Rivers Across

Sweet Grass County Lewis & Clark Bicentennial Commission

Expedition used several modes of transportation

By MARENA WATTS

If you were to go on a trip to explore something of interest to you, wouldn't you get in your car and drive there? In 1803, when Jefferson gave the orders to Meriwether Lewis to "...explore the Missouri River and such principal stream of it as by it's (sic) course and communication with the waters of the Pacific ocean, whether the Columbia, Oregon, Colorado or any other river may offer the most direct & practicable water communication across this continent for the purpose of content" they did not have that option ("Presidential Mission" 1).

To carry out such a task, Lewis and Clark had the means of traveling by foot, horse, wagon, and boats. The boats included keelboats, bullboats, canoes, and pirogues.

Meriwether Lewis left Washington on July 5, 1803 heading to Pittsburgh, Pennsylvania. When in Pittsburgh, Lewis supervised the construction of a 55-foot keelboat. After this construction, Lewis set out in the keelboat down the Ohio River, where he picked up William Clark at Clarksville, Indiana. While in Clarksville, Lewis gathered the first of their recruits ("Preparations" 2). Lewis then went ahead of Clark to St. Louis, Missouri on horseback while Clark and the newly recruited men took the keelboat up the Mississippi River.

Clark and the crew set up winter quarters in Illinois on the Wood River. Finally, in mid-May Lewis, Clark, and some 42 odd men set out for the Pacific Ocean. They started the expedition that would eventually travel approximately 2,151 miles to reach the Pacific in the keelboat and two smaller boats called pirogues (VanOrden 1). The keelboat carried 10-12 tons of supplies and the pirogues carried about 10 to 12 men apiece ("What's A Pirogue? What's A Keelboat?" 1).

The expedition started with these modes of transportation and successfully maximized their capabilities. The Corps' largest vessel was the keelboat, which was designed by Lewis. A keelboat has a keel to help it go straight in the water, and the keelboat was considered "the workhorse of the rivers" ("What's A Pirogue? What's A Keelboat?" 1).

The Corps had many methods of maximizing the use of the keelboat, as they did with every "tool" they had. They would use the sails if the wind was right. Poles were used if the river became too shallow to row. Oars were also used if they were needed, and as a last resort, cordelling was used only when the water was extremely shallow or rocky or extremely deep (Greenwood 1). Cordelling involves men on shore pulling the boat(s) upstream with heavy ropes.

The Corps started out with two pirogues along with the keelboat that Lewis designed. One pirogue was red and the other was white. Pirogues are flat-bottomed boats that would allow the men to float in very shallow water. Sails could be used, but mainly the men rowed in pairs.

Dugout canoes were made and used during the winter that the group stayed at Fort Mandan. The Corps used their axes to chop down, hollow out, and chip ponderosa pines into the shape of dugout canoes. The men had difficulty with this task because by this time at Fort Mandan they were struggling from severe intestinal problems. The expeditionists received a huge advantage when the Nez Perce Indians helped them speed up the process of making dugout canoes by showing them how to burn out the centers of the dugouts ("Corps of Discovery Dugout Canoes 1). Each dugout canoe was made from one entire tree to carry six to seven passengers.

Bullboats were another form of transportation for the expedition. Bullboats were formed by stretching animal hide, usually buffalo or elk, across a circular frame of willow poles and sealing it with pitch or beeswax ("Bullboats" 2). Although Lewis's first bullboat did leak, the crew soon perfected the construction. They used the bullboats when their horses were stolen. These boats carried their baggage and food just as the others did.

Lewis and Clark and the crew also relied on horses, wagons, and their own strength for effective means of transportation. The Corps had to walk frequently, and if they encountered waterfalls or rapids in the boats, they had to pull them. The Corps was, all in all, well prepared and maximized their equipment, successfully completing their journey to the Pacific Ocean and back.

Works cited include:

"Bullboats." *A Changing Land.* n.d. January 27, 2003 <http://www.sd4history.com/Unit4/bullboats.htm>.

"Corps of Discovery Dugout Canoes." *LewisClarkIdaho RoadTours.* 2000. January 14, 2003 <http://www.lewisclarkidaho.com/pages/dugouts.html.>.

Greenwood, Terri. "Transportation with Lewis and Clark." *North Dakota Lewis & Clark Resource Collection.* n.d. January 14, 2003 <http://www.Inc.k12.nd.us/Resources/LessonPlans/Terri/Transportationppt.htm.>.

"Preparations." *Discovering Lewis & Clark.* 1998. January 9, 2003 <http://www.lewis-clark.org/journal_prep.htm.>.

"Presidential Mission." *Discovering Lewis & Clark.* 1998. January 9, 2003 <http://www.lewis-clark.org/journal.htm.>.

VanOrden, Ginger. "Lewis and Clark Expedition." *Social Studies and Geography 5th and 6th grade.* n.d. January 14, 2003 <http://www.montana.edu/cybertour/socialstudies/6to12/vanordeng/>.

"What's a Pirogue? What's a Keelboat?" *Discovery Expedition of St. Charles* n.d January 17, 2003 <http://www.lewisandclark.net/boats.htm.>.

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