

**EXCAVATION OF THE WHITBY BRANCH SITE (7NC-G-151)
STATE ROUTE 1 CORRIDOR, ODESSA SEGMENT
NEW CASTLE COUNTY, DELAWARE**



By

Robert M. Jacoby, Charles H. LeeDecker, Richard J. Dent, and John C. Bedell

**THE CULTURAL RESOURCE GROUP
LOUIS BERGER & ASSOCIATES, INC.
East Orange, New Jersey**

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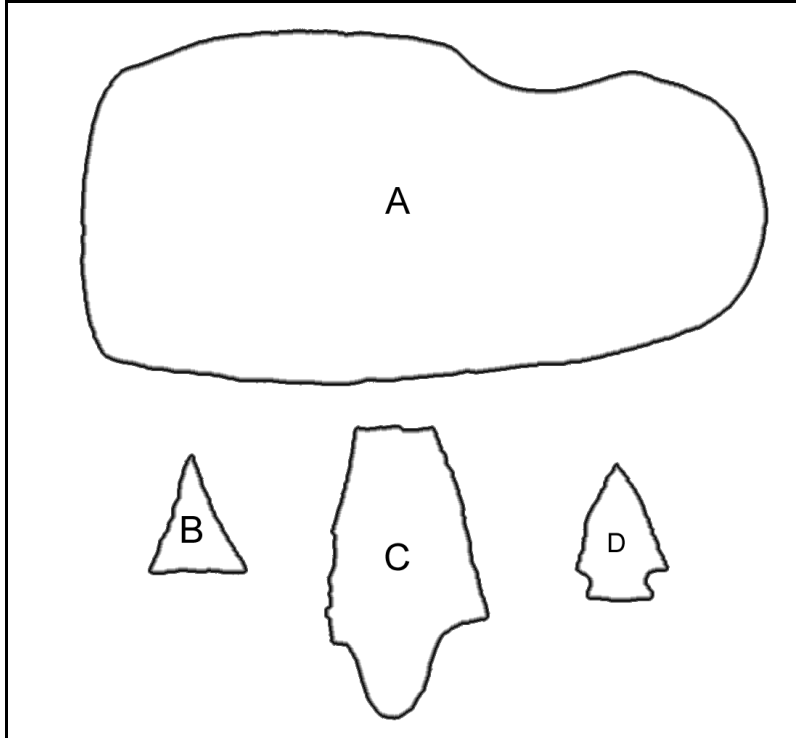
**Delaware
Department of Transportation**

**Eugene E. Abbot
Director of Planning**

2001



**U.S. Department of Transportation
Federal Highway Administration**



Cover: Artifacts Recovered from Whitby Branch Site

- | | | | |
|----------|------------------------|----------|---------------------------------|
| A | Quartzite axe | B | Chert triangle point |
| C | Quartzite knife | D | Jasper Jack's Reef point |



PLATE 1: Field Crew, Site 7NC-G-151

Left to right: Earl Proper, Rob Shaw, Bruce Bourcy (kneeling), Rob Jacoby, Diane Rog, Jeff Rog, Joelle Browning, Paul Stansfield, Chris Marshall, and Jim Skocik

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DELDOT PROJECT 91-110-15

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ABSTRACT

The Whitby Branch Site is one of many Native American archaeological sites that have recently been excavated along Delaware's new State Route 1. Planning studies for this new highway have included a broad program of archaeological investigations, resulting in a great amount of new information about Delaware's ancient cultural heritage. Indeed, there has been a virtual explosion of new information from the numerous archaeological excavations. Perhaps more important than new data, new analytical methods have been developed, new theories constructed, and new ways of interpreting information to broader audiences have appeared.

The Whitby Branch Site is unusual in that it was found in one of the few arable locations in Delaware that had not been subject to cultivation. The archaeological deposits were extremely well preserved and the site therefore offered an excellent opportunity to examine a Native American occupation area. The site investigation focused on issues of prehistoric chronology, subsistence, settlement patterns, intrasite patterning, environmental adaptation, and technology. The first period of documented site use occurred during the Clyde Farm complex of the Woodland I period (ca. 3000-500 BC). Intensive site use occurred during the Black Rock I complex of the Woodland I period (ca. 500-1 BC), and was followed by occupation during the Webb complex (ca. AD 500-1000). Site use during the Woodland II period (ca. AD 1000-1650) was limited and the remains from this period may represent only sporadic visits.

The site occupies a low ridge surrounded by extensive tidal wetlands that are tributary to the Appoquinimink River. The site was exploited for its extensive bed of workable cobbles, and may have been a procurement and processing station for game and plant resources. A number of hearth areas were present, as well as tool and activity areas relating to the manufacture and maintenance of lithic implements. One area of the site contained unusually high concentrations of lithic debris. Four 1x1-meter units excavated in this area collectively yielded over 4,000 pieces of debitage, a number that exceeds the total assemblages from many other sites in Delaware. The concentration of debitage at the Whitby Branch Site appears to have been the location of a refuse deposit situated at a distance from the site's primary work area. The activities inferred from the observed debitage and tool frequencies suggest that the site functioned in large part as a lithic quarry and workshop.

A possible pit house dwelling was uncovered and was dated to the Black Rock I complex. Botanical and faunal preservation at the site was poor, although charred walnut and hickory nutshell were recovered from a number of features, including a large storage pit within the proposed pit house. These remains may represent consumed food items.

Several regionally recognized point types were identified in the artifact assemblage, including Susquehanna Broadspear, Poplar Island, Jack's Reef Corner Notched, and Levanna. Artifact frequencies were unusually high for a site of this size, reflecting the extensive utilization of the locally available cobbles for tool manufacture. Flake-attribute and flake-size analyses demonstrated that the range of production techniques used at the site included core reduction and biface reduction.

ACKNOWLEDGMENTS

The Cultural Resource Group of Louis Berger & Associates, Inc. (Berger), wishes to express thanks to the various individuals who provided guidance, advice, and assistance at various stages of this project. Numerous local residents visited the site during the archaeological fieldwork and expressed interest in the project and provided information pertaining to the area's prehistory. Mr. S.R. Smith, the owner of the site, was helpful during the field excavations and took an interest in the work as it progressed.

Berger's Cultural Resource Group had direct responsibility for the study. The Berger staff was under the general supervision of John Hotopp, Group Vice President. Charles LeeDecker served as project manager for the project, with general responsibility for research design, field excavation, and report preparation. Dr. R. Joseph Dent served as principal investigator during the planning and fieldwork stage of the project; after he returned to his academic position at American University, Charles LeeDecker took on the responsibility of principal investigator. Rob Jacoby served as the field supervisor; he also conducted much of the artifact analysis and prepared major sections of the report. The field crew members included Bruce Bourcy, Joelle Browning, Andrea DeNight, Ron Feinen, Jennie Feinen, Erik Jonsberg, Whitney Kirk, Christopher Marshall, Glen Mellin, Margaret Nash, Kim Pokorosky, Jeffrey Rog, Diane Rog, Robert Shaw, Catherine Skocik, James Skocik, Paul Stansfield, Rebecca Sterling, Jane Taylor, and Lee Weber. Charles Dunton served as logistics coordinator, with assistance from Jack Goudsward.

Sharla Azizi, Berger's Laboratory Director, and Suzanne Rimmner Kahn, Assistant Laboratory Supervisor, oversaw the cataloging of the artifact collections. Rob Jacoby had primary responsibility for the lithic analysis, with assistance from Byron Simmons, David Breetzke, Magda Lozny, and Ludomir Lozny. Other laboratory tasks were completed by Luiz Cruz, Matthew Doherty, John Killeen, Christy Roper, John Ra, Robert Shaw, Barbara Slicner, Christina Szoke, and Sue Wong. Alex Ortiz had responsibility for preparation of the computer database, with assistance from Rubi Arquiza.

Editing was performed by Linda Fulcher. The illustrations were prepared by Jacqueline Horsford. The photographic plates were prepared by Rob Tucher.

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Curation Note: All artifacts, site records, analytical data, photographs, and slides from the Whitby Branch Site are being prepared for curation in accordance with Delaware State Museum standards. These materials are temporarily being curated at the Berger laboratory facilities in East Orange, New Jersey.

TABLE OF CONTENTS

CHAPTER	PAGE
Abstract	i
Acknowledgments	ii
List of Figures	viii
List of Tables	x
List of Plates	xii
I INTRODUCTION	1
II BACKGROUND AND PREVIOUS RESEARCH	5
A. Previous Archaeological Studies	5
B. Local Archaeological Sites	6
C. Regional Prehistory	10
III ENVIRONMENTAL SETTING	17
A. Physiography and Geology	17
B. Soils	17
C. Paleoenvironment	18
IV RESEARCH DESIGN	23
A. Introduction	23
B. Research Questions	23
1. Chronology	23
2. Subsistence	25
3. Settlement Patterns	27
a. Household Settlement Patterns	27
b. Community Settlement Patterns	27
c. Regional Settlement Patterns	28
4. Technology	29
5. Environmental Adaptation	30
C. Methodology	31
1. Sampling Strategy and Field Methods	31
2. Artifact Processing and Analytical Methods	35
V SITE FORMATION PROCESSES AND CULTURAL COMPONENTS	37
A. Soils and Stratigraphy	37
B. Radiocarbon Dates	40
C. Postdepositional Disturbances	42

TABLE OF CONTENTS (continued)

CHAPTER	PAGE
D. Prehistoric Components	43
1. Container Assemblage	44
2. Biface Assemblage	44
VI FEATURE DESCRIPTIONS	48
A. Introduction	48
B. Descriptions	48
1. Fire-Cracked Rock (FCR) Clusters	48
a. Feature 1	48
b. Feature 2	48
c. Feature 3	48
d. Feature 4	50
e. Feature 6	50
f. Feature 8	50
g. Feature 9	51
h. Feature 11	52
i. Feature 12	52
j. Feature 13	52
k. Feature 14	52
l. Feature 15	52
m. Feature 16	54
n. Feature 18	54
2. Possible Pit House and Storage Pit	54
a. Feature 19	54
b. Feature 21	57
3. Pit Hearths	58
a. Feature 20	58
b. Feature 22	58
4. Post Molds	59
a. Feature 23	59
b. Feature 24	59
5. Cobble Caches	59
a. Feature 5	59
b. Feature 7	60
6. Other Features	60
a. Feature 10	60
b. Feature 17	60

TABLE OF CONTENTS (continued)

CHAPTER		PAGE
VII	ARTIFACT ANALYSIS	61
	A. Introduction	61
	B. Artifact Classes	62
	1. Bifaces	62
	a. Projectile Points	62
	b. Staged Bifaces	66
	c. Drills	68
	2. Unifaces	68
	3. Cores	70
	4. Cobble Tools	75
	5. Groundstone Tools	75
	6. Debitage	77
	a. Quartz	77
	b. Quartzite	79
	c. Jasper	79
	d. Chert	80
	e. Rhyolite	80
	7. Fire-Cracked Rock (FCR)	81
	8. Minerals	82
	9. Archaeobotanical Material	83
	C. Mass Analysis	84
	1. Introduction	84
	2. Methodology	85
	3. Results	87
	4. Summary	90
	D. Pattern Analysis and Intrasite Structure	90
	1. Introduction	90
	2. Results	92
VIII	SYNTHESIS AND CONCLUSIONS	114
	A. Chronology	114
	B. Subsistence	115
	C. Settlement Systems	116
	D. Environmental Adaption	119
	E. Intrasite Patterning	120
	F. Technology	121
	G. Future Research	124

TABLE OF CONTENTS (continued)

CHAPTER	PAGE
IX REFERENCES CITED	132
GLOSSARY	147
PROJECT PERSONNEL	152
APPENDICES	
Appendix A: Geomorphological Site Evaluation by Dr. Daniel P. Wagner	
Appendix B: Geomorphological Evaluation of Feature 19 by Dr. Daniel P. Wagner	
Appendix C: Floral Analysis by Dr. Kathryn C. Egan	
Appendix D: Public Information Handout	
Appendix E: Artifact Inventory	

LIST OF FIGURES

FIGURE		PAGE
1	Site Location, Site 7NC-G-151	2
2	Previously Recorded Archaeological Sites in Vicinity	9
3	Idealized Pit House Reconstruction	14
4	Site Plan, Illustrating Topography and Unit Locations, Site 7NC-G-151	(pocket)
5	Stratigraphic Soil Profiles, East Block Excavation, Site 7NC-G-151	38
6	Stratigraphic Soil Profiles, West Block Excavation, Site 7NC-G-151	39
7	Site Plan, Illustrating Feature Locations, Site 7NC-G-151	(pocket)
8	Plan, Feature 2, Site 7NC-G-151	49
9	Plan, Feature 6, Site 7NC-G-151	49
10	Plan, Feature 13, Site 7NC-G-151	53
11	Plan, Feature 14, Site 7NC-G-151	53
12	Stratigraphic Soil Profiles, Pit House Block Excavation, Site 7NC-G-151	55
13	Basic Core Reduction Techniques	71
14	Generalized Reduction Sequence of a Core	72
15	Mass Analysis Flake Distribution Curves, Site 7NC-G-151	88
16	Mass Analysis Flake Distribution Curves for Raw Materials, Site 7NC-G-151	89
17a,b	Debitage Distribution, Site 7NC-G-151	93-94

LIST OF FIGURES (continued)

FIGURE	PAGE
18a,b Quartz Distribution, Site 7NC-G-151	95-96
19a,b Quartzite Distribution, Site 7NC-G-151	97-98
20a,b Jasper Distribution, Site 7NC-G-151	99-100
21a,b Chert Distribution, Site 7NC-G-151	101-102
22a,b Rhyolite Distribution, Site 7NC-G-151	103-104
23a,b Bifacial Tool Distribution, Site 7NC-G-151	105-106
24a,b Unifacial Tool Distribution, Site 7NC-G-151	109-110
25a,b Core Distribution, Site 7NC-G-151	111-112

LIST OF TABLES

TABLE		PAGE
1	Paleoenvironmental Episodes, Delaware Lower Coastal Plain	21
2	Soil Chemistry Test Results, Site 7NC-G-151	41
3	Radiocarbon Dating Analyses, Site 7NC-G-151	42
4	Site Chronology, Site 7NC-G-151	43
5	Point Types by Raw Material, Site 7NC-G-151	46
6	Feature Log, Site 7NC-G-151	50
7	Artifact Classes by Count and Weight, Site 7NC-G-151	61
8	Flaked-Stone Artifacts by Raw Material, Site 7NC-G-151	62
9	Biface Types by Raw Material, Site 7NC-G-151	64
10	Poplar Island Point Metrical Data and Raw Materials, Site 7NC-G-151	65
11	Jack's Reef Corner Notched Point Metrical Data and Raw Materials, Site 7NC-G-151	65
12	Biface Data from Selected Regional Sites	68
13	Uniface Types by Raw Material, Site 7NC-G-151	69
14	Unifacial Tools as a Percentage of All Flaked-Stone Tools at Selected Regional Sites	70
15	Core Types by Raw Material, Site 7NC-G-151	74
16	Cores as a Percentage of All Flaked-Stone Tools at Selected Regional Sites	75
17	Cobble Tools by Raw Material, Site 7NC-G-151	77
18	Debitage Types by Raw Material, Site 7NC-G-151	78

LIST OF TABLES (continued)

TABLE		PAGE
19	Fire-Cracked Rock by Raw Material, Site 7NC-G-151	81
20	Flake-Size Grade Distributions for Feature Cluster and Supercluster, Site 7NC-G-151	86
21	Flake-Size Grade Distributions by Raw Material, Site 7NC-G-151	86
22	Mean Weights of Selected Flake Types, Site 7NC-G-151	90
23	Frequencies and Site Proportions of Staged Bifaces, Cores, and Debitage from the Supercluster, Site 7NC-G-151	108

LIST OF PLATES

PLATE		PAGE
1	Field Crew, Site 7NC-G-151	(inside cover)
2	West Block Excavation in Progress, View to Northeast, Site 7NC-G-151	32
3	Rob Shaw, Laboratory Technician, Operating Dausman Flotation Device in Berger's Laboratory, East Orange, New Jersey	33
4	Sue Wong, Laboratory Technician, Sorting Flotation Fractions Through Graduated Screens	34
5	Vessels, Site 7NC-G-151	45
6	Feature 6, Overhead, Site 7NC-G-151	51
7	Feature 19, Site 7NC-G-151	56
8	Feature 21, Site 7NC-G-151	56
9a	Projectile Points, Site 7NC-G-151	63
9b	Enlarged View of Both Faces of Small Rhyolite Projectile Point Shown in Plate 9a (D)	63
10	Projectile Points, Jack's Reef Corner Notched and Poplar Island, Site 7NC-G-151	66
11	Staged Bifaces, Site 7NC-G-151	67
12	Cores, Site 7NC-G-151	73
13	Cobble and Groundstone Tools, Site 7NC-G-151	76
14	Petrified Wood, Site 7NC-G-151	83