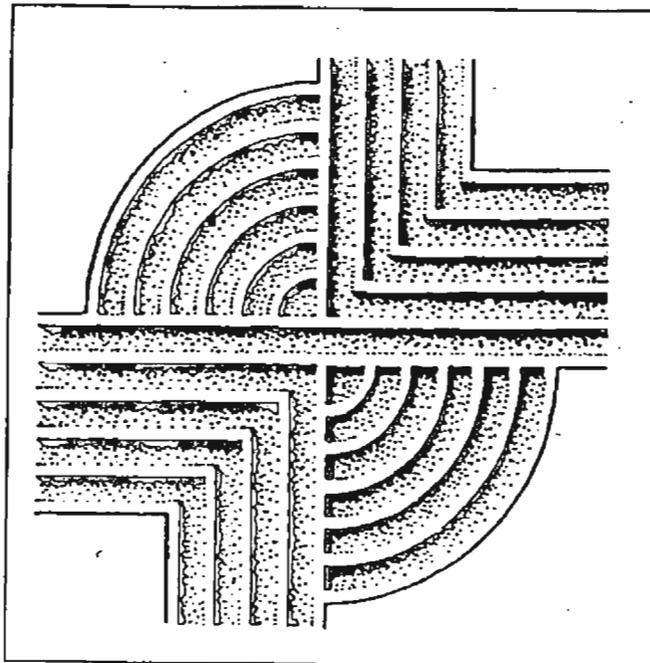


WOOD ANALYSIS OF FOUR COFFIN SAMPLES, CHARLESTON COUNTY, SOUTH CAROLINA



RESEARCH CONTRIBUTION 1

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Introduction

This paper reports on the examination of four coffin wood samples provided by Dr. Ted Rathbun, Department of Anthropology, University of South Carolina. Three samples were submitted from 38CH778, each representing a distinct coffin (D-4b, A-2, D-2). These samples date from the mid-nineteenth century and sample D-4b is dated to 1863 by a name plate found in the burial. These samples are from a black cemetery, used by slaves and/or free blacks. The cemetery, prior to removal during the summer of 1984, was situated in Mount Pleasant, South Carolina, just north of U.S. 17/701 By-Pass. One sample was provided from the Hutson Crypt, located at the Circular Congregational Church in the City of Charleston, South Carolina. No precise date is available for this sample, although it is presumed to date from either the eighteenth or nineteenth century. Burials in this churchyard are of high status white Charlestonians.

All samples were broken to expose a fresh transverse surface. The wood was then examined under low magnification (7 to 30x). The samples were identified, where possible, to the species level using comparative samples, Panshin and de Zeeuw (1970), and Koehler (1917).

38CH778 Samples

Each of the three samples measured approximately 4-5 by 2-3 by 0.8-1.2 cm. The samples contained abundant rootlets and small quantities of adhering sand. In each case the wood was found to be fairly sound, although

wood density was greatly decreased through the action of fungi decay. No evidence of insect attack was noted.

All three specimens appear to represent pine (Pinus sp.) and it is probable that they represent longleaf pine (Pinus palustris). Longleaf pine is very fire resistant except immediately after germination, and is therefore considered a fire subclimax species which originally existed in pure stands in the coastal plain. This species is generally classified as intolerant of competition, however, and is often replaced by other pines or hardwoods (Fowells 1965:388). Longleaf pine was abundant in the colonial and antebellum periods (Croker 1979) and was a significant source of naval stores and building materials. The importance of this species continued into the early twentieth century. Croker (1979:34) and Panshin and de Zeeuw (1970:456-457) indicate that because of the high resin content of the heartwood (10 to 25%) longleaf pine is resistant to rot and insect damage. This resistance is observed in these samples. The wood from coffin/burial A-2 is either more recent or had a higher resin content than the other two samples, based on its relatively better preservation.

The samples represent wood cuts with the rings running parallel to, perpendicular to, and at a 45° angle to the long dimension of the end of the plank. No evidence of saw or planing marks were observed on the examined woods. The planks were from 3/8 to 1/2-inch in thickness, based on the available samples.

Hutson Crypt

A single wood sample from the Hutson Crypt at the Circular Congregational Church in Charleston, was also examined. The specimen was roughly 6 by 2 by 0.8 cm in size and was clean of rootlets and soil. The

wood was quite soft with considerable reduction in the density. The sample evidences considerable fungal attack, although no evidence of insect damage was noted.

This sample, because of its advanced state of decay, could not be identified to even a genus level. The wood does represent a diffuse porous hardwood, such as birch, maple, basswood, gum, or yellow poplar. The wood appears to be waxed on the exterior, based on a black surface layer which has a slight shine and which is slightly harder and better preserved than the underlying wood. The interior side of the wood has a deposit of white, flaky material which could not be identified.

Summary

Although the samples are quite small, it is tempting to suggest that they represent two extremes in social status, as reflected in the coffin wood and its preparation. Such a social dichotomy is certainly suggested in the literature dealing with burials, but rarely is it verified in the archaeological study. Common pine with random cuts was used at 38CH778 to bury lower status blacks, while a more exotic hardwood was used for at least one of the coffins in the Hutson Crypt. This hardwood was further prepared by careful polishing and finishing with a waxy substance. The hardwood cut was not identifiable, although the woods used were apparently thin (3/8-inch).

Sources Cited

- Croker, Thomas C., Jr.
1979 Longleaf Pine: The Longleaf Pine Story. Journal of Forest History 23:32-43.
- Fowells, H. A.
1965 Silvics of Forest Trees of the United States. Agricultural

Handbook 271, U.S.D.A., Forest Service, Washington, D.C.

Koehler, Arthur

1917 Guidebook for the Identification of Woods Used for Ties and
Timbers. U.S.D.A., Forest Service, Washington, D.C.

Panshin, A.J. and Carl de Zeeuw

1970 Textbook of Wood Technology, vol. 1. McGraw-Hill, New York.

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