

About 900 words

Datus Proper
1085 Hamilton Road
Belgrade, MT 59714
(406) 388-3345

Called Jean w/ Change
9/13/00

RUN FREE, YELLOWSTONE

Not Just Another Dammed River

Where the Yellowstone River was only a creek, up near Two-Ocean Pass, native trout hovered golden-bright over gravel and I was watching them when I should have been steadying my horse. She slipped on a boulder. My boot went through a stirrup, and when that dizzy mare got back on her feet, I was bouncing along behind. She would have worn me down to bare bones except that another wrangler named John Armfield risked his neck to head her off.

And then on our return trip, down where the river runs into a wide spot called Yellowstone Lake, that same malevolent mare turned my thirty-dollar Granger fly rod into bamboo toothpicks while I was cutting logs that had fallen on the trail. Look close if you travel that country. You might see a weathered aluminum rod case wrapped around a lodgepole pine.

The next summer found me back on the upper Yellowstone with a steady horse and the world's best job: packing supplies to patrol cabins in the most remote wilderness of the lower 48 states. Bob Condie was the old geezer (maybe forty) in charge of our two-man crew. I was the kid who caught trout for breakfast and then boosted packs onto eight mules who were smarter than I was. They settled down for Bob, though, when he said he would feed them to the bears.

I thought he was kidding.

Next morning our cabin's window went dark and, before we could pull on our boots, we had company. It was just a black bear -- not a grizzly -- but it gobbled our trout fried in bacon fat. The mules kicked up a fuss and the horses broke out of the corral and I wanted to run them down, but Bob said they could run faster than me and they'd be back anyhow by the time I caught another breakfast.

That part was easy. My olive Woolly Worm must have looked like a scud on stearoids to the trout at the mouth of the river, and within minutes I had two cutthroats big enough to feed two hungry men.

The rest of the world has changed in the years since then, but the descendents of that pesky bear still feed on native trout and the Yellowstone River runs free in its headwaters, free in the wide spot called Yellowstone Lake, free through the painted canyon downstream, and free in the long warm-water stretch that Captain William Clark explored in 1806.

still
Captain Clark's route makes a splendid float trip, for those who are good at sitting. I'm not, so I pick a stretch of the river that can be waded -- if an angler is cautious and the water is low.

It was not quite low enough, one July day in the 'sixties, but Mert Parks and I went fishing anyhow. Mert was owner of a fly shop in Gardiner, Montana, back when fly shops were scarce in the Greater Yellowstone Ecosystem -- not that we knew what an ecosystem was. We were among the few anglers who even knew of a place where the river could be crossed on foot.

The trout shared our idyll. One of us would put a dry fly -- any pattern -- in front of an innocent cutthroat and it would rise, slurp, slosh around till it could be released, and then take the fly again in a few minutes. We had to keep moving so that we would not wear out the same fish.

But there was a bigger trout just beyond reach, so I waded in deeper, heaved out a mighty cast, and took water over the top of my waders. Mert grabbed me as I was bobbing downstream. It would have been a bad way to tour the Grand Canyon of the Yellowstone.

Some weeks later I did it the right way, skidding down the canyon wall on two feet and the seat of my jeans, and when I got to the bottom, the trout were waiting. But they were not like the lazy fish in Buffalo Ford. The canyon cutthroats were pale as the mist and strong as the current, and I wondered if these luminous beings had evolved to feed on small trout washed over the falls.

I still wonder -- but not enough to go down there again.

The view from the rim is better anyhow, if you don't mind crowds. Old folks climb from their Buicks, stretch stiff muscles, and walk to Artist's Point. Mothers hold tight to little hands. Everyone chatters. And then they see the canyon painted by time.

Chances are that you too have seen that sublime view and heard the roar of the Yellowstone River falling three hundred feet. Or, if you grew up in the dark canyons of a city, you may have seen a painting of the scene. Thomas Moran was the artist, and his work went on display in the nation's capitol. Today it hangs in the Smithsonian Institution.

Moran painted better than he knew. There were proposals to dam the Yellowstone River, in the century just past, but we -- Americans east and west -- knew what was at stake. Dam is a cuss-word now in the Yellowstone Valley, and the longest undammed river in the lower forty-eight states still runs free for six hundred miles.

Always has. Always will.

~

5/01

Callers w/ changes 9/13/00

The Yellowstone ^{River}
by Datus Proper

Not Just Another Dammed River

Where the Yellowstone River was only a creek, up near Two-Ocean Pass, native trout hovered golden-bright over gravel, and I was watching them when I should have been steadyding my horse. She slipped on a boulder. My boot went through a stirrup, and when that dizzy mare got back on her feet, I was bouncing along behind. She would have worn me down to bare bones except that another wrangler named John Armfield risked his neck to head her off.

And then on our return trip, down where the river runs into a wide spot called Yellowstone Lake, that same malevolent mare turned my \$30 Granger fly rod into bamboo toothpicks while I was removing cut logs off the trail. Look closely if you travel that country. You might see a weathered aluminum rod case wrapped around a lodgepole pine.

The next summer found me back on the upper Yellowstone with a steady horse and the world's best job: packing supplies to patrol cabins in the most remote wilderness of the lower 48 states. Bob Condie was the old geezer (maybe 40) in charge of our two-man crew. I was the kid who caught trout for breakfast and then boosted packs onto eight mules who were smarter than I was. They settled down for Bob, though, when he said he would feed them to the bears.

I thought he was kidding.

Next morning our cabin's window went dark, and before we could pull on our boots, we had company. It was just a black bear, but it gobbled our trout fried in bacon fat. The mules kicked up a fuss, and the horses broke out of the corral.

wanted to run them down, but Bob said they could run faster than me, ^{anyhow} they'd be back by the time I caught another breakfast.

That part was easy. My Olive Woolly Worm must have looked like a scud on steroids to the trout at the mouth of the river, and within minutes I had two cutthroats big enough to feed two hungry men.

The rest of the world has changed in the years since then, but the descendants of that pesky bear still feed on native trout and the Yellowstone River still runs free in its headwaters—free in the wide spot called Yellowstone Lake, free through the painted canyon downstream, and free in the long warmwater stretch that Capt. William Clark explored in 1806.

Capt. Clark's route still makes a splendid float trip, for those who are good at sitting. I'm not, so I pick a stretch of the river that can be waded—if an angler is cautious and the water is low.

It was not quite low enough, one July day in the 1960s, but Mert Parks and I went fishing anyhow. Mert was owner of a fly shop in Gardiner, Montana, back when fly shops were scarce in the Greater Yellowstone Ecosystem—not that we knew what an ecosystem was. We were among the few anglers who even knew of a place where the river could be crossed on foot.

The trout shared our idyll. One of us would put a dry fly—any pattern—in front of an innocent cutthroat and it would rise, slurp, slosh around till it could be released, and then take the fly again in a few minutes. We had to keep moving so that we would not wear out the same fish.

But there was a bigger trout just beyond reach, so I waded in deeper, heaved out a mighty cast, and took water over the top of my waders.

Article scheduled for 5/01 issue.
Call Jean with corrections ASAP.
(800) 227-2224 X 5290

Mert grabbed me as I was bobbing downstream. It would have been a bad way to tour the Grand Canyon of the Yellowstone.

Some weeks later I did it the right way, skidding down the canyon wall on two feet and the seat of my jeans, and when I got to the bottom, the trout were waiting. But they were not like the lazy fish in Buffalo Ford. The canyon cutthroats were pale as the mist and strong as the current, and I wondered if these luminous beings had evolved to feed on small trout washed over the falls. I still wonder—but not enough to go down there again.

The view from the rim is better anyhow, if you don't mind crowds. Old folks climb from their Buicks, stretch stiff muscles, and walk to Artist's Point. Mothers hold tight to little hands. Everyone chatters. And then they see the canyon painted by time.

Chances are that you too have seen that sublime view and heard the roar of the Yellowstone River falling 300 feet. Or, if you grew up in the dark canyons of a city, you may have seen a painting of the scene. Thomas "Yellowstone" Moran was the artist, and his work went on display in the nation's capital. Today it hangs in the Smithsonian Institution.

Moran painted better than he knew. There were proposals to dam the Yellowstone River, in the century just past, but we—Americans east and west—knew what was at stake. *Dam* is a cussword now in the Yellowstone Valley, and the longest undammed river in the lower forty-eight states still runs free for 600 miles.

Always has. Always will.

spell out

About 900 words

Datus Proper
1085 Hamilton Road
Belgrade, MT 59714
(406) 388-3345

RUN FREE, YELLOWSTONE

Not Just Another Dammed River

Where the Yellowstone River was only a creek, up near Two-Ocean Pass, native trout hovered golden-bright over gravel and I was watching them when I should have been steadying my horse. She slipped on a boulder. My boot went through a stirrup, and when that dizzy mare got back on her feet, I was bouncing along behind. She would have worn me down to bare bones except that another wrangler named John Armfield risked his neck to head her off.

And then on our return trip, down where the river runs into a wide spot called Yellowstone Lake, that same malevolent mare turned my thirty-dollar Granger fly rod into bamboo toothpicks while I was cutting cut logs off the trail. Look close if you travel that country. You might see a weathered aluminum rod case wrapped around a lodgepole pine.

The next summer found me back on the upper Yellowstone with a steady horse and the world's best job: packing supplies to patrol cabins in the most remote wilderness of the lower 48 states. Bob Condie was the old geezer (maybe forty) in charge of our two-man crew. I was the kid who caught trout for breakfast and then boosted packs onto eight mules who were smarter than I was. They settled down for Bob, though, when he said he would feed them to the bears.

I thought he was kidding.

Next morning our cabin's window went dark and, before we could pull on our boots, we had company. It was just a black bear -- not a grizzly -- but it gobbled our trout fried in bacon fat. The mules kicked up a fuss and the horses broke out of the corral and I wanted to run them down, but Bob said they could run faster than me and they'd be back anyhow by the time I caught another breakfast.

That part was easy. My olive Woolly Worm must have looked like a scud on stearoids to the trout at the mouth of the river, and within minutes I had two cutthroats big enough to feed two hungry men.

The rest of the world has changed in the years since then, but the descendants of that pesky bear still feed on native trout and the Yellowstone River runs free in its headwaters, free in the wide spot called Yellowstone Lake, free through the painted canyon downstream, and free in the long warm-water stretch that Captain William Clark explored in 1806.

Captain Clark's route still makes a splendid float trip, for those who are good at sitting. I'm not, so I pick a stretch of the river that can be waded -- if an angler is cautious and the water is low.

It was not quite low enough, one July day in the 'sixties, but Mert Parks and I went fishing anyhow. Mert was owner of a fly shop in Gardiner, Montana, back when fly shops were scarce in the Greater Yellowstone Ecosystem -- not that we knew what an ecosystem was. We were among the few anglers who even knew of a place where the river could be crossed on foot.

The trout shared our idyll. One of us would put a dry fly -- any pattern -- in front of an innocent cutthroat and it would rise, slurp, slosh around till it could be released, and then take the fly again in a few minutes. We had to keep moving so that we would not wear out the same fish.

But there was a bigger trout just beyond reach, so I waded in deeper, heaved out a mighty cast, and took water over the top of my waders. Mert grabbed me as I was bobbing downstream. It would have been a bad way to tour the Grand Canyon of the Yellowstone.

Some weeks later I did it the right way, skidding down the canyon wall on two feet and the seat of my jeans, and when I got to the bottom, the trout were waiting. But they were not like the lazy fish in Buffalo Ford. The canyon cutthroats were pale as the mist and strong as the current, and I wondered if these luminous beings had evolved to feed on small trout washed over the falls.

I still wonder -- but not enough to go down there again.

The view from the rim is better anyhow, if you don't mind crowds. Old folks climb from their Buicks, stretch stiff muscles, and walk to Artist's Point. Mothers hold tight to little hands. Everyone chatters. And then they see the canyon painted by time.

Chances are that you too have seen that sublime view and heard the roar of the Yellowstone River falling three hundred feet. Or, if you grew up in the dark canyons of a city, you may have seen a painting of the scene. Thomas Moran was the artist, and his work went on display in the nation's capitol. Today it hangs in the Smithsonian Institution.

Moran painted better than he knew. There were proposals to dam the Yellowstone River, in the century just past, but we -- Americans east and west -- knew what was at stake. Dam is a cuss-word now in the Yellowstone Valley, and the longest undammed river in the lower forty-eight states still runs free for six hundred miles.

Always has. Always will.

~

For tourists, the river ends at the canyon. For anglers, the trout water continues far downstream to the town of Big Timber, Montana.

I have not fished Captain Clark's piece of the river. I have not fished most of the Yellowstone, and maybe nobody has. Most of us just know a pool here, a run there, and a favorite stretch we can never quite recall when people ask where we caught a big trout. Below the Park, boating in the Yellowstone is allowed, but the trout are rainbows and browns -- less cooperative than cutthroats. And take a look at the rocks before you set out. They are a measure of water velocity, and some of those boulders are the size of houses. Pick a day late in the season, if you can, and make your first float in a drift-boat, which is a big, heavy, stable casting platform. One drift-boat guide says that the main qualifications for his job are a size [] 46 shirt and a size [] 5 hat. He is too modest. The trout are there, but they feed near the bottom, most days, and it takes a good guide to find them.

There was one close scrape, a few years back, but the dam-builders backed off and the Yellowstone still cleans itself in the old way, with high water and cottonwood brooms. Every few years the spring run-off uproots the trees and sends downstream. The trout zone is long -- maybe x miles, from Two-Ocean pass to Big Timber, and that in a straight line, but the river never runs straight for long. And when you reach the end of the trout water, the river still runs free for maybe 400 [] miles.

A few years later, when I had a little more money but no more

sense, I almost built a house on the Yellowstone's bank downstream from the Park. This is where spring floods rip out giant cottonwoods, peel them on boulders, and send them naked down the longest undammed valley we've got. [check]

It is a great river to float, though. Wait till the water is low, in July or August, then float the Yellowstone in a drift boat, which is a kind of fresh-water dory adapted for trout water. About one day out of three you will have good fishing, and on the other two days you will enjoy the ride anyhow. But hire a good guide if you are inexperienced.

Innocents take risks and most survive, thanks to benevolent angels, but don't count on it.

This was near the other end of the river, in a wilderness My next learning experience came from the same mare. I drank too much coffee for breakfast and had to dismount by the bright, shallow, uppermost Yellowstone. There was only one tree nearby. Karen found it. Scratched her ribs on the bark. Found that my rod tube was in the way and wrapped it around the trunk. Inside was a Granger nine-foot split-bamboo that cost me twenty-five dollars from Sears Roebuck, but at least that knot-headed horse did not get me.

Not that time, anyhow. On our way back downstream, almost to the ranger cabin, Karen slipped and went down, and when she got up, I was in the river and my foot was in the stirrup. That knot-headed mare would have dragged me till I was just molecules except that a wiry old cowhand named Bob Condie heard heard me

holler, charged out of the cabin and roped Karen.

I've written about the upper river
because it's the one ^{where} I grew up.

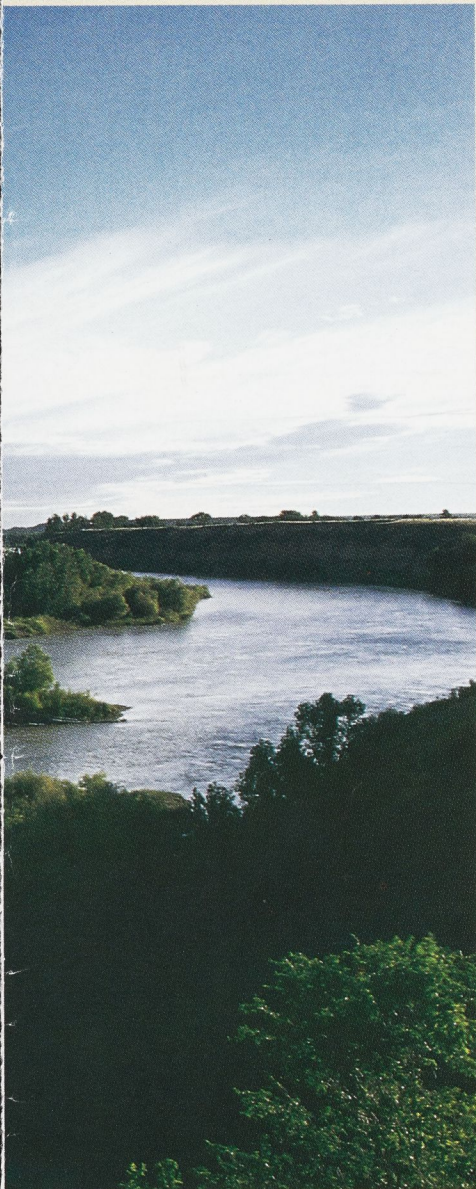
Riding ^{the} Roche Jaune

by Alan Charles

The Crow Indians called it *Ichiilikaashaashe*, or Elk River. Fur traders in the 1800s called it "Roche Jaune," meaning yellow rock. I call it peaceful, and consider the lower Yellowstone River one of Montana's most enjoyable river floats.

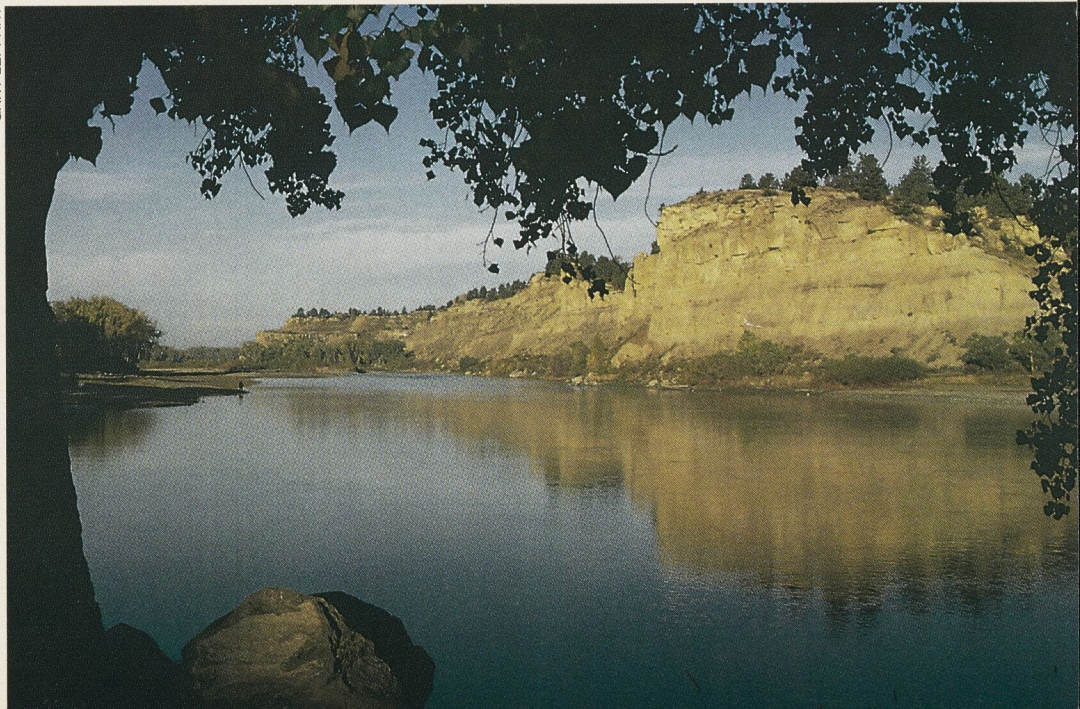
In a time of crowding and conflict on many of Montana's rivers, the quiet waters of the Yellowstone threading peacefully through braided channels of eastern Montana prairie are a delight for floaters in search of solitude.

Many people arbitrarily divide the 554-mile-long Yellowstone River into three segments: upper, middle, and lower. The upper Yellowstone, stretching 113 miles from the river's high-country origins near the Wyoming border down to Big Timber, is a coldwater stream famed for its flashy trout and mountain vistas. The middle Yellowstone, running 104 miles from Big Timber to the Huntley irrigation diversion dam east of Billings, blends west with east; mountains tower in the distance as the river widens and the waters warm. The lower Yellowstone begins at Huntley, about



CHUCK HANEY

GARY LEPPART





BARBARA THOMAS

Left: Antelope abound in prairie habitats adjacent to the river. Above: Elk Island Wildlife Management Area near Savage provides a boat launching site and opportunities for hunting, fishing, and wildlife viewing.

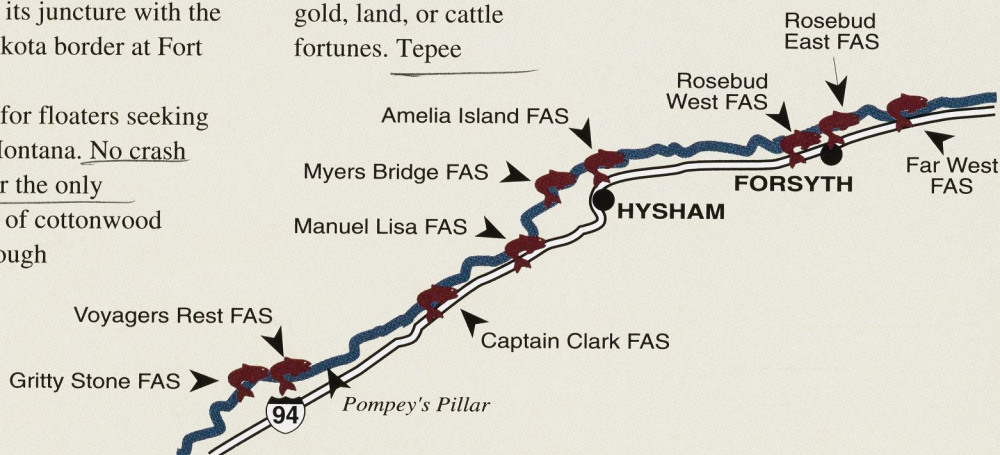
20 river miles upstream from Pompey's Pillar, where on July 25, 1806, William Clark scratched his initials in the sandstone outcropping and sailed downriver in a cottonwood canoe. This section flows east for 337 miles to its juncture with the Missouri River just inside the North Dakota border at Fort Buford.

This lower stretch of river is perfect for floaters seeking the sights and sounds of summertime Montana. No crash helmets or wet suits are needed here, for the only whitewater you'll find might be carpets of cottonwood seeds caught in a backwater eddy. Although kayaks or canoes can certainly be used to float this prairie expanse of Yellowstone River, I prefer a raft or medium-sized boat. A motor is sometimes useful to

fight headwinds or to motor back upstream.

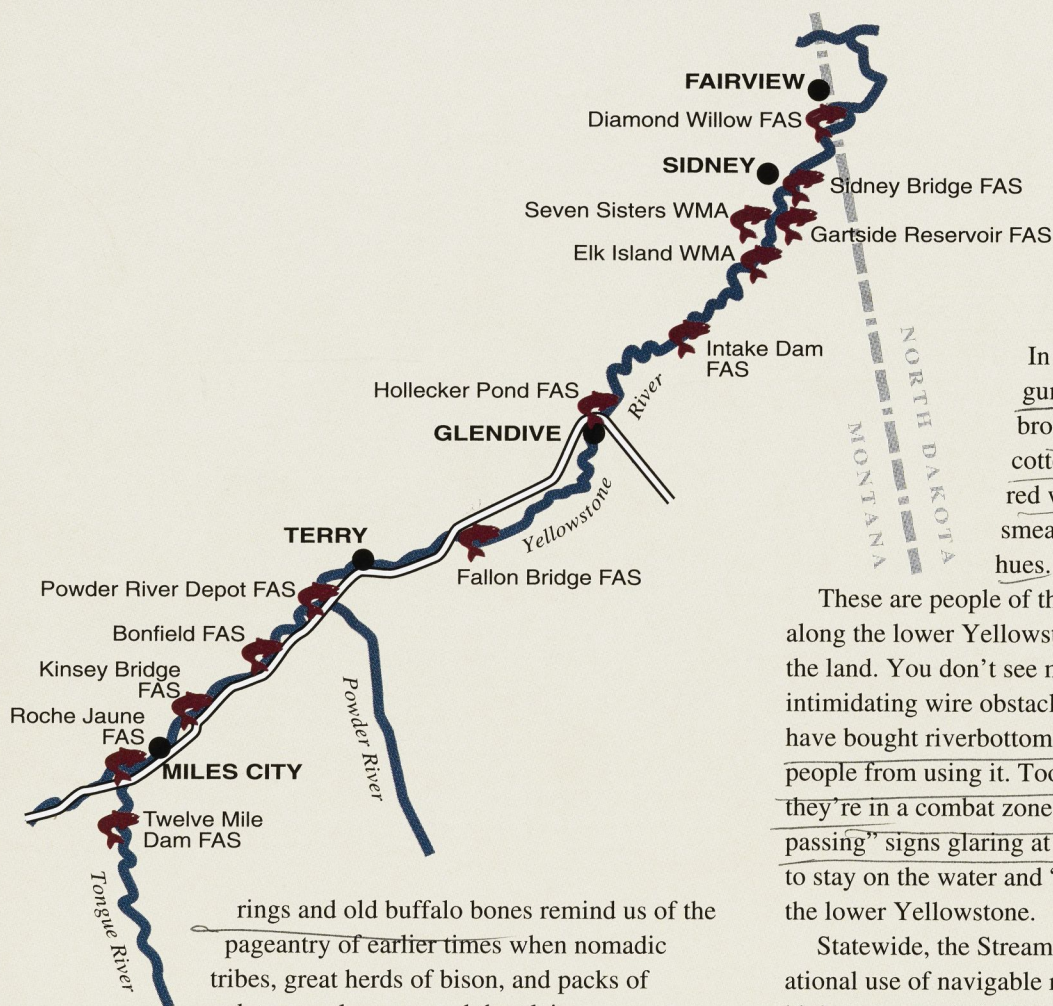
The best time to float the lower Yellowstone is from mid-July through early October. In May and June, snowmelt from mountain headwaters and tributaries can bloat the river into a muddy, dangerous torrent of floating debris and unpredictable currents. But by the middle of July the river has calmed and the silt has settled; like a snake slithering through sand, the river meanders quietly through whatever new channels the spring floods have etched across the broad floodplain.

This is frontier country, without glitzy signs and neon lights. Eastern Montana is rough-side-out prairie, with scars still visible from being pioneered for gold, land, or cattle fortunes. Teepee





History buffs can retrace the steps of early explorers, Native Americans, soldiers, and homesteaders in the Yellowstone Valley.



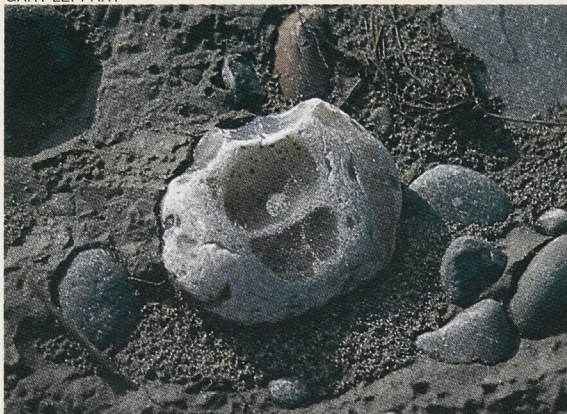
rings and old buffalo bones remind us of the pageantry of earlier times when nomadic tribes, great herds of bison, and packs of predatory wolves roamed the plains.

The riverbottom land is tamer now, cropped in corn, sugar beets, and alfalfa in many places, but still only sparsely inhabited. Although Interstate 94 parallels the lower Yellowstone for much of its journey through eastern Montana, its presence rarely intrudes on people floating the river.

In fact, the river winds through rugged gumbo bluffs or wends its way among broad channels lined with towering cottonwoods, where blue-tinged sage and red willows splash color on a palette smeared with Charlie Russell's favorite hues.

These are people of the earth, these ranchers and farmers along the lower Yellowstone, folks who make a living from the land. You don't see many of the bright orange signs and intimidating wire obstacles that usually signify people who have bought riverbottom land precisely to exclude other people from using it. Too often today, river floaters feel they're in a combat zone, with trophy homes and "no trespassing" signs glaring at them from the bank, warning them to stay on the water and "pass on by." But it's not like that on the lower Yellowstone.

Statewide, the Stream Access Law allows public recreational use of navigable rivers and streams up to the ordinary high-water mark. But lower Yellowstone floaters who take time to scout ahead and visit with landowners can often gain permission to camp or temporarily stop on private ground, sometimes even arranging to launch or pull out their boat at points between established fishing access sites. This is country where courtesy and mutual respect between



Above: Yellowstone River agates are eagerly sought by rockhounds. **Right:** Housed in a turn-of-the-century bank building, the Prairie County Museum in Terry features horse-drawn carriages, restored offices, and historical photographs.



DONNIE SEXTON

recreationists and landowners still pays big dividends.

What is it about the lower Yellowstone that merits attention? It's the size, the silence, the solitude, and magnificence. It's the fact that this is the longest free-flowing (undammed) river in the lower 48 states. It's the raw country and the way things that "used to be" still are. It's fresh-bared bison skulls staring silently from caved-off gumbo cutbanks and sharp-edged arrowpoints lying exposed on a sandy shore. It's the prehistoric and rare pallid sturgeon and the 80-pound paddlefish dubbed "Montana marlin" by anglers seeking a big-fish challenge. It's the multitude of wildlife that abounds along the river's banks—the mule deer and whitetails, antelope and beaver, geese and pelicans, raccoons and turkeys, even an occasional otter.

In 1806, as he headed east on his return trip through Montana, William Clark noted in his journal: "...for me to mention or give an estimate of the different Species of wild animals on this river particularly Buffalow, Elk Antelopes & Wolves would be incredible. I shall therefor be silent on the subject further. So it is we have a great abundance of the best of meat." Two hundred years later, the herds of bison no longer roam adjacent to the river, and the wolves that followed them are also gone from the prairie. But antelope are probably more numerous now than they were then, and numbers of geese and deer are also probably greater than those seen by early travelers, due in part to riverbottom agricultural crops.

The naturalist who floats the lower Yellowstone would do well to keep a journal, to carefully observe animal tracks on sandbars, and to watch the willows for signs of wildlife. The floating pace is slow, and especially during cool morning and evening hours when wildlife is more active, it's amazing just how many different species of wildlife can be seen.

It's common to witness broods of Canada geese, mallards, and wood ducks resting on islands or swimming ahead in flotillas. Great blue herons gather in cottonwood rookeries, and eagles and ospreys nest in the high cliffs and trees along the river. Pheasants, turkeys, and a myriad of songbirds add color and sound to the riverbank bushes, making a good pair of binoculars a must.

Opportunities abound for anglers as well—the lower Yellowstone is home to nearly 45 species of warmwater fish. While an occasional trout is caught in the lower river, fishermen most often encounter walleye, sauger, smallmouth bass, shovelnose sturgeon, and channel catfish.

Discriminating anglers can focus their attention on specific kinds of fish and do quite well. The river offers a variety of water conditions and fish habitats: riffles at the lower ends of islands, long stretches of slow-moving water, and deep holes with undercut banks and sunken logs. Summer can be hot in eastern Montana, so it's normally during the cooler early morning and late evening hours that fish move into the shallows. But midday can be productive for anglers plumbing the depths of deep holes and fishing lures or baits along rocky banks and stump-studded shorelines.

For flyrod purists who wince at the thought of whiskey catfish or prehistoric sturgeon, I recommend a six-weight flyrod and a small egg fly or nymph, and suggest casting to the big gold-colored "logs" lying close against the bank. Hook one of those 10- to 15-pound carp and you'll gain a new respect for warmwater river fish. Or tie on a flashy little Woolly Bugger or weighted streamer, strip it upstream through a backwater eddy, and you'll have a goldeye smack it nearly every time, imitating saltwater tarpon in aerial acrobatics. These same goldeyes offer excellent surface action for dry flies matched to frequent insect hatches.

Artists or photographers who embark on a summer float of the Yellowstone are never without inspiration. Each turn of the river reveals something new—a canopy of cottonwoods shading a newborn fawn, a fleet of pelicans floating silently ahead, a thicket of fragrant wild rosebushes speckled with goldfinches or wild canaries, or simply the constantly changing wide-open sky—one moment a curtain of soft-shaded pastels, next a blue ocean studded with high puffs of cottony cloud, or perhaps next a wild sea of surging thunderheads and wind-whipped waves of fast-moving rainshowers.

For history buffs, an extended float trip can easily be planned with stops scheduled for exploring past events. A number of old forts dating back to the days of the fur trappers exist along the lower Yellowstone. While most of these are located on private land, and many offer little in the way of visible structures, the notion of standing where past travelers once stood is intriguing. For many people, myself included, the absence of tourist-type attractions makes the historical connection more vivid.

The few towns along this stretch of the Yellowstone River all offer historical attractions of their own. Hysham, Forsyth, Rosebud, Miles City, Terry, Fallon, Glendive, and Sidney are all rooted in the past—they sprang up along this great river for specific reasons. Some have captured that history in museums, like the famous Range Riders Museum in Miles City or the wonderful museum in downtown Terry, while others reveal history more subtly in the faded structures of town buildings and the quiet voices of local citizens. History surrounds the river traveler who searches it out, whether it's the memories of steamboats once stranded on certain shoals, river-crossings used by early cattle drives and later horse gatherings, campsites of Native Americans, fur trappers, cowboys and cavalry troops, or grand engineering feats of railroad architects and early irrigation project designers.

It's all there, and more, for the floater who samples the lower Yellowstone River. A float trip can be as simple or as complicated as you care to make it. Whether it's a half-day float from one spot to another, doing nothing more than reveling in the peacefulness of smooth, quiet water—or a week-long trip with scheduled stops, pre-planned campsites,

and organized agendas—this stretch of water offers unlimited options. A variety of printed guides are available to help with planning a trip (see sidebar).

While the lower Yellowstone is typically quiet water easily floatable by neophytes, some precautions are in order.

Several irrigation diversion dams are located along this portion of the river, some of which require portaging, so floaters should consult maps and contact local sources to learn what is required to negotiate these obstacles.

Rattlesnakes, wood ticks, and poison ivy may be encountered along the river, so travel ashore should be done with caution. Mosquitoes and flies may be present, so pack some insect repellent. Weather can be unpredictable, with sudden thunderstorms, high winds, and severe heat common. Proper clothing and protection against rain and sun is always prudent. A safety kit provisioned with first-aid equipment, signaling device, flashlight, space blanket or shelter of some kind, and fire-starting materials should always be carried, along with required flotation equipment for all people aboard.

Floater in early fall can often combine scenery and fishing with hunting opportunities. Waterfowling can be excellent along the river, but some areas are closed to hunting on or adjacent to the river (see regulations for specifics). But where hunting is authorized, sandbars and islands offer superb jumpshooting and occasional decoying opportunities for Canada geese and ducks. Turkeys, pheasants, and deer, especially whitetails, are also abundant along the riverbottom, but landowner permission is needed to hunt on privately owned riverbottom lands or islands.

Whether it's summer or fall, fishing or floating, taking pictures or hunting agates, or simply riding along silently in the slow-moving current—the lower Yellowstone is my favorite river to float. The tangible touch of raw earth and big sky, shadowy whispers of tribal villages, fading relics of the great buffalo herds and homesteading pioneers, the bark and cry of lonesome prairie coyotes, and the star-studded sky stretching forever overhead—this and more awaits the traveler who chooses to travel away from the crowds, on the lower Yellowstone, heading east through Big Sky Country. ■

Guidebooks and Maps

Paddling Montana, by Hank & Carol Fischer. Falcon Publishing, P.O. Box 1718, Helena, MT 59624. (800-582-2665).

Floating and Recreation on Montana Rivers, by Curt Thompson. P.O. Box 392, Lakeside, MT 59922. (800-582-2665).

River Safety: A Floater's Guide, by Stan Bradshaw. Greycliff Publishing Co., P.O. Box 1273, Helena, MT 59624-1273. (406-443-7332).

Montana Wildlife Viewing Guide, by Hank & Carol Fischer. Falcon Publishing, P.O. Box 1718, Helena, MT 59624. (800-582-2665).

No topic burns hotter

right now in Montana wildlife circles than chronic wasting disease (CWD). People become near-apoplectic when discussing it. That's because CWD is a gruesome, even cruel, disease that attacks the brains of deer and elk. Infected animals literally waste away to skin and bones. Death comes harshly, taking up to a year.

CWD also sears public debate because it involves game farms—now called alternative livestock ranches by an act of the 1999 Legislature. Last year, scientists found Montana's first CWD case at an alternative livestock operation near Philipsburg, southeast of Missoula. "How did it get here?" asks Pat Graham, Montana Fish, Wildlife & Parks (FWP) director. "Is it in any other alternative livestock facility? Until we can answer that convincingly, testing will need to be done."

FWP shares responsibility with the Department of Livestock for monitoring the alternative livestock industry. FWP looks for diseases in wildlife outside the fences, Livestock keeps tabs on the animals inside.

So far, the disease has not shown up in Montana's free-ranging deer and elk, though FWP continues to test for it. Because no test exists for live animals, FWP workers the last three hunting seasons have collected brain tissue samples from more than 1,000 deer and elk at game checking stations. Results to date have been negative. That allows researchers to say with statistical confidence that CWD is not in the

state's wild deer and elk population. With an estimated one million ungulates in the state, FWP biologists needed to test 1,000 animals to have a 95 percent confidence level.

Besides random checking, FWP workers in late January killed 44 free-ranging deer and one elk near the Philipsburg operation and an alternative livestock ranch near Hardin. Brain tissue samples were checked for CWD. All were negative. Biologists and wardens also targeted nine deer and elk that displayed symptoms suggestive of CWD—emaciated animals that appear listless, with blank facial expressions, excessive salivation, lowered heads and, in some cases, hyperexcitability and nervousness. Test results were negative. "We do not want to live with the disease, nor should we have to," says Keith Aune, FWP's Wildlife Laboratory supervisor in Bozeman.

Geographically, the disease has spread more rapidly through the alternative livestock industry than in free-ranging deer and elk. CWD has been confirmed in captive elk in Canada, South Dakota, Nebraska, Colorado, Oklahoma, and recently Montana. Captive elk from infected herds have been shipped to operations in Idaho, Iowa, Illinois, Missouri, Texas, and Wisconsin.

The alternative livestock industry in Montana consists of about 85 ranches. These operations have 4,000 animals, of which 3,600 are elk. The remainder are deer, muskoxen, reindeer, bighorn sheep, mountain

goats, mountain lions, and bears.

CWD has persisted for decades in captive and free-ranging elk and deer in Colorado and Wyoming. In the northeast corner of Colorado and southeastern Wyoming scientists first discovered the disease, first named it, and first diagnosed it. Yet much of the disease remains a mystery. How is it transmitted? Where did it come from? Which ungulate population had it first, captive or free-ranging? Can it cross species barriers and infect humans or livestock?

"Nobody knows. Nobody knows," laments Terry Kreeger, supervisor of the Veterinary Services Branch of the Wyoming Game and Fish Department. In the wild the disease has spread slowly in Wyoming. "Last year we found CWD a couple of miles north and east of the endemic area," Kreeger says. That area consists of about five counties.

Even with the incremental spread of CWD, the infection rate has remained low. Where CWD occurs in Wyoming, the deer infection rate is 1 to 6 percent. In Colorado's CWD area the infection rate averages 3 percent, though in one hunting unit it runs to 15 percent. In both states the infection rate in elk is 1 percent or less.

CWD belongs to a family of diseases called transmissible spongiform encephalopathies (TSEs). Transmissible means the disease can be passed from one individual to another. Spongiform comes from the mark of the disease—holes left in the brain so

Chronic Wasting Disease

by Bruce Auchly