

## Ice Age people in eastern America



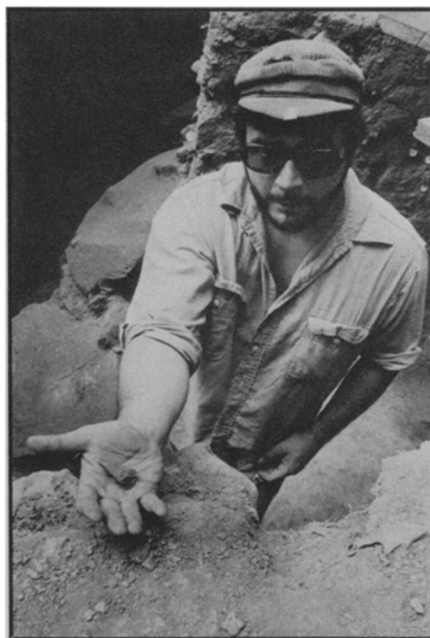
Students at work to unearth Ice Age peoples under Pennsylvania rockshelter.

One of the best ways to learn archaeology is to do some—pick up your pick and shovel and go out and start digging. And that is just what James Adovasio of the University of Pittsburgh did with his students last summer. He took a group of students to Meadowcroft Village, a restored community of early 19th century homes and buildings in Avella, Pa., about 30 miles south of Pittsburgh. There the students were to learn how to set up and work an archaeological dig. But the work turned out to be more than just an exercise in archaeology. Adovasio and the students discovered what may be the oldest existing site of human habitation in North America east of the Mississippi.

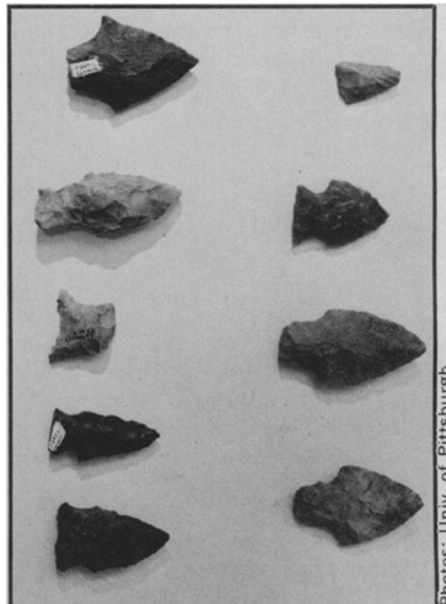
During last summer's dig the most exciting find appeared to be a burned bark basket about 4,000 years old. This artifact, along with numerous other articles (bones, seeds and tool fragments), was analyzed during the winter. Charcoal samples taken from numerous firepits at the excavation were sent to the Smithsonian Institution's radiocarbon dating laboratory. The radiocarbon dates were expected to confirm that the site was inhabited about 5,000 years ago—not an unusual age for such a site. Instead, reported Robert Stuckenrath of the Smithsonian, the charcoal samples were 14,000 to 15,000 years old. Similar dates for human habitation have been confirmed at sites in the western United States and in Alaska, but not in the eastern part

of the country. The Meadowcroft finds suggest that Ice Age peoples did not confine their migrant travels to Alaska and the West, but probably crossed the entire continent.

"An excavator's dream," says Adovasio of the Meadowcroft site. It consists of a 300-square-yard area protected by overhanging rock that gives shelter from the weather. Such habitable rockshelters are unusual topographic phenomena in the East. And this one is particularly suited for ex-



Adovasio: "An excavator's dream."



Photos: Univ. of Pittsburgh

Excavation yields hundreds of artifacts.

cavation because of its southern exposure, its access to water and materials for toolmaking and its abundance of wildlife. Such natural advantages suggest that the site may have been more or less continuously visited during thousands of years by peoples who used it as a base for hunting and fishing. In fact, until a shelter was recently constructed to protect the site, it served as part of a modern-day hunting camp.

Because the site has remained relatively dry and protected for thousands of years, artifacts there have been preserved to an extraordinary degree. More than 100,000 animal bones, some human bones, shells, ceramic fragments and domesticated beans have been unearthed. Hundreds of flakes from broken tools, of at least six various types of stone, suggest substantial migration from different areas. Among the most important of the site's features, however, are the fire pits found at 90 different levels. The pits, says Adovasio, have circular basins obviously scooped out of the sand by human hands, and the bottoms of the pits have been reddened by fire. The carbon ash from one of the pits, almost three meters below the surface, yielded the 15,000-year-old date.

According to Adovasio, the site was first occupied from about 15,000 to 14,000 years ago and was later occupied around 5,000 or 6,000 years ago. The work going on this summer and further exploration may provide information to fill in the 10,000-year gap. □