THE RIVER THAT DOES IT ALL

Despite booming residential development and growing angling pressure, the Bitterroot continues to provide superb trout fishing while maintaining pristine coldwater habitat for imperiled native fish. How long can that last?

BY DARYL GADBOW

BITTERROOT RIVER NEAR HAMILTON BY RON LOWERY/RONLOWERY.COM

LOVELY TO BEHOLD Like a blue serpent winding through a green garden, the Bitterroot River snakes its way north toward Missoula between banks lined with cottonwoods interspersed with ponderosa pine. The sandy river bottom is continually moving, forming new channels and sandbars that benefit fish but cause headaches for property owners.

he memory is still vivid more than a half-century later. The momentous event took place on the Bitterroot River about 30 minutes by bicycle from my childhood home in Missoula. A bunch of old wrecked cars were stacked along the bank in that stretch of river. The rusty hulks were part of a fleet of vintage automobiles used in the 1950s as "Detroit riprap" by the U.S. Army Corps of Engineers to prevent erosion and stabilize the channel in a few reaches of the river.

I was armed with Dad's battered old bamboo fly rod. Attached to my leader was a Bunyan Bug, a cork-bodied, horsehair-winged creation of the late Norman Means, also known as Paul Bunyan, of Missoula. Bunyan's "bugs" had been a favorite salmonfly imitation among fly casters across Montana and other western states since Means first tied them commercially in the late 1920s. There were no salmonflies in that stretch of the Bitterroot, but I didn't care.

Daryl Gadbow is a writer in Missoula.

My feet planted firmly on the caved-in roof of a 1940s-model Packard, I lobbed a cast onto the brilliantly clear water and was amazed when a beautiful 16-inch rainbow attacked the bug. Breathlessly, I hauled the fish in. It was the first time I had caught a trout on a fly, and from that day on I've been a devotee of both fly-fishing and the Bitterroot River.

I have plenty of company. According to Montana Fish, Wildlife & Parks surveys, the Bitterroot is the third most heavily fished river in Montana, behind only the hallowed Madison and famed Bighorn.

The river's popularity goes back a century. One local newspaper reported in 1910 that on warm afternoons anglers "line the shores almost daily." In recent years the river has drawn even more admirers. Housing starts in the valley are among the highest in Montana, and fishing pressure on the river has doubled in the past three decades. To maintain excellent fishing on the Bitterroot, FWP biologists and anglers have had to fine-tune fishing regulations as well as work with landowners to ensure adequate "in-stream flows" of water so trout can survive. That work, along with the river's natural ability to produce fish, has helped the Bitterroot remain among the best trout rivers in a state renowned for trout fishing.

So many attractions

The Bitterroot's greatest appeal, according to Pat Saffel, FWP regional fisheries manager in Missoula, is that it holds far more fish than similar-sized rivers. He notes that the upper Bitterroot carries roughly 1,000 trout per mile, compared to 300 to 500 trout per mile in the legendary (and similar-sized) Blackfoot River.

In addition to brown trout and rainbows, the Bitterroot contains a healthy population of native westslope cutthroat trout. "Only a few rivers are left in Montana where you can regularly catch 15-inch cutthroat, with the possibility of a 19- or 20-incher," says FWP fisheries biologist Chris Clancy of Hamilton, who has been working on the Bitterroot fishery for the past two decades.

BIG MONTANA NATIVE The Bitterroot is the most accessible river in Montana where anglers can catch large westslope cutthroat trout. Fish in the 15-inch range are common, and 19- and even 20-inchers are regularly reported.

WESTSLOPE CUTTHROAT PHOTO BY PAT CLAYTON; MAP ILLUSTRATION BY LUKE DURAN/*MONTANA OUTDOORS*

> "You get this mix of fertile water from the east and crystal-clear tribs from the west that makes a perfect combination for trout."

The Bitterroot Valley, often called Montana's "banana belt," is blessed with a relatively mild climate that allows anglers to fish nearly every month of the year. "If it's nice enough to be outside, you can catch fish the Bitterroot," says Saffel.

The river also offers anglers many different entry points. FWP fishing access sites, as well as other designated access points along highways and at bridge crossings, are well spaced along the river, says Clancy. "Plus, it's large enough to float, but small enough to effectively wade-fish."

The Bitterroot is famous for its prodigious insect hatches. Clancy says the Bitterroot is more fertile than many similar-sized western Montana trout rivers because several tributaries come down from the calcium-rich bedrock of the Sapphire Range. A wide variety of stoneflies, mayflies, and caddis flies provide exceptional fly-fishing opportunities. An early spring hatch of Skwala and Nemoura stoneflies attracts dry-fly anglers from across the West. The hatch starts in mid- to late March—well before the dry-fly season kicks off on most other major Montana streams.

If that isn't enough, the Bitterroot also gives anglers a chance to catch an occasional northern pike or largemouth bass in a few slow-current backwater stretches.

A rarity: both clear and fertile

The Bitterroot flows almost straight north for 80 miles from the junction of its East and West Forks, both great trout streams in their own right. The East Fork originates in the Sapphires in the Anaconda-Pintler Wilderness, while the West Fork springs from the rugged Bitterroot Mountains near the Idaho border.

After the two forks meet to become the mainstem Bitterroot near the small community of Conner, the river widens but remains cold and riffly, and cutthroats are the primary species. Below Hamilton the water warms and flow slows as the river runs through a broad floodplain between the two scenic mountain ranges. Browns and rainbows are most common here.

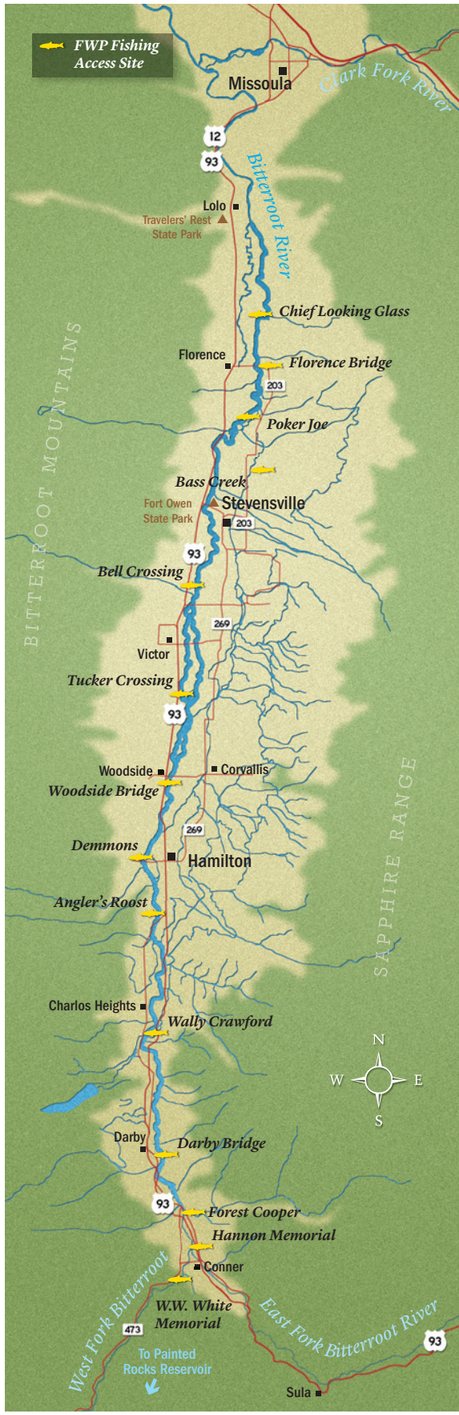
U.S. Highway 93 parallels the river throughout its length as it passes Darby, Hamilton, Corvallis, Victor, Stevensville, Florence, Lolo, and finally Missoula, where it merges with the Clark Fork River. Between Stevensville and Florence the Bitterroot runs through the spectacular Lee Metcalf National Wildlife Refuge.

Though fertile, the Bitterroot is crystal clear. That's because most of its tributary streams flow from the Bitterroots. Clancy says the igneous and metamorphic rocks in the mountains make the streams unusually low in hardness and dissolved solids. "You get this mix of fertile water from the east and crystal-clear tribs from the west that makes the Bitterroot a perfect combination for trout," he says.

In the Bitterroot's middle reaches, between Hamilton and Stevensville, the riverbed is mainly small gravel and fine sand, which cause the river to continually "braid" and form new channels each year. For decades landowners have tried to "tame" the meandering river by constructing dikes; they've also dredged channels that supply farmlands with water and help keep the river from flooding homes and other development.

That's where the old "Detroit riprap" from my boyhood days entered the picture. For several years in the 1950s, says Bitterroot rancher Tom Ruffatto, the U.S. Corps of Engineers used car bodies to bolster the river's banks and prevent braiding. "They cleaned out every junkyard in Missoula," says Ruffatto, whose family's ranch contains 2.5 miles of Bitterroot frontage that includes a stretch of rusty autos anchored into the bank. "They hauled 'em up the river in train cars and dragged 'em up the river cabled together."

Public protests about the old vehicles' ugliness—not to mention pollutants leaking from the wrecks—ended the practice in the early '60s, says Ruffatto. The river has since washed away many of the old junkers.



CLEARLY HAPPY Left: An angler wading the Bitterroot's crystal waters tries to hold a trout surging deep in a run near Stevensville. Above: The Bitterroot's clear waters are home to the Skwala stonefly, which hatches in March, attracting dry-fly anglers from across the West.

G. ALLEN HAY; INSET PHOTO: STEVEN AKRE

No dynamite allowed

The earliest recorded fishing accounts on the Bitterroot, in the late 19th century, reported excellent catches of plentiful native westslope cutthroat trout (then called "redbellies" by local anglers) and large bull trout. *The Weekly Missoulian* reported in September 1881: "Messrs. Ryman and Wolf…caught some 300 pounds of fish during their [two-week] trip, most of which they gave away to friends. Inside of nine hours they hooked 100 pounds of trout, 49 of which were taken during three hours fishing."

By the early 1900s, following initial stocking of nonnative rainbow and brook trout by both individuals and government agencies, newspapers and magazines were recounting tales of even more spectacular catches in the Bitterroot.

Fish conservation by local government officials apparently started in the late 1890s, when one of the first regulations on the river banned the use of "giant powder" (dynamite) for taking fish. As angling pressure increased, the state imposed more restrictive harvest regulations. In 1956 the daily limit on the Bitterroot was reduced to 15 trout; four years later it was lowered to 10.

FWP discontinued stocking trout in the Bitterroot River in 1979 after studies on other Montana streams showed that planting fish suppressed natural production of wild trout. An artificial-lures-only restriction was placed on two river stretches in 1982, and trout limits were reduced further. By this time biologists and anglers were convinced that overharvest was harming the Bitterroot trout fishery.

Today the daily limit on much of the river is three fish, only one of which can be over 14 inches, except in the 26-mile catch-and-release section from Woodside Bridge, roughly 5 miles north of Hamilton, downstream to Florence.

Since 1990 all cutthroat trout in the Bitterroot have had to be released. Starting in 1994, four years before bull trout were listed under the federal Endangered Species Act, FWP banned fishing for them in most state waters, including the Bitterroot.

Clancy says early harvest regulations definitely protected trout so they could be caught again. But regulations over the past two decades have had mixed results. Cutthroat trout populations have increased since the 1990s, after anglers were required to release the fish. For rainbow and brown trout, numbers increased below Hamilton in both a catch-and-release section and in general regulation sections. Numbers didn't improve in a catch-and-release stretch upstream from Hamilton. "So it's not clear what role the regulations played," Clancy says. Unable to justify the catch-and-release requirement there, FWP returned the upstream stretch to general regulations in spring 2012.

In addition to studying the effects of various harvest regulations, FWP biologists are tracking the effects of whirling disease. The biologically complex disease is killing large numbers of young trout upstream from Hamilton, especially in the East Fork. Clancy says he's glad to report that infection rates are low downstream from Hamilton.

Some of FWP's most important fisheries conservation work on the Bitterroot and its tributaries is to help residential landowners find river-friendly ways to prevent their banks from eroding. "People understandably want to keep the river from eating away their property," Clancy says. "But when they import rock to riprap banks, they alter trout habitat and the way the river functions." He notes that a 2008 Montana Department of Transportation study found that 12.5 percent of both sides of the Bitterroot was lined in riprap. Residential development is also growing along the tributaries, where the Bitterroot's trout are born and live for several years.

THE LATEST ANGLING INFO

A local conservation club has recently published *Fly Fishing the Bitterroot*. Order the book at flyfishersofthebitterroot.org.

Learn more about the Skwala hatch in an article by Steven Akre in the 2012 fly-fishing issue of *Big Sky Journal*.

Clancy says he hopes he is helping the fishery by educating people about streamside habitat, implementing Montana's stream protection laws, and keeping more water and fish in the river with water leases and ditch screens. "It's a challenge, given all the new people moving into the valley," he says. "But I tell folks that protecting the Bitterroot means protecting the reason they are here in the first place. Hopefully they see the benefits of keeping things in good shape."

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Water: war and peace

Some of the toughest battles FWP has fought on the Bitterroot are over water. The conflict boils down to landowners, who want water for crops or residential landscaping, versus trout, which need water to live. For decades landowners have dredged and bulldozed the riverbed to build dikes and ditches to move water from the Bitterroot to a complex irrigation system lacing the surrounding valley. That work intensified during drought years in the 1970s and '80s as landowners tried to concentrate and direct water flows to irrigate fields of alfalfa grown for hay.

Dewatering reduced the Bitterroot to a trickle in some sections between Hamilton and Stevensville. FWP studies found that low water hit juvenile trout especially hard. The small fish were forced into primary channel pools and away from brushy and rocky shorelines where they were safer from predators.

Shaken by the abuse of their beloved Bitterroot, local anglers and conservation groups joined forces to save the river. That required turning their attention to Painted Rocks Lake. Built in 1932 halfway up the West Fork of the Bitterroot, Painted Rocks holds roughly 32,000 acre-feet of water. That's enough to benefit both trout and agriculture if doled out in the right amount at the right time. In recent years anglers, landowners, FWP, and the Montana Department of Natural Resources and Conservation (which built and manages the reservoir) reached an agreement in which Painted Rocks' water is shared by trout interests and the Painted Rocks Water Users Association, an irrigation group. Both sides have agreed on the timing and amount of water releases. "The way Painted Rocks water is dealt with and managed is a unique thing about the Bitterroot," says Clancy. "In a river valley where contentious issues abound, this is one system where people cooperate to make it work."

By the look of the valley's bountiful hayfields in midsummer, it's obvious the agreement benefits farmers and ranchers. Andy Carlson of Hamilton can attest firsthand that it's helping trout, too. The owner of Bitterroot Anglers, a trout outfitting operation, Carlson was one of the first professional guides on the river. He was a leader in the fight to save the Bitterroot from dewatering in the 1970s. And as head of the Ravalli County Fish & Wildlife Association's fish committee, Carlson lobbied FWP for more restrictive fishing regulations. He organized volunteers to conduct a three-year creel census that helped FWP justify and carry out regulations, including those on catch-and-release sections.

After guiding for 35 years on the Bitterroot, Carlson has seen fishing pressure there more than double, from just over 50,000 angler-days in 1982 to more than 110,000 in 2009. Yet the outfitter says the Bitterroot continues to offer superb fishing. "It's better than ever," Carlson says. "FWP's timely and prudent regulations and guaranteed instream flow have had a tremendous influence. It's made this a world-class fishery."

WATER MONITORS FWP fisheries biologist Chris Clancy and regional fisheries manager Pat Saffel survey a tributary running into the East Fork of the Bitterroot. They say ensuring that the Bitterroot retains enough flow for trout to survive is one of the department's top priorities.

Centuries of human use

The Bitterroot Valley was the aboriginal home of the Salish Indians, also known as the Flatheads. The name Bitterroot came from a prevalent plant (later made the Montana state flower), the roots of which were a staple of the Salish diet.

In 1805, on its westward trek to the Pacific, the Lewis and Clark Expedition encountered members of the Salish Tribe at a broad meadow called Ross' Hole, near the current hamlet of Sula, on the East Fork of the Bitterroot. After a few days' march downstream, the explorers camped on Lolo Creek, a short distance from the tributary's confluence with the Bitterroot. The campsite, about 11 miles south of Missoula, is now Travelers' Rest State Park. The expedition would camp there again in 1806 on its return voyage.

In 1841, following persistent requests by the Salish, Father Pierre-Jean De Smet, a Jesuit priest, established St. Mary's Mission—the state's first church—on the east bank of the Bitterroot. After the mission closed in 1850, the Jesuits sold the property to John Owen, who founded Fort Owen, a trading post that was the first permanent white settlement in Montana. The post grew to become the town of Stevensville, while the fort itself was later turned into a state park.

An early 1900s logging operation in the Bitterroot Valley southwest of Florence

Throughout the late 19th century, the Bitterroot River and its tributaries were used to move logs downstream to mills near Missoula. Later, river water irrigated a wide range of crops including, at one time or another, apples, tart cherries, potatoes, and sugar beets. Today most of the valley's agricultural land grows alfalfa hay or has been converted into residential subdivisions.

Slowing the brown trout increase could help bulls and cutthroats

The clear, cold headwaters and upper tributaries of the Bitterroot River are historical strongholds for Montana's native bull trout and westslope cutthroat trout. But in recent years, anglers and FWP fisheries biologists have seen increasing numbers of brown trout that have moved up from the lower Bitterroot into these pristine waters, where the nonnative fish were once rarely found. One theory is that the warmer climate over the past decade has raised Bitterroot headwater temperatures and made them more favorable to browns.

FWP is concerned that brown trout could outcompete bulls and cutthroats and threaten state and federal efforts to conserve the indigenous species. "We have solid information that these brown trout are displacing bull trout," says Pat Saffel, FWP regional fisheries manager in Missoula. "The effects on cutthroat trout are less clear, as their numbers in tributaries seem to be holding steady. But cutthroat numbers in the mainstem Bitterroot have dropped in recent years, and we know that brown trout have replaced native cutthroats in many other large rivers in other western states."

Though Saffel has nothing against brown trout—he calls them a "superb sport fish"—he points out that the species is thriving in the Bitterroot's lower half and that cutthroat and bull trout need all the help they can get in their upstream waters.

To protect the native trout, FWP set new regulations this year that allow for an increase in brown trout harvest in the upper Bitterroot watershed. The most significant changes are on the West Fork (below Painted Rocks Reservoir) and the East Fork, where the limit went from three fish, only one over 14 inches, to three fish of any size; and on a stretch of the mainstem Bitterroot near Darby that went from catch-and-release-only to a harvest of three browns, one over 14 inches.

BARELY A DENT Despite concerns by some outfitters and anglers, FWP says new regulations aimed at helping cutthroat and bull trout won't threaten the Bitterroot's ability to continue producing big browns.

CLOCKWISE FROM LEFT: JEREMIE HOLLMAN; MONTANA FWP; MAUREEN AND MIKE MANSFIELD LIBRARY, THE UNIVERSITY OF MONTANA-MISSOULA

At first, news of the relaxed limits didn't sit well with some anglers and outfitters, who feared that brown trout would be overharvested. At public meetings Saffel assured them the Bitterroot's brown trout population has expanded so greatly in recent years that it can handle increased harvest. "There will still be plenty of big browns for anglers to catch, especially downstream from Hamilton," he says. Studies throughout the West have shown that anglers rarely overfish brown trout, which often feed at night and hang out during the day in deep holes and under submerged logs. "They're just harder to catch," says Saffel.

Saffel maintains that conserving the Bitterroot's cutthroat trout makes sense for several reasons: "They're a great sport fish, and they add diversity and resiliency to the system." He adds that in other parts of Montana where whirling disease has ravaged rainbow populations, "cutthroats can then come in and fill that gap."

Saffel considers the Bitterroot an example of where FWP is accommodating a diversity of fisheries without having to choose one species over the other. "This is a premier trout river providing a huge amount of angling recreation, and it's also a stronghold for bull trout and cutthroat trout," he says. "We're trying to maintain all of that."