

Fragments of a tusk (top) and molars from a 15,000 to 25,000-yearold Woolly Mammoth found at Buena Vista Road work site.

## Fragments of giant mammoth found

By ANDRE NEU

excavating a Granite Construction Co. site off Buena Vista Drive have uncovered fragments of a mammoth, the giant hairy elephant that walked the earth during the Pleisticene epoch which began a million years ago.

The fragments, discovered by the ex-cavating machine operator Bill Hatch and construction superintendent Bob McDonald, are judged to be from the end of the epoch, around 15,000 to 25,000 years old.

Found were three pieces of molars and a

large chunk of one of the tusks.

William Miller, a science teacher at Soquel High School and palentologist for the Natural History Museum in Santa Cruz, has tentatively identified the fragments as coming from an animal from the genus Mammuthus, commonly known as the Woolly Mammoth.

He believes further that it may be one of the species "primagenus," a conclusion made possible by discovery of a similar tooth in the Opal Cliffs area several years ago that was later determined to be of that

species.

Miller would like to have positive identification and dating made on fragments, but the carbon testing process is expensive, \$500, and no funds are presently available for it.

The tusk and teeth pieces are now in the office of Glenn Dorey, Granite Construction Co. vice president. The company has given the pieces to the museum, Miller said, and once they are cleaned and an area set up for them, they will be put on display.

Discovery of the fragments was made last week at a level between 65 and 75 feet below the surface, Dorey reported. The excavation is for a quarry operation needed for the

freeway construction job.

Since then, excavation work has continued but Miller thinks all fragments "from this individual mammuthus" have been found. "I don't think there's much chance of finding anything else from the same in-dividual," he said.

Miller added, however, that workers at the site have been told what to search for during excavation "and are pretty keyed up and looking for other bones."

The palentologist explained that the fragments were uncovered in a gravel deposit, which is not a good area for fossils. He believes the area was once a gravel bar at the inside turn of a river where various material deposits collected.



ft. high Mammoth: 11 at shoulder; tusks to 13 feet long. -0-

The mammal, he conjectured, had probably been dead and decaying a long while before its remains were washed down the river and settled on the bar. Most of the bones scattered and were lost but the molars and tusks are most resistent to decay, Miller said, and these survived on the bar.

The Woolly Mammoth is an extinct ephant line. The other line is the elephant line. mastodons which led to the breed of elephants now living.

The American mammoths attained huge sizes, being perhaps the largest of all elephants, attaining heights of up to 14 feet. Their remains were found only in deposits dating from Pleisticene times. They were the only elephants which adapted to life in cold climates, having coats of long reddish hair.

When warm interglacial periods came, the mammoth migrated to the north, following the retreating ice fields. The animals were hunted by late Paleolithic man and some frozen mammoths have been uncovered in Siberia, completely intact.

Most notable item of the mammoth, perhaps, was its tusks which were spiral. Their maximum length was about 11 feet, but Miller estimates the size of the tusks found here when full were about six feet in

Among the other inhabitants hereabouts when the Woolly Mammoth walked the land, said Miller, were such creatures as camels, giant sloths, saber tooth cats, and little horses and giant wolf-like animals.

Also during that period the shoreline was probably much different, with the sea level from 250 to 300 feet lower than it is at

present.

"It's really hard to imagine what this county was like back then," Miller said, but we're finding more and more material to fill in that picture."