APPENDIX C

PALEOETHNOBOTANICAL DATA FROM THE PUNCHEON RUN SITE

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By

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I. INTRODUCTION

Analysis of plant macroremains from three distinct loci at the Puncheon Run Site (7K-C-51) was undertaken to aid in the exploration of key research issues identified for extended Phase II and Phase III investigations, which were conducted from 1997 through 1999. These focused on 1) establishing the archaeological integrity of the site, 2) defining characteristics of the Woodland I microband base camp property type, and 3) exploring long-standing subsistence questions surrounding Woodland I and Woodland II settlements in Delaware. In addition, archeobotanical data from the Puncheon Run Site contributes to the growing floral database for the Middle Atlantic region (Dent and Kauffman 1985; LeeDecker et al. 1998). This report encompasses all paleoethnobotanical research accomplished during Extended Phase II and Phase III data recovery efforts at the Puncheon Run Site.

Specifically, research regarding archeobotanical remains from the Puncheon Run Site was designed to determine the types of plants extant in the archaeological record and their composition, frequency, ubiquity, and association. Attempts were made to calculate the relative dietary contribution of comestible plant taxa encountered, and the composition of wood remains used both as fuel and building material was established and scrutinized. Plant macroremains recovered archaeologically were then cross-referenced with regional paleoenvironmental data and with Holocene landscape and vegetative resource availability extrapolated for the Puncheon Run project area (McKnight 2000). Recovered plant remains were also examined to lend insight into the integrity and function of cultural features encountered during excavation.

A comprehensive program of soil sampling and flotation processing was undertaken at the Puncheon Run Site. Macrobotanical samples from select contexts throughout Loci 1, 2, and 3 were systematically collected through routine soil sampling. Soil samples were collected from culture-bearing strata, cultural features, and noncultural sediments encountered during field excavation. Samples of a standard volume (averaging 2 liters) were retained in the field. Isolated concentrations of plant charcoal were also hand-collected and submitted for species identification.

A total of 134 soil samples totaling 265.5 liters were selected for flotation-processing and analysis, and seven hand-collected charcoal specimens were submitted for identification. Forty-four flotation samples totaling 87.5 liters and three hand-collected carbon samples were submitted from Locus 1. Four flotation samples measuring a total of 8 liters were analyzed from Locus 2. Seventy-eight samples from cultural contexts within Locus 3 totaled 154 liters. Four hand-collected carbon samples were submitted from Locus 3. In addition, eight samples totaling 16 liters from strata lacking cultural material within Locus 3 were also selected in order to provide a control. Table C-1 presents a summary of macrobotanical samples analyzed from the Puncheon Run Site, by locus.

II. RESEARCH METHODS

Soil samples from the Puncheon Run Site were individually processed using two different flotation devices. Processing of the Extended Phase II samples was accomplished using a modified SMAP (Shell Mound Archaeological Project)-type flotation system (Watson 1976) equipped with 0.30-millimeter fine fraction and 1.6-millimeter coarse fraction screens. This system facilitates the separation and recovery of organic remains from the soil matrix via agitation in water. Processing results in a heavy and a light fraction of material. Floated portions were air-dried. In order to establish the recovery rate of macrobotanical remains from the Puncheon Run Site using this particular flotation system, the standard "poppy seed test" (Wagner 1982) was applied. Measured lots of 50 poppy seeds (*Papaver somniferum*) were added to 10 of the 91 Extended Phase

Table C-1: Summary of Macrobotanical Samples Analyzed by Locus

Locus	Sampling Method	Ext. Phase II	Phase III	Total
Locus 1				
Feature	hand-collected	.	3	3
Feature	flotation	10	21	31
Nonfeature	flotation	13	.	13
Locus 2				
Feature	hand-collected	.	.	0
Feature	flotation	1	.	1
Nonfeature	flotation	3	.	3
Locus 3				
Feature	hand-collected	.	4	4
Feature	flotation	32	14	46
Nonfeature	flotation	24	8	32
Control Samples	flotation	8	.	8
TOTAL		91	50	141

II flotation samples prior to processing. Recovery rates averaged 56 percent. No contamination was observed between samples and no damage to the poppy seeds was noted.

In an effort to achieve more effective capture of minute plant remains, a Flote-Tech flotation system equipped with 0.325-millimeter fine fraction and 1.0-millimeter coarse fraction screens was employed for the Phase III soil sample processing. The Flote-Tech system is a multi-modal flotation system which facilitates the separation and recovery of plant macroremains from the soil matrix via agitation in water. Processing resulted in two (light and heavy) fractions of material. Floted portions were air-dried. The poppy seed test was administered to 16 of the 50 Phase III soil samples prior to flotation processing. Recovery rates averaged 84 percent. Sample contamination was not observed, and no noticeable damage to the poppy seeds occurred.

Across the site, sample matrices were consistently composed of quartzitic gravel with coarse sand and heavy clays (more characteristic of the Locus 1 samples). The heavy flotation fractions contained limited ecofacts and geologic material. These included copious quartzitic gravel, small cobbles, and woody and herbaceous root fibers (of modern origin). No faunal remains were recovered from the analyzed samples, and minute cultural artifacts were limited to two potential quartz flakes retrieved from a single Locus 1 sample.

All archaeologically derived plant remains recovered through flotation were combined and passed through a 2-millimeter geological sieve, yielding fractions of two different sizes for analysis. Weights and sample descriptions were recorded for the resulting fractions of greater than or equal to 2 millimeters in size and less than 2 millimeters in size. The charcoal specimens greater than or equal to 2 millimeters in size were examined under low magnification (10X to 30X) and sorted into general categories of material (i.e., wood, nutshell, carbonized seeds, non-carbonized seeds, miscellaneous plant material, etc.). Descriptions were recorded for each category of material with a size of greater than or equal to 2 millimeters. The fractions less

than 2 millimeters in size were examined under low magnification; their general composition was recorded, and any seed remains encountered were removed for identification. Non-carbonized seeds were present within most of the analyzed samples. During Extended Phase II analysis, these non-carbonized seeds were described but not quantified. During Phase III work, non-carbonized seeds recovered were isolated, identified, counted, and weighed.

Identifications were routinely attempted on all seed, nut, and miscellaneous plant parts, and on a sub-sample of 20 randomly selected wood fragments from each sample containing *more* than 20 specimens, in accordance with standard practice (Pearsall 1989). Identifications of all classes of botanical remains were made to the genus level when possible, to the family level when limited diagnostic information was available, and to the species level only when the assignment could be made with absolute certainty. When botanical specimens were found to be in such eroded or fragmentary condition as to prevent their complete examination or recognition, a variety of general categories were used to reflect the degree identification possible. General wood categories within the analyzed assemblages include "ring porous," where specimens exhibited differences between early and late wood growth; "diffuse porous," where specimens exhibited homogenous growth within annual rings; "deciduous taxa," where specimens could be identified as having a porous vessel arrangement reflecting deciduous trees, rather than a trachid arrangement indicative of coniferous taxa; "coniferous taxa," where specimens exhibited a trachid arrangement rather than a porous one; and "unidentifiable," where specimens were so fragmentary or minute that no clear section could be obtained upon which to base identification. Seed categories within the site assemblages included "unknown seed," to describe specimens not recognized by the analyst; and "unidentifiable eroded seed," "unidentifiable large seed," or "unidentifiable seed fragment," where specimens were highly eroded and lacked the minute structures required for identification (such as seed coat or embryo attachment area). The categories "amorphous carbon" and "unidentifiable charcoal" were used in this report to classify carbonized remains which lacked any identifiable characteristics whatsoever.

All identifications were made under low magnification (10X to 30X) with the aid of standard texts (Edlin 1969; Kozlowski 1972; Martin and Barkely 1961; Panshin and deZeeuw 1980; Schopmeyer 1974) and checked against plant specimens from a modern reference collection germane to the flora of Kent County, Delaware. Specimen weights were recorded using an electronic balance accurate to 0.01 grams.

III. RESULTS OF ANALYSIS

A. FLORAL SUMMARY

1. Hand-Collected Samples

During the Phase III field excavation, seven visible charcoal deposits were retained for dating and were submitted for species identification prior to submission to the radiocarbon laboratory. These included three samples from Locus 1 and four samples from Locus 3. The total combined weight of these specimens was 1.66 grams. The samples retained from Locus 1 were secured from Features 50 and 51, and from nonfeature contexts within Excavation Unit (EU) 376. These samples were composed of thick-walled hickory nutshell (*Carya* sp.) and an insect gall. The hand-collected samples from Locus 3 were retained from Features 30 and 37, and from nonfeature sediments encountered in Stratum B, Level 3 of EU 164. These samples contained deciduous wood charcoal, thick-walled hickory nutshell (*Carya* sp.), and non-carbonized poke (*Phytolacca americana*) seeds. An inventory of the hand-collected samples is provided by locus and in the site summary section of Attachment A.

2. *Flotation Samples*

Flotation processing of 265.5 liters of soil site-wide yielded 45.64 grams of carbonized plant remains, or an average density of 0.17 grams of charcoal per liter of cultural fill analyzed. Of the 134 flotation samples analyzed from Puncheon Run, 106 (79 percent) yielded archeobotanical remains. Overall, carbonized plant remains were scant, and the condition of recovered organic remains varied from poor to fair. A variety of wild plant remains were recovered, including a predominance of deciduous wood charcoal; minor amounts of coniferous wood charcoal; scant thick-walled hickory and acorn nutshell; various carbonized seeds; abundant non-carbonized seeds; and miscellaneous plant materials, such as fungal fructifications, unidentifiable rind fragments, woody bud fragments, coniferous bud fragments, peduncle fragments, hull fragments, monocot stem fragments, unidentifiable bud fragments, unidentifiable plant parts, unidentifiable spherical specimens, unidentifiable charcoal, and amorphous carbon.

Attachment A contains the comprehensive results of the analysis presented for each locus by sample catalog number, as well as in a site summary of plant remains recovered by flotation. Discussion of each class of plant material encountered within the Puncheon Run assemblage is provided below, followed by a discussion of the distribution of plant remains by locus.

a. Wood Charcoal

Wood charcoal was the most abundant and ubiquitous class of material recovered from the Puncheon Run flotation samples, composing 98 percent (by weight) of the site sample. A total of 4,563 carbonized wood fragments weighing 39.43 grams was recovered. Of the total wood remains, a sub-sample of 1,218 fragments (a maximum of 20 fragments per sample) was randomly selected for identification. White oak (*Quercus* sp. [*LEUCOBALANUS* group]) (24 percent, by count) dominated the sample, followed by hickory (*Carya* sp.) (8 percent); unspecified oak (*Quercus* sp.) (7 percent); red oak (*Quercus* sp.[*ERYTHROBALANUS* group]) (3 percent); sweetgum (*Liquidambar styraciflua*) (3 percent); and maple (*Acer* sp.) (1 percent). The following species were identified in less than 1 percent of the sample: American chestnut (*Castanea dentata*); sassafras (*Sassafras albidum*); red mulberry (*Morus rubra*); maple/birch (*Acer/Betula*); black locust (*Robinia pseudoacacia*); black walnut (*Juglans nigra*); flowering dogwood (*Cornus florida*); persimmon (*Diospyros virginiana*); ash (*Fraxinus* sp.); American holly (*Ilex opaca*); tulip poplar (*Liriodendron tulipifera*); black cherry (*Prunus serotina*); and southern pine species (*Pinus* sp.). Poorly preserved specimens were assigned to the categories diffuse porous (less than 1 percent), ring porous (7 percent), deciduous taxa (20 percent), coniferous taxa (less than 1 percent), and unidentifiable (21 percent). Table C-2 indicates the relative species composition of wood charcoal recovered by flotation throughout the site.

b. Nutshell

A site total of 157 fragments of nutshell weighing a total of 2.22 grams was recovered through flotation. A total of 155 fragments of thick-walled hickory nutshell (*Carya* sp.) and two fragments of acorn shell (*Quercus* sp.) were identified.

c. Carbonized Seed Remains

Carbonized seed remains were scant throughout the Puncheon Run Site flotation assemblage. A total of 85 carbonized seed specimens representing 12 taxa was identified. Carbonized seed remains were present in 25 (approximately 19 percent) of the 134 flotation samples analyzed. Seed species identified include copperleaf (*Acalypha virginica*) (1 seed); goosefoot (*Chenopodium* sp.) (47 seeds); (possible) American lotus (*Nelumbo*

Table C-2: Site-Wide Composition of Recovered Wood Charcoal

	Context						
	Locus 1 Features	**Locus 1 Nonfea.**	**Locus 2**	**Locus 3 Features**	**Locus 3 Nonfea.**	**Locus 3 Control**	**Site Totals**
Number of Samples	31	13	4	46	32	8	134
Soil Sample Volume (l)	61.5	26	8	90	64	16	249.5
Total Charcoal Weight (g)	9.92	0.97	0.4	31.32	2.32	0.71	44.93
Wood Charcoal (total count)	1,078	32	24	3,267	162	44	4563
Total Weight (g)	8.58	0.23	0.14	28.77	1.71	0.54	39.43
Acer sp. (maple)	9	.	.	1	1	.	11
Acer/Betula (maple/birch)	6	.	.	.	2	.	8
Carya sp. (hickory)	59	5	.	29	6	.	99
Castanea dentata (American chestnut)	2	.	.	8	.	.	10
Cornus florida (flowering dogwood)	1	.	.	.	.	.	1
Diospyros virginiana (persimmon)	.	.	.	5	.	.	5
Fraxinus sp. (ash)	2	.	.	.	.	.	2
Ilex opaca (American holly)	6	1	.	.	.	.	7
Juglans nigra (black walnut)	2	.	.	6	.	.	8
Liquidambar styraciflua (sweet gum)	.	.	.	40	.	.	40
Liriodendron tulipifera (tulip poplar)	2	.	.	1	1	.	4
Morus rubra (red mulberry)	.	.	.	1	1	.	2
Pinus sp. (so. pine group)	1	.	.	4	.	.	5
Prunus serotina (black cherry)	.	.	.	.	1	.	1
Quercus sp. (red group)	3	.	.	12	25	.	40
Quercus sp. (white group)	82	8	13	181	6	.	290
Quercus sp. (unspecified)	37	3	5	35	5	4	85
Robinia pseudoacacia (black locust)	.	.	.	3	1	.	4
Sassafras albidum (sassafras)	.	.	.	2	.	.	2
diffuse porous	.	.	.	2	3	.	5
ring porous	43	.	.	34	6	.	83
coniferous taxa	1	.	.	.	.	.	1
deciduous taxa	93	7	.	106	42	15	248
unidentifiable	69	8	6	141	33	20	257
total identified fragments	418	32	24	611	133	39	1,218

lutea) (1 seed coat fragment); poke (*Phytolacca americana*) (2 seeds); knotweed (*Polygonum* sp.) (2 seeds), dock (*Rumex* sp.) (1 seed), chickweed (*Stellaria media*) (1 seed); and grass family (*GRAMINEAE*) (5 seeds). Seeds in poor condition were classified as unknown eroded seed (17 seeds), unidentifiable large seed (6 seeds), and unidentifiable seed fragment (1 seed fragment). One seed was not recognizable to the analyst and was labeled "unknown."

d. Non-carbonized Seed Remains

Non-carbonized seed remains were present in ubiquitous abundance within flotation samples from across the Puncheon Run Site. The recovery of large quantities of fresh ruderal seeds from these flotation samples is compelling and calls for a discussion of the origin, age, association, and archaeological integrity of these remains. Although the persistence of non-carbonized plant remains from rare contexts, such as consistently xeric or inundated environments, is not uncommon (Hastorf and Popper 1988; Minnis 1981; Pearsall 1989), such soil conditions do not characterize the Puncheon Run Site. The presence of "fresh" seed remains within flotation samples from open-site environments is usually considered evidence of modern seed contamination caused by plowing, seed rain, rodent or crustacean burrowing, root action, soil erosion and deposition, or a combination of these factors (Keepax 1977; Minnis 1981; E. Smith 1985). Evidence of bioturbation and tree falls was commonly observed during field investigations at Puncheon Run. The mixing of soil strata by such forces would explain the recovery of both carbonized and non-carbonized remains from flotation samples. Prehistoric deposits containing carbonized plant remains were likely intruded upon by biological or geologic forces which introduced modern material into an otherwise undisturbed archaeological record.

Non-carbonized seeds were recovered from 86 (64 percent) of the 134 analyzed flotation samples. The non-carbonized seed specimens identified represent the following taxa: pigweed (*Amaranthus* sp.), goosefoot/pigweed (*Cheno/Amaranth* group), goosefoot (*Chenopodium* sp.), rattlebox (*Crotolaria sagittalis*), spurge (*Euphorbia* sp.), goosegrass (*Eleusine indica*), wild lettuce (*Lactuca serriola*), lespedeza (*Lespedeza* sp.), carpetweed (*Mollugo verticillata*), bayberry (*Myrica* sp.), wood sorrel (*Oxalis stricta*), panic grass (*Panicum* sp.), poke (*Phytolacca americana*), knotweed (*Polygonum pennsylvanicum*) knotweed (*Polygonum* sp.), knotweed/dock (*Polygonum/Rumex* group), wild cherry (*Prunus serotina*), raspberry/blackberry (*Rubus* sp.), elderberry (*Sambucus canadensis*), buffalobur (*Solanum rostratum*), chickweed (*Stellaria media*), clover (*Trifolium* sp.), vetch (*Vicia* sp.), grape (*Vitis* sp.), fox grape (*Vitis labrusca*), and grape (*Vitis* sp.), and members of the pigweed (*AMARANTHACEAE*), bean (*LEGUMINOSAE*), and grass (*POACEAE*) families. A non-carbonized, unidentifiable seed coat fragment was also noted. The non-carbonized seed specimens recovered from the flotation samples include both native and non-native species. Table C-3 presents the non-carbonized seed taxa recovered and the native/non-native status of each taxa. For the purposes of this study, all non-carbonized botanicals will be considered modern in origin and as such have been omitted from the quantitative analysis of the Puncheon Run archeobotanical remains.

Although the separation of carbonized and non-carbonized plant macroremains recovered from prehistoric contexts is critical to the accurate interpretation of plant use, the composition of non-carbonized seeds from prehistoric contexts also has a substantial bearing on the interpretation of both the cultural contexts sampled and recovered subsistence data. The recovery of modern seeds from presumed archaeological contexts demands the consideration of postdepositional disturbance, signals the possible mixing of cultural strata, and suggests that it may be difficult to obtain reliable subsistence data from such contexts. Furthermore, the presence of Eurasian and tropical seed species may cast doubt on the integrity of archaeological contexts and upon the prehistoric origin of associated features.

Table C-3: Status of Non-carbonized Seeds Recovered from Flotation Samples

Common Name	Scientific Name	Status
pigweed	*Amaranthus* sp.	native
goosefoot/pigweed	*Cheno/Amaranth group*	native
goosefoot	*Chenopodium sp.*	native
rattlebox	*Crotolaria sagittalis*	native
spurge	*Euphorbia* sp.	non-native/native
goosegrass	*Eleusine indica*	non-native (European)
wild lettuce	*Lactuca serriola*	non-native (Eurasia)
lespedeza	*Lespedeza* sp.	non-native/native
carpetweed	*Mollugo verticillata*	native/non-native*
bayberry	*Myrica* sp.	native
wood sorrel	*Oxalis stricta*	native
panic grass	*Panicum* sp.	non-native/native
poke	*Phytolacca americana*	native
knotweed	*Polygonum pennsylvanicum*	native
knotweed	*Polygonum* sp.	native
knotweed/dock	*Polygonum/Rumex group*	native
wild cherry	*Prunus serotina*	native
raspberry/blackberry	*Rubus* sp.	native
elderberry	*Sambucus canadensis*	native
buffalobur	*Solanum rostratum*	non-native
chickweed	*Stellaria media*	non-native
clover	*Trifolium* sp.	non-native
vetch	*Vicia* sp.	native/non-native
fox grape	*Vitis labrusca*	native
grape	*Vitis* sp.	native
amaranth family	*AMARANTHACEAE*	native
bean family	*LEGUMINOSAE*	native/non-native
grass family	*POACEAE*	native/non-native

* Native to the tropics or subtropics of the Northern and Southern hemispheres. Archaeological evidence from the Tennessee River valley confirms that *M. verticillata* was present in temperate eastern North America 3,000 years ago (Chapman et al. 1974).

e. Cultivated Plant Remains

The remains of cultivated plants were conspicuously absent from the Puncheon Run flotation samples. Macrofloral analysis of remains from prehistoric sites throughout the Eastern Woodlands has established strong evidence for advanced horticultural economies focused on the cultivation of both native oily-seeded and starchy-seeded annuals (including knotweed, pigweed, goosefoot, little barley, sunflower, and sumpweed) and the Mesoamerican triumvirate of corn, beans, and squash (Ford 1994; Scarry 1993; B.D. Smith 1992). Although *Chenopodium* and *Polygonum* seeds were recovered within the site assemblage, the Puncheon Run specimens exhibit no characteristics of cultivated types (i.e., increased seed size, thin-seed coat, and morphological variation), and are assumed to be representatives of wild taxa (B.D. Smith 1985).

f. Miscellaneous Plant Remains

A variety of miscellaneous archeobotanical materials were identified within the Puncheon Run flotation assemblage, including 307 fragments of amorphous carbon fragments, three monocot stem fragments, five unidentifiable charcoal fragments, one coniferous bud fragment, three woody bud fragments, three unidentifiable bud fragments, 20 unidentifiable rind fragments, eight unidentifiable plant parts, one unidentifiable spherical specimen, one fungal fructification, two hull fragments, and a single unidentifiable peduncle.

B. DISCUSSION OF ARCHEOBOTANICAL REMAINS BY LOCUS

A discussion of archeobotanical remains and associated features, and a review of recovered plant remains, are presented below by locus. The feature descriptions provided in Appendix K of this volume give the location and general description of cultural features sampled. The comprehensive floral inventory is provided by locus in Attachment A. Table C-4 presents the percentage presence of plant macroremains by locus. Figure C-1 illustrates the comparative productivity of flotation samples based on the mean average of charcoal recovered per liter of cultural fill.

1. Locus 1

a. Hand-Collected Samples

Three hand-collected charcoal samples were analyzed from Locus 1 contexts. These were secured from Features 50 and 51, and from nonfeature deposits in EU 376, Stratum C. A total of 0.32 grams of carbonized plant material was examined. The Feature 50 sample was composed of a single insect gall, similar to those found on small oak limbs. The Feature 51 sample contained six fragments of thick-walled hickory nutshell. The nonfeature sample was composed of a single fragment of thick-walled hickory nutshell.

b. Feature Flotation Samples

A total of 31 soil samples were submitted for flotation processing and analysis from features in Locus 1. A total of 61.5 liters of feature fill were processed, yielding 9.92 grams of carbonized plant material (an average of 0.16 grams per liter). Macrobotanical remains from 14 distinct cultural features were examined (Features 1, 2, 3, 4, 5, 6, 7A, 7B, 41, 46, 50, 51, 66, and 98). The results are discussed below by feature.

Table C-4: Percentage Presence of Flotation-Recovered Macrofloral Remains by Locus

Locus	Wood	Nut	Carbonized Seed	Nc Seed	No. Samples
Locus 1					
feature	96.8	32.3	6.5	67.7	31
nonfeature	46.2	23.1	7.7	46.2	13
Locus 2					
feature	100.0	100.0	.	100.0	1
nonfeature	33.3	33.3	.	33.3	3
Locus 3					
feature	91.3	30.4	39.1	76.1	46
nonfeature	62.5	15.6	12.5	50.0	32
control	75.0	12.5	.	75.0	8
TOTAL	79.1	26.1	18.7	64.2	134

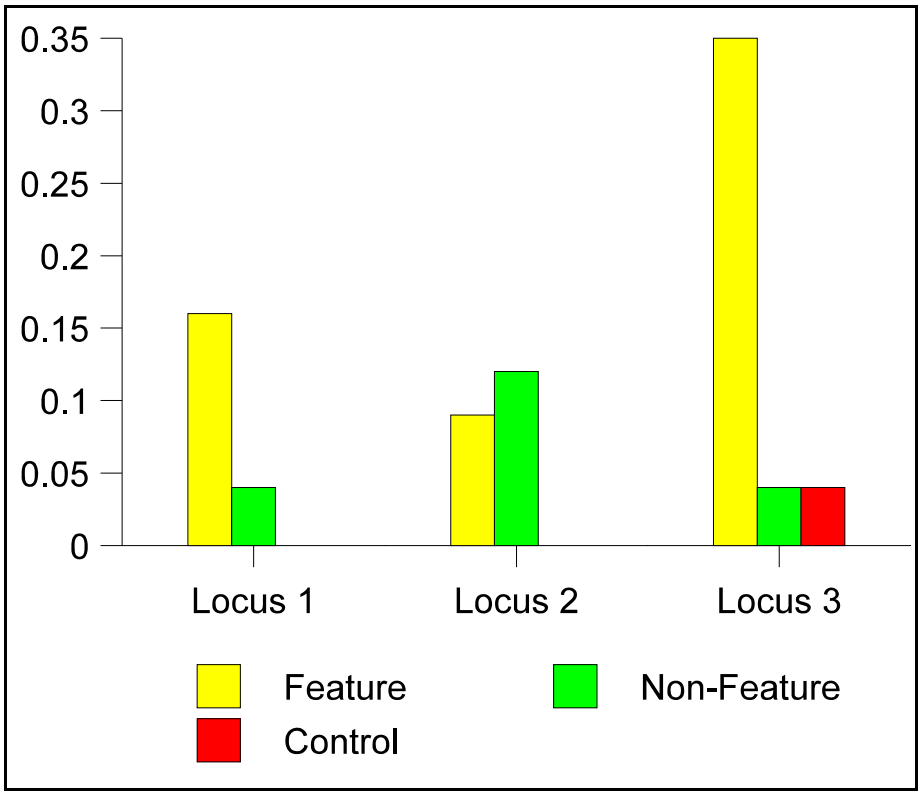

Figure C-1: Productivity of Puncheon Run Flotation Samples by Locus

1) Feature 1

A single 2-liter flotation sample analyzed from Feature 1 yielded 1.36 grams of carbonized plant material (0.68 grams per liter) composed of wood charcoal (hickory and oak) and unidentifiable plant carbon. Non-carbonized seeds were present within the sample.

2) Feature 2

A single 2-liter flotation sample secured from Feature 2 produced 0.08 grams of carbonized plant remains (0.04 grams per liter) composed of oak and hickory wood charcoal, thick-walled hickory nutshell, and unidentifiable plant carbon. Non-carbonized seeds were observed.

3) Feature 3

Three soil samples from Feature 3 totaling 6 liters yielded 1.31 grams of carbonized plant material (0.22 grams per liter). Identified plant remains included white oak, hickory and unspecified oak wood, thick-walled hickory nutshell, amorphous carbon, and unidentifiable plant charcoal. Non-carbonized seeds were observed in one of the three samples analyzed from Feature 3.

4) Feature 4

Two soil samples processed from Feature 4 yielded 0.63 grams of carbonized plant material (0.16 grams per liter). Recovered remains included white oak and maple wood charcoal, thick-walled hickory and acorn nutshell, and unidentifiable carbonized seeds. Non-carbonized seeds were encountered in both of the samples analyzed from Feature 4.

5) Feature 5

Two samples processed from Feature 5 yielded 0.96 grams (0.24 grams per liter) of carbonized plant material. The Feature 5 botanical assemblage contained hickory, white oak and unspecified oak woods, rind fragments, unidentifiable spherical carbon specimens, and amorphous carbon.

6) Feature 6

A single soil sample processed from Feature 6 yielded 0.18 grams of carbonized plant material (an average of 0.09 grams per liter). Recovered botanicals included unspecified oak, white oak and hickory woods, and unidentifiable rind fragments.

7) Feature 7A

Two samples analyzed from Feature 7A yielded 0.45 grams (0.11 grams per liter) of carbonized material composed of hickory, maple, white oak, American chestnut, holly and pine wood charcoal, thick-walled hickory nutshell, and amorphous carbon. Non-carbonized seeds were observed in both of the samples from Feature 7A.

8) Feature 7B

Two soil samples from Feature 7B yielded 0.26 grams (0.07 per liter) of carbonized plant material. Identified remains included white oak, tulip poplar and American chestnut wood charcoal, and amorphous carbon. Scant non-carbonized seeds were present in one of the two Feature 7B samples analyzed.

9) Feature 41

Three flotation samples from Feature 41 yielded 0.14 grams (0.2 grams per liter) of carbonized plant macroremains. Red oak and maple or birch wood charcoal, a monocot stem fragment, and amorphous carbon were identified. Non-carbonized seeds were absent.

10) Feature 46

Four samples from Feature 46 yielded a total of 2.18 grams of carbonized plant material (an average of 0.27 grams per liter). Identified remains included white oak, hickory, dogwood, holly and maple wood charcoal, thick-walled hickory nutshell, and amorphous carbon. Non-carbonized seeds were encountered in three of the four samples analyzed.

11) Feature 50

Two samples from Feature 50 yielded 0.24 grams (0.06 grams per liter) of carbonized plant macroremains composed of white oak wood charcoal and amorphous carbon. Non-carbonized seeds were present in both of the flotation samples from Feature 50.

12) Feature 51

Analysis of two soil samples from Feature 51 produced 0.39 grams of carbonized plant material (an average of 0.10 grams per liter). Identified remains included white oak, hickory, ash, unspecified oak, and black walnut wood charcoal; thick-walled hickory nutshell; and amorphous carbon. Non-carbonized seeds were present in the samples analyzed from Feature 51.

13) Feature 66

Four flotation samples totaling 7.5 liters were collected from Feature 66. Flotation-processing yielded 1.66 grams of carbonized plant macroremains (an average of 0.22 grams per liter), including hickory, unspecified oak, maple or birch and American holly wood charcoal; one possible seed coat fragment from American lotus (Feature Stratum A, Level 2, NW Quadrant); a coniferous bud fragment; and amorphous carbon. Non-carbonized seeds were observed in three of the four samples from Feature 66.

14) Feature 98

Two soil samples from Feature 98 yielded 0.08 grams (0.02 grams per liter) of carbonized plant material. The Feature 98 assemblage was composed of unidentifiable wood charcoal and thick-walled hickory nutshell. Non-carbonized seeds were encountered in one of the two samples analyzed.

c. *Nonfeature Flotation Samples*

A total of 13 2-liter soil samples secured from nonfeature contexts within Locus 1 were submitted for analysis. Flotation processing of 26 liters of nonfeature fill yielded a total of 0.97 grams of carbonized plant macroremains, or an average of 0.04 grams per liter of cultural fill. Seven (54 percent) of the Locus 1 nonfeature samples submitted were unproductive, yielding a paucity of carbonized plant remains. Archeobotanical remains secured from the other six samples contained a variety of wood charcoal types (dominated by white oak and hickory, with unspecified oak and American holly represented as well), thick-walled hickory nutshell (contained almost exclusively within two Block 16 samples), a single unidentifiable carbonized seed, and a fragment of unidentifiable plant tissue. Non-carbonized seeds were present in six of the 13 nonfeature flotation samples analyzed from Locus 1.

2. *Locus 2*

A total of four flotation samples were submitted for analysis from Locus 2. Analysis of 8 liters of cultural sediment yielded 0.4 grams of charcoal, or an average density of 0.05 grams of carbonized plant material per liter of fill.

a. *Feature Flotation Samples*

Two 2-liter soil samples were collected from Feature 1 contexts. One sample was secured from the upper strata of the feature interior and yielded 0.17 grams of plant macroremains. Recovered plant materials included white oak wood charcoal, thick-walled hickory nutshell, non-carbonized seeds, a fragment of monocot stem, and amorphous carbon. One sample was secured from the exterior of Feature 1. Carbonized plant remains were absent from this sample, but it contained non-carbonized seeds similar to those observed in the feature interior sample.

b. *Nonfeature Flotation Samples*

Two 2-liter flotation samples were analyzed from nonfeature contexts within Block 18 (EU 218). One sample was devoid of archeobotanical material and non-carbonized seed remains, and the other contained 0.23 grams of carbonized plant material. Identified floral material within the latter sample included oak wood charcoal, thick-walled hickory nutshell, and amorphous carbon. No non-carbonized seeds were observed in the samples.

3. *Locus 3*

a. *Hand-Collected Samples*

Four hand-collected carbon samples were collected from Locus 3 contexts. Three samples were secured from cultural features (Features 30 and 37), and one sample was retained from nonfeature contexts (EU 164). A total of 1.35 grams of carbonized plant material was analyzed from these proveniences. Two samples from Feature 30 contained deciduous wood charcoal, thick-walled hickory nutshell, and carbonized poke seeds (totaling 0.91 grams). The Feature 37 sample was composed exclusively of thick-walled hickory nutshell (weighing 0.44 grams). The nonfeature sample contained a single carbonized poke seed.

b. *Feature Flotation Samples*

A total of 46 soil samples were submitted for flotation processing and analysis from Locus 3 features. A total of 90 liters of feature fill was processed, yielding 31.32 grams of carbonized plant material (an average of 0.35 grams per liter). Macrobotanical remains from 18 distinct cultural features were examined (Features 1A, 1B, 2, 7, 8, 9, 13, 16A, 16B, 24, 25, 29, 30, 36, 37, 38, 94, 96). The results are presented below by feature.

1) Feature 1A

Two 2-liter flotation samples processed from Feature 1A yielded 1.09 grams of carbonized plant macroremains (0.27 grams per liter). The Feature 1A botanical assemblage was composed of white, red, and unspecified oak wood charcoal; carbonized goosefoot; knotweed grass; chickweed seeds and an "unknown" seed; and amorphous carbon. Non-carbonized seeds were present in both of the samples analyzed from Feature 1A.

2) Feature 1B

Three 2-liter samples from Feature 1B yielded 7.47 grams of carbonized plant material (1.25 grams per liter). Identified remains included white oak wood charcoal, thick-walled hickory nutshell, carbonized goosefoot and poke seeds, and amorphous carbon and unidentifiable carbon. Non-carbonized seeds were observed in all three flotation samples from Feature 1B.

3) Feature 2

Five 2-liter soil samples were submitted from Feature 2, yielding a total of 4.01 grams (0.40 grams per liter) of carbonized plant remains. Wood charcoal dominated the Feature 2 assemblage, with unspecified oak, sweetgum, and black locust identified. Thick-walled hickory nutshell, carbonized goosefoot, grass and unidentifiable eroded seeds, and amorphous carbon were also recovered. Non-carbonized seeds were encountered in one of the five samples analyzed from Feature 2.

4) Feature 7

The single flotation sample analyzed from Feature 7 yielded 0.26 grams of carbonized plant material (0.13 grams per liter). Recovered remains included white oak, sweetgum, and hickory wood charcoal; carbonized goosefoot seeds; and amorphous carbon. Non-carbonized seeds were also observed.

5) Feature 8

Processing of one soil sample from Feature 8 yielded 0.46 grams of carbonized plant remains (0.23 grams per liter). Identified material included pine and sweetgum wood charcoal, and an unidentifiable seed fragment. Non-carbonized seeds were also recovered.

6) Feature 9

A single 1-liter flotation sample retained from Feature 9 yielded 0.44 grams of carbonized plant remains. Oak charcoal and amorphous carbon were identified. Non-carbonized seeds were also observed.

7) Feature 13

One 2-liter soil sample was processed from Feature 13, producing 0.37 grams (0.19 grams per liter) of carbonized plant material. Recovered remains included sweetgum, hickory, and black walnut wood charcoal; unidentifiable eroded seeds; unidentifiable rind fragments; and amorphous carbon. The single sample from Feature 13 contained non-carbonized seeds.

8) Feature 16A

The single flotation sample processed from Feature 16A yielded 0.42 grams (0.21 grams per liter) of plant carbon. Identified remains included white oak, sweetgum, and American chestnut wood charcoal; a carbonized grass seed; and an unidentifiable rind fragment. Non-carbonized seeds were encountered within this sample.

9) Feature 16B

One 2-liter sample secured from Feature 16B was processed, yielding 0.09 grams (0.05 grams per liter) of carbonized plant macromaterial. Recovered remains included white oak and hickory wood charcoal, and a carbonized knotweed seed. Non-carbonized seeds were also present.

10) Feature 24

Seven 2-liter flotation samples were analyzed from this feature. Flotation processing of 14 liters of soil from the feature yielded 0.19 grams of charcoal, or an average density of 0.01 grams of charcoal per liter of feature fill. Four of the seven samples yielded carbonized plant remains. The Feature 24 wood remains were in eroded and fragmentary condition, which limited identification of 88 percent of the sample. Identifiable wood fragments were concentrated in the upper four levels of the feature. Sweetgum and white oak were identified. Hickory nutshell was recovered from the uppermost level of Feature 24. A total of 13 goosefoot seeds were identified from two samples. Miscellaneous plant remains recovered included two hull fragments, one fungal fructification, and a single fragment of amorphous carbon. Non-carbonized seeds were recovered from six of the seven samples analyzed. All non-carbonized seeds represent native species, including wild cherry, pigweed, elderberry, *Polygonum/Rumex*, goosefoot, and poke.

11) Feature 25

Six samples were submitted from Feature 25. Flotation processing of 12 liters of soil yielded 2.25 grams of charcoal, or an average density of 0.19 grams of charcoal per liter of feature fill. Wood charcoal was recovered from all six flotation samples, and a variety of tree species were identified. Hickory dominated the wood assemblage, followed by white oak species, sweetgum, mulberry, persimmon, and sassafras. Hickory nutshell was recovered from five of the six samples analyzed, totaling 33 shell fragments. Carbonized seeds were scarce within Feature 25, being present in only two of the samples examined. Two dock seeds and a single unidentifiable eroded seed were recovered. A variety of miscellaneous plant parts were also recovered from Feature 25, including amorphous carbon, an unidentifiable rind fragment, woody bud fragments, and a peduncle fragment. Non-carbonized seeds were present in three of the six Feature 25 samples analyzed.

An additional 2-liter flotation sample was secured from beneath Feature 25 (Stratum E, Level 9). This sample failed to yield any botanical remains whatsoever.

12) Feature 29

The single 2-liter soil sample processed from Feature 29 yielded a copious 10.18 grams (5.39 grams per liter) of carbonized plant material. Recovered remains were dominated by wood charcoal identified as white oak and American chestnut. Also identified were one eroded seed, amorphous carbon, and a woody bud fragment. Non-carbonized seeds were also observed.

13) Feature 30

Five flotation samples totaling 9 liters were processed from Feature 30, yielding 0.67 grams of carbonized plant remains (0.07 grams per liter). The Feature 30 assemblage included white oak and hickory wood charcoal, thick-walled hickory nutshell, an unidentifiable eroded seed, a rind fragment, unidentifiable charcoal, and amorphous carbon. Non-carbonized seeds were encountered in three of the five samples analyzed from Feature 30.

14) Feature 36

Two soil samples from Feature 36 yielded 0.50 grams of carbonized plant macroremains (0.13 grams per liter). Identified floral material included white oak, American chestnut, and unspecified oak wood charcoal; an unidentifiable bud fragment; and amorphous charcoal. Non-carbonized seeds were abundant within both of the samples from Feature 36.

15) Feature 37

The single sample analyzed from Feature 37 yielded 0.10 grams (0.05 grams per liter) of carbonized floral material. Recovered plant remains were composed of white oak and hickory wood charcoal, and thick-walled hickory nutshell. A variety of non-carbonized seeds were also encountered.

16) Feature 38

Of the four 2-liter flotation samples submitted from Feature 38, three yielded archeobotanical remains. Flotation processing of 8 liters of feature fill yielded 0.2 grams of carbonized floral material (0.03 grams per liter). Recovered remains included tulip poplar wood charcoal, a woody bud fragment, unidentifiable carbon, and amorphous carbon. Non-carbonized seeds were recovered from three of the four flotation samples analyzed from Feature 38.

17) Feature 94

The single sample from Feature 94 yielded 1.18 grams (0.59 grams per liter) of carbonized plant material. Identified remains included highly eroded wood charcoal (only a single fragment was identifiable [as pine]), a rind fragment, and amorphous carbon. A variety of non-carbonized seeds were also observed within the sample.

18) Feature 96

Three soil samples totaling 6 liters were processed from Feature 96, producing 1.44 grams (0.24 grams per liter) of carbonized plant material. The botanical assemblage was dominated by wood charcoal identified as white oak, red oak, black walnut, hickory, pine, and American chestnut. Thick-walled hickory nutshell was

recovered from two of the three samples, and amorphous carbon was present within all samples analyzed. Non-carbonized seeds were encountered in abundance throughout all three of the samples from Feature 96.

c. Nonfeature Flotation Samples

Thirty-two 2-liter soil samples secured from nonfeature contexts within Locus 3 were submitted for analysis. Flotation processing of 64 liters of nonfeature fill yielded a total of 2.32 grams of carbonized plant macroremains, or an average density of 0.04 grams per liter of cultural fill. Twelve (38 percent) of the Locus 3 nonfeature samples were unproductive, yielding a paucity of carbonized plant remains. Archeobotanical remains secured from the other 20 samples contained a variety of wood charcoal types (dominated by white oak, red oak, and hickory; and unspecified oak with maple, maple or birch, tulip poplar, red mulberry, black cherry, and black locust), thick-walled hickory nutshell (recovered exclusively from EUs 397 and 455), a carbonized goosefoot seed (from EU 123 samples), and poke (from an EU 120 sample) seeds, a fragment of monocot stem, and amorphous carbon. Non-carbonized seeds were present in 16 of the 32 nonfeature flotation samples analyzed from Locus 3.

d. Control Samples

To provide comparative data from non-cultural soil matrix, eight flotation samples were collected and processed as a control. Data established through the analysis of these control samples aids in assessing the contribution of natural seed rain, minute artifact migration, and rodent activities to the Locus 3 samples. Four control samples each were analyzed from EUs 153 and 213. Processing of 16 liters of soil yielded 0.71 grams of charcoal, or a mean average of 0.04 grams of charcoal per liter of fill. Carbonized botanical remains were scarce but present within 75 percent of the control samples analyzed. Recovered plant remains included wood charcoal (in 75 percent of the analyzed samples), thick-walled hickory nutshell (in 13 percent of the analyzed sample), and amorphous carbon (in 63 percent of the analyzed samples). In addition to carbonized plant remains, non-carbonized seeds were encountered in 75 percent of the analyzed samples. Non-carbonized seed remains identified include native taxa, as well as the non-native species carpetweed and wild lettuce.

IV. DISCUSSION

The culmination of Extended Phase II and Phase III archeobotanical analysis at the Puncheon Run Site represents a significant contribution to the archeobotanical database for the Middle Atlantic region. Large-scale flotation and analysis conducted over an unusually large Woodland period site provided an analytically significant data set from which to explore the many persistent questions regarding late Holocene human environmental adaptation, Woodland settlement systems, and prehistoric foodways on Delaware's coastal plain.

Although the flotation assemblage from the Puncheon Run Site is significant and comprehensive, and contributes to an interpretation of site subsistence and landscape utilization, the data are problematic in that they are productive because they were largely unproductive. In addition to providing only a small and biased sample of the array of plants deposited prehistorically, the data from Puncheon Run offer shockingly little information regarding diet and subsistence. In addition, review of the recovered botanical remains indicates that the integrity of cultural deposits at the site has been compromised. The patterning of carbonized plant remains combined with the recovery of Eurasian and tropical seed species from subplowzone contexts signals the mixing of cultural and natural strata by a variety of postdepositional factors.

Based on the botanical data recovered and our understanding of Woodland I and II culture in Delaware (Custer 1994), we know that residents of the Puncheon Run Site undoubtedly used a wide spectrum of plants

from the rich flora of the area for food, fuel, construction, tool manufacture, and medicine. The location of the Puncheon Run Site at the confluence of the St. Jones River and Puncheon Run would have afforded residents easy access to the productive potential of a variety of microenvironmental zones, including forested uplands, wooded bottomlands, tidal freshwater marshes, fertile floodplain areas, and open-water settings. Because the availability of various types of plant foods is strongly influenced by seasonal cycles, residents of the area would have maximized their dietary options by having direct access to this variety of vegetational zones throughout all seasons of the year, exploiting each in its turn. Surplus harvests, when available, would have been processed and stored for consumption during times of limited availability. Horticultural activities at the site may have further maximized the dietary options of site occupants.

Carbonized plant remains from across the site were disappointingly scarce, with a site average of only 0.17 grams of charcoal per liter of fill. Although a variety of plant species and plant parts were recovered, the condition of these remains ranged from poor to fair. Carbonized specimens appear to have suffered from considerable erosion and fragmentation. In addition to carbonized plant macroremains, the Puncheon Run botanical assemblage includes fresh seed remains from intact features, and carbonized and non-carbonized non-native seed species from below plowzone contexts. Interpretive issues raised by the presence of these remains are compounded by the stratigraphic complexity of the site, where sandy sediments appear to have permitted the leaching and transport of organic material through soil strata.

The presence of non-native seeds, such as wild lettuce, goosegrass, copperleaf, chickweed, clover, and carpetweed, cast considerable doubt on the prehistoric origin of the many subsurface contexts sampled. The presence of tropical and Eurasian imports raises interpretive questions regarding the integrity of cultural deposits at the Puncheon Run Site. The presence of non-native seeds at Puncheon Run is similar to the pattern observed at other Delaware sites, including Carey Farm, Leipsic, Pollack and Hickory Bluff (Custer, Riley, and Mellin 1996; Custer, Watson, and Silber 1996; McKnight 1999).

The predominance of oak and hickory woods within assemblage is entirely consistent with the forest cover type of the area (Brush 1986; Custer 1989; Sargent 1884) and with the pattern of wood remains expected for Woodland I and II flotation assemblage in the region (Custer and Hodny 1989; Custer and Silber 1995; Custer, Riley, and Mellin 1996; Custer, Watson, and Silber, 1996; Kellog and Custer 1994; LeeDecker et al. 1996). Unfortunately, the pattern of wood remains from Puncheon Run provides no insight into the preference of certain tree species for either fuel or construction.

Based on the extremely limited food plant remains recovered from Puncheon Run, significant dietary reconstruction for Woodland period site inhabitants cannot be achieved based on archeobotanical data. We speculate that the residents of Puncheon Run used a broad range of plant species from the local landscape for their dietary requirements. Indeed, the recovery of hickory, chestnut, and oak remains attest to the local availability of these taxa, and their fruits would have provided high-caloric, storable foods. Archeobotanical research has documented an increase in the importance of four indigenous, annual, starchy, seed-bearing plants by about 2,200 years ago: maygrass (*Phalaris caroliniana*), little barley (*Hordeum pusillum*), goosefoot (*Chenopodium* sp.), and knotweed (*Polygonum erectum*) (Asch and Asch 1983; Crites 1984; Johannessen 1984). Although present in the Puncheon Run flotation assemblage, the goosefoot and knotweed seeds recovered bear no morphological indication of domestication, but transition from wild to weedy to domesticated status is hard to pinpoint based on the small sample of recovered archeobotanical remains (B.D. Smith 1992). Based on the Puncheon Run assemblage, we may assert that these species flourished in the disturbed environment of the base camp and that the presence of starchy-seeded knotweed and goosefoot may indicate that these species were being used on site.

This archeobotanical assemblage does little to advance an understanding of seasonal resource use at the Puncheon Run Site. We know that hickory nutmeats contributed to the diet. Although these resources ripen for harvest during the fall, Smith notes that stored nutmeats were heavily relied upon during the spring months of March through June, when other foodstuffs were scarce (1986:162). The seed species represented in the Puncheon Run assemblage seeds ripen and are ready for harvest from midsummer through late fall.

Unfortunately, scrutiny of the Puncheon Run archeobotanical data provides little insight into feature function at the site. In addition to the fact that the unclear nature of many encountered features at the site limits interpretation of associated plant remains, the plant data themselves do little to elucidate possible feature function or patterning. Carbonized plant remains across all features sampled were scant, and their distribution is unrevealing. The recovery of modern seed remains (both non-carbonized native specimens and carbonized/non-carbonized Eurasian and tropical species) from archaeological contexts at Puncheon Run is supportive of the interpretation of many features as natural in origin (i.e., tree falls and rodent dens). The control and subfeature samples analyzed from the site show disappointingly little contrast to the cultural features analyzed.

Key research questions initially prescribed for Extended Phase II and Phase III investigations at the Puncheon Run site focus on the identification and function of pit house features. The natural or cultural origin of these features remains of interest. Previous investigations at the Puncheon Run Site (Liebknecht et al. 1997) suggest that the site conformed to the Woodland I microband base camp settlement type, similar to other examples of this site type identified in Kent and New Castle counties, Delaware. Designation of this site type relies, in part, on the presence of unique pit house features. Uncertainty surrounds the characteristics of these pit house features and their interpretation. Although Feature 24 is being examined as a possible pit house, data from the feature do not reveal either the depostional pattern or types of plant macroremains which might be anticipated on living-floors or in the preparation or processing of plant foods in a domestic setting. The presence of non-carbonized and exotic seeds casts further doubt on the integrity of this feature.

The botanical assemblage from the Puncheon Run Site can be compared to similar assemblages from other Woodland I and II sites in the region. The existing model for the Woodland I period (Custer 1994) indicates that this period was characterized by advances in plant food processing based on the addition of plant food processing tools to the basic toolkit and the use of pits that were presumably used for the storage of seasonally surplus foods. Although many Woodland camps have been excavated, there is relatively little information available about the types of plant foods that were used by Woodland I groups. Table C-5 offers a broad comparison of edible plant taxa from comparable sites in the region. Flotation data from other Woodland I and II sites in the region are similar to the problematic data from Puncheon Run. The recovery of non-carbonized and non-native seeds from within and below prehistoric features has been noted at other sites (Affleck et al. 1997:108-115). Whether this puzzling pattern of plant remains can be attributed to the migration of minute artifacts through the loose coastal plain soils in which the sites are located or to an inaccurate model of Woodland I and II settlement patterns has yet to be determined.

V. SUMMARY

Significant questions remain regarding the subsistence and settlement patterns of Woodland I and II occupants at the Puncheon Run Site. What plant foods *were* utilized by site residents? If they were not growing food, why is there not better representation of wild plant foods within the site assemblage? And why do the data not support the Woodland I model for advances in plant food processing and storage (Custer 1994)? These questions cannot be answered by the archeobotanical assemblage alone. The insufficiency of the data may simply be a result of preservational or sampling bias and should be viewed as inconclusive.

Table C-5: Comparison of Plant Food Remains From Woodland I and Woodland II Sites

SITE/PERIOD	Acorn	Am. Lotus	Bayberry	Bean	Butternut	Carpetweed	Chenopodium	Cherry	Chickweed	Clammyweed	Copper Leaf	Corn	Dogwood	Elderberry	Flax	Goosefoot	Grape	Greenbrier	Hackberry	Hickory
Puncheon Run Site 7K-C-51/Woodland I and II	✗	✗	✗			✗	✗	✗	✗		✗			✗		✗				✗
7K-C-194A (1)/ Woodland I and II	✗				✗		✗				✗		✗				✗	✗		✗
7NC-G-101 (2)/ Woodland I and II			✗		✗		✗				✗									✗
7K-D-21 (3)/AD 600		✗																		✗
7K-D-3 (4)/AD 0 - 60																				✗
7NC-E-41 (5)/ Woodland I and II	✗		✗	✗		✗	✗		✗	✗					✗		✗			✗
7NC-E-46 (6)/ca. 200 BC							✗												✗	✗
7S-K-21 (7)/ 500 BC - AD 600	✗				✗		✗													✗
7S-D-9 (8)/AD 0 - 600					✗															✗
7S-G-79(9)/ AD 1000 - 1500												✗								✗
7K-C-411 (10)/ Woodland I and II								✗						✗			✗			✗

SITE/PERIOD	Hognut	Knotweed	Mint	Mustard	Pigweed	Pokeweed	Ragweed	Raspberry	Sage	Sedge	Sheepsorrell	Skullcap	Solomons Seal	Spurge	Strawberry	Thimbleberry	Tulip Tree	Thyme	Viburnum	Walnut
Puncheon Run Site 7K-C-51/Woodland I and II		✗			✗	✗		✗			✗			✗	✗					
7K-C-194A (1)/ Woodland I and II					✗			✗			✗		✗				✗			
7NC-G-101 (2)/ Woodland I and II		✗					✗	✗						✗		✗				
7K-D-21 (3)/AD 600																			✗	
7K-D-3 (4)/AD 0 - 60																				
7NC-E-41 (5)/ Woodland I and II	✗	✗	✗	✗	✗	✗		✗	✗	✗		✗		✗				✗		✗
7NC-E-46 (6)/ca. 200 BC					✗															
7S-K-21 (7)/ 500 BC - AD 600					✗															
7S-D-9 (8)/AD 0 - 600																				
7S-G-79(9)/ AD 1000 - 1500																				✗
7K-C-411 (10)/ Woodland I and II		✗			✗	✗		✗						✗			✗			✗

*(1) Custer, Riley, and Mellin 1996; (2) Custer and Silber 1995; (3) Thomas et al. 1975; (4) Griffith 1974; (5) Thomas 1981; (6) Custer and Bachman 1983; (7) Custer, Stiner, and Watson 1983; (8) Custer and Mellin 1987; (9) Doms et al. 1985; (10) McKnight 1999. * Adapted from Custer, Riley, and Mellin (1996:129).*

shading denotes non-native species

Concurrent research at Puncheon Run includes microbotanical studies (phytolith, lithic edgewear, and protein antisera analysis), an ethnohistoric literature review focused on regional plant use, and a landscape study which together may better illuminate the role of plant resources in the economy, function, and culture of the Puncheon Run Site.

REFERENCES CITED

Affleck, Richard, Leslie Frucht, and Ingrid Wuebber
1997 *Class and Social Identity in St. Georges Hundred: Data Recovery Excavations at Locust Grove (7NC-F-13), State Route 1 Corridor, New Castle County, Delaware.* Draft report prepared for the Delaware Department of Transportation, Dover, by Louis Berger & Associates, Inc., East Orange, New Jersey.

Asch, David L., and Nancy B. Asch
1983 Archeobotany. In *Excavations at the Smiling Dan Site,* edited by B.D. Stafford and M.B. Sant, pp. 635-725. Report of Investigations 137. Contract Archaeology Program, Center for American Archaeology, Kampsville, Illinois.

Brush, Grace
1986 Geology and Ecology of the Chesapeake Bay: A Long-Term Monitory Tool for Management. *Journal of the Washington Academy of Sciences* 76(3):146-160.

Chapman, J., R.B. Stewart, and R.A. Yarnell
1974 Archaeological Evidence for Precolumbian Introduction of *Portulaca oleracea* and *Mollugo verticillata* into Eastern North America. *Economic Botany* 28:411-412.

Crites, G.
1984 Middle Woodland Paleo-ethnobotany of the Eastern Highland Rim. Paper presented at the 5th Annual Mid-South Archaeological Conference, Pinson Mounds, Tennessee.

Custer, Jay
1989 *Prehistoric Cultures of the Delmarva Peninsula*. University of Delaware Press, Newark.

1994 *Stability, Storage and Culture Change in Prehistoric Delaware: The Woodland I Period (3000 B.C. - A.D. 1000)*. Center for Archaeological Research, University of Delaware, Newark.

Custer, Jay F., and Bachman
1983 *Phase III Data Recovery Excavations of the Prehistoric Components form the Hawthorn Site (7NC-E-46) New Churchman's Road, Christiana, New Castle County, Delaware*. DelDOT Archaeology Series No. 27. Delaware Department of Transportation, Dover.

Custer, Jay F., and Barbara H. Silber
1995 *Final Archaeological Investigations at the Snapp Prehistoric Site (7NC-G-101), State Route 1 Corridor, Chesapeake and Delaware Canal Section, New Castle County, Delaware*. DelDOT Archaeology Series No. 122. Delaware Department of Transportation, Dover.

Custer, Jay F., and Glen Mellin
1987 Recent Archaeological Survey and Testing in the Atlantic Coast Zone of Delaware. *Bulletin of the Archaeological Society of Delaware* 24:1-78.

Custer, Jay F., and Jay Hodny
1989 *Final Archaeological Investigations at the Hockessin Valley Site (7NC-A-17), New Castle County, Delaware*. DelDOT Archaeology Series No. 75. Delaware Department of Transportation, Dover.

Custer, Jay F., Lynn Riley, and Glen Mellin
1996 *Final Archaeological Investigations at the Leipsic Site (7K-C-194A), State Route 1 Corridor, Kent County Delaware*. DelDOT Archaeology Series No. 118. Delaware Department of Transportation, Dover.

Custer, Jay F., M.C. Stiner, and S.C. Watson
1983 Excavations at the Wilgus Site (7S-K-21). *Bulletin of the Archaeological Society of Delaware* 15:1-44.

Custer, Jay F., Scott C. Watson, and Barbara H. Silber
1996 *Final Archaeological Investigations at the Carey Farm Site (7K-D-3) and Island Farm (7K-C-13) Sites, State Route 1 Corridor, Kent County, Delaware*. DelDOT Archaeology Series No. 142. Delaware Department of Transportation, Dover.

Dent, Richard J., and Barbara Kauffman
1985 Aboriginal Subsistence and Site Ecology as Determined from Microfloral and Microfaunal Remains. In *Shawnee Minisink: A Stratified Paleoindian-Archaic Site in the Upper Delaware Valley of Pennsylvania*, edited by Charles W. McNett, pp. 55-79. Academic Press, Orlando, Florida.

Doms, K., Jay F. Custer, G. Davis, and C. Trivelli
1985 Archaeological Investigations at the Bay Vista Site (7S-G-26) and the Cole Site (7S-G-79). *Bulletin of the Archaeological Society of Delaware* 19:1-26.

Edlin, Herbert L.
1969 *What Wood is That? A Manual of Wood Identification*. The Viking Press, New York.

Ford, Richard I. (editor)
1994 *The Nature and Status of Ethnobotany*. Anthropological Papers No. 67. Museum of Anthropology, University of Michigan, Ann Arbor.

Griffith, D.R.
1974 Ecological Studies of Prehistory. *Transactions of the Delaware Academy of Science* 5:63-81.

Hastorf, C.A., and V.S. Popper (editors)
1988 *Current Paleoethnobotany*. The University of Chicago Press, Chicago, Illinois.

Johannessen, Sissel
1984 Paleoethnobotany. In *American Bottom Archaeology*, edited by C.J. Bareis and J.W. Porter, pp. 197-214. University of Illinois Press, Urbana.

Keepax, Carole
1977 Contamination of Archaeological Deposits by Seeds of Modern Origin with Particular Reference to the Use of Flotation Machines. *Journal of Archaeological Science* 4:221-229.

Kellog, Douglas C., and Jay F. Custer
1994 *Paleo-environmental Studies of the State Route 1 Corridor: Contexts for Prehistoric Settlement. New Castle and Kent Counties, Delaware*. DelDOT Archaeological Series No. 114. Delaware Department of Transportation, Dover.

Kozlowski, T.T. (editor)
1972 *Seed Biology*. Academic Press, New York.

LeeDecker, Charles H., Henry Holt, and John Bedell
1998 *Preliminary Management Report: Extended Phase II Archaeological Testing of the Puncheon Run Site (7K-C-51), Locus 3, Puncheon Run Connector, Kent County, Delaware*. Draft report prepared for the Delaware Department of Transportation, Dover, by Louis Berger & Associates, Inc., Washington, D.C.

LeeDecker, Charles H., Brad Koldehoff, and Cheryl Holt
1996 *Excavation of The Two Guys Site 7S-F-68, Sussex County, Delaware*. DelDOT Archaeological Series No. 138. Delaware Department of Transportation, Dover.

Leibknecht, William, Richard Hunter, Ian Burrow, Michale Tompkins, Patricia Madrigal, Brooke Blades, Glen Mellin, Frank Dunsmore, Susan Fehrenbach, Brian Seidel, and Joseph Schuldenrein
1997 *Puncheon Run Connector, Parent Agreement #728, Dover, Kent County, Delaware, Phase I and II Archaeological Data Recovery (First Phase), the Puncheon Run Site (7K-C-51), the Hickory Bluff Prehistoric Site (7K-C-411), the Dawson House Site (7K-C-414), the Nixon Mill Site (7K-C-413)*. Draft report prepared for the Delaware Department of Transportation, Dover.

Martin A., and W. Barkely
1961 *Seed Identification Manual*. University of California Press, Berkeley.

Minnis, Paul E.
1981 Seeds in Archeological Sites: Sources and Some Interpretive Problems. *American Antiquity* 46:143-151.

McKnight, Justine Woodard
1999 *Results of Analysis: Flotation-Recovered Plant Remains from the Hickory Bluff Site (7K-C-411)*. Preliminary report submitted to Parsons Engineering Science, Inc., Fairfax, Virginia.

2000 *Landscape Assessment of the Puncheon Run Site, Puncheon Run Connector Kent County, Delaware*. Submitted to The Louis Berger Group, Inc., Washington, D.C.

Panshin, Alexis, and Carl deZeeuw
1980 *Textbook of Wood Technology*. Volume 1, 4th edition. McGraw Hill, New York.

Pearsall, D.
1989 *Paleoethnobotany: A Handbook of Procedures*. Academic Press, San Diego.

Sargent, C.S.
1884 *Forests of Delaware and Maryland*. Tenth Census U.S. 9.

Scarry, C. Margaret (editor)
1993 *Foraging and Farming in the Eastern Woodlands*. University Press of Florida, Gainesville.

Schopmeyer, C.S.
1974 *Seeds of Woody Plants*. Agricultural Handbook 450. United States Department of Agriculture, Washington, D.C.

Smith, B.D.
1985 *Chenopodium berlandieri ssp. Jonesianum*: Evidence for a Hopewellian Domesticate from Ash Cave, Ohio. *Southeastern Archaeology* 4:107-133.

1992 *Rivers of Change: Essays on Early Agriculture in Eastern North America*. Smithsonian Institution Press, Washington, D.C.

Smith, E.
1985 Recovery and Processing of Botanical Remains. In *The Analysis of Prehistoric Diets*, edited by Robert Gilbert and James Mielke, pp. 97-123. Academic Press, New York.

Smith, John
1986[1608] *A True Relation. The Complete Works of Captain John Smith (1580-1631)*. 3 vols. Edited by Philip Barbour. University of North Carolina Press, Chapel Hill.

Thomas, R.
1981 *Excavations at the Delaware Park Site (7NC-E-41)*. DelDOT Archaeology Series No. 11. Delaware Department of Transportation, Dover.

Thomas, Ronald A., Daniel R. Griffith, Cara L. Wise, Richard E. Artusy, Jr.
1975 Environmental Adaptation on Delaware's Coastal Plain. *Archaeology of Eastern North America* 3:35-89.

Wagner, G.E.
1982 Testing Flotation Recovery Rates. *American Antiquity* 47:127-132.

Watson, Patty Jo
1976 In Pursuit of Prehistoric Subsistence: A Comparative Account of Some Contemporary Flotation Techniques. *Mid Continental Journal of Archaeology* 1(1).

ATTACHMENT A

MACROFLORAL INVENTORY - LOCUS 1

Hand Collected Plant Remains, Locus 1, Puncheon Run Site (7K-C-51)

Cat #		98/2/1145	98/2/584	98/2/435	TOTALS
Locus		1	1	1	3 samples
Unit				376	
Strat				C	
Level				4	
Feature		51	50		
Feature Strat		A	A		
Feature Level		3	2		
Feature Quadrant		SW	SW 1/2		
Total Charcoal Weight (grams)		0.2	0.01	0.11	0.32
NUT REMAINS	(total count)	6		1	7
	total weight (grams)	0.2		0.11	0.31
Carya sp. (thick-walled hickory)		6		1	7
OTHER PLANT REMAINS	(total count)		1		1
	total weight (grams)		0.01		0.01
insect gall			1		1

Flotation Recovered Plant Remains from Non-Feature Contexts, Locus 1, Puncheon Run Site (7K-C-51)

Catalog #		98/2/203	98/2/204	98/2/205	98/2/206	98/2/144
Block						16
Unit		stp#C,1	stp#C-4	stp#C-6	stp#C-11	196
Strata		B	B	B	B	B
Level						3
Feature						
Feature Strata						
Feature Level						
Soil Sample Volume (liters)		2	2	2	2	2
Total Charcoal Weight (grams)		0	0	0	0	0.26
WOOD CHARCOAL	(total count)	0	0	0	0	1
	total weight (grams)	0	0	0	0	0.01
Acer sp. (maple)						
Acer/Betula (maple/birch)						
Carya sp. (hickory)						
Ilex opaca (american holly)						
Quercus sp. (red group)						
Quercus sp. (white group)						
Quercus sp. (unspecified)						
ring porous						
deciduous taxa						
unidentifiable						1
total identified fragments						1
NUT REMAINS	(total count)	0	0	0	0	17
	total weight (grams)	0	0	0	0	0.25
Quercus sp. (acorn)						
Carya sp. (thick-walled hickory)						17
SEED REMAINS	(total count)	0	0	0	0	0
	total weight (grams)	0	0	0	0	0
unidentifiable seed						
unidentifiable large seed						
non-carbonized seeds present		no	no	yes	no	yes
OTHER PLANT REMAINS	(total count)	0	0	0	0	0
	total weight (grams)	0	0	0	0	0
amorphous carbon						
unidentifiable rind fragment						
unidentifiable plant part						

Flotation Recovered Plant Remains from Non-Feature Contexts, Locus 1, Puncheon Run Site (7K-C-51)

Catalog #		98/2/143	98/2/148	98/2/145	98/2/146	98/2/183
Block		16		14	14	14
Unit		197	235	239	240	241
Strata		B	B	A	B	B
Level		2				
Feature						ext. Fea 4
Feature Strata						
Feature Level						
Soil Sample Volume (liters)		2	2	2	2	2
Total Charcoal Weight (grams)		0.5	0	0.17	0.01	0.02
WOOD CHARCOAL	(total count)	7	0	20	2	1
	total weight (grams)	0.03	0	0.15	0.01	0.02
Acer sp. (maple)						
Acer/Betula (maple/birch)						
Carya sp. (hickory)				5		
Ilex opaca (american holly)		1				
Quercus sp. (red group)						
Quercus sp. (white group)				8		
Quercus sp. (unspecified)		2				1
ring porous						
deciduous taxa		1		5		
unidentifiable		3		2	2	
total identified fragments		7	0	20	2	1
NUT REMAINS	(total count)	17	0	1	0	0
	total weight (grams)	0.47	0	0.01	0	0
Quercus sp. (acorn)						
Carya sp. (thick-walled hickory)		17		1		
SEED REMAINS	(total count)	0	0	0	1	0
	total weight (grams)	0	0	0	<0.01	0
unidentifiable seed					1	
unidentifiable large seed						
non-carbonized seeds present		yes	no	yes	yes	no
OTHER PLANT REMAINS	(total count)	0	0	1	0	0
	total weight (grams)	0	0	0.01	0	0
amorphous carbon						
unidentifiable rind fragment						
unidentifiable plant part				1		

Flotation Recovered Plant Remains from Non-Feature Contexts, Locus 1, Puncheon Run Site (7K-C-51)

Catalog #		98/2/187	98/2/202	98/2/161	TOTALS
Block		14	14	14	13 samples
Unit		242	243	237	
Strata		B	B	B	
Level					
Feature		ext. Fea 5	ext. Fea 6	ext. Fea 2	
Feature Strata					
Feature Level					
Soil Sample Volume (liters)		2	2	2	26
Total Charcoal Weight (grams)		0	0	0.01	0.97
WOOD CHARCOAL	(total count)	0	0	1	32
	total weight (grams)	0	0	0.01	0.23
Acer sp. (maple)					0
Acer/Betula (maple/birch)					0
Carya sp. (hickory)					5
Ilex opaca (american holly)					1
Quercus sp. (red group)					0
Quercus sp. (white group)					8
Quercus sp. (unspecified)					3
ring porous					0
deciduous taxa				1	7
unidentifiable					8
total identified fragments		0	0	1	32
NUT REMAINS	(total count)	0	0	0	35
	total weight (grams)	0	0	0	0.73
Quercus sp. (acorn)					0
Carya sp. (thick-walled hickory)					35
SEED REMAINS	(total count)	0	0	0	1
	total weight (grams)	0	0	0	0
unidentifiable seed					1
unidentifiable large seed					0
non-carbonized seeds present		yes	no	no	6 of 13
OTHER PLANT REMAINS	(total count)	0	0	0	1
	total weight (grams)	0	0	0	0.01
amorphous carbon					0
unidentifiable rind fragment					0
unidentifiable plant part					1

Flotation Recovered Plant Remains from Feature Contexts, Locus 1, Puncheon Run Site (7K-C-51)

Catalog #		147	162	171	169	170
WOOD CHARCOAL	(total count)	213	8	64	18	14
	total weight (grams)	1.33	0.05	0.82	0.23	0.14
Acer sp. (maple)						
Acer/Betula (maple/birch)					2	
Carya sp. (hickory)		7	1	1	2	9
Castanea dentata (American chestnut)						
Cornus florida (flowering dogwood)						
Fraxinus sp. (ash)						
Ilex opaca (american holly)						
Juglans nigra (black walnut)						
Liriodendron tulipifera (tulip poplar)						
Pinus sp. (so. pine group)						
Quercus sp. (white group)				17		
Quercus sp. (red group)		1				
Quercus sp. (unspecified)		4	3		5	
ring porous		5		2		2
coniferous taxa						
deciduous taxa		3	3		4	3
unidentifiable			1		5	
total identified fragments		20	8	20	18	14
NUT REMAINS	(total count)	0	1	0	6	1
	total weight (grams)	0	0.01	0	0.06	0.01
Quercus sp. (acorn)						
Carya sp. (thick-walled hickory)			1		6	1
SEED REMAINS	(total count)	0	0	0	0	0
	total weight (grams)	0	0	0	0	0
unidentifiable seed						
unidentifiable large seed						
possible Nelumbo lutea (American lotus) frag						
non-carbonized SEED REMAINS	(total count)					
	total weight (grams)					
Amaranthus sp. (pigweed)						
Ambrosia artemisiifolia (common ragweed)						
Euphorbia sp. (spurge)						
Mollugo verticillata (carpetweed)						
Oxalis stricta (wood sorrel)						
Polygonum pensylvanicum (knotweed)	*entire*					
	fragment					
Polygonum sp. (knotweed)						
Solanum rostratum (buffalobur)						
Stellaria media (chickweed)						
Vitis sp. (grape)						
AMARANTHACEAE (pigweed family)						
POACEAE (grass family)						
unidentifiable seed coat fragment						
presence/absence of non-carbonized seeds	(Phase II analysi	yes	yes	no	no	yes
OTHER PLANT REMAINS	(total count)	3	2	1	4	2
	total weight (grams)	0.03	0.02	0.01	0.03	0.01
amorphous carbon					4	1
monocot stem						
coniferous bud fragment						
unidentifiable rind fragment						
unidentifiable plant part		3	2	1		1
unidentifiable spherical specimen						

Flotation Recovered Plant Remains from Feature Contexts, Locus 1, Puncheon Run Site (7K-C-51)

Catalog #		184	182	186	185	201
WOOD CHARCOAL	(total count)	16	71	5	24	9
	total weight (grams)	0.06	0.25	0.07	0.84	0.08
Acer sp. (maple)			3			
Acer/Betula (maple/birch)						
Carya sp. (hickory)				1	14	1
Castanea dentata (American chestnut)						
Cornus florida (flowering dogwood)						
Fraxinus sp. (ash)						
Ilex opaca (american holly)						
Juglans nigra (black walnut)						
Liriodendron tulipifera (tulip poplar)						
Pinus sp. (so. pine group)						
Quercus sp. (white group)			13	2		2
Quercus sp. (red group)						
Quercus sp. (unspecified)					2	5
ring porous		3	1		3	1
coniferous taxa						
deciduous taxa		2	3			
unidentifiable		11		2	1	
total identified fragments		16	20	5	20	9
NUT REMAINS	(total count)	4	18	0	0	0
	total weight (grams)	0.05	0.2	0	0	0
Quercus sp. (acorn)			2			
Carya sp. (thick-walled hickory)		4	16			
SEED REMAINS	(total count)	0	6	0	0	0
	total weight (grams)	0	0.07	0	0	0
unidentifiable seed						
unidentifiable large seed			6			
possible Nelumbo lutea (American lotus) frag						
non-carbonized SEED REMAINS	(total count)					
	total weight (grams)					
Amaranthus sp. (pigweed)						
Ambrosia artemisiifolia (common ragweed)						
Euphorbia sp. (spurge)						
Mollugo verticillata (carpetweed)						
Oxalis stricta (wood sorrel)						
Polygonum pensylvanicum (knotweed)	*entire*					
	fragment					
Polygonum sp. (knotweed)						
Solanum rostratum (buffalobur)						
Stellaria media (chickweed)						
Vitis sp. (grape)						
AMARANTHACEAE (pigweed family)						
POACEAE (grass family)						
unidentifiable seed coat fragment						
presence/absence of non-carbonized seeds	(Phase II analysi	yes	yes	no	no	no
OTHER PLANT REMAINS	(total count)	0	0	6	1	11
	total weight (grams)	0	0	0.04	0.01	0.1
amorphous carbon				4		
monocot stem						
coniferous bud fragment						
unidentifiable rind fragment				2		11
unidentifiable plant part						
unidentifiable spherical specimen					1	

Flotation Recovered Plant Remains from Feature Contexts, Locus 1, Puncheon Run Site (7K-C-51)

Catalog #		98/2/1308	98/2/1301	98/2/1303	98/2/1320	98/2/1094
WOOD CHARCOAL	(total count)	22	20	35	11	8
	total weight (grams)	0.18	0.19	0.14	0.07	0.05
Acer sp. (maple)			4			
Acer/Betula (maple/birch)						
Carya sp. (hickory)		7	1			
Castanea dentata (American chestnut)		1		1		
Cornus florida (flowering dogwood)						
Fraxinus sp. (ash)						
Ilex opaca (american holly)			1			
Juglans nigra (black walnut)						
Liriodendron tulipifera (tulip poplar)				2		
Pinus sp. (so. pine group)			1			
Quercus sp. (white group)			2	3	5	
Quercus sp. (red group)						
Quercus sp. (unspecified)				1		
ring porous		1		6	6	
coniferous taxa						
deciduous taxa		4	6	2		2
unidentifiable		7	5	5		6
total identified fragments		20	20	20	11	8
NUT REMAINS	(total count)	1	1	0	0	0
	total weight (grams)	0.03	0.01	0	0	0
Quercus sp. (acorn)						
Carya sp. (thick-walled hickory)		1	1			
SEED REMAINS	(total count)					
	total weight (grams)					
unidentifiable seed						
unidentifiable large seed						
possible Nelumbo lutea (American lotus) frag						
non-carbonized SEED REMAINS	(total count)	1	13	1	0	1
	total weight (grams)	<0.01	0.01	<0.01	0	<0.01
Amaranthus sp. (pigweed)						1
Ambrosia artemisiifolia (common ragweed)						
Euphorbia sp. (spurge)						
Mollugo verticillata (carpetweed)			3			
Oxalis stricta (wood sorrel)			1			
Polygonum pensylvanicum (knotweed)	*entire*					
	fragment					
Polygonum sp. (knotweed)				1		
Solanum rostratum (buffalobur)						
Stellaria media (chickweed)						
Vitis sp. (grape)						
AMARANTHACEAE (pigweed family)		1	9			
POACEAE (grass family)						
unidentifiable seed coat fragment						
presence/absence of non-carbonized seeds (Phase II analysi						
OTHER PLANT REMAINS	(total count)	0	6	5	1	4
	total weight (grams)	0	0.03	0.04	0.01	0.02
amorphous carbon			6	5	1	2
monocot stem						
coniferous bud fragment						
unidentifiable rind fragment						2
unidentifiable plant part						
unidentifiable spherical specimen						

Flotation Recovered Plant Remains from Feature Contexts, Locus 1, Puncheon Run Site (7K-C-51)

Catalog #		98/2/1101	98/2/116	98/2/1084	98/2/1126	98/2/1133
WOOD CHARCOAL	(total count)	6	5	26	5	207
	total weight (grams)	0.04	0.02	0.13	0.03	1.6
Acer sp. (maple)						2
Acer/Betula (maple/birch)			1			
Carya sp. (hickory)						2
Castanea dentata (American chestnut)						
Cornus florida (flowering dogwood)						
Fraxinus sp. (ash)						
Ilex opaca (american holly)						
Juglans nigra (black walnut)						
Liriodendron tulipifera (tulip poplar)						
Pinus sp. (so. pine group)						
Quercus sp. (white group)						5
Quercus sp. (red group)			2			
Quercus sp. (unspecified)				6		4
ring porous				4		1
coniferous taxa						
deciduous taxa		6	1	8	3	3
unidentifiable			1	2	2	3
total identified fragments		6	5	20	5	20
NUT REMAINS	(total count)	0	0	1	0	0
	total weight (grams)	0	0	0.01	0	0
Quercus sp. (acorn)						
Carya sp. (thick-walled hickory)				1		
SEED REMAINS	(total count)					
	total weight (grams)					
unidentifiable seed						
unidentifiable large seed						
possible Nelumbo lutea (American lotus) frag						
non-carbonized SEED REMAINS	(total count)	0	0	11	5	0
	total weight (grams)	0	0	0.01	0.01	0
Amaranthus sp. (pigweed)				1		
Ambrosia artemisiifolia (common ragweed)						
Euphorbia sp. (spurge)				1		
Mollugo verticillata (carpetweed)				8		
Oxalis stricta (wood sorrel)					1	
Polygonum pensylvanicum (knotweed)	*entire*				1	
	fragment				1	
Polygonum sp. (knotweed)						
Solanum rostratum (buffalobur)						
Stellaria media (chickweed)						
Vitis sp. (grape)					1	
AMARANTHACEAE (pigweed family)						
POACEAE (grass family)				1		
unidentifiable seed coat fragment					1	
presence/absence of non-carbonized seeds	(Phase II analysi					
OTHER PLANT REMAINS	(total count)	1	1	4	1	3
	total weight (grams)	0.01	<0.01	0.02	0.01	0.03
amorphous carbon			1	4	1	3
monocot stem		1				
coniferous bud fragment						
unidentifiable rind fragment						
unidentifiable plant part						
unidentifiable spherical specimen						

Flotation Recovered Plant Remains from Feature Contexts, Locus 1, Puncheon Run Site (7K-C-51)

Catalog #		98/2/1134	98/2/1062	98/2/1092	98/2/1054	98/2/1145
WOOD CHARCOAL	(total count)	35	15	7	18	29
	total weight (grams)	0.33	0.11	0.04	0.13	0.16
Acer sp. (maple)						
Acer/Betula (maple/birch)						
Carya sp. (hickory)		3			5	
Castanea dentata (American chestnut)						
Cornus florida (flowering dogwood)		1				
Fraxinus sp. (ash)					2	
Ilex opaca (american holly)		2				
Juglans nigra (black walnut)					2	
Liriodendron tulipifera (tulip poplar)						
Pinus sp. (so. pine group)						
Quercus sp. (white group)		8		7		18
Quercus sp. (red group)						
Quercus sp. (unspecified)					2	
ring porous			2			
coniferous taxa		1				
deciduous taxa			13		7	2
unidentifiable		5				
total identified fragments		20	15	7	18	20
NUT REMAINS	(total count)	0	0	0	0	1
	total weight (grams)	0	0	0	0	0.01
Quercus sp. (acorn)						
Carya sp. (thick-walled hickory)						1
SEED REMAINS	(total count)					
	total weight (grams)					
unidentifiable seed						
unidentifiable large seed						
possible Nelumbo lutea (American lotus) frag						
non-carbonized SEED REMAINS	(total count)	3	34	3	3	28
	total weight (grams)	<0.01	0.01	<0.01	<0.01	0.01
Amaranthus sp. (pigweed)						
Ambrosia artemisiifolia (common ragweed)					1	
Euphorbia sp. (spurge)			2			2
Mollugo verticillata (carpetweed)		2	30	3	1	21
Oxalis stricta (wood sorrel)			1		1	4
Polygonum pensylvanicum (knotweed)	*entire*					
	fragment					
Polygonum sp. (knotweed)						
Solanum rostratum (buffalobur)						
Stellaria media (chickweed)			1			1
Vitis sp. (grape)						
AMARANTHACEAE (pigweed family)		1				
POACEAE (grass family)						
unidentifiable seed coat fragment						
presence/absence of non-carbonized seeds (Phase II analysi						
OTHER PLANT REMAINS	(total count)	1	12	2	2	10
	total weight (grams)	<0.01	0.07	0.01	0.01	0.07
amorphous carbon		1	12	2	2	10
monocot stem						
coniferous bud fragment						
unidentifiable rind fragment						
unidentifiable plant part						
unidentifiable spherical specimen						

Flotation Recovered Plant Remains from Feature Contexts, Locus 1, Puncheon Run Site (7K-C-51)

Catalog #		98/2/868	98/2/1072	98/2/898	98/2/869	98/2/1341
WOOD CHARCOAL	(total count)	109	65	8	0	3
	total weight (grams)	0.97	0.45	0.05	0	0.02
Acer sp. (maple)						
Acer/Betula (maple/birch)		3				
Carya sp. (hickory)			5			
Castanea dentata (American chestnut)						
Cornus florida (flowering dogwood)						
Fraxinus sp. (ash)						
Ilex opaca (american holly)		1	2			
Juglans nigra (black walnut)						
Liriodendron tulipifera (tulip poplar)						
Pinus sp. (so. pine group)						
Quercus sp. (white group)						
Quercus sp. (red group)						
Quercus sp. (unspecified)		5				
ring porous				6		
coniferous taxa						
deciduous taxa		6	7	2		3
unidentifiable		5	6			
total identified fragments		20	20	8	0	3
NUT REMAINS	(total count)	0	0	0	0	0
	total weight (grams)	0	0	0	0	0
Quercus sp. (acorn)						
Carya sp. (thick-walled hickory)						
SEED REMAINS	(total count)		1			
	total weight (grams)		0.01			
unidentifiable seed						
unidentifiable large seed						
possible Nelumbo lutea (American lotus) frag			1			
non-carbonized SEED REMAINS	(total count)	5	19	0	1	1
	total weight (grams)	<0.01	0.01	0	<0.01	<0.01
Amaranthus sp. (pigweed)						
Ambrosia artemisiifolia (common ragweed)						
Euphorbia sp. (spurge)		2				1
Mollugo verticillata (carpetweed)		2	9			
Oxalis stricta (wood sorrel)			2			
Polygonum pensylvanicum (knotweed)	*entire*					
	fragment					
Polygonum sp. (knotweed)						
Solanum rostratum (buffalobur)					1	
Stellaria media (chickweed)						
Vitis sp. (grape)						
AMARANTHACEAE (pigweed family)			8			
POACEAE (grass family)		1				
unidentifiable seed coat fragment						
presence/absence of non-carbonized seeds (Phase II analysi						
OTHER PLANT REMAINS	(total count)	11	8	4	0	0
	total weight (grams)	0.1	0.06	0.02	0	0
amorphous carbon		10	7	4		
monocot stem						
coniferous bud fragment		1				
unidentifiable rind fragment						
unidentifiable plant part						
unidentifiable spherical specimen						

Flotation Recovered Plant Remains from Feature Contexts, Locus 1, Puncheon Run Site (7K-C-51)

Catalog #		98/2/1342	TOTALS
WOOD CHARCOAL	(total count)	2	1078
	total weight (grams)	<0.01	8.58
Acer sp. (maple)			9
Acer/Betula (maple/birch)			6
Carya sp. (hickory)			59
Castanea dentata (American chestnut)			2
Cornus florida (flowering dogwood)			1
Fraxinus sp. (ash)			2
Ilex opaca (american holly)			6
Juglans nigra (black walnut)			2
Liriodendron tulipifera (tulip poplar)			2
Pinus sp. (so. pine group)			1
Quercus sp. (white group)			82
Quercus sp. (red group)			3
Quercus sp. (unspecified)			37
ring porous			43
coniferous taxa			1
deciduous taxa			93
unidentifiable		2	69
total identified fragments		2	418
NUT REMAINS	(total count)	8	42
	total weight (grams)	0.06	0.45
Quercus sp. (acorn)			2
Carya sp. (thick-walled hickory)		8	40
SEED REMAINS	(total count)		7
	total weight (grams)		0.08
unidentifiable seed			0
unidentifiable large seed			6
possible Nelumbo lutea (American lotus) frag			1
non-carbonized SEED REMAINS	(total count)	1	130
	total weight (grams)	<0.01	0.06
Amaranthus sp. (pigweed)			2
Ambrosia artemisiifolia (common ragweed)			1
Euphorbia sp. (spurge)			8
Mollugo verticillata (carpetweed)		1	80
Oxalis stricta (wood sorrel)			10
Polygonum pensylvanicum (knotweed)	*entire*		1
	fragment		1
Polygonum sp. (knotweed)			1
Solanum rostratum (buffalobur)			1
Stellaria media (chickweed)			2
Vitis sp. (grape)			1
AMARANTHACEAE (pigweed family)			19
POACEAE (grass family)			2
unidentifiable seed coat fragment			1
presence/absence of non-carbonized seeds	(Phase II analysi		5 of 10
OTHER PLANT REMAINS	(total count)	0	106
	total weight (grams)	0	0.76
amorphous carbon			80
monocot stem			1
coniferous bud fragment			1
unidentifiable rind fragment			15
unidentifiable plant part			7
unidentifiable spherical specimen			1

ATTACHMENT B

MACROFLORAL INVENTORY - LOCUS 2

Flotation Recovered Plant Remains, Locus 2, Puncheon Run Site (7K-C-51)

Catalog #		52	53	54	55	TOTALS
Block		20	20	18	18	
Unit			247	218	218	4 samples
Strata			B	C	B	
Level						
Feature		1	ext. feature 1			
Feature Strata		A				
Feature Level						
Soil Sample Volume (liters)		2	2	2	2	8
Total Charcoal Weight (grams)		0.17	0	0	0.23	0.4
WOOD CHARCOAL	(total count)	14	0	0	10	24
	total weight (grams)	0.08	0	0	0.06	0.14
Acer sp. (maple)						0
						0
Carya sp. (hickory)						0
Ilex opaca (american holly)						0
Quercus sp. (red group)						0
Quercus sp. (white group)		13				13
Quercus sp. (unspecified)					5	5
ring porous						0
deciduous taxa						0
unidentifiable		1			5	6
total identified fragments		14	0	0	10	24
NUT REMAINS	(total count)	1	0	0	9	10
	total weight (grams)	0.02	0	0	0.13	0.15
Quercus sp. (acorn)						0
Carya sp. (thick-walled hickory)		1			9	10
SEED REMAINS	(total count)	0	0	0	0	0
	total weight (grams)	0	0	0	0	0
unidentifiable seed						0
unidentifiable large seed						0
non-carbonized seeds present		yes	yes	no	no	2 of 4
OTHER PLANT REMAINS	(total count)	7	0	0	3	10
	total weight (grams)	0.07	0	0	0.04	0.11
amorphous carbon		6			3	9
unidentifiable rind fragment						0
unidentifiable plant part						0
unidentifiable spherical specimen						0
monocot stem		1				1

ATTACHMENT C

MACROFLORAL INVENTORY - LOCUS 3

Hand Collected Plant Remains, Locus 3, Puncheon Run Site (7K-C-51)

Cat #		98/2/193	97/55/463	98/2/1267	98/2/200	TOTALS
Locus		3	3	3	3	4 samples
Unit			164	464	320	
Strat			B			
Level			3			
Feature		30		37	30	
Feature Strat		A		B	A	
Feature Level		3		3		
Feature Quadrant						
Total Charcoal Weight (grams)		0.43	<0.01	0.44	0.48	1.35
WOOD CHARCOAL	(total count)				12	12
	total weight (grams)				0.47	0.47
deciduous taxa					12	12
NUT REMAINS	(total count)	5		5		10
	total weight (grams)	0.43		0.44		0.87
Carya sp. (thick-walled hickory)		5		5		10
non-carbonized SEED REMAINS	(total count)		1		8	9
	total weight (grams)		<0.01		0.01	0.01
Phytolacca americana (poke)			1		8	9

Flotation Recovered Plant Remains from Feature Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #		169	178	179	206	207	208
Block		4	4	4	4	4	4
Unit		120	122	122	126	126	126
Strata, Level							
Feature		1A	1B	1B	25	25	25
Feature Strata		A	A	B	A	A	A
Feature Level		1	1	2	1	2	3
Column		1,1	3,1	3,2	7,1	7,2	7,3
Soil Sample Volume (liters)		2	2	2	2	2	2
Total Charcoal Weight (grams)		0.22	2.51	1.3	0.47	0.64	0.49
WOOD CHARCOAL	(total count)	31	140	139	43	46	42
	total weight (grams)	0.17	2.19	1.24	0.44	0.52	0.39
Acer sp. (maple)							
Carya sp. (hickory)					5		6
Castanea dentata (american chestnut)							
Diospyros virginiana (persimmon)						5	
Juglans nigra (black walnut)							
Liquidambar styraciflua (sweetgum)					3	2	
Liriodendron tulipifera (tulip poplar)							
Morus rubra (red mulberry)							1
Pinus sp. (so. pine group)							
Quercus sp. (white group)		12	20	12	1	6	3
Quercus sp. (red group)		3					
Quercus sp. (unspecified)							
Robinia pseudoacacia (black locust)							
Sassafras albidum (sassafras)							2
diffuse porous							
ring porous					4	5	
deciduous taxa					2		5
unidentifiable		5		8	5	2	3
total identified fragments		20	20	20	20	20	20
NUT REMAINS	(total count)	0	0	1	1	3	8
	total weight (grams)	0	0	0.02	0.02	0.03	0.09
Carya sp. (thick-walled hickory)				1	1	3	8
carbonized SEED REMAINS	(total count)	3	3	0	0	1	2
	total weight (grams)	<0.01	<0.01	0	0	<0.01	<0.01
Acalypha virginica (copperleaf)							
Chenopodium sp. (goosefoot)		1	3				
Phytolacca americana (poke)							
Polygonum sp. (knotweed)		1					
Rumex sp. (dock)						1	
Stellaria media (chickweed)		1					
GRAMINEAE							
Unidentifiable seed fragment							
Unidentifiable eroded seed							2
Unknown seed							
non-carbonized SEED REMAINS	(total count)						
	total weight (grams)						
Amaranthus sp. (pigweed)	*entire*						
	frags						
Crotolaria sagittalis (rattlebox)							
Euphorbia sp. (spurge)							
Frageria sp. (strawberry)							
Mollugo verticillata (carpetweed)							
Myrica sp. (bayberry) ?							
Oxalis stricta (wood sorrel)							
Panicum sp. (panic grass)							

Flotation Recovered Plant Remains from Feature Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #		169	178	179	206	207	208
Block		4	4	4	4	4	4
Unit		120	122	122	126	126	126
Strata, Level							
Feature		1A	1B	1B	25	25	25
Feature Strata		A	A	B	A	A	A
Feature Level		1	1	2	1	2	3
Column		1,1	3,1	3,2	7,1	7,2	7,3
Soil Sample Volume (liters)		2	2	2	2	2	2
Total Charcoal Weight (grams)		0.22	2.51	1.3	0.47	0.64	0.49
Phytolacca americana (poke)							
Polygonum sp. (knotweed)	*entire*						
	frags						
Prunus serotina (black cherry)	*entire*						
	frags						
Rubus sp. (blackberry/raspberry)							
Stellaria media (chickweed)							
Trifolium sp. (clover)							
Vicia sp. (vetch)							
AMARANTHACEAE (pigweed family)							
LEGUMINOSAE (bean family)							
POACEAE (grass family)							
presence/absence (Phase II anlaysis)		yes	yes	yes	yes	no	yes
OTHER PLANT REMAINS	(total count)	5	26	5	4	8	1
	total weight (grams)	0.05	0.32	0.04	0.01	0.09	0.01
Amorphous carbon		5	26	5	2	6	1
Unidentifiable rind fragment						1	
Unidentifiable bud fragment							
Unidentifiable charcoal							
Fungal fructification							
Woody bud fragment					2		
Hull fragment							
Peduncle fragment						1	

Flotation Recovered Plant Remains from Feature Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #		209	210	211	226	227	233
Block		4	4	4	4	4	4
Unit		126	126	126	131	131	131
Strata, Level							
Feature		25	25	25	24	24	24
Feature Strata		B	B	B	A	A	A
Feature Level		4	5	6	1	2	3
Column		7,4	7,5	7,6	12,1	12,2	12,3
Soil Sample Volume (liters)		2	2	2	2	2	2
Total Charcoal Weight (grams)		0.48	0.13	0.04	0.05	0.02	0.09
WOOD CHARCOAL	(total count)	35	11	2	6	3	12
	total weight (grams)	0.3	0.08	0.03	0.03	0.02	0.08
Acer sp. (maple)							
Carya sp. (hickory)		5	1	1			
Castanea dentata (american chestnut)							
Diospyros virginiana (persimmon)							
Juglans nigra (black walnut)							
Liquidambar styraciflua (sweetgum)				1	1		
Liriodendron tulipifera (tulip poplar)							
Morus rubra (red mulberry)							
Pinus sp. (so. pine group)							
Quercus sp. (white group)		5			1		1
Quercus sp. (red group)							
Quercus sp. (unspecified)			2				
Robinia pseudoacacia (black locust)							
Sassafras albidum (sassafras)							
diffuse porous							
ring porous							
deciduous taxa		3	5			3	4
unidentifiable		7	3		4		7
total identified fragments		20	11	2	6	3	12
NUT REMAINS	(total count)	12	9	0	2	0	0
	total weight (grams)	0.18	0.04	0	0.02	0	0
Carya sp. (thick-walled hickory)		12	9		2		
carbonized SEED REMAINS	(total count)	0	0	0	12	0	0
	total weight (grams)	0	0	0	<0.01	0	0
Acalypha virginica (copperleaf)							
Chenopodium sp. (goosefoot)					12		
Phytolacca americana (poke)							
Polygonum sp. (knotweed)							
Rumex sp. (dock)							
Stellaria media (chickweed)							
GRAMINEAE							
Unidentifiable seed fragment							
Unidentifiable eroded seed							
Unknown seed							
non-carbonized SEED REMAINS	(total count)						
	total weight (grams)						
Amaranthus sp. (pigweed)	*entire*						
	frags						
Crotolaria sagittalis (rattlebox)							
Euphorbia sp. (spurge)							
Frageria sp. (strawberry)							
Mollugo verticillata (carpetweed)							
Myrica sp. (bayberry) ?							
Oxalis stricta (wood sorrel)							
Panicum sp. (panic grass)							

Flotation Recovered Plant Remains from Feature Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #		209	210	211	226	227	233
Block		4	4	4	4	4	4
Unit		126	126	126	131	131	131
Strata, Level							
Feature		25	25	25	24	24	24
Feature Strata		B	B	B	A	A	A
Feature Level		4	5	6	1	2	3
Column		7,4	7,5	7,6	12,1	12,2	12,3
Soil Sample Volume (liters)		2	2	2	2	2	2
Total Charcoal Weight (grams)		0.48	0.13	0.04	0.05	0.02	0.09
Phytolacca americana (poke)							
Polygonum sp. (knotweed)	*entire*						
	frags						
Prunus serotina (black cherry)	*entire*						
	frags						
Rubus sp. (blackberry/raspberry)							
Stellaria media (chickweed)							
Trifolium sp. (clover)							
Vicia sp. (vetch)							
AMARANTHACEAE (pigweed family)							
LEGUMINOSAE (bean family)							
POACEAE (grass family)							
presence/absence (Phase II anlaysis)		no	yes	no	yes	yes	yes
OTHER PLANT REMAINS	(total count)	0	3	1	1	0	3
	total weight (grams)	0	0.01	0.01	<0.01	0	0.01
Amorphous carbon			3	1			1
Unidentifiable rind fragment							
Unidentifiable bud fragment							
Unidentifiable charcoal							
Fungal fructification							1
Woody bud fragment							
Hull fragment					1		1
Peduncle fragment							

Flotation Recovered Plant Remains from Feature Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #		283	295	300	305	307	308
Block		4	4	4	4	4	4
Unit		131	131	131	131	119	119
Strata, Level					C,9		
Feature		24	24	24	24	2	2
Feature Strata		A	A	A	A		
Feature Level		4	5	6	7		
Column		12,4	12,5	12,6	12,7	15,1	15,2
Soil Sample Volume (liters)		2	2	2	2	2	2
Total Charcoal Weight (grams)		0.03	0	0	0	2.73	0.65
WOOD CHARCOAL	(total count)	4	0	0	0	322	67
	total weight (grams)	0.03	0	0	0	2.63	0.65
Acer sp. (maple)							
Carya sp. (hickory)							
Castanea dentata (american chestnut)							
Diospyros virginiana (persimmon)							
Juglans nigra (black walnut)							
Liquidambar styraciflua (sweetgum)						5	5
Liriodendron tulipifera (tulip poplar)							
Morus rubra (red mulberry)							
Pinus sp. (so. pine group)							
Quercus sp. (white group)							
Quercus sp. (red group)							
Quercus sp. (unspecified)						5	10
Robinia pseudoacacia (black locust)							
Sassafras albidum (sassafras)							
diffuse porous							
ring porous						5	
deciduous taxa		2				5	
unidentifiable		2					5
total identified fragments		4	0	0	0	20	20
NUT REMAINS	(total count)	0	0	0	0	2	0
	total weight (grams)	0	0	0	0	0.04	0
Carya sp. (thick-walled hickory)						2	
carbonized SEED REMAINS	(total count)	1	0	0	0	11	0
	total weight (grams)	<0.01	0	0	0	0.01	0
Acalypha virginica (copperleaf)							
Chenopodium sp. (goosefoot)		1				4	
Phytolacca americana (poke)							
Polygonum sp. (knotweed)							
Rumex sp. (dock)							
Stellaria media (chickweed)							
GRAMINEAE						1	
Unidentifiable seed fragment							
Unidentifiable eroded seed						6	
Unknown seed							
non-carbonized SEED REMAINS	(total count)						
	total weight (grams)						
Amaranthus sp. (pigweed)	*entire*						
	frags						
Crotolaria sagittalis (rattlebox)							
Euphorbia sp. (spurge)							
Frageria sp. (strawberry)							
Mollugo verticillata (carpetweed)							
Myrica sp. (bayberry) ?							
Oxalis stricta (wood sorrel)							
Panicum sp. (panic grass)							

Flotation Recovered Plant Remains from Feature Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #		283	295	300	305	307	308
Block		4	4	4	4	4	4
Unit		131	131	131	131	119	119
Strata, Level					C,9		
Feature		24	24	24	24	2	2
Feature Strata		A	A	A	A		
Feature Level		4	5	6	7		
Column		12,4	12,5	12,6	12,7	15,1	15,2
Soil Sample Volume (liters)		2	2	2	2	2	2
Total Charcoal Weight (grams)		0.03	0	0	0	2.73	0.65
Phytolacca americana (poke)							
Polygonum sp. (knotweed)	*entire*						
	frags						
Prunus serotina (black cherry)	*entire*						
	frags						
Rubus sp. (blackberry/raspberry)							
Stellaria media (chickweed)							
Trifolium sp. (clover)							
Vicia sp. (vetch)							
AMARANTHACEAE (pigweed family)							
LEGUMINOSAE (bean family)							
POACEAE (grass family)							
presence/absence (Phase II anlaysis)		yes	yes	yes	no	no	yes
OTHER PLANT REMAINS	(total count)	0	0	0	0	6	0
	total weight (grams)	0	0	0	0	0.05	0
Amorphous carbon						6	
Unidentifiable rind fragment							
Unidentifiable bud fragment							
Unidentifiable charcoal							
Fungal fructification							
Woody bud fragment							
Hull fragment							
Peduncle fragment							

Flotation Recovered Plant Remains from Feature Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #		309	310	311	289	290	382
Block		4	4	4	4	4	1
Unit		119	119	119			146
Strata, Level							B,2
Feature		2	2	2	1A,A,ALL	1B,B,ALL	8
Feature Strata							
Feature Level							
Column		15,3	15,4	15,5	west 1/2	west 1/2	
Soil Sample Volume (liters)		2	2	2	2	2	2
Total Charcoal Weight (grams)		0.14	0.4	0.09	0.87	3.66	0.46
WOOD CHARCOAL	(total count)	11	28	10	122	405	4
	total weight (grams)	0.14	0.4	0.09	0.8	3.18	0.46
Acer sp. (maple)		1					
Carya sp. (hickory)		1					
Castanea dentata (american chestnut)							
Diospyros virginiana (persimmon)							
Juglans nigra (black walnut)							
Liquidambar styraciflua (sweetgum)			9				1
Liriodendron tulipifera (tulip poplar)							
Morus rubra (red mulberry)							
Pinus sp. (so. pine group)							1
Quercus sp. (white group)					12	18	
Quercus sp. (red group)							
Quercus sp. (unspecified)			2		6		
Robinia pseudoacacia (black locust)				3			
Sassafras albidum (sassafras)							
diffuse porous							
ring porous		2	4	2			
deciduous taxa			5		2	2	
unidentifiable		7		5			2
total identified fragments		11	20	10	20	20	4
NUT REMAINS	(total count)	0	0	0	0	0	0
	total weight (grams)	0	0	0	0	0	0
Carya sp. (thick-walled hickory)							
carbonized SEED REMAINS	(total count)	3	3	0	3	3	1
	total weight (grams)	<0.01	<0.01	0	0.01	0.01	<0.01
Acalypha virginica (copperleaf)			1				
Chenopodium sp. (goosefoot)		3	1			2	
Phytolacca americana (poke)						1	
Polygonum sp. (knotweed)							
Rumex sp. (dock)							
Stellaria media (chickweed)							
GRAMINEAE			1		2		
Unidentifiable seed fragment							1
Unidentifiable eroded seed							
Unknown seed					1		

non-carbonized SEED REMAINS	(total count)	
	total weight (grams)	
Amaranthus sp. (pigweed)	*entire*	
	frags	
Crotolaria sagittalis (rattlebox)		
Euphorbia sp. (spurge)		
Frageria sp. (strawberry)		
Mollugo verticillata (carpetweed)		
Myrica sp. (bayberry) ?		
Oxalis stricta (wood sorrel)		
Panicum sp. (panic grass)		

Flotation Recovered Plant Remains from Feature Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #		309	310	311	289	290	382
Block		4	4	4	4	4	1
Unit		119	119	119			146
Strata, Level							B,2
Feature		2	2	2	1A,A,ALL	1B,B,ALL	8
Feature Strata							
Feature Level							
Column		15,3	15,4	15,5	west 1/2	west 1/2	
Soil Sample Volume (liters)		2	2	2	2	2	2
Total Charcoal Weight (grams)		0.14	0.4	0.09	0.87	3.66	0.46
Phytolacca americana (poke)							
Polygonum sp. (knotweed)	*entire*						
	frags						
Prunus serotina (black cherry)	*entire*						
	frags						
Rubus sp. (blackberry/raspberry)							
Stellaria media (chickweed)							
Trifolium sp. (clover)							
Vicia sp. (vetch)							
AMARANTHACEAE (pigweed family)							
LEGUMINOSAE (bean family)							
POACEAE (grass family)							
presence/absence (Phase II anlaysis)		no	no	no	yes	yes	yes
OTHER PLANT REMAINS	(total count)	0	1	1	7	58	0
	total weight (grams)	0	<0.01	<0.01	0.06	0.47	0
Amorphous carbon			1	1	7	56	
Unidentifiable rind fragment							
Unidentifiable bud fragment							
Unidentifiable charcoal						2	
Fungal fructification							
Woody bud fragment							
Hull fragment							
Peduncle fragment							

Flotation Recovered Plant Remains from Feature Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #		384	396	403	516	518	418
Block		1	2	3	3	3	
Unit		147	148		134	136	156
Strata, Level		B,2	B,2				
Feature		7	9	13,A,1	16A	16B	30,A,5
Feature Strata							
Feature Level							
Column				north 1/2			
Soil Sample Volume (liters)		2	1	2	2	2	2
Total Charcoal Weight (grams)		0.26	0.44	0.37	0.42	0.09	0.07
WOOD CHARCOAL	(total count)	20	28	47	60	7	5
	total weight (grams)	0.24	0.4	0.35	0.42	0.09	0.04
Acer sp. (maple)							
Carya sp. (hickory)		1		3		1	
Castanea dentata (american chestnut)					2		
Diospyros virginiana (persimmon)							
Juglans nigra (black walnut)				1			
Liquidambar styraciflua (sweetgum)		1		8	4		
Liriodendron tulipifera (tulip poplar)							
Morus rubra (red mulberry)							
Pinus sp. (so. pine group)							
Quercus sp. (white group)		8			8	3	
Quercus sp. (red group)							
Quercus sp. (unspecified)			1				
Robinia pseudoacacia (black locust)							
Sassafras albidum (sassafras)							
diffuse porous				2			
ring porous			3		6	1	
deciduous taxa			5				
unidentifiable		10	11	7		2	5
total identified fragments		20	20	21	20	7	5
NUT REMAINS	(total count)	0	0	0	0	0	2
	total weight (grams)	0	0	0	0	0	0.03
Carya sp. (thick-walled hickory)							2
carbonized SEED REMAINS	(total count)	2	0	6	1	1	1
	total weight (grams)	0.01	0	0.01	<0.01	<0.01	<0.01
Acalypha virginica (copperleaf)							
Chenopodium sp. (goosefoot)		2					
Phytolacca americana (poke)							
Polygonum sp. (knotweed)						1	
Rumex sp. (dock)							
Stellaria media (chickweed)							
GRAMINEAE					1		
Unidentifiable seed fragment							
Unidentifiable eroded seed				6			1
Unknown seed							
non-carbonized SEED REMAINS	(total count)						
	total weight (grams)						
Amaranthus sp. (pigweed)	*entire*						
	frags						
Crotolaria sagittalis (rattlebox)							
Euphorbia sp. (spurge)							
Frageria sp. (strawberry)							
Mollugo verticillata (carpetweed)							
Myrica sp. (bayberry) ?							
Oxalis stricta (wood sorrel)							
Panicum sp. (panic grass)							

Flotation Recovered Plant Remains from Feature Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #		384	396	403	516	518	418
Block		1	2	3	3	3	
Unit		147	148		134	136	156
Strata, Level		B,2	B,2				
Feature		7	9	13,A,1	16A	16B	30,A,5
Feature Strata							
Feature Level							
Column				north 1/2			
Soil Sample Volume (liters)		2	1	2	2	2	2
Total Charcoal Weight (grams)		0.26	0.44	0.37	0.42	0.09	0.07
Phytolacca americana (poke)							
Polygonum sp. (knotweed)	*entire*						
	frags						
Prunus serotina (black cherry)	*entire*						
	frags						
Rubus sp. (blackberry/raspberry)							
Stellaria media (chickweed)							
Trifolium sp. (clover)							
Vicia sp. (vetch)							
AMARANTHACEAE (pigweed family)							
LEGUMINOSAE (bean family)							
POACEAE (grass family)							
presence/absence (Phase II anlaysis)		yes	yes	yes	yes	yes	no
OTHER PLANT REMAINS	(total count)	2	1	3	1	0	2
	total weight (grams)	0.01	0.04	0.01	<0.01	0	<0.01
Amorphous carbon		2	1	2			
Unidentifiable rind fragment				1	1		1
Unidentifiable bud fragment							
Unidentifiable charcoal							1
Fungal fructification							
Woody bud fragment							
Hull fragment							
Peduncle fragment							

Flotation Recovered Plant Remains from Feature Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #		424	455	98/2/262	98/2/264	98/2/268	98/2/918
Block							
Unit		145	163	321	321	321	371
Strata, Level							
Feature		30,A	29,1	30	30	30	36
Feature Strata				A	A	A	B
Feature Level				2	6	10	3
Column							
Soil Sample Volume (liters)		1	2	2	2	2	2
Total Charcoal Weight (grams)		0.08	10.18	0.17	0.1	0.25	0.26
WOOD CHARCOAL	(total count)	10	1211	13	11	29	44
	total weight (grams)	0.06	10.15	0.04	0.06	0.2	0.22
Acer sp. (maple)							
Carya sp. (hickory)				2			
Castanea dentata (american chestnut)			1				4
Diospyros virginiana (persimmon)							
Juglans nigra (black walnut)							
Liquidambar styraciflua (sweetgum)							
Liriodendron tulipifera (tulip poplar)							
Morus rubra (red mulberry)							
Pinus sp. (so. pine group)							
Quercus sp. (white group)		10	19	2	4		9
Quercus sp. (red group)							
Quercus sp. (unspecified)						4	5
Robinia pseudoacacia (black locust)							
Sassafras albidum (sassafras)							
diffuse porous							
ring porous							2
deciduous taxa				9	4	5	
unidentifiable					3	11	
total identified fragments		10	20	13	11	20	20
NUT REMAINS	(total count)	1	0	2	0	0	0
	total weight (grams)	0.01	0	0.03	0	0	0
Carya sp. (thick-walled hickory)		1		2			
carbonized SEED REMAINS	(total count)	0	1				
	total weight (grams)	0	<0.01				
Acalypha virginica (copperleaf)							
Chenopodium sp. (goosefoot)							
Phytolacca americana (poke)							
Polygonum sp. (knotweed)							
Rumex sp. (dock)							
Stellaria media (chickweed)							
GRAMINEAE							
Unidentifiable seed fragment							
Unidentifiable eroded seed			1				
Unknown seed							
non-carbonized SEED REMAINS	(total count)			6	1	0	55
	total weight (grams)			0.02	0.01	0	0.02
Amaranthus sp. (pigweed)	*entire*			3			2
	frags						
Crotolaria sagittalis (rattlebox)					1		
Euphorbia sp. (spurge)							3
Frageria sp. (strawberry)				1			
Mollugo verticillata (carpetweed)							48
Myrica sp. (bayberry) ?							
Oxalis stricta (wood sorrel)							2
Panicum sp. (panic grass)							

Flotation Recovered Plant Remains from Feature Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #		424	455	98/2/262	98/2/264	98/2/268	98/2/918
Block							
Unit		145	163	321	321	321	371
Strata, Level							
Feature		30,A	29,1	30	30	30	36
Feature Strata				A	A	A	B
Feature Level				2	6	10	3
Column							
Soil Sample Volume (liters)		1	2	2	2	2	2
Total Charcoal Weight (grams)		0.08	10.18	0.17	0.1	0.25	0.26
Phytolacca americana (poke)							
Polygonum sp. (knotweed)	*entire*						
	frags						
Prunus serotina (black cherry)	*entire*						
	frags						
Rubus sp. (blackberry/raspberry)							
Stellaria media (chickweed)							
Trifolium sp. (clover)							
Vicia sp. (vetch)					1		
AMARANTHACEAE (pigweed family)							
LEGUMINOSAE (bean family)							
POACEAE (grass family)							
presence/absence (Phase II anlaysis)		yes	yes				
OTHER PLANT REMAINS	(total count)	2	6	4	6	8	5
	total weight (grams)	0.01	0.03	0.08	0.03	0.05	0.02
Amorphous carbon			5	4	6	8	4
Unidentifiable rind fragment							
Unidentifiable bud fragment							1
Unidentifiable charcoal		2					
Fungal fructification							
Woody bud fragment			1				
Hull fragment							
Peduncle fragment							

Flotation Recovered Plant Remains from Feature Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #		98/2/819	98/2/1265	98/2/937	98/2/810	98/2/984	98/2/836
Block							
Unit		356	463	432	420	432	420
Strata, Level							
Feature		36	37	38	38	38	38
Feature Strata		B	A	A	A	A	A
Feature Level		3	3	3	6	7	10
Column							
Soil Sample Volume (liters)		2	2	2	2	2	2
Total Charcoal Weight (grams)		0.24	0.1	0.12	0.07	0.01	0
WOOD CHARCOAL	(total count)	24	3	13	5	1	0
	total weight (grams)	0.15	0.02	0.08	0.03	<0.01	0
Acer sp. (maple)							
Carya sp. (hickory)			1				
Castanea dentata (american chestnut)							
Diospyros virginiana (persimmon)							
Juglans nigra (black walnut)							
Liquidambar styraciflua (sweetgum)							
Liriodendron tulipifera (tulip poplar)				1			
Morus rubra (red mulberry)							
Pinus sp. (so. pine group)							
Quercus sp. (white group)		5	2				
Quercus sp. (red group)				1			
Quercus sp. (unspecified)							
Robinia pseudoacacia (black locust)							
Sassafras albidum (sassafras)							
diffuse porous							
ring porous							
deciduous taxa		1		5	5		
unidentifiable		14		6		1	
total identified fragments		20	3	13	5	1	0
NUT REMAINS	(total count)	0	2	0	0	0	0
	total weight (grams)	0	0.04	0	0	0	0
Carya sp. (thick-walled hickory)			2				
carbonized SEED REMAINS	(total count)						
	total weight (grams)						
Acalypha virginica (copperleaf)							
Chenopodium sp. (goosefoot)							
Phytolacca americana (poke)							
Polygonum sp. (knotweed)							
Rumex sp. (dock)							
Stellaria media (chickweed)							
GRAMINEAE							
Unidentifiable seed fragment							
Unidentifiable eroded seed							
Unknown seed							
non-carbonized SEED REMAINS	(total count)	136	31	5	1	2	0
	total weight (grams)	0.03	0.04	0.01	0.02	0.01	0
Amaranthus sp. (pigweed)	*entire*	8		2			
	frags	3					
Crotolaria sagittalis (rattlebox)							
Euphorbia sp. (spurge)		3					
Frageria sp. (strawberry)				3		1	
Mollugo verticillata (carpetweed)		96	20				
Myrica sp. (bayberry) ?						1	
Oxalis stricta (wood sorrel)		1					
Panicum sp. (panic grass)		5					

Flotation Recovered Plant Remains from Feature Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #		98/2/819	98/2/1265	98/2/937	98/2/810	98/2/984	98/2/836
Block							
Unit		356	463	432	420	432	420
Strata, Level							
Feature		36	37	38	38	38	38
Feature Strata		B	A	A	A	A	A
Feature Level		3	3	3	6	7	10
Column							
Soil Sample Volume (liters)		2	2	2	2	2	2
Total Charcoal Weight (grams)		0.24	0.1	0.12	0.07	0.01	0
Phytolacca americana (poke)							
Polygonum sp. (knotweed)	*entire*	6					
	frags	3					
Prunus serotina (black cherry)	*entire*		1				
	frags		1		1		
Rubus sp. (blackberry/raspberry)			1				
Stellaria media (chickweed)		11					
Trifolium sp. (clover)			5				
Vicia sp. (vetch)							
AMARANTHACEAE (pigweed family)			3				
LEGUMINOSAE (bean family)							
POACEAE (grass family)							
presence/absence (Phase II anlaysis)							
OTHER PLANT REMAINS	(total count)	8	0	5	3	0	0
	total weight (grams)	0.06	0	0.03	0.02	0	0
Amorphous carbon		8		3	3		
Unidentifiable rind fragment							
Unidentifiable bud fragment				2			
Unidentifiable charcoal							
Fungal fructification							
Woody bud fragment							
Hull fragment							
Peduncle fragment							

Flotation Recovered Plant Remains from Feature Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #		98/2/840	98/2/827	98/2/825	98/2/812	TOTALS
Block						46 samples
Unit		410	390	390	397	
Strata, Level						
Feature		94	96	96	96	
Feature Strata		B	B	B	B	
Feature Level		3	4	3	3	
Column						
Soil Sample Volume (liters)		2	2	2	2	90
Total Charcoal Weight (grams)		1.18	0.16	0.17	1.11	31.32
WOOD CHARCOAL	(total count)	74	20	19	140	3267
	total weight (grams)	1.1	0.14	0.13	0.98	28.77
Acer sp. (maple)						1
Carya sp. (hickory)			2			29
Castanea dentata (american chestnut)				1		8
Diospyros virginiana (persimmon)						5
Juglans nigra (black walnut)					5	6
Liquidambar styraciflua (sweetgum)						40
Liriodendron tulipifera (tulip poplar)						1
Morus rubra (red mulberry)						1
Pinus sp. (so. pine group)		1			2	4
Quercus sp. (white group)			2	18		181
Quercus sp. (red group)			5		3	12
Quercus sp. (unspecified)						35
Robinia pseudoacacia (black locust)						3
Sassafras albidum (sassafras)						2
diffuse porous						2
ring porous						34
deciduous taxa		19	11		4	106
unidentifiable					6	141
total identified fragments		20	20	19	20	611
NUT REMAINS	(total count)	0	1	0	3	49
	total weight (grams)	0	0.01	0	0.02	0.58
Carya sp. (thick-walled hickory)			1		3	49
carbonized SEED REMAINS	(total count)					58
	total weight (grams)					0.05
Acalypha virginica (copperleaf)						1
Chenopodium sp. (goosefoot)						29
Phytolacca americana (poke)						1
Polygonum sp. (knotweed)						2
Rumex sp. (dock)						1
Stellaria media (chickweed)						1
GRAMINEAE						5
Unidentifiable seed fragment						1
Unidentifiable eroded seed						16
Unknown seed						1
non-carbonized SEED REMAINS	(total count)	20	8	66	89	420
	total weight (grams)	0.02	<0.01	0.03	0.02	0.23
Amaranthus sp. (pigweed)	*entire*	4			10	29
	frags					3
Crotolaria sagittalis (rattlebox)						1
Euphorbia sp. (spurge)		3				9
Frageria sp. (strawberry)						5
Mollugo verticillata (carpetweed)		6	5	21	68	264
Myrica sp. (bayberry) ?						1
Oxalis stricta (wood sorrel)			1	4	9	17
Panicum sp. (panic grass)						5

Flotation Recovered Plant Remains from Feature Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #		98/2/840	98/2/827	98/2/825	98/2/812	TOTALS
Block						46 samples
Unit		410	390	390	397	
Strata, Level						
Feature		94	96	96	96	
Feature Strata		B	B	B	B	
Feature Level		3	4	3	3	
Column						
Soil Sample Volume (liters)		2	2	2	2	90
Total Charcoal Weight (grams)		1.18	0.16	0.17	1.11	31.32
Phytolacca americana (poke)						0
Polygonum sp. (knotweed)	*entire*	4		30		40
	frags					3
Prunus serotina (black cherry)	*entire*					1
	frags					2
Rubus sp. (blackberry/raspberry)						1
Stellaria media (chickweed)		1			2	14
Trifolium sp. (clover)						5
Vicia sp. (vetch)						1
AMARANTHACEAE (pigweed family)			2	10		15
LEGUMINOSAE (bean family)		1				1
POACEAE (grass family)		1		1		2
presence/absence (Phase II anlaysis)						23 of 32
OTHER PLANT REMAINS	(total count)	7	2	2	7	204
	total weight (grams)	0.06	0.01	0.01	0.09	1.69
Amorphous carbon		6	2	2	7	184
Unidentifiable rind fragment		1				5
Unidentifiable bud fragment						3
Unidentifiable charcoal						5
Fungal fructification						1
Woody bud fragment						3
Hull fragment						2
Peduncle fragment						1

Flotation Recovered Plant Remains from Non-Feature Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #		171	172	173	182	183
Block		4	4	4	4	4
Unit		120	120	120	122	122
Strata, Level		B,3	B,4	C,5	B,4	C,5
Feature, Strata, Level						
Column		1,2	1,3	1,4	3,3	3,4
Soil Sample Volume (liters)		2	2	2	2	2
Total Charcoal Weight (grams)		0.06	0	0.01	0.19	0.02
WOOD CHARCOAL	(total count)	3	0	1	30	1
	total weight (grams)	0.04	0	0.01	0.16	0.02
Acer sp. (maple)						
Acer/Betula (maple/birch)						
Carya sp. (hickory)						
Castanea dentata (american chestnut)						
Diospyros virginiana (persimmon)						
Juglans nigra (black walnut)						
Liquidambar styraciflua (sweetgum)						
Liriodendron tulipifera (tulip poplar)						
Morus rubra (red mulberry)						
Pinus sp. (so. pine group)						
Prunus serotina (black cherry)						
Quercus sp. (white group)					14	
Quercus sp. (red group)						
Quercus sp. (unspecified)		2				
Robinia pseudoacacia (black locust)						
Sassafras albidum (sassafras)						
diffuse porous						
ring porous						
deciduous taxa				1		1
unidentifiable		1			6	
total identified fragments		3	0	1	20	1
NUT REMAINS	(total count)	0	0	0	0	0
	total weight (grams)	0	0	0	0	0
Carya sp. (thick-walled hickory)						
SEED REMAINS	(total count)	1	0	0	0	0
	total weight (grams)	0.01	0	0	0	0
Acalypha virginica (copperleaf)						
Chenopodium sp. (goosefoot)						
Phytolacca americana (poke)		1				
Polygonum sp. (knotweed)						
Rumex sp. (dock)						
Stellaria media (chickweed)						
GRAMINEAE						
Unidentifiable seed fragment						
Unidentifiable eroded seed						
Unknown seed						
non-carbonized SEED REMAINS	(total count)					
	total weight (grams)					
Amaranthus sp. (pigweed)						
Mollugo verticillata (carpetweed)						
Oxalis stricta (wood sorrel)						
Panicum sp. (panic grass)						

Flotation Recovered Plant Remains from Non-Feature Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #		171	172	173	182	183
Block		4	4	4	4	4
Unit		120	120	120	122	122
Strata, Level		B,3	B,4	C,5	B,4	C,5
Feature, Strata, Level						
Column		1,2	1,3	1,4	3,3	3,4
Soil Sample Volume (liters)		2	2	2	2	2
Total Charcoal Weight (grams)		0.06	0	0.01	0.19	0.02
Polygonum sp. (knotweed)						
Stellaria media (chickweed)						
Trifolium sp. (clover)						
AMARANTHACEAE (pigweed family)						
presence/absence (Phase II analysis)		yes	yes	no	yes	no
OTHER PLANT REMAINS	(total count)	1	0	0	6	0
	total weight (grams)	0.01	0	0	0.03	0
Amorphous carbon		1			6	
Monocot stem fragment						
Unidentifiable charcoal						
Unidentifiable rind fragment						
Fungal fructification						
Woody bud fragment						
Hull fragment						
Peduncle fragment						

Flotation Recovered Plant Remains from Non-Feature Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #		184	185	186	187	212
Block		4	4	4	4	4
Unit		123	123	123	123	126
Strata, Level		B,2	B,3	C,5	C,5	E,9
Feature, Strata, Level						
Column		4,1	4,2	4,4	4,4	7,7
Soil Sample Volume (liters)		2	2	2	2	2
Total Charcoal Weight (grams)		0.05	0.06	0.13	0.03	0
WOOD CHARCOAL	(total count)	5	3	5	3	0
	total weight (grams)	0.03	0.03	0.13	0.03	0
Acer sp. (maple)						
Acer/Betula (maple/birch)						
Carya sp. (hickory)		2			1	
Castanea dentata (american chestnut)						
Diospyros virginiana (persimmon)						
Juglans nigra (black walnut)						
Liquidambar styraciflua (sweetgum)						
Liriodendron tulipifera (tulip poplar)						
Morus rubra (red mulberry)						
Pinus sp. (so. pine group)						
Prunus serotina (black cherry)						
Quercus sp. (white group)			1	2		
Quercus sp. (red group)						
Quercus sp. (unspecified)						
Robinia pseudoacacia (black locust)						
Sassafras albidum (sassafras)						
diffuse porous						
ring porous			2		1	
deciduous taxa		3		1		
unidentifiable				2	1	
total identified fragments		5	3	5	3	0
NUT REMAINS	(total count)	0	0	0	0	0
	total weight (grams)	0	0	0	0	0
Carya sp. (thick-walled hickory)						
SEED REMAINS	(total count)	12	5	0	0	0
	total weight (grams)	<0.01	<0.01	0	0	0
Acalypha virginica (copperleaf)						
Chenopodium sp. (goosefoot)		12	5	0	0	
Phytolacca americana (poke)				0	0	
Polygonum sp. (knotweed)						
Rumex sp. (dock)						
Stellaria media (chickweed)						
GRAMINEAE						
Unidentifiable seed fragment						
Unidentifiable eroded seed						
Unknown seed						
non-carbonized SEED REMAINS	(total count)					
	total weight (grams)					
Amaranthus sp. (pigweed)						
Mollugo verticillata (carpetweed)						
Oxalis stricta (wood sorrel)						
Panicum sp. (panic grass)						

Flotation Recovered Plant Remains from Non-Feature Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #		184	185	186	187	212
Block		4	4	4	4	4
Unit		123	123	123	123	126
Strata, Level		B,2	B,3	C,5	C,5	E,9
Feature, Strata, Level						
Column		4,1	4,2	4,4	4,4	7,7
Soil Sample Volume (liters)		2	2	2	2	2
Total Charcoal Weight (grams)		0.05	0.06	0.13	0.03	0
Polygonum sp. (knotweed)						
Stellaria media (chickweed)						
Trifolium sp. (clover)						
AMARANTHACEAE (pigweed family)						
presence/absence (Phase II analysis)		yes	no	yes	no	no
OTHER PLANT REMAINS	(total count)	5	3	0	0	0
	total weight (grams)	0.02	0.03	0	0	0
Amorphous carbon		5	3			
Monocot stem fragment						
Unidentifiable charcoal						
Unidentifiable rind fragment						
Fungal fructification						
Woody bud fragment						
Hull fragment						
Peduncle fragment						

Flotation Recovered Plant Remains from Non-Feature Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #		213	214	215	216	217
Block		4	4	4	4	4
Unit		127	127	127	127	127
Strata, Level		C,3	C,4	C,5	C,6	D,7
Feature, Strata, Level						
Column		8,1	8,2	8,3	8,4	8,5
Soil Sample Volume (liters)		2	2	2	2	2
Total Charcoal Weight (grams)		0.02	0.02	0.01	0	0
WOOD CHARCOAL	(total count)	3	1	0	0	0
	total weight (grams)	0.01	0.01	0	0	0
Acer sp. (maple)						
Acer/Betula (maple/birch)		2				
Carya sp. (hickory)						
Castanea dentata (american chestnut)						
Diospyros virginiana (persimmon)						
Juglans nigra (black walnut)						
Liquidambar styraciflua (sweetgum)						
Liriodendron tulipifera (tulip poplar)						
Morus rubra (red mulberry)						
Pinus sp. (so. pine group)						
Prunus serotina (black cherry)						
Quercus sp. (white group)						
Quercus sp. (red group)						
Quercus sp. (unspecified)						
Robinia pseudoacacia (black locust)						
Sassafras albidum (sassafras)						
diffuse porous						
ring porous						
deciduous taxa						
unidentifiable		1	1			
total identified fragments		3	1	0	0	0
NUT REMAINS	(total count)	0	0	0	0	0
	total weight (grams)	0	0	0	0	0
Carya sp. (thick-walled hickory)						
SEED REMAINS	(total count)	1	0	0	0	0
	total weight (grams)	<0.01	0	0	0	0
Acalypha virginica (copperleaf)						
Chenopodium sp. (goosefoot)		1				
Phytolacca americana (poke)						
Polygonum sp. (knotweed)						
Rumex sp. (dock)						
Stellaria media (chickweed)						
GRAMINEAE						
Unidentifiable seed fragment						
Unidentifiable eroded seed						
Unknown seed						
non-carbonized SEED REMAINS	(total count)					
	total weight (grams)					
Amaranthus sp. (pigweed)						
Mollugo verticillata (carpetweed)						
Oxalis stricta (wood sorrel)						
Panicum sp. (panic grass)						

Flotation Recovered Plant Remains from Non-Feature Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #		213	214	215	216	217
Block		4	4	4	4	4
Unit		127	127	127	127	127
Strata, Level		C,3	C,4	C,5	C,6	D,7
Feature, Strata, Level						
Column		8,1	8,2	8,3	8,4	8,5
Soil Sample Volume (liters)		2	2	2	2	2
Total Charcoal Weight (grams)		0.02	0.02	0.01	0	0
Polygonum sp. (knotweed)						
Stellaria media (chickweed)						
Trifolium sp. (clover)						
AMARANTHACEAE (pigweed family)						
presence/absence (Phase II analysis)		no	no	no	no	no
OTHER PLANT REMAINS	(total count)	2	1	1	0	0
	total weight (grams)	0.01	0.01	0.01	0	0
Amorphous carbon		2	1	1		
Monocot stem fragment						
Unidentifiable charcoal						
Unidentifiable rind fragment						
Fungal fructification						
Woody bud fragment						
Hull fragment						
Peduncle fragment						

Flotation Recovered Plant Remains from Non-Feature Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #		218	228	229	234	288
Block		4	4	4	4	4
Unit		127	132	132	132	132
Strata, Level		D,8	C,3	C,4	C,5	C,6
Feature, Strata, Level						
Column		8,6	13,1	13,2	13,3	13,4
Soil Sample Volume (liters)		2	2	2	2	2
Total Charcoal Weight (grams)		0	0	0.02	0.01	0
WOOD CHARCOAL	(total count)	0	1	2	2	0
	total weight (grams)	0	<0.01	0.02	0.01	0
Acer sp. (maple)						
Acer/Betula (maple/birch)						
Carya sp. (hickory)						
Castanea dentata (american chestnut)						
Diospyros virginiana (persimmon)						
Juglans nigra (black walnut)						
Liquidambar styraciflua (sweetgum)						
Liriodendron tulipifera (tulip poplar)						
Morus rubra (red mulberry)			1			
Pinus sp. (so. pine group)						
Prunus serotina (black cherry)						
Quercus sp. (white group)						
Quercus sp. (red group)						
Quercus sp. (unspecified)						
Robinia pseudoacacia (black locust)						
Sassafras albidum (sassafras)						
diffuse porous						
ring porous				2	1	
deciduous taxa					1	
unidentifiable						
total identified fragments		0	1	2	2	0
NUT REMAINS	(total count)	0	0	0	0	0
	total weight (grams)	0	0	0	0	0
Carya sp. (thick-walled hickory)						
SEED REMAINS	(total count)	0	0	0	0	0
	total weight (grams)	0	0	0	0	0
Acalypha virginica (copperleaf)						
Chenopodium sp. (goosefoot)						
Phytolacca americana (poke)						
Polygonum sp. (knotweed)						
Rumex sp. (dock)						
Stellaria media (chickweed)						
GRAMINEAE						
Unidentifiable seed fragment						
Unidentifiable eroded seed						
Unknown seed						
non-carbonized SEED REMAINS	(total count)					
	total weight (grams)					
Amaranthus sp. (pigweed)						
Mollugo verticillata (carpetweed)						
Oxalis stricta (wood sorrel)						
Panicum sp. (panic grass)						

Flotation Recovered Plant Remains from Non-Feature Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #		218	228	229	234	288
Block		4	4	4	4	4
Unit		127	132	132	132	132
Strata, Level		D,8	C,3	C,4	C,5	C,6
Feature, Strata, Level						
Column		8,6	13,1	13,2	13,3	13,4
Soil Sample Volume (liters)		2	2	2	2	2
Total Charcoal Weight (grams)		0	0	0.02	0.01	0
Polygonum sp. (knotweed)						
Stellaria media (chickweed)						
Trifolium sp. (clover)						
AMARANTHACEAE (pigweed family)						
presence/absence (Phase II analysis)		no	no	yes	no	no
OTHER PLANT REMAINS	(total count)	0	0	0	0	0
	total weight (grams)	0	0	0	0	0
Amorphous carbon						
Monocot stem fragment						
Unidentifiable charcoal						
Unidentifiable rind fragment						
Fungal fructification						
Woody bud fragment						
Hull fragment						
Peduncle fragment						

Flotation Recovered Plant Remains from Non-Feature Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #		296	301	306	499	98/2/273
Block		4	4	4	3	
Unit		132	132	132	209	319
Strata, Level		D,7	D,8	D,9	B,4	C,4
Feature, Strata, Level						
Column		13,5	13,6	13,7		
Soil Sample Volume (liters)		2	2	2	2	2
Total Charcoal Weight (grams)		0	0	0	0	0.01
WOOD CHARCOAL	(total count)	0	0	0	0	2
	total weight (grams)	0	0	0	0	0.01
Acer sp. (maple)						
Acer/Betula (maple/birch)						
Carya sp. (hickory)						
Castanea dentata (american chestnut)						
Diospyros virginiana (persimmon)						
Juglans nigra (black walnut)						
Liquidambar styraciflua (sweetgum)						
Liriodendron tulipifera (tulip poplar)						
Morus rubra (red mulberry)						
Pinus sp. (so. pine group)						
Prunus serotina (black cherry)						1
Quercus sp. (white group)						
Quercus sp. (red group)						
Quercus sp. (unspecified)						
Robinia pseudoacacia (black locust)						1
Sassafras albidum (sassafras)						
diffuse porous						
ring porous						
deciduous taxa						
unidentifiable						
total identified fragments		0	0	0	0	2
NUT REMAINS	(total count)	0	0	0	0	0
	total weight (grams)	0	0	0	0	0
Carya sp. (thick-walled hickory)						
SEED REMAINS	(total count)	0	0	0	0	
	total weight (grams)	0	0	0	0	
Acalypha virginica (copperleaf)						
Chenopodium sp. (goosefoot)						
Phytolacca americana (poke)						
Polygonum sp. (knotweed)						
Rumex sp. (dock)						
Stellaria media (chickweed)						
GRAMINEAE						
Unidentifiable seed fragment						
Unidentifiable eroded seed						
Unknown seed						
non-carbonized SEED REMAINS	(total count)					3
	total weight (grams)					<0.01
Amaranthus sp. (pigweed)						
Mollugo verticillata (carpetweed)						2
Oxalis stricta (wood sorrel)						
Panicum sp. (panic grass)						

Flotation Recovered Plant Remains from Non-Feature Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #		296	301	306	499	98/2/273
Block		4	4	4	3	
Unit		132	132	132	209	319
Strata, Level		D,7	D,8	D,9	B,4	C,4
Feature, Strata, Level						
Column		13,5	13,6	13,7		
Soil Sample Volume (liters)		2	2	2	2	2
Total Charcoal Weight (grams)		0	0	0	0	0.01
Polygonum sp. (knotweed)						
Stellaria media (chickweed)						
Trifolium sp. (clover)						
AMARANTHACEAE (pigweed family)						1
presence/absence (Phase II analysis)		yes	no	no	yes	
OTHER PLANT REMAINS	(total count)	0	0	0	0	0
	total weight (grams)	0	0	0	0	0
Amorphous carbon						
Monocot stem fragment						
Unidentifiable charcoal						
Unidentifiable rind fragment						
Fungal fructification						
Woody bud fragment						
Hull fragment						
Peduncle fragment						

Flotation Recovered Plant Remains from Non-Feature Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #		98/2/276	98/2/816	98/2/817	98/2/1162	98/2/1168
Block						
Unit		319	397	397	455	455
Strata, Level		D,8	B,4	B,5	B,2	B,3
Feature, Strata, Level						
Column						
Soil Sample Volume (liters)		2	2	2	2	2
Total Charcoal Weight (grams)		0	0.66	0.14	0.26	0.3
WOOD CHARCOAL	(total count)	0	39	8	20	15
	total weight (grams)	0	0.61	0.07	0.17	0.12
Acer sp. (maple)						1
Acer/Betula (maple/birch)						
Carya sp. (hickory)			2			
Castanea dentata (american chestnut)						
Diospyros virginiana (persimmon)						
Juglans nigra (black walnut)						
Liquidambar styraciflua (sweetgum)						
Liriodendron tulipifera (tulip poplar)					1	
Morus rubra (red mulberry)						
Pinus sp. (so. pine group)						
Prunus serotina (black cherry)						
Quercus sp. (white group)					4	
Quercus sp. (red group)			6			
Quercus sp. (unspecified)				3		
Robinia pseudoacacia (black locust)						
Sassafras albidum (sassafras)						
diffuse porous						
ring porous						
deciduous taxa			5		7	14
unidentifiable			7	5	8	
total identified fragments		0	20	8	20	15
NUT REMAINS	(total count)	0	4	4	4	8
	total weight (grams)	0	0.02	0.06	0.07	0.14
Carya sp. (thick-walled hickory)			4	4	4	8
SEED REMAINS	(total count)					
	total weight (grams)					
Acalypha virginica (copperleaf)						
Chenopodium sp. (goosefoot)						
Phytolacca americana (poke)						
Polygonum sp. (knotweed)						
Rumex sp. (dock)						
Stellaria media (chickweed)						
GRAMINEAE						
Unidentifiable seed fragment						
Unidentifiable eroded seed						
Unknown seed						
non-carbonized SEED REMAINS	(total count)	5	7	2	111	361
	total weight (grams)	<0.01	<0.01	<0.01	0.02	0.03
Amaranthus sp. (pigweed)						14
Mollugo verticillata (carpetweed)		3	4	1	73	310
Oxalis stricta (wood sorrel)					1	1
Panicum sp. (panic grass)						1

Flotation Recovered Plant Remains from Non-Feature Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #		98/2/276	98/2/816	98/2/817	98/2/1162	98/2/1168
Block						
Unit		319	397	397	455	455
Strata, Level		D,8	B,4	B,5	B,2	B,3
Feature, Strata, Level						
Column						
Soil Sample Volume (liters)		2	2	2	2	2
Total Charcoal Weight (grams)		0	0.66	0.14	0.26	0.3
Polygonum sp. (knotweed)					5	
Stellaria media (chickweed)		1	2		12	35
Trifolium sp. (clover)		1				
AMARANTHACEAE (pigweed family)			1	1	20	
presence/absence (Phase II analysis)						
OTHER PLANT REMAINS	(total count)	0	5	2	0	3
	total weight (grams)	0	0.03	0.01	0	0.01
Amorphous carbon			5	2		3
Monocot stem fragment						
Unidentifiable charcoal						
Unidentifiable rind fragment						
Fungal fructification						
Woody bud fragment						
Hull fragment						
Peduncle fragment						

Flotation Recovered Plant Remains from Non-Feature Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #		98/2/1172	98/2/1173	TOTALS
Block				
Unit		455	455	32 samples
Strata, Level		B,4	B,5	
Feature, Strata, Level				
Column				
Soil Sample Volume (liters)		2	2	64
Total Charcoal Weight (grams)		0.11	0.21	2.32
WOOD CHARCOAL	(total count)	8	10	162
	total weight (grams)	0.07	0.16	1.71
Acer sp. (maple)				1
Acer/Betula (maple/birch)				2
Carya sp. (hickory)		1		6
Castanea dentata (american chestnut)				0
Diospyros virginiana (persimmon)				0
Juglans nigra (black walnut)				0
Liquidambar styraciflua (sweetgum)				0
Liriodendron tulipifera (tulip poplar)				1
Morus rubra (red mulberry)				1
Pinus sp. (so. pine group)				0
Prunus serotina (black cherry)				1
Quercus sp. (white group)			4	25
Quercus sp. (red group)				6
Quercus sp. (unspecified)				5
Robinia pseudoacacia (black locust)				1
Sassafras albidum (sassafras)				0
diffuse porous		3		3
ring porous				6
deciduous taxa		3	6	42
unidentifiable		1		33
total identified fragments		8	10	133
NUT REMAINS	(total count)	1	0	21
	total weight (grams)	0.02	0	0.31
Carya sp. (thick-walled hickory)		1		21
SEED REMAINS	(total count)			19
	total weight (grams)			0.01
Acalypha virginica (copperleaf)				0
Chenopodium sp. (goosefoot)				18
Phytolacca americana (poke)				1
Polygonum sp. (knotweed)				0
Rumex sp. (dock)				0
Stellaria media (chickweed)				0
GRAMINEAE				0
Unidentifiable seed fragment				0
Unidentifiable eroded seed				0
Unknown seed				0
non-carbonized SEED REMAINS	(total count)	33	10	532
	total weight (grams)	0.01	<0.01	0.06
Amaranthus sp. (pigweed)			2	16
Mollugo verticillata (carpetweed)		24	8	425
Oxalis stricta (wood sorrel)		1		3
Panicum sp. (panic grass)				1

Flotation Recovered Plant Remains from Non-Feature Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #		98/2/1172	98/2/1173	TOTALS
Block				
Unit		455	455	32 samples
Strata, Level		B,4	B,5	
Feature, Strata, Level				
Column				
Soil Sample Volume (liters)		2	2	64
Total Charcoal Weight (grams)		0.11	0.21	2.32
Polygonum sp. (knotweed)				5
Stellaria media (chickweed)		3		53
Trifolium sp. (clover)				1
AMARANTHACEAE (pigweed family)		5		28
presence/absence (Phase II analysis)				8 of 24
OTHER PLANT REMAINS	(total count)	1	5	35
	total weight (grams)	0.01	0.05	0.23
Amorphous carbon		1	4	34
Monocot stem fragment			1	1
Unidentifiable charcoal				0
Unidentifiable rind fragment				0
Fungal fructification				0
Woody bud fragment				0
Hull fragment				0
Peduncle fragment				0

Flotation Recovered Plant Remains from Control Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #		98/2/544	98/2/545	98/2/546	98/2/547	98/2/540
Block						
Unit		213	213	213	213	153
Strata, Level		A,1	B,2	B,3	C,4	A,1
Feature, Strata, Level						
Column						
Soil Sample Volume (liters)		2	2	2	2	2
Total Charcoal Weight (grams)		0.05	0.09	0.04	0.02	0.07
Acer sp. (maple)						
Acer/Betula (maple/birch)						
Carya sp. (hickory)						
Castanea dentata (american chestnut)						
Diospyros virginiana (persimmon)						
Juglans nigra (black walnut)						
Liquidambar styraciflua (sweetgum)						
Morus rubra (red mulberry)						
Pinus sp. (so. pine group)						
Quercus sp. (red group)						
Quercus sp. (white group)						
Quercus sp. (unspecified)						4
Robinia pseudoacacia (black locust)						
Sassafras albidum (sassafras)						
diffuse porous						
ring porous						
deciduous taxa		5	7	2		
unidentifiable					1	
total identified fragments		5	7	2	1	4
NUT REMAINS	(total count)	0	4	0	0	0
	total weight (grams)	0	0.04	0	0	0
Carya sp. (thick-walled hickory)						
carbonized SEED REMAINS	(total count)	0	0	0	0	0
	total weight (grams)	0	0	0	0	0
Acalypha virginica (copperleaf)						
Chenopodium sp. (goosefoot)						
Phytolacca americana (poke)						
Polygonum sp. (knotweed)						
Rumex sp. (dock)						
Stellaria media (chickweed)						
GRAMINEAE						
Unidentifiable seed fragment						
Unidentifiable eroded seed						
Unknown seed						
non-carbonized SEED REMAINS						
presence/absence (Phase II analysis)		yes	yes	yes	yes	yes
OTHER PLANT REMAINS	(total count)	2	0	2	1	1
	total weight (grams)	0.01	0	0.02	0.01	0.01
Amorphous carbon		2		2	1	1
Unidentifiable charcoal						
Unidentifiable rind fragment						
Fungal fructification						
Woody bud fragment						

Flotation Recovered Plant Remains from Control Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #	98/2/544	98/2/545	98/2/546	98/2/547	98/2/540
Block					
Unit	213	213	213	213	153
Strata, Level	A,1	B,2	B,3	C,4	A,1
Feature, Strata, Level					
Column					
Soil Sample Volume (liters)	2	2	2	2	2
Total Charcoal Weight (grams)	0.05	0.09	0.04	0.02	0.07
Hull fragment					
Peduncle fragment					

Flotation Recovered Plant Remains from Control Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #	98/2/541	98/2/542	98/2/543	TOTALS
Block				8 samples
Unit	153	153	153	
Strata, Level	B,2	B,3	C,4	
Feature, Strata, Level				
Column				
Soil Sample Volume (liters)	2	2	2	16
Total Charcoal Weight (grams)	0.44	0	0	0.71
Acer sp. (maple)				0
Acer/Betula (maple/birch)				0
Carya sp. (hickory)				0
Castanea dentata (american chestnut)				0
Diospyros virginiana (persimmon)				0
Juglans nigra (black walnut)				0
Liquidambar styraciflua (sweetgum)				0
Morus rubra (red mulberry)				0
Pinus sp. (so. pine group)				0
Quercus sp. (red group)				0
Quercus sp. (white group)				0
Quercus sp. (unspecified)				4
Robinia pseudoacacia (black locust)				0
Sassafras albidum (sassafras)				0
diffuse porous				0
ring porous				0
deciduous taxa	1			15
unidentifiable	19			20
total identified fragments	20	0	0	39
NUT REMAINS (total count)	0	0	0	4
total weight (grams)	0	0	0	0.04
Carya sp. (thick-walled hickory)				0
carbonized SEED REMAINS (total count)	0	0	0	0
total weight (grams)	0	0	0	0
Acalypha virginica (copperleaf)				0
Chenopodium sp. (goosefoot)				0
Phytolacca americana (poke)				0
Polygonum sp. (knotweed)				0
Rumex sp. (dock)				0
Stellaria media (chickweed)				0
GRAMINEAE				0
Unidentifiable seed fragment				0
Unidentifiable eroded seed				0
Unknown seed				0
non-carbonized SEED REMAINS				
presence/absence (Phase II analysis)	no	no	yes	6 of 8
OTHER PLANT REMAINS (total count)	137	0	0	143
total weight (grams)	0.08	0	0	0.13
Amorphous carbon	137			143
Unidentifiable charcoal				0
Unidentifiable rind fragment				0
Fungal fructification				0
Woody bud fragment				0

Flotation Recovered Plant Remains from Control Contexts, Locus 3, Puncheon Run Site (7K-C-51)

Catalog #	98/2/541	98/2/542	98/2/543	TOTALS
Block				8 samples
Unit	153	153	153	
Strata, Level	B,2	B,3	C,4	
Feature, Strata, Level				
Column				
Soil Sample Volume (liters)	2	2	2	16
Total Charcoal Weight (grams)	0.44	0	0	0.71
Hull fragment				0
Peduncle fragment				0

ATTACHMENT D

MACROFLORAL INVENTORY - SITE SUMMARY

Site Summary, Flotation Recovered Plant Remains, Puncheon Run Site (7K-C-51)

Designation		Loc 1 features	Loc 1 non-fea	Loc 2	Loc 3 features
Unit		31 samples	13 samples	4 samples	46 samples
Soil Sample Volume (liters)		61.5	26	8	90
Total Charcoal Weight (grams)		9.92	0.97	0.4	31.32
WOOD CHARCOAL	(total count)	1078	32	24	3267
	total weight (grams)	8.58	0.23	0.14	28.77
WOOD CHARCOAL	(total count)	1078	32	24	3267
	total weight (grams)	8.58	0.23	0.14	28.77
Acer sp. (maple)		9	0	0	1
Acer/Betula (maple/birch)		6	0	0	0
Carya sp. (hickory)		59	5	0	29
Castanea dentata (american chestnut)		2	0	0	8
Cornus florida (flowering dogwood)		1	0	0	0
Diospyros virginiana (persimmon)		0	0	0	5
Fraxinus sp. (ash)		2	0	0	0
Ilex opaca (American holly)		6	1	0	0
Juglans nigra (black walnut)		2	0	0	6
Liquidambar styraciflua (sweetgum)		0	0	0	40
Liriodendron tulipifera (tulip poplar)		2	0	0	1
Morus rubra (red mulberry)		0	0	0	1
Pinus sp. (so. pine group)		1	0	0	4
Prunus serotina (black cherry)		0	0	0	0
Quercus sp. (red group)		3	0	0	12
Quercus sp. (white group)		82	8	13	181
Quercus sp. (unspecified)		37	3	5	35
Robinia pseudoacacia (black locust)		0	0	0	3
Sassafras albidum (sassafras)		0	0	0	2
diffuse porous		0	0	0	2
ring porous		43	0	0	34
coniferous taxa		1	0	0	0
deciduous taxa		93	7	0	106
unidentifiable		69	8	6	141
total identified fragments		418	32	24	611
NUT REMAINS	(total count)	42	35	10	49
	total weight (grams)	0.45	0.73	0.15	0.58
Quercus sp. (acorn)		2	0	0	0
Carya sp. (thick-walled hickory)		40	35	10	49
carbonized SEED REMAINS	(total count)	7	1	0	58
	total weight (grams)	0.08	0	0	0.05
Acalypha virginica (copperleaf)		0	0	0	1
Chenopodium sp. (goosefoot)		0	0	0	29
possible Nelumbo lutea (American lotus) frag		1	0	0	0
Phytolacca americana (poke)		0	0	0	1
Polygonum sp. (knotweed)		0	0	0	2
Rumex sp. (dock)		0	0	0	1
Stellaria media (chickweed)		0	0	0	1
GRAMINEAE		0	0	0	5
Unidentifiable seed fragment		0	0	0	1
Unidentifiable eroded seed		0	1	0	16
unidentifiable large seed		6	0	0	0
Unknown seed		0	0	0	1

Site Summary, Flotation Recovered Plant Remains, Puncheon Run Site (7K-C-51)

Designation		Loc 1 features	Loc 1 non-fea	Loc 2	Loc 3 features
Unit		31 samples	13 samples	4 samples	46 samples
Soil Sample Volume (liters)		61.5	26	8	90
Total Charcoal Weight (grams)		9.92	0.97	0.4	31.32
WOOD CHARCOAL	(total count)	1078	32	24	3267
	total weight (grams)	8.58	0.23	0.14	28.77
non-carbonized SEED REMAINS	(total count)	130	0	0	420
	total weight (grams)	0.06	0	0	0.23
Amaranthus sp. (pigweed)	*entire*	2	0	0	29
	fragment	0	0	0	3
Ambrosia artemisiifolia (common ragweed)		1	0	0	0
Crotolaria sagittalis (rattlebox)		0	0	0	1
Euphorbia sp. (spurge)		8	0	0	9
Frageria sp. (strawberry)		0	0	0	5
Mollugo verticillata (carpetweed)		80	0	0	264
Myrica sp. (bayberry) ?		0	0	0	1
Oxalis stricta (wood sorrel)		10	0	0	17
Panicum sp. (panic grass)		0	0	0	5
Phytolacca americana (poke)		0	0	0	0
Polygonum pensylvanicum (knotweed)	*entire*	1	0	0	0
	fragment	1	0	0	0
Polygonum sp. (knotweed)	*entire*	1	0	0	40
	fragment	0	0	0	3
Prunus serotina (black cherry)	*entire*	0	0	0	1
	fragment	0	0	0	2
Rubus sp. (raspberry/blackberry)		0	0	0	1
Solanum rostratum (buffalobur)		1	0	0	0
Stellaria media (chickweed)		2	0	0	14
Trifolium sp. (clover)		0	0	0	5
Vicia sp. (vetch)		0	0	0	1
Vitis sp. (grape)		1	0	0	0
AMARANTHACEAE (pigweed family)		19	0	0	15
LEGUMINOSAE (bean family)		0	0	0	1
POACEAE (grass family)		2	0	0	2
unidentifiable seed coat fragment		1	0	0	0
presence/absence (Phase II analysis)		5 of 10	6 of 13	2 of 4	23 of 32
OTHER PLANT REMAINS	(total count)	106	1	10	204
	total weight (grams)	0.76	0.01	0.11	1.69
Amorphous carbon		80	0	9	184
Monocot stem fragment		1	0	1	0
Unidentifiable charcoal		0	0	0	5
coniferous bud fragment		1	0	0	0
Unidentifiable bud fragment		0	0	0	3
Unidentifiable rind fragment		15	0	0	5
Unidentifiable plant part		7	1	0	0
unidentifiable spherical specimen		1	0	0	0
Fungal fructification		0	0	0	1
Woody bud fragment		0	0	0	3
Hull fragment		0	0	0	2
Peduncle fragment		0	0	0	1

Site Summary, Flotation Recovered Plant Remains, Puncheon Run Site (7K-C-51)

Designation		Loc 3 non-fea	Loc 3 control	SITE
Unit		32 samples	8 samples	TOTALS
Soil Sample Volume (liters)		64	16	249.5
Total Charcoal Weight (grams)		2.32	0.71	44.93
WOOD CHARCOAL	(total count)	162	44	4563
	total weight (grams)	1.71	0.54	39.43
WOOD CHARCOAL	(total count)	162	44	4563
	total weight (grams)	1.71	0.54	39.43
Acer sp. (maple)		1	0	11
Acer/Betula (maple/birch)		2	0	8
Carya sp. (hickory)		6	0	99
Castanea dentata (american chestnut)		0	0	10
Cornus florida (flowering dogwood)		0	0	1
Diospyros virginiana (persimmon)		0	0	5
Fraxinus sp. (ash)		0	0	2
Ilex opaca (American holly)		0	0	7
Juglans nigra (black walnut)		0	0	8
Liquidambar styraciflua (sweetgum)		0	0	40
Liriodendron tulipifera (tulip poplar)		1	0	4
Morus rubra (red mulberry)		1	0	2
Pinus sp. (so. pine group)		0	0	5
Prunus serotina (black cherry)		1	0	1
Quercus sp. (red group)		25	0	40
Quercus sp. (white group)		6	0	290
Quercus sp. (unspecified)		5	4	85
Robinia pseudoacacia (black locust)		1	0	4
Sassafras albidum (sassafras)		0	0	2
diffuse porous		3	0	5
ring porous		6	0	83
coniferous taxa		0	0	1
deciduous taxa		42	15	248
unidentifiable		33	20	257
total identified fragments		133	39	1218
NUT REMAINS	(total count)	21	4	157
	total weight (grams)	0.31	0.04	2.22
Quercus sp. (acorn)		0	0	2
Carya sp. (thick-walled hickory)		21	0	155
carbonized SEED REMAINS	(total count)	19	0	85
	total weight (grams)	0.01	0	0.14
Acalypha virginica (copperleaf)		0	0	1
Chenopodium sp. (goosefoot)		18	0	47
possible Nelumbo lutea (American lotus) frag		0	0	1
Phytolacca americana (poke)		1	0	2
Polygonum sp. (knotweed)		0	0	2
Rumex sp. (dock)		0	0	1
Stellaria media (chickweed)		0	0	1
GRAMINEAE		0	0	5
Unidentifiable seed fragment		0	0	1
Unidentifiable eroded seed		0	0	17
unidentifiable large seed		0	0	6
Unknown seed		0	0	1

Site Summary, Flotation Recovered Plant Remains, Puncheon Run Site (7K-C-51)

Designation		Loc 3 non-fea	Loc 3 control	SITE
Unit		32 samples	8 samples	TOTALS
Soil Sample Volume (liters)		64	16	249.5
Total Charcoal Weight (grams)		2.32	0.71	44.93
WOOD CHARCOAL	(total count)	162	44	4563
	total weight (grams)	1.71	0.54	39.43
non-carbonized SEED REMAINS	(total count)	532	0	1082
	total weight (grams)	0.06	0	0.35
Amaranthus sp. (pigweed)	*entire*	16	0	47
	fragment	0	0	3
Ambrosia artemisiifolia (common ragweed)		0	0	1
Crotolaria sagittalis (rattlebox)		0	0	1
Euphorbia sp. (spurge)		0	0	17
Frageria sp. (strawberry)		0	0	5
Mollugo verticillata (carpetweed)		425	0	769
Myrica sp. (bayberry) ?		0	0	1
Oxalis stricta (wood sorrel)		3	0	30
Panicum sp. (panic grass)		1	0	6
Phytolacca americana (poke)		0	0	0
Polygonum pensylvanicum (knotweed)	*entire*	0	0	1
	fragment	0	0	1
Polygonum sp. (knotweed)	*entire*	5	0	46
	fragment	0	0	3
Prunus serotina (black cherry)	*entire*	0	0	1
	fragment	0	0	2
Rubus sp. (raspberry/blackberry)		0	0	1
Solanum rostratum (buffalobur)		0	0	1
Stellaria media (chickweed)		53	0	69
Trifolium sp. (clover)		1	0	6
Vicia sp. (vetch)		0	0	1
Vitis sp. (grape)		0	0	1
AMARANTHACEAE (pigweed family)		28	0	62
LEGUMINOSAE (bean family)		0	0	1
POACEAE (grass family)		0	0	4
unidentifiable seed coat fragment		0	0	1
presence/absence (Phase II analysis)		8 of 24	6 of 8	50 of 91
OTHER PLANT REMAINS	(total count)	35	143	356
	total weight (grams)	0.23	0.13	2.8
Amorphous carbon		34	143	307
Monocot stem fragment		1	0	3
Unidentifiable charcoal		0	0	5
coniferous bud fragment		0	0	1
Unidentifiable bud fragment		0	0	3
Unidentifiable rind fragment		0	0	20
Unidentifiable plant part		0	0	8
unidentifiable spherical specimen		0	0	1
Fungal fructification		0	0	1
Woody bud fragment		0	0	3
Hull fragment		0	0	2
Peduncle fragment		0	0	1