

The Flood of '52—Preface Missouri River Boisterous Marauder Since Earliest Records

The following pages will tell, by word and picture, the story of the greatest recorded flood on the unruliest of North American rivers.

But before we get into that story we offer as a preface some geographic and historic background of the river that in April, 1952, flung its most raucous taunt against humanity.

The Missouri has been a boisterous hell-raiser ever since man first laid eyes on it.

The Canadian explorers, Father Jacques Marquette and Louis Joliet, came upon the Missouri in 1673 as they floated down the Mississippi. The Missouri was spewing its summertime rise into the Father of Waters.

Farther Marquette described it in his journal:

"I have seen nothing more frightful. A mass of large trees—real floating islands. They came rushing so impetuously that we could not, without great danger, expose ourselves to pass across."

The Missouri enters the Mississippi just above St. Louis. Above that union, it weaves and twists for a river distance of 2,465 miles.

Its farthest reaches tap the rivulets that cascade from glacial snowcaps dipping down the east slopes of the Rockies.

Intermediate tributaries feed it silt-laden waters that originate on semi-arid plains where nearly all of a year's rainfall may descend in two or three torrential storms.

Its drainage area covers 530,000 square miles—one-sixth the land area of the continental United States. Nebraska is the only state wholly drained by the Missouri, but parts of nine other states and a small slice of the Canadian Provinces of Alberta and Saskatchewan help keep it supplied with water.

The river itself begins as a union of three mountain streams which merge near the pretty little town of Three Forks, Mont. These are the Jefferson, Madison and Gallatin Rivers, all rising in the peaks west and north of Yellowstone National Park.

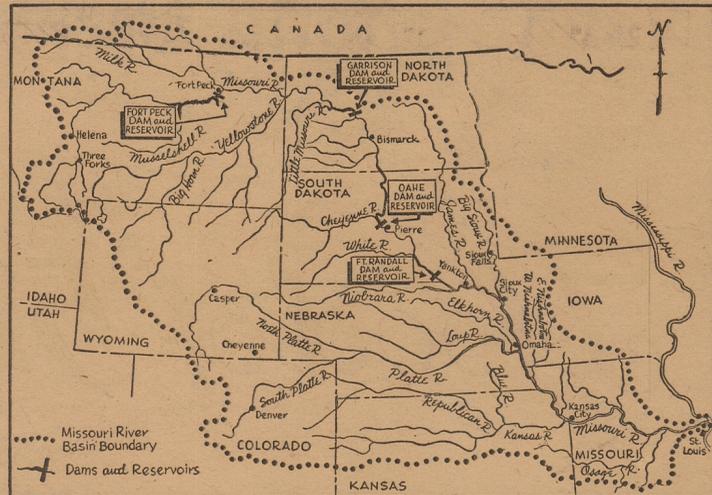
Such a clear and cool stream is the Missouri at this junction that if you visit it in summer you are almost certain to see fighting rainbows rising to the tantalizing flies of wading fishermen.

The river runs northward, then eastward, along the northern part of Montana. Where it enters North Dakota just above Williston, picking up the turbulent discharge of the Yellowstone, it begins a south-eastward slant along the eastern rim of its drainage basin.

And as it moves along, dropping from an elevation of four thousand feet at Three Forks to four hundred at St. Louis, it gains in muscle from the tributary systems that flow mostly from the west.

The Yellowstone, wings with it the Big Horn, Tongue and Powder from Wyoming.

The Knife, Heart, Little Missouri, Cannonball, Grand, Moreau, Bad, White, James, Big Sioux drain both of the Dakotas. The Niobrara and the Plattes



Missouri Basin—This map shows some of the reasons the Missouri always has been a bad actor. Note that many tributaries in the north part of the basin flow northward. In the spring, snow on their upper reaches melts while the tributary mouths and the mainstem may still be ice-clogged. Flood control in the Pick-Sloan Plan depends mainly on four reservoirs, only one of which (Fort Peck) is completed. When the three others are finished, their flood storage space can contain a volume of water nearly twice the size of the Flood of '52.



Missouri's Headwaters—Lieut. Gen. Lewis A. Pick points to the bubbling little stream that is the Missouri River where it is formed by the Jefferson, Madison and Gallatin rivers near Three Forks, Mont. With him is Nebraska Governor Peterson. Note the trout fisherman at left.

traverse Nebraska from trickling starts in Colorado. The Kansas River combines before it reaches the Missouri at Kansas City the principal rivers of Kansas as well as the Republican and Blue from Nebraska. From the State of Missouri the Grand and Chariton, the Osage and Gasconade Rivers pour steady and sometimes overwhelming flows. Over this wide range of terrain nature can, and frequently has,

displayed a stormy temperament in several places at the same time. The products merge into the neck of the funnel that is the Missouri River itself—raging and tearing through the countryside.

When the combinations work just right, they produce the whopper floods of 1881, 1943 and 1952, which stand out above the lesser inundations that plague valley dwellers somewhere every year or two.

Historically, great names associated with the river have appeared in pairs.

There were Marquette and Joliet, the first white men to see it. Then came Lewis and Clark, the intrepid explorers who described it from its mouth almost to its source. Thomas Jefferson and Napoleon Bonaparte made the deal that added virtually all of the Missouri Basin to the United States. The basin made up about two-thirds of Jefferson's Louisiana Purchase. That 15 million dollar transaction put an original price tag of a fraction less than two cents an acre on the Missouri Basin.

More recently came Lieut. Gen. Lewis A. Pick and W. G. Sloan, who devised for the basin a system of flood control, irrigation, power production and navigation to tame and harness the river and put it to work.

Flood control features of dams on the main stream of the Missouri are designed to hold 15,465,000 acre feet of water. The Flood of '52 carried an estimated eight million acre feet above bank-full stage, little more than half the flood storage capacity of the reservoirs above Yanick, S. D., will have when completed.

Unfortunately, only Fort Peck in Montana had been completed in 1952. Its 3,500,000 acre feet of flood control storage helped by holding back water that otherwise would have added to the flood. But the Milk River, which enters the Missouri just below Fort Peck and was the original troublemaker in the Flood of '52, flowed unimpeded. So also did other downstream tributaries because the reservoirs that could have trapped them are not completed.

But the other dams are being built. Fort Randall, with 2,500,000 acre feet of flood storage, is to be closed in July this year. Garrison, with 5,800,000 acre feet of flood storage, is due for closure in the summer of 1953. Oahe is barely started but could be speeded, with adequate appropriations, to completion in 1956 or 1957. It will add 3,500,000 acre feet of flood storage.

Integral parts of the Pick-Sloan Plan, too, are the levees and flood walls at Omaha and Council Bluffs, which with almost superhuman help, saved those cities from heavy damage in the Flood of '52.

Time is still on the side of the river for another year or two. After that the man-constructed restraints will go a long way toward guaranteeing safety. Complete control will not be achieved until the maximum required safeguards are constructed.

Water Got Deep in Bartlett, Ia., and Just About Everybody Left



Water, Water Everywhere—Nearly every one got out of Bartlett, Ia., where the water really got deep. The arrow in the photo is just over the Burlington railroad right of way. Some hardy residents moved into the third floor of the high school building.

A JOB Well Done . . .

We salute the people of Omaha and Council Bluffs and the Midwest for their heroic and successful fight against the "Mighty Mo" — to all the workers — to the brave housewives who took their added work and worries in stride — we offer our sincere congratulations. We are glad to have been of service — when our help was needed.

- Boyer Lumber & Coal Co.
- Bradford-Kennedy Co.
- Chicago Lumber Co. of Omaha
- Joyce Lumber Co.
- Platner Lumber Co.
- Ashton Wholesale Service

A Job Well Done . . .

The people of Omaha and Council Bluffs—separated by a river, yet bound by a river—saw disaster coming on the floodtide of the mighty Missouri. They battled it with every resource at their command to save their homes, their industries, their cities. Somehow, it seemed all along, that such courage and spirit could not be denied. It wasn't! They won against the river.

For a job well done you have earned the undying thanks of a grateful citizenry and the deep admiration of the Nation. We are proud to be a part of such a community...proud to be friends and neighbors of such courageous people as these.

American Smelting and Refining Co.