Monte Cristi Pipe Wreck Report

From 13 June to 17 August, 2001, archaeologists and volunteers sponsored by INA excavated the remains of a northern European merchant shipwreck on the north coast of Hispaniola. Archaeological data indicate the wreck is the remains of a merchant trader; historical and geographical information suggest the vessel may have ventured in search of salt, or, perhaps, to trade with contrabandistas or boucaniers common to the region during the second half of the seventeenth century. Comparative cultural material from contemporary sites indicates most cargoes were intended for European-American outposts on the eastern seaboard of what is now the United States of America, although at least one cohort of trade goods was specifically for Native Americans.

The “Pipe Wreck” lies at a depth of 4.4 m. in a bed of sea grass (Thalassia testudinum) at the northern end of Monte Cristi Bay, approximately 80 m east of Isla Cabra, the small island that served as base camp for the 2001 INA team. The wreck earned its moniker from the inordinately large number of clay tobacco smoking pipes that were carried as cargo aboard the vessel. The visible site is characterized by five large concretions, three of which appear to be conglomerations of iron and copper-alloy artifacts; two are most likely solid slabs of iron (Figure 1). All are covered with a thick layer of calcium carbonate and provide ample substrate for the reef ecosystem that characterizes and, to a great extent, defines the extant hull located beneath or in close association with these concretions.

The 2001 campaign focused on a region immediately southwest of the extant hull (Refer to Figure 1), where the prevailing wind and currents dispersed large quantities of cargo from the foundering vessel. Divers accessed this area from a wooden platform, the R.V. Rummy Chum III, positioned directly over the wreck (Figures 2 and 3) and were supplied with air from a low pressure (5 h.p.) compressor. Four divers were deployed twice a day using this nargileh/hookah system, with times ranging from 1.0 - 2.5 hours per dive. Once the turtle grass was extracted, the mostly sand overburden was lifted by hand-fanning and removed by a Venturi dredge comprising a water pump powered by an 8 horsepower motor. Most often, two divers were stationed at the head of the dredge, one to remove the overburden and the other to assist with artifact extraction.

Figure 1. Site Map.

Figures 2: the Rummy Chum diving platform with hookah system.
collection (Figure 4). Likewise, two divers were positioned at the dredge exhaust to monitor the spoil as it passed through a small-mesh wire screen (Figure 5). The research area was divided into 2 m x 2 m grid squares and divers excavated in 1 m x 1 m quadrants within these squares. Artifacts were distributed throughout the substrate in depths of 30 - 85 cm (Refer to Figure 4). There is sufficient evidence to suggest that this deposit of pipes, ceramics, metal, and wood fragments, as well as assorted organic artifacts, extends well beyond the areas that were excavated this past summer.

Two wooden Dominican yolas - El Arawaco of 20 feet LOA and La Madrugada, 22 feet LOA -- were used to transport personnel and supplies from the island to the dive platform, as well as to travel to the nearby town of Monte Cristi to provision the camp (Figure 6).

Several research questions have defined the investigation since its conception: does the archaeological record suggest an inbound or outbound voyage? Was the north coast of Hispaniola the primary destination, or was the ship en route to North or South America? In light of the fact that the wreck has been heavily salvaged for over three-and-a-half centuries, are there sufficient archaeological data to accurately interpret the site?

To date, there are overwhelming data - both historical and archaeological -- to indicate the vessel was inbound to the Americas and likely destined for the Upper Hudson River Valley. Furthermore, it is abundantly clear that, although heavily salvaged, the site still holds tremendous potential for future excavation, study, and interpretation.

With these tentative but suitable explanations to the preliminary research questions, researchers from the 2001 campaign sought information to answer an additional question: why did the vessel sink in the shallow water of a relatively well-protected bay?
Artifacts

Iron
A small group of iron artifacts adhered to an outlying coral reef 60 m northwest of the site may indicate that the vessel ripped open its starboard hull while trying to enter Monte Cristi Bay, therefore addressing the preliminary research question for the 2001 season. These artifacts -- mostly cooking cauldron fragments -- match well the iron fragments recovered directly from the wreck in past campaigns. A total of 262 new fragments were excavated from the 2001 research area.

Pipes
Two thousand three hundred and sixty-one pipes were raised during the 2001 campaign, of which 2,219 (94%) had bulbous bowls (BB) (Figure 7); the remaining 142 (6%) were the funnel elbow-angled (FEA) variety, a favorite European trade item for the Native Americans of the Upper Hudson River Valley. An additional 1,998 bowl fragments (BB 1,944 and FEA 54), along with 15,050 stem fragments were recovered.

Ceramics
Three ceramic types characterize the wreck cargo: Rhenish stoneware from Germany and two varieties of glazed earthenwares that likely had their origins in Holland (Figure 8). Additionally, seven sherds of a lesser known green-glazed earthenware -- thought to represent the ship’s utility wares -- were recovered, as was a single fragment of German Westerwald pottery. Unglazed earthenware ceramics may well represent degraded blue-and-white or white-glazed earthenware. Overall 1,218 sherds were excavated in 2001.
Other Artifacts
In addition to numerous pipes and ceramic sherds, 67 shards of glass, ranging from dense green case-bottle bases and body shards to delicate façon-du-Venice tableware, were excavated from the site. Other artifacts included 1,025 wood fragments -- 517 (50.43%) of which were charred -- as well as 130 small concretions and 146 organic artifacts. The majority of these organic samples comprised bone and bone fragments of cattle, pig, and sheep (or goats). Previous campaigns have yielded a total of 209 animal bones, most of which have been from domestic livestock, although several were from the ship’s vermin population (Rattus rattus).