## **ANTHROPOLOGY**

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## ABSTRACTS

**Debitage Classification Systems.** C. MICHAEL ANSLINGER, Indiana State University, Terre Haute, Indiana 47809.——In recent years archaeologists have found it useful to place debitage recovered from archaeological sites into discrete groups which theoretically represent sequential stages of lithic reduction systems. This provides one line of evidence for reconstructing past site activities and functions which is a primary goal of archaeology. However, recent studies have shown that some of the flake attribute lists traditionally used to place flakes in their appropriate reduction stage are not always meaningful and may, in fact, be ambiguous. This paper discusses some of the debitage classification systems used by researchers and reports on the application of a particular method of classification to a Lake Archaic lithic assemblage from Bartholomew County, Indiana.

**Mann Site Figurines.** RUTH BRINKER, Indiana University, Bloomington, Indiana 47405.——Figurines of human forms are found at the Mann Site in great numbers and in almost all known contexts. A total of 421 fragments of human figures have been recovered generally from village midden, but also from pits and mounds. The figurines have many characteristics in common which makes them "recognizable," yet some distinctive individual traits are present as well. A general description of characteristic forms is presented, variables are quantified, and Mann Site figurines are compared with figurines from other Hopewellian sites in Ohio and Illinois.

The Commissary Site (12-Hn-2) Revisited. FRANK BURKETT and DONALD R. COCHRAN, Ball State University, Muncie, Indiana 47306. — Monitoring of a small earthmoving project at the Commissary site revealed the remains of a prehistoric pit containing a few human and small mammal bones. A 10 gm sample of wood charcoal from the pit yielded a calibrated radiocarbon date of A.D. 1180  $\pm$  60. This date antedates the one radiocarbon date previously acquired from the site, A.D. 635  $\pm$  105, by 500 years. The Commissary site has been considered to be an early Late Woodland site because of the earlier radiocarbon date and the one cordmarked ceramic vessel recovered. The more recent date is contemporaneous with regional Late Woodland Oliver phase sites and suggests that either the site was in use for over 500 years or that its placement needs to be reassessed.

The raw material utilized is Holland Chert and its variants. This paper will describe the provenience and physical properties of the Holland Chert, as well as its utilization via lithic reduction sequence analysis, and relate this within the framework of the larger survey.

Test Excavations at the Smith Site, (12-Vi-86), Vigo County, Indiana. MARY ELLEN CARPENTER and ROBERT E. PACE, University of Illinois-Chicago Circle and Indiana State University, Terre Haute, Indiana 47809.——Materials diagnostic of Albee and Vincennes components have been recovered from the surface of the Smith and other sites in Sullivan, Vigo, Parke and Vermillion counties. Excavations previously reported have been either too limited or inadequately reported to firmly establish temporal, spatial and cultural relationships of Albee and Vincennes. Testing at the Smith Site was specifically undertaken to address these problems. Preliminary results suggest contemporaneity of materials, and either a mixing of the two populations or rapid assimilation of Vincennes material culture by Albee peoples.

A Description of Kenneth Chert. CATHARINE A. CARSON, Ball State University, Muncie, Indiana 47306.——The purpose of this study is to identify and describe cherts that occur within the Kenneth Limestone of the Wabash Formation of north-central Indiana. Kenneth chert is most commonly brownish-gray in color with a predominance of lighter grey to white. The most obvious diagnostic characteristic of this chert is its mottled, speckled, swirled, or splotched appearance due primarily to the differential silicification of fossil and burrow inclusions and the surrounding matrix. The above factors result in Kenneth chert possessing a highly varied appearance. The chert, which occurs as thin lenses as well as small nodules, is known to outcrop principally in Howard, Cass, and Carroll counties. Kenneth chert is archaeologically significant as a raw material source for the prehistoric manufacturing of chipped-stone tools.

Three Cranial Tumors from Late Woodland Sites: Diagnosis and Cultural Implications. DELLA COLLINS COOK. Department of Anthropology, Indiana University, Bloomington, Indiana 47405.——Tumors may not leave clear evidence on the skeleton, and they are less common than traumatic and infectious bone pathology. For these reasons paleopathologists seldom discuss them. An angioma or meningioma in an adult from the Koster mound group, Green Co., Illinois, a probable melanotic ameloblastoma in a child from the Schild mound group, Greene Co., Illinois, and an osteogenic tumor of the cranial base in an adult from the Alt site, LaPorte Co., Indiana, are presented. It is unlikely that age-specific frequencies of these tumors were very different in prehistoric times than they are today. The two adults are likely to have exhibited behavioral alterations that would have required much attention on the part of caregivers in their communities.

A Useful Morphological Characteristic of Two Toed Sloth Hair. EDMOND J. FURIA, Department of Anthropology, Indiana University, Bloomington, Indiana 47405.——The guard hairs or protective hairs from *Choloepus hoffmanni* and *Choloepus didactylus* were observed using a scanning electron microscope. The morphological characteristic of these hairs is unique among hairs from all living mammals known to the observer. A single hair form either *Choloepus* species splits a minimum of three times in a geometric fashion progressing from the proximal to distal portion. This "splitting" can produce what appears to be eight differentiated shafts in the distal portion of any one hair. This unique quality of two toed sloth hair may prove to be useful to anyone investigating the composition of coprolithic material. This information may prove useful also to ecology, zoology, and evolutionary biology.

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The Year at Dromberg. RONALD HICKS, Ball State University, Muncie, Indiana 47306.——It has been known for more than two centuries that Stonehenge is oriented to mark the summer solstice sunrise, and recent research on other stone circles has produced claims for their use to mark as many as 13 other dates, creating a 16-month solar calendar. Observations over the course of a year at one stone circle—Dromberg, in County Cork, Ireland—which has been known for some time to be oriented on winter solstice sunset have shown it to be designed also to mark both summer and winter solstice sunsises but no other dates. Indeed, weather conditions between autumnal and vernal equinox today, which are not likely to be significantly different from those prevailing at the time the circle was constructed, are such that chances of making the necessary observations during that half of the year are slim for any of the proposed dates *except* the winter solstice.

**Towards Predicting Loss of Archaeological Resources from River Channel Migrations.** MISTY JACKSON and ROBERT E. PACE, Indiana State University, Terre Haute, Indiana 47809.——Data being collected from riverbank survey of the central and lower Wabash, White and Eel rivers suggest significant patterns in frequency, size and cultural affiliations of exposed archaeological sites. Explanatory hypotheses being developed and tested include variables relating to past and present stream dynamics, natural features and resource base and settlement systems of prehistoric peoples. Preliminary results are reported.

A Preliminary Survey of the Maumee River in Allen County, Indiana. JAMES A. MOHOW, Indiana University-Purdue University at Fort Wayne, Fort Wayne, Indiana 46805 and DAVID DIAZ, 4512 S. Hanna, Fort Wayne, Indiana 46806.——A preliminary surface survey was conducted along a six mile length of the Maumee River in Allen County, Indiana between fall of 1980 and fall of 1983. The survey concentrated on the river's floodplain and its adjacent terraces. As this was a preliminary survey, its prime objective was to identify archaeological sites and certain chronologically sensitive artifacts within the research area. A total of 55 prehistoric sites was recorded during the survey and more than 4,000 artifacts were recovered. The artifacts consist of lithics and ceramics. Preliminary identification of pottery and tool types reveals that most sites were multicomponent in nature, ranging from Paelo-Indian through Late Woodland times. Since it is little known archaeologically, the primary purpose of this survey was to achieve an overview of the area as well as to form a basis for future research.

Woodland Sites and Ross Soils: A Correlation in the Upper White River (West Fork) Drainage. P. RANEL STEPHENSON, Ball State University, Muncie, Indiana 47306.——A reconnaissance survey of the Upper White River drainage in Randolph, Delaware, Madison, and Hamilton counties was focused on gathering data on Woodland habitation sites. The survey was carried out predominantly in the floodplain of the White River to determine whether particular soil types were selected for occupation. During the survey, 32 new floodplain sites were discovered; of these, 10 contained pottery and nine of the sites with pottery were located on Ross soils. Ross soils formed under mixed hardwoods and prairie grasses and constituted the smallest percentage of the floodplain soil types present in the counties being surveyed. Areas of Ross soil surveyed always produced Woodland components whereas surveys of other floodplain soils did not. A comparison of the locations of Ross soils and Delaware villages in the survey area also showed that Delaware villages were located adjacent to the larger areas of Ross soils. It, therefore, appears that Ross soils were selected by the Woodland occupants of the Upper White River drainage for either occupation or cultivation. Some Late Archaic Manifestations in Indiana. CURTIS H. TOMAK, Indiana Department of Highways, Indianapolis, Indiana 46204. ——This paper focuses upon pre-Riverton Late Archaic manifestations in the valley of the West Fork of White River upstream into Morgan County and in the valley of the East Fork of White River upstream into Jackson County. Those two areas are discussed in terms of sites, setting, cultural assemblages, and occupations or phases. Then some other areas of the state, particularly in southern Indiana, are considered. This is followed by commentary regarding the Late Archaic manifestations under review.