Gulf Shore Style

HISTORY

Diving Into Yesterday

by Betty Sadtler

SKIP WOOD

Wilburn Cockrell and Dr. Greg McDonald of the Cincinnati Museum of Natural History discuss the removal of saber cat bones from the site.

A STONE AGE HUNTER, spear poised, stalked a saber-toothed tiger near an ancient water hole from which rose clouds of warm sulfurous mist. The man hurled his coral-tipped weapon, striking the great cat. It lunged at the hunter, raked him with its huge claw. Howling with pain, the bleeding cat dragged itself down the slope of the sinkhole to a ledge overhung by rocks, crawled far back into the crevice to hide and lick its wound—and went to sleep for the last time.

The hunter also died, and his tribesmen buried him, curled around his spear thrower, on the same ledge not far from the crevice under the boulders.

That ancient water hole, located about 12 miles from the place we now know as Venice, Florida, is called Warm Mineral Springs and is one of the most significant

Retrieving Florida's history the hard way—under water.

underwater archaeological sites in the Western Hemisphere.

A number of terrestrial archaeological sites are being worked in Southwest Florida—among them digs at Marco Island, Horr's Island, Useppa, Pine Island, and Manasota Key. But the underwater site at Warm Mineral Springs is unique in the archaeological world because it gives new dimension to the settlement and subsistence patterns of early people.

In 1973, W.A. "Sonny" Cockrell, a state underwater archaeologist, retrieved a well-preserved skeleton of a prehistoric man from a ledge 40 feet down the spring's wall. This five-foot, four-inch Stone Age hunter had been buried in the fetal position, curled around his beautifully crafted spear thrower called an atlatl.

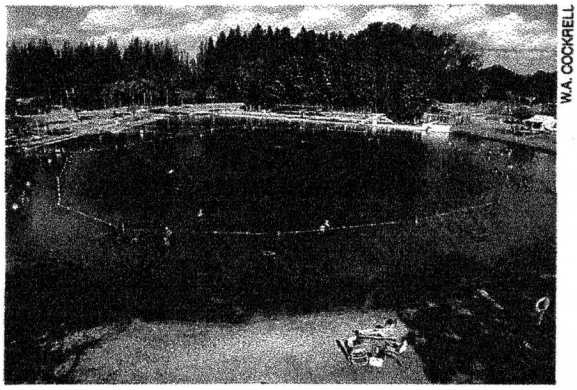
Weeks later, Cockrell brought up the skull of a saber-toothed tiger with its seven-inch canine tooth, vertebrae, thigh, and cheek bone.

Carbon-dating tests verified the remains were 10,300 years old, proof that humans existed at the same time as the saber-toothed tiger. Until then, textbooks said all Pleistocene animals had become extinct before man arrived.

The find also provided evidence of the earliest intentional burial ever discovered in North America and of the earliest known use of a compound spear thrower in the Western Hemisphere.

Archaeological excavation, even on land, is a painstakingly slow, gritty business. In shallow water, it is dramatically more difficult. At 160 feet, where Cockrell and his colleagues have done a lot of digging, the challenges are even more formidable.

Unlike the clear-water springs of north Florida, the water at Warm Mineral Springs is 17,439 parts per million chloride, sodium, sulfate, magnesium, and other minerals. Supplied by several underground streams of the Florida aquifer, about 19,000,000 gallons surge through the cavern daily and flow out into



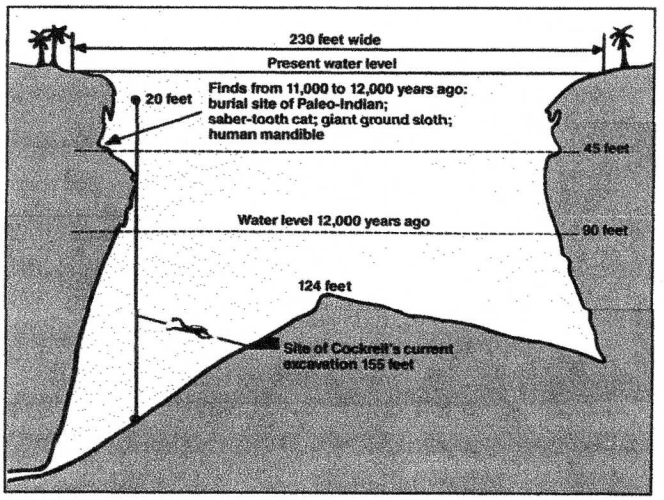
W.A. COCKRELL

the Myakka River at a rate of 17,000 gallons per hour. About 20 feet below the surface, the water contains no dissolved oxygen, so no bacterial action can take place. These conditions remarkably preserve organic remains, but make diving hazardous.

Visibility is also a problem. At 15 feet, light fades. At 40 feet, the waters are pitch black. At 130 feet, the surface appears like a faint star. Divers carry powerful lights and keep a visual reference on the downline they have installed by the spring's wall.

At 160 feet, most divers must remain motionless and concentrate very hard just to hold a thought. Nitrogen narcosis may make them numb, woozy, and useless, not remembering to breathe, not knowing which way is up, and not even caring. The dive teams must keep ritual mental checks and reassessment of each other, of techniques, and of equipment as they work. "Nothing drains one faster than swinging a hammer at that depth,"

LEFT: Warm Mineral Springs, where one of the most significant underwater archaeological excavations is taking place. OPPOSITE PAGE: Wilburn Cockrell displays a bone artifact from a depth of some 43 feet.



says Cockrell. "We deal with apprehension at every dive."

Divers carry double tank rigs, heavily weighted to counterbalance their eventual buoyancy as air is used. Hooked to loops on their gear, they carry hammers, shovels, fanning brushes stiff with epoxy, other tools, and video equipment.

Pressure at these depths is six times greater than that of the earth's atmosphere and bottom time is limited to 30 minutes. Divers must allow almost an hour to ascend, beginning decompression at 30 feet, staying there two minutes. Staying time at 20 feet is 11 minutes. Some divers add time at 10 feet, breathing pure oxygen to further rid their bodies of nitrogen. Navy decompression tables are strictly followed.

Over the past 17 years of diving, Cockrell has had "the bends" twice, caused by ascending too rapidly. Some divers have lost teeth when nitrogen bubbles get between the gums and a filling—"teeth just explode"—and some have had hearing problems caused by pressure.

Skip Wood, former Navy SEAL, is head of diving operations and works with the teams to combine safe diving rules with archaeological land practices. Ten percent of all project field time is given to training and maintenance of skills and rescue procedures for those engaged in diving. They've had some close calls, such as falling boulders and blackouts on ascent, but no serious accidents and not one fatality.

"Archaeology is one of the most valuable tools for examining the range of humanity," says Cockrell. "We can look around us today as anthropologists and see the range of behaviors in living people, and when you go into archaeology you can look into the past . . . You can see human behavior on a linear perspective. You can understand far more about

SKIP WOOD

what humanity is and even understand the human. It unlocks the past, tells us who we are, where we have been. We can look at the record right here in Mineral Springs . . . It's loaded with answers."□

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