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ANNOUNCING: The 1992 Summer Field School

**"Excavations at the Great Circle Park:
Prehistoric Ritual in Context"**
by Dr. Dee Anne Wymer

The Project's Background: Approximately 2,000 years ago a remarkable culture, called Hopewell by today's archaeologists, once existed in the mid-Ohio River drainages. The Hopewell are famous world-wide for their unique and rich burial customs that included elaborate death rituals and interment in large earthen mounds. The mounds were often built inside complex geometric enclosures - enclosures demarcated by earthen embankments forming squares, circles, octagons, and other unusual shapes and features (please see drawing of the Newark earthworks below). These embankments, typically enclosing 25 to 30 acres in extent, did not contain burials but rather functioned to define ceremonial or sacred spaces. Some evidence suggests that it may have taken several generations of individuals, piling basket-load upon basket-load of sediment, to complete entire complexes. Burial goods placed with the dead reflect a vast trade network that nearly spanned the entire North American continent, including ornaments fashioned from Canadian copper and Florida marine shell, along with ceremonial spearpoints made from Wyoming obsidian.

Surprisingly, given the dramatic and artistically important nature of this culture, archaeologists still know relatively little about the everyday life of these people who lived in the region from approximately 100 B.C. to A.D. 400. This is particularly true of the heartland of Hopewell culture - the Licking River valley of east-central Ohio. Many of the impressive burial mounds and ceremonial complexes were destroyed by early urban development as well as

wanton destruction for the sake of retrieving the elaborate burial goods during the 1800s and early 1900s by amateur archaeologists and relic collectors. Even less information was available about their smaller and less dramatic habitation sites. However, beginning in 1983 a concerned group of professionals from many scientific and education disciplines formed a research group to study the Hopewell culture in the Licking River valley before the push of urbanization had destroyed our archaeological past. I became a member of this set of scholars as a graduate student and much of my research is based on the results of our investigations.

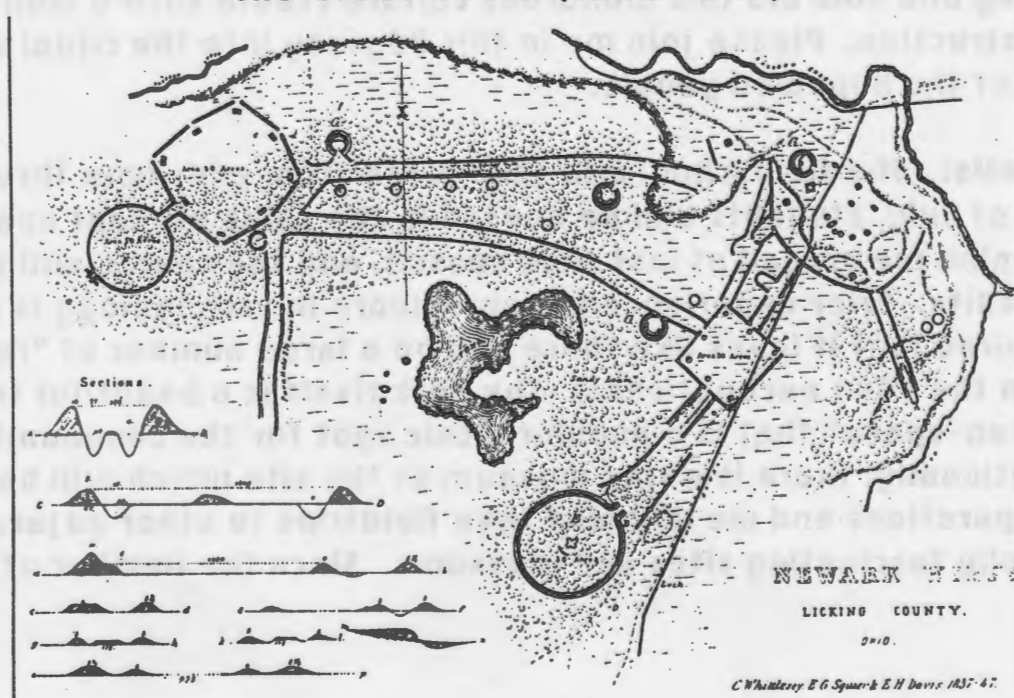
Since the formation of this group in 1983 we have conducted a large number of investigations of the Licking Valley, including surface surveys, interviews with local relic collectors, reviews of historic documents, and most importantly, several intensive excavations. In fact, the 1990 fieldschool took place at the Munson Spring Site located in the valley and the upper-most layers were ceremonial deposits produced by the Hopewell. However, at this phase of the research we have come to realize that we still do not have a complete picture of the prehistoric Hopewell culture, particularly in linking their small scattered hamlets to the large central ceremonial complex that had dominated the Licking Valley river system. Among the things that remain unanswered and require further investigation are: What drew together these scattered hamlets, each only consisting of several family groups, to periodically conduct ceremonies at the central geometric complex? How could an egalitarian society with neither chiefs or nobles organize such a massive monumental public construction? How did a society without written records keep track of such an extensive earth-moving project or know how to place the octagon-circle portion of the earthwork so that it matched specific lunar alignments? How long did it take to complete the entire geometric complex? Did a single generation complete one section at a time? How was the labor organized, for what period of time, and to whose advantage? Did the formation of these elaborate ceremonial complexes somehow play a role in the equally extensive pan-continental trade network?

It is with these questions in mind that I decided to address the larger picture by integrating the data gleaned from the recent excavations at Hopewell habitation sites in the region with a more in-

depth investigation of the currently remaining fragments of the valley's ceremonial complex. Although the vast majority of this complex, once covering over four square miles, was destroyed by the end of the 1800s, two significant portions were saved and are now preserved as parks within the Ohio Historical Society site management system. Due to my expertise in Hopewell archaeology, and the contacts I have with members of the Society, I have been given permission to bring Bloomsburg University's fieldschool to the Park to conduct a series of excavations - the first systematic research to be done there in well over 50 years.

The Newark Great Circle Park: A major section of the earthwork complex, known as the Great Circle, has been preserved as a park within the modern city of Newark, Ohio. The Great Circle, although once used as the county's fairground, appears to be fairly undisturbed by historic activities. This is particularly true of the embankment and adjacent interior "moat" (the ditch formed by removal of the dirt for creation of the embankment). The last research at the Great Circle was conducted in the 1930s and concentrated on a burial mound in the center of the park. Unfortunately, this research was conducted before modern theoretical perspectives or new techniques had been developed. Thus, there is no information on the construction technique utilized for the embankment itself, no accurate dates on the building of this portion of the ceremonial complex, or investigation of non-mound archaeological materials or remains within or immediately outside the Great Circle.

The Great Circle (circa 1840)



The two remaining major fragments include the Octagon-Circle (now a golf course!) located in the upper-left corner and the large circle located in the lower-center. This circle is preserved as a large (35 acre) park in Newark, Ohio and is known as the "Great Circle Park".

The Field School: Approximately 12 to 15 Bloomsburg University students will thus have the rare opportunity to work at a unique ceremonial site that is known world-wide. Students, working alongside other archaeologists and professionals from various fields, will help in the creation of a trench through a portion of the embankment and small test units will be placed within and just outside the circle. Our main goal is to record the construction techniques for the building of the Circle, recover materials like wood charcoal for radiocarbon dating, and test for undisturbed deposits in and around the embankment that may relate to the ceremonial rituals that took place at the site. Our research will be extremely important since these will be the first set of precise dates for the earthwork complex as well as the first scientific documentation of the archaeology of these complicated ritual spaces.

My ultimate goal is to conduct a series of excavations like those planned for this summer at the other remaining portions of the earthwork complex and to ultimately tie this information together with our habitation site data. Thus, I hope to eventually find answers to some of the questions noted above - how indeed did this incredible piece of "the built environment" operate as the central focus of the valley and how did this wondrous culture create such a monumental construction. Please join me in this Odyssey into the ritual and sacred life of the Hopewell people.

Details: The fieldschool will take place from mid-June through the end of July, students will be housed in the same student apartment complex we stayed at last field season, and the course will be worth 6 credits. Prior experience or coursework in archaeology is not required (but it looks like there will be a large number of "returnees" from the 1990 excavations!). The Park itself is a beautiful tree-filled "green-space" that is a popular picnic spot for the community. Additionally, there is a fine museum at the site which will be our base of operations and we will also take fieldtrips to other adjacent and equally fascinating sites and museums. Since the number of students

is limited to approximately a maximum of 15 please contact me as soon as possible if you are interested (or would like more details). Boy, are we going to have a great summer.

Lost Knowledge: Since the last newsletter, a number of articles of anthropological interest have appeared in national magazines. The most prominent of these was the cover story of the September 25, 1991 TIME. Entitled "Lost Tribes, Lost Knowledge," the article was about the rapidly disappearing native cultures of the world and their culturally specific knowledge bases. Native cultures are disappearing rapidly for basically two reasons: 1) determined efforts by governments, corporations, and entrepreneurial individuals to undermine native ways and dispossess natives of their assets, especially their land; and 2) the younger people in native cultures choosing to turn away from traditional ways to embrace the materialistic culture of international society. The result in either case is the same: a few old people who still retain the knowledge given to them by their ancestors but who have no students. As an example, MIT linguist Ken Hale is quoted in the article as saying that 3000 of the world's 6000 languages are doomed because no children speak them. Since languages contain special vocabulary items which reflect people's unique solutions to the problems facing them, the loss of a language generally also means the loss of potentially useful information.

The most common information lamented in recent articles like TIME's is the medical knowledge of native peoples. In two recent articles in CULTURAL SURVIVAL QUARTERLY, anthropologists Elaine Elisabetsky and Steven R. King both note that drug companies are becoming increasingly interested in the pharmacopoeias of native peoples. She notes that 7000 natural compounds are currently used in modern medicine; most of these are derived from folk healing traditions, especially from European and American Indian traditions. However, in the 1960's Western drug companies cut back their research into medicinal plants in favor of the fermentation of microorganisms and synthetics. While this fueled a biotechnology revolution, recently these firms are discovering that they are now deriving limited success at enormous cost from those efforts; many are turning back to plant research. At the same time, tropical rain forest deforestation has created a crisis in plant extinction; it is

estimated that 100 tropical plant species become extinct each day due to deforestation, which is occurring at a rate of 80 acres a minute world-wide. With fewer than 2% of higher plants having been screened for pharmaceutical properties, these losses of plant species may well mean that potential cures of all sorts are falling beneath the developers' bulldozers.

Thus, there are a great many drug companies gearing up their plant research facilities. For instance, Merck recently announced a major initiative with Costa Rica to discover and analyze rain forest plants for medical properties (reported in the September 20 PHILADELPHIA INQUIRER). Drug companies are finding that the most cost effective approach to plant research is to contact traditional healers in native societies to learn what they use and how; many anthropologists are engaged in this work. However, almost invariably those healers are the elderly. In culture after culture there is no one to carry on the work, and key information is being lost.

Both of these articles brings up an interesting legal question as well: to whom does medicinal plant knowledge belong? If a drug company studies a plant used by a native healer and finds it has therapeutic value, shouldn't the healer receive a patent and a portion of the proceeds from the sales? In the past, drug companies have refused to pay native healers for their contribution; King reports on a non-profit conservation organization, the Healing Forest Conservancy, which is trying to change this situation and give native healers the credit - and income - they are due.

The TIME article also notes other areas of traditional knowledge that are rapidly disappearing, including contraception for population control and traditional means of agriculture. For instance, the traditional system of slash and burn agriculture used by the native farmers of the tropics is becoming appreciated today for its ability to produce a crop while allowing the tropical rain forest to regenerate itself. (in "Cultivating the Tropical Forest", Richard K. Reed writes that "The damage being done to [South American] Indian societies is particularly distressing because they are the only humans who have managed to subsist in the forest without causing permanent harm." In. CONFORMITY & CONFLICT, edited by James P. Spradley & David W. McCurdy, p. 140.) In another article in the CULTURAL SURVIVAL

QUARTERLY, Gordon Thomasson writes that the civil war in Liberia has nearly wiped out indigenous knowledge of rice planting. Traditionally, Liberian women (who do the farming) maintained dozens of varieties of rice (Thomasson collected 112 in one village) which were planted in slightly different ecological microniches to produce the maximal potential from a piece of land. This knowledge was passed on from mother to daughter; young women memorized the appearance of the different varieties and their uses. This traditional knowledge is being replaced by one international hybrid rice which does not grow as well in Liberian soils - and in fact, does not do well at all without expensive petrochemical fertilizers.

Perhaps the best part of the **TIME** article is the photographic work accompanying it. Photographer William Coupon provides some marvelous portraits of the Penan people of Borneo, highland tribespeople of Papua New Guinea, Aleuts from Alaska, pygmies from the Central African Republic, and Lacandon Indians of Chiapas, Mexico.

Anthropology & Business: Another article appeared recently which takes a look at another aspect of anthropology. The September 30, 1991 **BUSINESS WEEK** contains an article about the increasing use of anthropologists as corporate consultants to study interactions and communications in the working place. Actually this is nothing new; **BUSINESS WEEK** published a similar article in June 1986. However, recently the number of corporate hirings of anthropologists has been on the rise. The current article quotes a prediction from a Wayne State anthropologist that half of all new anthropology Ph.D.'s will get their first employment in the business world by 1993.

What do anthropologists have to offer corporate executives? Anthropologists are trained in participatory observation, a data gathering technique in which anthropologists live and work among the people they are studying. When a business hires an anthropologist, the anthropologist goes out into the workplace, working and interacting with employees and discovering how they see their jobs. If possible, the anthropologist also gets to know the workers outside the job, going with them to their homes or restaurants or any other setting where the employee is comfortable about talking about problems on the job. This differs from the approach of most corporate consultants who either talk with managers about how

problems can be solved or who invite employees into their offices for one-on-one "chats" or formal interviews. This often leads to executive solutions imposed from above which may not address a problem from a worker's perspective. The anthropologist, by comparison, offers management an employee-based solution, which often comes closer to the heart of a difficulty.

The BUSINESS WEEK article cites cases from three companies, Xerox, Nynex Corporation, and General Motors, where these employee-based solutions are working. The Xerox example is a typical one. The problem put to the anthropologist, Julian Orr, by Xerox management was this: every year the number of service calls for Xerox equipment was increasing. Management's solution had been to produce new technology which was "simpler", but with the introduction of the new machines, service calls continued to increase. What could be done? Orr went out with Xerox service technicians to see what the problem was from the technician's perspective. He found that the technicians knew that the problem was not technology breakdown, but unfamiliarity with the machines. People didn't know how to use the equipment, and each new model added to the confusion. Service technicians were trained to fix breakdowns, but not how to effectively show people to use the equipment. Orr suggested to management that service technicians be trained as teachers; he also initiated a training program which drew on the knowledge of veteran technicians, rather than on outside experts, to help new personnel. With technicians trained for the job they actually had to tackle, the number of service calls decreased.

This kind of anthropological consultant work has a number of problems built into it. First, many of the problems anthropologists discover in these situations are those of poor employee/manager communications; a common employee complaint is "We told them, but they just don't listen to us." In this context, managers may not listen to anthropological solutions either. Second, many of these anthropological solutions seem deceptively simple - like the Xerox example. Managers are prone to say "I paid a consultant to tell me this?" An article in HR magazine in October 1990 by David M. Stipy ("Anthropologist Uncovers Real Workplace Attitudes") addresses this problem by noting the kind of intense work performed by an anthropologist to come up with these apparently simple solutions:

"When involved in a project [the anthropologist] literally works whatever hours are required. Spending 14 to 15 hours a day in a plant is not uncommon. Being in a plant all day and then going home with someone for dinner and continued discussion frequently occurs. This intense commitment to the project means that buying 30 consultant days from an anthropologist is like buying 45 to 50 days from most other consultants." Few managers are willing to make that kind of commitment to interacting with employees.

Finally, there is a problem of ethics in this kind of research. Anthropologists believe that their first ethical responsibility is to their informants, the people who provide them with information. Traditionally anthropologists have believed that if publishing a piece of information will harm an informant in some way, then it is best not to publish, even if this adversely affects the anthropologist's data base or publications record. This is especially a problem in the workplace, where many employee complaints end up being about management - or individual managers in particular. Since management is paying the anthropologist's fee, they feel they have a right to her or his information, but will an employee be fired for her or his candor? Similarly, an anthropological solution may lead to greater productivity, which may in turn lead to lay-offs as the company finds it needs fewer workers. Whose side is the anthropologist on in that case? To date, anthropologists haven't had to confront these problems, but as BUSINESS WEEK notes, sooner or later, these issues will emerge. As anthropology turns more and more away from being an academic discipline to the world of business, these ethical concerns will need to be addressed.

The Anthropologist's Cookbook: For a different taste, try this groundnut stew from Ghana in West Africa. Groundnuts are what we call peanuts.

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| 2 1/2 lbs lean meat | 1 small jar (8 oz) of peanut butter |
| 1 large onion | salt |
| 1 lb okra | 2 tbsp tomato puree |
| 3 chili peppers or 1 1/2 tsp ground chili | 1/2 cup peanut oil |
| 3/4 pt. beef stock | |

Cut up the meat, onion, and peppers. Fry in oil until the onions are

soft. Add salt and stock and cook until the meat is tender (1 1/2 to 2 hrs?). Half an hour before the meat is ready, add okra, peanut butter and tomato puree. When it is ready, the sauce should be the consistency of a thick soup.

In Ghana this dish is served with side dishes of bananas, dried fruit, coconut, oranges, apples or fried plantain. Serves 4-6.

BU Anthropologists Make Presentations: Several of the BU anthropologists have been making presentations around campus in the past month. Dr. Tom Aleto made a presentation, "Children of the Virgin", on September 16 as part of the university's Latino Heritage Month. Dr. Aleto talked about the integration of religion into everyday life in Mexico. He stressed the roots of this integration in both Spanish and the pre-Columbian Indian cultures; he then showed how Spanish Catholicism merged with Indian beliefs to produce contemporary Mexican faith and practice. He illustrated his talk with slides taken on his many visits to Mexico.

Dr. Dave Minderhout presented a workshop at the Phi Beta Lambda Fall Workshop on October 5. Entitled "Why Businesspeople Need Anthropology", Dr. Minderhout showed how anthropology is becoming more and more utilized in the American business community. Anthropologists are helping businesses understand the international marketplace as well as cultural minorities in the U.S. Also, as noted above, anthropologists also are in increasing demand as consultants to study internal problems in American businesses.

Dr. Dee Anne Wymer will make a presentation on October 25 to the Honor Society of Phi Kappa Phi's annual freshman awards luncheon. She will talk about her archaeological research over the past two years, focusing on her part in analyzing an 11,500 year old mastodon and in the excavation of Hopewell Indian mounds in Ohio. The team of which Dr. Wymer is a part had their Mastodon research published in QUATERNARY RESEARCH recently. Dr. Wymer analyzed the vegetable contents in the gut remains of the creature and found that the animal was ingesting a wider variety of plants than had previously been thought to have been true.