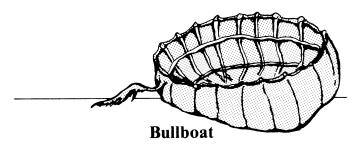
## management Missouri River Boats moreowers

The longest river in the United States, the Missouri River begins at Three Forks, Montana, where three mountain streams converge. As the river twists and turns through soft deposits of soil left by ancient glaciers, the Missouri becomes muddy and brown with silt. North of St. Louis the Missouri joins the Mississippi River, and together the two rivers form the longest river system in the world, draining into the Gulf of Mexico. The Missouri River and its tributaries drain 529,300 square miles in the United States and 9,700 square miles in Canada.

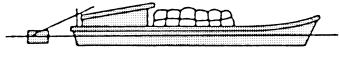
Early settlers nicknamed the Missouri "The Big Muddy." The river meandered across a thickly wooded bottomland which flooded periodically. The river varied with the seasons, rising with the spring thaws in the Rockies and drying to a narrow stream in some places during the summer. These fluctuations caused the river to change course frequently. Trees and banks were pulled into the river and then reappeared as "snags" in shallow spots. Sandbars formed and then were swept away again.

For more than a century, the Missouri River was the single most important means of entrance into the unsettled regions of the upper midwest. Although a natural highway, travel was made very difficult by swift currents, sandbars, dead tree trunks, hidden shallow areas, mud and winds that could literally blow a boat out of the channel. Because of these navigating hazards, some boats were better equipped than others to meet the challenge of the Missouri River.



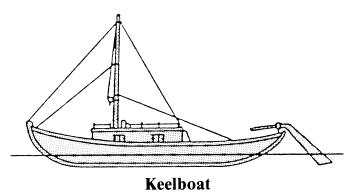
Among the earliest boats on the river was the bullboat. Used by the Mandan, Hidatsa, and Arikara, the bullboat was the principal craft for water navigation by Indian tribes living on the banks of the river. These boats were made and navigated by women. Green willow poles bent into a circular form and reinforced with willow ribs formed the structure of the

boat. A buffalo bull hide stretched over the frame with the fur outside completed the boat. The animal's tail was not removed; it indicated the stern or back of the boat. This ensured the fur fibers would not create friction if paddled against the current. Bullboats varied in size from a one person boat made from one buffalo hide to a boat made of several hides accommodating as many as eight people.



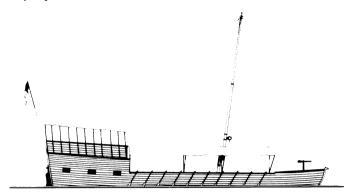
## Mackinaw

Mackinaw boats were relatively small flatbottomed boats used during the fur trade era. Constructed locally when needed, and averaging up to 70' long, these boats were made from unfinished lumber. Typically, these boats were constructed at posts like Fort Union, loaded with furs, and sent down river to St. Louis. Carried by the current, mackinaws could travel at a rate of 150 miles per day. Because this type of boat could not navigate up stream, upon arriving at St. Louis, the mackinaw was sold for its lumber.

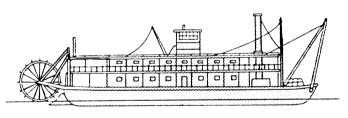


The basic mackinaw boat design was improved by the addition of a keel which looked like a fin running the length of the boat bottom. Keelboats were similar in length to a mackinaw, averaging 70' long. Built with a cabin and sail, these boats could, however, travel both up and down the river hauling several tons of cargo. Several methods of propelling the boat up river were

needed. Windpower was used for the sail and oars were sometimes used. If the river bed was firm, the boat could be poled; large poles were used to push the boat forward. Cordelling was a common technique. As many as 20 men on shore pulled the boat with a towline or a cordelle. The line was tied to the top of the mast raising it above the bushes on shore. A keelboat, by sailing, poling, and cordelling could travel 15 miles a day upstream.



This particular 55' long boat does not resemble the typical keelboat on the Missouri River. Used by Lewis and Clark on their exploratory voyage up the Missouri River in 1804-6, this boat was probably one of the first keelboats on the river. Built to Captain Lewis's specifications, the design resembles a 1790s Spanish river galley which was used by the military on inland waters.



## **Steamboats**

During the last half of the 19th Century steamboating was the primary method of transporting passengers and freight to the Northern Great Plains. Steamboats first appeared on the river near St. Louis in 1819. The first steamer to reach the Upper Missouri was the American Fur Company's "Yellowstone," arriving at Fort Union in 1832. Nearly 30 years later, in 1860, steamboats reached Fort Benton, the farthest navigable point on the Missouri. The steamers that travelled the Missouri were generally smaller, ruder, and less comfortable than the Mississippi River boats. The first steamers to reach the Upper Missouri were poorly equipped to meet the challenges of the river. Equipped with side-wheels, they were underpowered and had a six foot draft. By the 1850s a much improved stern-wheeler was in use. Able to carry 350 tons of cargo, it drew only 31" of water to better meet the challenges of the swift currents and shifting sand bars.

Confined to the river, steamers were losing business to the railroad. In 1873 the Northern Pacific Railroad had reached Bismarck and had by 1883 reached Great Falls, Montana. The last steamboat left Fort Benton in 1890.

Gasoline packets replaced the steamboats. By 1896 these small faster stern-wheelers were hauling grain between Bismarck and nearby ports. Gasoline packets continued to operate on the Missouri River well into the 1930s.

As their final commercial use on the Missouri, riverboats became ferry boats providing passage for automobiles and people prior to the construction of automobile bridges in the 1920s and 30s.

Illustrations from The Rivermen.

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