Department of Environmental Protection and the Sarasota Department of Historical Resources. Eventually he was hired by the Sarasota County Government as the first professional Sarasota County Archaeologist. Even after retirement from Sarasota County, Bill continues to do archaeological research at his home on Terra Ceia Island.



Interview Date: December 12, 2014
Interviewee: Bill Burger
Interviewer: Garrett Murto
Location: Jane Bancroft Cook Library, Sarasota, FL
Duration: 2 hours 15 minutes

Garrett Murto: Okay, well, first will be just to introduce yourself and what you have done in Sarasota County as the Sarasota County Archaeologist and a basic overview of who you are.

Bill Burger: We'll just start with sort of the beginning. As best as I can figure out, I was conceived in Michigan and I was born in Michigan but my parents were early snowbirds. They purchased property in coastal Manatee County in 1950, back and forth, so truthfully said, I can say I've been coming to Florida since before I was born. In that particular year of 1951, I was born in Michigan and then thereafter my life was divided every year between Michigan and Florida. I would start school in Michigan, the school year, and finish the year here and the following year the same deal, so I had a split life with friends at both ends of it in growing up until I was in tenth grade when I was allowed by my parents to come and start my junior year of high school down here in Palmetto and thereafter year-round here in Florida. Where my parents bought property is located on Bishop Harbor, which is a small harbor in north coastal Manatee County and that's largely where I grew up. Likely the reason for my interest in archaeology came in part from my father's profession, who had a heavy construction company in Michigan. When he retired he brought some of his equipment down to the property in Florida and proceeded to excavate and create classic canal

finger fills with the notion of selling the property. Well, all that excavation, of course, turned up a lot of material, mostly paleontological some archaeological materials but mostly paleontology. That combined with the fact that there was a gravel pit near our home in Michigan which exposed a lot of fossils, kind of got me started and as with many starting out, there's a conflation of paleontology and archaeology which became more clear later on, at least for me, a lot of people still do not understand that archaeologists do not dig up dinosaurs. I'm regularly correcting them on that point. So, my excavation was largely in Florida, after high school I came to New College in 1969 and as I was telling you earlier I was here for two years went on option for six years, where mostly I was involved in the tropical fish industry and I had a stint driving the bookmobile for Manatee County and then I decided to return to New College, which I did for two years and graduated in 1979, so started in '69 and ended in '79. After graduation from New College, I went directly into grad school at USF-Tampa and did the public, applied anthropology program with my specialization being archaeology, so officially I'm an anthropologist with a specialization in archaeology.

GM: You said that you were part of the fish industry?

BB: Well, tropical fish industry. The tropical fish industry for the aquariums began, well, it began in the Miami area but as far as west coast of Florida it began in our area of northern Manatee County and south Hillsborough County and today still there's considerable numbers of tropical fish farms located in Hillsborough County.

GM: What were some of the earliest sites that you began working at in the area?

BB: Well growing up on the bay of Bishop Harbor there were many archaeological sites adjacent to that area, shell mound sites, and that's really, I would say, why and how I got hooked on shell midden archaeology and really it's my specialization and my mania, if you will. Investigating how earlier peoples adapted to the coastal environment and made a living and the debris left thereafter which is full of clues not just regarding the cultures but the environment as well, so a good deal of my research interests were paleoenvironmental aspects of human adaptation along the coastal estuarine environments.

GM: Could you explain what a shell midden is and its importance in paleoecology?

BB: Well, first, the name is usually ascribed to a Danish word which I cannot pronounce correctly: kitchen midden, midden meaning garbage, the debris of daily life. If you ever make a substantial meal of shellfish and oysters, you know you can produce a considerable pile of shell just from one meal and that in collecting oysters, you also unknowingly bring in a lot of foods from the environment. There are a lot of

micro-mollusks and other organisms that are on and in the oysters that become a part of the archaeological deposit which reflect the environmental conditions of where they were gathered. And so, very careful fine detailed analysis can get a lot more than just the visually obvious, and then of course the garbage includes all the bits and pieces of daily life, reflecting the technology, tools, ceramics, et cetera, as well as the many bones that reflect part of the diet. A lot of people get a very mistaken impression of prehistoric diets when they see a shell mound and they just conclude that these people were largely only eating shellfish. Well, if you very carefully analyze a sample of shell middens, you'll find all these tiny little fish bones and animal bones and, for instance, you could find a small sliver of deer bone which could represent 80 pounds of meat. Well, if you think about it, if you were to try to produce 80 pounds of oyster flesh, the pile of shell that you would produce would be considerable. You see, you get a biased view of diet just from the visually obvious, so there's a lot of information in garbage and I always like to make the point when I give presentations to the public that garbage doesn't lie. People can make various claims about their behaviors, which may or may not be true, but the garbage doesn't lie. One of my favorite examples of that is that there was a directed project at the University of Arizona many years ago under Dr. William Rathje called the *Projet du Garbage*, which was a directed study of landfills to see what was going into our landfills and so forth, and it also included questionnaires and collection of garbage samples at curbside, with permission and follow-up interviews and so forth, and I always recall an instance where the household claimed to be non-drinkers, yet there was a case of empty beer cans in the garbage. The garbage doesn't lie. The stuff is right there.

Now my work in Sarasota County... Well, first to back up, after graduation from USF-Tampa I, if you will, (?) as an archaeological contractor, as you'd certainly know, most archaeology is done as a requirement of governmental regulation. It's part of the environmental impact assessment prior to development and so most of my career has been working for developers prior to their development. I feel I've been very lucky in a sense, in that I have been able to see the 'before' situations in this region of Florida, in particular, the natural conditions before it was paved over. I'm maybe one of the last people to see nature in some of these areas before it was converted to its present condition. In doing contract archaeology, mostly in the Tampa Bay region including Sarasota County, lots of projects for various private individuals as well as, over the years, for governments, Sarasota County government and other county governments in the region and also worked for the Southwest Florida Water Management District in this area and some projects for the Florida Department of Environmental Protection as well. So, I'm available for whomever requires service. Some 30 years ago, I was contacted by the Sarasota County... I'm not sure if it was called the Department of Historical Resources, the name has changed over time, today it's the Sarasota County History Center. Within the ordinances that had been passed in Sarasota County, there was a

need for a professional archaeologist to review potential impacts to cultural resources by development, and so I basically set up and created a program which continues to run today in assessing, you know, potential impacts and in requiring archaeological surveys to be done, or not, and I gotta tip my hat, as do many of my colleagues, to Sarasota County government because Sarasota County probably has the best program in this regard of any county or municipality in the State of Florida. They've had it the longest, it's been finely tuned and it works very well. Reviews are done at the state level, of course, in Tallahassee, but let's face it, they have 67 counties and limited staff, limited funding and so the fine level of analysis that is afforded by having a local county government archaeologist is very, very valuable and very effective.

GM: I have a few things. I was wondering if, first, you could explain how you recognize a shell midden today and I was also hoping you could detail your role when you worked with Water Management, I didn't quite catch it... Did you work with Water Management in this area?

BB: I've done some projects that required SWFWMD [Southwest Florida Water Management District] permits and so survey work that they required of a private individual, but in terms of actual SWFWMD projects, those have largely been in Manatee County. In fact, I am currently engaged in one such project in south Hillsborough County along Tampa Bay. But in terms of recognizing resources, well, a shell midden is, I dare say, to most people pretty obvious in terms of its appearance and you know, coastal as far as the larger ones. Its composition is shell, oysters, clams, conchs but as well, shell mounds provide a unique floral habitat type because of their elevation, drainage and their alkalinity because of all the shell. So there's a recognized ecotype association of plants that grow on shell mounds—that is a real signature botanically. In fact, many of the shell mounds throughout coastal Florida were really first recognized by early botanists who explored both coastally and the interior of the state from the 1700s on, and of course they were largely directed by the presence of very unique, sometimes, today particularly, endangered species of plants growing on the shell mounds. So they're pretty obvious for the most part by their composition of the plants that grow on them.

GM: So you say that the Sarasota County Archaeologist position is a really monumentally important position in being able to do these projects and stuff that you're talking about. What would you say are some of the most important aspects of the job for the Sarasota County Archaeologist and maybe you could give some anecdotes from your time as the Sarasota County Archaeologist?

BB: Well, it's a difficult balancing act being a regulator, and I've been both a regulator and a regulatee in terms of archaeology. Some of the viewers listening to this interview, will have heard this from me be-

fore, I gave the larger-scale perspective in looking at archaeology and what we do, particularly in the presence and atmosphere of anti-regulation, that we have to be very careful, we have to choose our battles. In the big picture, archaeology really isn't very important compared to food, clothing, shelter, infrastructure, etc. In the big social picture, what's this archaeology stuff, you know, digging up old garbage. 'Who cares?', you know, I need a job. Right, so given that perspective, where I come from, is that as archaeologists, we have to keep in mind that position and follow from what I call is the First Rule of the Successful Parasite, because in a sense we're a parasite on a body politic, we're not all that important in a big, big sense and an immediate sense of social needs, and the first rule of a successful parasite is 'Don't kill the host.' So this is what I mean by choosing your battles and the efforts of the County Archaeologist is to determine if there is a need for an archaeological survey and to further refine what portions of a property might have archaeological resources. Most of archaeology is below ground and of course, to back up a step, we're not just talking about prehistoric archaeology, we're also talking about the built environment, historic buildings have to be assessed as well. So a real important part is assessing the significance of anything that is found, whether there should be a recommendation for preservation or more archaeological work and salvage efforts to salvage data information from the site prior to its destruction. Since archaeological work is a sampling process, once you have a sample, that is that you're just getting more of the same, then there's no need to dig anymore, depending on what it is you're finding, of course. So you have to be very careful in weighing significance, significance of course is ultimately tied to the National Register process, which is very, very broad, something can be significant from a national perspective, a state perspective, a regional perspective or a very localized perspective in terms of its potential to yield important additional information regarding prehistory or whatever. So you have to make this judgement call and part of the difficulty, of course, is that significance changes all the time. What is of research interest today may not address something that potentially could be of research interest tomorrow, providing there's any sites left tomorrow and this directs my work, particularly with public agencies including when I was County Archaeologist here and presently for my work with the Southwest [Florida] Water Management District. The cultural resources, determined as prehistoric sites and historic structures, on public lands I think we should be particularly careful with in terms of conserving them for the future, for future researchers to examine very carefully. Archaeological sites are a non-renewable resource. Eagles can reproduce, thousand-year-old archaeological sites can't; once they're all gone, that's it. So there are archaeological sites that on private property might be of little significance and be written off by the County Archaeologist just after (?excavation?) and sampling. A comparable site on public land, let's say out on William MacArthur, the Carlton Preserve or other county conservation lands, might be the same kind of site insofar as it's on public conservation lands, my direction is to preserve it since general development on conservation lands is minimal, you need parking lots, bathrooms and trails, and well, let's move that

building over a little bit and preserve that site because that building doesn't have to be built right here. Because again, looking at the future, being optimistic, the cultural resources on public lands will at some point in time be the only ones that are left when the rest of Florida is paved over. So you see what I mean about levels of significance in assessment and so the County Archaeologist here reviews potential impacts for rezones, special exceptions, earth-moving permits and also county capital improvement projects. So it's a mix of land types and potential uses that have to be determined by the County Archaeologist and here the County Archaeologist has the authority to require survey work be done or other preservation efforts be done, which is something that you do not see done in most of the rest of Florida, sorry to say it, from my perspective.

GM: Well, you talk about preserving these sites and everything, what's the importance of these sites to the people of today? Because these sites were obviously a different culture of people than who live here today, why is it important for this culture that we live in?

BB: Well, I look at that question in two ways. First, from the professional, academic perspective that we find these things interesting and that we're looking at cultural evolution of our species, how our species has adapted or not adapted to different environments over time. We are looking at our species and particular cultural approaches to these questions, you know, which are pointy-headed academic issues, which we find interesting, right? But on the more public perspective, people are interested in archaeology. It's easy to get something in the newspaper regarding an archaeological site because people find it interesting, so I think there's a basic interest in what came before by the general population, particularly if there's human remains involved. The issue of our own mortality comes to play there, I think. So there is a basic belief, you know, that there is an importance to our past and where we came from and again from...well, maybe crossing both positions, that those who do not learn from the mistakes of the past are bound to repeat the mistakes of the past, you know it's an ideal we're taking and has been really followed actually, because it seems like the same old mistakes are made over and over and over again. But anyway, that's an idea that we hold up professionally and in the public as well. So there is a basic interest of the public about the past, however conflated at times, as I mentioned before, paleontology, no dinosaurs here. But people, you know, they find an interest in it and then of course, sorry to say, there's a certain percentage of the public have an interest because of the potential monetary rewards, and that of course, is against our professionalism and we have to deal with capitalism in the guise of looters, site looters and vandalism of archaeological sites is ongoing.

GM: What are some of the experiences that you have had to deal with vandalism?

BB: Well, it's a good question and I just fairly recently... a project that I did the fieldwork for about four years ago, and now I'm still involved in the environmental aspects of the Water Management project. It was the first time in well over 20 years that I found archaeological sites that had had no vandalism whatsoever; they are beyond rare to find a site that doesn't have a single pothole, as they call them. An untouched archaeological site is just unbelievable because typically there are holes dug in mounds of all sorts whether it's shell middens, or particularly burial mounds, by both previous looters and earlier investigators as well, since techniques change over time. Some of the first professional work done in Florida archaeology was done here in Sarasota County as part of F.D.R.'s [Franklin Delano Roosevelt's] New Deal program under what was initially the Civil Works Administration, that became the Works Progress Administration, the WPA, putting people to work during the Great Depression, and one of these projects excavated a burial mound in Englewood. A similar project came out around that same time under the same program in Hillsborough County and Manatee County and some over on the southeast coast of the state, so we've had some of the earliest professional work done in our region here. But, from today's perspective, we would have done it differently, definitely, but for its time it was state-of-the-art, and again, techniques change.

GM: What were some of the methods and techniques that they used, do you know?

BB: Well actually, the archaeologist who was in charge of the Englewood project as well as the Perico Island project on the north end of Sarasota Bay, Marshall Newman, was head and shoulders above many of his colleagues in terms of his techniques. I mean, he was using crews of initially untrained men who were out of work, and work was done with shovels and mattocks off a trench, but Newman actually recorded things three-dimensionally and made very good field notes on what was found and where—associations, because backing up a step for those who aren't aware, archaeology is all about context. It's not what you find, it's where you find it, and in association with what, and I can make the analogy to a thousand-plus-year-old murder case: You find two skeletons and a pistol and a bullet hole in one of the skulls; well, is the pistol in the hands of the skeleton with a bullet hole in its head—a suicide—or is the pistol in the hand of the other skeleton some distance away? Some pot-looter digs it up and says 'Well look what I found, a revolver, it's neat!' but what's the rest of the story? Well, it's gone because the context is destroyed. So Newman's work, I say, is very much ahead of his time. Many of his contemporaries that grew some of these other WPA and CWA projects were nowhere near as good as him in terms of how they excavated or the records they kept, or the photographs. Newman took a lot of photographs in the field, such that I've been working for some time on a project in Manatee County on Perico Island, which was the site of another excavation by Newman, one of his government projects, and I have all his notes from the National Archives and all the photographs he's taken and his record-keeping was such that I

could create a three-dimensional model of the burial mound in terms of who was buried, in what position, where, and to a certain degree, the demographics of the population: males, females, infants. He had principal training in physical anthropology, so some really, really good work for his time compared to some of the other work done, where they were basically hunting artifacts—they were not much different than pot-hunters. As was an earlier investigator in Sarasota County, Clarence Moore, an antiquarian to use a polite term, from Philadelphia, very well-off. He had his own steamship, which had a darkroom in it. He took a lot of photographs, he took field notes, but he was out looking for museum-quality goodies and excavated up and down both coasts of Florida, up in the Carolinas, up in Georgia and Alabama. I mean, many archaeological sites are gone today and all we have regarding them are Moore's notes and his publications. He widely published what he found where, including a large format with full-sized photographs of the things that he found. Then again, from today's perspective he was a looter, but if he had not done what he had done, we wouldn't even have those records if those sites had been hit by hundreds of individual collectors and looters, the dispersal of the knowledge, we would never be able to get it back intact. So C.B. Moore did work around Tampa Bay, Manatee County coastline and came down along the Sarasota County coastline and excavated a number of mounds along the coastline of Sarasota County. Most of his work here was in the early 1900s.

GM: Well, maybe you could go into some of the sites that you've excavated. Well, what are some of the things that you've found? I know you've talked about excavating shell middens and everything but what are some particularly unique sites that you've excavated and worked at in your career?

BB: Here in Sarasota County I've done very little coastal work. I did some work at Indian Mound Park in Englewood, but that was minimal. Most of the archaeological work that I've done in Sarasota County has been in the interior in the Myakka area, out east, and it's a really fascinating area that really ought to have a lot more directed archaeological investigation. There are still a fair number of large sand mounds that have not been professionally examined, they're for the most part recorded for the DHR [Department of Historical Resources] in Tallahassee but some of course have been vandalized, some of them are totally gone, but there appears to have been a major population in latest prehistory/earliest history, so early 1500s, 1600s, perhaps into the 1700s, of native peoples and cultures in the interior of Sarasota County. Don't know how many people, but concerted public works programs by those peoples occurred that probably could provide us with a lot of very interesting information about that very tumultuous period after the arrival of Europeans in the 16th century. Now I did recently do some work on a shell mound in the Indian Beach area, which is within the City of Sarasota, for a client, which is a large shell midden site on Sarasota Bay, but it was also the site of Fort Armistead during the Seminole War, and prior to that actually appears to have been the site of a Cuban fishing rancho. Starting in the late 1500s, Spaniards/Cubans

came to southwest Florida and set up fisheries, initially just seasonally living off their boats and ships but then subsequently actually building settlements, small settlements, family settlements along the coastlines in order to harvest the fish. You see, Cuba does not have the estuaries that Florida has. The offshore... Most of Cuba drops off into very deep water quickly so it doesn't have the large expanses of shallow water with input freshwater that creates the estuary where there's an explosion of life and a lot of fish, and keep in mind, Spanish Cubans were Catholics so they gotta have fish at least every Friday. And so, there was a large industry coming out of Cuba to our coastlines to harvest the fish and send them back to Cuba salted and/or smoked, and the site where I worked along the coastline north of us here—well, actually not quite north of New College, in fact—which again was initially a prehistoric shell mound which afforded elevation to live on, on the coast which is something that you would look for, there were also some freshwater sources nearby, which attracted a Cuban fishery and subsequently, as I mentioned, during the Seminole War it was the site of Fort Armistead, one of the last establishments of the Seminole War Period which dates to 1840-41 and it was only occupied, as I recall, for 7-8 months. And so there's some clues to our history as well as the deep story of prehistory at that site and I mentioned before I've been working in continuous process. After we finish today I'm back in my lab processing shell midden samples from the Perico Island site, which is up near the north end of Sarasota Bay, a large shell mound complex that dates back to at least 2000 BC and possibly earlier, and extending up to shy of history, shy of the 1500s, but an area of repeated occupations by many cultures over thousands of years of people living off the coastal resources. We all have a particular research interest, and one of mine there has been effectively to disprove a current notion of sensitivity of native peoples to their environment, this notion that they were part of nature, only took from it what they needed, didn't waste anything, et cetera, or from a different perspective, a New Age perspective, the noble savage of Rousseau, which has been disproven elsewhere by other archaeologists, and part of my work is further disproof of that romantic notion of how prehistoric peoples lived. The evidence is that they were gathering everything that was out there that was edible to them, many things today people don't eat they were collecting to eat or to otherwise use, regardless of species, regardless of size. For instance, conchs that grow to be 18 inches were collected at this size and everything between and so were all the other shellfish and a type of turtle, a freshwater turtle that is only like this big [gestures] were regularly harvested, fish of every size. There's no evidence of selectivity, of husbanding the resources; they were collecting everything that was available, but the perspective has to be kept that we're talking small populations of people, such that a group of such could practice that kind of harvesting in a particular area and effectively wipe out the resources in that immediate area, only they could pull up stakes and move a couple miles down the coast and move again. There weren't the populations that we have today, or historically, such that people could move around, such that, slipping into speculation of course, a particular group of people and/or their descendants by following this kind of

procedure could over time after x number of generations could wind up back where they started, by which time the natural resources would have naturally replenished themselves. The real selection that we do see in coastal occupation in Sarasota Bay and elsewhere, real key are tidal creeks where you have a freshwater source coming into the bay, because it's where saltwater mixes with freshwater that you have an estuarine situation and that's the optimal situation for oysters, other shellfish, the fish that are in Sarasota that eat some of those shellfish and so forth. It's that estuarine condition, plus you have to keep in mind it's a puzzlement in many cases coastally, working at shell middens is, where did these people get their freshwater? Because people have got to have freshwater, but now if you've got a tidal creek, at least on a low tide you'll be able to get freshwater right next door from the tidal creek but there are many shell mound sites on the coast where there are no tidal creeks, of course we have to keep in mind that sea level has risen and continues to rise. Not to argue, but there are still a number of sites that we don't know where they were getting their freshwater and of course one possible consideration is that some of these sites may have only been temporarily or seasonally occupied by small groups of people who could have brought water with them. That's another thing we look at in archaeology, trying to determine at some such sites, were people living here year-round or was it just a seasonal thing? Now having grown up on the bay, on the greater Tampa Bay, seafood and shellfish have always been a part of my life. We did a lot of oystering growing up. We ate a lot of oysters and fish of every kind growing up. Well, oysters are fattest during winter time and that's generally when we would oyster, as well as the local people. I mean oysters, regardless of what you might read, are edible year-round. Yes, there is a greater chance of certain viruses during the warm seasons in some areas at some time, but during the summer seasons, oysters are watery. They don't have the fat, they don't have the flavor. They're still perfectly edible, but in terms of cost-benefit—the effort, the work you have to put out versus what you get for your stomach—it's best in the winter time, and there are other species that are fatter in the winter, and other species that are only available during certain times of the year. For instance, if we see certain ducks... Evidence of duck bones of species that are only here in the winter are real key in my work, but often if I should find bones of loon, since loons are winter visitors, they don't live here year-round so we can say at least that part of this archaeological site was occupied at that time of the year. And this again all relates to these academic things that we find interesting regarding the evolution of our species, at what point and at what conditions can a population become sedentary, to live full-time, year-round in one location, versus having to move around an environment and following resources, so it's one of these big-picture, anthropological concerns that we have.

GM: So this area, is there any evidence of sedentary living in the Sarasota-Manatee area?

BB: Well, certainly if we look inland, as I mentioned with the large mound sites out around Myakka, certainly would imply permanent settlements, though not necessarily. This whole issue is very, very difficult to address given the nature of the record, which is fragmentary at best, even if it hasn't been vandalized. The natural processes of erosions and tree growth and et cetera can disturb archaeological sites. Many people have the mistaken idea that archaeological sites are like layered cakes—that's the ideal, the bottom being the oldest, of course, and then that's buried by the next, and the next, and the next, and you get this beautiful sequential record of the story at the site. Well, that's very rarely the case, as you yourself know from what you were telling me. When you're doing archaeological work, that is rare to never.

GM: Yeah the tree roots are so...

BB: Oh yeah, and a really large tree grows a thousand years ago and a storm blows it over and the upheaval of that root ball brings older stuff up to newer stuff and mixes it all together and in the thousand years since that, depression has naturally filled in, and you don't realize that that's what occurred in that spot, and you just happen to lay out your test excavation unit. And shell mounds are one of the most difficult things to figure out, insofar as you live in one spot and you throw your debris over here, a lot of shell, it builds up and then maybe a hundred years later, some other group of people, a different culture comes in and they live on the mound you created and they throw their trash adjacent, and maybe overlapping it, and so forth over time and we archaeologists come in and we put in an excavation unit, we blindly—carefully, but blindly—punch down through this and try to figure out the overlapping partial deposits that we have, by chance, intersected with our test units. Even if you had the funding for a hundred radiocarbon dates, you cannot really figure out the sequence of who was there, exactly when... and something I like to touch on when I speak to the public, and speaking of peoples and cultures, I always stress the plurality. We know from anthropological work that any number of non-literate peoples share the same material culture. I always keep in mind some of Claude Lévi-Strauss' work in Brazil where he dealt with at least three or four groups of native peoples. They spoke different languages, they regularly got together for trade and for females, for wives, and only one of those four groups created—manufactured—pottery. Well, pottery was an item of trade amongst the four groups and sometimes even a nicely decorated potsherd would be traded from the ceramic manufacturing group to one of the non-ceramic manufacturing groups. So if we looked at these four groups archaeologically, without this knowledge, it would appear to be one archaeological culture because their technology was shared, it was all the same and there would be ceramics at all four, but they're four different groups. And following from that, a typical question regarding the past—and I think this alludes to, generally people need to have a name, they need to have a handle on things—because I regularly get 'Well who are the people who lived here?' Well, we know historically, and again history in Florida begins with the arrival of the Spanish in the 16th century, particularly here with the ar-

rival of Pánfilo de Narváez in 1528 and de Soto in 1539 on the west coast of Florida here, that's when history, written records began. And we had two major groups of native peoples in this part of Florida, the Calusa to the south and the Timucua to the north and Tampa Bay was an interaction area between the two of them. Well, a few years ago I pulled together a lot of bits and pieces I had gotten out of historical research by many other colleagues and authors regarding what little bits of history were recorded regarding the native peoples of Tampa Bay, names and so forth. And what became very clear is that the Tampa Bay region was composed of many different named peoples with their own languages, who were variously under the control of the Timucua to the north of Tampa Bay or to the Calusa to the south of Tampa Bay. And through and into the early 1700s by that time but more so by the 1600s, Tampa Bay was under control of the Calusa to the south but the people hereabout were still their own named entities, with their own languages, and we have names in the Spanish accounts of the people here about. So the broad brush used of Timucua or Calusa is totally bogus, and more of a reflection of poor journalism than anything else, but to then apply those historic names a thousand years into the past is particularly bogus and I make the point that just because a guy named Burger lives in a house, a hundred-plus-year-old house on Terra Ceia Island in Manatee County does not mean either that Burgers built the house a hundred years ago, much less that Burgers lived there a thousand years ago. I try to get across the point that there are many, many questions we have ourselves as professionals, as well as the public has, that we can never answer unless someone invents a time machine, which I find to be highly unlikely. There are many questions that cannot, and never will be, answered because there is no physical evidence in the ground for them. Now, speculation—which today is rife not just generally in the public but, sorry to say from my perspective, even in my own profession—speculation is a good thing in a scientific context if it can lead to testable implications and it can arise to the level of hypothesis, testing, and with sufficient testing can become the law. This is something that I learned in the fifth grade; it's called the scientific method and it ain't changed. Speculation is important, but don't forget to label it as speculation, or you're just generating a bunch of just-so stories, which is fine—everybody does it, including professionals—but if you're going to be doing science, which I endeavor to do, I try to be very succinct when I present a speculation of testable type or what-if type, and so I say this is a real, real common question from the general public, and from the end of a lecture to a school group or a civic group or whatever, you always get that, that sort of question. And I think it reflects back on people's need to have some kind of a handle, a name, you know. Pre-historic aboriginal peoples just doesn't have the Calusa, Timucua, Tequesta, Tocobaga, what have you, it's just the nature of that.

Something to touch on: our part of Florida—west coastal Florida, specifically looking at Sarasota, Sarasota County, Sarasota Bay—we do not have sources of good, hard, quality stone from which tools could

be fashioned by the native aboriginal peoples. Geologically, the sources of stone run out in Hillsborough County, north, and along the the Peace River, to the northeast. Which is not to say that the native peoples from here south did not have stone tools—people find ‘arrowheads’—but the sources of that stone were to the north, so finding such materials from here south reflect trade and/or actual trips, special journeys of peoples of the south up to the quarry sites to get the stone. Well, you’re talking about expenditure of energy, and/or other costs in an economic sense. You might speculate that those quarry sites up in Hillsborough County were under control of the peoples who lived up there, so you might have had to pay something, or traded something, to get raw materials to cart back down here. What we see generally, not just here but worldwide, the human species is willing to adapt to its local environment and to make do. Okay, you got a function that needs to be fulfilled, how do you do it with the raw materials that you have at hand? Well, from here south, what you have a lot to hand are shells, a byproduct of your harvesting natural resources of the estuary, and shell is a very hard substance. Many people don’t realize just how dense shell is. Conchs, particularly, have a natural structure. The conch grows in a spiral around a central column, which you see here, and quite early in time, dating back to the Archaic and to at least 6000 BC, this was recognized, and the column could be broken out of a conch, but the column structure which is very, very dense, can be broken out of the structure of the conch by using another conch roughly, and for use as a bit on a wooden handle. Because again, you’re looking at percussive hammering activities to break open shellfish, and of course you can use one shellfish against another, and you see a lot of evidence of that, but hammers are a very useful tool, and some of the earliest uses of grooved shell for hammer purposes were using the column like this, and this is my speculation in how these were hacked, but it’s easy, over time these would break and wear down. Well, you could pop it out and put in a new one as a bit sort of tool. And chronology is not tight on tool, shell tool technology but either at the same time by other peoples, or subsequently, it was figured out by someone that if you took a conch, and you broke off the thin portion of the lip and you put a hole on the opposite side, you could run a stick through. And of course these are real artifacts I’m showing you here, but the wood of course I’ve added since wood doesn’t preserve.

GM: But the shells are from actual sites.

BB: These are real, these are actual artifacts. Part of the evidence of that, you can see the scarring and (?) that’s occurred at the base of the conch as it’s being used in a hammering fashion you get (?) that come off the hammer end. And you have a very functional tool, both for opening other shellfish, and only semi tongue-in-cheek—more speculation folks—ever wonder where the expression ‘to get conked on the head’ came from? I’m not going to, but I could easily kill you with this. This is a very serious tool/weapon. And just as today, a carpenter has a variety of types of hammers depending on the need. You’re putting on a

roof, or you're doing some fine work on a window frame, or whatever, so we see different sizes of hammers, depending on the particular task involved. Now, one of the stones we do have locally in the Sarasota-Tampa Bay Region, basically it's a low-quality phosphate ore, phosphatized sandstone, a gritty kind of sand cemented together with phosphorites and it naturally occurs, it can be found eroding out along the shore lines. Well, if you've got a piece of that, and you had one of your tools, you could grind, and put a bevel edge on the end of a tool, and again, this is an actual artifact. I've got a few of them here, a few different sizes. You can see the bevel on the edge. These are for cutting wood. These are axes, if you will. But I also always like to point out, think about trying to cut down a tree with this.

GM: That would be a pretty impressive task.

BB: And likely, again from historical accounts elsewhere in the country and in the world, we know that fire was often used in combination with shell and stone tools in chopping down trees, you know. Girdle a tree and have fire, et cetera, to at least kill the tree and/or drop the tree for making a dugout canoe, et cetera. But fire and shell tools, well you see, we don't have good quality volcanic or metamorphic rock here in Florida. Of course, it could be traded all the way down here from the Appalachians and we do have artifacts and material that were traded down into Florida, but generally not in any great number, not for great utilitarian, everyday-use kind of materials. For that, what they had is what they used, which is a lot of shell. And early on, of course, I mentioned the work that I'm doing at the Perico Island coastal shell midden and some indication of a similar time depth at the Indian Mound Park in Englewood, but prior to the invention, the discovery of how to make pottery, shell was also used for cooking vessels and serving vessels, and again, this is a real thing, this is a real artifact, very carefully the interior has been removed to form a vessel as a bowl but we find these that were actually used as cooking vessels. They have, depending on the heat, a relatively limited lifespan before the shell calciums combust through, but you can actually cook in one of these over a fire. But by about 2000 BC, ceramics were invented and became the prevailing cooking and storage vessels... (?) because again we are very limited, the archaeological record is very limited because again you don't find the wood handles, you don't find the lashings, they deteriorate and rot away in no time at all. The portions of the native technologies based on organic materials is speculative. We can look at other cultures from historical information, ethnographic work worldwide would project wooden vessels of various sizes and shapes, baskets of course and fiber for nets and such. But that right there is a case that I'm exploring and analysis that I'm doing on a shell mound to the north of us here. I'm finding a lot of very... evidence of a lot of small fish that were captured and eaten, and quite often in archaeology at such sites and at similar sites the speculations make that mass capture techniques—a good 75-cent word for nets—were being used. Well okay, but if that's the case, where are the net centers and at the site I'm working at now I'm not finding evidence of net technology, physical evi-

dence of net technology. But again, we try to go by the rule that absence of evidence is not evidence of absence. The record is biased by the nature of decomposition and also the nature of sampling. How many holes and test units that we put in, are you sure we got a representative sample of the contents of the site, you know, that's always an issue. But at this particular site that I'm working at now, I've put in a lot of test holes, I am about halfway through processing about one ton of shell midden materials.

GM: Wow.

BB: Yeah, wow is right. Mind-numbing, it's just mind-numbing. Really interesting stuff, all the little bits and pieces and clues that takes forever and I've given a preliminary paper about this to a local archaeological chapter and I've got an image that I throw up in my presentations like... this is a slight advantage on a personal level of this work, is after picking through all this shell midden and retrieving all the little bones and pieces of artifacts and so forth and doing other standard recordation of the material, there is no need to keep all the shell, the broken bits and pieces of food shell and so I am in the process of creating a very fine shell driveway in front of my house. There's no need to keep it, sure, more work could be done with some of it but the archaeological site itself is still there and it is owned by, in this case, Manatee County, and it's conservation land so it's preserved and protected. So there is still plenty of shell midden for future archaeologists to examine if they have other questions to be addressed. So, too, with a number of the sites here in Sarasota County. We've got some really, really interesting sites recorded and preserved in Sarasota County, but there's still a need to find them. There are huge acreages in Florida that are publicly owned tracts of conservation lands—parks, et cetera—and now with the approval of [Florida Constitutional] Amendment 1, hopefully this is going to work the way we want it to, which there will be a billion dollars a year for the next 20 years to purchase more conservation lands statewide, and I hope some of that money after purchase will be applied to systematic archaeological examinations of these tracts, or portions thereof, to find the archaeological sites on them. For county or state managers to properly manage these lands, they really need to know where the archaeological sites are, because again, most such sites are below ground without any surface evidence whatsoever, and they need to know where they are, like 'Oh, we're gonna do prescribed burning in this area, we're gonna have to have fire breaks harrowed or bulldozed around this.' Well you want to know if there's any archaeological sites there so you can avoid that and curve your fire break around it.

GM: I'm sure that's particularly important with the interior archaeology.

BB: Oh yeah, there are some obvious things, some of these mounds, of course it's obvious, flat area and a mound, but there are a lot of other sites that we don't know are there until we do the controlled testing to

find and record them—GPS [global positioning system] in this day and age—so they can be avoided. And into it depends on the governmental entity. I have—knock on wood—had really a great level of success with various people at the Southwest Florida Water Management District, 'Swiftmud', with whom I've worked over the years in sensitizing them to these concerns. Most of the projects I have done with Swiftmud have been restoration projects—creating new wetlands systems to offset the losses to Tampa Bay, in large part—which is what I've been involved in, and in the best situation, archaeological survey work is done as early as possible before anything else is done to encourage avoidance and preservation. So when that has occurred, in my experience on these projects, I then thereafter see the design of the proposed project, various lagoons and wetlands systems and connections and so forth and I'll ask 'Oh okay, well, we need to change this a little bit right here, we need to move this over a little bit because there's an archaeological site there and we want to preserve it.' And I've had very good response in that regard, with the staff that I've worked with on particular projects, because there's no need for this particular feature to be exactly right here, it can be moved a little bit. So the concern for the future has always been part of my work, both as a regulatee and a regulator, both.

GM: Well, you've said regulator and regulatee a couple times, what are the different roles you've been in with each, what have you experienced as a regulator and as a regulatee?

BB: Well, I'll be careful so we won't have to edit any of this out, I won't use any names because then it could slide into liability. When you are working as a regulatee for private property interests, let's generally say developers, the direction is to please your client because the basis of the system is capitalism.

GM: They want a building built there or they want something built there.

BB: Right, and you're out to make a living. I mean, bottom line it's about money. And again if, depending on a particular project, I like to point out to a client, if it's a large project, under land-use regulations, typically, you have to set aside a certain amount of green and open space as a preserve area amongst your thousand tract houses or whatever. Well, if the archaeology is done early enough in the planning process and something really important is found, make that your green space, your park, preserve it. You know, 'two birds with one stone' sort of a deal, because many land developers and general private property owners [say], 'Don't find anything, you know, I won't be able to use my property.' You know, that's the fear which is unfounded. It's totally unfounded, because we're talking private property and even in, let's call it the worse case scenario, would be the discovery of human remains because of various levels of federal and state law protecting human remains, no matter their condition or their age they are protected under law. Well, okay, that's true and we follow this very closely. You could properly, under permits, total-

ly excavate a burial mound or a burial area and remove the remains and then the condo or whatever can be built thereafter. It's not going to stop, in a definitive and ultimate sense, the development of the property, you can still remove the remains and build thereafter and in some cases it's even been allowed to bury in place and build on top of. It depends on many socio-political factors, some of which relate to present Native American groups that have input on such issues.

GM: Yeah I was gonna ask you. As far as I'm aware, the Seminole Nation has control, as far as the NAGPRA [Native American Graves Protection and Repatriation Act] regulation goes, that all defaults towards the Seminole Nation of Florida.

BB: Yeah, the Seminole and the Miccosukee Tribes in Florida, and to some degree, their associated peoples in Oklahoma. There are Seminoles out there as well in terms of the review process at the federal level. And it's interesting, between those two cultural groups, the Seminole and the Miccosukee, the Seminoles deal with it directly, but because of their belief systems, the Miccosukee, in my experience, have always dealt with it through Anglo attorneys because they don't speak of the dead—this is something you don't do for various religious reasons, so it's a step removed. But to me, and we're touching on things where I'll say it because it's where I stand, I am not a great supporter of NAGPRA, the way it's set up, particularly in our case in Florida. The truly native peoples of Florida are almost entirely extinct, largely due to introduced, unwittingly introduced European disease starting with the first arrival of the Spanish in the 1600s, but so the truly native Florida Indians are gone. Apparently there's a bloodline in Louisiana that's related to the Apalachee or Pensacola native Floridians that Dr. Milanich has done some work on in the past, but for the most part, the Timucua and the Calusa and the people in between, as I call it, the main peoples of Tampa Bay, they're gone, they left no descendants. The Seminole are... their history is they were portions of the Creeks of the greater Southeast who initially came down into Florida seasonally for hunting purposes, and I also point out, not just for hunting deer—the Creeks were largely responsible for the eradication of the last native peoples of Florida. The Creeks worked with the English in the Carolinas to supply slaves to the English, and the first slaves in America, in the historical sense, were native peoples and many of the native peoples of the Southeast and Florida were the slaves—you know, it was only after they were basically wiped out that blacks were imported from Africa and the black slave trade began. So, again, those Creeks who came down into Florida came to be known as the Seminoles, and there's various positions as to the origin of the word: runaways, wild peoples, people apart from the Greater Creek Confederacy of the Southeast. And so they came down into Florida, and again, with a lack of concise records where scientists come from, we don't know to what degree some of the native peoples may have been kept or intermarried into the Seminole as far as bloodlines but as distinct peoples, they're gone, extinct. It's only somewhat tongue-in-cheek, and you might get some responses from this, but I'll say it nonethe-

less, but I've regularly referred to the Seminoles as the first 'snowbirds.' Because the first Seminole people came basically, probably for the most part males, on deer hunting trips down into the peninsula but they would return to Alabama, Georgia and out of state lines of today, where they lived sedentary lives in large villages and so forth. You know, so in that sense, they were snowbirds. So the point that I like... that I would make is that it's where you draw lines. To me, the Seminoles have no relationship to the skeletal remains that we find in Florida. To call them all Indians, and it's a term that I use because the real Indians that I know personally prefer to be called Indians, they do not refer to themselves as Native Americans. To me that is a politically correct, liberal term, which again is my personal experience, however limited, that it is not used by real Native Americans, as far as I know they call themselves Indians. It's where you draw the line in terms of ancestry. And we come firmly up against belief systems, science versus other belief systems, where from this science, mythologies of other cultural belief systems, religions and so forth. The natural versus the supernatural, and clearly I'm coming out of the natural as a scientist, just where I come from. While understanding and appreciating as an anthropologist some of these other perspectives, I cannot support the notion that remains that are thousands of years old should be returned to people who are not the descendants. Now, if a museum has the remains of your grandfather or your great-great grandfather in its collections, I fully support your right and our duty that those remains be returned to you out of respect when you can show that level of descent and association, but simply showing that historically your tribe was in a particular area, to have that as the basis for your claim on human remains that pre-date by thousands of years the appearance of your culture and your people in an area, I find to be totally bogus. Because my interest is in our species, bottom line, and human remains can provide an incredible wealth of knowledge about our species, composition of particular groups of people, their adaptations and maladaptations to particular environments, and in this day and age with the advances in genetic research, the information that we can glean, if we are allowed, that fill in a lot of blank spaces in the history of the peopling of this side of the planet, you know. These big pictures, they are of interest to us... our interests are not shared by one and all, but I also bring up the point that 'Is this not a democracy? Do I not have any rights as a scientist to pursue investigations?' Within the context of respect, of course, and proper attention to respect, but I just have problems knowing... it's curious by comparison elsewhere in the world. In Israel, coming from the belief in the biblical traditions, any remains that are older than six thousand years, I believe is the figure, are of no concern to even the most traditional Hebrews, because they don't exist, or they don't count, and I'm probably not saying this correctly but there's that point. Which is great for science because some of the earliest Archaic human, homo and Neanderthal remains have come from archaeological sites in Israel and there is no direction by the religious components of their society to repatriate and rebury those remains. They've got that line, we don't have that here, and I think the attorneys are continuing to fight for one side or the other for the Kennewick Man's

remains, the late-paleo remains that were found in Washington State... a project some years ago in the face of NAGPRA, the Native American Graves Protection and Repatriation Act for those of you who are listening, you know, the first ruling went for us, archaeologists, to keep the remains so that they could be studied and so forth, as opposed to being retaken and buried somewhere. But that... it isn't... well, things can be appealed and appealed and appealed and appealed and so on, and that's the issue, that's the issue here for us. Now to me, one more point I'd like to make: years ago, a burial mound, or burial area was found somewhere up in the Panhandle, prehistoric... well I beg your pardon, it was native Floridian remains... these people had been Christianized, so it dates to the time of the Spanish, as I recall, the chain of missions had extended from St. Augustine across the top of the north-end of Florida and into the Panhandle. So likely, the Apalachee or the Timucua peoples, the native peoples of Florida, and in so far as this work was done by a university, all very careful attention was made to the laws and NAGPRA and so, after the work was done, it was repatriation time, and the remains were repatriated to a group of Creek natives for a reburial ceremony and it struck me as just, quite frankly, absurd of what I had read and heard about it in that at first we're talking about native Florida Indians that were Christianized by the Spanish who were preyed upon, probably by the ancestors of these Creeks, to be enslaved, to be sold to the English, yet their remains were being repatriated to, I dare say, their enemies or the ancestors of their enemies. That just bothers me about that, but that's just how it went.

GM: No, that's definitely a concern. I mean NAGPRA definitely has its drawbacks, and that's some of the things that I can definitely see as a drawback.

BB: Yeah, the claims made, competing claims made by different, federally-recognized tribes to get the remains back, as well as other items of cultural patrimony, funerary goods or ritual materials of one sort or another. And again, as we get into history where there is documentation, as an anthropologist, I can support these efforts. The collections of the Museum of the American Indian, of the—it's one of these words I've never actually heard, H-e-y-e, whether it's [pronounced] the... the 'High' Foundation or the 'Hay' Foundation, he [George Gustav Heye] was an incredible collector, rich and had a lot of agents all over the country, was buying out and collecting a lot of ethnographic artifacts from still-existing native groups and subsequently, that huge collection was... it's still not sure to me how, but it was obtained by the Smithsonian [Institution], it's now part of the national collection which was originally in New York. Anyway, I can remember visiting the Foundation when it was still in existence in New York and the collection, it was just amazing the amount of material they had, including shelves and shelves of Kachina dolls from the American Southwest. These are religious items that are still comparably, still in use by Southwestern native peoples in their religious ceremonies and belief systems, and he just had shelves and shelves of these that had been purchased or somehow obtained in trade or whatever by some of his agents

and still have, certainly, deep religious meaning to still-living and functioning native societies, in this case, in the Southwest United States, you know. But again, coming back to Florida and coming back to Sarasota County, we don't have that because it is prehistory; it was before recorded history, and it's, you know... you always have to strike a balance because there's a lot of competing interests in a multicultural, multiracial society, in which we live, you know, but I just... I'm sorry to see situations where we lose irreplaceable information, particularly when our endeavors can be entirely non-destructive and there are some instances where under NAGPRA, no analysis whatsoever is allowed.

GM: That's what I deal with working with the Cherokee, for the Eastern Cherokee Band of Indians, the regulation is that the moment that you come across remains, that unit gets shut down and there's no further excavation there.

BB: No, none whatsoever. Not even, like, measurement... in situ measuring, could that be allowed?

GM: You know, and I can respect that in that sense, that's one of the points where I think NAGPRA does serve a purpose because, you know, it goes to what you were talking about, that with, like, your grandfather is in a museum shelf and stuff like that, that's wrong and it's your right to have that back. You've made the point that in the case of living people, this is their ancestry, and a lot of the excavations that I was doing were on reservation land as well.

BB: And you have the historical information that there was a village here, which is like... The only historical archaeology that I've been involved with was in grad school. The archeological field school that I attended was under Dr. Deagan in St. Augustine, and I worked in St. Augustine where the whole story is within a meter of the ground surface, the whole story, from prehistory to today, in the old part of St. Augustine, and where there's maps of the layout of the streets and who owned what house, where, and sometimes which houses had a barrel well in the backyard. I mean, that level of... I'm basically a prehistorian, it is my research interest and most of my work, but of course, as a contractor I deal with whatever I find out there and I do my best to find everything that's out there, within the constraints of systematic sampling, of course. I like to point to people... people ask me 'How do you find these sites?' Well, you put in shovel tests that are about this big and by (?) or a meter deep, unless you hit the water table, of course, and you—in a grid or a staggered grid—you put in the shovel tests regularly over a whole area. But—and I mean it still amazes me today when I'm doing—well, for one that I'm still able to do field work in this (?) variety, but that you can put in a shovel test right here and find a projectile point and if the shovel test had been here, you wouldn't have found it. So there's a fair amount of luck involved in finding information, just in the intervals between, I mean by convention here in Florida in an area in which we consid-

er to be high probability of appearance of cultural material, 25 meters, that's a little over 30 feet, pardon me, 82 feet. Well, who's to say what's between your two shovel tests? So then again, it reflects on what sampling is, it's a sample. I can recall... and I deal with collectors, looters, they're a source of information, sometimes the only information that's available anymore, on some state-funded projects I recall years ago, prior to the construction of [interstate highway] I-75, sites were found and many burials, and large excavations done on the contract to the state and then the collectors go in afterward, and then I remember from one of them, 'Oh them archaeologists, they missed all this stuff, all this great stuff, we went in there and dug up all this neat stuff.' And it's like, in some sections they were trespassing, but the point is that the archaeologists were in there, we did systematic work, we got a representative sample of what was there, what you found thereafter was just more of the same, we're not in it for the stuff, we are not artifact collectors, you know, that's not why we're doing it. Well, you can get that across to some people, but other people it's just 'Whoosh!' [gestures over head] I like to... I make use of this phrase... in talking with some people you determine that you're talking apples and oranges, well with other people you determine that you're talking apples and asteroids. The basic ideology or paradigm, if you want to use the 75-cent word, is that different, apples and asteroids, it's like apples and oranges but apples and asteroids, there's nothing in common. And it's come to my mind again here recently, and a friend of mine has got cable television and we're watching some stuff on one of the cable channels and it just boggles my mind, it is just beyond absurd what some people can believe and in particular the collector, treasure hunter, pot hunter mentality that the speculation that becomes almost instantaneously fact in their minds, that this must mean this and this and this and it's like... if that's a type of logic, it's one that I certainly don't share. I didn't get into any of the specifics because I could be liable if I got into some of the specific programs that I've seen here recently.

GM: That's all right.

BB: Well, given the subject matter at hand, there is just one thing that I might want to touch on so you've got it on tape and you can use it or not. So I largely grew up on the coast of Bishop Harbor in Manatee County and the property my parents purchased, they purchased from a commercial fisherman who'd owned the property for a considerable time, and a commercial fisherman prior to him. And after my parents bought this property, they continued to let this commercial fisherman and his crew operate from our property, and so growing up, at least part of every year here in Florida, I came very attuned to fishing and fisherman and their techniques and what they caught and I have family photographs of some of those early years when I was five or six years old probably. The incredible amounts of fish that were brought in the haul boats, these large, flat-bottomed boats that were just heaped with catch because back then, whether, well I guess at some point even illegal then, but stop netting was still being used, where an embayment

would be closed off and its contents seined to a shoreline and that's what actually brought up and they would have a boat called, well it was called a mule and it was a small boat, with an engine oriented vertically with a pulley on it to pull in the net, to pull the seine into the shore, and they could bring the seine up to the shoreline, catching everything that was in it. Yeah, and the amount of waste, of course, was considerable in terms of, well on level I can remember the hundreds of pelicans and seagulls that got really fat, almost to the point of being unable to fly away from all the 'trash fish' that were not a part of the commercial catch. I also recall the catch boats coming in, as I said, piled high with fish, and perched on top would be snook as long as this table, pretty big female snook. Well, the first thing that was done when they came into the dock was to fillet and skin the snook and bagged it up in plastic bags, and that was called 'scamp' and it was sold, and it was illegal even then, and I'm talking the late 1950s, all right. Now, in the area where I grew up, and here's a connection for you for Sarasota County, at the mouth of the harbor, the south side of the mouth of Bishop Harbor is formed by what is known as Mariposa Key, which is an island that is connected to the mainland by mangrove swamp, so it forms one side of the mouth and in the, probably 1910s, there was a man in Sarasota living on the bay, John Savarese, whom he had a considerable fishing operation and he set up fishing camps along the shorelines all the way up to Tampa and had their fish houses in Tampa and he would set these crews up at various optimal locations to catch fish and then he had a boat, *The Mistletoe*, which was later used for kind of passenger use and mail transport, up and down this part of the coast, including down to Sarasota, he lived somewhere south of downtown along the bay was where his house was, John Savarese. And a man named Harry Walling, who in trade was a bookbinder and engraver in New York State came down to Florida somehow and met Savarese, and Savarese set him up at a fish camp that was established at the mouth of Bishop Harbor in the very late 1910s, early 1920s. And Harry Walling lived out there in the camphouse, if you will, a multi-roomed structure, and he kind of managed Savarese's operations out there until his death in 1944. He died out there. I missed meeting the man but one of the associated fisherman who was alive when I was a little kid, whom I knew at that level when I was a child, and he just a couple years ago, totally by chance, gone down by several hands, I was able to find Harry Walling's diary, he kept a daily diary of his life involving fishing trade out there on the key and just amazing insights and day-to-day life of a man living somewhat of a hermit's existence on the shoreline associated with the fishing industry back then.

GM: Do you have any interesting stories from when you... you talked earlier about natural Florida before they started paving over it and everything, how did that influence your childhood growing up here and some of the things that you did?

BB: Well, let's see, of course my father's business being an excavator had a big impact on my perspective certainly, but I like to make the point that he was an excavator and I'm an excavator, but he used a bull-

dozer and I use a trowel, you know, different approaches. But the before-and-after of my work in terms of my seeing the natural environment before it's stripped and developed has always been bittersweet, because I've seen some really neat things out in the woods as I'm working, and the natural environment, flora and fauna both, and close to home, it's been a positive aspect of my life, in that, over time, both our family place and associated lands which had been planned for a development of up to 80,000 people is all now state conservation lands; the plans fell through for various reasons, through various developers over the years. A huge tract of native Florida, coastal, is now preserved, which would have been totally destroyed otherwise and it's the area where I cut my teeth in doing archaeology, an area where I've recorded some 60 archaeological sites which are now preserved under state ownership and available to future researchers, providing sea level doesn't speed up real fast here soon. Now a point that I neglected to make earlier, part of my interests has always been the beginnings of adaptations to estuarine existence in the Florida bays, Sarasota and elsewhere, and a big difficulty is the fact that sea level has risen since the first peoples lived along this part of Florida, and such that there is no superficial evidence of many of these sites, they are not just underground, they are underwater and sometimes out in the bay, sometimes in the mangrove swamps close to the uplands of our bayside, but finding them is really difficult, a real needle in the haystack sort of deal, but then excavating thereafter is also very difficult and/or expensive because they are below a water table. And these are some of the earliest clues we have of how people did it, a big part of my work is just that, figuring out from the evidence that I carefully excavate, 'How did they do it?' Some things, especially sample size again, if you have a big enough sample, you see patterns and you see a hole that 'Perfect, that's artificial'. There's no doubt, there's no doubt at all. But there are other tools that are like, 'Is this a tool or is it an accident of nature or opening?' So again, the bigger the sample the better, but I say quite often and with the materials that I am analyzing now, where formal tools are very, very rare, looking at things like, 'Well this might have been used as an expedient tool.' Not a formal tool, but something that would serve the purpose once or twice and then be thrown in the trash, you know, but making that determination, well, you're always walking that fine line between rife speculation and something that you can prove. I mean, if you pick out everything that looks like a tool, you wind up with some nice tools, but were they really tools? Because stone has the advantage of giving us evidence of use for it by the micro-fractures and micro-removal of flakes along an edge that was used in using the tool, right? We don't see that in shell, use in shell is virtually impossible to show when it was just an expedient, a temporary tool of convenience, as I call it.

GM: Shells wear and tear pretty quickly, very easily, too.

BB: Yeah, and when you've got a whole pile of them and you're supplying more with every new basket of meat-filled shell that you're bringing in the process to eat, you've got plenty of raw material, you

know. So to go through the efforts of making a formal tool, it kind of makes you wonder, 'Why go to that effort when a whole conch can be used like this against another one to open it?' You don't have to go through all this effort, you know, because they didn't have metal tools, they had very small amounts of hard stone, people call flint, more correctly called chert, to scratch and wear and bore, et cetera, it took a lot of time to do that. It took a lot of time to do that, whereas when something expedient would work just as well, why do you make that effort to make something formal? Of course, once you have made something like this, it's going to last a good long time and it's going to serve you well, including in areas where there isn't any more shell to replace this or be used in an expedient sort of way, so it's maybe worth the investment, the use-life. But even these wear out over time, the breakage builds up, the column breaks away as you're using it in a percussive manner and sooner or later it's exhausted its use and you toss it. But again, keep in mind, they didn't have steel axes, they didn't have steel files, they didn't have general motor tools, and I also think the limitations of the use of firewood. When you think about it today, no steel axes, no chainsaws, I try to put myself in their place, and like 'How would I do it to this level of technology?' You want freshwater, you want elevation, and you're going to need firewood, one of the first things I would do, is to girdle a number of trees close by, because that would kill them, and so over time, they're going to be standing dead wood, natural decomposition, rainstorms, et cetera, branches are going to fall out to the ground and supply you with firewood. You can pick up a certain amount of firewood off the surface, driftwood on the shoreline, bits and pieces here and there but for a fairly, if not permanently, repeated use of one spot, you need fuel, you need fire, firewood. And, but again, keeping in mind that you don't need a big roaring fire, that's conspicuous consumption that you don't need to cook some shellfish, to steam open some clams, you know, a few little twigs and a little fire is fine, but sooner or later if you're in one spot long enough, you've run up against the fuel limitation. What's fairly conveniently close to your central place, campsite, you get to the point where it's too damn far, you're gonna move somewhere else, you know?

GM: Yeah, absolutely.

BB: You know, I try not to use the term common sense over much, because common sense is culturally determined. Now we're talking about other cultures that are, to say, seeing through a glass darkly in the absence of a time issue, so it's dangerous from a scientific perspective to ascribe common sense as a cover explanatory term. As it's become clear by now, I am definitely not a post-modernist. Even though I am a New College graduate, I am not a post-modernist.

GM: It's interesting because I haven't, in my short career so far, I haven't really met many people who weren't post-modernists. So it's been nice to get the perspective from somewhere other than just reading in the books.

BB: It's just so different than where I'm coming from. That everything is culturally relative, that anybody's opinion is as good as anyone else's, that there are no facts, I don't buy that. My suggestion to anyone of that persuasion is to step off a cliff and see what happens. It's called gravity. It's a law. There are laws, there are facts, there is an objective reality, you know. My whole thing has always been, if I speculate, I label it as such. I see it any number of times in doing research, I've gotten burned a couple of times, so I learned, when you're reading somebody and it references something else, go to that original reference and read it yourself. See what it really says. The most extreme example of this, back in the '80s, I worked with a guy on the De Soto Trail Project, yet another effort to determine where the hell De Soto really landed, you know, so I did a lot of that reading and research. And I came across this mention that De Soto had lost a ship, very near the landing place in Florida. And I... 'What?' Because we have essentially three, three-and-a-half original accounts of the expedition. Members of De Soto's secretary, you know, primary documentation, that's all we got, thereafter it's just some just-so stories. Well, him losing a ship near the landing point is nowhere in these accounts, it's not even in the *Florida of the Inca*, which is a huge volume written by a fellow who was ostensibly the offspring of a conquistador and an Incan princess, who wrote the story of Hernando de Soto. There were two members of the expedition that he interviewed in Spain, so this is the least reliable to serious researchers of what we have, and there's nothing, nothing about this loss of a ship. What the hell is this? So I proceeded to backtrack it. Okay, so this guy cited this reference, and I found that reference, and then a couple of steps back to the primary document and it was by a self-styled historian and pretty much at the end of his article, because his argument was figuring out where the hell de Soto landed, and at the end of his article it's like, 'You know what we really need, what would be the smoking gun to determine where de Soto landed would be if he had lost a ship.' That was the original statement, upon which these other people... It's like, are you familiar with the game of telephone in elementary school?

GM: Yeah, yeah.

BB: What starts... What comes out at the end of the chain, there's little to no resemblance of the whispered whatever at the beginning of the telephone game, right? So with this research, 'if De Soto had lost a ship at the landing spot,' it became, he *had* lost a ship.

GM: That's funny.

BB: That's why... and I'm a dinosaur, I'll be the first to admit it in terms of today's technology and the way things are done today... but I always caution people like yourself who are starting out and going into the field, that they don't rely on second and third-hand stuff. Always, whenever possible, go to the original source and read it yourself. So, you got any directed questions or follow-up stuff? Like I said, I have occasional stuff I need to do down here, so it's not a big thing for me to come to Sarasota.

GM: I had one last, kind of like, thought... It's not really a question, but do you have any, I don't know, thoughts on the connection between these people who—these Indians—who lived here in the past, and their relationship with the waterways, and how that relates to our modern society's relationship with the Sarasota-Manatee waterways?

BB: Well, it's been many years ago and I can't remember the source exactly, but it's something like 50% of the humans on this planet live within 50 miles of a coast, or some such figure like that, that a majority of humans on this planet live relatively close to the coastline. And part of it, to me... my perspective is it's like this, you know, at least initially a lot of easily obtainable, delicious resources where, and as Dr. (?) of Gainesville and colleagues down the Charlotte Harbor area have shown based on earlier work, such a resource base can result in a settled, highly-stratified culture. Back then, at the beginnings of our discipline of anthropology, it was like, the law that in order to have a settled existence and a complex society, you had to have agriculture, and that was the basis of complexification and everything that occurred thereafter. Well, no. We have the earlier example, of course, of the Pacific Northwest coast of the Western Hemisphere of great social complexity based on the resources they gathered. So true amongst the historic Calusa of Southwest Florida, because the resources were so rich you don't have to be seasonal, but, and I touched on this earlier, it's tied to bottom-line demographics. Up to a point, if you exceed carrying capacity, and you can't just pull up stakes and move a few miles down the coast to another tidal creek and rich estuarine system because there's already someone there, you come up against that. In many ways I am basically a determinist, an environmental determinist in terms of society and culture, what it can achieve before it runs up against limits. I believe there are such things as limits.

GM: Well there's the environmental limits and then, what you said, your social limits like running up against other populations.

BB: Right, that, and the technology as well, your limitations of technology. Some would claim this day and age and recently that technology can get us beyond that, we can do more with less, more efficiently with technology, with highly complex technologies. There's still material limits. I would come from the perspective that there are the limits of physics. They are called the three laws of thermodynamics. Collo-

quially expressed, the three laws of thermodynamics are: you can't win, you can't break even and you can't get out of the game. Those are the three laws of existence, of reality, physics, it's how things work. And when it costs you more, bottom-line net, if it costs you more than what you're getting out at the other end, you're playing a losing game, you know, especially in the context of present consumerist society where you want to maximize the throughput, the throughput of material possessions and commodities to keep an economic system charged up. Sooner or later, you're gonna run out of raw materials. 'Oh well, we can recycle, we can mine the landfills.' Okay, yeah, and how do you, what operates the mining equipment? Hmm, petroleum. 'Well, we can have solar cells.' Well how do you mine the raw materials to make solar cells. Hmm, petroleum. You see where I'm coming from?

GM: Yeah.

BB: There are limits, there are limits, there is always a certain amount of 'waste' in the cycle of thermodynamics entity, there is a certain amount of heat, energy that is of such low quality, that you can't do anything with it. Well you can do some, with some of it—the exit water at a power plant is warm and the manatees love it. At the plant just north of Ruskin, you can see the manatees, but there is a certain point where you can't get the high-quality energy that you need to operate the technology like this gizmo right here, much less to create all the complex circuitry and chips that composes it. There's a point. 'Okay well, we can mine materials from asteroids.' Okay, how are you going to get the rocket off the earth to get it, and bring it back, and doesn't nasty exhaust come out of rockets that stays in our atmosphere? So I tend to be grounded in material. I'm a cultural materialist, determinist. There's ways of getting around things, but it's based upon taking from something else and (?) of many cultures. The specific ways... For us it was, depending on the cultures and the demographics... We see evidence of trade throughout prehistory. Hell, even the earliest occupations I have at Perico Island, this work that I'm involved in, go back, so far back I've only been able to get one radiocarbon date, and it's somewhere about 1200 BC, so it's in the fiber-tempered era of ceramics, but it's not just fiber temper. There's fiber-tempered pottery, sandstone-tempered pottery, limestone-tempered pottery and there's tradewares, even at that early date, there was a lot going on between, say two... maybe even before 2000 BC up to, say 0 BC, a lot of interactions between different peoples, different cultures that were experimenting with different ways of doing things, trading and/or... Of course, a good friend of mine, Dr. White at USF-Tampa [University of South Florida, Tampa], an archaeologist who is a self-described radical feminist, who I argue with... I mean, I try, but there's all sorts of things that come out of my mouth that I might regret later... but typically, when looking at ethnographic data, ceramics are for the most part made by females, not entirely, but for the most part. So it's like, when we see a type of ceramic here that wasn't made here, we ascribe it to trade and/or women, either by alliances, trading of... acquisition of females for wives or by some level of, if you want

to call it warfare, raiding of one group by another but one of, again from ethnography, one of the principal targets amongst many cultures has been to acquire women, and if that were the case, and further, women were the potters, when they get taken from their home to a new location and they become a part of that culture, well they bring their abilities with them and start making pottery here, just like they made it back home perhaps, or some variation with the women here and how they make pottery, so you get interactions between peoples and technological ideas on how to do things. A continuing curiosity... and again, there's so much more work we can do on these nit-picky things that interest us as archaeologists. These shell tools, there are different styles of these shell tools, and it has still not been determined if maybe there is a chronological progression of the types of shell tools, whereby it would be great if we could determine that, with enough testing we could determine that, because then you could examine a site and then find some shell tools and superficially determine that this dates from generally this era because it's this style of tool. But, you know, we're not there yet, and that is a reality that is yet to be discovered, so there's a lot of work to be done because there are a variety of tool types, and variations between some that could be time-sensitive indicators. Not maybe as sensitive as embossed soda bottles in historic archaeology... It's great at a historic site, where you got a piece of a plate and you got the maker's mark on it with the code that tells you what month and year it was made. You know, we don't have that level of precision [in pre-historic archaeology]. I like to make the analogy that history, the image of history is painted with an artist's brush, but in prehistory, more often it's done with a paint roller.

GM: Yeah, I think that's a fair analogy.

BB: You know, parts of it, we get pretty damn detailed, whether we are picky, picking things apart or sampling and we figure out things in greater detail on some issues but by and large it's a broad, broad sort of deal.

Well, it's interesting what you say about post-modernism, it was my suspicion, but it's just, I don't know, I don't see the utility because this notion of cultural relativism is integral to anthropology from its creation as a discipline. I come from that too, it's nothing to me to say, this regard is culturally relative, in that regard. In speaking of shell middens, I'll give talks and tours to people: 'Well what's shell midden anyways?' Well, basically, it's the garbage of everyday life and early on, speaking of which, especially in Florida, the aboriginal peoples would bury their dead in the shell midden. Okay, well, the impression you get today, with our bias is, 'What? They were burying their people in the garbage? What a lack of respect, of honor to the dead.' Well, back up a second. Garbage is a culturally loaded word from our perspective. That's an ethnocentric perspective from us, garbage is a negatively connoted... the negative connotations of garbage are coming from our culture. It's not necessarily shared by a different culture, and I make the

point that a shell midden could serve, could have served in some cases as a territorial marker for a group of people, particularly when you're looking at a seasonal-round fashion of existence where the shell midden was only... they only lived there part of the year, whether inland, elsewhere, the mounding of the shell could have served as an ownership monument.

GM: Well, it's significant to some degree, because at most archaeological sites there's multiple 'trash' pits, there's multiple pits and stuff like that, but with the shell middens you see a concerted effort to pile all of it in one location.

BB: To elevate. But I mean, down here, elevation, I mean it floods, it rains, it keeps your feet dry to be elevated, so there's a functionality aspect, but then again this is all speculation, but as a monument of ownership and following from that logic, if you bury your dead in it, it makes a further claim to ownership. 'We built this and our dead are in it. It's ours.' But we're touching on elements of common sense and speculation, and again from my perspective as an old-style scientist, it's fun. It's fun to speculate and consider, but how could we generate testable implications to support or not support what I just said, in a scientific sense. Evidence. I've been wondering this for some years amongst colleagues, and some colleagues that I don't know, why the hell they're saying... publishing some of the stuff that they publish because this is light speculation. 'Well yeah, it could be this, or it could be this?' To me it further softens the social sciences. Are you familiar with that dichotomy of the social sciences being soft as opposed to the hard sciences of physics and chemistry and so forth? And you know, it makes us... soft.

GM: I feel you on that one. I don't know, though. Me personally, I see value in speculation, but it's like you said, you have to keep it in context as speculation. I feel like, if you don't allow yourself to think yourself through all of the possibilities, I think you lose the... you start cutting off possibilities, and by at least having some realm of thought that encompasses all of these different possibilities that could explain an archaeological site or an artifact or something like that. I feel like you get closer to the truth, you know, because that's the thing with archaeology, it's really hard to, especially with the prehistory and stuff like that. Truth is really hard to get to and speculation allows you to get a little closer.

BB: It's like a, it's a surrounding... it's like bounding a site by shovel testing and you try to get a ring of negatives but not limiting yourself...

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