



STAFF PHOTO/BARRY MCCARTHY

Excavators Gordon Edmund, center, and Mitchell E. Hope lift plaster-covered mammoth bones, while Col. Bill Royal works in the background.

Unearthing a Mammoth Find

By **SALLY BECKMAN**
Staff Writer

In what may be the most important archaeological find made in Southwest Florida, excavators have found remains of a prehistoric mammoth, which they believe to be at least 100,000 years old.

William Royal, who has been working on a grant from the Mote Marine Laboratory in Sarasota,

discovered what he believed to be a bone from the mammoth's hind leg last weekend at Salt Creek, about a mile from the Warm Mineral Springs site, near North Port.

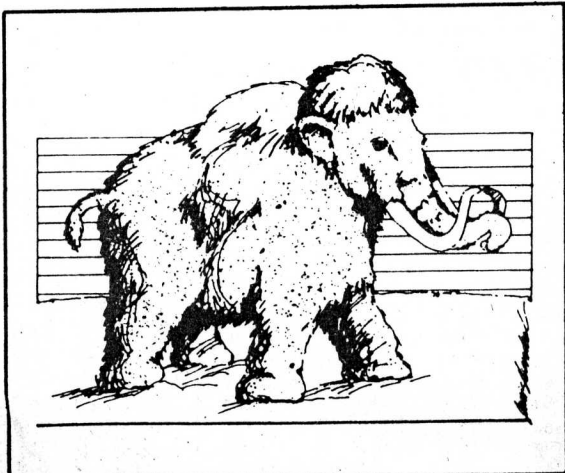
Royal asked Gordon Edmund, a friend who works as a curator at the Royal Ontario Museum in Canada and winters in El Jobean, to assist him in removing the rest. Edmund and Royal, with the help of some friends, carefully removed leg bones, vertebrae, ribs and two teeth — all of which, they think, came from the same mammoth.

Edmund, who left Saturday to take the bones back to the museum, said that they belong to a prehistoric mammoth that stood about 13 feet tall at the shoulder.

Huge beasts that were closely related to modern-day elephants, mammoths had tusks that could grow 13 feet long, and some had hairy bodies that kept them warm during the Ice Age. They are thought to have originated in India about 4 million years ago and spread to other continents, reaching North America about 3.5 million years ago. The last of the mammoths died out about 10,000 years ago.

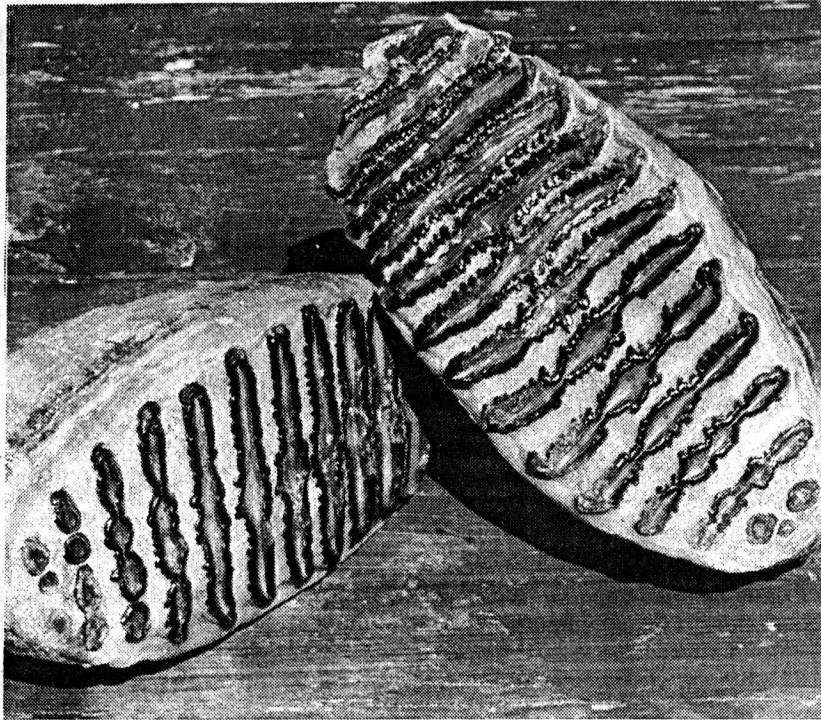
Royal said he thinks that the mammoth remains that he found at Warm Mineral Springs may be 2½ million to 3 million years old, but Edmund is more cautious. "I would say it's in the ballpark of 100,000 years old," Edmund said.

Even with that conservative estimate, the mam-



STAFF GRAPHIC/JANIS DUNCKEL

The original possessor of the bones?



BARRY McCARTHY

The grinding surfaces of two mammoth teeth recovered from Salt Creek are displayed.

Mammoth Discovery Unearthed

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moth would predate other remains discovered in the Warm Mineral Springs area by at least 90,000 years. Archaeologist Wilburn "Sonny" Cockrell raised 10,000-year-old Indian remains from the spring in a celebrated 1973 dive.

There is disagreement over the age of the mammoth because Florida's geology is more complex than that of other areas, said Mitchell Hope, an Englewood anthropologist. During the past two million years, Florida has been submerged under the ocean four different times, eroding many layers of deposited earth, Hope said.

Under conditions where erosion is not so intense, scientists can estimate the age of fossil remains by examining the soil layers in which they are found. But in digging at Royal's site, the anthropologists discovered a gap of several million years in the soil layers. The upper soil layers were formed about 100,000 years ago, Royal said. The next layer was blue clay, known to have formed 2½ million years ago, he said.

Warm Mineral Springs, located just north of North Port on U.S. 41, has long been recognized for its therapeutic hot-spring waters. But the qualities that attract people seeking relief from aches and pains, also have made the springs a haven for archaeologists.

Because the spring water contains little dissolved oxygen, the site is virtually free of the bacteria that wear away most remains. Bones found in Warm Mineral Springs are remarkably well-preserved.

Edmund said the mammoth bones were an unusual find because they all appear to be from a single mammal. "It's interesting. You usually find parts of many different mammals all mixed together," he said.

He added that the mammoth is not only unusual, but also significant, because of its age. "It is material that should be in a museum to be cared for," he said. "It's that significant."

To be certain not to damage any of the bones, Royal, Edmund and crew took painstaking measures in removing the fossils.

After carefully removing each piece, they spent a week preparing the remains for the trip North. Wrapping each piece much like a surgeon constructs a cast, they covered each bone first with wet paper towels, followed by two to five lay-

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... Dr. Gordon Edmund

ers of burlap wrapped in plaster, Edmund said.

Edmund will study the remains at the museum and try to determine the mammoth's age. The bones probably will have to dry out for as long as six months before scientists can begin to do that, however.

Royal plans to pay for the dating process with part of his \$20,000 grant from Mote. After the mammoth has been studied, it will be put on display at the museum, Edmund said.

In the meantime, Royal plans to continue looking for the remainder of the mammoth. "The rest is still there," he said. "We'll be looking for it, inch by inch."

Royal has been exploring Salt Creek, which runs from Warm Mineral Springs past his property and into the Myakka River, for two years. The North Port resident and some friends have collected more than 800 fossils, including remains of whales, giant armadillos, camels and tortoises.

While Royal's discovery of the mammoth may bring him some well-deserved attention, he has always been overshadowed by Cockrell, who had taken center stage as head of the excavation project at the springs since the early 1970s. Cockrell has made some spectacular finds, among them the remains of four humans, a saber-toothed cat and a ground sloth, all at least 10,000 years old.

Other excavations in the area also have proved successful. A 9,800-year-old wooden throwing stick was found at Little Salt Spring about a decade ago - and is said to be the only known discovery in the world of that type of prehistoric tool.

But more recent excavations have been disappointing. John Gifford, an underwater archaeologist and staff member at the University of Miami, led an expedition to the spring in May 1986 and uncovered skeletal remains that showed very little evidence of flesh or other organic material.