



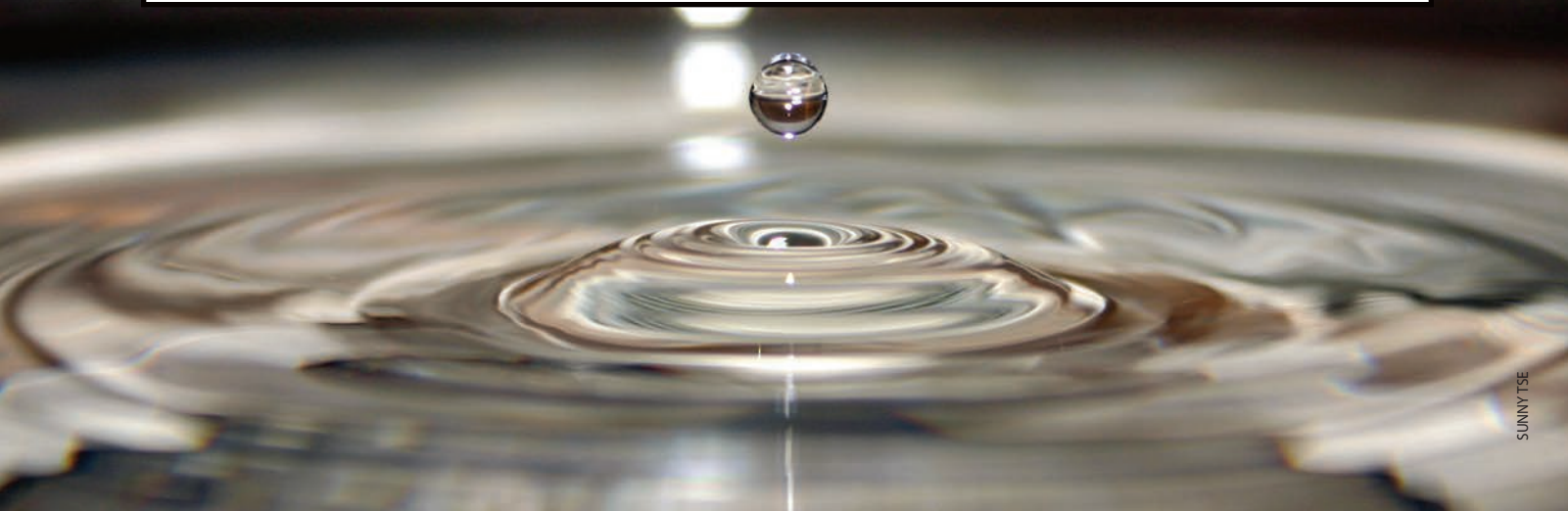
CHUCK HANEY

# The TRUE UTMOST REACHES of the MISSOURI



Were Lewis and Clark wrong when they identified  
the source of this great river?

BY DONALD F. NELL AND ANTHONY DEMETRIADES



SUNNYTSE



On Monday, August 12, 1805, the Corps of Discovery was ascending the Beaverhead Mountains just east of Lemhi Pass, toward the source of a small stream known today as Trail Creek.

Soon the stream had faded to an indifferent brook that a person could easily straddle. And here Hugh McNeal did just that. The expedition member was undoubtedly thinking of the many months of hard poling and rowing behind him when, as Captain Meriwether Lewis later wrote, he “thanked his god that he had lived to bestride the mighty & heretofore deemed endless Missouri.”

This long-awaited and momentous discovery answered two important questions on the minds of Americans at the time: Was there a practical navigable route across the mountainous country of North America via the Missouri River? And where exactly were the headwaters of that mighty river?

Lewis later wrote there was no navigable link between the Pacific and Atlantic oceans. He was right on that account. But he was wrong about his other conclusion, that the stream he, McNeal, and their companions looked down upon that August day of 1805 was the source of the river they had traveled up since their voyage began 15 months earlier in St. Louis. Two miles up the mountain from where McNeal straddled the stream, Lewis hiked to where the creek seeped from the rocks and wrote in his journal that they had reached “the most distant fountain of the waters of the mighty Missouri in surch of

which we have spent so many toilsome days and wristless nights.” Young Lewis, so accurate in his many other geographic and cartographic endeavors on the voyage, had missed the true origin of the Missouri by

other water routes in its search for a way west. But more important, to set the record straight—as it has been set for the Nile, the Mississippi, the Congo, and the world’s other great rivers. Thus, the true origin of the Missouri:



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**NOT “THE MOST DISTANT FOUNTAIN”** Captain Lewis and crewman McNeal mistakenly identified this spring on today’s Trail Creek, known as Lewis Spring, as the Missouri’s source. The river’s true origins, in the Red Rock River Valley (opposite page), would not be identified for another 90 years.

more than 100 miles.

On this, the bicentennial of the Corps of Discovery’s journey through Montana, it is necessary to finally make clear where in fact the great Missouri emanates from the earth. Not just to answer questions posed by tourists and schoolchildren. Not just to reopen the door to debate over what might have become of the expedition had it followed

## NOT THREE FORKS

In some ways, there is no question as to where the Missouri begins. In his journal entry of July 28, 1805, Lewis solved the problem at the Three Forks with a stroke of his pen: “Both Capt. C. and myself corresponded in opinion with respect to the impropriety of calling either of these [three] streams the Missouri and accordingly agreed to name them after the President of the United States and the Secretaries of the Treasury and state....” In other words, the Missouri begins where its three confluents end, at today’s Missouri Headwaters State Park, near the town of Three Forks. Any map from a

bookstore, library, or service station confirms that the river Missouri “starts” at Three Forks. What has been forgotten, however, is that this stated origin of the mighty river is an artifice bequeathed upon the nation courtesy of Lewis and Clark, thereafter upheld by the U.S. Geological Survey, the U.S. Board on Geographic Names, and many other fed-

eral and state agencies.

However, the captains' saying the Missouri begins at Three Forks does not make it so. The true source of a river is the tributary spring bubbling up from the ground in a location that is the farthest, along water miles, from where that river ends. One way to think of this is to ask: At what point of the Missouri River system could a person dispense a drop of water, so that the drop will travel the longest distance to reach the Atlantic Ocean?

That point is the Missouri River's true origin.

Viewed in this light, Three Forks is obviously not the Missouri's starting place. Look at a Montana highway map, and the most likely route to the site is up the Jefferson River, to the Beaverhead south past Dillon, to the Red Rock River, and then east toward a little-known chasm on Mount Jefferson near the Continental Divide in Montana's remote Centennial Valley.

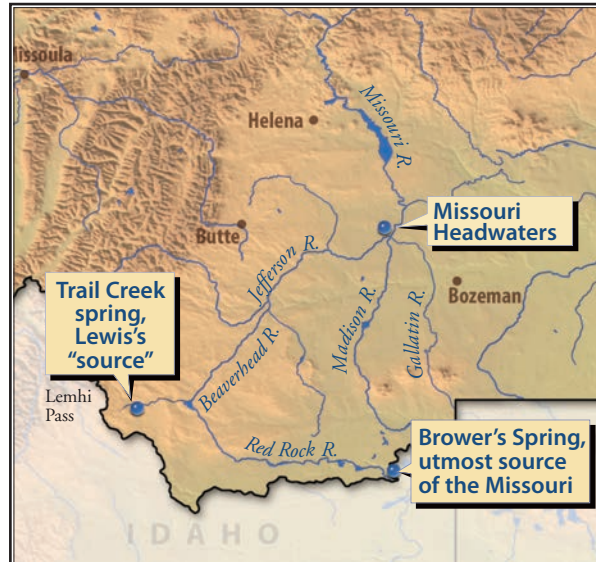
Yet for some reason over the past two centuries, explorers, surveyors, chance travelers, and historians have rarely mentioned the Centennial Valley as a possible cradle of the Missouri. It is remarkable that, as the years passed, Lewis's original misnomer survived scrutiny in the face of modern cartographic evidence to the contrary.

## BROWER'S SPRING

Not everyone missed the captain's mistake. In the mid-1890s, Civil War veteran, surveyor, and historian Jacob V. Brower set out to locate the Missouri's true source. In 1888, Brower had verified the true source of the Mississippi River and urged the state

*The late Donald F. Nell was a past president of the Lewis and Clark Trail Heritage Foundation and coauthor of Lewis and Clark in the Three River Valley. Anthony Demetriades, professor emeritus of mechanical engineering at Montana State University and founder of the Gallatin Lewis and Clark Bicentennial Association, spends summers with his wife, Donna, at their ranch on Hellroaring Creek, 3 miles from Brower's Spring.*

of Minnesota to protect the site as Itasca State Park. Accompanied by several local ranchers, Brower scaled the Centennial Mountain range on its south side, determined to reach the source of the principal stream of the basin now called the Red Rock River. Ascending slopes choked by rock slides and avalanches, dodging precipices and snowbanks, he and his companions finally discovered a mossy hillside from which first oozed the stream, the progenitor of the Jefferson River and the distant Mis-



**MANY ORIGINS** From Missouri Headwaters, Lewis and Clark headed up the Jefferson then the Beaverhead before going west into today's Idaho. Had they continued to the Red Rock River, they would have found the Missouri's true source in the Centennial Valley (see map, page 13).

souri. Brower left a copper plate with his name and date as testament to his visit. He also took a few photographs and named many of the area's geographical features on his hand-drawn maps after his companions who accompanied him on the hike.

A prolific author, Brower wrote about his discovery in *The Missouri: Its Utmost Source*, published in 1896. However, subsequent references to the publication were rare, despite Brower's national reputation as an explorer. Though some hikers and hunters surely passed by Brower's Spring over the next century, there was no official commemoration of the site as the Missouri's true source.

That changed, however, in the summer of 1995, after members of the Lewis and

Clark Trail Heritage Foundation (LCTHF) discovered Brower's book and eagerly read the details it provided. Two trips ensued that summer. The first was led by an officer of the heritage foundation, John Montague, who commemorated the hike by leaving his name and those of his companions inside a glass jar buried under a mound of rocks. The other expedition was organized by Donald Nell (the senior author of this article), who led 15 members of the newly formed LCTHF Headquarters Chapter in Bozeman to the Centennial Mountains and Brower's Spring on July 10.

## BROWER'S SPRING, REVISITED

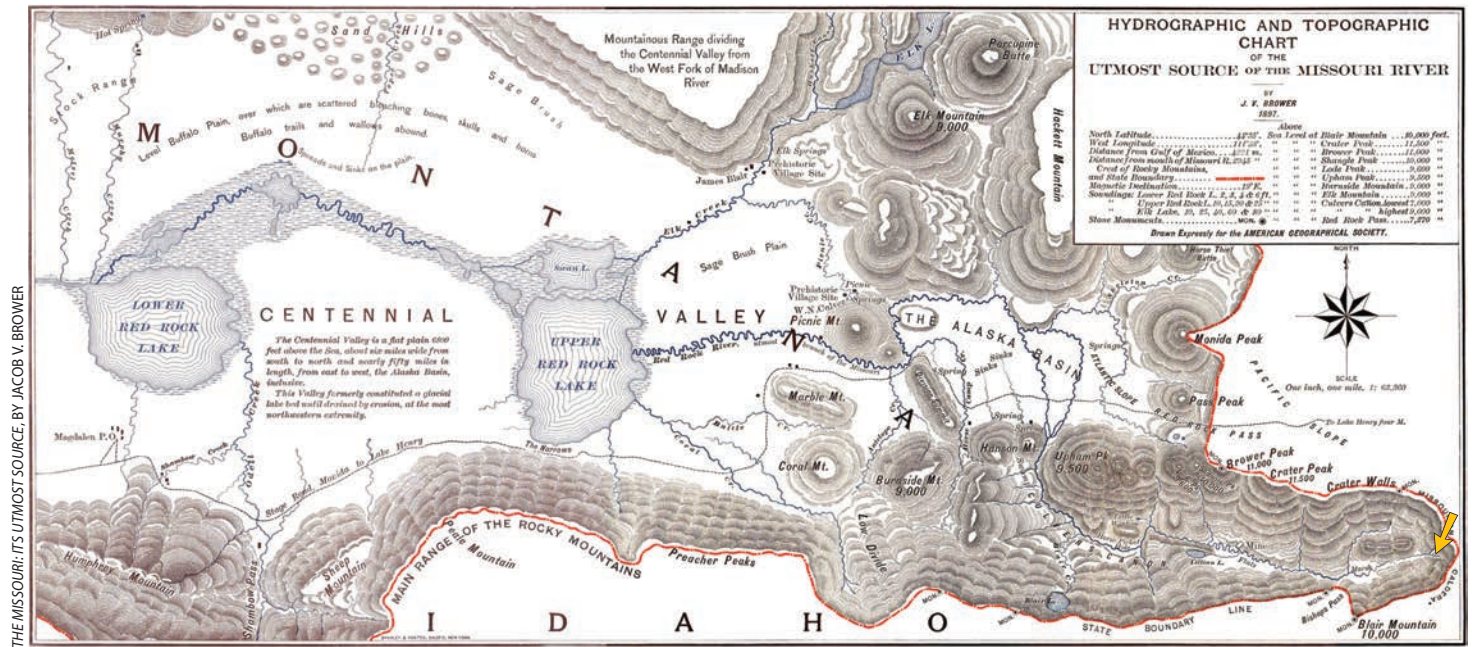
The spring emanates from inhospitable, volcanic terrain at nearly 9,000 feet above sea level in the Centennial Mountains. The Continental Divide traverses the area, on the Montana-Idaho boundary. The only Montana range aligned east-west rather than the usual north-south direction, the Centennials are known as incubators of severe storms. In summer, the mountain skies can darken in minutes, sending rain, hail, and even snow down on intrepid explorers.

The LCTHF members drove on a mountain road to a position where they could park their vehicles as closely as possible to the spring. With the aid of Brower's and modern maps, they reached the spring after a

few miles' hike. Here they found Montague's rock pile. Inside was the glass jar, to which they added their names. They then rebuilt the mound around the jar for future visitors to find.

Unfortunately, the group was forced to postpone its search for Brower's copper plate, because one member broke an ankle on the rocky terrain and a rescue helicopter had to be summoned.

Despite the injury, the trip had been a supreme achievement for the modern explorers. Like Hugh McNeal nearly two centuries before, they too had straddled a little creek. But unlike the Corps of Discovery crewman, the LCTHF members were most certainly at the Missouri River's true source.



## THE LONGEST RIVER

How was the LCTHF certain that, of the three rivers that met in Three Forks, the Jefferson was the longest and thus led to the Missouri's source? The following river lengths come from the Montana Natural Resource Information System and the Montana Department of Natural Resources and Conservation, which maintain the most recent and accurate records of in-stream distance measurements by professional surveyors.

The Gallatin River first rises in Gallatin Lake in Yellowstone National Park, southwest of Mammoth Hot Springs and south of the park's Mount Holmes. The west longitude is 110 degrees and 53 minutes, and the north latitude is 44 degrees, 51 minutes. Altitude is roughly 9,000 feet. From there the river flows through the park down Gallatin Canyon to Bozeman and then Three Forks. Total length from Gallatin Lake to its confluence with the Missouri is 115.4 miles.

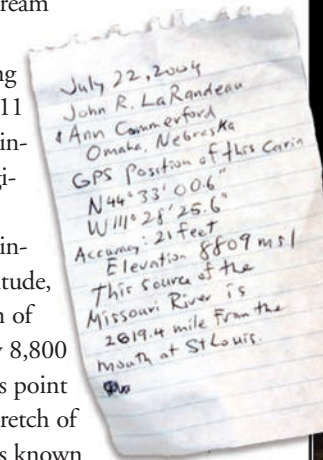
The Madison originates in 8,500-foot-high Madison Lake, also in Yellowstone National Park. Maps show the lake's location at 110 degrees and 52 minutes west longitude, and 44 degrees, 21 minutes north latitude, about 7 miles south of Old Faithful. The stream discharging from the lake is first called the Firehole River, until it joins the Gibbon River about 20 miles to the north and becomes the Madison. The entire length of the Madison is 177.3 miles

from Madison Lake to the Missouri at Three Forks.

The Jefferson takes an even more varied course. The stream issuing from Brower's Spring is located at 111 degrees, 29 minutes west longitude, and 44 degrees, 33 minutes north latitude, at an elevation of approximately 8,800 feet. From this point on, the first stretch of the Jefferson is known as Hellroaring Creek, for the thundering noise of its riffles and waterfalls. Soon thereafter, it flows into the flat of the valley, where it becomes the Red Rock River and flows west then northwest to Clark Canyon Reservoir. Below the dam, the river becomes the Beaverhead until it joins the Big Hole River just north of Twin Bridges, beyond which it is known as the Jefferson. The total distance from Brower's Spring to the junction of the Jefferson with the Madison at Three Forks is 298.3 miles. This confirms that the Jefferson drainage is the longest of the three and that Brower's Spring is the Missouri's true origin.

Which brings us, finally, back to the idea of following a single drop of water. Were

**THE UTMOST SOURCE** Jacob Brower's original map (above), published in 1897, shows the route to the Missouri's source (see our added indicator arrow). Nearly one century later, John LaRandeau (shown below at the spring) and other members of the Lewis and Clark Trail Heritage Foundation retraced Brower's steps. Left: Notes from a recent trip.



we to follow one that dropped from the sky into Brower's Spring, it would flow along the 298 miles from the spring to Three Forks. Then it would continue another 2,341 miles to St. Louis, where the Missouri meets the Mississippi. From there our drop would travel 1,003 miles to New Orleans, after which it would travel an additional 103 miles before finally depositing itself into the Gulf of Mexico. The total distance is 3,745 miles, making this great American river system the world's third longest, after the Nile and the Amazon.

And to think: Lewis and Clark almost discovered its source. 🐾