

United States Department of the Interior
National Park Service

For NPS use only

National Register of Historic Places
Inventory—Nomination Form

received

date entered

See instructions in *How to Complete National Register Forms*
Type all entries—complete applicable sections

1. Name

historic 36 CE 65

and/or common The Houserville Site

2. Location

street & number East College Avenue (1300 Block)

not for publication

city, town State College N/A vicinity of

state Pennsylvania

code 042

county Centre

code 027

3. Classification

Category	Ownership	Status	Present Use
<input type="checkbox"/> district	<input type="checkbox"/> public	<input type="checkbox"/> occupied	<input checked="" type="checkbox"/> agriculture
<input type="checkbox"/> building(s)	<input checked="" type="checkbox"/> private	<input checked="" type="checkbox"/> unoccupied	<input type="checkbox"/> commercial
<input type="checkbox"/> structure	<input type="checkbox"/> both	<input type="checkbox"/> work in progress	<input type="checkbox"/> educational
<input checked="" type="checkbox"/> site	Public Acquisition	Accessible	<input type="checkbox"/> entertainment
<input type="checkbox"/> object	<input type="checkbox"/> n/a in process	<input checked="" type="checkbox"/> yes: restricted	<input type="checkbox"/> government
	<input type="checkbox"/> n/a being considered	<input type="checkbox"/> yes: unrestricted	<input type="checkbox"/> industrial
		<input type="checkbox"/> no	<input type="checkbox"/> military
			<input type="checkbox"/> museum
			<input type="checkbox"/> park
			<input type="checkbox"/> private residence
			<input type="checkbox"/> religious
			<input type="checkbox"/> scientific
			<input type="checkbox"/> transportation
			<input type="checkbox"/> other:

4. Owner of Property

name Kenneth Walker

street & number N/A

city, town Milesburg N/A vicinity of

state Pennsylvania

5. Location of Legal Description

courthouse, registry of deeds, etc. Centre County Courthouse

street & number High Street

city, town Bellefonte

state Pennsylvania 16823

6. Representation in Existing Surveys

title Pennsylvania Arch. Site Survey

has this property been determined eligible? yes no

date 1978

federal state county local

depository for survey records State Museum

city, town Harrisburg

state Pennsylvania 17120

7. Description

Condition		Check one	Check one	
<input type="checkbox"/> excellent	<input type="checkbox"/> deteriorated	<input type="checkbox"/> unaltered	<input checked="" type="checkbox"/> original site	
<input checked="" type="checkbox"/> good	<input type="checkbox"/> ruins	<input checked="" type="checkbox"/> altered	<input type="checkbox"/> moved	date <u>N/A</u>
<input type="checkbox"/> fair	<input type="checkbox"/> unexposed			

Describe the present and original (if known) physical appearance

The Houserville Site (36CE65) is a prehistoric open-air lithic workshop site located in Nittany Valley, 1 Km southeast of Houserville, Pennsylvania (Map 1).

[REDACTED]

Topographically, Nittany Valley is within the Ridge and Valley Province. This area is typically characterized by narrow floodplains within steep-sided valleys which run in a northeast-southeast direction. Nittany Valley is different from this typical topographic configuration in that it is very broad in width and contains a gently rolling valley floor drained by several small streams.

The area around the Houserville Site is predominantly agricultural. Most floodplain areas and gentle slopes are cultivated on an annual basis. This land use pattern is gradually changing since the town of Houserville is undergoing moderate but consistent expansion. New housing developments are being constructed in areas which were previously agricultural fields.

Prehistorically, the vegetation of the area was probably quite different from that observed today. Nittany Valley lies at the northern extension of the oak-chestnut forest (Braun 1950). White oak, sugar maple, and hemlock were most likely predominant in floodplain areas with white, red, black and chestnut oak, along with scattered pitch and white pine, occurring on the slopes of the valley floor. Chestnut was probably ubiquitous and constituted up to 25% of all species represented.

The Houserville Site is one of a large number of sites (Map 1) located in the immediate vicinity of Slab Cabin Run which were recorded during the 1978 Pennsylvania State University Archaeological Survey. In 1979, the Houserville Site was selected for investigation in order to determine phases of occupation, site function, and archaeological context.

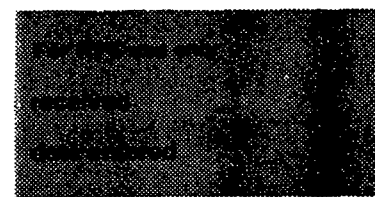
Under the direction of Dr. James W. Hatch, Department of Anthropology, the Pennsylvania State University, twenty 2 meter by 2 meter randomly selected units were excavated during a two week period. Extensive collections were also taken of surface materials. These investigations indicated that stratified deposits are absent at the site. All cultural material is contained within a 25cm-35cm yellow-brown plow zone which is underlain by a compact yellow clay subsoil. No features such as hearths, burials or post mold patterns were discovered during the course of excavation. An analysis of the recovered materials indicates that the Houserville Site was occupied primarily during the Early and Middle Archaic periods and served as a lithic workshop locality for the manufacture of jasper biface preforms.

In the following year, the Houserville lithic assemblage was subject to additional analysis. Two interrelated problems were approached; 1) the jasper lithic reduction sequence, and 2) the thermal alteration of the jasper and its role in the reduction sequence. In order to achieve these objectives two lines of analysis were implemented. First, controlled heating experiments of jasper were undertaken. These tests indicated that at 200°C - 300°C the goethite component of the jasper decomposed to hematite (accounting for the yellow to red transformation) and that the fracturing properties of jasper improved substantially (Schindler et al. 1981). Second, an analysis of several thousand

*The lithic material processed at the site is known as Bald Eagle Jasper. It occurs locally as a yellow rock but turns red during heat treatment (Schindler et al. 1981).

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lithic specimens resulted in the formulation of a model of the lithic reduction sequence (Figure 1) which describes the reduction process from raw material to finished bifacial tool. An analysis of the role of heat treatment in this sequence shows that heat was applied at all stages in the reduction process. Minimal heat treatment occurred during initial trimming of the raw material but increased significantly during the crude to fine biface thinning process.

Comparative studies of the Houserville Site lithic assemblage have provided important insights into lithic procurement and reduction strategies. Located approximately 1000 to 1555 meters west of the Houserville Site is the Tudek Site (36CE238), an Early and Middle Archaic jasper quarry locality. Detailed comparisons between the lithic assemblage from this latter site (36CE238) and the Houserville Site (Table 1) have provided insights into the procuring and processing activities involved in the exploitation of Bald Eagle Jasper. In particular, the Tudek Site exhibits lower frequencies of heat-treated jasper and lower frequencies of artifacts produced during the latter stages of the lithic reduction process. From these data, the activities involved in Bald Eagle Jasper exploitation can be inferred.

At the Tudek Site, raw material of yellow jasper was acquired in the form of nodules. From these nodules crude and intermediate biface preforms were manufactured. The heating of yellow jasper in hearths to improve the fracturing properties was practiced but only on a modest scale. Instead, the predominant behavior appears to be the manufacture of unheated preforms for transport to other localities for further processing. The lack of finished bifaces of fine biface preforms supports this interpretation. Furthermore, the complete absence of tools such as projectile points, scrapers, drills, etc., suggests that the Tudek Site functioned as a quarry locality only and did not serve as a habitation site.

In contrast, the Houserville Site lithic assemblage reflects a more complex set of activities. Nodules, crude preforms, or intermediate preforms were transported from the Tudek Site and were then reduced to finished products. Heat treatment was used frequently and at every stage of the lithic reduction process (Schindler *et al.* 1981). Furthermore, the presence of projectile points, end scrapers, drills, etc., in the Houserville assemblage indicates that jasper processing was only one of several activities conducted by groups camping at the Houserville Site. Hunting and hide processing are also represented and other activities were probably conducted as well.

In summary, during the Early and Middle Archaic period groups camped at the Houserville Site and, while in residence, visited the Tudek Site to acquire Bald Eagle Jasper. The material acquired was then transported to the Houserville Site where tools and nearly finished preforms were manufactured. These latter products were then carried through the territories traversed by their makers and perhaps were traded beyond. Artifacts of Bald Eagle Jasper thus appear on sites throughout much of Central Pennsylvania.

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Table 1. Heat Treated vs. Untreated Specimens by Lithic Category.

<u>Lithic Category</u>	<u>Unheat-Treated*</u>	<u>Heat Treated**</u>	<u>Totals</u>
(a) Crude Biface Preforms	9 (45%)	11 (55%)	20
(b) Intermediate Biface Preforms	8 (53%)	7 (47%)	15
(c) Fine Biface Preforms	2 (40%)	3 (60%)	5
<hr/>			
(i) Primary Trimming Flakes	19 (58%)	14 (42%)	33
(ii) Crude Biface Thinning Flakes	23 (16%)	123 (84%)	146
(iii) Intermediate Biface Thinning Flakes	110 (20%)	431 (80%)	538

*Without any indications of reddening
**Visible reddening on surface

8. Significance

Period	Areas of Significance—Check and justify below			
<input checked="" type="checkbox"/> prehistoric	<input checked="" type="checkbox"/> archeology-prehistoric	<input type="checkbox"/> community planning	<input type="checkbox"/> landscape architecture	<input type="checkbox"/> religion
<input type="checkbox"/> 1400–1499	<input type="checkbox"/> archeology-historic	<input type="checkbox"/> conservation	<input type="checkbox"/> law	<input type="checkbox"/> science
<input type="checkbox"/> 1500–1599	<input type="checkbox"/> agriculture	<input type="checkbox"/> economics	<input type="checkbox"/> literature	<input type="checkbox"/> sculpture
<input type="checkbox"/> 1600–1699	<input type="checkbox"/> architecture	<input type="checkbox"/> education	<input type="checkbox"/> military	<input type="checkbox"/> social/ humanitarian
<input type="checkbox"/> 1700–1799	<input type="checkbox"/> art	<input type="checkbox"/> engineering	<input type="checkbox"/> music	<input type="checkbox"/> theater
<input type="checkbox"/> 1800–1899	<input type="checkbox"/> commerce	<input type="checkbox"/> exploration/settlement	<input type="checkbox"/> philosophy	<input type="checkbox"/> transportation
<input type="checkbox"/> 1900–	<input type="checkbox"/> communications	<input type="checkbox"/> industry	<input type="checkbox"/> politics/government	<input type="checkbox"/> other (specify)
		<input type="checkbox"/> invention		

Specific dates 8,000–3,500 BC **Builder/Architect** N/A

Statement of Significance (in one paragraph)

The Houserville Site has contributed significant information towards an understanding of the lifeways of Early and Middle Archaic hunter-gatherers in Central Pennsylvania and can be expected to yield additional information which will further this understanding.

Additional research at this site will enable data to be collected concerning several important archaeological problems. First, more extensive research efforts may yield chronological data which will directly determine the time period of prehistoric utilization. The proposition that yellow jasper was used exclusively during the Early and Middle Archaic periods still awaits more solid documentation. The possible presence of hearths used for heat treating may provide the radiocarbon samples required for this information.

Second, patterns of jasper distribution surrounding a known source will permit the reconstruction of patterns of regional interaction. Models relating to the exchange systems and to the territorial ranges of the groups that visited the Houserville and Tudek Sites may be developed and tested with such distributional data.

Third, comparative studies between the Early and Middle Archaic jasper assemblages and the assemblages of other lithic materials characteristic of later prehistoric periods can be used to investigate technological change. What factors promoted the shift from Bald Eagle Jasper to other materials? Was material availability, knapping quality, material durability, or some other factor the cause of this shift in lithic preferences? Since changes in lithic technology probably reflect changes in more general aspects of economic and social organization, answers to these questions may make important contributions to an understanding of prehistoric socioeconomic evolution in Central Pennsylvania.

9. Major Bibliographical References

*Houseville Site
Centre Co.*

Braun, Lucy E. 1967. Deciduous Forests of Eastern North America. Blakeston Co., Phila.
Schindler, D., Hatch, J.W., Hay, C., and Bradt, R. 1981. The Heat Treating of Jasper:
Analytical and Behaviour Implications. American Antiquity.

10. Geographical Data

Acreeage of nominated property 1.12

Quadrangle name State College

Quadrangle scale 1:24000

UTM References

A	<u>[redacted]</u>	<u>[redacted]</u>	<u>[redacted]</u>	B	<u>[]</u>	<u>[]</u>	<u>[]</u>	<u>[]</u>	<u>[]</u>	<u>[]</u>
	Zone	Easting	Northing		Zone	Easting	Northing			
C	<u>[]</u>	<u>[]</u>	<u>[]</u>	D	<u>[]</u>	<u>[]</u>	<u>[]</u>	<u>[]</u>	<u>[]</u>	<u>[]</u>
E	<u>[]</u>	<u>[]</u>	<u>[]</u>	F	<u>[]</u>	<u>[]</u>	<u>[]</u>	<u>[]</u>	<u>[]</u>	<u>[]</u>
G	<u>[]</u>	<u>[]</u>	<u>[]</u>	H	<u>[]</u>	<u>[]</u>	<u>[]</u>	<u>[]</u>	<u>[]</u>	<u>[]</u>

Verbal boundary description and justification

[redacted]
[redacted]
[redacted] (see continuation sheet)

List all states and counties for properties overlapping state or county boundaries

state	code	county	code

11. Form Prepared By

name/title Christopher M. Stevenson and Conran Hay

organization The Pennsylvania State University date October 15, 1980

street & number 105 Carpenter Building telephone 863-2301

city or town University Park state Pennsylvania 16802

12. State Historic Preservation Officer Certification

The evaluated significance of this property within the state is:

national state local

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

State Historic Preservation Officer signature [Signature]

title Larry E. Tise, State Historic Preservation Officer date 1/24/86

For NPS use only

I hereby certify that this property is included in the National Register

date

Keeper of the National Register

date

Attest:

Chief of Registration