ANCIENT GROUND SLOTH JOINS TUALATIN’s PREHISTORIC ANIMALS

By Yvonne Addington, President of Tualatin Historical Society

Tualatin, Oregon. Prehistoric animals roamed the Tualatin area 10,000-15,000 years ago at the end of the Ice Age. The discovery of several types of animal remains in the area is causing new national interest of scientists who study and consult regarding prehistoric bones, fossils, ice age floods and the environment in which the ancient animals lived and died.

Recently parts of a prehistoric animal, in addition to Tualatin’s mastodon and a mammoth tusk, have been identified from remains found in the Tualatin area. The partial skeleton was found in the late 1960s-early 1970s and until recently has been identified incorrectly as a mastodon.

It is a Harlan’s Ground Sloth according to Portland State University officials who recently suspected the bones were not from a mastodon and sent evidence to an expert at the National Park Service who confirmed their suspicions. According to descriptions from the Robinson Library website, ground sloths were large relatives of the modern two-toed and three-toed sloths and were roughly 20 feet long and weighed about 3 to 4 tons. They resembled a huge furry brown bear but had a long broad tail. The ground sloths had very large claws, even though they were herbivores. The shape of their hip bones indicates that they could stand up on their hind legs, allowing them to reach high up into trees. It is likely they walked on the sides of their hind feet and backs of their forefeet according to the scientists.

In 2008, Dr. Robert McDonald, a chiropractor in Aloha donated to the Tualatin Historical Society, the sacrum and two vertebrae of this prehistoric animal, identified by Portland State University in the 1970s as a second mastodon found in the Tualatin area.

In 1962, the first mastodon partial skeleton, now featured in the new Tualatin library and Tualatin Heritage Center was dug up by Portland State University students John “Bobby” George, Ron and Gordon Sund. It was located in the organic bottom land west of Interstate 5 and south of the Fred Meyer store in Tualatin. Now a retired dentist, at the time Dr. George needed to do a college paper and had been told by the Tualatin Town Marshall Charlie Roberts when he was a young child, where “a big elephant carcass” was located in Tualatin. After turning in his college papers, he left the mastodon bones, except for a tusk and two molars.

In 1974, Yvonne Addington, first city manager of Tualatin, saw the bones displayed at PSU as the “Tigard Mastodon” and knew better. She had typed Dr. George’s college report in 1962.
She called to have the display information corrected. PSU agreed and asked if Addington wanted the bones since they were running out of room. She reluctantly accepted, knowing she couldn’t personally take it home and the city council at the time would not value such a find.

The unassembled bones were kept in a pine box in the city shop closets. Addington left city employment in 1982 and sometime thereafter, the city gave the bones to the Portland Zoo.

In 1992, Loyce Martinazzi, co-founder of the Tualatin Historical Society (THS) asked to have the partial mastodon skeleton returned to Tualatin. THS, the city, citizens and students paid the University of Oregon to prepare a wall mounted displayed of the bones for the city library. In 2007, the mastodon was restructured in front of a huge glass etching and is now the featured attraction at the new Tualatin city library just a few blocks north of where it was originally dug up.

In 2007, Dr. George donated the mastodon’s tusk and two molars to the Tualatin Historical Society which are now on display at the Tualatin Heritage Center.

In 2008, Dr. Robert McDonald, a chiropractor in Aloha, donated the prehistoric Harlan’s Ground Sloth sacrum and vertebrae to the Tualatin Historical Society. He had purchased them a few years before from a patient and friend, Ernest Rowland. In the late 1960s or early 1970s when the Unified Sewage Agency started construction of the Durham Wastewater Treatment Plant, Rowland was an oiler of construction equipment. On the day the bones were excavated, he was watching a backhoe operator digging in a marsh in Fanno Creek, approximately ¼ mile from where Fanno Creek empties into the Tualatin River at the new Ki-a-Kuts Pedestrian Bridge. “It was so mucky and swampy they had to drive equipment over big steel mats and move the mats ahead of the equipment”, Rowland said. Suddenly he observed something solid in the backhoe bucket. He asked the operator to lay it on the ground, and then carried it to a shed near a closed country school (probably Durham Grade School) where he and the workers had been parking. He found a water faucet, washed it off and found the vertebrae attached to a back bone, and “you could wiggle them.” He took them to Portland State University where he was told they were part of a mastodon skeleton over 10,000 years old. He said PSU displayed them for awhile, then gave them back to Rowland. It is now on display at Tualatin Historical Society and its identity has been corrected from mastodon to Harlan’s ground sloth. Upon word of the correction, Dr. McDonald said he still has one vertebra displayed in his Aloha chiropractic office and intends some day to donate it to the Historical Society.

Several prehistoric animal carcasses thought to be 10,000-15,000 years old have been found in and near Tualatin in recent years and have become of national interest to scientists who study and consult regarding the prehistoric bones, fossils, ice age floods (known as Missoula Floods) and the environment in which they lived and died.

Recently, archaeologist Danny Gilmour, who is preparing his master’s thesis at PSU regarding the existence of the prehistoric ice age animals in the Tualatin and Willamette River Valleys,
took samples of several carcasses, including the two Tualatin skeletons to the University of Arizona to radiocarbon date them with modern dating equipment. The results of the radiocarbon dating and Gilmour’s thesis are expected soon.

With recent improvements in the dating equipment, it will be possible to get very close to the animals age and how long ago they lived here, Gilmour said.

What was not expected by Tualatin officials was the suspicion of Gilmour and Virgina Butler, Professor of Anthropology at PSU, that the “Tualatin River-Fanno Creek” sacrum and vertebrae were not from an American mastodon but from a Harlan’s ground sloth.

Butler and Gilmour sent a series of photos to Dr. Greg McDonald, the Senior Curator of Natural History at the Park Museum Management Program of the National Park Service. He is a recognized leading expert in Late Pleistocene fauna, with a specialty in extinct ground sloths. He identified the bones as Paramylodon harlani, Harlan’s Ground Sloth. According to Dr. Greg McDonald, in scientific terms for parts of the backbone, the bones are a part of the “synsacrum in which the transverse processes of the proximal cadals fuse to the ischium with the last (third) lumbar vertebrae attached to it as well”. Lacking the radio carbon dating information at this time, Gilmour estimates the age as post-Missoula floods time but no older than 15,000 years.

In addition to Tualatin’s mastodon and Harlan’s Ground Sloth, several prehistoric specimens have been located in the Tualatin area and nearby which is causing scientific interest and the reason for Gilmour’s study of the area. A mammoth tusk was found near Tualatin-Sherwood Road and parts of a mammoth skeleton was found in McMinnville in 2008. A bison antiquus or ancient bison skeleton was also found by Woodburn High School students in 2009. The University of Oregon Museum of History has almost an entire carcass of a mammoth found in the Hillsboro area years ago. An Oswego woman has molars from a mastodon found at Langdon Farms south of Wilsonville and several other bones are said to have been found and reburied at the Aurora airport and near the Tualatin River Refuge. More discoveries are suspected but the inaccurate assumptions that prehistoric animal bones are illegal to possess have kept people from disclosing their possessions. Underground utility contractors could look out for them.

The ice age mammals lived in the Tualatin area at the same time as the several great Missoula Floods backed into the Tualatin, Yamhill and Willamette Valleys from the Columbia River over 10,000 years ago. The height of the floods in Tualatin was about 350’ deep (Tualatin’s elevation is 124’ above sea level) In early 2010, three multi-ton “erratics” or granite rocks from as far away as Missoula, Montana were recently found in the Cipole swamps south of Herman Road in Tualatin and moved to Fields Park on the Tualatin River, in the Willamette community of West Linn where ice age interpretative signs exists. It is believed the Willamette Meteorite found in 1902 above the Tualatin River (and now in the New York Museum of History) came with the floods and the floods may have contributed to the extinction of some of the prehistoric animals. The granite erratics (granite is not a local rock) were originally attached to melting icebergs
which came down the Columbia when an ice dam burst near Missoula and backed into the Willamette, Tualatin and Yamhill Valleys. A 15 ton erratic was found years ago and is on public display west of McMinnville.

The three valleys have long been known as great agricultural lands with rich soils as a result of the Missoula floods. They are the location of hop yards for the growing beer industry on the bottomlands and a wine industry is gaining world-wide attention from the local wines produced from the expanding vineyards on the valley hillsides above. Significant economic development occurs now from the sand and gravel deposits in the Tonquin Scablands between Tualatin, Sherwood and Wilsonville. Some citizens have been discussing the possibility of using the pre-historical features of the area in addition to “wine country” as a unique tourism attraction, such as “Valley of the Giants”.

Note: Danny Gilmour referred Addington to links to two public educational websites for good physical descriptions and drawings of a sloth:
http://www.sdnhm.org/exhibits/mystery/fg_giantsloth.html

And http://www.tarpits.org/education/guide/flora/sloth.html

Also see drawings and descriptions of mammoths, mastodons, sloths, bison at Academy of Natural Sciences-Thomas Jefferson Fossil Collection at

http://www.ansp.org/museum/jefferson.html

(THS-prehist update 3-6-2010)