Current Research:
Discovery and Recovery of a 14th Century Dugout Canoe on the Red River, Caddo Parish, Louisiana

Jeffrey S. Girard¹ and Charles R. McGimsey²
¹Northwestern State University of Louisiana.
²Louisiana Division of Archaeology

In June 2017, Jenna Bradley and Robert Cornett were boating down the Red River in northern Caddo Parish, Louisiana, when they noticed an unusual log protruding from a sandy bank near the town of Belcher. After realizing that it was a dugout canoe, they contacted the Louisiana Department of Wildlife and Fisheries, and eventually word of the find was transmitted to state archaeologist Chip McGimsey at the Louisiana Division of Archaeology. The following day, Bradley and Cornett led Jeffrey Girard and Jameel Damlouji of the Louisiana Archaeological Society to the site. It was obvious that it was a dugout canoe of comparable size and form to one found in 1983 at the base of a steep cutbank on the east side of a now cut off channel of the Red River approximately 12 km (7 miles) downstream (Figure 1). At the time, the 1983 canoe was thought to be the largest prehistoric watercraft in the Southeastern United States measuring 9.35 m (or 30 ft. 8 inches) long and 56 cm (1 ft. 10 inches) in diameter. The newly discovered canoe is a little larger, measuring 10.2 m long (33.4 ft.) and approximately 60 cm (2.0 ft.) in diameter. Both boats have similar shapes with step-like seats carved into the ends (Figures 2 and 3), and both probably are made from cypress logs, although the wood of the recent find has not been identified with certainty.

A sample of wood from the recently found canoe was radiometrically dated to 590 ± 30 B.P., calibrated at 2 sigma to A.D. 1298-1413 (Beta- 467673), within the Middle Caddo period. The boat appears to date earlier than mound construction at the nearby Belcher site (16CD13), but is contemporary with occupation of the Willow Chute locality a few miles downstream on the eastern side of the Red River floodplain. Two radiocarbon dates on the earlier boat suggest it was made much earlier, in the early twelfth century A.D., during the Early Caddo period when the Mounds Plantation site was in use.

The physical context of the two boats differed significantly. The 1983 boat was found embedded in clay deposits at the base of a nearly vertical bank, probably resting on a deeply buried surface. Removal necessitated burrowing into the bank and cutting the canoe into three sections for transport. The newly discovered boat rested on about a 30 degree slope in shallow, sandy deposits. It is possible that it had been displaced from upstream, perhaps as recently as the spring of 2016 when the region experienced massive floods, as it is unlikely that it would have preserved for several centuries in this context.

Because it was situated on the bank, above the normal water level of the river, it belonged to the Kavanaugh LLC and McKneely Family Partnership, landowners of the adjacent property. The families
donated the boat to the state a few days after the discovery, and efforts began to extract it from the site and transport it to the Conservation Lab at Texas A&M University for preservation. Paul Dickson of Shreveport offered the use of a semi-trailer truck and a driver from his company to take the boat to College Station, but removing the canoe from the bank presented significant logistical problems. Because of the immense size and weight, it seemed too risky to tow or place it on a boat or barge. As plans were being formulated to carry or drag the canoe up the slope into an adjacent field, tropical storm Cindy approached from the Gulf. On the day before the storm hit, Dickson arranged for home builder Michael Crager and a 10-man carpentry crew to construct a wooden frame platform on which to place the dugout (Figures 4 and 5). They used blankets and packing materials provided by Dickson to wrap and protect it during transport. Local equipment operator Tony Hale removed several feet of sediment from a sandy ridge that lay between the slope and the adjacent cultivated fields using a bulldozer that also was used to drag the platform and boat up the slope and onto a flatbed trailer. The trailer was then transported to the nearby town of Gilliam, where the boat was loaded onto the truck with the assistance of a loading dock and forklifts at the Helena Seed Company.

The next day, McGimsey accompanied the truck and canoe to Texas A&M University where the canoe was placed in a vat and submerged in water.

Figure 2. View downslope at the uncovered dugout.

Figure 3. Bow and stern cross sections and profile of the dugout.
(Figure 6). At the conservation lab, polyethylene glycol (PEG) will be introduced to slowly replace the water in the wood and provide support and stabilization to the structure. Once the PEG has completely impregnated the wood, the canoe will be placed in an enormous freeze-dryer where, over the course of several months, the water will be drawn out of the wood. A 3-D scan of the canoe will be made as part of the conservation efforts. The entire conservation process is estimated to take three years. Although the exact location has not been determined, plans are underway to return the canoe to Louisiana for public display.

Figure 5. The dugout on the platform with packing materials for transport.

Figure 6. The dugout hoisted above the preservation vat at Texas A&M University.

Figure 4. Wood platform constructed next to the dugout.