GRANT PROPOSAL TO

NATIONAL PARK SERVICE

HISTORIC PRESERVATION FUND PROGRAM,

SUBMITTED TO

INDIANA DEPARTMENT OF NATURAL RESOURCES, DIVISION OF HISTORIC PRESERVATION AND ARCHAEOLOGY

TOPOGRAPHIC MAPPING AND TRANSECT SURVEY

OF THE PRATHER ARCHAEOLOGICAL SITE (12-CL-4),

CLARK COUNTY, INDIANA

Cheryl Ann Munson
Assistant Scientist
Department of Anthropology
Indiana University-Bloomington

and

Robert G. McCullough
IPFW Archaeological Survey
Indiana University-Purdue University Ft. Wayne

I. Project Description

II. Background of the Proposed Study

III. Goals and Methods

IV. Products

V. Personnel and Timetable

VI. Statement on Meeting State Priorities – not included)

VII. References Cited

VIII. Attachments and Letters of Support

I. Project Description

Scope and Structure of the Project

This proposal to the FY2003 archaeological HPF grant program is envisioned and structured as the first year of a multi-year investigation of a large but poorly known Mississippian site – the Prather site (12-CL-4) – in Clark County, Indiana. This first year will involve basic topographic mapping and initial transect survey, which will provide the foundation for future investigations. As presently conceived, future work would involve boundary and areal surveys, as well as geophysical and geoarchaeological surveys, followed by test excavations. Finally, large-scale block excavations of artifactual and geophysical anomalies, would follow, if funds can be secured from other grant programs.

Cheryl Ann Munson (Department of Anthropology, Indiana University-Bloomington [IU-B]) and Robert G. McCullough (IPFW Archaeological Survey, Indiana University-Purdue University Ft. Wayne [IPFW]) will combine their expertise to co-direct this program of survey and research. IPFW's work for the proposed grant project will be carried out under subcontract to IU. Munson and McCullough plan to exchange leading roles in future grant proposals.

The Prather site is located in the greater Louisville metropolitan area in Grant 52, between Jeffersonville and Charlestown, Indiana (Figure 1). It is also situated immediately west of the former Indiana Army Ammunition Plant (INAAP), in a once rural area that is rapidly being transformed by residential and industrial development (Figure 2). In the 1940s, the Prather family farm extended south of SR 62 and into the area developed for the INAAP (Figure 3). This area is presently the subject of industrial development plans, and residential expansion has exploded on private lands. The planned construction of a new bridge across the Ohio River is located near the Prather site and will increase the scale and pace of development. Consequently, the long term preservation of this site is threatened by multiple modern developments.

Land use in the site locale previously was row crops and pasture. Over the decades, plowing for crops is responsible for deflating the mounds observed previously. Today, the site locale is used for pasture and no-till agriculture, and the mounds – whether man-made constructions for structures, refuse accumulations, or undulations of the karst upland – are suggested only by several slight elevations (Figure 4).

II. Background of the Proposed Project

Research Setting: The Prather Complex

The Prather site has long been recognized as one of the keys to understanding the nature of the Mississippian occupation in the cental Ohio River Valley, which is essentially restricted to the Falls of the Ohio River region (Guernsey 1939, 1942; Janzen 1972; Granger et al. 1981; Anne Bader, personal communication). Prior to historic modifications, the Falls themselves were a series of rapids located between Louisville, Kentucky, and Jeffersonville, Indiana. Since Prather is the best preserved of a small number of known Mississippian sites at the Falls, the term "Prather Complex" has been used by several archaeologists (e.g. Green and Munson 1978) to refer to the Mississippian occupation in the Falls locality.

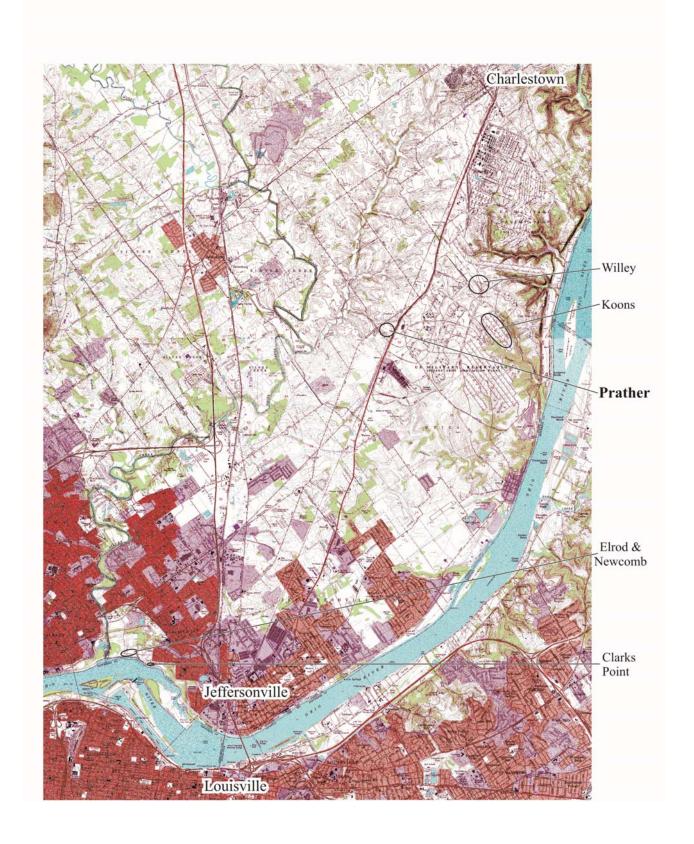


Figure 1. Location of the Prather site, and nearby Mississippian sites in the Falls region (modified from the 1993 USGS 7.5 minute Charlestown, IN-KY and Jeffersonville, IN-KY quadrangle maps).

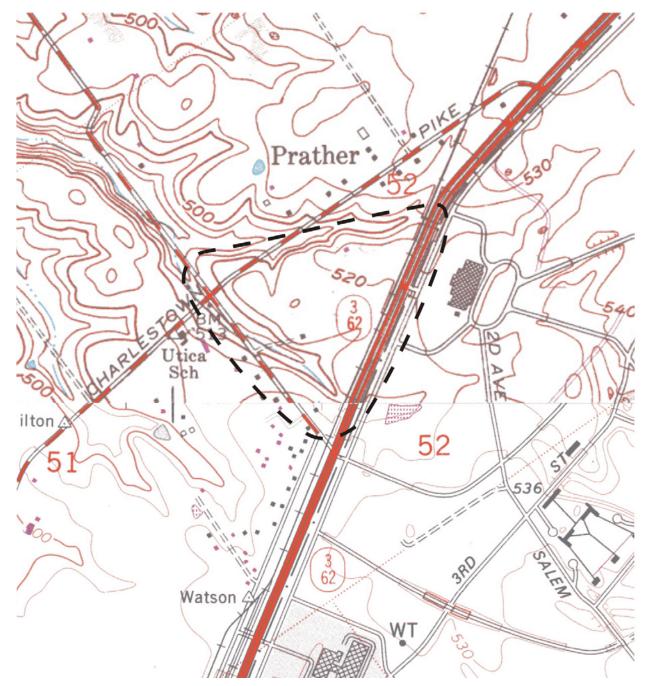


Figure 2. Topography and modern landscape features of the Prather site (modified from the 1993 USGS 7.5 minute Charlestown, IN-KY). The site name is also the name of a small rural community, which today is a cluster of houses. The limits of the Prather site are unknown. The site may extend across the railroad track and SR 62, to the former Indiana Army Ammunition Plant. The headquarters building for INAAP is shown as a large structure immediately east of the former Prather family residence on the southwest side of the approximate site area. The Prather house (shown as a black square) was demolished and a new residence built in the late 1960s (purple square).

Another term is "Falls Mississippian" (Muller 1986: 249-250). The terms "Falls phase" or "Prather phase" is premature, given the unknown temporal, spatial, and formal dimensions that await delineation.

Research over a broad geographic area shows that the Prather Complex represents the northeastern limit of Middle Mississippian culture in the Ohio Valley (Figures 5and 6). This complex is also situated at the southwestern limit of the Upper Mississippian Fort Ancient culture. Given the paucity of archaeological data, the complex is presently an enigma of considerable importance to research concerning the population dynamics of the Late Prehistoric period, which included widespread population movements and dispersals, territorial abandonment, and settlement-subsistence shifts occurring throughout the Eastern Woodlands (for recent overviews, see Brose et al. 2001; Emerson 1991; Green 1997).

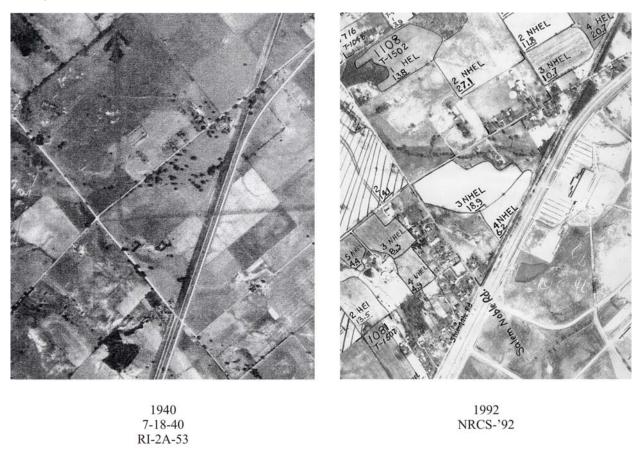


Figure 3. Aerial photos taken of the site area in 1940 and again in 1987 illustrate some of the changes in the landscape and site preservation. The house and other structures associated with the Prather farm in the 1930s and situated along Salem-Noble Road (formerly Prather Road) have been demolished. A house built by the present landowner was built in the late 1960s on Charlestown Pike. Additional air photos (1937-1975) may be a source of information about the location of the early excavations at the Prather site, plus disturbances caused by construction at the site (buildings, roads, railroad).

The borderlands location of the Prather Complex also relates to the nature of frontiers (for an overview, see Rice 1998). As heirs to an American tradition in which frontiers are considered to be arenas of conquest, North American archaeologists most often have characterized frontier zones as "areas of unremitting violence" (Emerson 1999:38). But frontiers can also be arenas of adaptation, interdependence, and cultural change (Rice 1998:52). At the peripheries, far from core control, a middle ground (White 1991) may arise where culture brokers and mediators have a certain autonomy and may express creative possibilities. Within Mississippian societies King and Freer (1995:280) speculate that "polities in these boundary zones . . . stood more in the status of ally rather than tributary . . . were located too far away from cores for effective military dominance . . . and therefore were able to develop new and different social institutions. When viewed as a "border polity," the Prather Complex presents as much importance to archaeological studies of borderlands dynamics as it does to understanding social risk during the Late Prehistoric period.

Determining the origin and development of the Prather occupation --along social, economic, religious, and political dimensions – is the fundamental, long-term research issue toward which our initial surveys are directed. Given the multiplicity of populations that may have been involved – Mississippian, Fort Ancient, and/or local Late Woodland – the political and social dimensions are especially intriguing.



Figure 4. Present conditions at the Prather site, September 2002. Dr. R.G. McCullough, Dr. T. Harold Martin (the landowner), Ms. Jeanne Burke (Clark County Historian), and Mr. Perry Harrell walk over a slight rise, possibly one of the mounds repotred in 1934 by E.Y. Guernsey through surveys and excavations. Little is known about the antecedents of the Prather Complex, but small Late Woodland settlements were present in the Falls region, as they are in so many locales.

Previous Research

The early archaeological work at the Falls has been summarized by Dr. Donald E. Janzen (1972). Janzen describes the theories of the antiquarian era and the legend of Welch-speaking invaders (who sometimes were equated with White Indians), and the Red Indians who defeated the Whites, with the final battle taking place at the Falls. George Rogers Clark relayed this legend to others, who thought that a

large "burial ground" eroding along the river at the Falls lent supporting evidence. Apart from legend, archaeological investigations actually began in Clark County, Indiana, with the surveys of early geologists

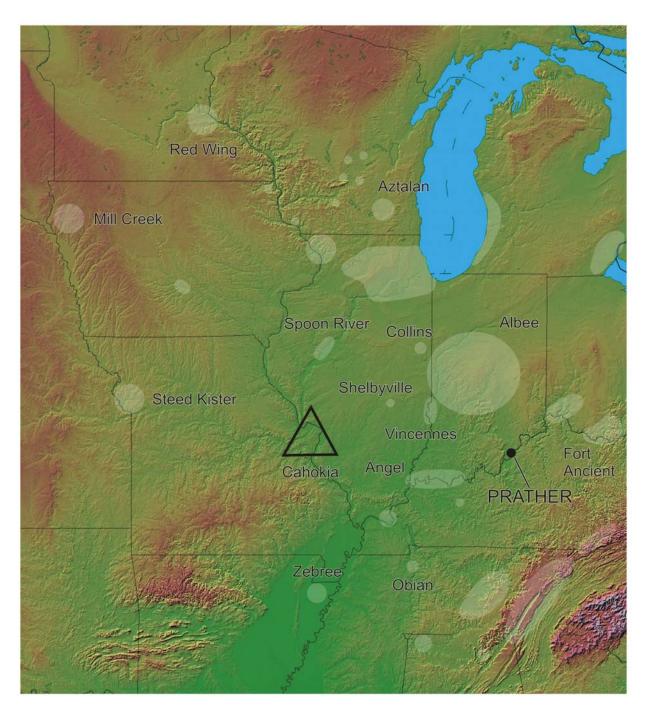


Figure 5. Location of the Prather site and neighboring Mississippian, Upper Mississippian, and Late Woodland populations, ca. A.D. 1100. (Adapted from Green 1997; Garland 1992; Morse and Morse 1990; Hollinger 2002, and personal communication.)

Edward T. Cox (1874, 1875) and William Borden (1874). They reported – and speculated about – a

"stone fort" and small stone mounds at Devil's Backbone, a steep bluff spur at the confluence of Fourteen Mile Creek and the Ohio (also Lilly 1937:50). They also reported shell tempered pottery and stone box graves at the site, which point to a Mississippian use of the locale, though not necessarily one associated with the stone mounds or the stone walls. The site locale, itself, is a naturally fortified area, and the Ohio River bluff to the south offers a high vantage point for tracking movements along the river. These features were also subsequently reported by F.W. Putnam of the Peabody Museum of American Archaeology and Ethnology (Putnam 1875), but later questioned by Gerard Fowke (1902), a geologist interested in archaeology. The reports of Borden and Cox also describe the exposure of many burials along the Ohio River to the west of Devil's Backbone, near the Falls in "Old Clarksville." Again, the reports refer to stone box graves and distinctive ceramics which signify Mississippian interments (Cox 1875:185-186). The ceramics include an owl effigy vessel, fabric impressed pottery, and ear-shaped vessel attachments or lugs. Subsequent work in this locale by Guernsey 1939, 1942) and Janzen (1977a) demonstrated that these sites contain deep Middle-Late Archaic shell mounds with numerous flexed burials of that era.

In 1934, E.Y. Guernsey was employed by Indiana's first noted prehistorian, Eli Lilly, to carry out archaeological investigations in Clark County (Madison 1988). The Guernsey-Lilly correspondence from 1934-1937 is curated at the Glenn A. Black Laboratory of Archaeology, Indiana University, and contains information about the general locations of sites, artifact characteristics, and Guernsey's interpretations. Based on the presence of shell tempered pottery, including effigy vessels and fabric impressed pans, and stone box graves, Guernsey identified Mississippian components at seven Falls area sites in three locales, which he summarizes in two brief reports (1937, 1942). In the uplands between Silver Creek and the Ohio River are three sites: Prather (12-CL-4), Willey (12-CL-16), and Koons (unnumbered, location learned only recently, based on real estate maps of the INAAP). Along the Ohio River terrace and floodplain in the "Old Clarksville" locality, are Clark's Point (Collins, 12-CL-1), Newcomb (12 CL-2), and Elrod (Kelly), a continuation of Newcomb. Finally, on a precipitous bluff top ridge overlooking the Ohio River is the naturally fortified Devil's Backbone, which may have once held Mississippian defensive constructions.

Prather is the best preserved of this group of sites. Willey and Koons have not been observed by modern archaeologists and are located in the general vicinity of bunkers constructed at the former Indiana Army Ammunition Plant, which began development during World War II. The hilltop at Devil's Backbone was also highly disturbed many years ago (Janzen 1977b; James H. Kellar, personal communication), even before the construction and use of Rose Island Park and the acquisition of the area by the INAAP. Clark's Point and Newcomb/Elrod were substantially disturbed by the 1937 flood and later constructions, but a portion of the Newcomb site area remains. While many of these sites are large, small sites or camps of Mississippian or Fort Ancient hunters are indicated by discoveries of arrow points at multiple Clark County sites. Also, in developing areas immediately to the east and northeast of Prather, recent reports of shell tempered ceramics at multiple small sites point to the presence of additional Mississippian or Fort Ancient habitations located along small streams associated with salt springs (Perry Harrell, personal communication).

In addition to the small number of Mississippian sites in the Falls region in Indiana, there are at least 13 recorded sites south of the Ohio River that have components attributed to either Mississippian or Fort Ancient cultures (Granger et al 1981:170). Most of these sites are probably hunting stations. In recent months, two additional sites with highly disturbed Mississippian habitation deposits have recently

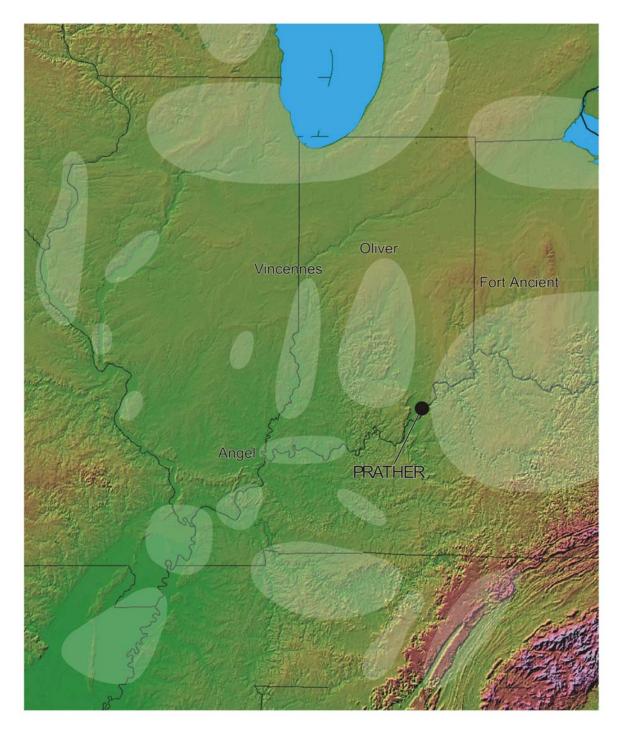


Figure 6. Location of the Prather site and neighboring Mississippian and Upper Mississippian populations, ca. A.D. 1300. (Adapted from Drooker 2000; Green and Munson 1978; Hollinger 2002, and personal communication; McCullough 2000; Pollack and Henderson 2000.)

been brought to light as a result of construction projects in Louisville and on one of the "islands" at the Falls (Anne Bader, personal communication; David Pollack, Kentucky Heritage Council, personal communication).

Guernsey's interest in Mississippian led him to carry out limited excavations at the Prather site, where he had identified three flat-topped mounds... He later remarked in one of his weekly reports that the mounds had become much reduced in elevation, which presumably was a consequence of plowing. Over the course of several days of excavation at Prather he explored the largest mound Guernsey discovered three burials in the largest " mound." These were accompanied by Mississippian vessels, a stone discoidal, and other materials. The most unusual artifact recovered is a carved wooden bird figure that had been covered by copper, which preserved the wood (Figure 7). Fired clay and carbonized wood indicative of burned structural remains overlay the burials. Guernsey (1942) later reports that the burials were beneath the prepared clay floors of rectangular structures built without wattling. His brief descriptions do not give us much clue for interpreting the nature of the mound, since both structural and mortuary features are indicated and no maps of the excavation have been found. While Guernsey's collections from Prather are curated at the Glenn A. Black Laboratory of Archaeology, most artifacts lack

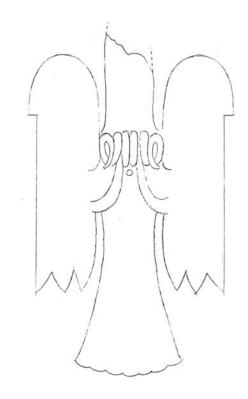


Figure 7. Photocopy of outline drawing by E.Y. Guernsey of the copper-covered bird or "eagle" found at the Prather site, reproduced approximately half size (from site records, Glenn A. Black Laboratory of Archaeology, Indiana University). The head of the bird is fragmentary. The length of the artifact in the original drawing is 22 cm.

specific records to interpret associations. Still, Guernsey's correspondence refers to a multi-chapter manuscript sent chapter by chapter to Eli Lilly. The location of this manuscript is unknown, but it potentially may contain a fuller account of Guernsey's work. Munson's casual observations in the 1970s of the temper, surface treatment, and vessel shapes represented in Guernsey's Prather site ceramic collection confirmed his attribution of the bulk of the collection to Mississippian rather than Fort Ancient.

In 1971, Donald E. Janzen, formerly of Centre College, Danville, Kentucky, held an archaeological field school at the Prather site and excavated into an elevated area (Janzen, written communication to James Kellar, Oct. 2, 1972). He found part of a rectangular wall trench house, and many pottery sherds. A radiocarbon date of A.D. 1045 ± 70 (uncalibrated, UGa-309) is associated with this structure. Ceramics uncovered by Janzen have not been formally analyzed, but shell tempering and plain surfaces predominate, red slipping is rare, and incised guilloche designs are absent. Bone as well as carbonized corn and amaranths also were found.

Site Setting

Prather is the only Mississippian site at the Falls to have reported mounds, and Guernsey considered these to be structural mounds. Prather may have served as a central place for political and religious authority, but the occurrence of stone box graves at multiple sites indicates that mortuary rituals per se were not centralized in this region. The size of Prather site is presently unknown, although the landowner reports that artifacts have been found over an area of approximately 30 acres. This size is comparable to small Mississippian mound centers in other regions, but its environmental setting is unusual. Most other Mississippian mound centers are located near rich alluvial soils and areas of high aquatic food resources, such as backwater lakes or sloughs. Prather, in contrast, is situated on an upland ridge 4.9 km (3.0 mi) west of the Ohio River and 2.4 km (1.5 mi) east of Silver Creek, the nearest large stream (Figure 1). Several springs in the immediate vicinity must have been the main source of water for the site's inhabitants.

Although the settlement pattern of the Prather Complex is unknown, the locations and characteristics suggests something of their interrelationships to each other and the environment. The Willey and Koons sites, which also have reported stone box graves, are located much like Prather, back from the Ohio River on upland ridges. However, the other stone box grave sites at Newcomb and Elrod are located adjacent to the Ohio River at the Falls. Because the Falls themselves created a concentration of aquatic resources and expanses of alluvial soils, the environmental setting at these sites parallels the "classic" Middle Mississippian environments to the west and south.

The unusual upland siting of Prather, Willey, and Koons suggests that their inhabitants were hiding from people traveling the Ohio River, and that this settlement strategy was worth the economic costs. Intuitively, for Mississippian farmers, hunters, and fishermen, the economic costs of settlement in an upland location would have involved increased travel time to aquatic food resources and rich alluvial soils for agricultural fields, or substitution of less concentrated upland fauna and less-fertile upland soils (when used for repeated cropping). Though intriguing, the variation in the settlement locations of Prather Complex communities cannot be interpreted in the absence of radiocarbon dating for multiple settlements.

Finally, the essentially destroyed Devil's Backbone site certainly could be interpreted as another defensive structure, but not one that was necessarily associated with a substantial habitation. That site is located at the most defensible location along the Ohio River near the Falls, and may have been a special use site.

Research Questions: Prather Site

The Prather site has never been systematically surveyed by archaeologists, nor are detailed topographic maps available. The one radiocarbon date places the site in the Late Prehistoric period, but early in the period of Mississippian development in the midcontinent. Thus, fundamental cultural-historical information for this site is unknown. Our research questions for Prather site can be answered through integrated surveys, testing and excavation.

• Knowledge of community scale and configuration.

How extensive is the Mississippian occupation at the site? What are the site boundaries? How many mounds, if indeed present, and what type – platform mounds for principal structures, or burial mounds? Fortification walls, or not? Formal cemetery areas, or residential burials, or both? Residences arranged around a central plaza, or loosely grouped according to natural features?

• Dating and duration of the Mississippian occupation.

Does the Prather site and complex represent an early Mississippian expansion into the central Ohio Valley? To the northwest, and west of Prather (Figure 5), population movements during A.D. 1050-1150 emanated from the Mississippian center at Cahokia, appeared in a number of distant regions of the midcontinental U.S. (e.g., most distantly, Aztalan, Collins, Steed-Kisker), and produced mixed settlements of Mississippians and local Late Woodland populations, which ultimately developed into local Mississippian centers (see summaries by Emerson 1991; Green 1997; Goldstein and Richards 1991). To the southwest of Prather, "cultural influences" from Cahokia are thought to play a role in the transformation of the local population, though not necessarily population movements (Garland 1992; Morse and Morse 1990). East of Prather, some degree of Mississippian interaction is evident at early Fort Ancient occupations in southwestern Ohio. There, the Turpin and State Line sites have produced limited examples of pottery with Ramey Incised-like designs (Riggs 1986; Vickery et al. 2000), but none of the regional specialists believes these manifestations represent an intrusion of Cahokians or other Mississippian peoples.

Or perhaps the Mississippian presence at the Falls was due to an increasingly traveled avenue of communication between Cahokia and a local Late Woodland population. Such may have been the case west of Prather, where around A.D. 1100 the lower Ohio Valley Mississippian center at Angel (Black 1967) shows evidence of interaction with Cahokia in the form of a variety of Ramey Incised pottery (Hilgeman 2000). Prior to Angel, diagnostic ceramics of the antecedent Late Woodland/emergent Mississippian Yankeetown phase (A.D. 700-1100) (Redmond 1990) of the same southwestern Indiana region appear at Cahokia in contexts dating ca. A.D. 950-1000 (Muller 1986:165).

Alternatively, does the Prather Complex represent an intrusion of Mississippian peoples into the Falls region that followed the demise of Cahokia and the emergence and expansion of Oneota and Fort Ancient? Around A.D. 1300, many regional cultures and sites north of the Ohio River in Illinois, Indiana, and beyond, are associated with archaeological evidence of increased social risk and sometimes conflict (Figure 6) (McCullough 2000; Hollinger 2002, and personal communication). South and east of Indiana, Fort Ancient settlement is also expanding at this time (Drooker 2000; Pollack and Henderson 2000). Widespread population movements may have brought Mississippian settlement into the Falls region from elsewhere but did not expand any further because of a boundary to the east with the Fort Ancient population.

• Characteristics of artifacts and subsistence remains.

Artifact, faunal, and floral assemblages are essential to reconstructing the Prather community and to deciphering cultural relations on local and extraregional scales. Ceramics are the primary artifact category for addressing questions about internal cultural processes and external relationships, regardless of scale of inquiry, because Mississippian and Fort Ancient ceramic traditions outside the Falls area are

distinguishable. Hypothetically, the earliest Prather Complex might have associated ceramics of some mix of Mississippian, Fort Ancient, and possibly local Late Woodland traditions. To a lesser extent, lithic assemblages may reveal external connections, since cherts from southern Illinois (Mill Creek and Kaolin) and Tennessee (Dover) were widely exchanged throughout the Mississippian period in the lower Ohio Valley, and far beyond. Additionally, differences between Fort Ancient and Mississippian botanical remains suggest that Prather site's subsistence remains may reflect degrees of cultural adaptation to the local environment (Rossen and Edging 1987).

III. Project Goals and Methods

Given the unknown but estimated large size of the Prather site and the absence of surface visibility in pastures and no-till fields, the proposed FY 2003 grant project can realistically achieve six goals in the initial survey of the site:

- (1) review existing documents and previous site collections to assess site size, configuration, and types of materials, and the future research potential of these records and collections;
 - (2) establish a site grid for recording observations made in 2003 and future years;
 - (3) prepare a detailed topographic map;
- (4) survey multiple transects across the site by excavating probe samples to identify the extent and types of cultural materials and to begin to document site boundaries;
- (5) clean, catalog, and analyze recovered materials with respect to documented contexts and spatial distributions, and prepare materials for curation; and
- (6) prepare a report on the project for the National Park Service and DHPA, and communicate research results with other archaeologists, historical organizations, and the public.

Reviewing existing documents and collections is the first step, but one that also will be carried out over the course of the grant project. Dr. Donald E. Janzen has graciously agreed to work with the project research team to provide information about his work at the site, and Philip DiBlasi, University of Louisville, has offered to loan Dr. Janzen's records and collections from Prather for study by Munson and McCullough. The project co-directors have sought permission to study documents, photographs, and collections from E.Y. Guernsey's work at Prather, which are curated at the Glenn A. Black Laboratory of Archaeology, Indiana University. Guernsey's multi-chapter manuscript describing his work at Prather and other Mississippian sites has not yet been located in the more obvious repositories, but it will be searched for in other agencies and institutions by experts working on Clark County history.

Establishing a grid at Prather site is the first step in field work. Permanent datums will be set in protected places to facilitate mapping and to allow future work to be integrated with the 2003 investigations. Permanent datums of metal rods set into concrete have proven more durable than metal pins alone. A sufficient number of datums will be set to provide multiple transit survey stations.

Topographic mapping will be accomplished using a total station. Contour intervals will be small to delineate the subtle elevation variations that may reflect the locations of mounds deflated by plowing. The topographic map will be tied to the site grid and provide a base map for all site investigations. All observations with the total station will be logged for future reference.

Excavation of probe samples is a standard procedure for carrying out archaeological survey in vegetated areas. When controlled for volume, excavated in a standardized manner, and screened, probe samples can provide information on the types, densities, distributions, and associations of material remains, as well as depth of cultural deposits and agricultural disturbances.

Our probe sampling is modeled on the shovel probe procedures in DHPA's guidelines, but the excavation will be done mechanically rather than by shovel. A tractor-mounted posthole auger with a 12inch diameter bit will be used to physically displace the soil in the probe holes. The excavated soils will be collected for screening or other processing. The selected diameter of the bit is comparable to the horizontal dimensions used in standard shovel probes. Hand-held posthole augers have been used effectively at other sites, and bucket augers are another standard subsurface survey tool, especially for survey of deep deposits. In Indiana, tractor-mounted posthole augers have recently been used to survey a construction area at Hovey Lake Fish and Wildlife Area, and the method proved to be more effective and efficient than hand-excavated shovel probes (Munson 2000). Mechanically-assisted augering has been chosen for survey work at Prather not only because of efficiency, but because recovery of materials and control of volume can be better standardized than with cone-shaped, hand-excavated "shovel-probes." Hand-excavation of 50 x 50 cm "test pits" (as opposed to "shovel probes") also provides good control of volume and material recovery, but test pits encompass a larger area and are far more time-consuming to excavate than mechanical posthole auger probes. In other words, with the mechanically excavated probes, more samples can be excavated in the budgeted time for this aspect of the project. With mechanically augered probes the result will be data of comparable quality and greater quantity than shovel test pits, and greater quality and than shovel probes.

Two other considerations about survey techniques are also important. First, the site area is in pasture and no-till crop fields, rather than brush or forest, making it possible to use tractor-mounted auger probes. Second, the landowner has offered his services and equipment to carry out the tractor work for the sampling, thereby reducing costs for contracted tractor work.

Probe locations will be set out by transit and tape, with elevations recorded. Two north-south and two east-west transects will be used as the initial sample, with probes spaced regularly at 20 m intervals. Intervals between probes may be reduced, depending on results. Probes will be excavated by level. Level 1 will be excavated to a depth of 30 cm, or the average depth of the plowzone. During augering, much of the displaced soil will fall back into the hole, but subsequently will be scooped out by hand for screening. Other displaced soil will be scattered around the probe hole, but collected on a board or sheet of hard plastic, and then scooped up for screening. After the hole is cleaned out, the walls of the hole will be examined and the depth of the plowzone and distinct soils recorded. Soil characteristics (including Munsell colors, mottling) and content will be recorded on forms, as will depth of levels, so volume of excavated soil can be calculated. The base of the excavated level will be examined to identify culturally sterile soil, and an Oakfield probe will be used to confirm their presence. If sterile soil is not exposed, or there is uncertainty, then level 2 will be excavated until sterile soil is reached. Samples from level 2 will

be saved for flotation in selected probes, but otherwise screened. Screening will employ 1/4-inch mesh. Samples collected by screening and flotation will be assigned field specimen numbers, as will any artifacts found on the surface (e.g., in cow paths or eroded areas). All probe holes will be backfilled. If human remains are discovered during probe sampling, excavation will be terminated at that location and DHPA immediately notified. No excavation of burials is being proposed.

Soil profiles exposed in probes will be analyzed with respect to topography to assess how mounds or possible mounds, and other large community-scale features, can best be investigated in future research. Dr. C. Russell Stafford also will examine the soil profiles and lend his expertise by consulting on geoarchaeological research prospects for future investigations.

Following field work, collected materials will be cleaned, cataloged, and analyzed. Selected flotation samples will be processed and analyzed by an archaeobotanist. Faunal remains retrieved from the probes will be preliminarily analyzed by a zooarchaeologist to assess the preservation of remains and research potential of the archaeofauna. The bulk of the laboratory work will take place at Indiana University, but personnel from IPFW will participate in identifications and analysis, and will prepare distribution maps of types of recovered materials. Curation will be provided by IPFW.

Presentation of research findings will begin with preparation of a web site, so the public can share in the research carried out at this site. Following analysis of collections, the co-directors will prepare a report of investigations. This will be the primary research product for NPS and DHPA. Because of the high public interest in the project, copies of the report also will be provided to local libraries and historical organizations. Additionally, the co-directors will give presentations about the Prather project to state or regional professional meetings and to public meetings. A commitment has already been made to present a lecture in May 2003 about Mississippian archaeology in the Falls region to the recently organized Falls of the Ohio Archaeological Society. Many members of this organization may volunteer to help with the project. Finally, preliminary arrangements have been made for a short-term exhibit about Prather site research at the Falls of the Ohio State Park.

IV. Products

Products resulting from the project will be:

- (1) Archaeological site survey records for the Prather site, plus any other sites reported to the research team.
 - (2) Topographic map of the Prather site.
- (3) Maps of artifact types and distributions, as well as depth of cultural deposits, as observed in multiple transects across the site.
 - (4) Report of investigations describing the survey project.
- (5) Results of the project to be incorporated in conference papers and published articles, as warranted.

(6) A web site, public lectures, and museum exhibits to communicate research findings and preservation values.

V. Personnel and Timetable

The research team will be led by co-directors C.A. Munson (Assistant Scientist, Department of Anthropology, Indiana University) and R.G. McCullough (Director, IPFW Archaeological Survey, Indiana University-Purdue University Ft. Wayne). The rest of the team is composed of experienced research assistants, volunteers, specialists, and consultants.

The project will be administered by C.A. Munson, but the direction of the project and many of the research activities will be carried out by both C.A. Munson and R.G. McCullough. Only a small part of Munson's time (5% FTE) would be covered by the grant. C.A. Munson and R.G. McCullough will contribute time to the project (respectively, 6% and 10% FTE) to meet part of the matching share. Other additional work will be contributed by Dr. P.J. Munson, (archaeologist, Indiana University) who will assist with probe samples during the survey. Research assistants will be paid by the project and will work in both the field and laboratory. Other assistance, primarily during survey work, will come from volunteer workers, including people with previous archaeological experience. Many of the volunteers are professional archaeologists, students, and experienced avocational archaeologists associated with the Falls of the Ohio Archaeological Society, whose assistance in the work with probe samples will be especially helpful.

Specialists working on the project are: Dr. Leslie Bush (Archaeobotanical Analysis, Austin, TX), archaeobotanist; Rexford Garniewicz (Indiana State Museum) zooarchaeologist; and Dr. Della Collins Cook (Indiana University), bioanthropologist. Additionally, Garniewicz will contribute time during the fieldwork portion of the project, as his schedule allows. Dr. C. Russell Stafford (Indiana State University) will also visit the site to examine profiles and consult with the project co-directors on prospects for future geoarchaeological research to delineate mounds. Cook's and Stafford's work will be contributed, as will most of Garniewicz's. Other specialists are in the field of regional history: Ms. Jeanne Burke, Clark County Historian, and Dr. Karl Cramer, who is writing a book on Clark County's history. Both have offered to assist with documentary research and will contribute work as consultants. Ms. Burke, along with Mr. Perry Harrell of Jeffersonville, IN, have already provided copies of documents relating to Prather site which have been used in preparing this proposal. Finally, Dr. Donald E. Janzen has offered to provide information about his work at the Prather site, and the collections and documents from his excavations, that will be loaned for study by the University of Louisville, courtesy Philip DiBlasi.

The work of R.G. McCullough and his research assistants will be conducted under subcontract between IU and IPFW.

The project will be carried out from May 2003 to June 2004.

May:

Begin review of existing documents and collections. Set datums and grid for site. Collect data for a detailed topographic map. Carry out initial probe samples for survey. Calculate average number of probes augered and screened per hour to plan work in fall.

Work on site will take place over 7 days.

June-August: Clean and catalog materials recovered in May. Prepare topographic map. Examine and

record documents and collections from previous investigations at Prather (Guernsey's 1934 work, Janzen's 1971 work). Review initial probe results to plan the location of

probes samples in fall work.

October-

November: Work on site will take place over 15 days. Prepare instructions for volunteers assisting

with field work. Expand initial transects of probe samples. Set out their locations with a

total station, screen samples, and record data. Process flotation samples, and select

samples (2-4) for analysis. Clean some of the collected materials from samples on-site, if

this is feasible.

December-

March: Clean and catalog materials from probe samples. Calculate volumes of probe samples.

Prepare data sets from samples for analysis of types, densities, distributions, and associations. Tabulate data summaries. Begin preparing illustrations for report.

Continue review of existing collections.

April Prepare draft report of investigations, to be submitted by April 30.

June Revise draft report and prepare final report, to be submitted by June 30.

VII. References Cited

Anderson, D.G.

1990 Stability and Change in Chiefdom-Level Societies: An Examination of Mississippian Political Evolution in the South Atlantic Slope. In *Lamar Archaeology: Mississippian Chiefdoms in the Deep South*, edited by M. Williams and G. Shapiro, pp. 187-213. University of Alabama Press, Tuscaloosa.

Borden, W.

1874 Report of a Geological Survey of Clarke and Floyd Counties. In *Indiana Geological Report of 1873*, pp. 184-186. Indianapolis

Benn, D. W.

1995 Woodland People and the Roots of the Oneota. In *Oneota Archaeology: Past, Present, and Future*, edited by W. Green. Office of the State Archaeologist, University of Iowa, Iowa City.

Black, G.A.

1967 Angel Site: An Archaeological, Historical, and Ethnological Study. Indiana Historical Society. Indianapolis. Borden

Brose, D.S., C.W. Cowan, and R.C. Mainfort Jr. (editors)

2001 Societies in Eclipse: Archaeology of the Eastern Woodlands Indians, A.D. 1400-1700. Smithsonian Institution Press, Washington, D.C.

Cox, E.T.

- Mounds and Mound Builder's Implements. In *Fifth Annual Report of the Geological Survey of Indiana, Made During the Year 1873*, pp. 126-127. Indianapolis.
- Antiquities. In *Sixth Annual Report of the Geological Survey of Indiana, Made During the Year* 1874, pp. 124-125. Indianapolis.

Drooker, P.B.

- 1997 The View from Madisonville: Protohistoric Western Fort Ancient Interaction Patterns. Memoir, Museum of Anthropology, University of Michigan, Ann Arbor.
- 2000 Madisonville Focus Revisited: Reexcavating Southwestern Ohio Fort Ancient from Museum Collections. In *Cultures Before Contact: The Late Prehistory of Ohio and Surrounding Regions*, edited by R. A. Genheimer, pp. 228-270. Ohio Archaeological Council.

Drooker, P.B., and C.W. Cowan

2001 Transformation of the Fort Ancient Cultures of the Central Ohio Valley. In Societies in Eclipse: Archaeology of the Eastern Woodlands Indians, A.D. 1400-1700, edited by D. S. Brose, C. W. Cowan, and R. C. Mainfort Jr., pp. 83-106. Smithsonian Institution Press, Washington, D.C.

Emerson, T.E.

- 1991 Some Perspectives on Cahokia and the Norther Mississippian Expansion. In *Cahokia and the Hinterlands: Middle Mississippian Cultures of the Midwest*, edited by T.E. Emerson and R.B. Lewis, pp. 193-206. University of Illinois Press, Urbana.
- The Langford Tradition and the Process of Tribalization on the Middle Mississippian Borders. *Midcontinental Journal of Archaeology* 24:3-56.

Garland, E.B.

The Obion Site: An Early Mississippian Center in Western Tennessee. *Mississippi State University, Cobb Institute of Archaeology Report of Investigations* 7.

Gibbon, G.

Oneota at the Periphery: Trade, Political Power, and Ethnicity in Northern Minnesota and on the Northeastern Plains in the Late Prehistoric Period. In *Oneota Archaeology: Past, Present, and Future*, edited by W. Green, pp. 175-199. Office of the State Archaeologist, University of Iowa, Iowa City.

Goldstein, L.G., and J.D. Richards

1991 Ancient Aztalan: The Cultural and Ecological Context of a Late Prehistoric Site in the Midwest. In *Cahokia and the Hinterlands: Middle Mississippian Cultures of the Midwest*, edited by T.E. Emerson and R.B. Lewis, pp. 1193-206. University of Illinois Press, Urbana.

Granger, J.E., P.J. DiBlasi, and J.M. Hemberger

Toward a Research and Management Design: Cultural Resources Studies in the Falls Region of Kentucky, Volume III: The Search for a Research and Management Design Process.

Graybill, J.R.

- 1981 The Eastern Periphery of Fort Ancient (A.D. 1050-1650): A Diachronic Approach to Settlement Variability. Unpublished Ph.D. dissertation, Department of Anthropology, University of Washington, Seattle.
- 1984 The Eastern Periphery of Fort Ancient. *Pennsylvania Archaeologist* 54(1-2):41-50.

Green, T.J. and C.A. Munson

1978 Mississippian Settlement Patterns in Southwestern Indiana. In: *Mississippian Settlement Patterns*, edited by Bruce D. Smith, pp. 293-330, Academic Press, New York.

Green, W.

1997 Middle Mississippian Peoples. In Wisconsin Archaeology. *The Wisconsin Archaeologist* 78:202-222.

Guernsey, E.Y.

1939 Relationships Among Various Clark County Sites. *Proceedings of the Indiana Academy of Science* 48: 27-32.

1942 The Culture Sequence of the Ohio Falls Sites. *Proceedings of the Indiana Academy of Science* 51: 60-67.

Hilgeman, S.L.

2000 Pottery and Chronology at Angel. University of Alabama Press, Tuscaloosa.

Hollinger, R.E.

- 1995 Residence Patterns and Oneota Cultural Dynamics. In *Oneota Archaeology: Past*,

 **Present, and Future, edited by W. Green, pp. 141-174. Office of the State Archaeologist,

 University of Iowa, Iowa City.
- 2002 Conflict and Culture Change in the Late Prehistoric and Early Historic American Midcontinent. Draft, Ph.D. Dissertation, Department of Anthropology, University of Illinois, Urbana.

Janzen, D.E.

- 1971 Excavations at the Fall of the Ohio River Region. *Filson Club History Quarterly* 45(4):373-380.
- 1972 Archaeological Investigations in Louisville and Vicinity: An Historical Sketch. *Filson Club History Quarterly* 46(4):302-321.
- 1977a An Examination of Late Archaic Development in the Falls of the Ohio Area. In For the Director: Research Essays in Honor of James B. Griffin, edited by Charles E. Cleland, pp. 123-143. *Anthropological Papers, Museum of Anthropology, University of Michigan* 61, Ann Arbor.
- 1977b The Devil's Backbone of Clark County, Indiana and the Evolution of a Legend. *Filson Club History Quarterly* 51(4):303-314.

King, A., and J.A. Freer

1995 The Mississippian Southeast: A World-Systems Perspective. In *Native American Interactions: Multiscalar Analyses and Interpretations in the Eastern Woodlands*, edited by M. S. Nassaney and K. E. Sassaman, pp. 266-288. University of Tennessee Press, Knoxville.

Lilly, Eli

1937 Prehistoric Antiquities of Indiana. Indiana Historical Bureau, Indianapolis.

Madison, J.H.

1988 Eli Lilly: Archaeologist. *Glenn A. Black Laboratory of Archaeology, Research Reports* 8, Indiana University, Bloomington.

McCullough, R.G.

2000 The Oliver Phase of Central Indiana: A Study of Settlement Variability as a Response to Social Risk. Ph.D. Dissertation, Department of Anthropology, Southern Illinois University, Carbondale.

Milner, G.R.

1992 Morbidity, Mortality, and the Adaptive Success of an Oneota Population from West-

Central Illinois. In *Late Prehistoric Agriculture: Observations from the Midwest*, edited by W. J. Woods, pp. 136-166. Studies in Illinois Archaeology 8. Illinois Historic Preservation Agency, Springfield.

Milner, G.R., V.G. Smith, and E. Anderson

1991 Conflict, Mortality, and Community Health in an Illinois Oneota Population. In *Between Bands and States*, edited by S. G. Gregg. Occasional Paper 9. Center for Archaeological Investigations, Southern Illinois University, Carbondale.

Muller, J.

1986 Archaeology of the Lower Ohio Valley. Academic Press, New York.

Munson, C.A.

2000 Phase I Archaeological Survey of the Construction Area for two New Storage Buildings, Hovey Lake Fish and Wildlife Area, Posey County, Indiana. Prepared for Division of Engineering, Indiana Department of Natural Resources. Department of Anthropology, Indiana University.

Morse, D.

1978 *Ancient Disease in the Midwest*. 2nd ed. Reports of Investigations 15. Illinois State Museum, Springfield.

Morse, P. and D.F.

1990 The Zebree Site: An Emerged Early Mississippian Expression in Northeast Arkansas. In *The Mississippian Emergence*, edited by B.D. Smith, pp. 51-66. Smithsonian Institution, Washington, D.C.

Overstreet, D. F.

1995 The Eastern Wisconsin Oneota Regional Continuity. In *Oneota Archaeology: Past, Present, and Future,* edited by W. Green, pp. 33-64. Office of the State Archaeologist, University of Iowa, Iowa City.

Pollack, D. and A.G. Henderson

2000 Insights into Fort Ancient Culture Change: A View from South of the Ohio River. In *Cultures Before Contact: The Late Prehistory of Ohio and Surrounding Regions*, edited by R. A. Genheimer, pp. 194-227. Ohio Archaeological Council.

Putnam, C.W.

1875 Archaeological Researches in Kentucky and Indiana with Descriptions of Salt Cave. *Proceedings of the Boston Society of Natural History*: 42:315-316.

Redmond, B.G.

1990 The Yankeetown Phase: Emergent Mississippian Cultural Adaptation in the Lower Ohio River Valley. Ph.D. Dissertation, Department of Anthropology, Indiana University, Bloomington.

Rice, P.M.

1998 Contexts of Contact and Change: Peripheries, Frontiers, and Boundaries. In *Studies in Culture Contact: Interaction, Culture Change, and Archaeology*, edited by J. G. Cusick, pp. 44-66.

Riggs, R.E.

1986 New Stratigraphic Sequences from the Lower Miami Valley. *West Virginia Archaeologist* 38(2):1-21.

Rossen, J. and R.B. Edging

1987 East Meets West: Patterns in Kentucky Late Prehistoric Subsistence. In *Current Archaeological Research in Kentucky, Volume One*, edited by D. Pollack, pp. 225-234. Kentucky Heritage Council, Frankfort.

Santure, SK, A.D. Harn, and D. Esarey (editors)

1990 Archaeological Investigations at the Morton Village and Norris Farms 36 Cemetery. Reports of Investigations 45. Illinois State Museum, Springfield.

Sasso, R. F.

1993 La Crosse Region Oneota Adaptations: Changing Late Prehistoric Subsistence and Settlement Patterns in the Upper Mississippi Valley. *The Wisconsin Archaeologist* 74:324-369.

Vickery, K.D., T.D. Sunderhaus, and R.A. Genheimer

2000 Preliminary Report on Excavations at the Fort Ancient State Line Site, 33 Ha 58, in the Central Ohio Valley. *Cultures Before Contact: The Late Prehistory of Ohio and Surrounding Regions*, edited by R. A. Genheimer, pp. 272-329. Ohio Archaeological Council.

White, R.

1991 The Middle Ground: Indians, Empires, and Republics in the Great Lakes Region, 1650-1815. Oxford University Press, New York.

VII. Attachments

Institutional, administrative approval for co-directed research under subcontract: Patricia Farrell, Director, Research and Sponsored Programs, IPFW

Landowner Permission:

Dr. T. Harold Martin, Charlestown, IN

Letters of support:

Research Team

- Dr. C. Russell Stafford, Department of Anthropology, Indiana State University
- Dr. Della Collins Cook, Department of Anthropology, Indiana University
- Dr. Leslie Bush, Archaeobotanical Analysis, Austin, TX
- Mr. Rexford Garniewicz, Curator of Prehistoric Archaeology, Indiana State Museum
- Dr. Donald E. Janzen, archaeologist and specialist in communal societies, Danville, KY

Historical and Cultural Organizations

- Ms. Jeanne Burke, Clark County Historian, Charlestown, IN
- Dr. Carl Kramer, adjunct professor of history, IU-Southeast, historic research, Jeffersonville, IN
- Mr. Gregory Sekula, Southern Regional Office, Historic Landmarks Foundation of Indiana, Jeffersonville, IN
- Mr. Robert E. Gallman, Clark's Grant Historical Society, Clarksville, IN
- Ms. Jane Salres, Clarksville History Society, Clarksville, IN
- Mr. Elmer L. Hoehn, interested citizen, Jeffersonville, IN

Institutions and Agencies

- Ms. Bett Etenohan, Falls of the Ohio State Park, Clarksville, IN
- Mr. Philip J. DiBlasi, Staff Archaeologist, University of Louisville, Louisville, KY
- Ms. Anne T. Bader, Falls of the Ohio Archaeological Society

Elected Officials

The Honorable Baron P. Hill, U.S. Congressman, Indiana 9th District Indiana State Representative, James L. Bottorff, House District 71