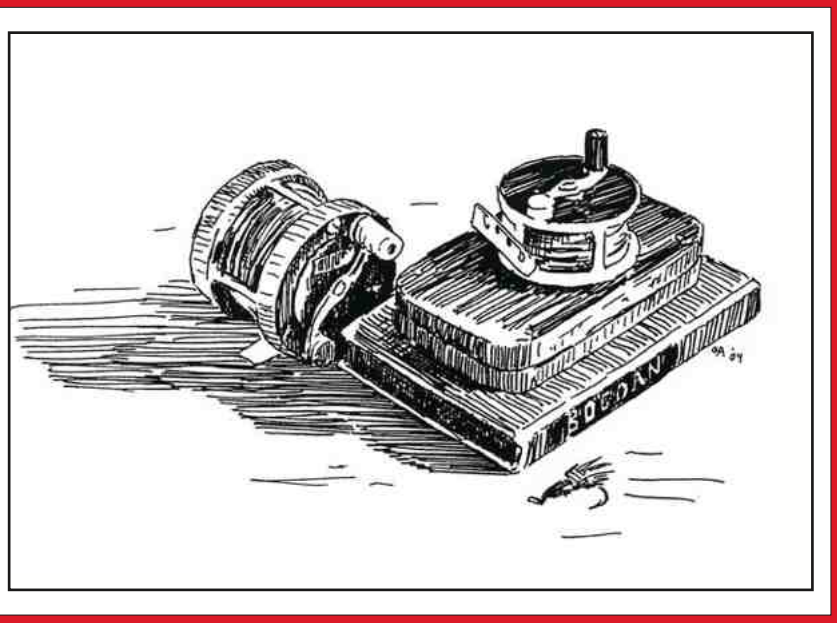
The American Fly Fisher

Journal of the American Museum of Fly Fishing



SPRING 2007 VOLUME 33 NUMBER 2

Living History: Blue-Ribbon Tailwaters and Stan Bogdan

Rivers and creeks flowing now, as you read this. A legendary reel maker still producing reels by hand. History both made and in the making. This spring issue features historical characters still alive and affecting our sport: western tailwaters born of dam projects and the one and only Stan Bogdan.

History affects the environment, which in turn affects history. We're please to be able to offer an article that clearly demonstrates this. When the U.S. Bureau of Reclamation began constructing dams in the 1930s for flood control and irrigation, all fishing focus was on the recreational opportunities created by the impoundments behind the dams. No one really considered the resulting *new* habitat: tailwater fisheries. By the mid-1970s, the potential of the tailwaters was discovered, and regulations soon had to follow to protect the resource. In "Blue-Ribbon Tailwaters: The Unplanned Role of the U.S. Bureau of Reclamation in Western Fly Fishing," western historian Ken Owens offers us both biology and history lesson. He identifies dams upstream from blue-ribbon tailwaters, describes a bit of the unique stream ecology, addresses issues of stocking (both political and economic), and discusses the benefits of sustaining tailwaters as wild—if not necessarily native—fisheries. To begin to take it all in, turn to page 2.

Ever since the delightful Graydon R. Hilyard let me know he was working on a biography of Stan Bogdan, I'd eagerly been awaiting its publication and the chance to showcase a chapter. Finally, last July, Kim Koch, editor and publicist extraordinaire at Frank Amato Publications, Inc., sent me the page proofs from which we'd be able to choose our chapter and photos.

Soon after, in early August, Stan Bogdan made a visit to Manchester, accompanied by his good friend Fred Kretchman, maker of my beloved bamboo fly rod. Stan and Fred accepted an invitation to breakfast at my house, where my husband Tim prepared his unbeatable (at a certain point, literally—it's a *folding in* at the end, really) buttermilk pancakes. Stan hadn't seen a proof yet, it being so recently completed, and after breakfast we went through it, page by page. Fred, Tim, and I were quite the captive audience as Stan told us the story behind each and every photo. Not a shabby way to spend a morning.

The next month, on a trip to Oregon, I was able to stop by the Amato offices and meet Frank, Kim, and some of the hard-working gang producing this biography and other publications. Dave Eng's recommendation to the Salmon Row Pub in Cascade Locks led Tim and me to some good food and some of the best horseradish on earth after a fun-filled visit to the fish ladders at the Bonneville Dam. (Which just goes to show you, there's no telling where you'll end up or what you might find when you're on a Bogdan-inspired journey.)

Hilyard's done a fabulous job with *Bogdan.* We'll have it available at our 2007 Heritage Award dinner in May, where we'll be honoring Stan as this year's award recipient. The chapter we've excerpted includes some of Bogdan's early history, his start in the business, and comments on his unorthodox business practices (which, paradoxically, turned out to be highly successful in his niche). Also featured are photos of some of his prototype reels. "Bogdan: Milestones" begins on page 11.

Our most recent goings-on and goings-on-to-come can be found in Museum News (page 24). And keep those cards and letters coming, like Brian Railsback and Robert Behnke have (page 26).

Kathleen Achor
Editor

This dry-point etching of Stan Bogdan, created by noted wildlife artist Gordon Allen, is one of many artistic tributes to the master reelmaker that appear in Bogdan, *written by Graydon R. Hilyard.*

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ON THE COVER: *A line drawing by Gordon Allen. From Graydon R. Hilyard's* Bogdan *(Portland, Ore.: Frank Amato Publications Inc., 2006), 1.*

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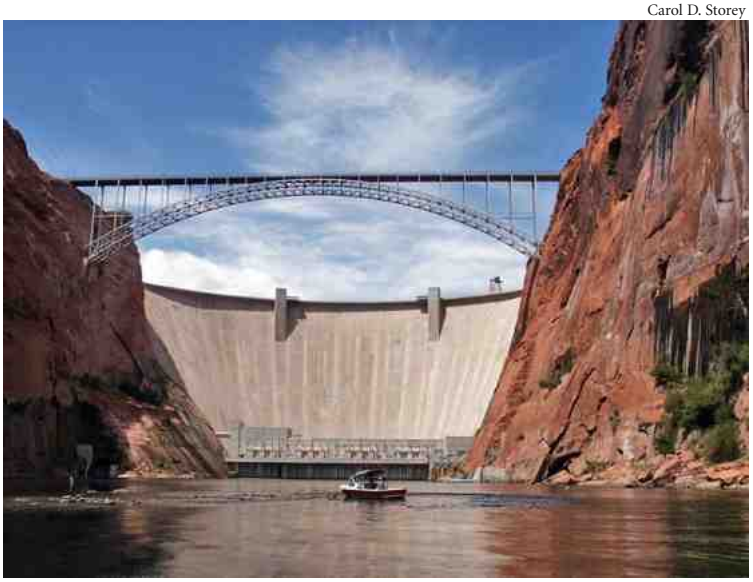
Blue-Ribbon Tailwaters: The Unplanned Role of the U.S. Bureau of Reclamation in Western Fly Fishing

by Ken Owens

Tailwaters, as all fly fishers know, are those stretches of rivers and creeks directly downstream from dams and their impoundments. Especially important in western America for trout and thus for fly fishers are the tailwaters below bottom-release high dams built for flood control and irrigation purposes, in particular the tailwaters downstream from many dams constructed by the U.S. Bureau of Reclamation (USBR) between the late 1930s and the early 1990s. Under the right circumstances, the bureau's high dams sustain blue-ribbon tailwater sites for trout growth. Before construction, however, no one—not civil engineers, not fisheries biologists, and certainly not fly fishers—had an inkling of what impact these dams would have on downstream fisheries. The only recreational concerns discussed by bureau planners for any of these projects were the boating and fishing opportunities being created in the huge impoundments behind the dams. The tailwater effect for downstream fisheries only came to be recognized gradually, as fly fishers began to investigate these radically changed streams and as aquatic entomologists first gave attention to the unique conditions of insect life in man-made tailwater microenvironments.

Table 1, "Inventory of Stream Sites" (page 4), identifies thirty-one USBR-constructed dams on twenty-four rivers and creeks in western states upstream from blue-ribbon tailwaters. State fisheries agencies now manage most of these sites for sustained recreational use by fly fishers, subject to special regulations that restrict the methods of angling and impose limited take or no-take rules on the tailwaters. The bureau has primary responsibility for managing nineteen of these thirty-one dams; local irrigation boards or similar entities control eleven, and one—the Pactola Dam on Rapid Creek in South Dakota—has a shared management arrangement in place.[1]

Carol D. Storey



Scenic fishing in the dramatic Glen Canyon tailwater on the Colorado River.

The construction dates of these thirty-one dams, displayed in Table 2 (page 6), show a trend familiar to all students of western water history. Before 1945, USBR engineers had completed only six high dams in the western states, none designed on a truly massive scale.[2] The 1945 completion of Shasta Dam on the Sacramento River in northern California signaled the bureau's entry into a new phase of dam building that emphasized large, high dams on big rivers, creating extensive tailwater environments.[3] By 1968, the bureau's leadership had planned, constructed, and put into operation eighteen more high dams, including such colossal projects as Canyon Ferry Dam on the Missouri River in Montana, Flaming Gorge Dam on the Green River in Utah, Glen Canyon Dam on the Colorado River in Colorado, and Yellowtail Dam on the Big Horn River, also in Montana. Since 1968, by comparison, the bureau has built only an additional six high dams that supply tailwater fisheries, none as great in size as the larger projects of the previous two decades.

Coincidentally, the major era of USBR large-dam construction in the West was the period during which fly fishing grew from a minor recreational interest to a widely popular enthusiasm in the western states.[4] And as more people learned to

U.S. Bureau of Reclamation

A tailwater pioneer. This lady angler displays her trophy steelhead taken below the Priest Rapids Dam on the Columbia River, circa 1960.

fly fish, the general level of on-stream sophistication rose markedly. Yet western tailwater fishing opportunities remained generally ignored until well into the 1970s. Most of the new high dams were situated on rivers that had previously provided at best only a marginal trout fishery. (Although naturalists may regret the dams' destruction of habitat for indigenous warm-water species, this concern has certainly not been a priority for trout fanciers.) Tailwaters were slow to develop their trout-growing potential because of the time it took for each stream to recover from the harsh impact of dam construction. In addition, this development of trout-growing potential waited on the efforts of state agencies to plant tailwaters with the trout that would naturalize and serve as a founding generation for new fisheries. In part also, fly fishers were slow to perceive that a special type of fishery was taking shape in advantageous tailwater situations. None of the standard published guides during the era of dam construction made mention of tailwater fishing as a distinct category, and none of the popular fly-fishing magazines carried early stories about the amazing new fisheries below the bureau's high dams.[5]

The situation at Lee's Ferry, downstream from the Glen Canyon Dam on the Colorado River, may represent a general case. According to Terry Gunn, a guide and fly-shop owner in nearby Vermillion Cliffs, the completion of Glen Canyon Dam "converted the Colorado River from a catfish fishery to a cold-water trout fishery, and nobody noticed." The Arizona Department of Game and Fish stocked trout in the tailwater in 1963, Gunn relates, "then basically forgot this fishery. Nobody was coming here then—no river runners to speak of, no anglers, not much of anything to impact the fishery that was growing up."[6] Until about 1975, these trout grew unmolested. Then anglers discovered the fish and started catching 15-pound rainbows, principally with bait and spinning gear. With a ten-fish limit and no special catch rules in place, the big fish disappeared within a few seasons. Trout stocking continued actively, but fishing pressure overwhelmed the state hatcheries' ability to deliver catchable trout to the site. Realizing the benefits of attracting fly fishers, in 1981 Arizona first put special regulations in place, ended stocking, and established a wild trout fishery now maintained by a catch-and-release policy for all trout more than 12 inches in length. "It is such a good fishery right now," one experienced guide declared in 2001, "you can easily fish it year-round."[7] It has become a boon to the local economy near the isolated Lee's Ferry site.

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As a few fly fishers began to explore productive tailwaters in various parts of the West by the late 1970s, aquatic entomologists and fisheries biologists also started to examine and analyze the tailwater effect. The creation of blue-ribbon tailwaters, they came to realize, turns on a few basic principles of stream ecology. High dams alter the downstream ecosystem by affecting water clarity, water flow, water temperature, and nutrient load. First, these dams trap the sediments in the river's natural runoff, sending clear, well-aerated water downstream that benefits the plants and insects sustaining trout populations. Second, the outflow from the high dams tends to be nutrient rich, giving the aquatic food chain an energy boost that fosters natural reproduction and promotes rapid growth rates in trout. Third, these dams moderate the pattern of highly variable seasonal flows that typify the high country in western America, holding back the snowpack runoff surges during the spring and keeping instream flows adequate for trout survival and growth during the low-water, late-summer seasons. Fourth, like natural lakes, large, deep impoundments turn over along a thermocline according to seasonal cycles. As air and water temperatures rise in the late spring and summer, the cooler water stratifies in the deepest parts of the reservoir. During the colder fall and winter months, warmer, denser water settles into the lower depths. Because high dams draw their outflow from the bottom of their impoundments, this seasonal stratification moderates the temperature extremes

Chris Parsons

A drift boat lunch break on the lower Sacramento River tailwater, below Shasta Dam.

Table 1: Inventory of Stream Sites within U.S. Bureau of Reclamation Project Impact Areas Designated or Eligible for Special Trout Fly-Fishing Regulations

State	River/Stream	Upstream Dam	Construction Completion
Arizona Operator: U.S. Bureau of Reclamation Glen Canyon power plant online 1964 State fishery regulations: catch and release, barbless hooks, artificial lures	Colorado	Glen Canyon	1963
California Operator: U.S. Bureau of Reclamation Stampede power plant online 1988	Little Truckee	Stampede	1970
California Operator: Washoe County Water Conservation District	Little Truckee	Boca	1939
California Operator: U.S. Bureau of Reclamation	Putah Creek	Monticello	1957
California Operator: U.S. Bureau of Reclamation Shasta power plant online 1944 Water cooling device installed in 1997 to benefit threatened salmon runs	Sacramento	Shasta	1945
Colorado Blue Mesa power plant online 1967	Gunnison	Blue Mesa	1966
Colorado Morrow Point power plant online 1970	Gunnison	Morrow Point	1968
Colorado Crystal power plant online 1978 Operator: U.S. Bureau of Reclamation	Gunnison	Crystal	1976
Colorado Operator: Dolores Water Conservancy District McPhee power plant online 1993 Fishery wiped out by 1987 dewatering; now recovering	Dolores	McPhee	1984
Colorado Operator: U.S. Bureau of Reclamation	Uncompahgre	Ridgway	1983
Colorado Operator: U.S. Bureau of Reclamation Green Mountain power plant online 1943	Blue	Green Mountain	1943
Colorado Operator: U.S. Bureau of Reclamation	Fryingpan	Ruedi	1964
Colorado Operator: Uncompahgre Valley Water Users Association	Taylor	Taylor Park	1937
Idaho Operator: Boise Project Board of Control Anderson Ranch power plant online 1950	South Fork of the Boise	Anderson Ranch	1950
Idaho Operator: U.S. Bureau of Reclamation Palisades power plant online 1957	South Fork of the Snake	Palisades	1957
Montana Operator: U.S. Bureau of Reclamation Canyon Ferry power plant online 1953	Missouri	Canyon Ferry/Hauser	1954
Montana Operator: East Bench Irrigation District	Beaverhead	Clark Canyon	1964
Montana Operator: U.S. Bureau of Reclamation Yellowtail power plant online 1966	Bighorn	Yellowtail/Yellowtail Afterbay	1966
Montana Operator: U.S. Bureau of Reclamation	Marias	Tiber	1956
New Mexico Operator: U.S. Bureau of Reclamation	San Juan	Navajo	1963

Table 1 *(continued)*

State	River/Stream	Upstream Dam	Construction Completion
Oregon Operator: Northern Unit Irrigation District	Deschutes	Crane Prairie	1940
Oregon Operator: Northern Unit Irrigation District	Deschutes	Haystack	1957
Oregon Operator: Northern Unit Irrigation District	Deschutes	Wickiup	1949
Oregon Operator: Ochoco Irrigation District	Crooked	Arthur R. Bowman	1961
South Dakota Operator: U.S. Bureau of Reclamation/Rapid Valley Project	Rapid Creek	Pactola	1956
Utah Operator: U.S. Bureau of Reclamation Flaming Gorge power plant online 1963	Green	Flaming Gorge	1962
Utah Operator: Provo River Water Users Association	Provo	Deer Creek Jordanelle	1941 1993
Utah Operator: U.S. Bureau of Reclamation	Currant Creek	Currant Creek	1975
Wyoming Operator: U.S. Bureau of Reclamation Kortes power plant online 1950	North Platte	Kortes	1951
Wyoming Operator: U.S. Bureau of Reclamation	North Platte	Pathfinder	1909

common to western rivers, providing year-round temperatures within an optimal range for insect and trout populations.

The potential benefits of high dams for sustaining large, healthy tailwater trout populations are reduced or subverted in the case of dams built and run primarily for the production of hydroelectric power for urban customers. In this age of air-conditioning, fluctuating household and industrial power demands during the summer mandate drastic changes in stream flows from day to day and during different parts of the day. Seasonal flow patterns for hydroelectric dams can vary sharply, depending on weather conditions and other variables that affect power production and distribution throughout the western states. The uneven flows typical of these dams are more or less damaging to the tailwater food chain. In addition, rapid, unannounced drastic changes in flows are a hazard for wading fisherfolk. Every year a few overly bold, fatally uninformed, sadly unprepared, or just unlucky fly fishers are swept away by sudden dam releases.

To lesser degrees, these effects also appear downstream from USBR high-dam projects that include a power plant as part of their design, which is the case at fourteen of the thirty-one tailwater sites identified in Table 1. But the principal purpose of power generation at most of these sites is to run pumping plants and other USBR project–related operations with relatively stable electrical usage. Hence, downstream flows do not fluctuate so greatly as with projects operated mainly for hydroelectric power production. Consequently, the impact on downstream insect life and on the fisheries, although not negligible, is less severe.

More of the Favored

Under usual conditions, the overall ecological tendency in high-dam tailwater situations is to narrow significantly the natural range of diversity in insect species, but to produce extremely large populations of favored species. In other words, high-dam tailwaters support fewer different types of bugs, but produce huge numbers of these few types. On the Green River, for example, entomologists recorded twenty-three mayfly species before construction of the Flaming Gorge Dam. Now, only four species are well documented.[8] Every fly fisher familiar with western blue-ribbon tailwaters has stories to tell of amazing hatches of one insect or another, perhaps a green drake hatch on the Gunnison River or a Trico hatch on the Big Horn. Such hatches can bring enormous trout to the surface to slurp down the naturals with reckless abandon. These events, your piscatorial expert will probably tell you, are miracles of nature. Of course, they represent nature within a setting that man has reengineered along tailwater streams for other purposes.[9] The welfare of the trout and the satisfaction of avid trout anglers are serendipitous consequences, not part of the cost-benefits analysis that justified USBR high-dam construction.

Not all tailwaters are the same, of course, but a general pattern of insect life can be identified in tailwaters that is distinctly different from what is typically found in undammed western freestone rivers. First, tailwater insects tend to be small, especially in the flow directly below the dams. Midges are abundant. Mayfly species tend to be small close to dams, with a preponderance of blue-winged olives (*Baetis*), whereas larger mayflies like the pale morning duns (*Ephemerella infrequens*) are apt to appear only farther downstream. In most tailwaters, stoneflies are not found at all close to the dam, whereas the stoneflies that hatch downstream are the relatively smaller species rather than the large golden stoneflies and brown willow flies

Table 2: Dam Sites Arranged by Construction Dates

Completion Date	River/Stream	Dam
Before 1940 (3 dams)		
1909	North Platte	Pathfinder
1937	Taylor	Taylor Park
1939	Boca	Little Truckee
1940–1944 (3 dams)		
1940	Deschutes	Crane Prairie
1941	Provo	Deer Creek
1943	Blue	Dillon (Green Mountain)
1945–1949 (2 dams)		
1945	Sacramento	Shasta
1949	Deschutes	Wickiup
1950–1954 (3 dams)		
1950	Boise South Fork	Anderson Ranch
1951	North Platte	Kortes
1954	Missouri	Canyon Ferry
1955–1959 (5 dams)		
1956	Rapid Creek	Pactola
1956	Marias	Tiber
1957	Putah Creek	Monticello
1957	Snake South Fork	Palisades
1957	Deschutes	Haystack
1960–1964 (6 dams)		
1961	Crooked	Bowman
1962	Green	Flaming Gorge
1963	San Juan	Navajo
1963	Colorado	Glen Canyon
1964	Fryingpan	Reudi
1964	Beaverhead	Clark Canyon
1965–1969 (3 dams)		
1966	Big Horn	Yellowtail
1966	Gunnison	Blue Mesa
1968	Gunnison	Morrow Point
1970–1974 (1 dam)		
1970	Little Truckee	Stampede
1975–1979 (2 dams)		
1975	Currant Creek	Currant Creek
1976	Gunnison	Crystal
1980–1984 (2 dams)		
1983	Uncompahgre	Ridgway
1984	Dolores	McPhee
After 1985 (1 dam)		
1993	Provo	Jordanelle

(genus *Acroneuria*) common to western freestone rivers. Some tailwaters hold huge caddis populations; on others, the caddis species seem to be quite unimportant until the trout seeker moves miles downstream, where the tailwater effect gradually disappears. Fly fishers have learned to imitate two other forms of underwater life that are quite important in tailwaters but seldom if ever found in other western rivers: small freshwater crustaceans (genus *Gammarus*), commonly called scuds, and aquatic earthworms (family *Lumbricidae*), which go by the generic name San Juan worms, after the river where their easily tied imitations first became popular.[10] Another common feature of tailwater fishing is the general summertime prevalence of terrestrial bugs—ants, beetles, grasshoppers, and cicadas—that are high-protein trout food, easy to imitate, and productive with a surface presentation.

Peculiar to a few Colorado tailwaters are Mysis shrimp, native to lakes in the Canadian far north. During the 1960s, Colorado state biologists introduced these shrimp in Reudi Reservoir and Taylor Park Reservoir to provide a food source for planted kokanee salmon and lake trout. Unfortunately for the professional reputation of those who conceived this plan, the appearance and behavior of the Mysis—which are as clear as glass and which feed near the surface only at night, then descend to the depths during the daylight hours—left them virtually invisible and untouched by the sight-feeding kokanee. But the shrimp ate heartily of the zooplankton that the kokanee relished. Although lake trout flourished on a Mysis diet, ironically these impoundments experienced a sharp cutback in kokanee numbers. Downstream, something else happened. Mysis shrimp were swept from the lower layers of the reservoirs through the dams and into the tailwaters, where they became shrimp candy for the foraging trout. Fly fishers soon found it possible to catch fat, fat Mysis-gulping superfish. Below Reudi Dam on the Fryingpan River and below Taylor Park Dam on the Taylor River, the tailwaters became famous (and remain famous) for huge short trout—6, 8, even 10 pounds in weight—shaped like footballs with fins attached, taken deep on minimal small flies that can be tied with white thread, a few fibers of Antron, and a little scrap of clear plastic wrap or closed-cell packing foam.[11]

With the rich mixture of trout food available in blue-ribbon tailwaters, a distinctive set of expectations and fly styles have come to characterize these fishing sites, influenced by local conditions and changing seasons. Easily the most effective way to fish most of the time is with small underwater artificials: nymph, scud, and worm imitations presented on light tippets, weighted to reach the fish near the streambed, and usually with either a bobbing surface strike indicator or an indicator fly tied in above. Dry-fly fishing will be limited to those happy few hours when a hatch is on. But especially in the late summer and early fall months, an abundance of grasshoppers and other terrestrials also means fishing success when their imitations are floated on top of the water. Midge fishing is the newest trendy fashion among fly fishers. These tiny two-winged flies challenge the hopeful angler to tie and fish imitations on hooks as small as size 22, 24, or even 26 and 28 (which are about an eighth of an inch long) and on extremely light tippets—a daunting challenge especially for senior devotees of the piscatorial art whose eyes are no longer what they might once have been. These miniature flies are fished deep or in the surface film, and it requires a delicate presentation and exquisitely honed skills for hooking and landing large trout on ultralight tippets. While midge fishing is

Mysis relicta.
Photograph courtesy of the U.S. Geological Survey.

also successful on spring creeks, east and west, this demanding technique has come to prominence mainly as a response to the challenge of stalking educated tailwaters trout.[12]

Reengineering: Biology and Politics

The mix of trout species commonly present in the West's blue-ribbon tailwaters is another element affected by the reengineering of nature. Cutthroat trout, with many localized subspecies, were the trout native to the interior West and many parts of the Pacific Slope. Rainbow trout were originally located within a much more restricted range, mainly at lower elevations in the waterways and lakes of the western Cascades and the Sierra Nevada. For many reasons mainly related to an impulse to improve recreational sport fishing, private individuals and then federal and state fisheries agencies in the late nineteenth century started to introduce exotic fish species here and there throughout the West. Brook trout from New England and brown trout from Europe each had their advocates, who made sure these species were planted in accommodating lakes and streams in the western states. Even more popular, however, were the rainbow trout: brilliantly colored, known for their proclivity to take to the air when hooked, and yet not particularly hard to attract with an artificial lure or fly. A hardy, fast-growing strain of rainbow trout from northern California became the brood stock for a massive dispersion of these fish throughout the West and into eastern states and overseas as well. Federal and state hatcheries began to rear millions of rainbows annually that were dumped either as fingerlings or—from the 1930s onward—as so-called catchable fish into any waters that could be reached by tank trucks or mule packlines, or later by small planes or helicopters. The result was to expand vastly the number and extent of fishable waters in the West. But the hatchery mania had unforeseen environmental consequences, not least the serious depletion or even eradication of native cutthroat, golden trout, Paiute trout, and other, less hardy strains of rainbow trout, all of which proved to be at a competitive disadvantage against the hatchery-bred invaders.[13]

Politics and biology intersect and often collide on issues related to large-scale fish stocking programs that rely on hatcheries. With their funding dependent on the sale of fishing licenses, state fisheries agencies are usually quite sensitive to the need to preserve stocking programs for so-called put-and-take fisheries, where untutored, unskilled fishers can readily catch a few recently planted hatchery fish with the simplest of methods and equipment. Meanwhile, fisheries biologists and an ever-growing constituency among fly fishers deplore the consequences of indiscriminate stocking over the past century. Throughout the West, local fly-fishing groups and scientists have allied in seeking to place premium waters off limits to fish planting and the put-and-take style of fish harvesting. Blue-ribbon tailwaters, with their rich suitability for raising trout by natural reproduction, are near the top of the list for those who advocate the creation of sustainable fisheries without the constant addition of hatchery-raised fish.

Because of the historical popularity of stocking programs, the trout populations in blue-ribbon tailwaters are by no means limited to native fish. Brook trout are seldom present, but brown trout and rainbow trout are commonly found, along with cutthroat. In many localities, a cutthroat-rainbow fertile hybrid, a *cutbow* as it is commonly called, is also part of the fishery. These different species coexist, each with distinctive traits, behaviors, and some degree of ecological niche specialization. What is important to fly fishers is that most of these fish, although they are not all natives, are completely naturalized; they have hatched and grown to maturity in the stream. They have never tasted little brown hatchery pellets; they have never competed with hundreds of thousands of their finny, voracious siblings in a narrow concrete tank. They are, according to another fly fishers' term, wild trout.

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Yet how wild are they? One sure way to spark a lively discussion among western fly fishers today is by characterizing blue-ribbon tailwaters as piscatorial Disneylands—Disneylands with trout.[14] The extremely large numbers of trout present in some tailwaters stagger the imagination of experienced fisherfolk. Fish census figures report an amazingly high 6,000 to 8,000 or more catchable-size trout per mile in the Big Horn River downstream from Yellowtail Dam or in the Green River downstream from Flaming Gorge Dam. Under optimum conditions with fast rates of growth, moreover, the average size of these tailwater trout can be astounding. Sixteen-inch or even 18-inch rainbows, regarded

Chris Parsons

Drift fishing the lower Sacramento River's Shasta Dam tailwater.

as very good fish on other streams, may come to seem like little fellows after a few days' fishing on one of the prime blue-ribbon tailwaters. Four- and 5-pound trout are rare anywhere, but certainly less rare in the most productive western tailwaters. On those waters where Mysis abound, the fish might even be called Disneyland trout on steroids. Under favorable conditions, large tailwater trout can be taken in substantial numbers by any reasonably experienced fly fisher who can match the bugs *du jour* and present the imitations accurately with a natural drift and a delicate touch.

Still, despite their abundance, tailwater fish are not always easy to catch. Particularly in heavily fished waters with catch-and-release regulations, which now include most western blue-ribbon tailwaters, trout become discriminating with experience: once caught (and released), twice or thrice shy is the rule. These so-called wild trout are naturally reproducing trout with an education. Although their brains are no larger than a pea, on some days the better-educated fish will surely outsmart the big-brained people standing in the water and waving a very expensive graphite stick at them.[15] And just as in some heavily fished western spring creeks, the fish become accustomed to being hooked, with resulting modifications in their behavior that deserve the attention of fisheries scientists.

The abundance of fish and the conditions of fishing—perhaps with large numbers of fly fishers vying for a turn at the better runs—make tailwater fishing quite a different experience from the solitary pursuit of wild native trout in a small headwaters stream located long, leg-wearying miles from pavement. Ambitious, physically well-conditioned, high-energy purists among fly-fishing addicts will continue to prefer their secret places where no trails lead. But doesn't everyone like to go to Disneyland at least once in a while? Yet ecological historian Paul Schullery interposes a skeptical view of tailwaters, emphasizing the environmental cost of tailwater fisheries. They are ecological palimpsests, he has recently stated, "new river ideas written abruptly and violently over the top of old river ideas." Tailwaters, he reminds us, "are trout fisheries built upon the wreckage of whatever native aquatic ecosystems were there before the dam went in."[16]

A Recognized Subdiscipline

The discovery of tailwater fly-fishing opportunities came as no sudden revelation to trout chasers. Rather, one can see in the literature from the mid-1970s forward a gradually dawning awareness that some high dams in western states created special situations for great fishing. Stories in fly-fishing magazines were followed by expert books about specific tailwater fisheries. In 1991, the publication of Ed Engle's fine book, *Fly Fishing the Tailwaters,* first drew wide attention to the tailwater big picture. Colorado-based Engle and his fishing friends made Cheeseman Canyon, below the power-generating Cheeseman Dam on the South Platte River, their piscatorial kindergarten where they learned the basics of tailwater fishing. Travel to other tailwater fishing locations throughout the West increased their appreciation of the unique and wonderful opportunities common to these streams.

Chris Parsons

An urban tailwater: wading the lower Sacramento River at Redding, California, below Shasta Dam.

In the fifteen years since the publication of Engle's book, tailwater fly fishing has become, in effect, a recognized subdiscipline within the world of western trout hunters. Because fly fishing has continued to increase in popularity, the growing thousands upon thousands of devotees are crowding each other in the search for suitable fishing venues. In every western state, the issue arises of public access to good trout water. Private landowners find themselves in conflict with the fly-fishing community as represented by local groups and by Trout Unlimited. Tailwater fisheries have particular importance in efforts to strike a balance between the competing interests of recreational water users, including fly fishers, private landowners, and those municipalities or other public agencies with a prior-use claim to scarce western water resources. These fisheries can usually tolerate crowds of fish-infatuated visitors without destroying the resource, assuming that the fishery is regulated to sharply limit the catch or allow only catch-and-release fishing. Because they are bordered by publicly owned land, most USBR tailwater fisheries are easily accessible. On many larger rivers, access and use is further aided by convenient public launch sites for drift boats and other motorless craft, and frequently campgrounds are close at hand. Although data are not available, logic suggests that public availability of blue-ribbon tailwaters, some within easy driving distance of western urban centers and others in remote rural locations, relieves pressure on less accessible, less durable trout streams. And for fly fishers, tailwaters can provide a preferable alternative to competition with the crowds following the hatchery trucks.

We have partial figures—perhaps no more than guesstimates—on the dollar value of fly fishing and fly-fishing tourism for a few western localities. In *Fly Fishing the Tailwaters,* Ed Engle states (without specifying a time frame) that the Mysis-fattened trout of the Fryingpan River brought one million dollars' worth of new business to the local economy. More recently, a committee of the Colorado state legislature estimated that sports fishing in Colorado—a category in which fly fishers are prominent—had in 1996 more than one million participants, who spent in excess of $972 million. That figure likely does not count either the catalog purchases of fishing gear or the fly-fishing trips to Colorado sold by out-of-state fly shops and other non-Colorado businesses.[17] More trustworthy, perhaps, are the figures of the American Fly Fishing Trade Association, which estimates that there are nationwide seven million active fly anglers, who spend more than $600 million annually on fishing equipment and related gear.[18] Total expenditures for

fly-fishing travel and guide services on fish-rich streams are very likely two or three times that amount, judging from estimates by a small informal sample of fly-shop owners.

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Tailwater fisheries have become highly significant in many western localities, creating opportunities for wonderful fly fishing where, before USBR high-dam construction, there were no trout, or at best, the fishing was marginal. The development of tailwater trout fisheries, unplanned and at first virtually unregulated, now has come to attract widespread attention in the fly-fishing world. Feature articles in fly-fishing magazines and dozens of books highlight these sites, encouraging their use by well-informed, well-equipped, well-heeled, and perhaps well-skilled fishers. Because of their recreational benefits and their direct economic value to surrounding communities, sustaining these exceptional fisheries should become a key element in water resources management by the USBR and cooperating agencies. But to the present moment, bureau administrators still tend to ignore or downplay the importance of tailwaters and their fly-fishing constituency.

The steps necessary to optimize blue-ribbon tailwaters for fly fishers and to maintain these fisheries into the distant future are relatively few. First, for those tailwaters not yet under special regulations, bureau representatives should work with state fisheries agencies, Trout Unlimited, fishing-guide associations, and any local fly-fishing interest groups to institute a catch-and-release policy or, at a minimum, highly restrictive fish bag limits while allowing only artificial lures and barbless hooks. Second, with such regulations in place, bureau administrators should also encourage state fisheries officials to eliminate fish stocking or reduce stocking programs to a minimum in tailwater situations in order to establish a naturally reproducing trout population. Third, particularly for those dams operating under the supervision of local water users boards, the bureau should revise water management guidelines to assure appropriate minimum downstream flows even during drought cycles, preventing dewatering episodes that unduly stress or wipe out viable native trout populations. Fourth, bureau managers should reexamine, case by case, the daily and seasonal pattern of water releases, especially at those dams that combine power generation with storage for irrigation purposes. Relatively small modifications in flow regimes, according to a limited few studies, have the potential to enhance greatly some tailwater fisheries. These decisions also should involve consultation with representatives of the local fly-fishing community and especially tailwater fishing guides, who may spend two hundred days or more a year on their home waters and so are the most experienced monitors of the day-to-day condition of the fishery.[19]

Although not reliably quantifiable, the economic benefits from blue-ribbon tailwater fisheries are substantial in many communities served by the Bureau of Reclamation. Because of USBR projects, fly fishing has called into existence new local businesses and new vested interests whose needs should be considered alongside the concerns of the bureau's traditional rural constituencies. Finally, although this matter is largely untested in the courts, current environmental law suggests that tailwater trout themselves may have the potential to gain legal standing, with interests in an assured minimum stream flow that could perhaps require recognition under federal and state legislation. Responsible management of its high dams by the bureau will seek to minimize conflicts over water usage and maximize the benefits of its projects for all interested parties, including tailwater fly fishers and the abundant trout populations that they come seeking to catch—and then to release.

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Mike Gurnett, photographer, Montana Fish, Wildlife and Parks Department

View of the renowned Missouri River "boat hatch" on the Canyon Ferry tailwater during a full-scale fishers' frenzy.

ENDNOTES

1. This information comes from U.S. Department of Interior, Water and Power Resources Service, compiled, *Project Data 1981* (Denver: U.S. Government Printing Office, 1981), a weighty comprehensive guide to USBR projects. It is now supplemented by the bureau's excellent informational website: http://dataweb.usbr.gov.

2. High dams are built primarily to impound huge amounts of water for irrigation and flood control purposes; power generation is incidental. Dams built for hydroelectric generation are usually lower, with heavier volumes of water being released. My selection of the designated thirty-one "high dams" for this article reflects not only their design and use, but also the appearance of these thirty-one in the fly-fishing literature as good places to fish—the "blue-ribbon" effect.

3. Shasta Dam's development as a major tailwater fishery actually is more recent, resulting from the installation of an $80 million temperature-control device on the dam's face in 1997, intended to benefit the declining runs of Chinook salmon by providing cold water to their downstream spawning beds. The change in water temperatures unexpectedly created a new year-round fishery for large, wild rainbow trout that by 1999 made this section of the Sacramento, according to one fishing guide, "one of the hottest trout rivers in America right now" (Thom Gabrukiewicz, "Off season never really arrives for Sacramento trout," *Sacramento Bee*, 1 December 1999, E6).

4. Three complementary essays summarize recent fly-fishing history in the West, emphasizing the sport's role in modern western culture: Ken Owens, "Fishing the Hatch: New West Romanticism and Fly-Fishing the High Country," *Montana: The Magazine of Western History* (summer 2002, vol. 52, no. 2), 10–19; Adrian Bantjes, "Nature, Culture, and the Fly-Fishing History of Wyoming and the Rocky Mountain West," *Annals of Wyoming* (spring 2004, vol. 76, no. 2), 41–53; and Paul Schullery, "Fly Fishing in Western Culture," Chapter 2 in *Cowboy Trout: Western Fly Fishing As If It Matters* (Helena, Mont.: Montana Historical Society Press, 2006).

5. The most widely read and influential introduction to trout fishing during the World War II and postwar era was *Trout* by Ray Bergman, originally published in 1938, with a revised and enlarged second edition published in 1965 (New York: Alfred A. Knopf). This excellent book did not notice tailwaters. Another comprehensive and popular guidebook in its time was Arthur H.

Carhart's *Fishing in the West* (Denver: Sage Books, 1950), which reflected the general lack of awareness about tailwater fisheries, despite the existence of tailwater situations below hydroelectric power dams in many localities on the Pacific Slope since at least the 1920s. Such esteemed authors of the postwar era as Ted Trueblood, Joe Brooks, and Ernest Schwiebert also gave no specific recognition to tailwater fishing opportunities in the West.

6. Quoted in Richard Alden Bean, "Lee's Ferry," *California Fly Fisher* 9-3 (January/February 2001, vol. 9, no. 3), 32–33.

7. Dave Foster of Marble Canyon Guide Service, quoted in Bean, "Lee's Ferry," 33.

8. Dennis Breer, *Utah's Green River: A Fly Fisher's Guide to the Flaming Gorge Tailwater* (Portland, Ore.: Frank Amato Publications, 1998), 60.

9. This summary description of tailwater ecology depends heavily on material in Ed Engle, *Fly Fishing the Tailwaters* (Harrisburg, Pa.: Stackpole Books, 1991). Also important is Robert Behnke, "Tailwater Trout: Fish of Enormous Size," *Trout* (spring 1996), 43–44.

10. See Engle, *Fly Fishing the Tailwaters,* Chapter 2. Much of Engle's description rests on the observations of J. V. Ward, whose 1973 Ph.D. dissertation at the University of Colorado documented the postconstruction changes in insect life on the South Platte River below Cheeseman Dam.

11. Engle, *Fly Fishing the Tailwaters,* 141–42: "Mysis Shrimp Mysteries."

12. Exemplary of the recent enthusiasm for tailwater midge fishing is the following sample of articles taken from two leading fly-fishing publications during one year: Jim Schollmeyer, "Effective Midge Patterns for Streams," *Flyfishing & Tying Journal* (winter 2001), 90–93; Brian Chan, "Fly Fishing Biology: Midges," *Flyfishing & Tying Journal* (winter 2001), 82–85; Ed Engle, "Springtime Tailwater Fishing," *Flyfishing & Tying Journal* (spring 2001), 30–35; Ross Purnell, "Midge Tactics for Tailwater Trout," *Fly Fisherman* (September 2001), 34–37, 60–61; Dave Rothrock, "Tiny-Nymph Tactics," *Fly Fisherman* (September 2001), 46–49, 68; Trapper Badovinac, "Fishing Small Dry Flies," *Fly Fisherman* (September 2001), 54–57, 64. This last publication also features a how-to-do-it-style article on effective midge patterns: Rick Takahashi, "Fly Tier's Bench—Yong's Special," 62–64. The strength of this movement is demonstrated even more by the publication of *Midge Magic* by Don Holbrook and Ed Koch (Harrisburg, Pa.: Stackpole Books, 2001), which followed on the success of Neale Streeks and Rod Walinchus, *Small Fly Adventures in the West: A Guide to Angling for Larger Trout* (New York: Pruett Books, 1997) and Darrel Martin, *Micropatterns: Tying and Fishing the Small Fly* (New York: Lyons & Burford, 1994).

13. For detailed and appreciative accounts of the West's native trout, see Patrick C. Trotter, *Cutthroat: Native Trout of the West* (Boulder, Colo.: Colorado University Press, 1987) and Robert J. Behnke, *Native Trout of Western North America* (Bethesda, Md.: American Fisheries Society, 1992). No comprehensive account of the movement to introduce exotic trout and other fish species in western waters has yet appeared. Likewise, the related turn toward a reliance on hatchery programs as a mainstay in fisheries management—a policy meant to alleviate the damage to fish populations from environmental degradation, overfishing, and overdrafts on limited stream flows—also waits full telling. These topics, however, appear in bits and pieces throughout the literature of western fisheries and fishing.

14. The Disneyland analogy received wide circulation with the publication of Gary LaFontaine's column, "The Bighorn River: As You Like It," in the spring 1998 issue of *Trout,* pages 59–61. For a followup, see Gary LaFontaine, "Sparring over Fly Lines and Tailwaters," *Trout* (summer 1999), 57–59.

15. My thanks to John Gierach for this phrase, adapted from one of his fine books of trout-fishing stories, *Standing in the Water and Waving a Stick* (New York: Lyons & Burford, 1999), which includes essays about tailwater experiences. Gierach, who moved to Colorado in the late 1960s, records a first discovery of western tailwater fishing on a small, privately owned stretch of stream in the third chapter of *Where the Trout Are All as Long as Your Leg* (New York: Lyons & Burford, 1991).

16. Paul Schullery, "Blocking Rivers, Part II," *American Angler* (fall 2006, vol. 29, no. 5), 25.

17. House Joint Resolution 97-1035, Committee of Agriculture, Livestock and Natural Resources, First Regular Session, Sixty-first General Assembly, 7 May 1995, State of Colorado. The full text is available online: www.state.co.us/gov_dir/leg_dir/res/HJR1035.htm.

18. These figures are contained in news releases posted on the AFFTA's website: affta.com.

19. For an instructive example of cooperation between dam administrators and local fly-fishing interest groups, see Hugh Gardner, "Dateline: Wyoming," *The Angling Report* 13-5 (May 2000, vol. 13, no. 5), 1–3.

Chris Parsons

Fall fishing in the lower Sacramento River tailwater at Redding, California, below Shasta Dam.

Bogdan: Milestones

by Graydon R. Hilyard

James Hardman

Stan Bogdan stands next to a set of reels he donated to the American Museum of Fly Fishing in June of 2005.

Once again, Stan Bogdan was hurtling through the night bound for New Hampshire. Once again, he was a maelstrom of emotions, excitement tinged with doubt overrun by hope tarnished by a plague of what-ifs.

Eight years had passed since he boarded the train at Boston's North Station, leaving behind the 1947 New England Sportsmen's Show with one hundred and fifty of Julian Crandall's dollars in his pocket. Without them, he would have doubted that the owner of Ashaway Line and Twine Company of Ashaway, Rhode Island, had actually bought all of his Atlantic salmon reels. Anyone who could afford to hire Ted Williams for his trade-show booth could certainly afford any reel on the market. But he had bought his.

More importantly, they were not bought out of pity, as Mr. Crandall had scathingly critiqued his efforts two years before. Herbie Welch had been rather gentle in his earlier evaluation, but not so Julian: "Too big, too heavy, poorly finished. The drag looks promising. Keep at it."

For the first time, Stan began to seriously consider commercially producing reels. Until then, he had been compelled by the need to be involved in the fishing process. First it had been fly tying, then it had been reel making, his goal nothing more than a few reels for himself and friends. A few reels after work in the basement at King Street was one thing; gearing up a business was quite another. He was a husband and a father now. Somehow a balance had to be struck. If not careful, his dreams could turn nightmarish in short order.

Now it was 1955 and he had just left New York City, flying on to Boston, once again a maelstrom of conflicting emotions. No money was in his pocket this time. Instead, a contractual handshake from William Shearer and the promise of an Abercrombie & Fitch check for an order of forty reels.

Halfway through that politely intimidating meeting had come a reassuring phone call from John Olin asking, "Are they treating you all right down there?" The answer had been, "Yes sir, they are." Thanks to Abercrombie & Fitch's round-trip tickets, he was in New York City for the first time, visiting the prestigious New York Anglers' Club, and meeting the legendary Joe Brooks and Sparse Gray Hackle. The business meeting was going well, and Stan had agreed to a number of conditions.

Yes, he would create three new models to be called the 100M, 200M, and 300M to be marketed solely by them. They had no interest in his Model 0 and Number 1 as Abercrombie & Fitch was aloofly driven to exclusivity. The 100M would be 3½ inches in diameter, and the 200M and 300M would be 3¾ inches in diameter. Curiously, they insisted that the 200M be equipped with his smaller 1¼-inch brake drum that he considered inadequate for the long haul. Any reel 3½ inches or more in diameter required a 1½-inch brake drum for maximum durability, but

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Excerpted from *Bogdan*, by Graydon R. Hilyard (Frank Amato Publications, Inc., 2006; 208 pages, full color, $59.95). To order a copy, contact the publisher at (800) 541-9498 or online at www.amatobooks.com.

Abercrombie & Fitch could not be persuaded. A practical Yankee with a wife, three children, and a twenty-year mortgage, then and there, Stan adopted the classical adage that the customer is always right. Even when he is not. No matter how inane, if a request did not compromise the reel's integrity, Stan would roll his eyes and cash the check.

Yes, he would create a new identification code to be used only on their reels. Stamped on the side of each reel foot would be a three-, four-, or five-digit number. The first two digits denoted the year of manufacture, then a dash, with the remaining digits denoting the number of models made. *AF* and the model number would be stamped within the curvature of the reel foot; 56-57 would mean that the reel was made in 1956 and was the fifty-seventh one made of whatever model number was stamped within the reel foot.

Yes, he had agreed to their use of the letter *M* to indicate that the reels were multipliers. Why this was needed he never knew, as he did not make a single-action reel.

ABERCROMBIE & FITCH CO.

MADISON AVE. AT 45TH ST. NEW YORK 17, N.Y.

MUrray Hill 2-8000

CHICAGO STORE
VON LENGERKE & ANTOINE

CHICAGO 2, ILL.

October 4, 1955

Mr. S. E. Bogdan
33 Fifield Street
Nashua, New Hampshire

Dear Mr. Bogdan:

Thank you for your nice letter of September 28th. We are glad that you enjoyed your trip and we enjoyed meeting you.

We are glad to hear about your new arrangements and are looking forward to the first of your reels. In the meantime, here's a check for your expenses.

Cordially yours,

ABERCROMBIE & FITCH CO.

William Shearer
Manager Tackle Dept.

WS:R
Encl.

"THE GREATEST SPORTING GOODS STORES IN THE WORLD"

A letter from Abercrombie & Fitch signifying the beginning of its relationship with Stan Bogdan. Image courtesy of Frank Amato Publications.

Yes, he had agreed to their need for a color change. His buffed aluminum serpentine handle would be anodized gloss black, as would the reel foot. Lest he forget, they would send along a golden chalice as the color reference to be used exclusively on their line of reels. Maybe it made good marketing sense, but esthetically he despised their burnished gold. This was a battle that he could not win. They were New York City, and he was Nashua.

Yes, the retail price of one hundred dollars per reel seemed reasonable to him, particularly as he received sixty percent of it on their receipt of reel. Early on, his policy was never to accept payment until the reel was delivered. Customers often did not appreciate the time that handwork demanded, and their distracting demands he could do without. By not accepting money, he maintained control of a clientele very much conditioned to instant gratification.

Yes, the unwritten Bogdan warranty of "one turn of the crank" would remain in effect. Abercrombie & Fitch was secure in the fact that compromise was not in the Bogdan vocabulary. He alone would determine fault and fix any problems free of charge for the life of the reel.

Could he supply their orders in a timely fashion? Through a fog, he heard a voice very much like his own saying, "Of course, Mr. Shearer. I see no problem." Now adrenaline was wearing off, exposing the reality that, of course, there were going to be problems. Already he was working long hours after a full day at Highland Tool on Pine Street Extension in Nashua. Realistically, he could not continue making reels on a part-time basis for long. But what if the orders did not come as needed? They had just built a new home at 33 Fifield Street, and King Street had not yet sold. The new neighbors all thought that he was just an avid hunter but, truth be known, he was just trying to put meat on the table.

Meanwhile, Phyllis was already raising their three children essentially by herself, while he worked fourteen-hour days six days a week. True, it was the husband's function to make the money, but shouldn't his kids be able to recognize their own father? Could his dream really generate enough income, or was it just selfishness on his part? No matter the outcome, he feared that there was a price to be paid.

Fortunately, the train to Nashua would take longer than the flight to Boston. He needed time to think. More fortunately, he had married a woman very much like an earlier Bogdan wife. In 1610, it had been Anna Bogdan who had encouraged a reluctant Jan to return to America where, despite the risks, they achieved success. Some 350 years later, the same would be said of another Bogdan couple. But Stan would not know that then.

From the beginning, Stan had been the anti-Christ of all things business. Since the invention of the wheel, no rational businessperson has ever created a product without first reviewing the competition. Not so Stanley.

Perceiving his reel to be a creative extension of himself, he had been aghast to find his first reel essentially a clone of the Hardy Perfect. A noble reel, but Stan's last name was not Hardy, and so he vowed never again to look internally at another maker's reel. Years later, he would give that first effort to Alec Jackson, in appreciation of his introducing the Bogdans to steelhead waters. In 2003, Alec Jackson would refuse an offer of $25,000 for that first Bogdan prototype, stating, "I never sell a gift from a friend."

As romantic as the image of the solitary artisan may be, it cost Stan dearly as he spent countless hours fumbling his way forward. Two more prototypes would be required before he finally purged himself of the Hardy influence. In 1947, satisfied that his concept of the brake drum and single-brake shoe was viable, Julian Crandall would advise a lawyer as Stan may be impinging on Pfleuger patent rights. Exit Hardy and enter Pfleuger, and a young man's sobering realization that nothing takes place in a vacuum.

No matter, really. His obsessive sense of perfection was already driving him toward the unique concept of the double-brake shoe. Although the single shoe worked well, durability was in question. In Stan's view, the inherent unevenness of pressure by a single force on the spindle would cause early brake and bearing wear, causing spool oscillation and the increased likelihood of snapped tippets.

Hours by the thousand were consumed, but it was time well spent. Designs flowed, problems dissolved, and when the drum-embracing double-brake shoe emerged, the hallmark of the Bogdan reel had been struck.

As unorthodox as Stan's design approach may have been, an economics professor from nearby Rivera College found his business practices even more quixotic. Initially the professor had thought it a sound idea to use S. E. Bogdan–Custombuilt as a model for his course on marketing.

The students enjoyed the process of investigating Stan's business, but not so the professor, as Stan quickly degenerated from role model to a study in Business Failure 101. Gleefully, Stan recalls the day when the good professor held an impromptu lecture on the floor of Stan's oil-soaked, 15-by-15 classroom delicately rimmed in chicken wire:

> There is no reason why this man should still be in business, but yet he is. He ignores all the rules of American business. He does not advertise, and he does not take up-front money.
>
> His waiting list is too long, and he risks losing customers. For all the wrong reasons, his inventory is low, but he pays no attention to the economy of scale. He has no business plan, and worse, has no interest in developing one.

The clear message was that what the students were observing was not applicable and that they should never try this stunt at home.

Encouraged by his intrepid wife, Stan resigned from Highland Tool in 1955 and moved his $440 dollars' worth of archaic equipment into Highland Tool's $19-a-month basement. Later, the Flather lathe, the Van Norman milling machine, and the drill press powered by a washing machine motor would move across the way to space sublet from Austin-Gordon, a manufacturing company buried deeply in the shadow of a towering smokestack. Without that brickwork spire marked MILLYARD against the Nashua skyline, sherpas would still be searching for Bogdan visitors as Austin-Gordon obscurely sublet from the Nashua Industrial Machine Company. Initially located in the basement, later Stan gratefully moved into the daylight, where the years passed and his rent slowly increased to $101.09 a month. Once a millennium, the management would shovel out and paint the environs, giving rise to the legend of the painted post, on which orders had been jotted down. The painted post never lost an order, but for years it became the whipping boy for any unfortunately "delayed" shipments.

Stan Bogdan's reels were separated from the rest of the field in the 1961 Orvis catalog. From the collection of the American Museum of Fly Fishing.

By maintaining close relationships with both Highland Tool and Austin-Gordon, sophisticated machinery was made available for developments such as the one-piece spool and the refinement of the double-brake shoe concept. Equally important was the prototype and specialty work fed him by these shops that often sustained him through the grimness of the early years. Fleeing Austin-Gordon's looming bankruptcy, in 1996 the faithful machinery left New Hampshire's largest city for the solitude of its New Ipswich countryside.

Dave Rust

The Bogdans' base of operations until 1996.

In 1957, the Orvis Company of Manchester, Vermont, finally agreed to market Bogdan reels. Talks had been stalled for some time as Orvis demanded naming rights. Encouraged by their premier rod designer, Wes Jordan, Stan refused, and Orvis management eventually acquiesced. Like Abercrombie & Fitch, a gentleman's handshake confirmed a 60/40 split of retail. Unlike Abercrombie & Fitch, they approved of his anodized colors and his models, asking only that model numbers be stamped on the side of reel feet. As Stan prefers to stamp directly down into the curvature of the reel foot, side-marked model numbers now serve to identify reels specifically made for Orvis. The relationship ended in 1977 when Stan could no longer supply a sufficient volume without alienating his own customer base.

In time, all the major tackle merchants would add the Bogdan reel to their product line and effectively advertise it in their international catalogs. Attention was guaranteed as the premier rodmakers of Leonard, R. L. Winston, and later Thomas & Thomas advertised Bogdans as companions to their exquisite bamboo. In addition to Abercrombie & Fitch and Orvis, the New York City merchants of Hunting World, Angler's Roost, and William Mills were echoed on the west coast by Norm Thompson and Alec Jackson. The Canadian market was well represented by the Gulline Brothers of Montreal and Streeter & Quarles in Toronto. Prestigious fishing lodges all along the Grand Cascapedia and the Restigouche routinely ordered for their discerning guests and members. In Sweden, the Royal Coachman, owned by the irrepressible Milan Hajer, found itself continually back-ordered. Should a company fail, no matter, as the void would be quickly filled by another anxious to associate with the best.

Additional recognition came through sporting literature. Once Joe Brooks's *Salt Water Fishing* established the pattern in 1950, no serious writing on the tools of fishing Atlantic salmon could fail to mention Bogdan. "S.E. Bogdan of Nashua, N.H., manufactures custom-built salt water fly reels that sell for $30.00. Tough and with just about the best brake I've ever seen, they perform in masterly style and have capacity for all the line you could possibly need."

A fundamental ingredient in the Bogdan success was his ability to engage the leading sportsmen of the day in his

Dave Rust

Stan Bogdan's engineering drawings.
Image courtesy of Frank Amato Publications.

quest. It would be difficult to name another person capable of simultaneously focusing the attention of a John Olin, Stanley Gildersleeve, Ted Bates, B. E. Bessinger, and Julian Crandall—experienced salmon fishers and influential millionaires all. If they were not enough, then there was Joe Brooks, A. J. McClane, and Lee Wulff field-testing in the salt, while R. L. Haig-Brown did the same in British Columbian waters. Their combined input was essential as Stan had never fished for Atlantic salmon—until 1957, when he was invited to the Matane by Wes Jordan. Today, when asked why he chose to build Atlantic salmon reels, he bemusedly answers that his reels were expensive, and only Atlantic salmon fishers could afford them. That, and he hoped someday to fish for Atlantic salmon himself and would need a reel.

> **Professor:** For a company to survive long term, it must make repeated sales to a large customer base . . .
> **Student:** But Mr. Bogdan says not many people can afford to fish for Atlantic salmon, and that his reels never wear out.

Gathering often-conflicting advice and mixing it with untold hours of perseverance, the Number 1 emerged in 1951 to be followed by the archetypal Model 0 in 1953. A variety of cranks had given way to the classically counterbalanced serpentine. Per Stanley Guildersleeve, the brake lever position plate was increased from 7 holes to 11 to guarantee accurate drag tensions in the heat of battle. Three captive screws driven by a Canadian dime prevented chaos during disassembly in the field. Extra spools were available on request, but beware. Because of close tolerances, that spool would only fit the specific reel that it was made for. A "poacher button" was installed for any heathen unable to abide the song of a salmon rushing to the sea. Anodizing and corrosive-resistant materials neutralized the devastating effects of salt, but flushing after use would always be advised. Side plates of hard rubber had been only briefly flirted with and only in the prototype stage. The use of nickel silver was never considered, as it was perceived as being too heavy and too expensive. Quite coincidentally, the pale gold anodizing on the frame would accurately impersonate the patina of aging nickel silver.

Awaiting the development of production techniques, aluminum alloys were not readily available until the late 1930s. Then came World War II, and, like Delrin, they were unavailable to the civilian sector. Postwar, Stan would use the aluminum-magnesium-silicon alloy, 6061, for the Bogdan frame and the 2024 alloy for the spool and side plates. Having great strength and excellent machining and anodizing properties, there has been no reason to ever change alloys. Initially, the S. E. Bogdan nameplate had been attached to the crank side, but was moved to the reverse side to avoid potential line entanglement. After some experimentation, the Orvis reel foot became the model for the Bogdan reel foot, as it was the nearest thing to universal. At Everett Garrison's request, he made a die to better fit the Garrison seat to the Bogdan foot. Although he will modify on request, Stan much prefers that owners do their own reel foot file work.

Respecting the power of the adversary, a 1.91:1 retrieve ratio (rounded up to the familiar 2:1) was combined with his peerless cam-driven two-shoe braking system. Although immediately hailed as the best drag system ever designed, it would need no patent protection as its expensive complexity effectively discouraged interlopers. All this was corralled by a one-piece frame hewn from aluminum alloy tubing, another first by Stan in his continual effort to maximize strength while eliminating problems. With the Bogdan, there was no need to fear a meltdown. Years of analytical thought and the eighteen hours of handmade manufacture and assembly required for each salmon reel would be the guarantee of that.

Thirteen years of challenges had been met and mastered. But as gratifying as the critical acclaim was, as encouraging as the Abercrombie & Fitch and Orvis contracts were, the question still remained: would he sell enough to survive? Overshadowing his constant business concerns, a war was looming, and he had two young sons.

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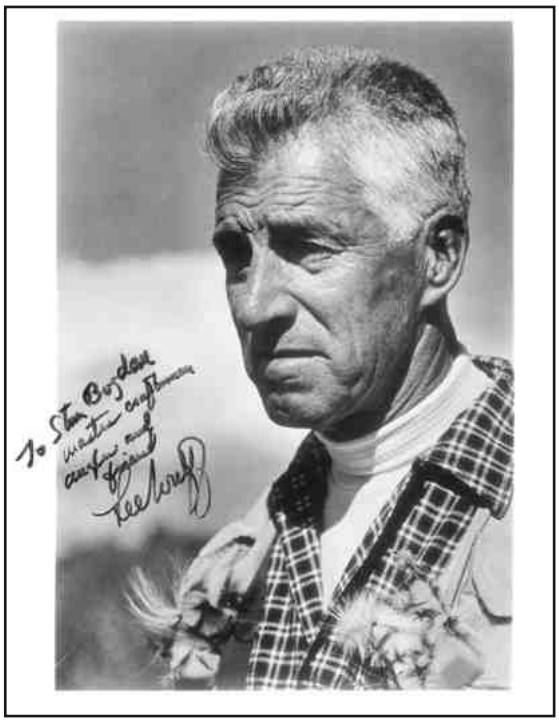
Mercifully, the decade of the 1960s was survived on all fronts, and the 1970s dawned brightly with laughter in the wind. By joining the Montreal-based Atlantic Salmon Association in 1961 and by becoming a trustee of the American Museum of Fly Fishing in 1973, Stan had put a face to his reels, and sales were slowly but steadily increasing.

On joining the precursor to the Atlantic Salmon Federation, he immediately became embroiled in a passionate argument that gives fishing lodges their late-night charm. To wit, in playing the salmon, should the reel be up or down? For most of the world, that question had been settled as far back as 1808 when, in his *Complete Angler's Vade-Mecum,* Captain T. Williamson cogently argued for the reel beneath the rod. In 1881, Dr. James Henshall reinforced the captain's view in his widely acclaimed book that sold so well. Then again, perhaps it is unreasonable to assume that a proper salmon fisher

Dave Rust

Bogdan reel parts made by the master himself.
Image courtesy of Frank Amato Publications.



Lee Wulff was one of the many prominent anglers impressed by Stan Bogdan's work. Image courtesy of Frank Amato Publications.

would sully his library shelves with the title *The Book of Black Bass.*

Besieged by requests spawned by the controversy, Stan bemusedly made and repositioned line guards and rollers, grateful for the work. Diplomatically, his first publication would be an open letter in the *Atlantic Salmon Journal* requesting input on this baffling state of affairs. Diplomacy paid off when B. E. Bensinger invited him to his Brunswick Lodge on the Flatlands of the Restigouche, ostensibly to discuss the problem in its natural setting. Despite many subsequent visits, history does not record the resolution of this great debate.

If sales were marginal in the 1960s, respect for his design abilities was not. Obsessed with lightness in tackle, Lee Wulff, who was living in nearby Keene, New Hampshire, asked Stan to design a reel capable of handling large fish, but without the bulk. Inspired by the ancient wooden Nottingham reel, Stan eliminated the outer frame, cut off the connecting bars, designed an exposed rim in lieu of a heavier braking system, and drilled the spool into oblivion. Line retrieval proved to be a bit sloppy, and Lee suggested reinstating the bottom crossbar in the shape of the letter T. Problem solved, Lee immediately field-tested the reel in Ecuador, catching a 146-pound black marlin.

In 1967, one hundred such reels were made by Farlow & Company of London and marketed by Norm Thompson Outfitters as the Lee Wulff Ultimate Reel.

Shortly thereafter, Orvis approached Stan with similar needs. Again, using the concept of the Nottingham reel, for a fee of two hundred dollars, Stan designed the CFO, named for their founder, Charles Frederick Orvis. A landmark reel, it remains in production, having sold more than 200,000 units as of 2003.

In September of 1973, Steve arrived at the shop sardonically carrying a sign reading S. BOGDAN AND FATHER. Although blessed by many things, nothing could ever equal the father's joy that day when his son arrived to work beside him. And work he did. Any hopes harbored by the faithful that reel production would soon increase were quickly dashed. When recently asked how long he had apprenticed, Steve's response was, "Thirty-one years, so far." More arduous than that of any medieval guild, his apprenticeship officially ended in 1996 when he completely assembled a Bogdan reel for the first time—one year after he and wife Sandy had bought the company.


S.E. BOGDAN
Custombuilt
Salmon & Salt Water Fly Reels
NASHUA, N.H.

DIRECTIONS FOR OPERATING AND TAKING APART THE BOGDAN SALMON FLY REEL

The reel has a gear ratio of 2 to 1 and holds 200 yards of backing plus the fly line. The brake is made to operate only on the outward rotation of the spool and is operated from the lever on the back plate. The brake can be turned to full drag or any position in between by turning the lever in a half circle from right to left. The drag should be tested with a line on the reel and not by turning the handle backward. There is an optional click on the outward rotation of the spool and this can be turned on or off by the knurled knob on the back plate.

A ten cent piece used as a screwdriver is all that is needed to take the reel apart. Loosen the three screws on the front plate about two turns or until they clear the indent and push toward the center of the reel. Tighten slightly to prevent screws from falling back into the indents. (These screws are headed over so they cannot be lost). Lift out front plate and spool. To assemble place spool on shaft making sure that the slot in the spool is engaged with the lugs on the ratchet. Line up locating pin in front plate with slot in the frame and push into place. Loosen the three screws. Push into indents and tighten.

The reel can be oiled from the one hole in the center of the back plate by removing the dust cap.

An early instruction sheet for Bogdan Custombuilt reels. Image courtesy of Frank Amato Publications.

Although a twenty-three-year training period may be a bit protracted, there is some justification for it given the complexity of the Bogdan operation. Do not imagine that the Bogdans are eagerly waiting by the phone to cheerily say hello-goodbye and immediately get to work on your order. Instead, individual reel models are systematically made one batch at a time. The size of batches range from one to three hundred depending on inventory stock and anticipated orders. If you should order the best-selling reel of all, the Model 0, and that batch is recently finished, then you will quickly receive your reel. Dream on. There are fifteen models. The odds are not with you. Some years, no reels are shipped at all.

Pretend you are Steve. First you must learn to identify every part in the widely differing trout and salmon reels. You must learn to make these parts on machinery that dates to the dawn of the Industrial Revolution. When machinery goes down, you call the Smithsonian for parts. You are grateful that there is a set of springs that you do not have to make. You are grateful that there are two gears you do not have to cut.

Measurements and assembly sequences are known only to a man whose body may be in Nashua, but whose head is on the Alta. Your father is the only instructor in the galaxy who answers every question with, "Well, you know . . . " No, you don't. Why else ask the question? You learn that answers are only clues. You are Sherlock Holmes. He is Professor Moriarty. Finally, all the parts for the Model 0 are made. Hallelujah! Now you must learn to assemble it. Uh-oh. No blueprints. Just oil-soaked sketches mapping a road to . . . nowhere. Turns out that it really doesn't matter that you can't decipher them. "Well, you know, I haven't used those for years. Here, let me do that." At last, a completed reel. Then you get to do it all over again—fourteen times. Years go by before you ever say hello again to that Model 0. Care to remember how much you forgot? Waiting for a Bogdan or making one, patience is a virtue. Just ask Steve.

Professor: He puts his company at risk as he has only one employee and no blueprints.
Student: But Mr. Bogdan says he has no idea how many parts are in his reels, and it would slow his production if he trained a staff.

In 1972, Stan attended a meeting of the Theodore Gordon Fly Fishers held at the Essex Hotel in New York City, an evening made memorable by John McDonald's remarks on his recently published *Quill Gordon*. After the dinner auction, Stan was approached by Harry Darbee, Ron Kusse, and Sid Neff, suggesting that he make a reel for trout fishers. His initial response was the oft-quoted, "Save your money, boys. Keep your line in your pocket."

Fortunately, they persevered and in 1976, ten 5-weight, single-action, nonadjustable pawl-drag reels were shipped to Harry Darbee for distribution to the members. Happy to be free of the boring perforations and thinking that was the end of it, Stan returned to the serious work of making salmon reels.

Despite an initial reluctance to accept the nonadjustable drag, orders started pouring in for the 5-weights. Hard on their heels came requests for a larger 6-weight, a smaller 4-weight, and finally, the diminutive 3-weight. (Not overly fond of the "baby" image, Stan much prefers that trout reels be identified by line weight.)

Spare spools were never an option as the drive shaft was held to the spool by a tapered pin connection. This was the strongest means of assembly and was required by the use of the two bearings that gave the drive shaft maximum support. Despite Stan's lectures on thrift, by 1976, an entire line of trout reels was in place and would account for nearly half of all future sales. Thanks to them, in 1977, he was able to jettison all subcontract work and focus entirely on reel production.

Whatever his perceived business shortcomings were, Stan always listened to his customer base. The "how" of the reel was always his, but the "why" of the reel was often theirs. Although the reels were market generated, they would not quickly come to market. Undue haste has never been a Bogdan characteristic.

> **Professor:** To meet demand, Bogdan must take advantage of new computerized machining methods and subcontract out work.
> **Student:** But Mr. Bogdan says that if he does, his reels will no longer be Bogdans made by Bogdan.

In 1975, John Olin received the first Model 150 with its wider spool designed to better accommodate the newer and thicker polymer lines that had turned silk antique. That same year also marked the end of line guards and rollers, perhaps a sign that the Great Up-Down Reel Debate was winding down on Québec waters.

In 1976, Alec Jackson called asking about the feasibility of creating a reel for steelheaders, something lighter than a salmon reel but with more line capacity than a trout reel. Encouraged by Stan's response, he gathered input from the Washington Steelhead Fly Fishers. In 1977, they received their uniquely tailored, single-action, nonadjustable pawl-drag reels housed in either a 3¼- or 3½-inch frame containing a 1⅝-inch diameter spool.

In 1980, Christopher Russell of England and Warren Duncan of Canada received the first of the Model 50s. This unique hybrid designed for Atlantic salmon dry-fly fishing consists of a single-action reel outfitted with double-brake shoes within a 3½-inch frame.

In 1992, W. Thorpe MacKenzie of Tennessee received the first Model 400. The official party line is that it was created to handle the increased line required by the renewed interest in two-handed rods. The reality is that it never would have happened but for a shipping error. Four-inch pipe was sent instead of the 4-inch tubing required for the Model 300 frame, a problem as one takes its measurement off the outside diameter, whereas the other uses the inside diameter. With thrift outranking godliness in Nashua, some way had to be found to use the stock the distributor refused to take back.

Since 1997, another model has been languishing in New Ipswich. Stan faithfully promises to complete his 5½-inch, 2-pound version of the Alta reel by this book's deadline, but one wonders. Most likely, the writer will make discovery not long before the reader.

~

Hindsight makes us smarter than we are. From its vantage point with everything explained, all things seem quite simple. So surely we must be forgiving of the professor and his standard business-school advice. Business plans are based on probabilities supported by the law of averages. The professor's only failing was not understanding that there was nothing average about a man named Bogdan, a reel named Bogdan, or the market for which it was intended.

Only someone intimately aware of the nature of the Atlantic salmon fisher could discern Stan's marketing genius. Having crafted the best for Atlantic salmon, he made obtaining it as difficult as obtaining the fish itself. Although the Atlantic salmon may or may not be the King of Fishes, it certainly takes a king's ransom to fish for them. But money alone will not get you on the Bogdan waiting list, and power will not vault you to the head of it. There are other criteria that must be met. Consider what that does to an individual so competitive that he will fish to anorexic fish. The professor need not have worried about losing clients. At a certain level, fly fishers are conditioned to the best, presuming that it makes them better. They must have it. For those who cannot wait, there is the secondary market, at twice the price. Created by delay, this fascinating tool allows Stan to safely observe the market, then raise his prices, with no danger of choking it. Every price increase lessens his need for volume, which only stimulates the cycle of supply and demand. Fifty-five years later, and prices continue to spiral. When asked if all of this was orchestrated with malice aforethought, Stan sparkles and moves on, quite content to let the mystery be.

We do not know where the professor and his students are today. We trust that like the Bogdans, their ledger sheets are balanced, and friendships are the order of the day.

We do, however, know where the Bogdans are. Like the steadfast Flather Lathe, midwife to some 9,338 Bogdan reels, they are working late into the New Hampshire night.

~

Dave Rust

Three fly patterns honoring the Bogdans. Top left: 33 Fifeld, originated and tied by Leslie Hilyard. Top right: Bogdan's Black and Gold, originated and tied by Dave Rust. Bottom: Lady Bogdan, originated and tied by Dave Rust. Image courtesy of Frank Amato Publications.

Bogdan Prototype 1

"Oh God, I've made a Hardy Perfect."
~ S.E.B.

Photos by Alec Jackson

Number made:	One
Date of origin:	1940
Frame:	One-piece, sand-cast aluminum, no finish, OD = 3.5 inches
Spool:	Three-piece, sand-cast aluminum, screwed construction, no finish
Width:	1 inch
Weight:	9.2 ounces
Direct drive:	1:1
Brake system:	Click and pawl
Brake adjuster:	Screw, brass
Handle:	Post on plate, aluminum
Reel foot:	Aluminum, one-piece, nontapered, four-screw attachment
Observations:	Trout engraving is the same as found on letterheads and business cards. Ball bearings were obtained by breaking up a larger used one. World War II restrictions on materials limited experimentation from 1940 until 1945.
Crank:	Positive 1149; Outside: Positive 1144; Internal: Positive 1147

Bogdan Prototype 2

"I can't get the damn drag to smooth out."
~ S.E.B.

Number made:	One
Date of origin:	1945
Frame:	One-piece, sand-cast aluminum, no finish
Spool:	Three-piece, sand-cast aluminum, screwed construction, one side perforated, no finish
Width:	4.25 inches
Weight:	17.2 ounces
Direct drive:	1:1
Brake system:	Single Micarta brake shoe activated by a round spring engaging a two-piece, 0.25-inch-high brake drum perforated for weight reduction
Brake adjuster:	Rocker button
Handle:	Post on plate, aluminum
Reel foot:	Aluminum, one-piece, nontapered, four-screw attachment
Line guard:	⅛-inch soldered round wire attached to frame by brass screws
Observations:	Hardy influence continues with the use of a threaded drive shaft to join the front plate and spool allowing for RH wind only. Brake worked poorly as it was essentially on or off. Incoming click created by a dog mounted on the spool with four clicks per revolution. Front, short handle front, long handle back, perforated.

Photos by Dave Rust

Bogdan Prototype 3

"I'm still making Hardys."
~ S.E.B.

Photos by Dave Rust

Number made:	Three
Date of origin:	ca. 1945
Frame:	One-piece, sand-cast aluminum, no finish
Diameter:	4.75 inches
Spool:	Three-piece, sand-cast aluminum, screwed construction, one side perforated, no finish
Weight:	16.2 ounces
Gear ratio:	3:1 and 4:1
Brake system:	Single Micarta brake shoe activated by a flat spring engaging a two-piece, ⅛-inch drum perforated for weight reduction
Brake adjuster:	Push bar, elongated and ribbed
Line guard:	⅛-inch soldered round wire attached to frame by brass screws
Handle:	Post on plate, aluminum, offset
Reel foot:	Aluminum, one-piece, nontapered, four-screw attachment
Observations:	Hardy influence continues in the offset handle that resulted in poor leverage. To regain it, a slotted handle was sleeved over the shorter. Reel is joined by a conventional Hardy mechanism consisting of a spring-release locking into the drive shaft causing a sloppy fit. First evidence of multiplier.

Bogdan Prototype 4

"I sold them all!"
~ S.E.B.

Number made:	Ten
Date of origin:	ca. 1946
Frame:	One-piece, sand-cast aluminum, no finish, back plate part of frame
Width:	3.75 inches
Spool:	Three-piece, sand-cast aluminum, screwed construction, one side perforated, no finish
Spool width:	3.25 inches, diamond-shaped spool release cover
Direct drive:	1:1
Brake system:	Single Micarta brake shoe activated by two coil springs engaging a two-piece, ¼-inch-high brake drum perforated for weight reduction
Brake adjuster:	Stepless lever on back plate
Handle:	Post on plate, aluminum
Reel foot:	Aluminum, one-piece, nontapered, two-screw attachment
Observations:	All ten reels were bought in 1947 by Julian Crandall, who gave one to Ted Williams.

Photos by Stan Bogdan

Allen Dorrill

Bogdan Prototype 5

"Am I nuts using hard rubber?"
~ S.E.B.

Bill Young

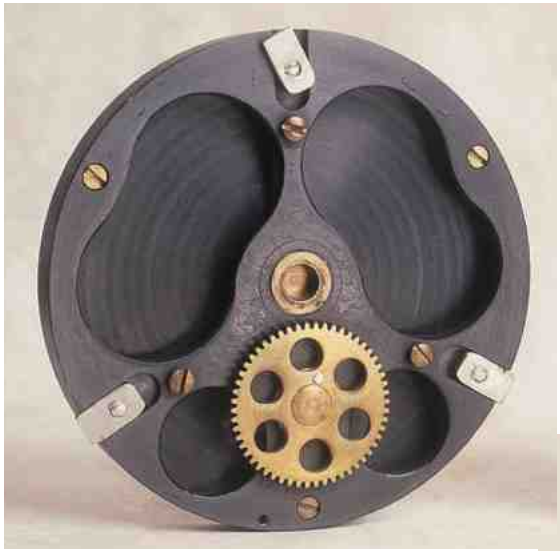
Stan in his workshop, ca. 1975.

Number made:	Six
Date of origin:	ca. 1949
Frame:	OD = 3¾ inches
Construction:	One-piece, sand-cast aluminum; finish oven-baked, crinkle-finish black paint
Side plates:	Hard rubber
Spool:	Three-piece, sand-cast aluminum, screwed construction
Weight:	14.4 ounces
Gear ratio:	1:1 and 2:1
Brake:	Single Micarta brake shoe activated by two coil springs engaging a two-piece, ¼-inch-high drum perforated for weight reduction
Brake adjuster:	Lever on back plate
Handle:	Atypical serpentine crank with counterweight; knob of black nylon
Reel foot:	Aluminum, ribbed for weight reduction, one-piece, nontapered, two-screw attachment
Observations:	Only use of hard-rubber side plates, because it expands and contracts, destabilizing the reel. Centering of crank handle requires four gears to engage, whereas an off-center placement requires three gears to engage.

Allen Dorrill

Bogdan Prototype 6

"This anodizing looks promising."
~ S.E.B.



Photos by Dave Rust

Number made:	Unknown
Date of origin:	ca. 1950
Frame:	One-piece, sand-cast aluminum, anodized black finish
Diameter:	3.75 inches
Side plates:	Center shaft attached to back plate
Spool:	Three-piece, sand-cast aluminum, screwed construction
Weight:	14.8 ounces
Gear ratio:	2:1
Brake:	Single Micarta brake shoes activated by two coil springs engaging a two-piece, ¼-inch-high drum perforated for weight reduction
Brake adjuster:	Stepless lever on back plate
Handle:	Stainless steel, straight, counterbalanced; Delrin knob
Reel foot:	Aluminum, one-piece, tapered, ribbed for weight reduction, two-screw attachment
Observations:	First use of anodizing and stainless in response to complaints of rusting and seizing in salt water.

The Final Product

By 1951, the prototypes had coalesced into the archetypal Bogdan Number 1, employing the iconic cam-driven double-brake shoe made of Delrin. Although the collections of Wells, Dorrill, and Jackson are revealing, as is the Bogdan memory, some sixty-five years have passed since the onset of this grand experiment. Should other prototypes exist, the Bogdans would be most anxious to hear of them.

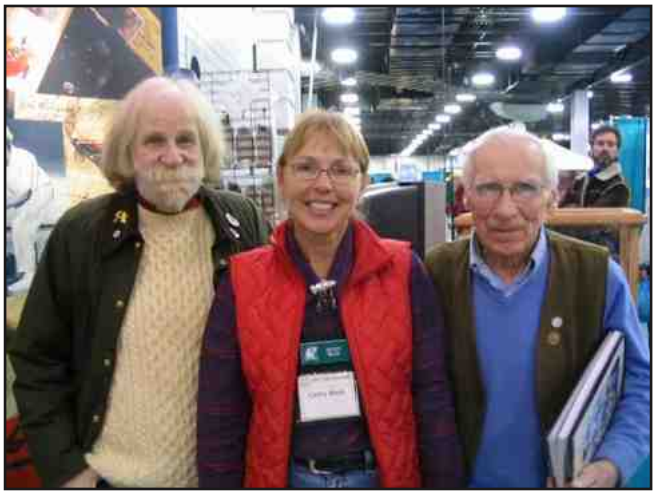
Stan Bogdan

Dave Rust

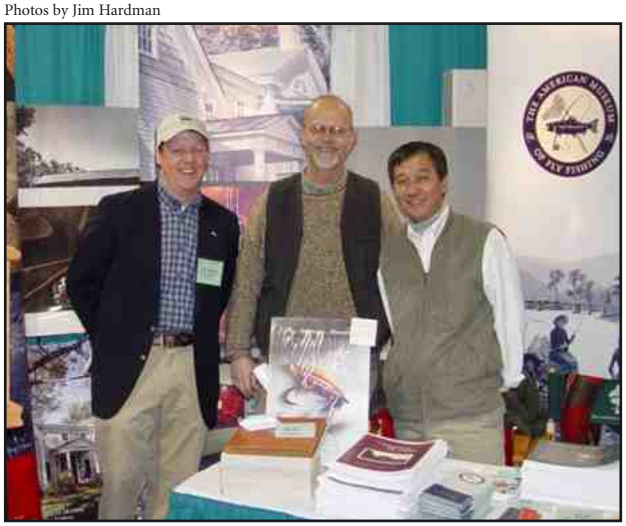
Above: The final Bogdan prototype.

Right: The Bogdan canon. Reels from the collection of Joseph Wells. Top row (left to right): 00, 100, 1, 2, 300, 400. Center row (left to right): 0, 50, 150. Bottom row (left to right): 5-weight, 6-weight, 3-weight, 4-weight, Steelhead, Steelhead (large).

Museum News



Photos by Jim Hardman



Above: Graydon R. Hilyard, Cathy Beck, and Stan Bogdan strike a pose at the Marlborough Fly-Fishing Show.

Right: Per Brandin (center) stopped by the AMFF booth at the Somerset Fly-Fishing Show to visit with Bill Bullock and Yoshi Akiyama.

Museum Attends Fly-Fishing Shows

The museum attended fly-fishing shows on two consecutive weekends in January: one in Marlborough, Massachusetts, January 19–21, then one in Somerset, New Jersey, January 26–28.

At Marlborough, Executive Director Bill Bullock and Collections Manager Yoshi Akiyama were on hand to debut the museum's new booth and the Jock Scott traveling exhibit to the show's passionate crowd. Jerry Karaska, our tireless museum library volunteer, helped us introduce the museum to new anglers. We gave out free issues of the *American Fly Fisher* to interested visitors, sold items from our gift shop, and signed up many new members.

We were thrilled to have Stan Bogdan and Graydon Hilyard in our booth on Saturday and Sunday. They were at the show promoting Graydon's beautiful new book, *Bogdan,* which is a must-read for all museum members. The show turned out to be an opportunity to reconnect with many museum friends, including Fred Kretchman, Peter Castagnetti, Trustee Pamela Bates, Bob Warren, David Foley, Barry and Cathy Beck, Paul Rossman, Roger Plourde, David Brandt, and Bill Newcomb.

The following weekend, Collections Manager Yoshi Akiyama and Bill Bullock journeyed to Somerset. Trustee Jim Hardman made the trek and was a great help in setting up the booth. Jim Becker, a great museum friend and a fantastic bamboo rod maker, was also on hand.

Per Brandin, Carmine Lisella, and Judith and Jim Bowman stopped by, and we got to visit with former museum trustees Jim Spendiff and Curt Hill. Nelson Ishiyama brought us up to speed on the happenings at the Henry's Fork Lodge. And we had a chance to visit with friends from the Catskill Fly Fishing Center and Museum (Livingston Manor, New York) and the Pennsylvania Fly Fishing Museum Association (Harrisburg).

A special thank you to our hosts at the Fly-Fishing Show who provided us with complimentary booth space at the Marlborough show.

Recent Donations

Jim Heckman of Manchester, Vermont, donated a cigarette card book published by Allen & Ginter, *50 Fish from American Waters;* one lot of fishing license stamps from Pennsylvania (total of eight stamps from 1956 to 1963); a NEMO fly-tying kit, ca. 1950; George Leonard Herter's *Professional Fly Tying Manual* (Herter, Inc.); and Ray Bergman's *Fresh Water Bass,* 8th ed. (Alfred A. Knopf, 1962).

John Betts of Denver, Colorado, sent us a homemade raised-pillar brass fly reel and a copy of his new book, *Making Strip-Built Fly Rods from Various Woods on a Lathe.* **William Kunkel** of Kittery, Maine, donated a two-piece, 9-foot Orvis Battenkill impregnated bamboo fly rod.

Jim Hardman of Dorset, Vermont, gave us a two-piece, 8-foot, 9-inch greenheart trout rod with scarfed joints in a formed wood case and a British folding-crank brass salmon reel, unmarked, manufactured under the Jones patent of 1860.

David Walsh of Jackson, Wyoming, donated a framed limited-edition print (424/550) of Henry McDaniel's *The Best Time of Day.* And artist **Peter Corbin** of Millbrook, New York, sent us a framed, signed, limited-edition print (11/25) of his *Million Dollar Afternoon.*

CORRECTION: In the Winter 2007 issue, we listed Ralph Billingsley as the donor of leather rod case that belonged to Dean Sage. The donor of the case was the late **Warren Duncan** of St. John, New Brunswick, Canada. Our sincere apologies for the mistake.

Back Issues!

Volume 6:	Numbers 2, 3, 4
Volume 7:	Number 3
Volume 8:	Number 3
Volume 9:	Numbers 1, 2, 3
Volume 10:	Number 2
Volume 11:	Numbers 1, 2, 3, 4
Volume 13:	Number 3
Volume 15:	Number 2
Volume 16:	Numbers 1, 2, 3
Volume 17:	Numbers 1, 2, 3
Volume 18:	Numbers 1, 2, 4
Volume 19:	Numbers 1, 2, 3, 4
Volume 20:	Numbers 1, 2, 3, 4
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Volume 29:	Numbers 1, 2, 3, 4
Volume 30:	Numbers 1, 2, 3
Volume 31:	Numbers 1, 2
Volume 32:	Numbers 1, 2, 3, 4
Volume 33:	Number 1

Back issues are $4 a copy.
To order, please contact Rebecca Nawrath at (802) 362-3300 or via e-mail at amff3@amff.com.

Upcoming Events

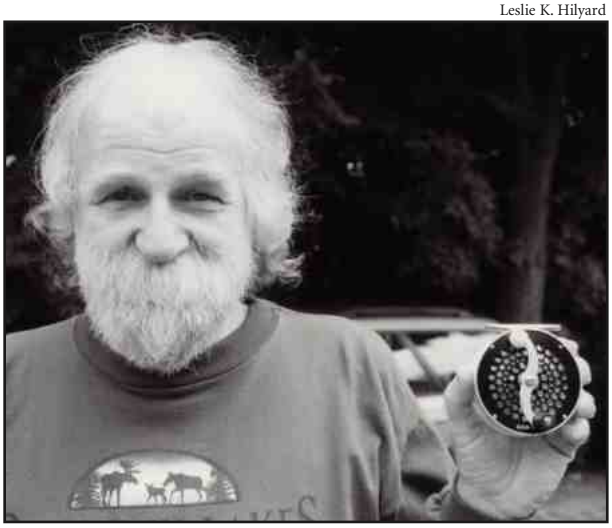
May 9
Heritage Award Dinner
An evening in honor of Stanley E. Bogdan, 2007 Heritage Award Recipient
The Yale Club
New York City

June 2
Napa Valley Winery Dinner
Venue to be announced

For more information, contact the museum at(802) 362-3300 or via e-mail at amff3@amff.com.

CONTRIBUTORS

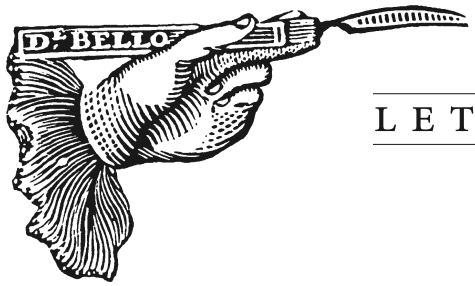
Leslie K. Hilyard



When not chasing Maine's landlocked and Canada's Atlantic salmon, **Graydon R. Hilyard** pursues book projects focused on Maine's legendary Maine guide Herbert L. Welch and the contemporary art of Russian émigré Alexandre Kouznetsov. His previous publications include the biography *Carrie Stevens: Maker of the Rangeley Favorite Flies* (Stackpole Books, 2000) and original research published in the *American Fly Fisher.*

Sally Owens

Ken Owens is a western historian who retired from a lengthy university teaching career in 2000. His many publications include books and articles relating to John A. Sutter, the California Gold Rush, and the gold rush era in both California and Montana, as well as the early history of Russian America. He contributed two essays to the summer 2000 special edition of *Montana: The Magazine of Western History,* which was devoted to fly fishing in the West. As a retirement project, he is combining fishing travel with interviews of significant figures in the development of western fly fishing. His essay "Blue-Ribbon Tailwaters: The Unplanned Role of the U.S. Bureau of Reclamation in Western Fly Fishing," his first contribution to the *American Fly Fisher,* is the outgrowth of a paper originally prepared for a U.S. Bureau of Reclamation history conference. He and his wife, Sally, make their home in northern California.



LETTERS

As a fisherman who dwells in Steinbeck's rainbow, I was delighted to read Robert DeMott's thoughtful essay, "Of Fish and Men" (Fall 2006). Of particular interest was the notion that a great author fishes for readers and, as it is for the angler, the writer must wonder if he or she will "ever receive the tangible rewards" expected or deserved (literary agents and publishers must be anglers as well). DeMott, in his discussion of Steinbeck, ties into a vast array of authors he notes who have merged the art of fly fishing and writing into one.

Thus I am inspired to point out what seems to me to be the most important literary paragraph about the trout that has ever occurred in American literature. It is an astonishing paragraph that occurs at the end of Cormac McCarthy's 2006 novel, *The Road* (p. 256):

> Once there were brook trout in the streams in the mountains. You could see them standing in the amber current where the white edges of their fins wimpled softly in the flow. They smelled of moss in your hand. Polished and muscular and torsional. On their backs were vermiculate patterns that were maps of the world in its becoming. Maps and mazes. Of a thing which could not be put back. Not be made right again. In the deep glens where they lived all things were older than man and they hummed of mystery.

The paragraph stands on its own, but what amazes is how this image of the trout illuminates the entire novel that comes before it. And isn't this the kind of thing that DeMott, Steinbeck, and authors like them, with rod in one hand and book in the other, are writing about?

Brian Railsback
Professor of English
Dean, The Honors College
Western Carolina University
Cullowhee, North Carolina

~

The historical account of fly fishing in the Devils River, Texas, in 1896 ("Echoes from Yesteryear" by Rhodes S. Baker), published in the Fall 2006 *American Fly Fisher,* caught my attention. In my 1992 book, *Native Trout of Western North America* (American Fisheries Society monograph 6), and in my 2002 book, *Trout and Salmon of North America* (The Free Press), I discussed the probability that Rio Grande cutthroat trout were native to Texas in historical times, although documented proof, such as museum specimens, is lacking.

Dr. Gary Garrett, Texas Parks and Wildlife Department, has compiled the most comprehensive historical research on the question of native trout in Texas. In 1991, Dr. Garrett and coauthor G. C. Matlock published a paper titled "Rio Grande Cutthroat Trout in Texas" in the *Texas Journal of Sciences* (vol. 43, no. 4). I acknowledge Dr. Garrett's input for this letter.

The best circumstantial evidence on native trout in Texas concerns two notes published in 1878 in *Forest and Stream.* N. A. Taylor wrote that a surgeon, Dr. H. I. Hunter, stationed at Fort Davis during the Civil War, caught "brook trout" nearby in Limpia Creek (10[13]:236). Limpia Creek (or River) was described as a "clear, cool, sparkling stream flowing through a region about 5,000 feet in elevation." Another Civil War surgeon, Dr. J. W. Daniel, published a note stating that he had a "distinct recollection" of catching "speckled trout" in the Devils River at Fort Hudson during the Civil War and also in the Limpia River near Fort Davis (10[48]:336). Daniel wrote that he also caught trout in the Rio Bonita, New Mexico. The Rio Bonita, a tributary to the Pecos River, did have Rio Grande cutthroat trout and indicates that Dr. Daniel could distinguish "trout" from other fishes. An editorial note followed Daniel's account stating that the presence of trout in Texas has been "firmly established by ample testimony." I know of no such "testimony" that I consider reliable or convincing on the question of trout in Texas in the nineteenth century, except for the notes by Taylor and Daniel.

Mr. Baker's account of his grandfather's bicycle trip in 1896 along the Devils River cites his grandfather's letter telling of good fishing: "have caught all the fish we wanted and more than we could eat." What species of fish did he catch? Consideration of all species of fish native to the lower Rio Grande basin in Texas that could possibly have occurred in the Devils River and that he could have caught by fly fishing includes five species of sunfishes and largemouth bass. I doubt that any of these species would have been confused with "trout" that were reported from the Limpia and Devils Rivers during the Civil War period. Chubs of the genus *Gila* historically have been confused with "trout." The Rio Grande chub (*G. pandora*), however, rarely exceeds 6 inches. In New Mexico, this chub commonly is associated with Rio Grande cutthroat trout. Like the trout, the chub prefers clear, cool or cold water. Presently, the Rio Grande chub in Texas is known only from Little Aguja Creek, near the Limpia River. Before habitat and water-quality degradation, the Rio Grande chub likely had a broader distribution. The factors affecting the Rio Grande chub in Texas would have had an even greater impact on Rio Grande cutthroat trout. I wonder if other written accounts exist on trout in Texas in the nineteenth century—perhaps in family histories or archives of newspapers and historical societies.

Robert Behnke
Fort Collins, Colorado

Honoring Stan Bogdan

The Heritage Award Dinner Committee
and the Board of Trustees of
the American Museum of Fly Fishing
cordially invite you to participate in our
2007 Heritage Award dinner celebrating

Stanley E. Bogdan

Wednesday, May 9, 2007 at 5:30 p.m.

in New York City, New York
at the Yale Club

RSVP: Rebecca Nawrath
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Reel Genius

James Hardman

Stan Bogdan educates Bill Bullock and Collections Manager Yoshi Akiyama on the finer points of reel design.

The fly-fishing industry has witnessed remarkable technological advances over the last half century. Anglers have seen fly-rod materials evolve from Tonkin cane and fiberglass to the modern miracles of carbon fibers and nanotechnology. And it's not just the materials that are changing. Advances in technology are making it easy for manufacturers to keep pushing the envelope for lighter, stronger rods. Compound tapers and ferrule designs have produced specific rods for every imaginable fishing situation.

Certainly, computer numerically controlled (CNC) technology has changed the face of reel manufacturing. Embracing this technology, today's reel designers have greatly improved their machining processes, resulting in lower labor costs and more accurate and increased production. Consumers have benefited greatly from this new technology and the global economy. Offshore sourcing from Asia has resulted in significant reductions in manufacturing costs for machined reels.

I mention these advances in the fly-fishing industry in light of a recent tour I was giving to a local high school class. As we toured the reel section of our *Anglers All* exhibit, one of the students pointed to Charles F. Orvis and his 1874 ventilated fly reel. He noted that this reel looked a lot like the reel he uses to fish our local rivers. He did not believe that this reel was more than 130 years old.

After the tour, I returned to look at this Orvis reel and could not help but notice how astute his observation was. I thought it remarkable how little has changed in the basic design of the modern fly reel.

How lucky was I that this tour preceded a visit to the reel-manufacturing facility of Stanley E. Bogdan and his son Stephen? As many of you know, Stan Bogdan has been producing fly reels for more than sixty-six years. In testament to their quality, there is a two-year waiting list for their most popular models. Travel to any Atlantic salmon camp, and the rod racks will be dominated by various models and sizes of his reels.

In a slap to the face of the modern age, Stan and Stephen still produce each of these reels by hand. Their facility features the most basic machine-shop equipment customized to their needs. Every single part of their reels is turned by hand in this shop. Although I knew this to be true before my visit, I was absolutely blown away by the scale and magnitude of their commitment to making these reels by hand. There were stockpiles of working parts catalogued throughout the shop, from spool frames to the tiniest screws and posts. Only then did I truly appreciate their dedication to this process.

At that moment, I recognized how fortunate I am to be able to fish with a S. E. Bogdan reel. I received one from my father for my twenty-fifth birthday, and it remains my most prized possession. I have had the undeserved good fortune to have tested this reel on many Atlantic salmon rivers. It has performed flawlessly, helping me catch and release nature's greatest cold-water fish.

When I returned home from my visit, I retrieved my Model #00 reel and examined it on the kitchen table. It showed its years, with many scars and scrapes. I picked it up and spun the crank. The cadence of the clicks transported me to the smell of towering black spruce trees and the living sounds of my favorite salmon river.

Thank you, Stan Bogdan!

Bill Bullock
Executive Director

On May 9 at the Yale Club in New York City, the museum will be honoring Stanley E. Bogdan with our 2007 Heritage Award. The awards dinner is an opportunity to recognize a legend of the sport of fly fishing. Please join us for an evening celebrating one of the twentieth century's great reelmakers and one of the most engaging and respected fly-fishing personalities of our time.

The event will feature an exhibit designed by the American Museum of Fly Fishing displaying Stan's contributions to our sport. There will also be remarks from his friends and admirers, along with a small selection of special auction items. Signed copies of Stan's new biography, written by Graydon Hilyard, will be available. For more details and reservations, call the museum at (802) 362-3300.

The American Museum of Fly Fishing

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THE AMERICAN MUSEUM OF FLY FISHING, a nationally accredited, nonprofit, educational institution dedicated to preserving the rich heritage of fly fishing, was founded in Manchester, Vermont, in 1968. The museum serves as a repository for, and conservator to, the world's largest collection of angling and angling-related objects. The museum's collections and exhibits provide the public with thorough documentation of the evolution of fly fishing as a sport, art form, craft, and industry in the United States and abroad from the sixteenth century to the present. Rods, reels, and flies, as well as tackle, art, books, manuscripts, and photographs, form the major components of the museum's collections.

The museum has gained recognition as a unique educational institution. It supports a publications program through which its national quarterly journal, the *American Fly Fisher,* and books, art prints, and catalogs are regularly offered to the public. The museum's traveling exhibits program has made it possible for educational exhibits to be viewed across the United States and abroad. The museum also provides in-house exhibits, related interpretive programming, and research services for members, visiting scholars, authors, and students.

JOIN!

Membership Dues (per annum)

Associate	$40
International	$50
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Business	$200
Patron	$250
Sponsor	$500
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The museum is an active, member-oriented nonprofit institution. Membership dues include four issues of the *American Fly Fisher.* Please send your payment to the membership director and include your mailing address. The museum is a member of the American Association of Museums, the American Association of State and Local History, the New England Association of Museums, the Vermont Museum and Gallery Alliance, and the International Association of Sports Museums and Halls of Fame.

SUPPORT!

As an independent, nonprofit institution, the American Museum of Fly Fishing relies on the generosity of public-spirited individuals for substantial support. We ask that you give our museum serious consideration when planning for gifts and bequests.