TABLE OF CONTENTS


| | |
|---|---|
| ABSTRACT | i |
| NTIS FORM | ii |
| TABLE OF CONTENTS | iii |
| LIST OF ILLUSTRATIONS | vi |
| LIST OF PLATES | vii |
| LIST OF TABLES | vii |
| MANAGEMENT SUMMARY | viii |
| INTRODUCTION | I |
| Research Contract Data | I-1 |
| Site Location and Description | I-2 |
| Nature of the Project | I-2 |
| Organization and Personnel | I-5 |
| NATURAL RESOURCE PATTERNS | II |
| Physiographic Setting | II-1 |
| Geologic Profile | II-3 |
| Flora | II-8 |
| Fauna | II-8 |
| Catchment Analysis | II-9 |
| PROJECT BACKGROUND | III |
| Area Prehistory | III-1 |
| Research Design | III-5 |
| Field Methodology | III-5 |
| Laboratory Procedure | III-11 |
| DATA BASE | IV |
| Introduction | IV-1 |
| Lithic Material Types | IV-2 |
| Cultural/Morphological Artifact Types | IV-5 |
| Projectile Point Types | IV-5 |
| Pottery Types | IV-13 |
| Artifact Functional Categories | IV-15 |
| Faunal Food Procurement and Processing Tools | IV-18 |
| Floral Food Procurement and Processing Tools | IV-19 |
| Domestic Equipment - General Utility | IV-22 |
| Domestic Equipment - Miscellaneous | IV-25 |

Manufacturing Tools - Lithic IV-26
Manufacturing Tools - Woodworking IV-28
Ornamental Items IV-31

Feature Typology IV-32

Analysis of Feature Morphology IV-33
Feature Types IV-37
Feature Distribution IV-45

Perishable Items IV-46

Charred Seeds IV-46
Pollen IV-47
Phytoliths IV-49
Soil Residues IV-50
Faunal Resources IV-51
Radiocarbon Dates IV-52

INTERPRETATIONS V

Cultural Chronology V-1

Ceramic Chronology V-1
Radiocarbon Dates V-2
Projectile Point Type Sequence V-3
Ceramic Chronology V-6
Feature Type Chronology V-7
Definition of Cultural Complexes V-7
Summary of Chronology V-11

Economic Activities at the Delaware Park Site V-11

Feature Artifact Contents V-11
Feature Discussion V-16
Feature Distribution V-19
Discussion of Subsurface Features V-20
Feature/Artifact Associations V-23
Functional Activity Areas V-24

Subsistence/Settlement Patterning V-24

EVALUATION OF RESEARCH VI

SUMMARY AND RECOMMENDATIONS VII

REFERENCES CITED VIII

APPENDICES IX

A. Research Design IX-1

B. "Blueprint for Action" IX-14

C. Project Personnel IX-22

D. Geologic History and Physical Environment IX-26

E. Seed Identification IX-41

F. Phytolith Analysis of Soils IX-55

G. Pollen Studies IX-67

H. Soil Analysis IX-80

I. Lithic Material Utilization Patterns IX-111

J. General Artifact Inventory IX-120

K. Radio-carbon Dates IX-134

L. Feature Inventory IX-143

M. Feature Distribution Maps IX-150

N. 1980 Surface Collection Maps IX-181

O. Lithic Data Analysis Worksheets IX-187

## LIST OF ILLUSTRATIONS


| Figures | | Page |
|---|---|---|
| I-1 | Site Location Map | I-3 |
| I-2 | DOT Project Location Map | I-4 |
| II-1 | USDA - SCS Soil Survey Sheet No.15 | II-2 |
| II-2 | Site Physiographic Location | II-4 |
| II-3 | Geologic Cross-Section Through Site | II-7 |
| III-1 | Flotation Unit | III-13 |
| IV-1 | Feature Categories | IV-36 |
| IV-2 | Type A - Feature 37 | IV-37 |
| IV-3 | Type B - Feature 94 | IV-38 |
| IV-4 | Type C - Feature 188 | IV-39 |
| IV-5 | Type D - Feature 157 | IV-40 |
| IV-6 | Type E - Feature 153 | IV-41 |
| IV-7 | Type F - Feature 117 | IV-42 |
| IV-8 | Type G - Feature 109 | IV-43 |
| IV-9 | Feature Type Chronology Chart | IV-44 |
| IV-10 | Feature Chronology Chart | IV-53 |
| V-1 | Projectile Point and Ceramic Type Chronology | V-5 |
| V-2 | Feature Artifact Category Percentages | V-10 |
| V-3 | Functional Categories by Feature Type - Worked Stone Tools | V-14 |
| V-4 | Functional Categories by Feature Type - Utilized Flakes | V-15 |
| V-5 | Functional Categories by Feature Type - Firecracked Rock | V-15 |

## PLATES


| | | Page |
|---|---|---|
| II-1 | Strata Cut- Old Road Cut | II-6 |
| II-2 | Strata Cut - Unit 18 N10/W10 | II-6 |
| III-1 | View of Site - Early Stage | III-6 |
| III-2 | View of Site - Later Stage | III-6 |
| III-3 | Gradall in Use | III-8 |
| III-4 | Shelters in Use | III-8 |
| III-5 | Features 63, 69 | III-10 |
| III-6 | Bi-Pitted Mortar | III-10 |
| IV-1 | Artifacts in situ - Feature 94 | IV-29 |
| IV-2 | Artifacts in situ - Feature 94 | IV-29 |
| IV-3 | Artifacts in situ - sub-soil | IV-29 |


## TABLES


| | | |
|---|---|---|
| II-1 | Floral Resources | II-12 |
| II-2 | Faunal Resources | II-14 |
| IV-1 | Lithic Material Use Index for All Functional Categories | IV-3 |
| IV-2 | Chemical Residue PPM Means | IV-51 |