

## TABLE OF CONTENTS

	Page
Abstract.....	i
DelDOT Archaeological Series Index Information .....	ii
Acknowledgements .....	iv
Table of Contents .....	v
List of Figures.....	viii
List of Tables .....	xi
List of Plates .....	xv
Introduction .....	1
Environmental Setting .....	3
Paleoenvironments.....	7
Regional Prehistory .....	16
Paleo-Indian Period .....	16
Archaic Period .....	18
Woodland I Period .....	18
Woodland II Period.....	19
Contact Period .....	19
Woodland I Chronology in Central Delaware .....	19
Previous Research .....	31
Research Design and Research Methods .....	39
Research Design .....	39
Field Research Methods .....	47
Laboratory Research and Analysis Methods .....	51
Feature Typology .....	55
General Excavation Results.....	68
Site Stratigraphy .....	68
General Feature Data .....	71
Analysis of Feature Functions .....	74
Artifacts .....	77
Blood Residue Analysis .....	77
South Area Excavation Results.....	77
Chronology .....	79
Plow Zone Diagnostic Artifacts.....	79
Feature Diagnostic Artifacts .....	84
Radiocarbon Dates .....	94
Distribution of Dated Features .....	94

	Page
Plow Zone Artifact Distributions .....	97
Feature Distributions .....	98
Feature Clusters .....	98
Cluster I .....	98
Cluster II .....	100
Analysis of Lithic Technology .....	102
Analysis of Ecofacts .....	123
 South Central Area Excavation Results .....	 127
Chronology .....	127
Plow Zone Diagnostic Artifacts .....	127
Feature Diagnostic Artifacts .....	129
Radiocarbon Dates .....	146
Distribution of Dated Features .....	149
Plow Zone Artifact Distributions .....	149
Feature Distributions .....	149
Feature Clusters .....	152
Cluster I .....	152
Cluster II .....	155
Cluster III .....	158
Biface Cache .....	166
Analysis of Lithic Technology .....	170
Analysis of Ecofacts .....	189
 North Central Area Excavation Results .....	 192
Chronology .....	192
Plow Zone Diagnostic Artifacts .....	192
Feature Diagnostic Artifacts .....	194
Distribution of Dated Features .....	196
Plow Zone Artifact Distributions .....	196
Feature Distributions .....	200
Feature 841 .....	200
Analysis of Lithic Technology .....	201
Analysis of Ecofacts .....	205
 North Area Excavation Results .....	 206
Chronology .....	206
Plow Zone Diagnostic Artifacts .....	206
Feature Diagnostic Artifacts .....	208
Distribution of Dated Features .....	212
Plow Zone Artifact Distributions .....	215
Feature Distributions .....	215
Analysis of Lithic Technology .....	216

	Page
Woods Area Excavation Results .....	224
Chronology .....	224
Excavation Unit Diagnostic Artifacts .....	224
Feature Diagnostic Artifacts .....	229
Artifact and Feature Distributions .....	229
Analysis of Lithic Technology .....	230
 Island Farm Site Excavation Results .....	 237
Chronology .....	238
Plow Zone Diagnostic Artifacts.....	238
Feature Diagnostic Artifacts .....	238
Radiocarbon Dates .....	243
Distribution of Dated Features .....	244
Plow Zone Artifact Distributions .....	245
Feature Distributions .....	246
Analysis of Lithic Technology .....	247
 Discussion and Conclusions .....	 252
Paleoenvironmental Studies .....	252
Chronology .....	255
Household Settlement Patterns .....	261
Community Settlement Patterns .....	262
Regional Settlement Patterns .....	263
Lithic Technology .....	265
Ceramic Technology .....	275
Subsistence Systems .....	281
Trade and Exchange .....	286
Mortuary Ceremonialism.....	286
Prehistoric Migrations .....	286
Trends in Socio-Cultural Evolution.....	286
 References Cited .....	 287
Personnel .....	301
Appendices .....	305
Appendix I: Reconstruction of Holocene Sedimentary Environments of the St. Jones River Near Delaware Route 10 .....	305
Appendix II: Carey Farm (7K-D-3) Report on Human Skeletal Remains ...	337
Appendix III: Glossary .....	341

## LIST OF FIGURES

**Page**

Figure		Page
Figure 1:	Site Locations in the State Route 1 Corridor.....	xviii
Figure 2:	Island Farm (7K-C-13) and Carey Farm (7K-C-3) Site Locations .....	1
Figure 3:	Physiographic Zones of Delaware .....	4
Figure 4:	Delaware Drainages .....	4
Figure 5:	Environmental Changes and Climatic Episodes.....	8
Figure 6:	Wet and Dry Climates in Central Delaware .....	13
Figure 7:	Correlation of St. Jones River Drainage Climatic Conditions and Cultural Chronology .....	14
Figure 8:	Climatic Moisture, Species Diversity, and Cultural Chronology .....	15
Figure 9:	Cultural Complexes of Delaware .....	17
Figure 10:	Traditional Woodland I Chronology .....	20
Figure 11:	Spatial Adjustments to Traditional Woodland I Chronology .....	21
Figure 12:	Stemmed Point Types .....	22
Figure 13:	Early Woodland Projectile Point Assemblage from the Snapp Site (7NC-G-101) .....	23
Figure 14:	Presence/Absence of Projectile Point Types at Various Middle Atlantic Sites .....	24
Figure 15:	Projectile Point Associations .....	25
Figure 16:	Summary Late Archaic Point Chronology .....	26
Figure 17:	Revised Woodland I Chronology .....	27
Figure 18:	Woodland I Ceramic Chronology .....	28
Figure 19:	Trends in Woodland I Ceramic Technology .....	29
Figure 20:	Distribution of Ceramic Tempers .....	30
Figure 21:	Artifact Distribution from Phase II Testing at the Carey Farm Site.....	35
Figure 22:	Artifact Distribution from Phase II Testing at the Carey Farm Site.....	36
Figure 23:	Feature Distribution from Phase II Testing at the Carey Farm Site .....	37
Figure 24:	Woodland I Mid-Drainage Base Camp Locations .....	40
Figure 25:	Snapp Site Feature Cluster (Clyde Farm II Complex) .....	41
Figure 26:	Lithic Tool Types .....	42
Figure 27:	Varieties of Cordage Twists .....	44
Figure 28:	Plant Use Data for Woodland I Sites .....	45
Figure 29:	Feature Type Plan Views and Profiles .....	56
Figure 30:	Taphonomy of Pit House Features .....	58
Figure 31:	Plan View and Profile of Feature 1995, Carey Farm Site (Type 1) .....	59
Figure 32:	Plan View and Profile of Feature 2017, Carey Farm Site (Type 2) .....	62
Figure 33:	Plan View and Profile of Feature 1981, Carey Farm Site (Type 3) .....	64
Figure 34:	Plan View and Profile of Feature 1980, Carey Farm Site (Type 4) .....	66
Figure 35:	Plan View and Profile of Feature 346, Carey Farm Site (Type 5) .....	67
Figure 36:	Site Areas .....	68
Figure 37:	Typical Profile - Carey Farm and Island Farm Sites .....	69
Figure 38:	Development of the Carey Farm and Island Farm Site Profiles .....	70
Figure 39:	Typical Profile from Wooded Area .....	70
Figure 40:	Pit House Architecture .....	75
Figure 41:	Household Cluster .....	76
Figure 42:	Feature Locations - Carey Farm Site, South Area, West Section .....	79
Figure 43:	Feature Locations - Carey Farm Site, South Area, East Section .....	80

	Page
Figure 44: Date Ranges - Carey Farm Site, South Area .....	93
Figure 45: Distribution of Dated Features - Carey Farm Site, South Area, West Section .....	94
Figure 46: Distribution of Dated Features - Carey Farm Site, South Area, East Section .....	95
Figure 47: Distribution of All Artifacts in Plow Zone Soils - Carey Farm Site, South Area, West Section .....	96
Figure 48: Distribution of Debitage Without Cortex in Plow Zone Soils - Carey Farm Site, South Area, West Section .....	96
Figure 49: Distribution of Debitage With Cortex in Plow Zone Soils - Carey Farm Site, South Area, West Section .....	96
Figure 50: Distribution of Ceramics in Plow Zone Soils - Carey Farm Site, South Area, West Section .....	96
Figure 51: Distribution of All Artifacts in Plow Zone Soils - Carey Farm Site, South Area, East Section .....	97
Figure 52: Feature Cluster I, South Area .....	99
Figure 53: Feature Cluster II, South Area .....	101
Figure 54: Flake Tools from South Area Features .....	111
Figure 55: Flintknapping Tool Kit from the Island Field Site .....	118
Figure 56: Split Cobbles, South Area.....	119
Figure 57: Bipolar Split Cobbles Used to Manufacture Unifaces, South Area .....	120
Figure 58: Bipolar Split Cobbles Used to Manufacture Bifaces, South Area .....	121
Figure 59: Conjoining Bipolar Flakes from Feature 2005 .....	122
Figure 60: Hafted Flake Tool .....	122
Figure 61: Small Utilized Flakes from Feature 1997.....	122
Figure 62: Reconstructed Fish Spear or Harpoon .....	124
Figure 63: Fishing with Spears in the St. Jones River .....	125
Figure 64: Feature Locations - Carey Farm Site, South Central Area .....	126
Figure 65: Date Ranges - Carey Farm Site, South Central Area .....	145
Figure 66: Distribution of Dated Features - Carey Farm Site, South Central Area .....	150
Figure 67: Distribution of All Artifacts in Plow Zone Soils - Carey Farm Site, South Central Area .....	151
Figure 68: Distribution of Debitage Without Cortex in Plow Zone Soils - Carey Farm Site, South Central Area .....	151
Figure 69: Distribution of Debitage With Cortex in Plow Zone Soils - Carey Farm Site, South Central Area .....	151
Figure 70: Distribution of Ceramics in Plow Zone Soils - Carey Farm Site, South Central Area .....	151
Figure 71: Feature Cluster I, South Central Area .....	153
Figure 72: Feature Cluster II, South Central Area .....	157
Figure 73: Feature Cluster III, South Central Area .....	160
Figure 74: Flake Tools and Point Tips from South Central Area Features .....	180
Figure 75: Jasper Early Stage Biface from Feature 707 .....	181
Figure 76: Argillite Biface No. 37A, Feature 1059 .....	182
Figure 77: Argillite Biface No. 37B, Feature 1059 .....	183
Figure 78: Argillite Biface No. 41, Feature 1059 .....	184
Figure 79: Small Utilized Flakes from Feature 1487.....	187
Figure 80: Bipolar Split Cobbles - South Central Area .....	188
Figure 81: Blade Cores - South Central Area .....	189

	Page
Figure 82: Feature Locations - Carey Farm Site, North Central Area .....	193
Figure 83: Date Ranges - Carey Farm Site, North Central Area .....	197
Figure 84: Distribution of Dated Features - Carey Farm Site, North Central Area .....	198
Figure 85: Distribution of All Artifacts in Plow Zone Soils - Carey Farm Site, North Central Area .....	199
Figure 86: Distribution of Debitage Without Cortex in Plow Zone Soils - Carey Farm Site, North Central Area .....	199
Figure 87: Distribution of Debitage With Cortex in Plow Zone Soils - Carey Farm Site, North Central Area .....	199
Figure 88: Distribution of Ceramics in Plow Zone Soils - Carey Farm Site, North Central Area .....	199
Figure 89: Flake Tools from North Central Area Features .....	205
Figure 90: Feature Locations - Carey Farm Site, North Area .....	207
Figure 91: Date Ranges - Carey Farm Site, North Area .....	212
Figure 92: Distribution of Dated Features - Carey Farm Site, North Area .....	213
Figure 93: Distribution of All Artifacts in Plow Zone Soils - Carey Farm Site, North Area .....	214
Figure 94: Distribution of Debitage Without Cortex in Plow Zone Soils - Carey Farm Site, North Area .....	214
Figure 95: Distribution of Debitage With Cortex in Plow Zone Soils - Carey Farm Site, North Area .....	215
Figure 96: Flake Tools from North Area Features .....	220
Figure 97: Excavation Units and Features - Carey Farm Site, Woods Area, Carey Farm Section .....	225
Figure 98: Excavation Units and Features - Carey Farm Site, Woods Area, Island Farm Section .....	226
Figure 99: Distribution of Diagnostic Ceramics in Excavation Units - Carey Farm Site, Woods Area, Island Farm Section .....	226
Figure 100: Distribution of Diagnostic Ceramics in Excavation Units - Carey Farm Site, Woods Area, Carey Farm Section .....	227
Figure 101: Date Ranges - Carey Farm Site, Woods Area .....	230
Figure 102: Flake Tools from Woods Area .....	233
Figure 103: Chert Biface from Woods Area .....	236
Figure 104: Feature Locations - Island Farm Site .....	237
Figure 105: Date Ranges - Island Farm Site .....	242
Figure 106: Distribution of Dated Features - Island Farm Site .....	244
Figure 107: Distribution of All Artifacts in Plow Zone Soils - Island Farm Site .....	245
Figure 108: Distribution of Debitage Without Cortex in Plow Zone Soils - Island Farm Site .....	245
Figure 109: Distribution of Debitage With Cortex in Plow Zone Soils - Island Farm Site	246
Figure 110: Tools and Bifaces from the Island Farm Site .....	251
Figure 111: Side-Notched Projectile Points/Knives from the Hawthorn Site .....	257
Figure 112: Radiocarbon Date Ranges for Mockley Ceramics .....	261
Figure 113: Regional Settlement Model .....	264
Figure 114: Lithic Assemblage Sample Site Locations .....	271
Figure 115: Hafted Biface Reconstruction No. 1 .....	275
Figure 116: Hafted Biface Reconstruction No. 2 .....	276

## LIST OF TABLES

	Page
<b>LIST OF TABLES</b>	
Table 1: Woodland I Ceramic Attributes .....	28
Table 2: Revised Woodland I Complexes and Diagnostic Artifacts .....	31
Table 3: Sample Summary Tool Catalog - Snapp Site .....	43
Table 4: Feature Count Summary .....	71
Table 5: Feature Type Summary .....	72
Table 6: Feature Dimensions by Area .....	73
Table 7: Summary Catalog of All Artifacts .....	77
Table 8: Summary Catalog - Carey Farm Site, South Area .....	78
Table 9: Diagnostic Projectile Points from Plow Zone Soils - Carey Farm Site, South Area .....	78
Table 10: Diagnostic Projectile Point Types from the Carey Farm and Island Farm Sites .....	78
Table 11: Diagnostic Ceramics from Plow Zone Soils - Carey Farm Site, South Area .....	83
Table 12: Diagnostic Ceramic Types from the Carey Farm and Island Farm Sites .....	83
Table 13: Diagnostic Artifact Assemblages - Carey Farm Site, South Area .....	86
Table 14: Diagnostic Projectile Points from Features - Carey Farm Site, South Area .....	92
Table 15: Diagnostic Ceramics from Features - Carey Farm Site, South Area .....	92
Table 16: Summary Catalog of Feature Artifacts - Cluster I, South Area .....	98
Table 17: Summary Catalog of All Feature Clusters .....	99
Table 18: Summary Catalog of Feature Artifacts - Cluster II, South Area .....	100
Table 19: Lithic Artifact Assemblage and Raw Materials from Plow Zone Soils, South Area .....	102
Table 20: Lithic Artifact Assemblage - Cortex Percentage from Plow Zone Soils, South Area .....	103
Table 21: Lithic Artifact Assemblage - Raw Material Percentage by Tool Types from Plow Zone Soils, South Area .....	103
Table 22: Lithic Artifact Assemblage and Raw Materials from Features, South Area .....	104
Table 23: Lithic Artifact Assemblage - Cortex Percentage from Features, South Area .....	104
Table 24: Lithic Artifact Assemblage - Raw Material Percentage by Tool Types from Features, South Area .....	105
Table 25: Lithic Artifact Assemblage and Raw Materials - Cluster I, South Area .....	106
Table 26: Lithic Artifact Assemblage - Cortex Percentage - Cluster I, South Area .....	106
Table 27: Lithic Artifact Assemblage - Raw Material Percentage by Tool Types - Cluster I, South Area .....	107
Table 28: Lithic Artifact Assemblage and Raw Materials - Cluster II, South Area .....	107
Table 29: Lithic Artifact Assemblage - Cortex Percentage - Cluster II, South Area .....	108
Table 30: Lithic Artifact Assemblage - Raw Material Percentage by Tool Types - Cluster II, South Area .....	108
Table 31: Tool Types - South Area .....	109
Table 32: Summary Catalog - Carey Farm Site, South Central Area .....	127
Table 33: Diagnostic Projectile Points from Plow Zone Soils - Carey Farm Site, South Central Area .....	128
Table 34: Diagnostic Ceramics from Plow Zone Soils - Carey Farm Site, South Central Area .....	128

	Page
Table 35: Diagnostic Artifact Assemblages - Carey Farm Site, South Central Area ...	142
Table 36: Diagnostic Projectile Points from Features - Carey Farm Site, South Central Area .....	144
Table 37: Diagnostic Ceramics from Features - Carey Farm Site, South Central Area	144
Table 38: Radiocarbon Dates - Carey Farm Site, South Central Area .....	146
Table 39: Summary Catalog of Feature Artifacts - Cluster I, South Central Area .....	152
Table 40: Summary Catalog of Feature Artifacts - Cluster II, South Central Area .....	156
Table 41: Summary Catalog of Feature Artifacts - Cluster III, South Central Area .....	159
Table 42: Lithic Artifact Assemblage and Raw Materials from Plow Zone Soils, South Central Area .....	170
Table 43: Lithic Artifact Assemblage - Cortex Percentage from Plow Zone Soils, South Central Area .....	171
Table 44: Lithic Artifact Assemblage - Raw Material Percentage by Tool Types from Plow Zone Soils, South Central Area .....	171
Table 45: Lithic Artifact Assemblage and Raw Materials from Features, South Central Area .....	172
Table 46: Lithic Artifact Assemblage - Cortex Percentage from Features, South Central Area .....	172
Table 47: Lithic Artifact Assemblage - Raw Material Percentage by Tool Types from Features, South Central Area .....	173
Table 48: Lithic Artifact Assemblage and Raw Materials - Cluster I, South Central Area .....	174
Table 49: Lithic Artifact Assemblage - Cortex Percentage - Cluster I, South Central Area .....	174
Table 50: Lithic Artifact Assemblage - Raw Material Percentage by Tool Types - Cluster I, South Central Area .....	175
Table 51: Lithic Artifact Assemblage and Raw Materials - Cluster II, South Central Area .....	175
Table 52: Lithic Artifact Assemblage - Cortex Percentage - Cluster II, South Central Area .....	176
Table 53: Lithic Artifact Assemblage - Raw Material Percentage by Tool Types - Cluster II, South Central Area .....	176
Table 54: Lithic Artifact Assemblage and Raw Materials - Cluster III, South Central Area .....	177
Table 55: Lithic Artifact Assemblage - Cortex Percentage - Cluster III, South Central Area .....	177
Table 56: Lithic Artifact Assemblage - Raw Material Percentage by Tool Types - Cluster III, South Central Area .....	178
Table 57: Tool Types - South Central Area .....	178
Table 58: Biface Attributes - Feature 1059 and Kiunk Ditch Cache .....	185
Table 59: Oyster Shell Data - Salinity and Seasonality .....	190
Table 60: Oyster Environment Summary .....	191
Table 61: Age of Oysters at Harvest.....	191
Table 62: Summary Catalog - Carey Farm Site, North Central Area .....	192
Table 63: Diagnostic Projectile Points from Plow Zone Soils - Carey Farm Site, North Central Area .....	194
Table 64: Diagnostic Ceramics from Plow Zone Soils - Carey Farm Site, North Central Area .....	194

	Page
Table 65: Diagnostic Projectile Points from Features - Carey Farm Site, North Central Area .....	196
Table 66: Diagnostic Ceramics from Features - Carey Farm Site, North Central Area .....	196
Table 67: Lithic Artifact Assemblage and Raw Materials from Plow Zone Soils, North Central Area .....	201
Table 68: Lithic Artifact Assemblage - Cortex Percentage from Plow Zone Soils, North Central Area .....	201
Table 69: Lithic Artifact Assemblage - Raw Material Percentage by Tool Types from Plow Zone Soils, North Central Area .....	202
Table 70: Lithic Artifact Assemblage and Raw Materials from Features, North Central Area .....	202
Table 71: Lithic Artifact Assemblage - Cortex Percentage from Features, North Central Area .....	203
Table 72: Lithic Artifact Assemblage - Raw Material Percentage by Tool Types from Features, North Central Area .....	203
Table 73: Tool Types - North Central Area .....	204
Table 74: Summary Catalog - Carey Farm Site, North Area .....	206
Table 75: Diagnostic Projectile Points from Plow Zone Soils - Carey Farm Site, North Area .....	208
Table 76: Diagnostic Ceramics from Plow Zone Soils - Carey Farm Site, North Area .....	208
Table 77: Diagnostic Projectile Points from Features - Carey Farm Site, North Area .....	211
Table 78: Diagnostic Ceramics from Features - Carey Farm Site, North Area .....	211
Table 79: Lithic Artifact Assemblage and Raw Materials from Plow Zone Soils, North Area .....	216
Table 80: Lithic Artifact Assemblage - Cortex Percentage from Plow Zone Soils, North Area .....	216
Table 81: Lithic Artifact Assemblage - Raw Material Percentage by Tool Types from Plow Zone Soils, North Area .....	217
Table 82: Lithic Artifact Assemblage and Raw Materials from Features, North Area .....	217
Table 83: Lithic Artifact Assemblage - Cortex Percentage from Features, North Area .....	218
Table 84: Lithic Artifact Assemblage - Raw Material Percentage by Tool Types from Features, North Area .....	218
Table 85: Tool Types - North Area .....	219
Table 86: Summary Catalog - Carey Farm Site, Woods Area .....	224
Table 87: Diagnostic Projectile Points from General Excavation Units - Carey Farm Site, Woods Area .....	225
Table 88: Diagnostic Ceramics from General Excavation Units - Carey Farm Site, Woods Area .....	225
Table 89: Diagnostic Projectile Points from Features - Carey Farm Site, Woods Area .....	229
Table 90: Diagnostic Ceramics from Features - Carey Farm Site, Woods Area .....	229
Table 91: Total Lithic Artifact Assemblage and Raw Materials, Woods Area .....	231
Table 92: Total Lithic Artifact Assemblage - Cortex Percentage, Woods Area .....	231
Table 93: Total Lithic Artifact Assemblage - Raw Material Percentage by Tool Types, Woods Area .....	232
Table 94: Tool Types - Woods Area .....	232
Table 95: Summary Catalog - Island Farm Site .....	236

	Page
Table 96: Diagnostic Projectile Points from Plow Zone Soils - Island Farm Site .....	238
Table 97: Diagnostic Ceramics from Plow Zone Soils - Island Farm Site .....	238
Table 98: Diagnostic Artifact Assemblages - Island Farm Site .....	241
Table 99: Diagnostic Projectile Points from Features - Island Farm Site .....	241
Table 100: Diagnostic Ceramics from Features - Island Farm Site .....	243
Table 101: Radiocarbon Dates - from the Island Farm Site .....	243
Table 102: Lithic Artifact Assemblage and Raw Materials from Plow Zone Soils, Island Farm Site .....	247
Table 103: Lithic Artifact Assemblage - Cortex Percentage from Plow Zone Soils, Island Farm Site .....	247
Table 104: Lithic Artifact Assemblage - Raw Material Percentage by Tool Types from Plow Zone Soils, Island Farm Site .....	248
Table 105: Lithic Artifact Assemblage and Raw Materials from Features, Island Farm Site .....	248
Table 106: Lithic Artifact Assemblage - Cortex Percentage from Features, Island Farm Site .....	249
Table 107: Lithic Artifact Assemblage - Raw Material Percentage by Tool Types from Features, Island Farm Site .....	250
Table 108: Tool Types - Island Farm Site .....	250
Table 109: Dated House Feature Occurrence Over Time .....	253
Table 110: House Feature Density Over Time .....	253
Table 111: Diagnostic Artifacts in Plow Zone Soils from Varied Site Areas .....	254
Table 112: Lithic Artifact Assemblage and Raw Materials - Combined Clusters, South Area .....	266
Table 113: Lithic Artifact Assemblage - Cortex Percentage - Combined Clusters, South Area .....	266
Table 114: Lithic Artifact Assemblage - Raw Material Percentage by Tool Types - Combined Clusters, South Area .....	267
Table 115: Lithic Artifact Assemblage and Raw Materials - Combined Clusters, South Central Area .....	267
Table 116: Lithic Artifact Assemblage - Cortex Percentage - Combined Clusters, South Central Area .....	268
Table 117: Lithic Artifact Assemblage - Raw Material Percentage by Tool Types - Combined Clusters, South Central Area .....	268
Table 118: Lithic Artifact Assemblage and Raw Materials - All Middle Woodland Clusters Combined .....	269
Table 119: Lithic Artifact Assemblage - Cortex Percentage - All Middle Woodland Clusters Combined .....	269
Table 120: Lithic Artifact Assemblage - Raw Material Percentage by Tool Types - All Middle Woodland Clusters Combined .....	270
Table 121: Comparative Lithic Resource Use Data .....	270
Table 122: Cortex Percentage Ranking .....	272
Table 123: Cryptocrystalline Percentage Ranking .....	272
Table 124: Lithic Resource Use Classification .....	273
Table 125: Flake Attribute Data .....	274
Table 126: Ceramic Vessel Data .....	277
Table 127: Vessel Associations and Cordage Twist Direction .....	279

	Page
Table 128: Cross-Tabulation of Surface Treatment and Cordage Twist Direction .....	280
Table 129: Delaware Cordage Twist Data .....	280
Table 130: Cordage Twist Percentage by Time Period .....	281
Table 131: Summary Catalog of Flotation from All Site Areas .....	281
Table 132: Seeds in Flotation Samples by Site Area .....	282
Table 133: Varieties of Seeds and Uses .....	283
Table 134: Comparative Seed Data .....	284
Table 135: Raw Material Types Among Debitage from Flotation .....	285
Table 136: Nut Data.....	285

## LIST OF PLATES

Plate 1: Aerial View of Island Farm and Northern Section of Carey Farm Sites ....	2
Plate 2: Aerial View of Carey Farm Site .....	3
Plate 3: Marshes Along the St. Jones River Near the Carey Farm Site .....	5
Plate 4: Wild Rice .....	6
Plate 5: Excavating Drill Cores .....	11
Plate 6: Phase II Excavations.....	34
Plate 7: Aerial View of Excavations at the Island Farm Site .....	38
Plate 8: Aerial View of Phase II Testing in the Northern Section of the Carey Farm Site .....	47
Plate 9: Counting Artifacts from Plow Zone Excavations.....	48
Plate 10: Excavations in Carey Farm Woods.....	49
Plate 11: Aerial View of Stripping of Plow Zone Soils .....	50
Plate 12: Backhoe Excavations .....	51
Plate 13: Aerial View of Feature Excavations in the Northern Section of the Carey Farm Site .....	52
Plate 14: Excavating a Feature .....	53
Plate 15: Excavating a Biface Cache in Feature 1059A .....	53
Plate 16: Aerial View of Carey Farm Site Areas .....	54
Plate 17: Analyzing Prehistoric Ceramics .....	55
Plate 18: Wooden Framework of House Reconstruction .....	57
Plate 19: House Reconstruction with Bark Covering .....	57
Plate 20: Type 2A House Feature from the Leipsic Site .....	58
Plate 21: Opening Plan View of Feature 76, Island Farm Site (Type 1) .....	60
Plate 22: Excavated Plan View of Feature 76, Island Farm Site (Type 1) .....	60
Plate 23: Excavated Plan View of Feature 143, Carey Farm Site (Type 1 with Fire-Cracked Rock) .....	61
Plate 24: Excavated Plan View of Feature 440, Carey Farm Site (Type 1 with Interior Hearth) .....	61
Plate 25: Opening Plan View of Feature 623, Carey Farm Site (Type 2) .....	63
Plate 26: Profile View of Feature 623, Carey Farm Site (Type 2) .....	63
Plate 27: Excavated Plan View of Feature 480, Carey Farm Site (Type 3) .....	65
Plate 28: Excavated Plan View of Feature 2026, Carey Farm Site (Type 3 with Fire-Cracked Rock) .....	65
Plate 29: Profile View of Feature 609, Carey Farm Site (Type 4) .....	66
Plate 30: Excavated Plan View of Feature 346, Carey Farm Site (Type 5) .....	67

	Page
Plate 31: Miscellaneous Projectile Points from Plow Zone Soils .....	81
Plate 32: Stemmed Projectile Points from Plow Zone Soils .....	82
Plate 33: Hell Island Ceramic Pipe Stem - Carey Farm Site, South Area .....	84
Plate 34: Marcey Creek Ceramics - Carey Farm Site, South Area.....	85
Plate 35: Artifact Assemblage - Feature 2031, Carey Farm Site, South Area, West Section .....	87
Plate 36: Artifact Assemblages - Features 2035 and 2002, Carey Farm Site, South Area, West Section .....	88
Plate 37: Artifact Assemblages - Features 137, 2021, and 2039, Carey Farm Site, South Area .....	89
Plate 38: Artifact Assemblages and Individual Diagnostic Artifacts from Miscellaneous Features, Carey Farm Site, South Area .....	90
Plate 39: Sample Flake Tools from Plow Zone Soils .....	110
Plate 40: Sample Bifaces from Plow Zone Soils .....	112
Plate 41: Sample Bifaces from Features, South and South Central Areas .....	114
Plate 42: Sample Argillite Bifaces .....	115
Plate 43: End Scraper with Fossil from Feature 2039 .....	116
Plate 44: Hammerstones from South Area .....	117
Plate 45: Artifact Assemblage - Feature 427, Carey Farm Site, South Central Area ..	130
Plate 46: Artifact Assemblage - Feature 440, Carey Farm Site, South Central Area..	131
Plate 47: Artifact Assemblage - Feature 465, Carey Farm Site, South Central Area..	132
Plate 48: Artifact Assemblage - Feature 608, Carey Farm Site, South Central Area..	133
Plate 49: Coulbourn Net-Marked Ceramic Sherds - Feature 686, Carey Farm Site, South Central Area .....	134
Plate 50: Artifact Assemblage - Feature 358, Carey Farm Site, South Central Area..	135
Plate 51: Mockley Cord-Marked Ceramic Sherds - Feature 623, Carey Farm Site, South Central Area .....	136
Plate 52: Artifact Assemblage - Feature 371, Carey Farm Site, South Central Area ..	137
Plate 53: Artifact Assemblage - Feature 428, Carey Farm Site, South Central Area..	138
Plate 54: Artifact Assemblage from Miscellaneous Features, Carey Farm Site, South Central Area .....	139
Plate 55: Miscellaneous Projectile Points Associated with Mockley Ceramics, Carey Farm Site, South Central Area .....	140
Plate 56: Miscellaneous Projectile Points from Features, Carey Farm Site, South Central Area .....	141
Plate 57: Steatite Bowl Sherd - Feature 192, Carey Farm Site, South Central Area ..	143
Plate 58: Biface Cache <u>In Situ</u> - Feature 1059, Carey Farm Site, South Central Area	147
Plate 59: Bifaces from Cache - Feature 1059, Carey Farm Site, South Central Area ..	148
Plate 60: Excavated Profile of Feature 425, Carey Farm Site (Type 5) .....	154
Plate 61: Excavated Profile of Feature 428, Carey Farm Site (Type 2) .....	154
Plate 62: Crushed Mockley Ceramic Vessel - Feature 623 .....	158
Plate 63: Feature 358 During Excavations .....	161
Plate 64: Human Remains from Feature 358 .....	162
Plate 65: Feature 371 During Excavations .....	163
Plate 66: Mockley Ceramic Vessel in Feature 372 .....	164
Plate 67: Reconstructed Mockley Ceramic Vessel from Feature 372 .....	165
Plate 68: Biface Cache <u>In Situ</u> in Feature 1059 .....	166

	Page
Plate 69: Argillite Bifaces from Carey Farm Features and the Middle Delaware Valley .....	167
Plate 70: Argillite Biface <u>In Situ</u> in Feature 546 .....	168
Plate 71: Kiunk Ditch Site Biface Cache .....	169
Plate 72: Hammerstone from Feature 1059 .....	186
Plate 73: Diagnostic Artifacts from Features - Carey Farm Site, North Central Area .....	195
Plate 74: Feature 841 .....	200
Plate 75: Artifact Assemblages from Features 921 and 1899 - Carey Farm Site, North Area .....	209
Plate 76: Diagnostic Projectile Points from Features - Carey Farm Site, North Area .....	210
Plate 77: Bifaces from Features - Carey Farm Site, North Area .....	221
Plate 78: Hammerstones from North Area .....	222
Plate 79: Grinding Stones from North Area .....	223
Plate 80: Projectile Points - Carey Farm Site, Woods Area .....	228
Plate 81: Bifaces - Woods Area .....	234
Plate 82: Hammerstones - Woods Area .....	235
Plate 83: Projectile Points from Features, Island Farm Site .....	239
Plate 84: Diagnostic Artifact Assemblages from Features, Island Farm Site .....	240
Plate 85: Projectile Points Associated with Early Woodland Ceramics .....	256
Plate 86: Projectile Points Associated with Mockley Ceramics .....	258
Plate 87: Projectile Points Associated with Hell Island Ceramics .....	260
Plate 88: Cordage Twist Impressions .....	278