

quarries in Mill Creek and Pike Creek valleys (Cooch 1936:41-46), and the need for repairing the heavy wagons used in hauling the limestone, served as the catalyst for the creation of a separate wheelwrighting establishment. The wheelwright shop was torn down in 1900. The archaeological remains of the wheelwright shop were badly damaged by house construction in 1900, pathway construction in the first half of the twentieth century, and road widening in 1964.

CONCLUSIONS AND RECOMMENDATIONS

The final archaeological investigations at the Mermaid Blacksmith Shop and Stable (7NC-D-106B) and Wheelwright Shop (7NC-D-106C) uncovered the remains of both of these structures, as well as associated sheds and features. Both sites had been badly damaged in 1964 when DeIDOT widened Limestone Road, and most of the actual shop areas for both structures were demolished and destroyed. However, a surprisingly large number of features and a sizable collection of artifacts were recovered from the sites.

The excavations at the blacksmith shop site provided researchers with an opportunity to examine the material remains and documentary evidence of the rural blacksmithing trade in the Delaware Piedmont between circa 1730 and 1900. The management plan for Delaware's historic archaeological resources suggests that industrial shops can best be investigated using the Manufacture and Trade research domain. Included under this heading would be investigations of site location and use, shop layout, landscape and architectural alterations, the production process (including fuel, raw materials, and products), patterns of work behavior, and the domestic lives of the workers themselves (De Cunzo and Catts 1990:19-21).

Features related to the stable, the shop, a fuel shed, and a horseshoeing shed were discovered at the site, along with large amounts of scrap iron and slag. Evidence of some activity areas, particularly trash areas, were revealed by the plotting of plow zone artifact distributions and densities. The majority of the metal artifacts recovered were related to the shoeing shed, with smaller amounts of debris from horse furnishings, wagon parts, and scrap metal forming the balance of the assemblage.

Documentary investigations at the Mermaid intersection found that the history of the Mermaid Tavern and associated shops were an integral part of the history of the Ball, Derrickson, and Walker

TABLE 23

Faunal Material Distribution by Feature

Feature number	Species	Number of Identified Specimens
1	aves	9
	cow	4
	pig	2
	rabbit	1
	unidentifiable mammal	7
	Total	23
13	aves	5
	unidentifiable mammal	2
	Total	7
15	unidentifiable mammal	1
	Total	1
17	rabbit	1
	Total	1
	TOTAL	32

TABLE 24

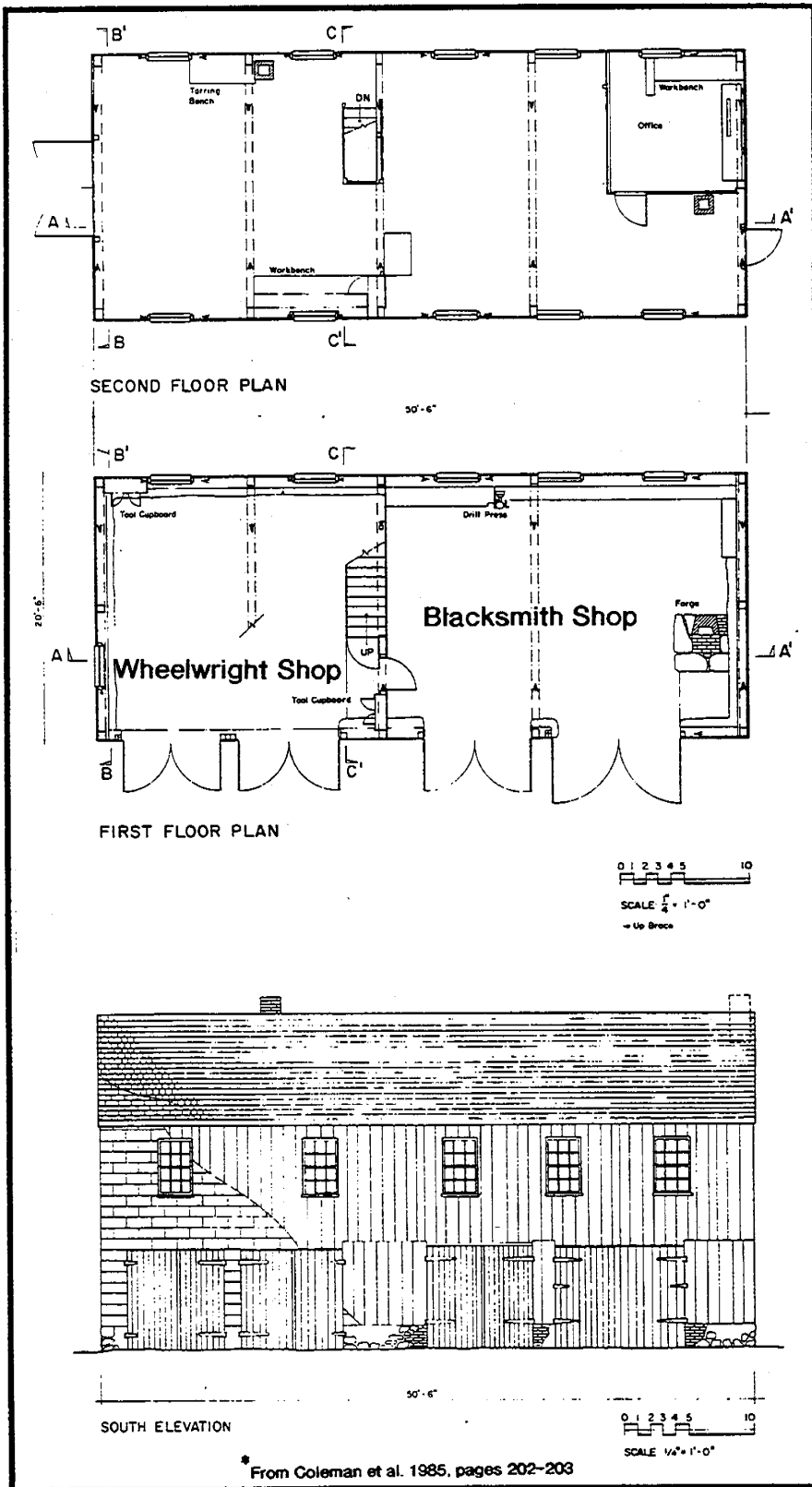
Faunal Material Distribution by Species

Species	Number of Identified Specimens	Percent of Total	Modified	Age	Minimum Number of Individuals	Number of Identified Specimens/Minimum Number of Individuals
Aves	14	44	1 knife marks			
Cow	4	13	1 knife, 2 saw marks	1 is < 3.5-4 y	2	2
Pig	2	6	--	1 is < 3.5 y	1	2
Rabbit	2	6	--		1	2
Unidentifiable Mammal	10	31	2 calcined, 2 knife, 3 saw marks			
Totals	32	100%	11			

families of Mill Creek Hundred. The Ball family was the earliest owner of the Mermaid tract, originally coming to Mill Creek Hundred in the early-eighteenth century and operated a smithy in the vicinity for nearly a century. Blacksmithing was a Ball family occupation, and the knowledge of metallurgy and artifice was passed down through several generations of smiths. The Ball family was responsible for the construction of the structure that today is known as the Mermaid Tavern, and a blacksmith shop was probably located across the Limestone Road by at least 1750. The Walker family and its descendants

FIGURE 41

Floor Plan and Elevation of the Wilson-Slack Agricultural Implements Works, Newark, Delaware

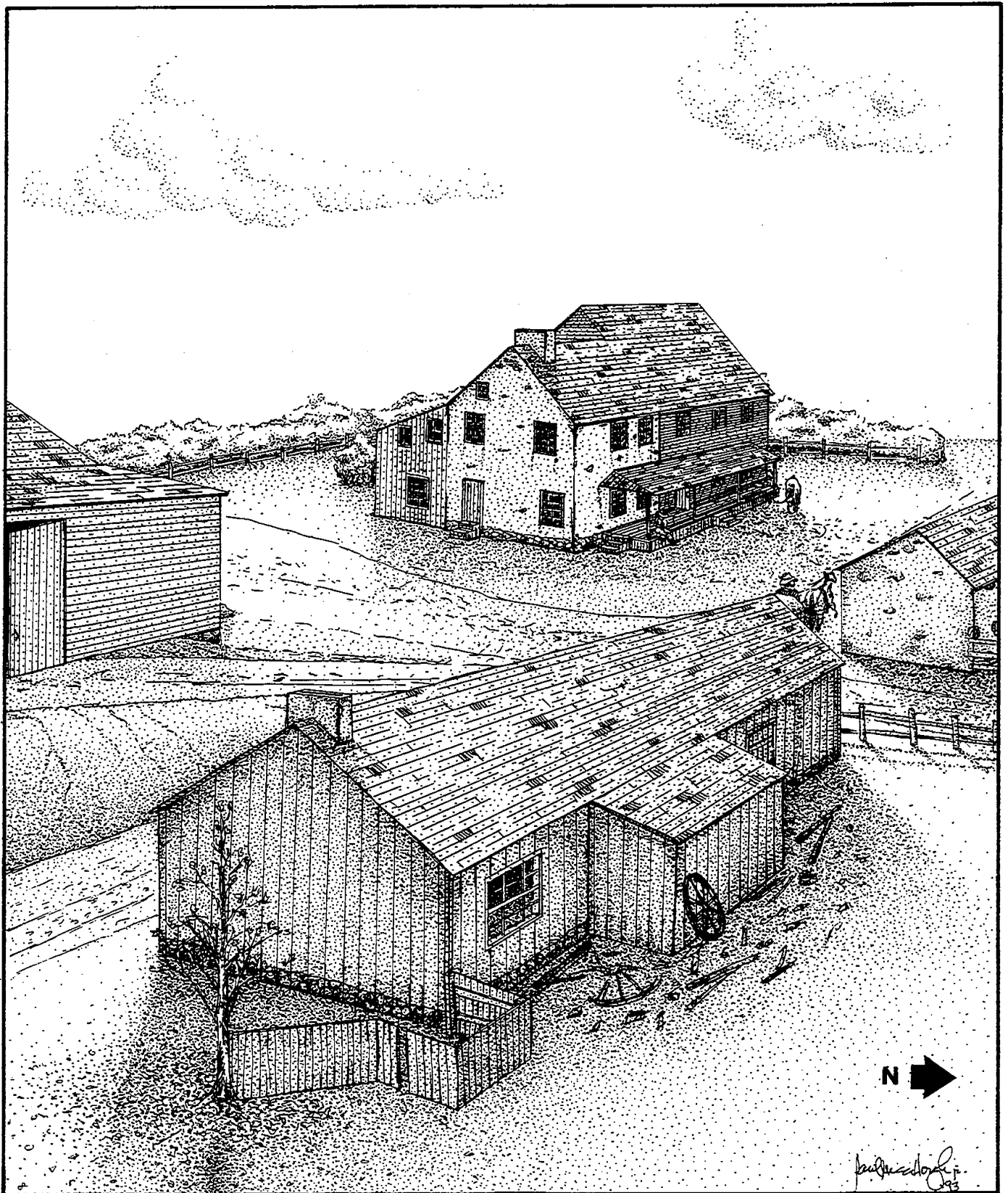


followed the Ball family's long residence at the site. Beginning in 1829, and lasting with only slight interruption, until the present, the Walker's operated the Mermaid tavern and hotel until 1869, and leased the blacksmith and wheelwright shops. Between the Ball and Walker ownerships, the Derrickson's, a wealthy farming family in the vicinity related to the Balls, briefly held the land.

Much of the archaeological evidence is related to the stone stable and shop constructed by the Ball's during the last half of the eighteenth century until about 1816, when William Ball [4] died and the land passed out of the family. The stone fuel shed located north of the shop was probably built circa 1830, about the time that Samuel

FIGURE 42

Mermaid Wheelwright Shop Reconstruction, circa 1850



Walker purchased the land.

The scrap iron piles and shoeing shed, and the debris within the shoeing shed were associated with the occupation of the shop by Milton Steel, a boarder at the Mermaid Hotel during the second half of the nineteenth century (Figure 32). In the censuses and state directories he referred to himself variously as a blacksmith, post master, and machinist. His shop appears to have been a small-scale smithing business aimed at the teamsters that frequented Limestone Road, and at the local agricultural community. The shop and stables were torn down in 1900.

The archaeological remains of the Mermaid wheelwright shop dated from the middle of the nineteenth century to 1912, when the shop was torn down and the Walker House constructed. Features related to the shop -- a small shed, and the alteration of the Walker House porch -- were discovered at the site. Due to post-occupational site disturbances, few artifacts were recovered, but some indications of activity areas were suggested.

The wheelwright shop was constructed during the Walker ownership of the Mermaid property, between 1827 and 1849. Like the blacksmith shop across Stoney-Batter Road, the wheelwright shop was leased by the Walkers to an unknown tenant. Much less evidence of the kind of work conducted at the site was discovered archaeologically. The shop was probably similar to the blacksmith shop, providing limited services to local customers, particularly the limestone quarry wagons and hotel guests (Figure 42). The demise of the Mermaid Hotel in 1869 probably reduced the business at both shops considerably. By the end of the century, the availability of cheap, ready-made hardware and the proximity of larger smith shops combined to close the Mermaid blacksmith and wheelwright shops.

The archaeological investigations at the Mermaid shops have provided evidence of the material remains of a rural industry that was once commonplace on the Delaware landscape. It was remarkable that so much of the physical evidence of the shops were still intact, even after demolition, house construction, and landscaping, at the turn of the century, and subsequent road widening in 1964. Despite these disturbances, a large number of extant features were discovered suggesting that sites (domestic and industrial) in similar settings need to be carefully investigated during Phase I and II testing to determine their cultural integrity and conditions. While the results of final archaeological investigations at the shops were not as conclusive as was expected, the analysis of smithing tools, plow

zone artifact distribution patterns, and background research can be applied to the interpretations in the archaeological investigations at sites of rural artisans.