

Scientists dig for Ice Age fossils in Los Angeles

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In this photo taken Tuesday, March 8, 2011, Page Museum at the La Brea Tar Pits chief curator Dr. John Harris, left, and lead excavator Carrie Howard, look at fossil deposits at Box 14 of Project 23 at La Brea Tar Pits in Los Angeles. (AP Photo/Damian Dovarganes)

(AP) -- With a dental pick in hand, Karin Rice delicately scraped off a clump of asphalt from a pelvic bone belonging to a horse that roamed Los Angeles tens of thousands of years ago.

Like many unsuspecting creatures of the last [Ice Age](#), the horse probably stopped to take a sip of spring water only to be ensnared - and later preserved - in a pool of sticky asphalt that seeped from underground crude oil deposits.

"You're opening up this ancient world and getting to look back in time,"

Rice said during a recent dig at the La Brea Tar Pits in the heart of Los Angeles.

For the past three years, scientists have been sifting through a significant trove of bones and a nearly intact mammoth skeleton discovered in 2006 during the construction of an underground garage next to the tar pits.

It's been slow going. To make room for the parking structure, researchers at the George C. Page Museum built wooden crates to house the cache and trucked them to the tar pits complex where excavators use power and hand tools to break up the soil.

Careful to avoid the mistakes of early diggers who only prized large mammals bones and little else, a small army of museum employees and volunteers painstakingly chisels away seven days a week, recovering not only animal bones, but also saving the dirt for later inspection for [microfossils](#).

So far, scientists have unearthed five of the 23 boxed deposits, removing some 16,000 [fossil](#) bones. Among the finds: partial skulls and lower jaws of half a dozen saber-toothed kittens, several ribs and skull of a camel, and assorted remains of a giant jaguar, ground sloth and baby mammoths.

While visitors are wowed by the larger fossils, scientists are equally interested in finding bits of plants, insects, rodents and [microscopic organisms](#) that can reveal a great deal about the past environment, said Page Museum chief curator John Harris.

"We're still trying to piece everything together," he said.

Harris estimated it will take five years to sort through the crates. The museum has placed a priority on getting the above-ground excavation

done, so it temporarily halted work on Pit 91 where scientists have been pulling out bones since 1969.

The tar pits located 7 miles west of downtown Los Angeles are a paleontological gold mine. Asphalt bubbled upward through cracks and fissures over the millennia, trapping Ice Age beasts that later starved to death. Once a large mammal was bogged down, predators would approach, followed by scavengers and insects, which would also get stuck.

Before this latest dig, more than a million bones have been recovered from the sticky ponds.

In the new work being carried out just north of Pit 91, researchers hopscotch between two tarp-covered crates, which have been divided into grids to help pinpoint the exact position of fossils.

Digging in the larger box one recent morning as a group of schoolchildren peered through a fence, chief excavator Carrie Howard and colleague Rice scraped away dirt from a deposit containing a hodgepodge of specimens including horse, saber-toothed cat and dire wolf.

Unlike the underground excavations, the bones in the crates are encased in hard dirt as a result of sitting out in the sun for two years.

To get around the problem, Rice uses a dry cleaning solution to soften the asphalt mixture. Others improvise by using heat lamps.

Once fossils are extracted - a process that can take months - they are shipped to the museum lab where they are cleaned, identified and, in some cases, put on display. The current project is expected to double the museum's Ice Age collection.

As excavators toiled outside, lab workers continued their examination of the skull of Zed, the Columbian [mammoth](#) skeleton that was found nearly complete.

Later in the week, the museum plans to open up another crate for study.

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