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FOR IMMEDIATE RELEASE:

EIU DISCOVERY MAY PROVE EXISTENCE OF MASTODONS IN COLES COUNTY

CHARLESTON -- Six hairs, one of which is five inches long. Is this proof-positive of early mammal life in what is now Coles County?

Vincent Gutowski, professor in Eastern Illinois University's Department of Geology/Geography, sure hopes so. "It could be the hard evidence we need," he says.

For 10 years, Gutowski and a host of undergraduate students involved in departmental research, have sifted through and pored over countless bucket-loads of dirt, rock and debris taken from digs near the banks of the nearby Embarras River.

Tree stumps -- discovered during a routine class exercise -- were the first indication that something very special was happening.

"What was unusual was how well-preserved they were. And that they were found rooted -- still standing up-right," Gutowski said. "That was significant in proving that the

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Eastern Illinois University emphasizes distinguished teaching in the liberal arts, sciences and selected professions. A traditional, residential state university of recognized quality, Eastern enrolls more than 11,000 students in undergraduate and graduate programs. The university, located in Charleston, also serves the region through a variety of non-credit and off-site degree programs, as well as cultural and recreational opportunities. Eastern's pursuit of excellence attracts well-qualified students of an increasingly diverse population and a teaching faculty active in research and public service who utilize the latest technology.

stumps had developed there rather than having been moved to that location.”

Enlisting the help of the Illinois Geological Survey, Gutowski had the stumps carbon dated. The results: It was determined that the black spruce stumps -- indicative of a cooler climate such as that now found in northern Canada -- were 20,000 years old.

Their well-preserved condition, Gutowski said, was explained by glacier movement through the area at about that time. “They’re basically the remains of a buried forest, covered where they and everything else stood by the deposits left behind,” he explained.

Additional time-consuming research has revealed other -- smaller -- pieces of pre-glacier life. “We’ve found about 30 species of seeds, a number of different types of gastropods (small snails) and other small fossils and plants.”

And -- possibly -- footprints. Big footprints.

The scientific term is actually bioturbation meaning, basically, that “something messed up the ground somewhat,” Gutowski said. Regardless of what term is used, however, the fact remains that EIU researchers found depressions, or holes, in the old soil measuring one meter (39.37 inches) across and more than 24 cm. (9.36 inches) deep.

Jeffrey Saunders, research scientist at the Illinois State Museum in Springfield, is “99 percent sure” that the depressions, or tracks, are the result of “very large mammals” traveling through very shallow water, Gutowski said. The most likely candidates are known as mastodons, earlier -- and larger -- ancestors of the modern-day elephant.

The size of the prints are consistent with what they might expect for mastodons on the move, as are the actual patterns and dirt disturbances in and around the depressions.

It would not be any surprise to find that mastodons did, at one time, roam the Coles County area since evidence of their movement has been discovered elsewhere in the state, as well as in Missouri, Indiana and Ohio.

"But we needed hard evidence to be 100 percent sure," Gutowski added.

Their wish may be coming true. This spring, while undergraduate Kari Kirkham of Greenville was slowly and painstakingly sifting through five-gallon buckets of soil and examining every particle under the lens of an EIU laboratory microscope, she found a hair. And then another. And then yet another. Six altogether.

Gutowski, quick to practice optimistic caution, said he is unsure exactly what species of animal the hairs belong to, leaving the final determination to those "who do this for a living" -- the research staff at the Illinois State Museum where the hairs will be sent.

Obviously, a positive ID would be a feather in the cap for Eastern's geology/geography department but, as Gutowski explained, the success of this project has already been proven many times over. "It is an activity that helps further unite the professor and the students," he said. "I relive the excitement of first discovery over and over through them."

Also, he added, it is proof that Eastern students can and do go out and do good research. Their finds have attracted the attention of established scientists throughout the country and the world, including the Geological Society of America who plans to hold its midwestern regional meeting here, along with several field trips, in part because of Gutowski and his students' finds.

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Gutowski said much credit for the program's success goes to a local landowner on whose property most of the digs and research have taken place. "This landlord has been extremely generous. We couldn't have done it without his cooperation."

Those hoping to see the actual site where the hairs and depressions were discovered can't have their wish. The owner, who makes his living from the land, has since reclaimed the site and all traces of the "footprints" are gone.

But, Gutowski said, interested persons are welcome to visit a small display of photographs, computer-generated maps and written material regarding the find. The display can be found in a first-floor display case located in the north section of Eastern's Physical Sciences Building.