INTRA-SITE ANALYSES AND INTERPRETATIONS

SOIL CHEMICAL ANALYSIS

It has been shown that archaeologically derived patterns or concentrations of certain soil trace elements can be correlated with the occurrence of particular activities which are reflective of site usage or human behavior (Sopko 1983:24-30; McManamon 1984; Custer et al. 1986). Besides providing a more generalized understanding of spatial utilization of a site, soils analyses

PLATE 9

North Wall of Buchanan-Savin Farmhouse

can be useful in determining intra-site activity areas, particularly when used in conjunction with artifact distributional patterns. The chemical analyses were conducted by the Soils Laboratory of the University of Delaware College of Agriculture. Soils analyses have been used with favorable results on other recently excavated historical sites in Delaware (Custer et al. 1986; Coleman et al. 1985; Shaffer et al. 1988; Catts and Custer 1990).

The soils analysis for the Buchanan-Savin Farmstead consisted of determining the relative frequency levels of calcium, phosphorus, potassium, magnesium, and soil pH across the site. The level of phosphorus in site soils are probably the most significant of the soils analyses that were conducted. High phosphorus levels are indicative of chemical evidence of human or animal activities caused by the deposition of urine, excrement, and organic refuse (Sjoberg 1976; Eidt 1977). Abnormal concentrations of calcium result from agricultural fertilization (i.e., liming), oyster or clam shell deposition, or the presence of building materials such as plaster or mortar in the soils. Magnesium levels are generally related to the calcium levels, although very high magnesium concentrations found in association with agricultural liming may indicate the use of dolomitic limestone from Pennsylvania. The presence of high potassium levels are the result of the deposition of wood ash through surface burning or from the dumping of fireplace or stove ashes. Soil pH readings of 7.0 or greater are indicative of alkaline soils, and readings below 7.0 are acidic. Delaware soil pH values are naturally acidic (Matthews and Lavoie 1970), and readings above 6.0 suggest agricultural fertilization (Sopko 1983; Custer et al. 1986).

PLATE 10

Front of Buchanan-Savin Farmhouse, East View

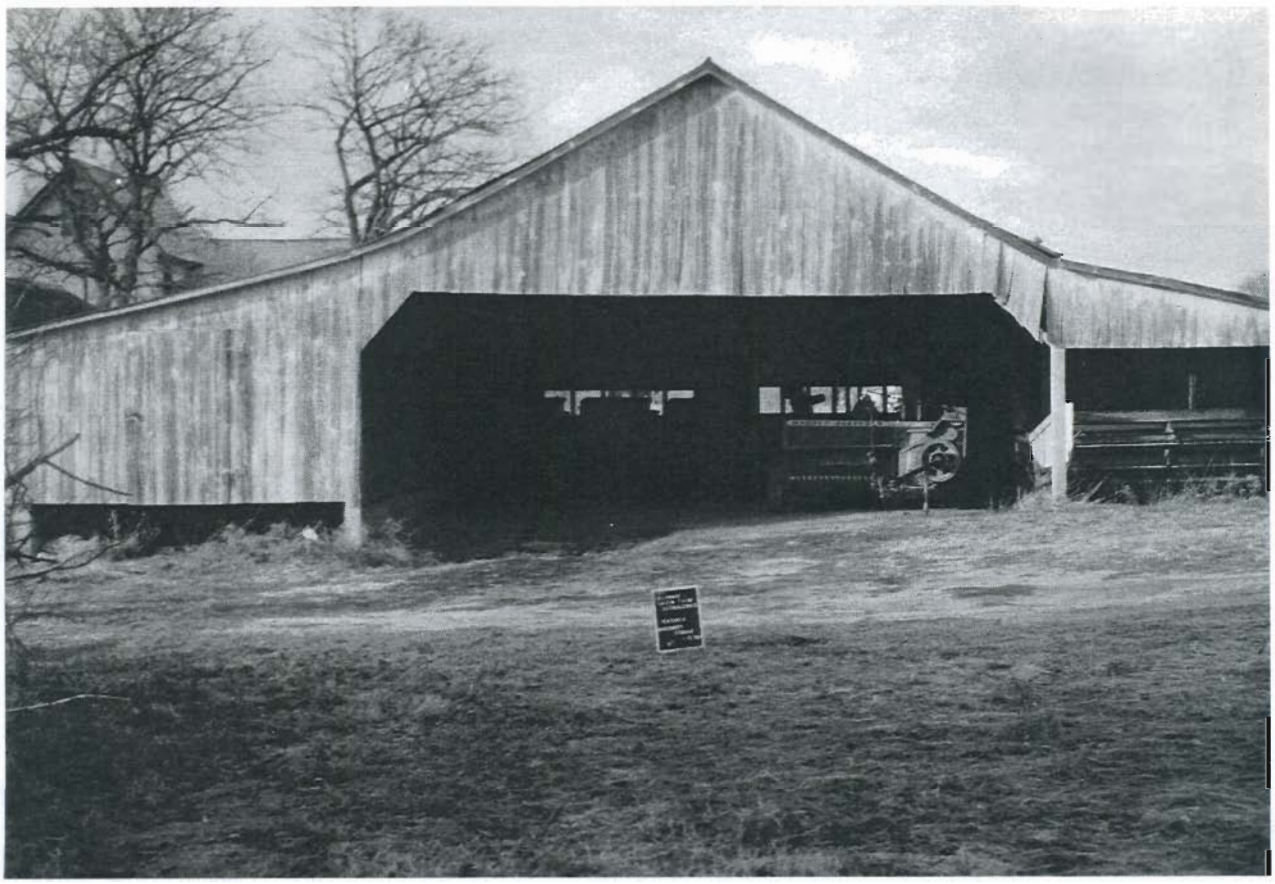
PLATE 11

Milk Shed, West View

At the Buchanan-Savin Farmstead, sets of soil samples were collected from the randomly excavated plow zone test units, and from each of the larger 10x10 ft subsoil units within the limits of the site (Figure 35). Soil samples from the plow zone and subsoil from the area around the twentieth-century farm buildings and the farmhouse were also collected to allow a comparison between the nineteenth century and twentieth-century farms (Figure 35). This method of sampling both the plow zone and the subsoil was utilized to check the amount of alteration of chemical distribution by subsequent agricultural fertilization. It was assumed that the subsoil sample would be less effected by post-occupational chemical contamination caused by agricultural practices and other modern contamination and therefore more reflective of earlier intra-site soils patterns. A similar sampling scheme was employed with success at the Whitten Road site (Shaffer et al. 1988), A. Temple site in Ogletown (Hoseth et al. 1990), the Thomas Williams site (Catts and Custer 1990), and the Cazier site (Hoseth, Catts, and Tinsman 1993). Another factor in this analysis was the minimal contamination resulting from the relocation of the Moffett farm buildings south of the Buchanan-Armstrong farm buildings. Thus the soil chemical patterning of the Buchanan-Savin Farmstead offers a unique opportunity to compare and contrast the nineteenth-century farm to the twentieth-century farm. The results of the specific excavation area (i.e. the nineteenth-century Buchanan farm) site soils analyses are presented in a series of chemical frequency distribution maps (Figures 36 through 45). Results for comparison of the nineteenth-century Buchanan-Armstrong farm and the twentieth-century Moffett dairy farm can be found in Figures 36 through 55.

PLATE 12

Equipment Shed, North View



SOIL CHEMICAL SAMPLING AT THE NINETEENTH-CENTURY FARM

Phosphorus

The nineteenth-century Buchanan farm area located to the east of the farmhouse contained an area of high phosphorus density within the nineteenth-century fencelines. In this area three peaks of higher phosphorus concentration were apparent. The largest area was located directly east of the farmhouse, to the south of Structure III (Figure 36-D), and west of Outbuilding II (Figure 36). Positioned next to the farmhouse occupied for 140 years, this phosphorus concentration is related to a long-term locus of activity. The subsoil measure of the phosphorus concentration in this area correlated well with that in the plow zone (Figure 37), indicating that the phosphorus was of a high enough concentration over a long enough period to "soak" into the subsoil, confirming the high activity area interpretation.

A second area of high phosphorus concentration was located north of Structure II (Figure 36). There was a slight correlation between the plow zone and the subsoil amounts of phosphorus in this area (Figure 37), perhaps due to either more recent or limited depositions of phosphorus.

The final area of high concentration was an area unmarked by subsoil features north of Privy II and west of Fencelines I and II (Figure 36). This area seemed to indicate another open

PLATE 13

Animal Trough, North View

PLATE 14

Milking Barn, West View

yard area or animal pen. The correlation with the subsoil concentrations indicated a well established activity area (Figures 36 and 37). Overall, the high phosphorus concentrations were located within the fencelines.

Calcium

Like the phosphorus concentrations, a calcium concentration formed to the east of the farmhouse, south of Structure II, and west of Outbuilding IV (Figure 38). A concentration was also located south of the farmhouse in the area of the meat house. The calcium concentration high-lighted and confirmed the main activity area of the farmyard. The high calcium densities correlated to oyster shell excavated from the plow zone east of the farmhouse, while decomposing mortared brick probably caused the high concentration south of the farmhouse. The mortared brick was used as a fill along the south side of the farmhouse, leveling a depression during the late twentieth century (Ed Savin, personal communication). The distribution of calcium in the subsoil mirrored that in the plow zone (Figures 38 and 39).

Magnesium

The plow zone levels of magnesium fell into the same high concentration areas as calcium (Figure 40). The same was true of the magnesium concentration distribution in the subsoil reflecting shell and brick deposition (Figure 41).

PLATE 15

Corn Crib, West View

Potassium

Potassium was concentrated in two areas in the plow zone. The highest concentration was along the north central edge of the excavation area (Figure 42). This portion of the site yielded high potassium levels because of historical dumping of coal and wood ash and recent trash burning. Plow zone test units in this area yielded large amounts of coal ash. This may be the location of the "ashes pounded [sic] on the ground 60 feet from [the farm house]" mentioned in the 1857 Kent Mutual fire insurance record. Two 55-gallon drums used for burning trash by the Savin family were extant at the time of excavation in this area.

The second area of potassium concentration was located in the southern portion of the site south of Outbuilding IV and west of Structure I, (Figure 42). This area was within the farmyard and could possibly indicate incidental burning and dumping activities.

Subsoil distributions of potassium presented a slightly different picture (Figure 43). The highest concentration observed in the plow zone shifted west around the north side of Structure II. The shift in concentration area may indicate a lessened influence of the recent Savin trash burning and a heightening of the Buchanan ash dumping.

TABLE 17

Artifact Totals - Plow zone

Kitchen (32.4%)	
Ceramics	
Whiteware	1,351
Pearlware	2
Yellowware	97
Rockingham	9
Redware	358
Brown stoneware	16
Ironstone	441
Bone china	144
American porcelain	31
American stoneware	69
Fiesta ware	36
Unidentified	85
Glass	
Bottle and jar	1,678
Table	166
Household	548
Unidentified	2,120
Metal tableware	10
Total	**7,161**
Architectural (53.8%)	
Window glass	2,727
Nails	
Cut	565
Wire	1,169
Unidentified	7,087
Staples, screws, and bolts	254
Wire	37
Wood	1
Other architectural	79
Total (minus brick)	**11,919**
Brick weight	57,302g

Flora and Fauna (1.7%)	
Wood	16
Oyster and clam shell	27
Bone	304
Teeth	6
Nuts and pits	19
Total	**372**
Clothing (0.3%)	
Textiles and leather	32
Buttons	28
Total	**60**
Activities (0.6%)	
Toys	13
Pipe fragments	9
Arms	7
Household metal	69
Tools	15
Coins	19
Total	**132**
Unknown (11.2%)	
Other metal	195
Unidentified metal	1,622
Miscellaneous modern trash	633
Other	40
Total	**2,490**

Total Plow zone artifacts: 22,134

pH Factor

The pH factor of the excavation area was also plotted. Results of the plow zone samples indicated that there were two areas of distinct pH, one slightly more acidic, and one slightly more basic (Figure 44). The most acidic area centered on Structure I. Structure I, the historical barn/carriage house mentioned in the 1857 fire insurance record, may have more acidic soils due to increased contact with animal manure. One area of low acidity was centered on the meat house. This area of more basic soils also corresponded with an area of high calcium (Figures 38 and 39); calcium is a neutralizer of acids and may have changed the pH of the soils. A third area of basic soils was located north of Structure II (Figure 44-C) in an area that had been used for wood ash dumping. The pH levels in the subsoil were generally higher than in the plow zone (Figure 45).

In conclusion, soil chemical analysis, particularly that of phosphorus, was shown to be a useful tool in site interpretation. Soil chemical distribution maps used in conjunction with structure locations defined and delineated yard areas at the Buchanan-Savin Farmstead. The high phosphorus concentrations were instrumental in defining human and animal activity areas. Calcium analysis defined shell and brick disposal areas and indicated that field liming did not take place in this area. Magnesium was found to be less helpful in interpretation and to mirror the distribution of calcium. Potassium assisted in defining activity areas, particularly those associated with burning, and located a documented ash deposition. The pH factor highlighted

TABLE 18

Artifact Totals - Features

Kitchen (38.8%)	
Ceramics	
Whiteware	623
Pearlware	2
Yellowware	3
Rockingham	3
Redware	82
Brown stoneware	2
Ironstone	137
Bone china	121
American porcelain	4
American stoneware	8
Fiesta ware	1
Unidentified	19
Glass	
Bottle and jar	633
Table	182
Household	994
Unidentified	884
Total	**3,698**
Architectural (24.8%)	
Window glass	849
Nails	
Cut	23
Wire	41
Unidentified	1,309
Staples	21
Wire	8
Mortar and plaster	96
Other architectural	14
Total (minus brick)	**2,361**
Brick weight	17,918g

Flora and Fauna (6.5%)	
Wood	139
Oyster and clam shell	206
Bone	255
Teeth	10
Total	**610**
Clothing (0.3%)	
Textiles	28
Buttons	4
Total	**32**
Activities (0.4%)	
Toys	15
Pipe fragments	2
Arms	2
Household metal	16
Total	**35**
Unknown (29.0%)	
Other metal	141
Unidentified metal	979
Metal can fragments	1,663
Total	**2,783**

Total Feature artifacts: 9,519

TABLE 19

Minimum Ceramic Vessel Counts

106 Total Vessels from Features

Ceramic	Number of Vessels	Flat ware	Hollow ware	Cup	Mug/ jug
Redware	8	0	7	--	1
American stoneware	5	0	5	--	--
Bone china	10	3	7	2	--
American porcelain	3	0	2	--	--
Bennington	1	0	--	--	--
Ironstone	23	9	14	2	--
Whiteware	48	30	14	3	--
Fiesta ware	1	0	1	--	--
Yellowware	2	0	2	--	--
Unidentified	5	1	1	--	--
Total	**106**	**43**	**53**	**7**	**1**

PLATE 16

Teawares

Left to right: Ironstone cup and saucer, bone china cup and saucer, and blue transfer-printed whiteware.

areas where high acidic materials such as manure were concentrated, and demonstrated a correlation between basic pH levels and calcium deposition.

SOIL CHEMICAL SAMPLING AT THE TWENTIETH-CENTURY FARM

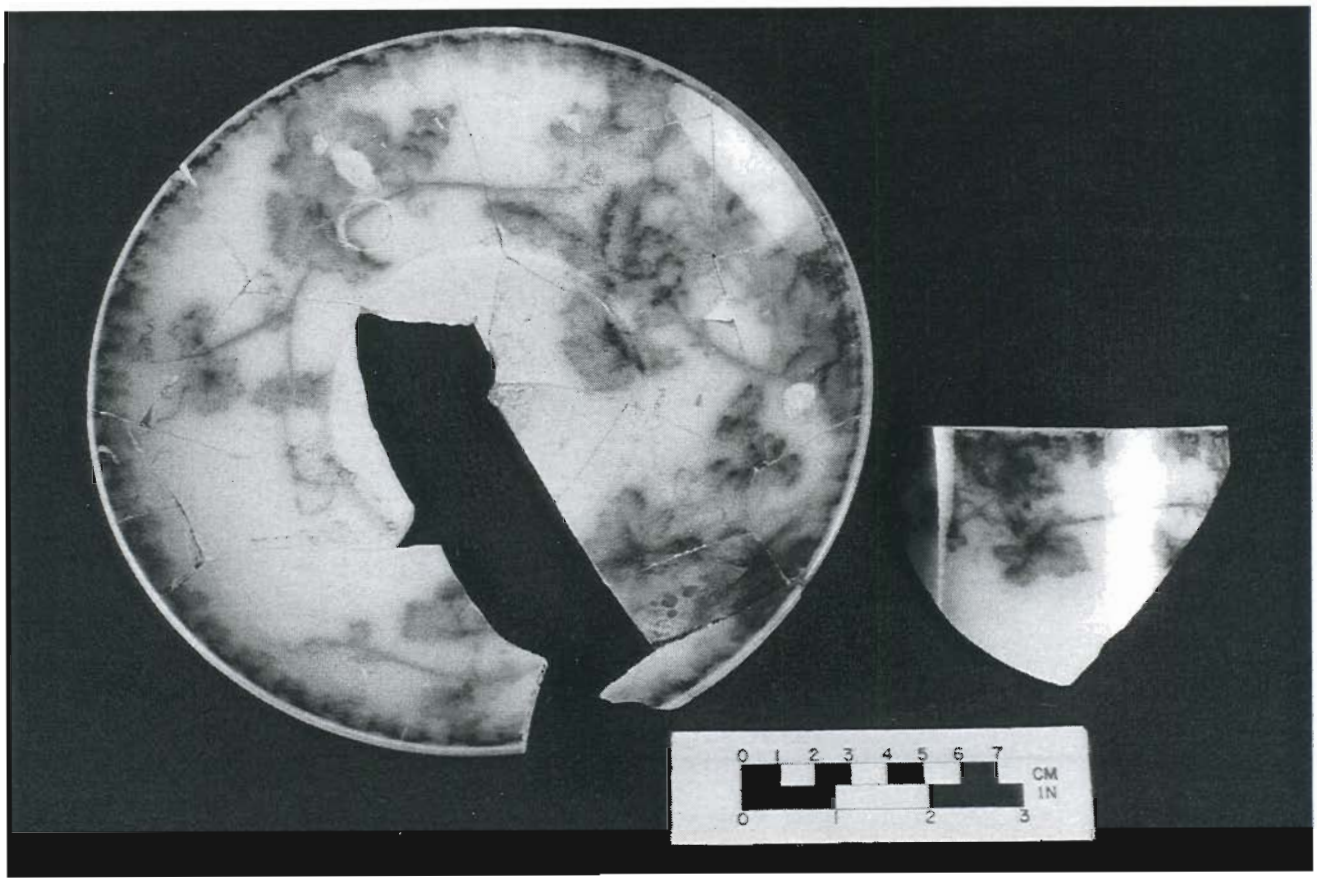
Soil chemical distributions for the Moffett dairy farm differed fundamentally from the earlier Buchanan-Armstrong agricultural farm. The nineteenth-century farm soil distributions were marked by a relatively high background level of chemical concentrations with slight peaks of higher densities. The Moffett dairy farm was characterized by large areas of relatively low density separated by sharp peaks of high density. Factors effecting these differences include farm size, length of occupation, and the use of modern fertilizers. The Moffett farm buildings were primarily oriented towards dairying activities, but a bag of fertilizer was observed in the large farm implements shed at the time of excavation. Although a dairy farm, the Moffetts were likely also growing crops, hence the presence of fertilizers.

Phosphorus

Phosphorus distributions of the Moffett farm outlined a large area that represented the activity area as a whole, with three areas of higher chemical density (Figure 46). Distributions

PLATE 17

Matching Whiteware Cup (Feature 90) and Saucer (Feature35)



Vessel 51-F35 Vessel 52-F90

of phosphorus concentration revealed an activity area encompassing all the farm buildings, including the corn crib, but excluding the pig pen. The subsoil distributions of phosphorus confirmed the large activity area (Figure 47). The pattern of high phosphorus density was restricted, but reflected the three areas of greatest chemical concentration.

The first of the three high concentrations of phosphorus at the Moffett farm was within the western portion of the dairy farm west of the garage/repair shop. This area included an large oak tree, a well, and most importantly a dog house. The high phosphorus concentrations may have been derived from activities involving the well, but the presence of the Savin dog(s) was probably the greatest influence on the phosphorus levels in that area. A second area of high phosphorus density in the plow zone was located to the north and inside the large farm implements shed (Figure 46). Spillage of fertilizer from manure spreaders and other agricultural machinery kept in the shed may have caused the high phosphorus concentration. Subsoil phosphorus concentrations in this area confirms a location of heavy phosphorus deposition (Figure 47). The third and last area of high density phosphorus on the Moffett farm was located north and east of the milking shed. This concentration can be attributed to milk cow waste (Figure 46). The subsoil tests strongly agreed with plow zone chemical concentrations (Figure 47), indicating a large deposit of phosphorus bearing material.

TABLE 20

Summary of Ceramic Minimum Vessels from Features

Function	Number	Percentage
Dining (tableware)	48	45.3
Serving	6	5.7
Tea and coffee wares	21	19.8
Drinking (mugs and goblets)	0	0.0
Food preparation	1	0.9
Food storage	5	4.7
Medicinal	0	0.0
Decorative	1	0.9
Food storage or dining	4	3.8
Condiments	0	0.0
Food storage or preparation	10	9.4
Toys	2	1.9
Unidentifiable	8	7.6
Total	**106**	**100**

Calcium

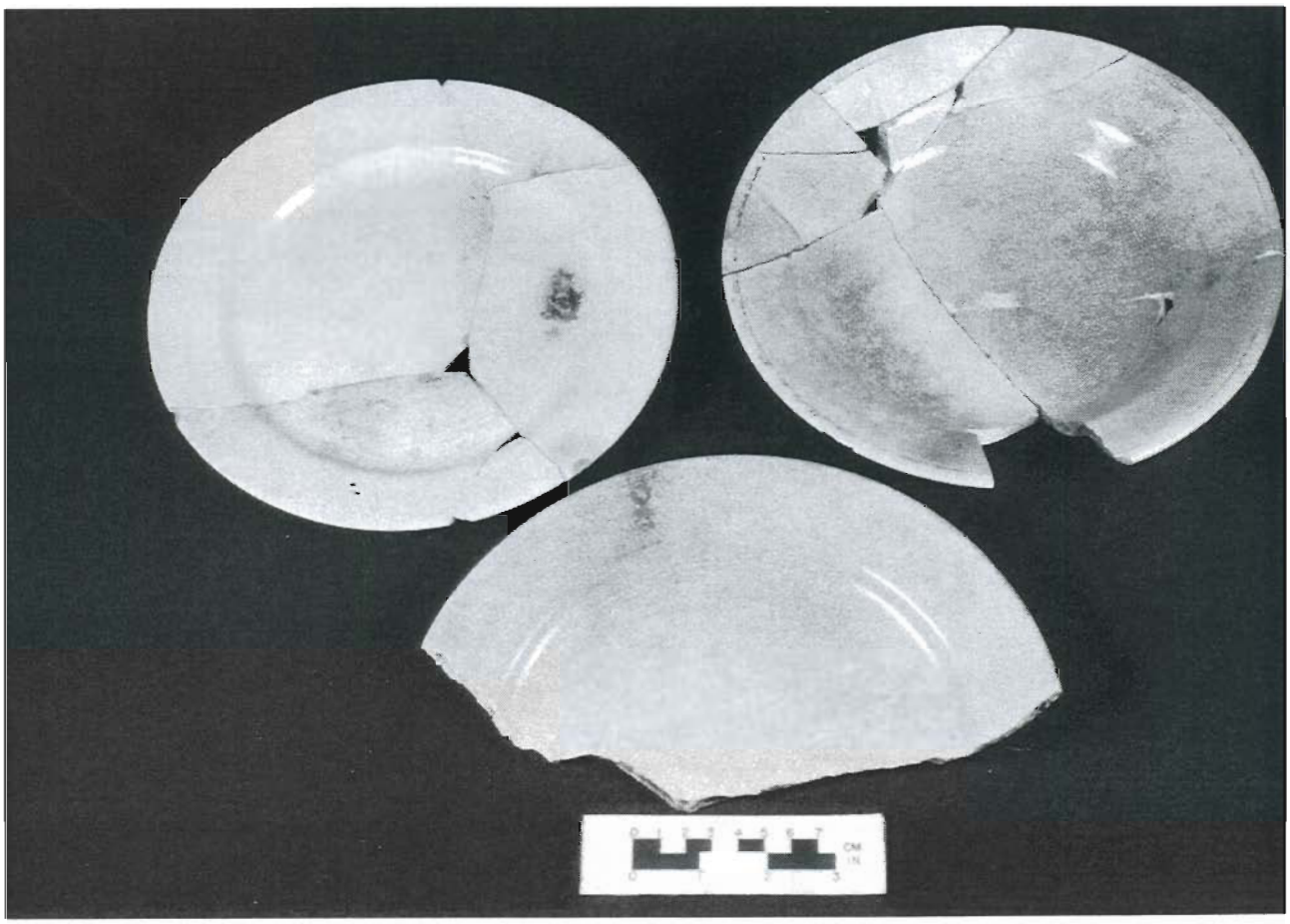
Like the potassium levels, distributions of calcium in the plow zone centered on the same three areas of high chemical density (Figure 48). The first area of high calcium density was located south and west of the garage/repair shop. This concentration was small and did not extend into the subsoil, indicating a minor deposition. A second plow zone concentration of calcium was located north of, and inside the large equipment shed (Figure 48). The calcium concentration in the subsoil correlated weakly with concentrations in the plow zone (Figure 49). Like the phosphorus concentration in this area, high calcium readings were probably due to fertilizers coming from farm machinery kept in the large equipment shed. The third area of calcium concentration was located north and east of the milking barn, mirroring that of the phosphorus concentration (Figures 46 and 48). The correlation of plow zone and subsoil calcium densities was strong, indicating a large deposition (Figure 49).

Magnesium

The areas of magnesium concentration mirrored those of calcium and phosphorus, with the exception of the first area located south and west of the garage/repair shed. The second area north and inside the large equipment shed bore a high density of magnesium in the plow zone, and a lesser concentration in the subsoil (Figures 50 and 51). Similar concentrations of phosphorus and calcium were also noted (Figures 46 through 49). Accidental deposition of fertilizer from farm machinery may have accounted for the high levels of magnesium in this area. The third area, north and east of the milking shed contained a high density of magnesium in the plow zone (Figure 50) Magnesium distribution mirrored that of calcium, but had lower densities. Subsoil magnesium concentration reflected the large deposits in the plow zone (Figure 51).

PLATE 18

Whiteware Plates and Bowl



Potassium

The distribution of potassium followed the same three high density areas as did phosphorus, calcium and magnesium. The first area of high potassium density located to the west of the garage/repair shop was relatively slight and did not appear in the subsoil (Figures 52 and 53). Rotted tree debris may account for the high readings of potassium in the first area. The second area north and inside the large equipment shed contained high potassium plow zone and subsoil distributions (Figures 52 and 53) possibly a result of fertilizer spillage. The third area of potassium deposition north and west of the milking barn had strong densities in both the plow zone and the subsoil. Like magnesium, calcium, and phosphorus, soil chemical densities of potassium in this area could be attributed to milk cow manure.

pH factor

The pH factor varied little. The least acidic (most basic) area was centered on the large area to the west of the garage/repair shop (Figure 54). The area of highest soil acid content in the plow zone was under the corn crib along the southern edge of the site. These fluctuations were slight and fall within the natural variation of pH in Delaware soils. The area of highest soil acid content in the subsoil was located east of the milk barn (Figure 55).

PLATE 19

Glass Bottles from Features

COMPARISON OF NINETEENTH AND TWENTIETH-CENTURY SOIL CHEMICAL DISTRIBUTIONS

The nineteenth-century soil chemical distributions were characterized by relatively high background chemical densities marked by areas of greater chemical concentrations. Phosphorus, calcium, and magnesium were unevenly distributed defining activity areas associated with each particular chemical (i.e. the concentration of potassium located the Buchanan ash pile). The twentieth-century farm had a low background soil chemical concentration interrupted by sharp spikes of extreme density of phosphorus, calcium, magnesium, and potassium.

Within the nineteenth-century farm, phosphorus was prevalent and helped define activity areas, animal and human waste disposal areas, and assisted in the determination of the location of farm buildings. Phosphorus distributions at the twentieth-century farm outlined activity areas around the farm structures and other activity areas such as the dog house, accidental fertilizer spillage in the heavy equipment shed, and high levels of animal activity at the milking barn. At both the nineteenth and twentieth-century farms phosphorus was found to be a very useful indicator of activity areas.

Analysis of calcium distribution at the nineteenth-century farm located building debris, and trash midden areas. Distributions of magnesium mirrored that of calcium. Potassium soil chemical distributions identified wood ash disposal, and trash burning areas. Soil pH varied according to the presence of other chemicals such as calcium, and did not indicate any particular

TABLE 21

Minimum Glass Vessel Function Types

Alcoholic beverage	4
Non-alcoholic beverage	0
Medicinal	33
Condiments	5
Chemical	3
Drinking	
Tumblers	24
Stemmed	0
Tableware	
Dining	1
Serving	7
Decorative	1
Lighting	18
Personal	3
Mirror	1
Storage/ preserves	9
Other	8
Unidentified	10
Total glass vessels	**127**

cultural activity. The twentieth-century farm soil chemical distributions of calcium, magnesium, and potassium mirrored the concentrations of phosphorus to a high degree.

The nineteenth-century farm area soil concentrations revealed differentiated activity areas indicated by varied chemical concentrations. In contrast, twentieth-century soil chemical deposition at the Buchanan-Savin Farmstead defined a singular activity area, undifferentiated due to the high concentrations of phosphorus, calcium, magnesium, and potassium. The use of modern concentrated fertilizers, and the centralization of farm activities changed the nineteenth-century pattern of soil chemical distribution from many activity areas, to the twentieth-century pattern of small areas with concentrations of many chemicals.

PLOW ZONE ARTIFACT DISTRIBUTIONS

To aid in the determination of any intra-site patterns of yard usage, the frequencies of artifacts collected during the plow zone sampling were plotted. The remains of eight buildings, two privies and five fencelines suggested that different artifact densities and distributions associated with the separate structures or activity areas in the farmyard could be determined by analyzing the pattern of artifact distribution dependent on functional classification. Distributions of ceramic, window glass, container glass (bottle and jar), brick (by weight), wire nails, cut nails, and all nails were investigated.

Ceramics

Buchanan-Savin Farmstead ceramics were plotted according to their general chronology of manufacture: mid-nineteenth century, late nineteenth and early twentieth-century ceramics, redware, and total ceramics. The highest concentration of ceramic sherds was centered in the area between the farmhouse and Structure II (Figure 56). The distribution of ceramics delineated an area of domestic activity around the farmhouse and Structure II.

Distribution of ceramic shards with a mid-nineteenth-century mean date consisted of whitewares, American stoneware, brown stoneware, ironstone, pearlware, and Rockingham. The distribution pattern of the mid-nineteenth-century ceramics in the plow zone mirrored that of the distribution of total ceramics, not surprising considering that 78% of all ceramics found

PLATE 20

Medicine Bottles

dated from the mid-nineteenth century (Figure 57). The distribution was greatest between the farmhouse and Structure II.

Late nineteenth/early twentieth-century ceramics recovered from the plow zone sampling of the Buchanan-Savin Farmstead consisted of yellowware, bone china, American china, and Fiesta ware. The highest concentration of these ceramics was located along the central northernmost edge of the site, where no structures were located, suggesting sheet midden deposition (Figure 58). The second concentration of late nineteenth century/early twentieth-century ceramics followed that of the mid-nineteenth-century ceramics in indicating the area between the farmhouse and Structure II as a prime locus of domestic activity.

The distribution of redware in the plow zone showed two high density areas, the smallest located north of Structure I and Outbuilding I (Figure 59). This concentration otherwise lies in an area of very low density. The larger area of high density encompasses the entire north-west quadrant of the distribution map. Located north of the farmhouse, around Structure II and to the north of Structure III, this high density of redware fragments indicated a domestic activity area.

Comparison of the mid-nineteenth and late nineteenth/early twentieth-century ceramic distributions shows no change in the domestic activity area through this period in the occupation of the site. All ceramic distributions uphold a domestic area involving the Farmhouse and

FIGURE 34

Date Ranges of Building Demolition from Datable Glass Vessels

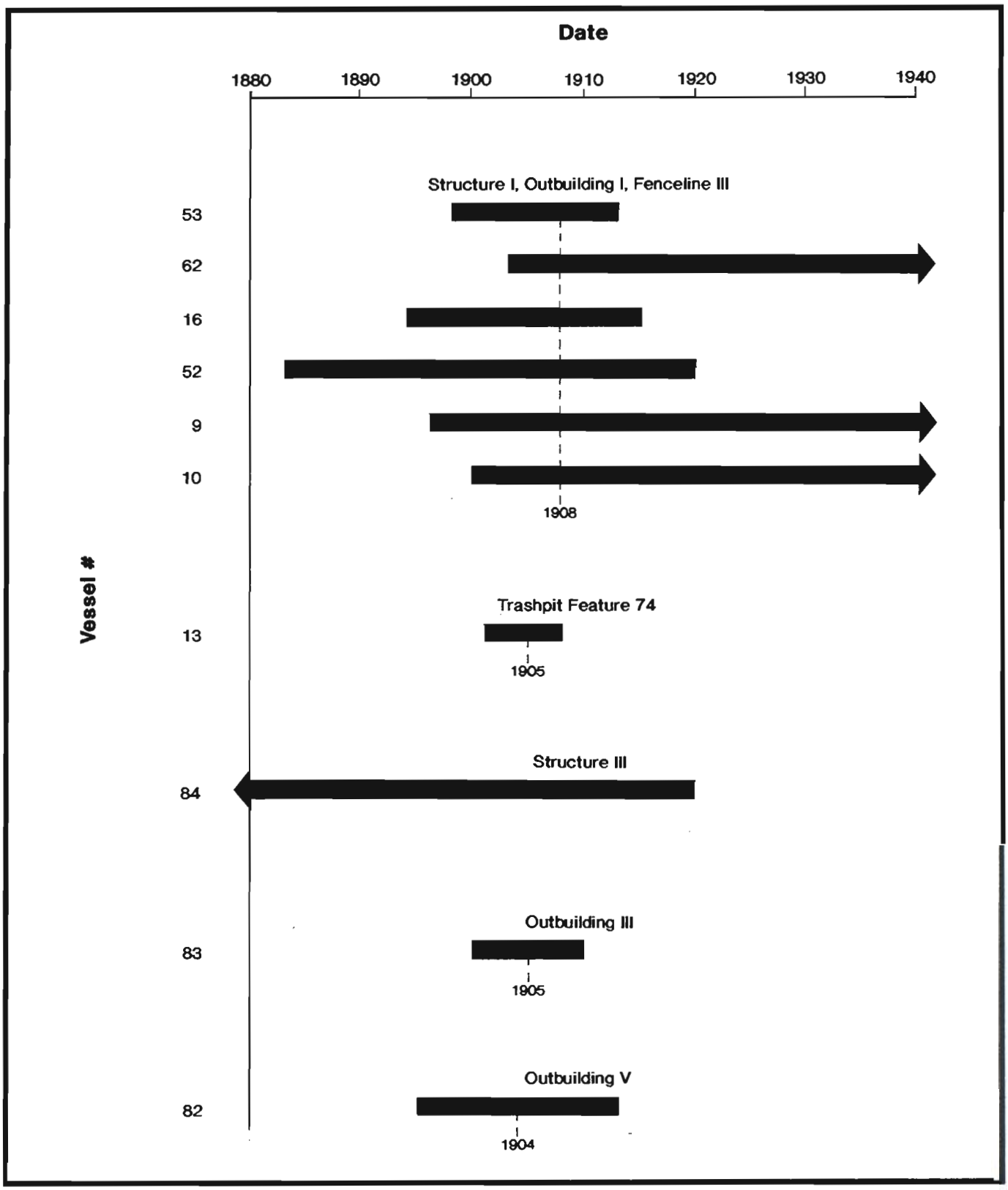


TABLE 22

Summary of Faunal Remains

Species	Minimum number of individuals	Percent minimum number of individuals	Bone count	Percent bone count
Cow	1	10%	1	<1%
Pig	7	70%	209 (87 teeth)	83%
Bird	2	20%	37	15%
Unidentified	--	---	5	2%

Structure II, and a marked lack of domestic activity in the area of Structure I and the surrounding outbuildings.

Glass

Concentrations of bottle glass fragments (including jars and other glass containers) were most dense in the area directly east of Structure II and north of Fenceline V (Figure 60). Bottle glass distribution indicated the area between the farmhouse and Structure II as the center of domestic activity at the Buchanan-Savin Farmstead.

The first of two areas of high window glass density was located adjacent to the east side of the farmhouse, where a window was extant at the time of excavation (Figure 61). A second area was located to the east of Structure II. Window glass densities in this area could indicate the location of window(s) in the east side of Structure II, or a trash disposal area. The Savin trash burning barrels were within the same area.

Brick

Brick by weight was evenly distributed across the excavation site with slight increases close to the farmhouse which had many brick components (Figure 62). A small brick concentration south of Structure II was also evident.

Nails

Cut nails, wire nails, and all nails combined were plotted as to their distribution in the plow zone. Five hundred and sixty-five cut nails were identified from the plow zone survey. The occupation of the Buchanan-Savin Farmstead corresponded with the date range for cut nails (1830-1880). Thus, the cut nail distribution was one indication of which buildings were constructed during this period. The areas that yielded the greatest concentration of cut nails were positioned between Structure III and Outbuilding IV, and also west of Structure II (Figure 63). Distributions of cut nails indicated that Structures II and III, and Outbuilding IV were built before 1880 during the occupation of the Buchanan family.

Wire nails developed popularity during the last quarter of the nineteenth century and gained predominance in the twentieth century. These types of nails related to the Francis C. Armstrong, Moffett, and Savin occupations at the Buchanan-Savin Farmstead. Over 1,100 wire nails were recovered from the plow zone at the Buchanan-Savin Farmstead. A high concentration of roofing nails was located between Structure III and Outbuilding IV (Figure 64), and was probably related to roofing repairs on the farmhouse. The second area of high density is located

TABLE 23

Summary of Coins Recovered from the Buchanan-Savin Farm Site

Coin	Date	Provenience
Seated Liberty dime	1853	N85 E60 Level 1
Liberty dime	1900	N80 E10 Level 1
Lincoln penny	1920	N80 E10 Level 1
Lincoln penny	1923	N105 E30 Level 1
Lincoln penny	1929	Surface collection
Lincoln penny	1934	N85 E0 Level 1
Lincoln penny	1937D	N85 E0 Level 1
Lincoln penny	1948	N85 E0 Level 1
Lincoln penny	1956D	N45 E35 Level 1
Lincoln penny	1956	N60 E35 Level 1
Jefferson nickel	1957	N45 E35 Level 1
Lincoln penny	1957D	N85 E0 Level 1
Eisenhower dime	1959	N60 E35 Level 1
Lincoln penny	1961D	N45 E35 Level 1
Lincoln penny	1961D	N60 E45 Level 1
Jefferson nickel	1963D	N0 E65 Level 1
Lincoln penny	1963	N65 E45 Level 1
Lincoln penny	1968	N60 E50 Level 1
Lincoln penny	1970	N75 E70 Level 1
Quarter	1972	N30 E20 Level 1

*All coins were of United States issue.

around Outbuilding II and Outbuilding III. This concentration would have represented the construction of more recent farm buildings or repairs to older ones.

The distribution of all nails (8,821 total) revealed a high density of nails clustered to the east of the farmhouse and around Structure III (Figure 65). The distribution of nails at the Buchanan-Savin Farmstead defined the locus of archaeologically derived buildings.