Remains Listed As Giant Pliocene Camel

MIXING WET PLASTER with burlap for a casting process is Lloyd Seely Jr., a student at the University of Oregon who worked on the project of recovering the giant bones.

NEW CAST for a two million year old fracture. Burlap soaked in plaster is wrapped over wet newspaper.

AFTER REMOVAL from its ancient matrix, the bone structure is pointed out by Ben Murphy, center, to Lloyd Seely, right, and Carrol Howe, left.

CAREFULLY UNCOVERING the bones of the giant camel is Bill Burk, sophomore at the University of Oregon, who spent almost six weeks on the bones.

A WET NEWSPAPER COVERING formed the undercoat for the cast; then the application of burlap soaked with casting plaster permits the bones' removal to the museum. Enormous ribs can be seen directly above the cast.

THE DEPTH of the fossils plus the temperature is caught in this shot by Kettler. The Salamander heater furnished by Murphy kept both diggers and bones from freezing.

Giant Camel Unearthed In Merrill Canal Bank

By CARROL HOWE

An exciting discovery in the field of paleontology ushered in Oregon's Centennial year in Klamath County when workmen for the Klamath Irrigation District found the fossil bones of a giant camel near Merrill.

Austin Milligan, Ray Rollins and Lincoln Elzner first uncovered the bones while filling muskrat holes on the D Canal. They informed Jim Reed, the crew foreman, who called museum officials reporting the find, and then led them to the site of the astonishing animal.

Bones, together with samples of the surrounding matrix and underlayer, were sent to Dr. Arnold Shotwell, paleontologist at the University of Oregon. Dr. Shotwell identified the animal as a giant camel of the late pliocene period, about two million years old.

The volunteer crew of the museum, made up of Ben Murphy, Fred Hess, Jim Devore, George Howe and Carrol Howe, first removed the overburden, then carefully hand troweled the surrounding soil away from the ancient fossils. Later, under instructions from Dr. Shotwell, and with the added help of Lloyd Seely Sr. and Jr., the group cast the bones in plaster for removal to the museum.

Dr. Shotwell reported that the material surrounding the bones was diatomaceous earth of the late pliocene period. This earth is made of silica skeletons of billions of tiny plants which grew in the pliocene lakes and surrounded themselves with a case of silica.

The great beast probably died on the shore of a lake and was covered by the diatoms over a long period of time.

In a report to the museum, Dr. Shotwell stated that the camel was twice as large as present day camels and larger than any previous specimen that he had seen. The museum officials were doubly grateful to the workmen because the camel is the first pliocene fossil in the museum collection.

The only other pliocene fossil of importance in the area is that of a peccary (ancient pig) skull found in the Malin area some years ago. The camel bones will be kept in the Klamath County Museum for exhibit and study.

CAREFUL FOOTWORK AND PATIENCE is required amid the ancient but delicate bones. Lloyd Seely Jr., right, and Carrol Howe apply ice cold plaster to a leg bone.

Klamath Site Pictured In Late Pliocene Era

By JOHN C. CLEGHORN

Until the fossil bones found in the Adams Canal at Merrill were identified as those of a giant camel of the late Pliocene age, there was caution along with hope among local geologists. It could have been one of Nate Merrill's giant mules. However, they were both products of Klamath grass, and the development of grass had a profound effect upon the evolution of animals in the Tertiary, the age of mammals. The Pliocene was the last of the subdivisions of that period, just before the Pleistocene or Ice Age.

It has been asked what were the conditions under which our camel lived, what caused them, and what changes have occurred since then?

The causes were the gradual rise of the Cascades by uplift and deposition of volcanic material on top. Not only was eastern Oregon uplifted, its rivers to the ocean dammed and clogged with ash and great lake and swamps formed, but the climate became colder and arid. Numerous fissures opened up and vast areas were covered with thin sheets of liquid lava and ash. Abundant silica from the ash promoted the growth of microscopic aquatic plants whose skeletons compose the chalk-like deposit called diatomite.

The floor of the Klamath valley is underlaid by a formation of hundreds of feet of this material interbedded with ash and lava, and fault scarps reveal it in the edges of the blocks that were thrown up later. It is upon this formation, eroded or wave-washed by ancient lakes that our camel bones were found.

At the end of the Pliocene age, the temperature was 10 degrees warmer than now and rainfall twice as heavy, the land was hummocky; lava flows alternated with lakes, swamps and grassy plains upon which roamed the newer single toed horse, rhinoceros, mastodon and elephant, horned antelope, long limbed giraffe camel, bison and musk ox, preyed upon by huge bear-dogs and other carnivores while hippopotami and giant beaver frequented the streams.

During the Pleistocene age which geologists place at one to two million years ago, the Cascades became higher, the climate colder and glaciers began to form on the peaks, and the stage was set for the Ice Age. Volcanic activity was less, but there were extensive earth movements that fractured the crust and threw up great fault blocks so prominent on our skyline. Hot gases rushed out and threw up cinder cones and much modified their outline.

According to late theories, ice accumulating at the poles is prevented from forming symetrically by open seas. Instead it is thrust southward by centrifugal force until the crust of the earth yields and flows over the liquid interior and vast continental movements and volcanism are caused. Numerous former glacial centers even in tropical lands suggests that at one time or other all regions have been under the polar cap.

Fossil plant remains are found in the polar regions that show these lands have been in warmer regions. Thus the rhythm of successive geological ages seems explained.

It has long been a riddle to the writer how our mountains called the Basin Range Structures were thrown up when all the faults are tension cracks. Finally, the conclusion was reached that the compressive force was a shove of the eastern sector southward, causing a shearing action and the staggered or echelon pattern of the ridges and horizontal movement along the line of the fissure. Now this shove can be attributed to the movement of the Hudson Bay ice cap to the southward from the vicinity of the north pole, or vice versa.

However caused, vast ice sheets formed over Canada and advanced and retreated with periods of mild climate between. In the Midwest, the ice reached the Ohio and Missouri rivers. On the Pacific Coast, the ice reached the Columbia River, and forced it to overflow down Grand Coulee. In Oregon only the mountains were covered by glaciers. Most of the Cascade lakes were excavated and dammed back by the excavated material.

Now as the ice advanced and retreated, forest and fauna advanced and retreated to suit its needs. It does not seem reasonable that whole species should be wiped out as the changes must have been very small in a lifetime.

When the ice melted back, vast lakes formed, to dry up again. Animals still wandered over the plains and swamp, but the horse, camel and elephant departed, the giant bison came and went, giant ground sloths came from S. America but died out.

But the giant camel might still feel at home in Klamath grass and mahogany brush, although by now he might sport a warmer coat.

HAND WORK WITH A TROWEL is required to avoid breakage of the delicate bones. The large shoulder blade appears at lower front.

Red Historian Hits Theory Of Columbus

LONDON (AP.—A Soviet historian says Christopher Columbus didn't discover America — but he doesn't claim a Russian did.

Moscow radio said the historian's study of ancient documents showed that Columbus already had maps giving the position of some lands of the New World when he set out aboard the Santa Maria on his famous voyage in 1492.

Somebody, the Soviet concluded must have visited those places to put them on the map.

"It also has been made clear that the best course toward these lands was known to Columbus," Moscow told listeners on its home service.

The research was carried out by a lecturer at the Alma Ata Pedagogical Institute identified only as Suyerny.

Superny made a detailed study of publications and documents in Portugese, Spanish and Italian archives, the broadcast said.

The theory he advanced before the U.S.S.R. Geographical Society was that "European navigators had visited the New World (before Columbus) but the names of these navigators remained unknown."

Here's how Superny pieced together the voyage:

Columbus crossed the Atlantic following the latitude of the Canary Islands because his charts told 'n trade winds and currents existed there favorable for navigation toward the New World.

Before the three-ship expedition departed, Columbus handed to his captains secret instructions which they were to open only should the group be scattered by storms.

If this happened, the ships were to proceed "at fixed speeds by day and by night until they had covered 700 leagues (about 2,600 miles)."

After covering this distance, they were to continue the journey only in good visibility in order not to run aground.

The Soviet historian said Columbus' son Ferdinand had written about these instructions and showed that his father knew before leaving Spain about the presence of lands to be found 750 leagues to the west of the Canaries.

"In those latitudes the New World is exactly that distance from the old world," Superny said.

He added: "An analysis of diaries of Columbus and of other documents shows that before departure of the first voyage in 1492, he had a map with some islands of the Antilles group marked on it.

"A study of documents contained in the archives makes it possible to conclude that before Columbus, European navigators had visited the New World, but the names of these navigators remained unknown.

"The inhabitants of the Azores possessed maps drawn by these navigators and this made it possible to organize the expedition correctly."

REALLY TALL

SAN DIEGO, Calif. (AP)—People are always commenting on Tom Carlile's height—6 feet 8 inches—and, Carlile, an advertising man, shrugs off most of the wisecracks. One he remembers was: "I'll bet you have snow on your shoulders six months of the year." Carlile says: "It was not a great line, but I liked it."

Legislature May Mute Tax Subject

By PAUL W. HARVEY JR.

SALEM (AP) — Oregon's citizens, wondering whether the Legislature will increase their income taxes, probably will not hear much about the subject for a few weeks.

The House Taxation Committee, which drafts the tax program, is going to wait until it finds out how much money the state needs for the next two-year budget period. And it will not have that answer until the Joint Ways and Means Committee finishes its work on the appropriation bills.

The key to the problem is what the committee recommends be done about new institution and college buildings. This answer is weeks away, too.

If ex-Gov. Holmes' recommendation that buildings be constructed by a bond issue is accepted, then a very small tax increase would be likely.

But if Gov. Mark Hatfield's plan to increase income taxes in order to set up a $14,300,000 building fund is approved, then a more substantial increase would be likely.

Gov. Hatfield's plan would first levy a one per cent tax on gross income, thus making persons in the low income groups pay a little toward the cost of government. It also would put a rate schedule of one to seven per cent into the present income tax law, which now has a spread of three to nine and one-half per cent. Deductions would be eliminated.

The Democratic majority opposes Hatfield's plan, so there is little likelihood of approval. But there's also a chance that the tax committee will have to come up with a tax increase of its own.

It is uncertain whether an important part of Hatfield's program might even be introduced. This would benefit industry by reducing the tax on capital gains, and then pick up the lost seven million dollars in revenue by taxing tobacco, including a cigarette levy of two cents a package.

Since House rules committee permission is needed for introduction of bills now, it is questionable whether that committee, with its Democratic majority, would permit its introduction.

The second largest problem—unemployment compensation—now is before the Senate Labor and Industries Committee. The last of the bills recommended by the Unemployment Compensation Commission's advisory council were introduced this week.

The senate committee will have to work on this difficult subject for the next several weeks. The purpose of the measures is to build up the unemployment trust fund, which has been hard hit by heavy unemployment.

Employers do not want their payroll taxes increased, and that is the core of the problem.

The House State and Federal Affairs Committee still is wrestling with the many proposals to reorganize the government. But it has not come to grips yet with the most important one.

That proposal would permit the governor to reorganize, eliminate or consolidate state agencies. His plans would be subject to a veto by either house.

National cost of removing roadside litter from U.S. highways is estimated at 30 million dollars annually.