ANTHROPOLOGY

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ABSTRACTS

Evidence for Heat-treatment at the Wint Site (12B95), Bartholomew County, Indiana. C. Michael Anslinger, Anthropology Laboratory, Indiana State University, Terre Haute, Indiana 47809.——An on-going analysis of the lithic assemblage recovered from the Wint Site (12B95), a multicomponent settlement with a major Riverton component located in Bartholomew County, indicates heat-treated cherts were used in the manufacture of certain tool types. Tools and debitage were categorized on the basis of chert type and reduction stage, and then examined for evidence of heat-treatment using the standard criteria of color, luster and fracture. Before doing so, however, a support collection consisting of raw, heat-treated and heat-fractured cherts was accumulated by collecting raw cherts from the immediate and local site area, and then subjecting them to a series of controlled and uncontrolled heating experiments. Results indicate that while heat-treated cherts were frequently selected to manufacture certain tool types, they were less frequently or never selected for the manufacture of others. Information regarding the frequency of heat-treatment for different chert types and the stage at which heat-treatment was used within the overall lithic system also resulted. Finally, thermoluminesence (TL) determinations of select artifacts confirms the use of heat-treatment at the site.

Pesticide Use: An Occupational Hazard in the Conduct of Archaeological Survey. Kristen Beckman, Department of Sociology and Anthropology, Indiana University-Purdue University at Fort Wayne, Fort Wayne, Indiana 46805.——This paper examines the latest information regarding the health effects of several of the pesticides most commonly used in the fields by the farmers of Northeastern Indiana. The explicit statement of the hazards which surround these agents necessarily leads to the exploration of what steps can and should be taken to minimize the risks to field workers who undertake pedestrian ground survey in order to locate archaeological sites.

Archaic Adaptations in Northeastern Indiana: An Overview. Diane E. Beynon, Department of Sociology and Anthropology, Indiana University-Purdue University at Fort Wayne, Fort Wayne, Indiana 46805.——This paper presents an overview of preliminary research results from three consecutive archaeological surveys in the Northeast Indiana area. Over eighty newly documented Archaic loci have provided information concerning settlement patterning in the Northern Moraine and Lakes Region of Indiana. Riverine Archaic and Lacustrine Archaic adaptations are compared and site selection processes are examined. The evidence indicates at this point in time an intensive and almost exclusive Archaic occupation of the biotically rich and circumscribed resource zones

in the Northern Moraine and Lake Province of the state. The distribution of Woodland sites is in the more southerly oriented Tipton Till Plain along the edges of the southern end of the St. Joseph River and along the Maumee's Riverbanks. This phenomenon that of an almost exclusive Archaic region, also has been documented for similar areas in Northwestern Ohio. Large Archaic villages and small residential camps are located close to the waters edge at the location of large meander loops on rivers and on elevated beach ridges of lakes. Small resource extraction stations are located in the interior uplands. To people whose main economic strategy was the collecting of seasonal and scheduled resources and the distribution of those resources to a semi-permanent residential population, the restricted yet biotically rich ecotones of the Northern Moraine and Lake Region of Northeastern Indiana provided an optimal environment.

Jeffersonville Chert: A Problem in Provenience. MARK CANTIN AND C. MICHAEL ANSLINGER, Anthropology Laboratory, Indiana State University, Terre Haute, Indiana 47809.——In this paper the authors propose to name and define a chert type found to outcrop in southeastern Indiana. Through geostratigraphic means, the name suggested for this chert is to be "Jeffersonville" Chert. Through physical properties and fossil assemblages, an attempt is made to define it as geochemical and petrographic studies are still pending. This study was undertaken because of the lack of information in the geological and archaeological literature concerning this chert when provenience was sought after it appeared in artifactual form at the Riverton Wint Site (12B95).

Hithertofore known vernacularly as "Coffee Creek" Chert after its potential source area in Jennings County, Indiana, it was believed to be a variant of the silurian-aged Laurel Chert. However, reconnaissance has demonstrated provenience in the devonian-aged Jeffersonville Limestone which warrants the new name for its more accurate lithologic, stratigraphic and temporal implications.

The geological information demonstrates the necessity for provenience. This information, in turn, can be applied to archaeological models of socio-technological and lithic procurement strategies of prehistoric peoples utilizing this chert.

Early Archaic in the Upper Wabash Drainage: An Initial Assessment. DONALD R. COCHRAN, Ball State University, Muncie, Indiana 47306.——Since 1979 the Archaeological Resources Management Service (ARMS) has been involved in researching the prehistory of a region defined by the Upper Wabash River drainage basin. This paper reports the results of a survey of early Archaic points from the region; the survey was initiated as a means of developing regional Early Archaic settlement patterns. During the project 171 Early Archaic points recovered from ARMS surveys were used to develop a regional chronology and to determine the density and distribution of Early Archaic materials within the region. Correlations of chert raw material types and point types were investigated to define the home range of the Early Archaic components present within the region. The project recorded a density of one Early Archaic artifact for every 37 acres surveyed. The majority of the points occurred singly and only 3 sites contained more than one point of the same type. Correlations of points and the major environmental zones present within the region revealed a definite preference for the till plain/valley and the lakes, marshes and bogs zones. Chert types employed in the manufacture of Early Archaic points suggested distinctly different home ranges for certain Early Archaic groups. Although the results of the project were not definitive, patterns relative to the Early Archaic settlement of the region were identified for testing during future projects.

Test Excavations at the Smith Site (12-Vi-86) in 1985, Vigo County, Indiana. CHRIS JACKSON AND ROBERT E. PACE, Anthropology Laboratory, Indiana State University, Terre Haute, Indiana 47809.——Previous testing in 1984 established the presence of Late Woodland Albee and Mississippian Vincennes components. Alternative hypotheses being pursued view the components as representing (1) temporally and culturally separate habitations, (2) selective exchange between contemporary cultures in the region, or (3) rapid cultural assimilation of contemporary cultural traditions. Data having a bearing upon these hypotheses and upon subsistence, storage features and intra-site organization are discussed.

Archaeological Investigation of the Early 19th Century Preston House, Terre Haute, Indiana. MISTY JACKSON AND MARY ELLEN WAITE, Anthropology Laboratory, Indiana State University, Terre Haute, Indiana 47809.——The Preston House, the earliest standing residential structure in Terre Haute, is listed on the National and State registers of Historic Places. Built by a former Louisiana resident between 1823 and 1826, the house is an example of the southern vernacular of French Colonial architecture. It is believed to be unique in Indiana, and perhaps the Midwest. In addition to an account of the history and folklore of the house, archaeological methods employed and initial results of excavation are reported.

An Archaeological Survey of Jay County, Indiana. MARY LOU JAMES AND DONALD R. COCHRAN, Ball State University, Muncie, Indiana 47306.——A sampling survey of Jay County, Indiana was undertaken to acquire data on prehistoric use of the environmental zones present within the county. The survey covered 1,227 acres and recorded 323 sites for a mean site density of one site for every 3.7 acres surveyed. Overall artifact densities were relatively low, 4 artifacts per acre surveyed. Site densities were not appreciably greater in the edge zones, but artifact densities were; the edge zones contained a mean of 25 artifacts per site while the other environmental zones contained a mean of only 8 artifacts per site. The survey also compared artifact class distributions and chert raw material associations to derive settlement pattern data relevant to the remainder of the Upper Wabash drainage of central Indiana.

Test Excavations at the Amini Site: A Late Archaic Settlement in Dubois County, Indiana, 1985. JAMES KENDRICK AND ROBERT E. PACE, Anthropology Laboratory, Indiana State University, Terre Haute, Indiana 47809.——The north perimeter of the Amini Site was examined during the summer of 1985. The site occupies a bluff spur overlooking the Patoka River, north of Huntingburg in Dubois County. An average of 45 cm of stained midden was encountered along with a fire hearth and mortuary features. Artifactual materials reflect minor occupations by terminal Archaic and Late Woodland peoples but the midden appears to be that of a Late Archaic population. Matanzas cluster points, hafted scrapers and incised bone pins, along with a radiocarbon date, indicate a cultural association with French Lick Phase sites elsewhere in southern Indiana, and related Late Archaic phases in Kentucky and Illinois.

Projectile Point Types of Northeastern Indiana. JAMES AUGUST MOHOW, Ball State University, Muncie, Indiana 47306.——A presentation of projectile point types from surveys and excavations in northeastern Indiana. The artifacts analyzed are from regional archaeological research projects of Indiana University-Purdue University at Fort Wayne, Ball State University, the Indiana Department of Highways, the Maumee River Survey, and credible private collections. The point types identified are indicative of aboriginal occupations in the northeast Indiana region ranging from the Paleo Indian Period to Late Woodland times. The presentation stresses the importance of such comparative

identification of chronologically sensitive artifacts, particularly in the northeastern quarter of the state where deeply stratified or undisturbed sites are rare.

Arrowhead Arch (12Cr219), a Multicomponent Rockshelter Site in Southcentral Indiana. MARK SCHURR AND KEN TANKERSLEY, Glenn A. Black Laboratory of Archaeology, Indiana University, Bloomington, Indiana 47405.——Arrowhead Arch (12Cr219) is a large multicomponent rockshelter site in Southcentral Indiana. Although it is described as a "rockshelter," this unique site is actually a large sandstone cave with three entrances. Test excavations conducted by Indiana University in 1984 sampled undisturbed cultural deposits which extended to a depth of 4.25 m. Cultural remains from the Late Archaic to Fort Ancient periods were recovered in stratified context. Of particular interest were fragments of a Middle Woodland pipe manufactured from Wyandotte Cave speleothem aragonite associated with charcoal dated to 1795 ± 65 B.P. (UGa-5323). Anderson Phase Fort Ancient ceramics also were recovered providing the first documentation of these materials in Southcentral Indiana.

The Present Status of Knowledge Regarding Petroglyphs, Markings, and Notable Graffiti in the State of Indiana. B. K. SWARTZ, JR., Department of Anthropology, Ball State University, Muncie, Indiana 47306.——Rock markings from nine Indiana localities are identified. A description of the exposure at the (Upper) Critchfield Cave site, 12-Or-381 (AS-IU) is included. No attempt is made to record only incidental graffiti.

Early Paleoindian Chert Exploitation in Indiana: A Preliminary Report. KENNETH B. TANKERSLEY, Glenn A. Black Laboratory of Archaeology, Indiana University, Bloomington, Indiana 47405.——The lithostratigraphic and geographic distribution of chert resources in Indiana recently have been identified. The petrologic composition of these chert source areas also have been identified and compared with those cherts which have been manufactured into fluted projectile points. The results of these analyses demonstrate the importance of Wyandotte, Attica, and Holland cherts in the exploitation strategies of early Paleoindians in Indiana.

An Archaeological Excavation at the Alton Site, Perry County, Indiana. CURTIS H. TOMAK, Indiana Department of Highways, Indianapolis, Indiana.46204.——The Alton site is situated upon a terrace of the Ohio River in Perry County. A principal component of the site is Paleo-Indian, and a substantial amount of Paleo-Indian material has been found there. Included in that material are fluted points, unfluted points, and unifacial flake tools. The writer has been involved with the Alton site for the past few years and in 1984 conducted an excavation at the site. The excavation was funded by a research grant from the Indiana Academy of Science, and this paper discusses that research.