

Conservation

Rebirth of Montana's Clark Fork/By Michael Hamilton

The Clark Fork is named for explorer William Clark. It is Montana's largest river by volume, draining an extensive region of the Rocky Mountains in western Montana. It's also one of the most polluted rivers in the Lower 48, recovering from a century of mining for copper and other heavy metals.

In 1908, a massive flood washed millions of tons of mining and smelting waste 100 miles downstream from Butte. The toxic soup settled into a 180-acre reservoir behind the Milltown Dam, at the confluence of the Clark Fork and the Blackfoot River, 8 miles above Missoula. In 2003, the Environmental Protection Agency and state agencies approved a long-term plan to remove Milltown Dam and the 3 million tons of contaminated sludge in the reservoir.

A decade later the dam is gone and prolific hatches of stoneflies, caddisflies, and mayflies have returned above and below the former dam site. The reemergence and redistribution of eco-sensitive invertebrates sends an undeniable signal that a new dynamic, benefiting both fish and anglers, is under way.

Last year, guide Sean O'Brien rolled his raft down the Turah Fishing Access ramp. Owner of Osprey Outfitters, (406) 363-1000, www.ospreyoutfittersflyshop.com, in nearby Hamilton, O'Brien was on the oars as I joined David Schmetterling, Montana Fish, Wildlife & Parks senior biologist, on a 9-mile float through the confluence of the Blackfoot and Clark Fork and past the former site of the Milltown Dam. Our float was more reconnaissance than fishing. This stretch had been closed to the public for five years to allow a massive flood plain behind the dam to recover.

"Rising fish river right," barked O'Brien. Schmetterling made one cast. A thick-shouldered westslope cutthroat rose slowly and inhaled his fly. O'Brien rowed to shore and netted the 18-inch beauty. "Not a mark anywhere. Beautiful, huh?" he marveled. As the cutthroat slipped away, I began to notice hundreds of stonefly nymph shucks covering the rocks. A slight movement to my left caught my eye. A closer look revealed two huge Salmonflies, perfect specimens of *Pteronarcys californica*.

"That's amazing," proclaimed Schmetterling. Everywhere we looked, native vegetation such as willows and cottonwoods were thick along the main channel. Engineers had placed

downed trees, many salvaged from the bottom of the drained reservoir, along the outside banks of braids and bends. Fish were rising all along the artificial debris jams as we approached the confluence with the Blackfoot, where a new 542-acre

Milltown State Park has been developed. Park manager Michael Kustudia had told me earlier that trails, picnic shelters, an interpretive center, and river access points "have combined to make the park a tremendous community asset."

In 2010, soon after the Clark Fork was restored to its natural channel, rainbow and cutthroat moved upriver and repopulated in water traditionally inhabited only by sparse pods of brown trout. Downriver, below the dam site, it was a different story. When the last portion of the Milltown Dam was breached, in 2009, sediment flowed downstream toward Missoula, smothering pollution-sensitive invertebrates. Outfitters and guides complained bitterly that historic hatches of Blue-Winged Olives and Pale Morning Duns had all but disappeared, buried under 4 inches of toxic sludge.

Preaching patience, Schmetterling and fellow scientists predicted that invertebrates would return to the lower river in three to five years if Mother Nature cooperated. As if on cue, she produced near-record spring runoffs in 2011 and 2012. The high water scoured the river bottom, pushing pockets of sediment all the way to the mouth of the Clark Fork at Lake Pend Oreille, in the Idaho panhandle. As early as the fall of 2011, flights of Mahogany Duns and Blue-Winged Olives, absent for two years, reemerged from Kelly Island below Missoula. In 2012, *Skwala* stoneflies, Blue-Winged Olives, Pale Morning Duns, and various caddisflies hatched river-wide. Salmonflies, excellent signs of insect resurgence, hatched for the first time in memory below the confluence of the Blackfoot and the Clark Fork.

"The river is gradually regaining its dynamic equilibrium," says Schmetterling. "With the dam gone, we are seeing species of invertebrates and fish recover, repopulate, and migrate throughout the entire watershed."

The Clark Fork's restoration near its confluence with the Blackfoot is only the beginning. State and federal agencies are spearheading a different cleanup plan for the upper Clark Fork, from its headwaters at Silver Bow Creek downstream to Drummond.



CLARK FORK RIVER; MILLTOWN DAM; PHOTOGRAPHY