

Learning in Action: Student Centered Research

Learn. Work. Discover.

An Archaeological Survey of a Data Deficient Region: Survey of > 2,600 acres in Newton County, Indiana

Jamie M. Leeuwrik, Abby Clark, Christine Thompson, and Kevin C. Nolan

Abstract

The AAL conducted three data enhancement projects for archaeological resources in Newton County, Indiana funded by FY2014, FY2015, and FY2016 Historic Preservation Fund Grants. These projects covered all townships in Newton County. A total of 2,691 acres of agricultural land was surveyed, identifying 275 new archaeological sites. The survey recovered 683 prehistoric artifacts and 7,638 historic artifacts. Cultural periods represented in the artifact assemblage include precontact era Middle, Early, and Late Archaic, Middle and Late Woodland, and Late Prehistoric, in addition to Historic components. Sixteen sites were recommended for additional research and are potentially eligible for the National Register of Historic Places.

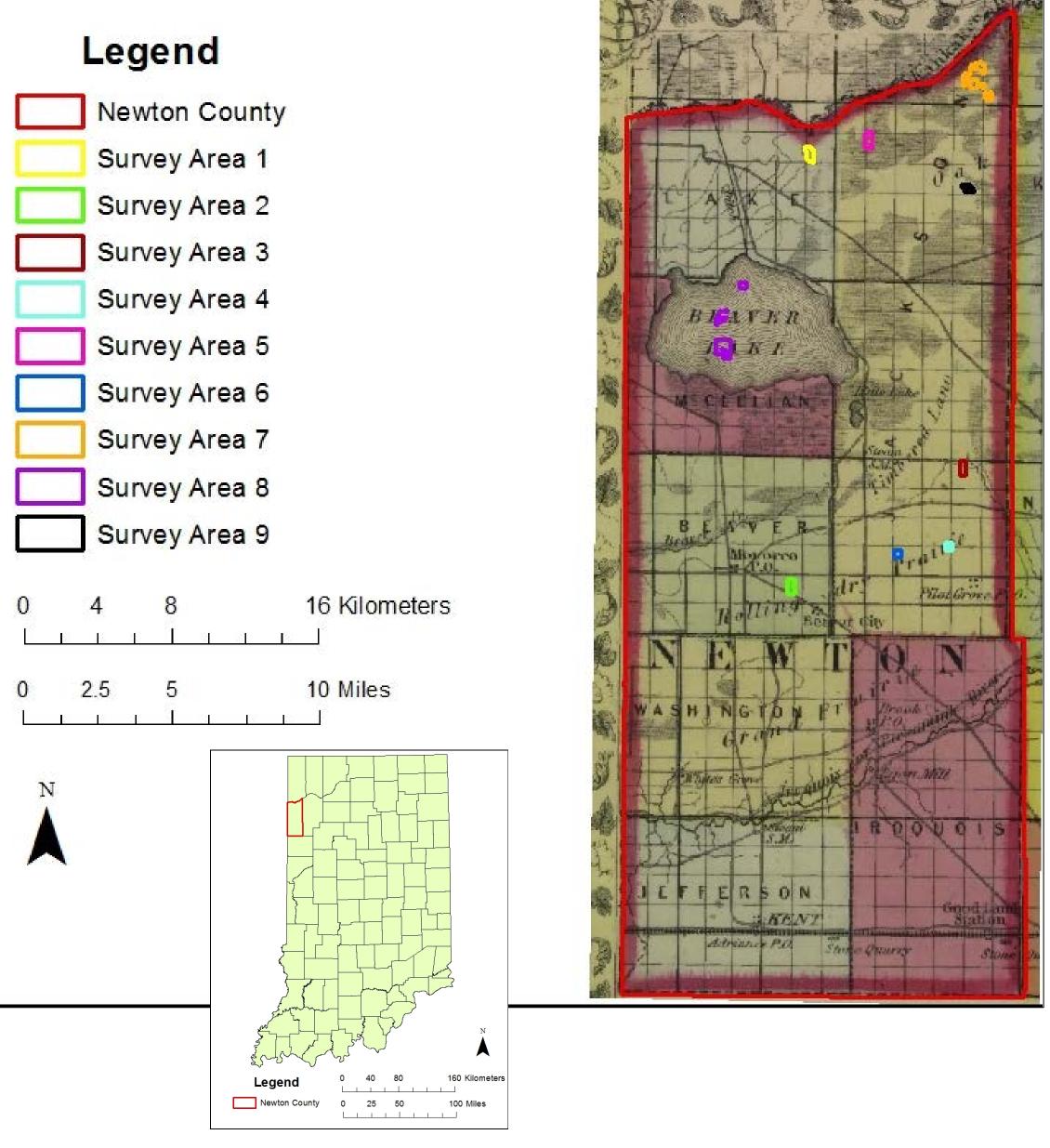
| Cultural Period | Projectile Point Types | | | | |
|-----------------------|---|--|--|--|--|
| Paleoindian | | | | | |
| Early Archaic | Palmer, Charleston Corner Notched, Rice Lobed, MacCorkle Stemmed, Kirk, | | | | |
| | Kanauha Stemmed, St. Albans Side Notched, Thebes, Kirk Corner-Notched⊙ | | | | |
| Middle Archaic | Graham Cave side-notched, Morrow Mountian Cluster■ | | | | |
| Late Archaic | Matanzas, Table Rock Stemmed, Riverton, Merom cluster■, Brewerton eared- notched, Matanzas side notched*■, Brewerton Side-Notched*®, Matanzas Cluster® | | | | |
| | Bottleneck Stemmed®, <u>Lamoka</u> Cluster = , | | | | |
| Terminal Late Archaic | Genesee cluster | | | | |
| Early Woodland | Adena Stemmed®, Motley | | | | |
| Middle Woodland | Affinis Snyder, Snyders | | | | |
| Late Woodland | Madison®, Unclassified Side Notched, Unclassified Corner Notched, Unclassified | | | | |
| | Flared Stem, Triangular Cluster⊙, Humpback Knife■ | | | | |

| Landform | FY2014 - 2016 # of acres | FY2014 - 2016 # of sites | Site Acreage | Density | Distribution | |
|--------------------------------------|--------------------------------|--------------------------------|-----------------|------------------------|------------------------------------|--|
| Outwash Plains and Till Plains | 729.9 | 89 | 15.8 | 1 site per 8.2 acres | Sites cover 2.16% of surface area | |
| Lake Plains or Lake Beds | 219.3 | 20 | 7.86 | 1 site per 10.67 acres | Sites cover 3.58% of surface area | |
| Moraines | 1,454.6 | 125 | 23.31 | 1 site per 11.64 acres | Sites cover 1.6% of surface area | |
| Outwash Plains | 166.7 | 21 | 18.3 | 1 site per 7.94 acres | Sites cover 10.98% of surface area | |
| Floodplains | 113.6 | 20 | .64 | 1 site per 5.68 acres | Sites cover .56% of surface area | |
| | | | | | | |

| Landform | # of FY2014 Artifacts | # of FY2015 Artifacts | # of FY2016 Artifacts | Total | % of Artifacts Recovered |
|--------------------------------------|--------------------------|--------------------------|--------------------------|-------|-----------------------------|
| Outwash Plains and Lake Plains | 0 | 361 | 733 | 1,094 | 14% |
| Lake Plains or Lake Beds | 0 | 1,184 | 0 | 1,184 | 15.1% |
| Moraines | 1,069 | 124 | 2,574 | 3,767 | 48% |
| Outwash Plains | 0 | 608 | 917 | 1,525 | 19.4% |
| Floodplains | 260 | 9 | 2 | 271 | 3.5% |

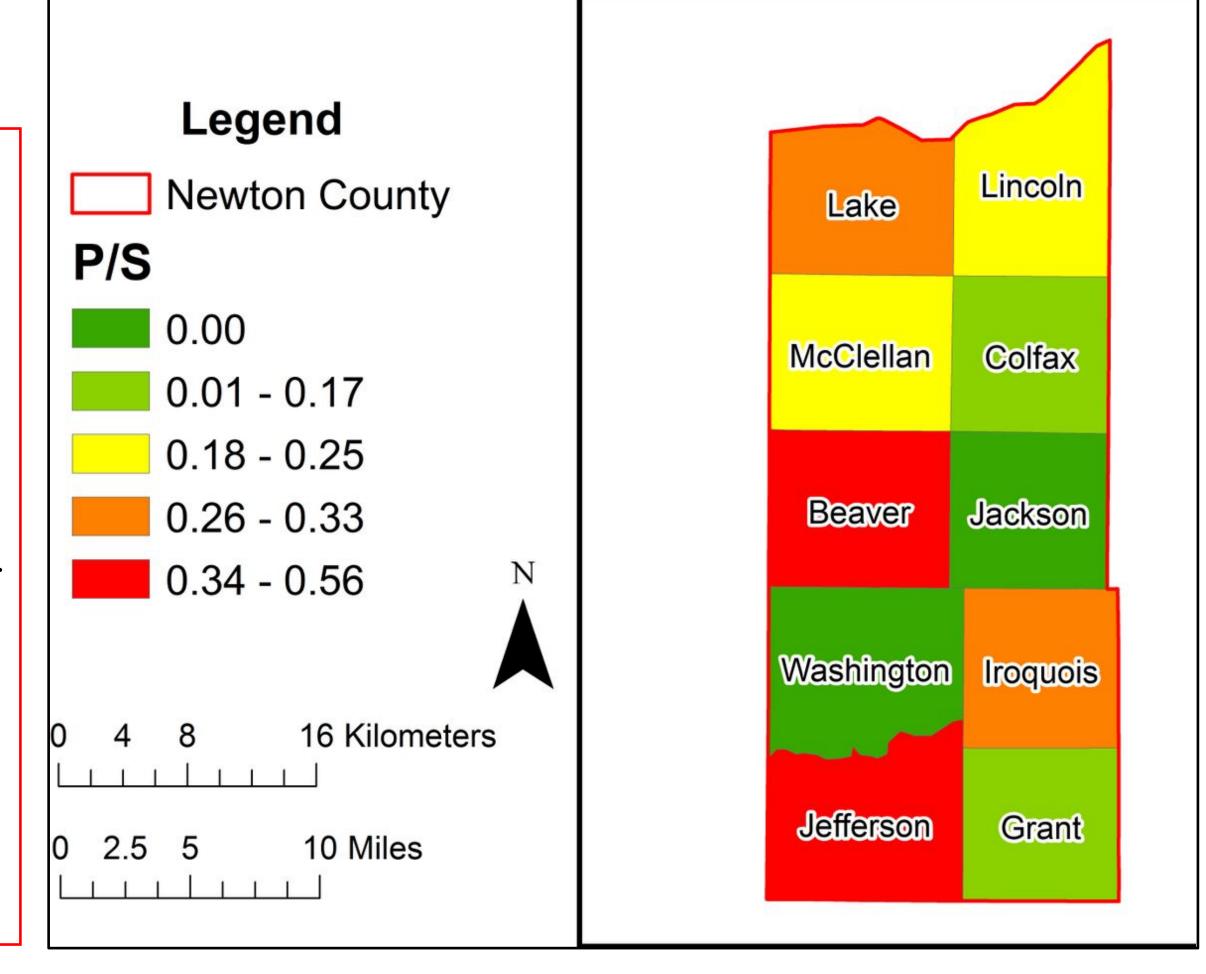
Background

Newton County is located in northwestern Indiana bordered by the Kankakee River to the north and sharing a western border with Illinois. Prior to these three surveys, there were 178 archaeological sites documented in Newton County, a lower number compared to the surrounding counties. The amount of previous archaeological work completed in Newton County was relatively low, and the results of those surveys show that sites were encountered in about one in every 3.33 surveys in Newton County with an average positive survey to total survey ratio of 0.29 across the 10 townships. Previous archaeological investigations in Newton County have been predominantly oriented toward surface surveys and only a small percentage of sites have been tested or excavated. The goals of the FY2014, FY2015, and FY2016 Historic Preservation Fund grants were increasing the existing archaeological data base, refining the cultural chronology, and examining evidence for the settlement and interaction of the Euro-American settlers and Native Americans in Newton County.



Methods

Over the course of the FY2014, FY2015, and FY2016 Historic Preservation Fund Grant projects pedestrian transects at 10 meter intervals were used for archaeological reconnaissance in Newton County of over 2,600 acres. In addition, two reinvestigations were conducted totaling approximately 13.73 acres. Areas were selected for survey using topographic maps, aerial maps, soil information, historic sources and reconnaissance information. The survey was constructed to sample different regions within the project area, with a different emphasis within the county each year. Cultivated fields with optimal visibility were sought for survey. Any potential new archaeological sites encountered were recorded using handheld GPS units. The artifacts encountered were collected and brought to the AAL for identification and cataloging.



Results

In total approximately 2,691.2 acres (1,089.1 hectares) of agricultural land in Newton County underwent pedestrian survey, with 7,781 artifacts recovered, and 275 archaeological sites recorded. Over the course of the FY2014 HPF grant approximately 902.8 acres were surveyed in the southern half of the county, with 1,329 artifacts collected, and 89 new archaeological sites recorded. Of the 89 sites, 25 had a Prehistoric component and 74 contained a Historic component. Primarily the Prehistoric site components were of an unidentified time period (n=23), and two sites contained diagnostic projectile points, both from the Late Archaic.

During the FY2015 HPF grant approximately 849.1 acres of agricultural land were pedestrian surveyed in the northern half of the county with 7.1 acres being a resurvey located within an area that was once Beaver Lake (see map to left). Within the survey areas, 2,286 artifacts were recovered and 76 new archaeological sites recorded. Of the 76 archaeological sites, 20 had a Prehistoric component and 63 sites had Historic components. Fourteen sites contained unidentified Prehistoric components. One Early Archaic site, three Late Archaic sites, one Late Prehistoric site, and one Late Woodland/Late Prehistoric site were discovered.

The final FY2016 Newton County HPF grant surveyed 932.27 acres within the central townships of the county, with 4,172 artifacts collected, and 110 new archaeological sites recorded. Of the 110 archaeological sites identified during the FY2016 project, 41 had Prehistoric components and 72 had Historic components. Thirty-five had unidentified Prehistoric components. The identified precontact components consisted of one Middle Archaic site, one Middle-Late Archaic site, three Late Archaic sites, and one Late Woodland site. Out of the 275 new archaeological sites added to the archaeological record over three years, 15 were determined potentially eligible for listing on the Indiana Register of Historic Sites and Structures and the National Register of Historic Places based on the results of this work.

















Discussion/Conclusion

Newton County displayed a lack of artifacts as compared to similar county surveys in Indiana. It is very likely that the presence of Beaver Lake wetland and the Kankakee Marsh during prehistoric times and into the mid- 1800s heavily influenced the habitability of the area. The variably extensive wetlands would have dramatically restricted both livable land and resources in the area for the incoming Euro-American settlers during the historic period. This constraint would have concentrated those individuals who were there to select upland and well drained features in order to avoid the marshlands that were so prevalent throughout the county. The surveys conducted in Newton County are unable to be compared to those of other Indiana counties whose results show a greater evidence of land use in upland areas because of the disproportionate survey of upland features in Newton County. Newton County would benefit from further archaeological investigations, especially those focusing on the procurement of diagnostic prehistoric materials and systematization of landform use prehistorically.

Acknowledgements - This project has been funded in part by a grant from the U.S. Department of the Interior, National Park Service's Historic Preservation Fund administered by the Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology. The project received federal financial assistance for the identification, protection, and/or rehabilitation of historic properties and cultural resources in the State of Indiana. However, the contents and opinions contained in this publication do not necessarily reflect the views or policies of the U.S. Department of the Interior, nor does the mention of trade names or commercial products constitute endorsement or recommendation by the U.S. Department of the Interior. Under Title VI of the Civil Rights Act of 1964 and Section 504 of the Rehabilitation Act of 1973, the U.S. Department of the Interior prohibits discrimination on the basis of race, color, national origin, or disability in its federally assisted programs. If you believe that you have been discriminated against in any program, activity, or facility as described above, or if you desire further information, please write to: Office of Equal Opportunity, U.S. Department of the Interior, 1849 C Street, N.W., Washington, D.C. 20240. References

Clark, Abby L., Christine Thompson, Matthew P. Purtill, and Kevin C. Nolan

An Archaeological Survey of Newton County: Enhancement of a Data Deficient Region, Part III. Reports of Investigation 98, edited by Christine Thompson and Kevin C. Nolan. Applied Anthropology Laboratories, Ball State University, Muncie, Indiana.

Leeuwrik, Jamie M., Shelbi Long, Christine Thompson, Kevin C. Nolan, and Erin Steinwachs

An Archaeological Survey of Newton County: Enhancement of a Data Deficient Region. Reports of Investigation 88, edited by Christine Thompson and Kevin C. Nolan. Applied Anthropology Laboratories, Ball State University, Muncie, Indiana.

Leeuwrik, Jamie M., Christine Thompson, and Kevin C. Nolan

An Archaeological Survey of Newton County: Enhancement of a Data Deficient Region, Part II. Reports of Investigation 92, edited by Christine Thompson and Kevin C. Nolan. Applied Anthropology Laboratories, Ball State University, Muncie, Indiana.