

Sand Hills Discovery Experience participants dig for hidden treasure

By Debrénée Adkisson and Kathy Worrell

As part of the 3rd annual Sand Hills Discovery Experience entitled "Sand Hills Trails: Ancient, Historic and Modern" and held at Ainsworth High School, many eager participants were given the opportunity to take part in an actual fossil dig. The dig was held north of Bassett, NE, and was led by four experts: Mike Voorheis and his wife Jane, founders of Ash Fall fossil bed, Bruce Bailey, Highway Salvage Paleontologist from Lincoln and Shane Tucker, graduate student from the University of Nebraska at Lincoln and practicing Highway Salvage Paleontologist.

"We go from project to project, year to year," said Tucker, who composed his master's thesis on Nebraska's fossil beds. His team of highway salvage paleontologists work with road construction crews to find and uncover prospective fossil beds. "We usually know six to eight years ahead of time what projects are coming up." Twenty-eight people from the Sandhills Discovery Experience signed up for the morning expedition held on Wednesday, July 14. Some set to digging for remains while others sifted through finer sediments for smaller objects. Clad in work clothes and clasp everything from trowels to paintbrushes, they strove to uncover the treasures hidden in multiple layers of rock and sand. Most fossils are 7 million years old. "What they [the participants] find, they can bag so that it can be looked at later this winter. If they find a new species, it can be named after them," Tucker explained. "We can find big things; the first year we did this we found a complete lower rhino jaw."

Usually, however, complete skeletons would not be found in places such as the Sand Hills Discovery Experience's dig site. This is because the area was previously the site of a river bed, so the bodies of animals and therefore their skeletons would have been disassembled by the water and current.

Although no whole skeletons were to be found during the dig, many remains were discovered, including a fish vertebrae, many rodent teeth, fragments of turtle shells, a squirrel tooth, and bones from rabbits, bea-

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Shane Tucker (left) graduate student from the University of Nebraska at Lincoln and practicing Highway Salvage Paleontologist helps Jerry Adler (right) of Hastings, NE, prepare the casting of a leg belonging to either a horse or camel. Shane will remove the bone from the site and take it to Lincoln for further study.



These fossils were on display at the Ainsworth Community Schools during the Sand Hills Discovery Experience. These fossils, which included camel, horses, rhinos, etc., have been found throughout areas in Nebraska.

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vers, two-horned rodents and three-toed horses. All diggers were given paper sacks in which to keep their finds; film cannisters were also distributed so that the participants could keep smaller objects for later research and identification. Some participants were lucky enough to uncover a few larger bones. Pat Cerney, of Burke, South Dakota, found a full camel vertebrae in outstanding condition, Carol Larson of Ainsworth uncovered part of a large leg bone most likely from either a camel or horse, and Jerry Adler of Hastings discovered a horse or camel bone which the team "jacketed" or casted to preserve and study.

Jacketing is a three-step process, beginning with the paleontologist digging a pedestal of dirt around the object to support it. This is done by cutting dirt away from underneath the edges and sides of the object. Later, tissue paper is placed around

the object in preparation for the plaster coat (the plaster will not stick to the paper). Lastly, the plaster jacket is applied to the object in strips similar to those medical bandages used to treat broken bones. This jacket is then used for transport of the object.

Every fossil is given its own official number in order of finding per paleontologist. The first fossil found this year by Tucker would have been labeled as #1000-004. These numbers are permanent and assist researchers in keeping track of all recorded fossils.

"Nebraska is one of the best places to find fossils in all of North America," Tucker said. He expects to find bear remains next at the site. "We know there's a bear here, but we haven't found it yet," he said. With all the extensive digging done lately, perhaps the missing bear won't be missing much longer.



Barb Lamb (fourth from the left) assists these younger attendees in looking for bones and teeth. Barb is a member of the Sand Hills Discovery Experience Committee.

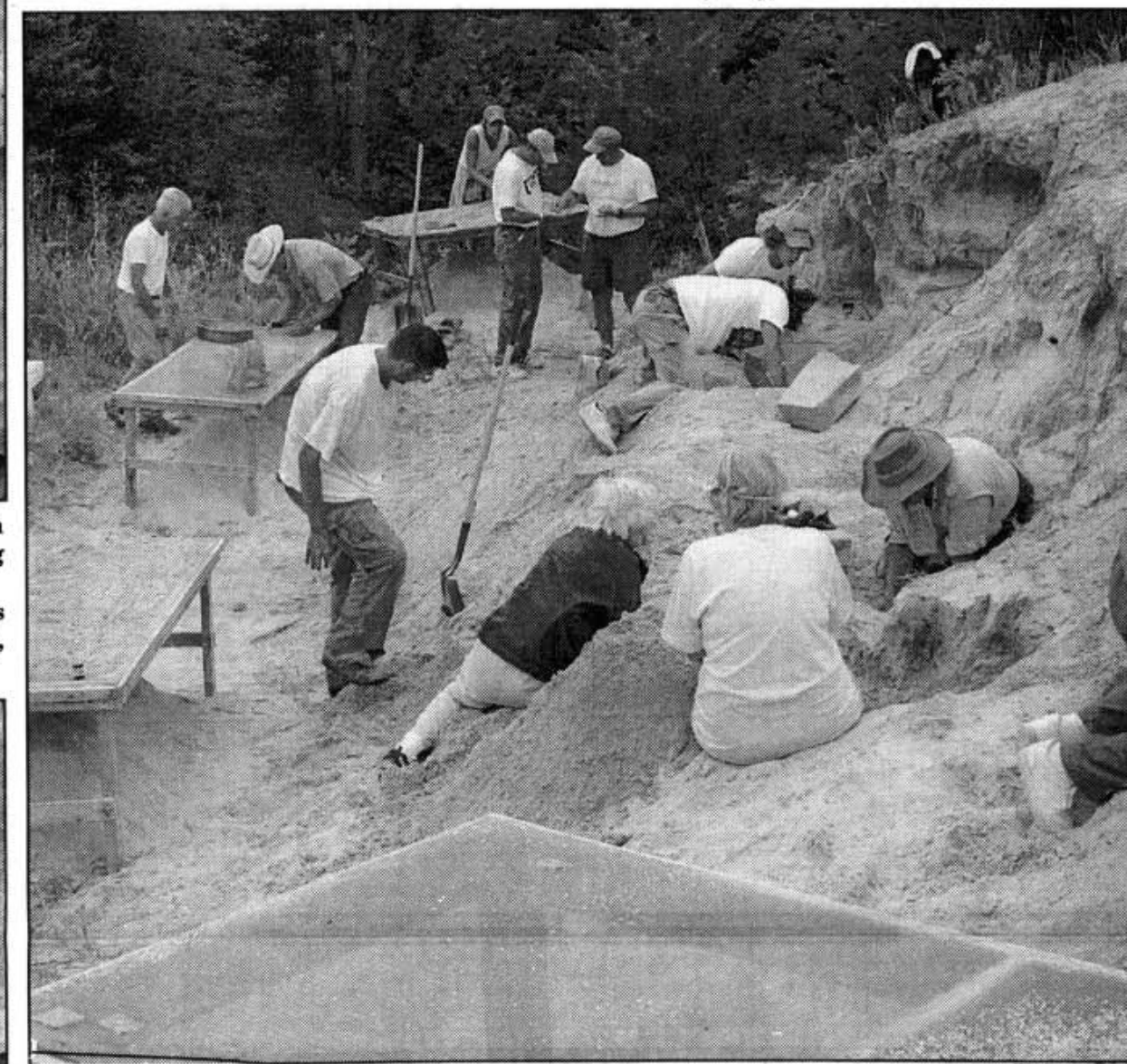


Mike Voorheis (left) was excited when Pat Cerney from South Dakota found a full camel vertebrae in outstanding condition.

Throughout the 4 different tours to the fossil bed, bones and/or teeth were discovered that belonged to rabbits, beavers, two-horned rodents and three-toed horses.



Once the sand was dug through and put on the various screening tables, the remaining sand is bagged and taken back to Lincoln for further research. The bags won't be touched until this winter some time. As pieces are found from the various sites, they try to piece the pieces together and see if they can produce the fossil as a whole.



Highway Salvage Paleontologist from Lincoln were on hand to help participants of the 3rd Annual Sand Hills Discovery Experience dig for fossils in a fossil bed north of Bassett. Those attending were able to dig in the beds, use the screening tables, or just watch to see what was going on.