

Metal Detecting Hobby Talk

Serving The Metal Detecting Community

MDHTALK News Brief



World Wide Hobby News



May 2023

Metal Detecting Hobby Talk News Brief

Volume 13 Number 158



Support The Hobby

I would like to point out to the News Brief readers that there are a number of organizations taking on the challenge against various types of legislation dealing with metal detecting and gold prospecting. MDHTALK's recommendation is to visit their website and give strong consideration to joining the fight. In some cases your support may be to send emails and / or write a letter to specific legislators or to provide funds to help with the fight. Here are the organizations and a link to their website.

[Go to the Join The Fight MDHTALK Webpage to read more about each of these organizations](#)

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What is a News Brief? The news brief provides a brief look into any news event. The intent of the news brief is to provide you, the reader, with news clips on what was taking place in the hobby last month. To read the whole story select the Article Link or go to [MDHTALK.org](#). There are more news stories placed on the MDHTALK website for April the news stories listed in the MDHTALK News Brief are just a portion of all the hobby related news reported the past month. **The news Brief is now available in Adobe PDF format, there is a link at the top of this webpage.** The news brief is no longer emailed; it is only available on the MDHTALK website and can be downloaded.

The Website's featured article for this month is: Roaming Access to Public Lands has Disappeared for Metal Detectorist and Others [Download This Article](#)

The Ideal Situation is to have complete access to public lands with no restrictions but alas that is far from today's reality.

Today's Reality is that more and more public lands are being put behind man made barriers. These barriers come in the form of laws, regulations and rules that prohibit or limit many personal outdoor activities on public lands.

This is the biggest single issue facing many out door activities (recreational metal detecting, gold prospecting, fossil and mineral collecting, rock hounding, off road vehicles, etc). Access to public lands is not just a metal detecting issue but is also the single most important major issue for the many outdoor recreational activities.

Why are more and more public lands being put off limits to metal detectorist? Metal detectorist are being pushed off of public land because the hobby is considered to be destructive by many public land managers, archaeologist and nature preservationists.

Public land managers find that their many parks, school yards and ball fields are being heavily damaged by irresponsible detectorist. Many new detectorist have entered the hobby and have not taken the time to learn how to correctly recovery a target from the turf. The result is that there is a great deal of damage caused to manicured public parks grass, ball fields, etc. All detectorists must afford the same consideration, care and non-destructive behavior toward public lands as he / she would towards their own lawn and property.

National, state and local historical sites have been plundered for profit by a small number of individuals without any regard to the historical value and significance to the public. Generally, these individuals plunder for profit and in some cases for their private collection.

Today, the metal detecting hobby is portrayed on TV on at least three different programs as a turn-on and go hobby. Some of the shows portray the hobby in a very negative light with destructive target removal techniques and with an emphasis on how much the target is worth (profit). When new potential detectorist view these shows they can be influenced by the bad habits and practices as seem on these shows. This can create the situation where a new detectorist may start practicing the hobby without any regards to the metal detecting environment, to property and the potential public value of objects being found.

There are many new retirees entering the population from lifetime careers who are looking for a hobby to occupy their free time. These new retirees see the metal detecting TV shows and decide to purchase a detector without any knowledge as to where and how to use the detector. Their only knowledge base about the hobby is the TV show and that knowledge is not enough to inform them of the right way or even the incorrect ways to practice the hobby. An inexperienced detectorist with no prior experience, knowledge and the lack of a personal mentor is a detectorist in trouble. This situation can cause the hobby a great deal of damage in the public eye.

In Summary. The lack of individual personal knowledge about how to properly use a detector and recover targets in a park setting is the single major cause of why public land managers limit or remove access. Plus, there are those individuals that use a metal detector to plunder historical sites. The plundering of historical sites brings forward the archaeologist and now you have a very large constituent of people, who will pressure public land managers to remove all access.

So how can metal detectorist gain greater access to public lands?

Local Involvement. The best way for metal detectorist to retain access to those public lands that are still open

in their community and to gain more access to public lands is to work with the local public land managers. Do not wait until a law or regulation is purposed or enacted; at that juncture it is probably too late. To change an existing law can be difficult without a lot of help from the U.S. metal detecting community or in some cases to hire legal help, which can be expensive. Getting the law changed is not an easy task.

All clubs need to have a conversation at their monthly meeting about public land access and how they as a club can make an impact. This should not be a one time event but must be an on going monthly conversation at their club business and board meetings.

A loud uniform voice must come from the local metal detecting club and this can be accomplished by becoming an intergraded part of the local public land management organization or the department's rule setting process. What this means is that there should be a number of volunteer club members who can be available to participate on how regulations and laws should be enacted. These volunteers need to be open minded about how to protect public lands but also gain support for metal detectorist and other recreational activities to have public access.

The club should seek out the local archaeologist organization and volunteer their services to help profile historical sites. This could develop into a good working relationship and may soften their (archaeologist) view about the metal detecting hobby and its participates.

The club should also team up with local law-enforcement and provide evidence search services at crime scenes. This is an excellent PR service and can be very beneficial to law enforcement.

Get the club in the local news services with PR stories about finding lost items for people or doing projects with other organizations. These type of activities can build support for metal detecting in the local community.

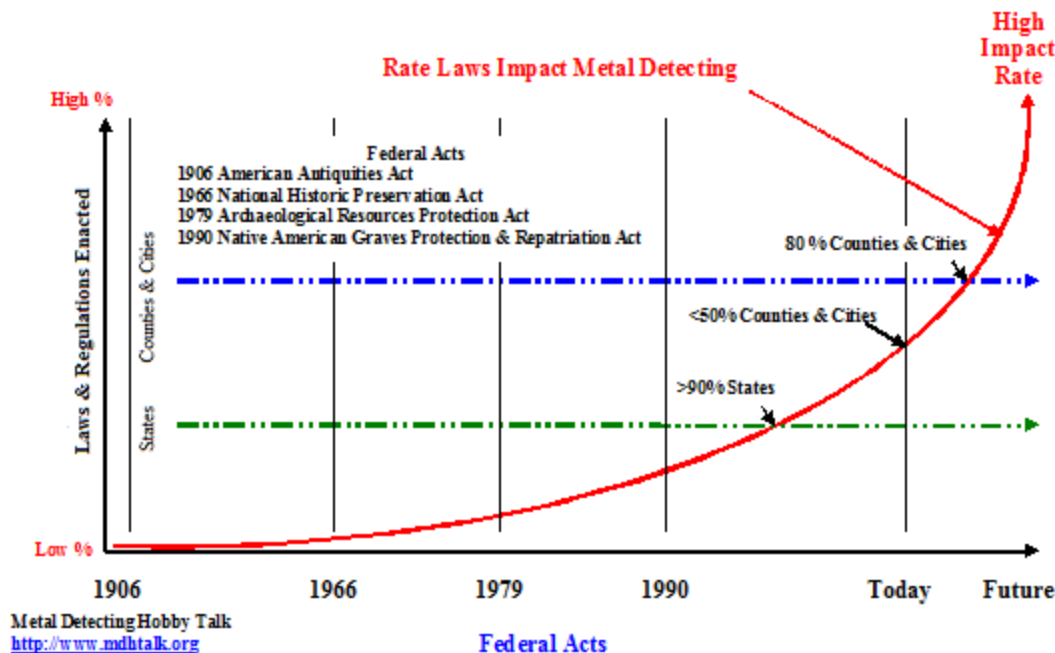
Advertise in the local newspaper about your club's monthly meeting so that new metal detectorist can gain knowledge about the club existence. Also provide a monthly or quarterly introduction to metal detecting class for the public though the local senior center.

State Involvement. There also needs to be a well organized effort to influence state law and regulations for access to state land. To accomplish a state level effort will require that all of the recreational hobby groups in the state work together with a uniform voice to the state policy makers. This means that organizations / groups that represent metal detecting, gold prospecting, gem and mineral, fossil collecting and off road vehicle use, etc. must consider getting together to fight for public access with a single voice. These organization normally has members throughout the whole state and with these members all state legislators could be targeted by the hobby related constituents to gain their help and support on open access issues.

National Involvement. A very similar situation (as state involvement) needs to take place at the national level - all national organization with a public access issue should work together to create one loud voice for access. If this were to take place just think about all the voices across the 50 states that would be focused on one major issue in congress. Think leverage, leverage, leverage.

Finally there are a number of non-profit groups working independently doing fire-fighting on the open access issue - this can be effective but not very efficient. These groups need to stop and look at the big picture. The groups need to operate as one voice on open access issues since they all have the same objective and mission which is to keep public access open to the recreationalist. View some of These Groups at: [Join the Fight](#)

What is the future without change?



Graphic Disclaimer. The graphic below is based on an analysis of the federal acts' time line, state laws, and the review of many county and city regulations. The percentages are a bit of a guess when it comes to the level of law enacted in each entity (states, counties, cities, etc) however, the error factor is probably relatively small.

The vertical axis (Y) on the left represents Laws and Regulations enacted from the very LOW level percentage in 1906 on the bottom of the axis to a HIGH percentage at the top of the axis over time.

The horizontal axis (X) on the bottom represents time by using the various acts passed by congress since 1906. Keep in mind that these federal acts drive almost all state and local laws for access to public land. (National, State, County, City, etc)

The conclusion you could take away from this graphic is that over the last 100 years access to public lands is being either eliminated or

regulated by laws. This is being accelerated at a very rapid pace today and will be even more so in the future. More and more states, cities, county and school

districts are placing limits on their public property against metal detecting. It is time to take real action by all clubs and metal detectorist across the country or our public land access will probably be gone in the next 25 years.

Summary. This article and other similar articles on the MDHTALK News website represent just one small voice for gaining greater access. It is hoped that detectorist and others will read these articles and add their voice to the public lands access troubles.

So [Join the Fight](#)

Here are a list of articles on the MDHTALK website that can be read which will further enforce this article's theme.

Is Recreational Metal Detecting on the Endangered List? [Article Link](#)

Is Recreational Metal Detecting on the Endangered List? ---Next Step [Article Link](#)

Thoughts on Responsible Metal Detecting [Article Link](#)

Metal Detecting Etiquette [Article Link](#)

Hobby Related News

General U.S. and World Wide Hobby News

- Mystery of Roman coins discovered on shipwreck island has archaeologists baffled. [Article Link](#)
- 8 Major Discoveries Made With Metal Detectors. [Article Link](#)
- How Denmark Became a Nation of Metal Detectorists. [Article Link](#)
- Eureka! Aussie Rock Hound Finds \$160K Nugget With Cheap \Metal Detector. [Article Link](#)
- WALLED IN I'm a treasure hunter – there are crucial signs revealing if \$1,000s are hidden in your walls or floorboards. [Article Link](#)
- Lucky bloke finds massive nugget of gold worth £130k with budget metal detector. [Article Link](#)
- Metal-Detecting Drone Could Autonomously Find Landmines. [Article Link](#)
- 'All about the story': Metal detectorist matches long-lost treasures with owners. [Article Link](#)

U.K. News

- Banksy-style graffiti of metal detectorist appears on Cleethorpes Beach following Council 'ban' on activity. [Article Link](#)
- Trial of Bishop Auckland man and co-accused in ancient coins case. [Article Link](#)
- BURIED TREASURE I found 'time machine' ancient treasure in a field... now it could be worth £40k. [Article Link](#)
- Detectorists car up for auction. [Article Link](#)
- Collector 'who tried to sell £766,000 of Viking-era coins' to American buyer told undercover officer 'I'm not a greedy man', court hears. [Article Link](#)
- GOLD HAUL Homeowner finds stash of GOLD BARS worth £120,000 in his flat – and could get to keep them if he follows simple rules. [Article Link](#)
- Watch as Morecambe metal detecting enthusiast makes his find of a lifetime. [Article Link](#)
- Four men charged with metal detecting over an ancient monument. [Article Link](#)
- Diss Museum's metal detector display proves a great find. [Article Link](#)
- Sting operation employed to stop Viking coin hoard being sold, court hears. [Article Link](#)
- Sussex Police remove Brighton beach cordon after mine find. [Article Link](#)
- Calcot treasure hunters bring history to life at Upper Basildon. [Article Link](#)
- Morecambe metal detectorist's emotional reaction to 'find of a lifetime'. [Article Link](#)
- Bronze Age and medieval finds from Wales declared treasure. [Article Link](#)
- I spend my spare time hunting for buried treasure in Huddersfield. [Article Link](#)
- Wiltshire Museum acquires bronze vessels buried 1,600 years ago. [Article Link](#)
- Metal detectorist finds 400-year-old Civil War coins in Wiltshire. [Article Link](#)
- 'I've been mudlarking in the River Thames for 11 years - I've found coins, gems, and three dead bodies'. [Article Link](#)
- Highland detectorists dig deep to help Lodge Averon in Alness boost earthquake relief fund. [Article Link](#)

Other News Sources

- **American Digger Relic Roundup.** For diggers and collectors of history. An hour long program every Monday Night at 9:00 PM eastern standard time. Join your hosts Butch Holcombe, Jeff Lubbert and Heath Jones as they explore the past. Learn more about Metal Detecting, Treasure hunting in all it's forms, and the preservation of history. [April Pod Cast Link](#)
- **Coin World** - Numismatic and Coin Collecting [May News](#)
- **Garrett Searcher** [September Searcher](#)
- **Gold Prospectors Assn of America (GPAA)** - News on legal issues for the gold prospecting community [April News](#)
- **KG & Ringy's** [Archive Podcast](#), [March 23, 2023 Podcast](#)
- **Mel Fisher** [Salvage Update](#)
- **Prospecting and Mining Journal (IMCJ)** [April News](#)
- **1715 Fleet Society** [May Newsletter](#)

Jewelry Returns

- Lost wedding ring found on beach thanks to dog photo, Google and detectorist. [Article Link](#)
- It's the prettiest thing I have': Class ring returned to BG evangelist after 45 years. [Article Link](#)
- Bo'ness wild swimmer's delight after being reunited with her ring lost in lagoon. [Article Link](#)
- A story with a nice ring to it. [Article Link](#)
- Aussie boy's \$20,000 find buried at popular beach. [Article Link](#)
- A South Carolina Police Officer Recovered an Engagement Ring That Was Dropped in a Sewage Drain. [Article Link](#)

W.W.W. Meteorite News

- 'Space race! Meteorites hit Maine, museum offers \$25K reward. [Article Link](#)
- For the first time ever, radar has observed a meteorite fall in Maine. [Article Link](#)
- Magnets wipe memories from meteorites, erasing billion-year-old data. [Article Link](#)
- Harvard Astronomer Believes Meteorite That Exploded Was An Alien Probe. [Article Link](#)
- Massive asteroid passes between Earth and Moon. [Article Link](#)
- Risk of Giant Asteroids Hitting Earth Could Be Worse Than We Realized. [Article Link](#)

- Bronze Age treasure found in Poland. [Article Link](#)
- Norfolk metal detecting: 'Nothing to do with the stresses of today'. [Article Link](#)
- Councillor denies metal detectorists face outright ban. [Article Link](#)
- Metal detectorists dig deep to raise £6,000 for cancer services Fundraising tally reaches £200,000. [Article Link](#)
- Colchester treasure finds are determined during inquest. [Article Link](#)
- Roman gilded silver fragment uncovered in Norfolk baffles researchers. [Article Link](#)
- 'It's a total joke' - Metal detectorists speak out on NELC's Cleethorpes Beach ban. [Article Link](#)
- Metal detecting finds in Norfolk revealed at inquest. [Article Link](#)
- Buried treasure dating back 3000 years discovered in North Wales. [Article Link](#)

North America Archaeology News

- 1,000-year-old Native American canoe brought to the lake's surface. [Article Link](#)
- Archaeologist explains why we need to look underwater to understand our past. [Article Link](#)
- Clues to the Lives of North America's First Inhabitants Are Hidden Underwater. [Article Link](#)
- Archaeologist discusses Civil War sites in Missouri. [Article Link](#)

Event News

Metal Detecting & Gold Prospecting Events.

Now is the time to start planning and getting your club's 2023/24 hunt information on the web. The sooner it is out and available to the metal detecting community the greater the chance for people to see it and give your event some consideration.

Check out your event before going it may have been postponed or canceled.

- **May 03, 2023** (Five Days)
Johannesburg, California
Gold Prospecting Experience: 5-Day Gold Mining Dirt Party!
Lost Dutchman's Mining Assn

- **May 05, 2023** (Two Days)
Rock Hill, South Carolina
Nugget Noggin Treasure Hunt
- **May 14, 2023** (One Day)
Allentown, Pennsylvania
Spring Open Seeded Hunt
Lehigh Valley Treasure Hunters Club
- **May 17, 2023** (Five days)
Lane Huntington, Orgeon
Gold Prospecting Experience: 5-Day Gold Mining Dirt Party
LDMA-Lost Dutchman Mining Assn
- **May 19, 2023** (Four Days)
Johannesburg, California
Gold Mining Weekend Experience: Learn how to find real Gold!
Lost Dutchman's Mining Assn

- **May 20, 2023** (Two Days)
Emporium, Pennsylvania
9th Annual Hunt
Dirt Digging PA
- **May 21, 2023** (One Day)
Hoyt, Kansas
Open National Hunt
Topeka Treasure Hunters
- **May 27, 2023** (Two Days)
Stoney Creek, Winona, Ontario, Canada
Southern Winona Beach Hunt
Rainbows End Metal Detecting Assn
- **May 27, 2023** (Two Days)
Sapulpa, Oklahoma
50th Annual Indian Territory Treasure Hunt
Indian Territory Treasure Hunters Club

[Add Your Event Information Here](#)

[Select here to View the Complete Event](#)

Clues to the Lives of North America's First Inhabitants Are Hidden Underwater Submerged prehistory holds insights on the first humans to live in North America [Web Link](#)

Below the surfaces of freshwater springs, lakes and rivers, sunken landscapes hold clues about the daily lives, beliefs and diets of the first humans to settle in what is now the United States. But submerged prehistory, as the study of these millennia-old sites is widely known, is often overlooked in favor of more traditional underwater archaeology centered on shipwrecks.

“There’s tremendous work to be done,” says Barbara Purdy, author of *The Art and Archaeology of Florida’s Wetlands* and an emeritus anthropologist at the University of Florida. “Fast-developing technology holds great potential to explore what lies below. One day, the sunken world will unlock the answer to how America was really settled and how [our] ancestors lived.”

From Miami to Lake Huron to Warm Mineral Springs, these are three sites driving the conversation about the nascent discipline. Warm Mineral Springs

The hunt for sunken evidence of early humans in North America began some 60 years ago with a swirl of controversy in southwestern Florida. In 1959, retired Air Force Lieutenant Colonel William R. Royal uncovered traces of prehistoric people while diving at Warm Mineral Springs, an hourglass-shaped sinkhole formed when an earthquake collapsed a subsurface cave around 20,000 years ago. Because Royal was “an untrained amateur,” says Purdy, “scientists poured cold water over his bold claims.”

The spring’s main claim to fame is its association with Spanish conquistador Juan Ponce de León, who supposedly identified it as the Fountain of Youth in 1513. Though tales of the explorer’s search have been greatly exaggerated, hordes of modern water worshippers have followed in his wake. “Few who take the waters can deny their healing properties and therapeutic nature,” says Sarasota County Archaeologist Steve Koski.

Royal was the first to dive in the sinkhole, which has a surface circumference of 1.4 acres and reaches depths of up to 250 feet at its center. In January 1959, he spotted stalactites some 70 feet below the water’s surface, in a cave off the main basin.

Aerial view of the Warm Mineral Springs sinkhole

Limestone formations grown over thousands of years, stalactites typically don’t form underwater. According to a geologist consulted by Royal, the last time the sea level was low enough for such structures to form in the cave was 6,000 years ago. On his next dive, Royal discovered a human thighbone on a ledge near the cave, suggesting it dated to around that same era—well before humans had been believed to have arrived in Florida around 3,500 years ago.

Royal “knew [he] had found something that would turn archaeological thinking around,” pushing humans’ presence in the region back by thousands of years, he told Florida magazine in 1987. But the establishment refused to listen to him, even after he uncovered additional human remains, as well as the bones of extinct giant sloths, saber-toothed tigers and camels.

In the summer of 1959, Royal recovered an intact human skull at a depth of about 45 feet. Examining the bones, he noticed what felt like a “soft and slimy soap” at the base of the skull. Royal was convinced it was millennia-old brain tissue—an improbable theory given how quickly brains tend to decompose after death but one that would ultimately prove correct.

Marine archaeologist Wilburn “Sonny” Cockrell with a human skull found at Warm Mineral Springs in 1973

Florida Memory

The discovery happened to be filmed by an NBC crew that caught wind of the project. But scholars shrugged, concluding the story must have been a made-for-TV stunt. In the lab, skeptical scientists raised their eyebrows, too. The brain was as fresh as if its owner had just died. Though wood found in the same sediment as the skull was later radiocarbon dated to 10,000 years ago, Royal and his main collaborator, marine biologist Eugenie Clark, continued to be lambasted by the press. As Clark later recalled, naysayers told the pair to “stick to the fishes.”

Seven years after the brain’s discovery, an independent radiocarbon analysis conducted in Monaco dated the skeleton to between 7,140 and 7,580 years ago. Subsequent studies indicated the brain belonged to a 5-foot-6, 19-year-old woman with a dietary deficiency. “Indisputable proof followed in 1973 when, under 1930s Coca Cola bottles and a 78-rpm phonograph record, Wilburn ‘Sonny’ Cockrell, Florida State’s underwater archaeologist, excavated an entire human skeleton,” says Purdy. The new Warm Mineral Springs find “dated to more than 11,900 ... years ago, making it the oldest human remains in the Western Hemisphere.”

Lake Stanley and Lake Huron

Over 1,200 miles north of the Sunshine State, John O’Shea, an anthropologist and curator at the University of Michigan’s Museum of Anthropological Archaeology, has spent a large part of his life investigating Lake Huron. Around 10,000 years ago, the basin now occupied by Lake Huron was home to another freshwater lake whose water level was 300 feet lower than Huron is today. The submerged lake, which boasted waterfalls as large as Niagara Falls, is known as Lake Stanley after the geologist George Stanley, who found evidence of its existence in the 1930s.

In the 2000s, O’Shea had a hunch that somewhere below Lake Huron stretched a lost prehistoric land. But he wasn’t sure where to begin his search of the lake basin. Caribou—the main food source for the area’s prehistoric peoples—proved to be the key to unlocking Lake Stanley’s chilly, dry landscape, which was once dotted with spruce trees, sedge and sphagnum moss.

For early humans with limited resources, hunting caribou was a necessary pursuit. People could eat their meat, use their sinews as thread, turn their hides into clothing and tents, and make weapons or tools out of their antlers and bones.

Studies of caribou migration patterns in Alaska suggest the animals obsessively follow the same routes seasonally. Armed with knowledge of these paths, “modern caribou hunters create lines out of rock and brush to channel the animals into kill locations,” O’Shea says. He and his colleagues brought in Robert Reynolds, an expert on artificial intelligence and group decision-making at Wayne State University, to gauge whether prehistoric hunters used a similar strategy.

The team focused on the Alpena-Amberley Ridge, a ten-mile-wide land bridge that linked northern Michigan with central Ontario, crossing modern-day Lake Huron on the way. “Reynolds and his students designed caribou automata and let them loose on a virtual world simulation map of Lake Huron’s sunken world,” O’Shea says. “Then computers tracked their movements.”

Simulation of caribou migration patterns on the Alpena-Amberley Ridge

The simulation worked, pinpointing several likely locations for hunting structures across a 27-square-mile area. The researchers mapped the spots—ranging in depth from 39 to 129 feet—with side-scan sonar and autonomous underwater vehicles. They then let loose mini remotely operated vehicles equipped with video cameras. At promising sites, scuba-diving archaeologists photographed and collected soil samples to sieve on land for small finds. Finally, the team revealed a prehistoric hunting master plan.

According to the analysis, early hunters constructed lines of small boulders (measuring up to 1,150 feet in length) to funnel caribou toward “blinds,” 11.5-foot-wide hideouts ringed by five large boulders, some 9,000 years ago. “Pretty simple blinds like these could hide two or three hunters until they were surrounded by the animals,” says O’Shea. The team found two structures where meat was stored during the winter, as well as one stocked with tools.

The Alpena-Amberley Ridge has fossilized the Great Lake’s prehistoric annual life cycle. In the fall, when the caribou’s antlers and meat were in their prime, hunters moved to the ridge to prepare for winter. Families stashed the preserved meat in stone “freezers” on the ridge on Lake Stanley; the hunters braved the frozen lake to remove provisions when they were needed. When spring arrived, the scattered families reunited. The warming months were bad for storing meat long-term, so after hunting, early humans stayed on the ridge, renewing acquaintances and swapping stories of family and survival. Diver Tyler Schultz excavates a site on the Alpena-Amberley Ridge in Lake Huron.

Miami

Back in Florida, archaeologists are poring over Miami’s damp black soil. Most of the downtown has been built over and lost to development, leaving pockets of the Miami River shoreline as one of the last chances to reconstruct the city’s earliest history.

When Ponce de León anchored in Biscayne Bay in July 1513, he wrote in his journal that he’d “reached Chequescha”—a reference to the Native American Tequesta tribe. Based in southeastern Florida, the Tequesta lived in the region for some 2,000 years. Around 100 C.E., they established their main village at the confluence of the Miami River and Biscayne Bay.

“A lot of people who grew up in Miami or moved here think this is a modern city,” says Robert S. Carr, director of the Florida-based Archaeological and Historical Conservancy. “They believe it was created from dredge-and-fill operations by the railroad and hotel tycoon Henry Flagler, and before that it was all swamp. But that’s not true.” Archaeological finds made by Carr and other scholars indicate the Tequesta and other local Native American tribes adopted

a settled lifestyle.

To date, Carr has investigated 18 ancient sites linked to Miami's first inhabitants. In 1998, he unearthed traces of a circular structure measuring 38 feet in diameter at the mouth of the Miami River. Cut into limestone bedrock, the 24 holes that make up the Miami Circle served as the foundation of a Tequesta building, perhaps one used for ritual or ceremonial purposes. Analyses of burnt wood and artifacts found at the site suggest it was used between 500 B.C.E. and 900 C.E. The circle is the only known prehistoric structure of its kind built into bedrock in the U.S.

Since 2005, Carr has focused on pockets of the Tequesta village located less than half a mile north of the circle. In 2013, his team uncovered thousands more ancient postholes, some from 11 circular structures cut into the bedrock. Natural freshwater springs that still bubble up from deep underground today would have enticed the Tequesta to settle in the area, Carr says.

Carr thinks the posthole village is the earliest preserved urban plan in eastern North America. Here, several hundred Tequesta lived on platforms in houses raised above the water level by wooden stilts. They docked their canoes on the riverbank under their houses and used wooden boardwalks to cross from one building to the next.

The Tequesta were expert fishers who stretched nets across the Miami River and built barriers to funnel fish into their clutches. They ate gar and manatees, topping up their diet with turtles and alligators. Their hunters paddled canoes into the Everglades, just five miles inland, to catch deer, raccoons, squirrels, reptiles and snakes.

Beyond waterways acting as a key food source, "water was a critical aspect of the Tequesta's cosmology," Carr says. "The Tequesta believed there were three souls: one in your shadow, one in your eye and the third your reflection in the water where the soul looked back at you."

Water was also a key element in Tequesta mortuary practices. The Spanish name for Key West, an island southwest of Miami, was Cayo Hueso, or Bone Cay (a moniker that got lost in translation when the English mislabeled their maps). When Spaniards arrived in the region in the 16th century, they found bones scattered across the beaches.

"They imagined these were remains of victims slain by fierce cannibals and heathens," Carr says. In truth, however, "they were just part of the mortuary preparations for secondary burials. The bodies were laid out near the water, where they were subject to decomposition and desiccation from buzzards, the weather and time. ... This process is all linked to water."

The Tequesta village on the south bank of the Miami River and nearby Miami Circle may have been the settings for similar ritual acts focused on freshwater. The name Miami is derived from Mayaimi, which translates to "big water" in the Tequesta language.

In 1567, Pedro Menéndez de Avilés, founder of the colony of St. Augustine, convinced the Tequesta to let the Spanish build a fort and Catholic mission at the mouth of the Miami River. Though the Spanish abandoned the mission soon after, European contact—and the violence, disease and enslavement that followed—signaled the end of the Tequesta's way of life. In the 18th century, the few surviving Tequesta resettled in Cuba.

The potential for studying America's sunken past is bottomless. Waterways' oxygen-free environments keep archaeological finds astonishingly well preserved. Wooden artifacts abound in Florida's freshwater, from 185 canoes dating back 6,050 years to a statue of a seated figure recovered from a lake in Okeechobee County in 1921.

Elsewhere in Florida, researchers are studying a sinkhole in the Aucilla River, south of Tallahassee, that served as a prehistoric watering hole for humans, mastodons, bison, bears and dogs. Dated to at least 12,200 years ago, it's the earliest documented site of human activity in the southeastern U.S. To the northwest, in Michigan's Grand Traverse Bay, underwater archaeologist Mark Holley has discovered evidence of a more than one-mile-long line of boulders possibly used to herd caribou. One of the stones features what appears to be a petroglyph of a mastodon. Both sites hold enormous untapped promise. But the future study of submerged prehistory is far from secure.

The city of North Port, owner of Warm Mineral Springs, understandably hopes to cash in on the site's therapeutic qualities. A plan that would have maintained the spring as a park, with new walking trails, a canopy boardwalk, lookout towers and an event pavilion for weddings, went nowhere after developers estimated the cost at \$18 million, twice the \$9 million allocated for the restoration. The latest proposal calls for a resort with 300 residential units, a wellness center, a restaurant and a Native American history museum.

Some locals are up in arms over the planned development. An estimated 70 percent of Warm Mineral Springs remains unexplored, including a 148-foot-deep debris cone that likely contains a trove of late Pleistocene megafauna, as well as weighted bundles dropped into the spring during rituals. Construction work could shake the ground so much that this submerged prehistory crumbles away.

"The city has been [a] good steward of the underwater archaeology by restricting diver access," says archaeologist Koski. "Warm Mineral Springs should not be open for commercial tour dives or access without sound professional academic research. ... There is still great potential for research. There are likely more undisturbed human remains ... and evidence of activities of the people who visited the site."

The future for some pockets of the Great Lakes looks far brighter. With support from the National Oceanic and Atmospheric Administration, O'Shea's team has started mapping more of the Alpena-Amberley Ridge. Submerged offshore areas that were once islands could hold early signs of human activity.

O'Shea says, "The Great Lakes have tremendous potential for expanding our understanding of prehistoric America. There are portions of the archaeological record that simply do not exist anywhere else."

Archaeologists excavate the site of a Tequesta village at the mouth of the Miami River in May 2013.

In Miami, archaeologists working in the shadow of skyscrapers, private marinas and waterfront restaurants must balance the interests of developers with public sentiment and their own quest for knowledge. A dig currently underway in the Brickell neighborhood has uncovered pottery, tools and animal bones associated with the same Tequesta village previously studied by Carr. But representatives from the American Indian Movement and the Miccosukee Tribe

of Florida have called for all excavations at the site to stop.

Though arrow and spear points discovered during the dig appear to date to around 8,000 years ago, Carr says radiocarbon testing places activity in the village between 750 B.C.E. and 1763. He theorizes that the Tequesta people found the prehistoric objects and brought them back home, unwittingly providing an example of ancient curiosity confusing modern archaeology.

As in all great cities, the pace of progress can't be stopped. The final vacant lot in Brickell is being excavated ahead of construction of new residential buildings. A movie theater already covers the section of the Tequesta village identified by Carr in 2013. A Native American cemetery lies under a Whole Foods in the same vicinity.

Miami Circle has been admirably excavated, but its importance is already fading. The city has no reconstruction of a Tequesta structure, nor a visitor's center for education and tourism. Today, the circle is mostly used as a dog park.

"Let's integrate this prehistory into the consciousness of Miami and make it accessible for the public and tourists," Carr suggests. "That has not happened. It lacks the respect it needs."