## Washington State History Mr. Aitken - Manis Mastodon

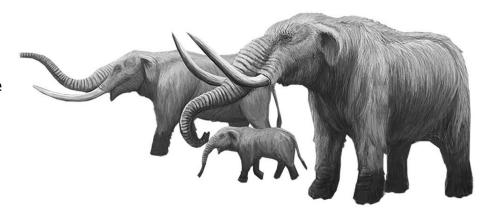
What does the Manis Mastodon tell us about the earliest people to live in the Pacific Northwest?

## **Manis Mastodon**

The mastodon kill site on Emanuel Manis' property near Sequim, Washington was discovered when he was digging through six feet of peat to make a small pond. Manis found two fossilized tusks that he thought had belonged to an elephant.

When Washington State University archaeologist Carl Gustafson excavated the pond site in 1977, he quickly recovered one of the animal's ribs with a bone projectile point in it. It was later determined from analysis of the animal's tooth that the bones belonged to a mastodon.

A mastodon is an animal that is related to elephants (and wooly mammoths). They inhabited North America after the end of the last ice age, until they became extinct about 11,000 years ago. They had a thick coat of fur, like mammoths, but mastodons were smaller than mammoths, and had a



different shaped skull and tusks. They could be as much as 10' tall and weighed up to eleven tons.

Organic material found near the Manis mastodon remains was dated to about 14,000



years ago. Controversy ensued, with members of the archaeological community refuting the dating because it hadn't been done on the actual bones. In addition, multiple theories emerged as to how the bone fragment had come to be embedded in the mastodon rib.

Years later, in 2011, Mike Waters (a researcher from Texas A&M university) announced that he had dated purified collagen in the bone, and that it was 13,800 years old. CT scans and 3-D projections of the rib with the projectile in it show that the bone fragment is, in fact, a spear point.

For Waters, Manis wasn't an isolated case. He has recently re-excavated a sinkhole in Florida. There, in the 1980s and 1990s, archaeologists discovered that ancient people likely killed a

mastodon in the sinkhole. They found several flakes from stone tools and a mastodon tusk with cut marks on it. Dating nearby seeds returned ages of about 14,400 years old.

Although no human remains were found at the Manis Mastodon site, the spear point confirms that the mastodon must have been killed by humans more than 13,000 years ago.

The site also turned up remains of caribou, bison, and plant fossils. Bones of the bison showed evidence of butchering by humans.

The Manis Mastodon site is located near Sequim, WA.

[Excerpt from Archeology Magazine, edited by Mr. Aitken for school use.]



Photo: Emanuel Manis on his backhoe on his farm near Sequim in 1977. He thought the tusks were from an elephant. Later examination by scientists revealed that the tusks were from a mastodon, and that the mastodon had been killed by humans more than 13,000 years ago.