The American Fly Fisher

Journal of the American Museum of Fly Fishing

SPRING 2014 VOLUME 40 NUMBER 2

Adaptation

From Field and Stream, *April 1920, p. 1129. Bound volume 1919–1920, Vol. 24.*

Things change. Sometimes we like it. Sometimes we don't. But those of us charged with preserving the history of a thing at least know this: We have to look at change. We need to document it. We need to consider how things are evolving and attempt to analyze how we adapt.

Fly fishing's history is full of evolutions: equipment, materials, techniques, technology. Perhaps we easily adapt to technical advances that give ease to our efforts and (maybe) help us catch fish. Perhaps it is more difficult to adapt to changing regulations that require cooperation in the face of deteriorating environmental conditions. Conservation practices are relatively new acts.

This issue of the *American Fly Fisher* features discussion of both technical and behavioral evolutions.

Although humans have always fished in salt water, fly fishing there is a more recent development. Bob Stearns tells us how modern configurations—raised decks, poling platforms, lighter materials—came about. He highlights the game-changing role that Bob Hewes played in developing boats for flats fishing, starting with the fiberglass Hewes Bonefisher. "The Evolution of Boats for Fly Fishing in Salt Water: Doing More with Less" begins on page 2.

With advancing knowledge, ethics evolve. Samuel Snyder studies the ways that the sport of fly fishing and efforts at cold-water conservation affect how we understand and relate to the natural world. "Anglers," he notes, "have moved from utilitarian self-interest toward biocentric, ecosystem-based conservation." In "Wading through the History of Angling's Evolving Ethics" (page 7), Snyder discusses what he sees as the four phases of thought and action in American fly fishing, and how angling ethics have evolved to include, over time, catch-and-release practices, fish hatcheries, and transplanted fish.

"When brookies strike at the end of my invisible leader," writes Michael Steinberg, "the mountain has bestowed upon me a living gift." Steinberg calls the brook trout the most iconic species among anglers in eastern North America and points first to its appearance in art and literature, then to its role as indicator species, as proof. Steinberg's "The Brook Trout as Icon" begins on page 15.

John Mundt's Keepers of the Flame (page 20) profiles rod maker Marc Aroner, who, on a hot summer day in the mid-1980s, became the unlikely new owner of equipment from the original H. L. Leonard Rod Company. We also offer, for your consideration, Jim Merritt's review of Paul Schullery's *The Fishing Life: An Angler's Tales of Wild Rivers and Other Restless Metaphors* (page 18).

The American Museum of Fly Fishing deals with evolving technology not only in the sport, but, like the rest of the world, in how we do business. Executive Director Cathi Comar presents some history of our digital development in "AMFF in the Digital Age" (inside back cover).

Of course, one thing that doesn't change is our need to thank those who work to make the museum a success by donating money, resources, and time. A list of our 2013 donors begins on page 22. Thank you.

Kathleen Achor
Editor

Catch and Release
the Spirit of Fly Fishing

Our Mission:

The American Museum of Fly Fishing is the steward of the history, traditions, and practices of the sport of fly fishing and promotes the conservation of its waters. The museum collects, preserves, exhibits, studies, and interprets the artifacts, art, and literature of the sport and uses these resources to engage, educate, and benefit all.

The American Fly Fisher

Journal of the American Museum of Fly Fishing

SPRING 2014 VOLUME 40 NUMBER 2

ON THE COVER: Small Fry—Brook Trout. *Oil, 2009. BobWhite—BobWhite Studio. Used with permission.*

We welcome contributions to the *American Fly Fisher*. Before making a submission, please review our Contributor's Guidelines on our website (www.amff.com), or write to request a copy. The museum cannot accept responsibility for statements and interpretations that are wholly the author's.

The American Fly Fisher (ISSN 0884-3562) is published four times a year by the museum at P.O. Box 42, Manchester, Vermont 05254. Publication dates are winter, spring, summer, and fall. Membership dues include the cost of the journal ($50) and are tax deductible as provided for by law. Membership rates are listed in the back of each issue. All letters, manuscripts, photographs, and materials intended for publication in the journal should be sent to the museum. The museum and journal are not responsible for unsolicited manuscripts, drawings, photographic material, or memorabilia. The museum cannot accept responsibility for statements and interpretations that are wholly the author's. Unsolicited manuscripts cannot be returned unless postage is provided. Contributions to *The American Fly Fisher* are to be considered gratuitous and the property of the museum unless otherwise requested by the contributor. Periodical postage paid at Manchester, Vermont 05254; Manchester, Vermont 05255; and additional offices (USPS 057410). *The American Fly Fisher* (ISSN 0884-3562) EMAIL: amff@amff.com WEBSITE: www.amff.com

POSTMASTER: Send address changes to:
The American Fly Fisher
P.O. Box 42
Manchester, Vermont 05254

space for FSC info

The Evolution of Boats for Fly Fishing in Salt Water: Doing More with Less

by Bob Stearns

Like all good boats, those that specialize in sportfishing essentially develop through a process of evolution rather than invention. It is an evolutionary progression that undoubtedly began when the first human decided there had to be a better way of getting around on the water than sitting on a log—which constantly tried to roll over—and using a stick for propulsion.

The first big step surely came when someone finally discovered that digging out the log's interior not only made it considerably less likely to roll, but also allowed the dry transport of game, fish, and other necessary items. It follows that in modern times, those of us who enjoy recreational angling also began to make what we considered essential changes in our watercraft to better suit our particular requirements. A case in point is the evolution of specialized boats that have incorporated many unique exterior and interior designs to make them more suitable and efficient for the saltwater fly fisher.

Adaptation and Modification

When it comes to fishing boats, the process has always started with the adaptation and modification of existing watercraft. For example, the immensely popular drift boat of the western United States is a superb fly-fishing platform for covering long and often unwadeable distances on streams to reach desired locations. Historically, the drifter is a highly practical adaptation of the Banks dory, a simple wooden rowboat designed to be carried aboard a larger seagoing vessel and dropped overboard for two or three crew to fish primarily for commercial purposes. The first inland sportfishing version was also built from wood, but with some necessary changes in the hull for easy navigation of rapids and shallow water, plus interior changes to accommodate the needs of the fly caster. Today it is also available in aluminum, fiberglass, Kevlar, and possibly other materials as well.

It should be noted that many existing boats need no modification for fly fishing. Over several decades, I and many others have caught large numbers of sailfish and other offshore game fish from the cockpit of larger blue-water fishing craft, using a bucket to hold the loose fly line until the time came to make the cast. This system works because such boats typically have lots of open aft-cockpit space that provides the fly caster with plenty of room. In stark contrast, the inshore angler fly fishing from a much smaller boat typically has relatively little space to work with—unless, of course, essential modifications are made to create a workable platform.

My own first bonefishing experiences occurred in the Florida Keys during the early 1950s. We used plain flat-bottom wooden rowboats in those days. I was not using fly tackle back then, but nevertheless appreciated the fact that my guide had created a casting platform by spanning the open space between the front seat and the bow with a piece of plywood. Sometimes the open space between the rear seat and the transom was similarly converted by

Photos by Bob Stearns

An empty 5-gallon paint bucket was used for fly-line storage during offshore fly fishing aboard a larger blue-water boat.

The Alum1: A 16-foot semi-vee aluminum utility boat before it is converted into a flats boat.

In the Alum2, the middle seat (second seat forward from the transom) has been removed to create an open cockpit. The two front seats are spanned with ½-inch marine plywood to create a spacious forward casting platform; the rear platform is created in the same manner.

Bonefishing with the new flats skiff, the Alum3.

guides who preferred to pole from the bow while the angler stood in the stern. The thought of using that casting platform for fly fishing never occurred to most of us (including me) until I finally saw the late Joe Brooks working his magic from the same type of boat a few years later and suddenly wanted to try it myself.

Although the flat-bottom skiff, if not too large or too small, actually does make a workable fishing platform for all forms of light tackle, it has several serious drawbacks. First and foremost, it rides in rough water like a wet jackhammer. And because the outboard motors of the day were limited in horsepower, it was also slow, which made the agony of a long open-water crossing a seemingly endless and miserable journey. There was no real storage space, which usually resulted in a thorough soaking for each of us and every item of gear we had aboard—and that allowed the acidic effect of salt water to damage a lot of exposed tackle and other equipment not designed for the harsh environment.

But by the middle to late 1950s, a few serious anglers and guides began searching for something that was faster, rode smoother, and still poled easily on the flats. The first efforts consisted of taking an existing hull of the right size and shape (in the eyes the potential user) and converting it into a flats boat. Bare hulls, often bought directly from some manufacturer in unfinished condition, were built up as desired. Some of these bare boats were little more than bottom, sides, and transom with no interior work completed at all.

Of course, the development of the overall design so popular today did not happen all at once. It was an incremental process over more than a decade, during which various ideas were introduced. Some were accepted and are still in use today; others did not make the cut.

The concept of a raised deck as a fishing platform in the area of the bow and a similar deck as a poling platform in the stern were the first steps. Then came a

Featured in the September 1999 issue of Men's Journal *is the original guide's version of the Hewes Bonefisher, actually built in 1970. Only a few were built of that model; it was discontinued by 1975.*

center console or side-mounted steering station. The space under the front and rear decks, and also inside the center console if there was one, was soon claimed for storage purposes. Eventually wide, flat gunwales—with horizontal rod racks underneath—were added to provide a stable platform along the entire length of the sides to facilitate landing and releasing large game fish. Certainly a 6- to 7-foot 100-plus-pound feisty tarpon can be a real handful in such situations.

Outboard engines were also getting larger and faster, allowing these newly adapted boats to range farther from the dock and cover more distance in a day's fishing.

But each and every one of these boats was essentially custom built, and no two were finished exactly alike. Some of these one-offs performed well; others, not so much. Many were not that well constructed and failed to withstand the rigors of saltwater use for more than a year or two.

Bob Hewes

Boat builder Bob Hewes changed all that. During the middle 1960s, Hewes had been building a semi-open 17-foot fiberglass general-purpose fishing boat called the Tarpon, which was okay for inshore use, but not at all suitable for fly fishing.

Hewes also enjoyed fishing himself and liked the visual experience of flats fishing. He decided to design and build his own flats boat, and in 1969 the first production model appeared, the fiberglass Hewes Bonefisher. The hull was adapted from the Wildcat, a popular fiberglass waterskiing boat he was already building. A 16½-foot modified vee hull, it both was fast and provided a soft, smooth, and dry ride in rough water. Following the suggestions from several fishing friends and guides, the Bonefisher's length was increased to 17½ feet by adding a pair of transom bait wells. This addition also increased the length of the running bottom by one more foot, thus contributing significantly to riding comfort and decreased draft for shallow-water use.

Large, slightly recessed decks were added to both bow and stern. The gunwales were a minimum of 12 inches wide and completely flat. Both decks were also designed for storage underneath. A very few early models had the side-mounted steering station often preferred by the guides of that era, but the center console model quickly won the popular vote by a huge margin.

Hewes was never completely satisfied with any boat he was building. There *had* to be not only a better way to build it tomorrow, but also a way to make it even more fishable. Back in the 1970s and 1980s, I received a seemingly endless series of you-gotta-see-this telephone calls from Hewes, many of which resulted in a visit to his small factory in Miami or a long boat ride with test equipment instead of fishing tackle.

The 1984 16-foot Kevlar version of the Hewes Bonefisher, with Bob Hewes at the helm. Note the elevated poling platform on the transom.

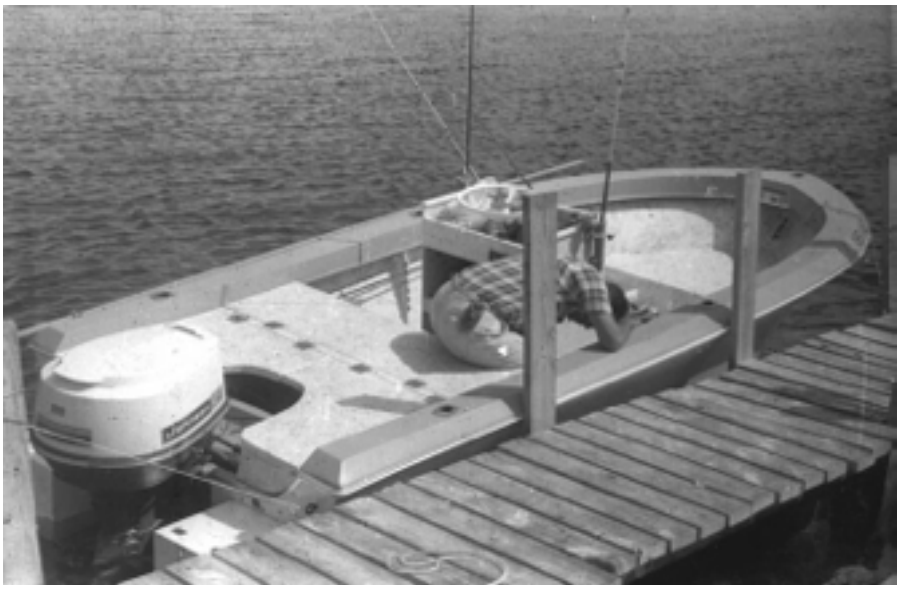
Fishing the Flats

Not all boats used today for fly fishing in shallow salt water are of the more traditional flats configuration. Canoes, for example, have been used for many years in a variety of ways, either as is or modified with the addition of such extras as side-mounted floats for additional stability. I've caught lots of redfish, snook, bonefish, and small- to medium-size tarpon from basic flat-bottom canoes with just enough keel to pole in a straight line in spite of a crosswind. Both the angler and the person doing the poling can stand up comfortably in the wider versions of such craft.

Aluminum jon boats, 12 to 17 feet in length, have been modified for this type of fishing for many years and are still in use today. Even more recently, there has been an explosion in the use of kayaks, both one- and two-person versions; not great for stand-up fishing, so the angler either casts while sitting or gets out and wades. And then there are the newest craft on the saltwater scene, the stand-up paddle board: these can be fished from a standing position, as well as parked for wading. None of these offer anywhere near the all-around capability of a more traditional flats boat, but they certainly fill applicable niches.

A 16-foot aluminum jon boat built up in the same manner as the Alum2 skiff. Modified coolers are used for both storage and as elevated platforms for better visibility.

Draft, for obvious reasons, is always the foremost consideration for every dedicated flats boat. There are two ways to reduce draft on any particular design without making it too wide to pole easily: change the shape of the bottom to make it flatter, or reduce the overall weight of the boat and its contents. Hewes's first draft-reduction attempt was the Redfisher, which appeared in the middle 1970s. He used the same basic hull as the Bonefisher, same hull construction materials, but no inner liner (a hull within a hull), no built-in storage lockers under the stern platform, and a smaller, lighter center console. It was less expensive than the Bonefisher and worked well enough to reduce draft (with two anglers and gear aboard) from 12 inches to about 9 or 10.



One of many bare hulls converted for flats fishing by adding a rear deck and center console. This Capri 16 came from the factory with the flat gunwales and recessed foredeck.

Still not satisfied with the results, Hewes soon found out about a new material that had recently been introduced into the bass-boat market. Known as Kevlar, it was also used for combat body armor and radial tire cords because of its light weight and great strength. In the late 1970s, Hewes contacted Kevlar manufacturer DuPont and, with their assistance, the first Bonefisher was built by directly substituting Kevlar 49 for fiberglass, laminate for laminate. This resulted in a 10 percent decrease in hull weight. Good, but not enough, especially because Kevlar increased the cost of building the boat by about 10 percent.

Always willing to experiment, Hewes developed a still lighter hull by eliminating all unnecessary layers of Kevlar—a further weight reduction of nearly another 10 percent. This allowed the use of a smaller and less expensive engine, which burned less gas and got better mileage. Thus it was possible to get the same range while carrying less gas. The end result was a Bonefisher that now drew 8 to 9 inches and poled like a dream.

Over the years, more new Bonefisher models were introduced, including an 18-footer without transom bait wells and a cut-down version of that same hull that

The interior of the author's Hewes Redfisher, built in 1976. It had no inner liner or built-in storage containers, and the otherwise bare cockpit floor was covered with outdoor carpet to reduce noise.

An ultralightweight 17-foot flats skiff with a tunnel hull. It is built using Kevlar carbon layers with foam in between and floats in less than 6 inches of water with two anglers aboard.

became a 16-footer by moving the transom 2 feet forward. From the very beginning, new features were constantly being added, such as the elevated poling platform on the transom, which allowed the person doing the poling to see incoming fish at a greater distance and thus have more time to position the boat to assist the angler in making the cast.

Finally, in 1989, Hewes sold his boat company to another builder in Fort Pierce, Florida, and retired.

Today the race to build lighter and quieter flats skiffs continues, using vacuum-bagged hulls constructed of Kevlar carbon as the two outer layers with stiff, high-density foam as the inner core. There are several companies that specialize in these so-called technical poling skiffs, which are capable of easily getting into less than 5 inches of water with two anglers and gear aboard, and of reaching 30 miles per hour or more with 40 horsepower or less on the transom. These very specialized high-tech boats do not come cheap: a fully rigged boat with motor and trailer can run upwards of $40,000, depending on how the buyer wants it configured. By comparison, the original fiberglass Bonefisher of the early 1970s with 115 horsepower on the transom sold for about $6,000—but then it also drew a lot more water, it was harder to pole, the hull was not nearly as quiet, and it required a lot more fuel to cover the distance.

The traditional flats boat as we know it today was originally designed to be used on the clear shallow-water flats of south Florida, the Keys, and, more recently, the Bahamas, but it continues to spread to other areas of the United States and even other parts of the world. The basic application remains the same: stalking and sight casting to game fish visible in shallow water. To this end, it has become popular for skinny-water striper fishing in New England, as well as for red drum (redfish), spotted sea trout, tarpon, and other species throughout the southeastern and Gulf coasts. I could have even used such craft for stalking salmon in Alaska.

Wading through the History of Angling's Evolving Ethics

by Samuel Snyder

During the summer of 2006, I sat in a Santa Fe, New Mexico, coffee shop interviewing local anglers involved in restoring dwindling populations of Rio Grande cutthroat trout (*Oncorhynchus clarki virginalis*), the native trout of the region. The topics ranged from why a person fly fishes and the value of native trout to the politics of river restoration. Karen Denison, a local fly-fishing guide and Trout Unlimited chapter leader, whom I was interviewing at the time, spotted an old friend. To her friend she mused, "Get this—this guy is doing his dissertation about fly fishing." She laughed. I think she called it "a sham."

Denison meant nothing rude in the comment. She took delight in the subject matter and that I was pursuing it as a topic. In light of her prodding, I had to remind her that not only did she get paid to fly fish, but that my research was about more than just fly fishing. Of course, the vast history of fly fishing has never been just about fishing—at least that's what authors from Izaak Walton to Harry Middleton have argued.

I have long been interested in the role of anglers in conservation history and the movements rooted in fly fishing. I believe that fly fishing provides an important and unique lens through which to study the ways that Americans understand, relate to, and value the natural world. By thinking historically about fly fishing and cold-water conservation, I explore experiences in nature, shape values of nature, and provide essential undercurrents to fly fishing's contributions to cold-water conservation and the eventual restoration of native species. A love of sport, as Aldo Leopold argued, provides motivation for the conservation, preservation, and restoration of North American salmonids (trout, salmon, and char).[1] Conservation projects have at times succeeded and at other times failed—sometimes miserably, even with good intentions. In some cases, though, concerned citizens, through hard work, learned success by paying attention to earlier mistakes. From overuse of hatcheries, they moved to focus their attention on the importance of intact habitats and the restoration of native species, watersheds, and ecosystems.

The journey has not always been easy; it has always had a subcurrent of self-interest with currents of unqualified elitism and snobbery, which has, at times, been debilitating, leading to conflict rather than collaboration. Other times, enlightenment has prevailed and led to local, regional, or federal policies that are in the best interest of ecosystems, not just anglers. Either way, the waters and ways of angling, particularly fly fishing, offer interesting cultural avenues through which to understand the role of values and culture within environmental politics. The values range from aesthetics to something resembling religious fervor, the culture can be exclusive or embracing, and the politics are always slightly turbulent. Through all of this, anglers have gradually expanded their gaze from self to watershed.

I realize I am talking about a select population of anglers. This does not apply to all anglers or all fly fishers, merely a small portion. However, as the angling population expands, changes, and diversifies—and as impacts from development, human population, and climate change not only alter our fisheries, but the ways we engage those fisheries—it is important that we address both success and failure stories in our sport's varied history. This essay, in many ways, is much more of a celebration of successes and marking of milestones than an investigation into failures and errors. That said, as scholars examine the future of the sport, examining these trends and milestones will provide opportunities to understand how we might successfully confront future challenges caused by overuse, water disputes,

Aldo Leopold and Olaus Murie sitting together outdoors at the annual meeting of the Wilderness Society Council, Old Rag, Virginia, 1946. From the U.S. Fish and Wildlife Service. http://digitalmedia.fws.gov/cdm/singleitem/collection/natdiglib/id/7837/rec/1. Accessed 20 September 2013.

Samuel Snyder—with Bryon Borgelt and Elizabeth Tobey—is working on a book, *Rivers of Conservation: Historical and Global Perspectives in Fly Fishing and Coldwater Conservation*, in which this essay appears as the introductory chapter.

The Caledonia Hatchery in New York in 1897, one of the first fish hatcheries in the United States. From the Third Annual Report of the Commissioners of Fisheries, Game and Forests of the State of New York *(New York: Wynkoop Hallenbeck Crawford Co., Printers, 1898), facing page 202 (exterior) and facing page 192 (interior). Images retrieved from the Freshwater and Marine Image Bank, http://content.lib.washington.edu/cdm4/results.php?CISOOP1=all&CISOBOX1=caledonia&CISOROOT=%2Ffishimages &CISOFIELD1=CISOSEARCHALL. Images accessed 20 September 2013.*

or loss of habitat resulting from resource development or climate change.

Expanding the Gaze, Thinking Like a Watershed

Although not always considered a primary figure in the pantheon of angling authors, there is no doubt that Aldo Leopold—the great American forester, conservationist, sportsman, and father of American environmental ethics—was deeply shaped by fishing, and indeed fly fishing. Leopold wrote exhaustively on a number of subjects, but we mostly remember him for teaching us that "a thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise."[2] The famous land ethic of *A Sand County Almanac* is also a water ethic, and we anglers have been wrestling with that ethic throughout our haphazard history.

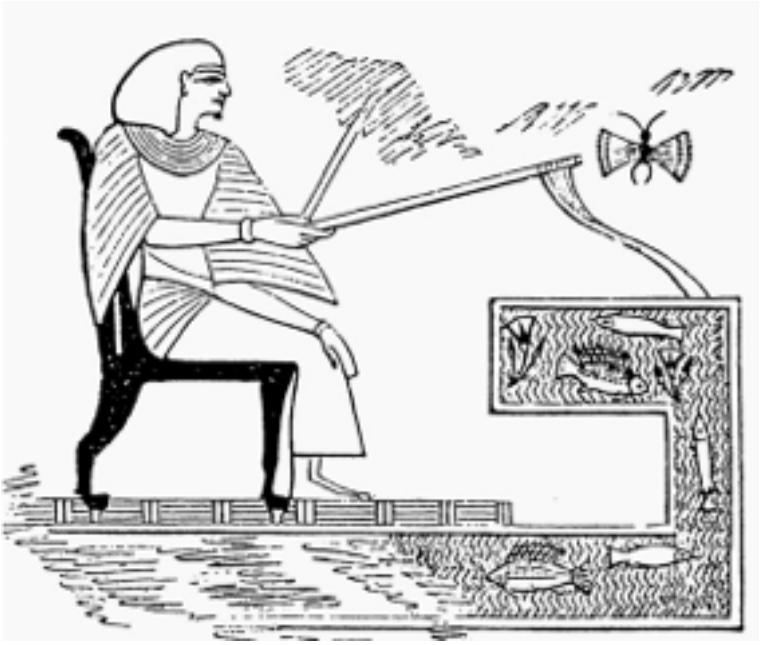
Broadly speaking, I see four phases of environmental thought and action in American fly fishing. Through these evolutions in thought and practice, fly anglers have gotten a little bit closer to Leopold's guiding vision of the "land ethic," closer to "thinking like a mountain"[3]—or, if you will, thinking like a watershed.

Abundant fisheries and a mentality of manifest destiny that quickly led to declining fish populations defined the first phase (1730–1880).[4] Second, as fisheries declined by the mid- to late 1800s, fish hatcheries emerged as a supplement for fish stocks, and anglers assessed the impact of pollution, population, deforestation, and the construction of dams in newly formed sporting periodicals (1880–1970). Third, by the mid-1970s, fisheries conservation turned its attention toward watershed conservation with a focus on protecting populations of wild trout instead of hatchery-reared fish (1970–2000). Fourth, toward the end of the twentieth and beginning of the twenty-first centuries, through organizations ranging from Trout Unlimited to the Wild Steelhead Coalition, anglers began leading initiatives to protect and restore populations of native trout, steelhead, and salmon (2000–present). Of course, these periods overlap. None of these phases is without its controversy or lingering advocates, as the hatchery rearing of trout and salmon remains a popular management tool for sport-fish stocks as much as foodstuffs. However, over time, new approaches for fisheries management, conservation, and policy have emerged and been guided by cultural values coinciding with advances in biological sciences and ecological understanding.

Following this timeline of angling's evolving ethics, spheres of concern have largely expanded, albeit with hiccups (sometimes serious) along the way. Anglers have moved from utilitarian self-interest toward biocentric, ecosystem-based conservation. Historical literacy is important for dealing with issues facing cold-water conservation today. I wonder how the analysis of historical trends can move downstream into the future of fishing and conservation. Such an approach requires critique as much as, if not more than, caretaking of cultural ideas, mythologies, and traditions.

More Than Play, More Than Recreation

Angling, and particularly fly fishing, is for its practitioners considerably more than simply fishing. A survey of the culture reveals that fly fishing quite often powerfully affects the practitioner through experiences with nature, methods of casting, or understanding of ecology. I have long been intrigued by the ways in which fly fishing is celebrated as something more than fishing. It affects people deeply, heals them, and provides streams toward ecological awareness. In my field research, I heard anglers continuously, and quite seriously, couch their practice in terms that reveal the affective dimensions of the sport and exhibit intense emotion when describing the power of fly fishing to heal (from cancer, for example) or inspire collective environmental action.[5] In doing so, they often drew upon a long history of writing devoted to fly fishing, fish, and nature worship, a historical trajectory I have devoted considerable time to researching in the archives of places like the American Museum of Fly Fishing or the National Sporting Library and Museum. Understanding this history is



An Egyptian noble fishes for fun in this image dating back more than five thousand years. It was found in the tomb of Nebwenef, a high priest under Ramses the Great, Thebes, 3290 B.C.

crucial for comprehending how angling, as a recreation, creates certain aesthetic preferences that, along with science, have been influential in determining the management, conservation, or the restoration of fisheries.

Thinking historically, evidence suggests that techniques of hook and line, common to definitions of angling, date back at least 50,000 years.[6] Early evidence of recreational fishing—that is, fishing not motivated by personal consumption, sale, or trade (in other words, *fishing for fun*)—derives from an image that shows an Egyptian noble fishing and dates back more than 5,000 years.[7]

While anglers tout the likes of Juliana Berners, Izaak Walton, and Charles Cotton as fly fishing's ancestors, fly fishing is first reported from Macedonia about 1,800 years ago.[8] As for recreational fishing, broadly speaking, one of the earliest European texts devoted explicitly to it was the Heidelberg fishing tract, or "How to Catch Fish," first printed by Jacob Kobel (1493) and reprinted in Richard C. Hoffmann's *Fishers' Craft & Lettered Art* (1997).[9] But the first clear reference to angling as a distinct recreation is found more than one hundred years earlier in *The County Farm* (1307), in which the author refers to angling equipment and "the seasons and time of the year fittest for sport."[10]

This reference to sport is crucial. The term *sport* derives from "disport," which means to take one's ease or to "re-create" the self. The concept here, in its origins, has clear psychological, affective, and aesthetic implications. After all, for generations anglers have celebrated fly fishing because it refreshes and restores the soul. The sport, along these lines, has strong experiential values, which not only help personal restoration, but can potentially lead to the restoration of nature. It also has significant aesthetic implications, which have proven crucial in the evolution of environmental ethics and management plans.[11]

Fly fishing situated within the realms of the aesthetic and affective is hardly new. Some have gone so far as to trace the sport to religion. After all, Hollywood took Norman Maclean's famous line that in his family "there was no clear line between fishing and religion" and made it common well beyond fly-fishing circles.[12] But Maclean was hardly the first one to discuss the fuzzy distinction between fishing and religion. Since Maclean, artist and author James Prosek, as a part of his senior thesis project at Yale University, took a religious pilgrimage to follow the streams of fishing and the thoughts of fishing's patron saint, Izaak Walton.[13] In these contexts, the use of religious terminology is tricky and controversial, but what is important is understanding how fly fishing is described and understood culturally as unique, how experiences of fly fishing are significant, and how the sport is somehow special to practitioners. These proclamations can be problematic. In their slippery manifestations, they can lead to elitism, snobbery, and idolatry. However, to understand the relationship between sport and conservation, I believe it is useful to investigate cultural proclamations of sport and nature-based experience as unique and special in the context of fly fishing. Such investigations allow us to understand the role of cultural values in social, economic, or ecological decision making. In short, I fully believe that the social, psychological, religious, and aesthetic values of fishing—and fly fishing—are paramount for comprehending the history of fisheries management and conservation.

Evolution of Angling Ethics

Before fly fishing developed environmental ethics, it was, and still is, a source of varied and interesting social ethics, which are worthy of historical scrutiny. Broadly speaking, however, one of the earliest environmental ethics articulated and enacted was that of catch and release. In the mid- to late 1870s, father of fish culture Seth Green promoted catch-and-release fishing as a response to overfishing and declining fish stocks. In doing so, he touted barbless hooks as an effective means of landing and releasing fish unharmed. In later years, in the early 1900s, his son Chester followed suit and used the same outlet, *Forest and Stream* magazine, as a venue to publish articles and editorial letters on the subject.[14] Today the message of catch and release remains a prominent and primary platform for a variety of fisheries-related groups from the Federation of Fly Fishers and Trout Unlimited to Professional Anglers Association, B.A.S.S., and many others. Although pervasive, catch-and-release fishing is fraught with all sorts of debate in the terrain of ethics, philosophy, and neuroscience. Pages of fly-fishing magazines continue to be devoted to the issue.

In North America, many laud Lee Wulff as the father of catch-and-release fishing for his statement in 1939 that "game fish are too valuable to be caught only once."[15] Wulff is by no means the originator of this practice. He just spoke of it in a way that stuck in people's minds.

One of the first references to releasing fish is in the fifteenth-century *Piers of Fulham*,[16] and the famed, yet potentially mythical Dame Juliana Berners (1496) argued for a conservative harvest to protect resources.[17] The Game Act under Charles II (1671) set limits for the size and number of fish caught, establishing one of the first known examples of a bag limit.[18]

By 1828, Sir Humphrey Davy mused that "every good angler, as soon as his fish is landed, either destroys his life immediately, if he is wanted for food, or returns him to the water."[19] Charles Cotton, in the 1853 (fifth) edition of the

Compleat Angler, added this line: "This is a diminutive gentleman, e'en throw him in again and let him grow till he be more worthy of your angle."[20] And in 1913, Frederick Halford noted that "the sportsman is not only willing to return any fish below legal limit to the water, but exercises great care both in extracting the hook and returning the fish to the water."[21] Note the expansion of values here, the emergence of care for the fish. Today, fly-tying guru Randall Kaufman often cuts the hook off his flies, therefore engaging the fish through the rise, but never more than the immediate tug, which is all he needs.[22]

For Europeans seeking angling opportunities in their new North American homes and colonies, the rivers and fisheries seemed so abundant that the notion of releasing fish seemed irrelevant. Anglers responded to their abundance with an air of angling manifest destiny, catching their fill on waters that appeared limitless. Eventually resource decline became apparent, and anglers voiced their concern in early American fishing and hunting publications, such as *American Turf Register*, the *Spirit of the Times*, and *Forest and Stream*. Anglers lamented the "game hogs" who were catching hundreds of fish and started to point fingers toward the problems of pollution, but the language and intent was largely self-interested. It was less about the fishery and more about opportunities to catch fish.

Conservation ideas in the American fishing and sporting world did not really emerge until the years following the Civil War, when sportsmen's organizations around the country began to (a) spring up, in part because they saw outdoor recreation as a healing response to the war, and (b) advocate for more responsible stream management as they watched conditions deteriorate.[23] At the time, the notion of conservation was new, amorphous, and hardly named. The magazine world was pivotal in hashing out an ethic. Many contributors mentioned some degree of catch and release, and more famed writers of the early to mid-1900s—such as Theodore Gordon, Zane Gray, Roderick Haig-Brown, and Lee Wulff—set the tone of the debate.

Today, catch-and-release fishing is only one small part of the story of trout, salmon, and fisheries conservation and sportfishing. Although important, it did not take long to realize that catch-and-release fishing was hardly a sufficient approach to fisheries management. Therefore, the second phase of fishing-driven fisheries conservation and management turned to fish culture and hatchery practices.

Evolution of Hatcheries and Transplanted Fish

Historically, fish introductions have always been a major part of sportfishing around the world, and salmonids are the most common candidates. They are, it seems, the most charismatic of the cold freshwater fishes. And this charisma, based on cultural values, aesthetics, and articulations of sacred experience in nature, is crucial for understanding the choices of fisheries management.[24]

"Fish culture" emerged as a primary tool for fisheries conservation in America by the mid-1800s, but fish hatcheries have a much wider global story. Malcolm Draper demonstrates how cultural identity and trout were bound up in the colonialist enterprise in South Africa, Australia, New Zealand, and South America.[25] For European settlers, trout were seen as a means of recreating home in their new colonial homelands. Trout were so important that they were included in the plans of acclimatization societies, which sought to make settlers feel as much at home as possible by making their new homes much like their old homes. Among these programs was the transportation and transplantation of trout. Introducing fish to these waters was a way to make and mark territory, so to speak—what environmental historian Alfred Crosby called ecological imperialism.[26]

Frank Forester, Seth Green, and Fred Mather (in the 1840s) first touted fish propagation in America as a means to restore game fish to waters depleted by dams, pollution, and overfishing. Forester was quickly joined by voices such as Robert Barnwell Roosevelt, Thaddeus Norris, George Dawson, and Genio Scott, along with countless anonymous anglers writing under pseudonyms in national sporting periodicals. As historian John Reiger noted, volumes of periodicals are "replete with protests against the dumping of sawdust, mine wastes, factory chemicals, and other pollutants into the country's waterways; demands for fish ladders at dams so that migratory fishes could pass;" and, of course, the restocking of fisheries.[27]

There was such strong concern over the decline of trout through the nineteenth century that in 1879, *Forest and Stream* magazine suggested that "this is

SETH GREEN TAKING SPAWN FROM A SALMON TROUT.
THE PROPER POSITION.

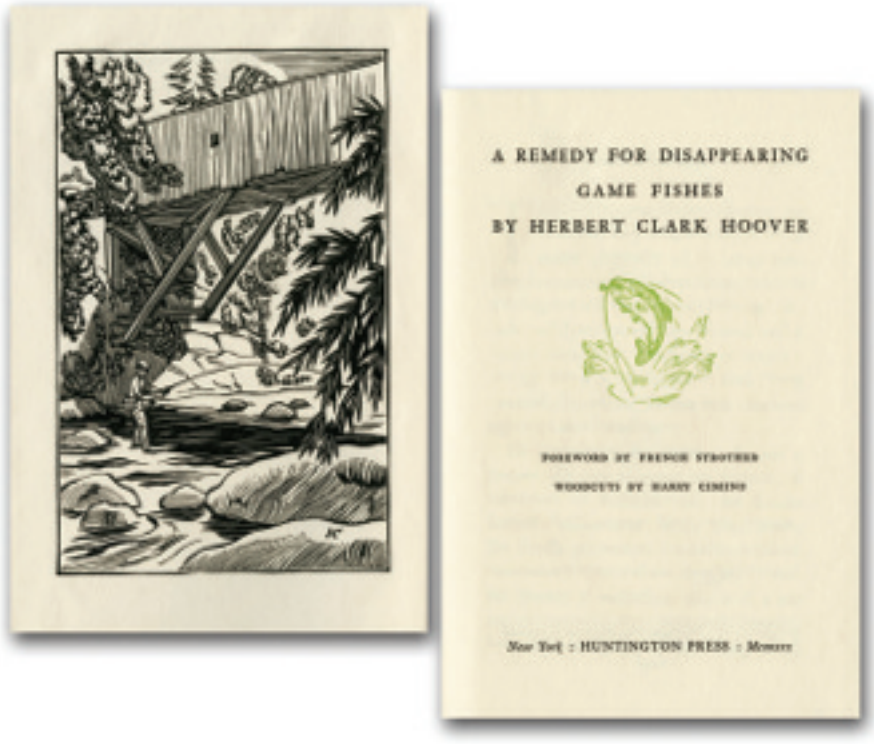
Seth Green. From R. Barnwell Roosevelt and Seth Green, Fish Hatching and Fish Catching *(Rochester, New York: Union and Advertiser Co.'s Book and Job Print., 1879), 112.*

probably the last generation of trout fishers."[28] Recently, famed angler Lefty Kreh made a similar claim.[29] Anglers keep making these pronouncements, but trout fishing continues to grow globally. Amidst this early growth of sport and decline of fisheries, hatcheries seemed like a golden conservation opportunity. Little did those fish culturists know that mixing trout would later be understood as ecologically disastrous on many levels. This is in part due to the reality that early and modern fish culture and propagation have often been driven by anglers' aesthetics and interest, but not by science. The fields of conservation biology and fisheries ecology, as we know them, were still decades away. Anglers were driving the science of fish culture, and their efforts provided the foundations for today's established scientific disciplines.

In response to the increasing alarm over deteriorating fisheries, the administration of Ulysses S. Grant established the United States Fish Commission in 1871. Its first project was to detail the decline of coastal and freshwater fishes. Its second task was to remedy those declines, and fish hatcheries were put to work. In no time, brown trout were imported from Europe (1883), and rainbow trout were making their own global journey at the hands of anglers and fish culturists.[30]

These efforts continued to build over time, and in 1927 Herbert Hoover argued for more hatchery work in an address on April 9 to the Izaak Walton League in Chicago titled "A Remedy for Disappearing Game Fishes." He emphasized stocking America's rivers with fishes so that "there is less time between bites."[31] Hoover certainly espoused religious perceptions of angling, as he argued elsewhere that "next to prayer, fishing is the most personal relationship of man . . . fishing is a chance to wash one's soul with pure air, with the rush of the brook, or with the shimmer of the sun on the blue water."[32] It seems his most religious experiences came from catching fish, not necessarily from the "time between bites"; hence, the need for a strong hatchery program.

By Hoover's administration, the United States Fish Commission was well on its way to stocking trout around the country. Much of this work was driven by—and simultaneously helped drive—a particular fish aesthetic ultimately tethered to recreational fishing. Trout were superior game fish, as many officials, fisheries scientists, and anglers believed. Early and leading fish-culture figure Livingston Stone noted in 1873 that the brook trout "surpasses all other fish in grace of form, in beauty of coloring, in gentleness of expression, in fascination of manner, in gameness of spirit, in sweetness and firmness of flesh, and in general personal attractiveness"—clearly a charismatic species.[33]



Herbert Hoover's 1927 address to the Izaak Walton League, "A Remedy for Disappearing Game Fishes," was published in book form by Huntington Press in 1930.

Based on these ideals, fisheries programs set about stocking brook, rainbow, and brown trout in a variety of rivers, lakes, and waters around the country. Some locations, particularly in the West, were originally fishless areas. Angler-conservationists believed that they were improving the sporting nature of these "wilderness" areas by adding trout to them. Moreover, they were aiming to curtail declines of fish in popular rivers and watersheds. The intentions were certainly noble. They not only understood the economic benefit of maintaining (semi-)healthy fisheries, but also deeply believed in the psychological and even spiritual benefit of having places for Americans to fish regularly.

From Wild Fish to Native Fish

Even though the actions of introducing hatchery-raised fish into the wild were commendable, the practice was certainly misguided: it operated on the assumption that a trout was a trout, so mixing trout in waters was not only okay, but good for the ecology of the river and the native trout's genetic makeup. We have learned, thanks to the insights and developments of conservation biology (and despite the continued dependence on hatcheries and fish-stocking programs), that these actions were, as Paul Schullery explained, more akin to throwing the reality of "ecological integrity" into an "eggbeater."[34] The news is not new; anglers and conservationists just rarely listened.

In 1918, the conservationist Aldo Leopold wrote a little-known, rarely read article, titled "Mixing Trout in Western Waters." Here Leopold would signal his famous land ethic that followed forty years later. As Leopold biographer Julianne Newton Warren explained, in this article Leopold expresses one of the earliest, scientifically guided management proscriptions for trout that also reveals his respect and admiration for native species and their place in the biotic system. But his views would be slow to catch on.[35]

By the mid-1900s, a new phase was emerging in trout conservation, one in which "wild trout" became more valuable to anglers and fly fishers around the country.[36] This preference shifted attention toward maintaining populations of fish in streams rather than simply putting more fish in the water. This was a step in the right direction, as the gaze began to expand to issues like stream and watershed health necessary for maintaining populations. This shift coincided with

the emergence of mandatory catch-and-release rivers, fly-fishing-only rivers, and fishing seasons that straddled spawning.

This phase of wild trout also marked the emergence of trout- and fly-fishing-specific conservation groups, such as Trout Unlimited, which were certainly responsible for some of the management regulations just noted. The earliest groups date back to after the Civil War, but those were more often clubs, not conservation-minded nonprofit organizations. Of course, some of these sportsmen's organizations were certainly conservation oriented—most notably the Boone and Crockett Club, founded in 1887 by Theodore Roosevelt and George Bird Grinnell. National trout- and fishing-centered organizations really did not catch on until the mid-1900s. Trout Unlimited was born on the banks of the Au Sable River in 1959. Ironically, their focus was on conserving wild trout fishing on the Au Sable, not the native grayling, which made its home in Michigan's waters before its decline.

If, perhaps, the mid-1900s marked a phase of "wild trout," anglers are finally coming to appreciate native trout (and native fish) in these early years of the twenty-first century. In part, this comes from an awareness of the impacts of nonnative species on native ecosystems. The effects of brown trout in western waters extends beyond their outcompeting native cutthroat, but also affects salamanders, macroinvertebrates, and other smaller native fish, like the darter, dace, or sucker. Currently, the World Conservation Union ranks both brown and rainbow trout among *100 of the World's Worst Invasive Alien Species.*[37]

Beyond science, the move from wild to native trout depends heavily on aesthetics. As Schullery noted in *Cowboy Trout*, "Most recently, it wasn't all that big a step from preferring wild fish to preferring wild native fish, which are now seen by many as providing a more authentic angling experience in nature. A fish that actually evolved over many millennia in the water has certain aesthetic advantages over a fish that only arrived a few decades ago."[38] Many anglers not only value native fish for aesthetic reasons, but angling has taught them basic streamside ecology so that they understand the importance of native fish in native habitats, ecologically speaking. That said, there remain countless debates over restoration projects for native trout, as many anglers would prefer to continue catching wild browns or rainbows, which they might see as better sport.

Responding to these realities of science and aesthetics, groups like Trout Unlimited are funding programs such as Eastern Brook Trout Venture and Bring Back the Natives. Similarly, the Federation of Fly Fishers in 2001 issued a native fish policy, which seeks to restore native fish species and their habitats as essential for the continuation of "fly fishing heritage and tradition, as well as the betterment of ecosystems."[39] In one (of many) grassroots example, the bylaws of New Mexico Trout state that the trout streams of New Mexico must be protected, not only because "trout waters and their pristine surroundings offer nourishment, solitude, and comfort to the human spirit," but also because "trout waters are a gift of nature to be understood, preserved, and protected."[40] We are only now beginning to come to terms with the value of native fish and native ecosystems; however, many restoration projects across the West remain hotly contested.

Biologists with the New Mexico Fish and Wildlife Conservation Office and the Santa Clara Pueblo ready themselves to gather Rio Grande cutthroat trout in northern New Mexico, 2010. From the U.S. Fish and Wildlife Service. http://digitalmedia.fws.gov /cdm/singleitem/collection/natdiglib/id/10767/rec/4. Accessed 27 September 2013.

Wading toward Holistic Perspectives

Responding to the issues of hatchery fish, anglers have turned their gaze from trout to their salmon cousins. They are realizing that along with dams, introduced hatchery-reared fish significantly affect salmon and steelhead in the Pacific Northwest. Oregon and Washington allow fish culture, but the state of Alaska has banned the practice, at least when it comes to salmon conservation and the supplementation of commercial fishing.

Attention to native fish has, in part, coincided with shifts in biology, or the emergence of the field of conservation biology, which insists on systemic—rather than species-specific—approaches to conservation. Angler-conservationists have learned that watersheds must be defended and restored if the fish are to be conserved and protected. One cannot simply put more fish back in; one cannot, as Leopold said, mix trout in western—or any—waters. Anglers and fly fishers are gradually moving from a species perspective to a watershed perspective, learning that native fish require restored ecosystems and arguing more frequently that native fish need restoring—not for fishing, but because they have inherent value and the right to exist in their native streams.

Thinking systemically, fly fishers have learned that native species, such as the Rio Grande cutthroat trout, are the proverbial canary in the coal mine. These trout, more than hatchery-reared trout, need clean, clear water. If they cannot survive, then the watershed is sick. This approach is moving in positive directions; rivers and ecosystems are indeed being restored. John Ross documents twenty-one successful stories from the work of Trout Unlimited in *Rivers of Restoration.*[41] There are many feel-good stories. Lessons are being learned, and watersheds are, in some cases, improving. Anglers are getting closer to the land ethic—getting closer,

as Leopold taught, to thinking like a mountain or thinking like a watershed. But they are still far from getting it right.

This work is not easy and is certainly controversial. Each project has its own dilemmas, such as the removal of dams or the use of piscicides (e.g., rotenone or antimycin A) to clean out nonnative fish from a river. But numbers in some contexts are improving, fishing is improving, and anglers are so pivotal to the process that the Society for Conservation Biology praised recreational anglers as "instrumental in successful fisheries conservation through active involvement in, or initiation of, conservation projects to reduce both direct and external stressors contributing to fishery declines."[42] Historically, many of the success stories do not come from federal management, but from the hard work of grassroots groups. Perhaps the federal management will catch up; again, that will be driven by aesthetics and preferences of recreational and sport anglers.

There are still many struggles ahead. Steelhead numbers are plummeting, as steelhead devotee Dylan Tomine painfully documents in "State of Steelhead."[43] Salmon have been the catastrophic casualty of overfishing, dams, and, of course, poorly managed hatchery and fish-culture programs. Mineral development threatens trout and salmonids globally. Most notably, the world's largest remaining runs of sockeye salmon—as many as forty million a year—in Bristol Bay, Alaska, are threatened not by nonnative species, but by nonnative mining companies.

Schullery was right that most fly fishers "wouldn't know history if it came up and bit us on our breathables, but we love to think it is on our side."[44] There is a concept of historical illiteracy to which sociologists and historians often refer—basically, that we do not know our own history. There are books on religious illiteracy and food illiteracy; I am mostly convinced that the bulk of fly fishers today do not know much about fly-fishing history. Perhaps this is not a problem. I, however, am often bothered by it—particularly when I think of the hurdles our fisheries still face and the contribution that fly fishers, and the broader angling community, can make toward clearing those hurdles.

Fly fishers often talk and write about following streams to their sources and wading into headwaters. We fantasize about the magical origins of our favorite fisheries. We seek the flows that give cold, flowing life to the spaces where we feel most at home. As we wade upstream, casting, splashing, spotting trout, or identifying bugs, we participate in an age-old ritual that unites us with the history of our sport.

Bob Waldrop

Sockeye spawning in Bristol Bay's Wood River system.

Today, amidst all of the glitz, technology, and shifting elements of our sport, we sometimes forget to look back from whence we came. By gazing back into the headwaters of history, we can better understand the evolution of fly fishing's techniques, technology, and tributaries. Regarding our fisheries, a historical perspective can tell us where we have gone wrong, where we have succeeded, and perhaps where we should go in the future. Looking back at this history and looking ahead toward these struggles, not only anglers but scholars of environmental history and politics must ask, "So what?" From a theoretical vantage point, the question pertains to what looking at fly fishing, trout, and salmon brings to the table for scholars of religion, environmental ethics, environmental history, or environmental policy. From an engaged and practical perspective, we as anglers and historians have an integral role to play in the future of fisheries and watershed conservation.

~

ENDNOTES

1. Aldo Leopold, *Game Management* (Madison: University of Wisconsin Press, 1933), 420–23.

2. Aldo Leopold, *A Sand County Almanac: And Sketches from Here and There* (Oxford: Oxford University Press, 1949), 224.

3. In *A Sand County Almanac*, Leopold used the metaphor of "thinking like a mountain" (129) to exemplify the "land ethic" (224–25), in which he articulated the importance of thinking systemically about the chains of connection between species and components of ecological systems.

4. The first text in America written explicitly about fishing was Joseph Seccombe's *Business and Diversions Inoffensive to God Necessary for the Comfort and Support of Human Society* (1739), in which Seccombe, a New Hampshire minister, proclaimed fishing as essential for the re-creation of the human spirit, and necessary for contemplating God through nature and ensuring moral behavior. However, just because this is the first text published on fishing does not mean that Americans were not out enjoying streams from the very earliest moments of colonial America.

5. Fly fishing is often used as a method for coping and healing, for example, for cancer victims through the work of Casting for Recovery, or for soldiers returning from the wars in Iraq or Afghanistan through Project Healing Waters.

6. Robert Arlinghaus, Steven Cooke, Jon Lyman, David Policansky, Alexander Schawb, Cory Suski, Stephen Sutton, and Eva B. Thorstad, "Understanding the Complexity of Catch-and-Release in Recreational Fishing: An Integrative Synthesis of Global Knowledge from Historical, Ethical, Social, and Biological Perspectives," *Reviews in Fisheries Science* (2007, vol. 15, no. 1), 75–167, 80.

7. Tony Pitcher and Charles Hollingworth, eds., *Recreational Fisheries: Ecological, Economic, and Social Evaluation* (Oxford: Blackwell Science, 2002), 3.

8. Many fly-fishing authors argue that one of the first examples of fly fishing is found in the writings of Claudius Ælianus (220 BCE), who described fishing with a red hackle on a hook. There is debate over the nature of fishing, its preferences, and who fished. Some speculate that elites never fished, but it was an activity used by the working class for consumption or sale (Pitcher and Hollingworth, *Recreational Fisheries*, 4).

9. Richard C. Hoffmann, *Fishers' Craft & Lettered Art* (Toronto: University of Toronto Press, 1997), 73–110.

10. C. Estienne, *L'agriculture et Masion Rustique* (1307); anonymous English translation (1600); *The County Farm* (1616). Quoted in Arlinghaus et al., "Understanding the Complexity of Catch-and-Release in Recreational Fishing," 81.

11. Paul Schullery, *Cowboy Trout: Western Fly Fishing as If It Matters* (Helena: Montana Historical Press, 2006); Jennifer Corrine Brown, "Why Are Mountain Whitefish Ugly? A Native Fish in Western Trout Waters," White Paper, Corvallis: Oregon State University, 2009.

12. Norman Maclean, *A River Runs Through It and Other Stories* (Chicago: University of Chicago Press, 1975), 1.

13. James Prosek, *The Complete Angler: A Connecticut Yankee Follows in the Footsteps of Walton* (New York: Harper Collins, 2001).

14. One of the first to advocate fishing with a barbless hook was Seth Green, who is also hailed as the father of fish culture in the United States. In articles and editorials to *Forest and Stream* (25 November 1875), he touted barbless hooks for their effectiveness in catching fish, not for their ability to ease the release of fish. In an article in *Forest and Stream* (3 April 1909), Seth's son Chester spoke in favor of the barbless hook, leading to what historian Todd Larson deemed "one of the great early proclamations of conservation in America" (Todd Larson, *The History of the Fish Hook in America* [Cincinnati, Ohio: Whitefish Press, 2007], 71). See also Seth Green, "Seth Green on Needle Points," *Forest and Stream* (25 November 1875), 245; and Chester Green, "Barbless Hooks," *Forest and Stream* (10 April 1909), 580.

15. Lee Wulff, *Lee Wulff's Handbook of Freshwater Fishing* (New York: Frederick A. Stokes Co., 1939), xv.

16. *Piers of Fulham*, 1420. Cited in Robert Blakey, *Historical Sketches of Angling Literature of All Nations* (London: John Russell Smith, 1855), 35. Also cited in Arlinghaus et al., "Understanding the Complexity of Catch-and-Release in Recreational Fishing," 82. Richard Hoffman addresses *Piers of Fulham* in "Fishing for Sport in Medieval Europe: New Evidence," *Speculum* (October 1985, vol. 60, no. 4), 877–902, 883–84. *Piers of Fulham* is a mid-fifteenth-century poem found in several sources, one of which is Blakey. As Hoffman explains, the author of *Piers of Fulham* "laments overfishing, especially by those unscrupulous fishers who take young fish before they reach their growth" (883).

17. Dame Juliana Berners, *A Treatyse of Fysshynge wyth an Angle* (c. 1421), in *Uncommon Waters: Women Write about Fishing*, ed. Holly Morris (Seattle: Seal Press, 1991), 97–118. See also Arlinghaus et al., "Understanding the Complexity of Catch-and-Release in Recreational Fishing"; Hoffmann, *Fishers' Craft & Lettered Art*; Pitcher and Hollingworth, *Recreational Fisheries*; and David Policansky, "Catch and Release Recreational Fishing: A Historical Perspective," in Pitcher and Hollingworth, *Recreational Fisheries*, 74–93.

18. Arlinghaus et al., "Understanding the Complexity of Catch-and-Release in Recreational Fishing"; Hoffmann, *Fishers' Craft & Lettered Art*; Pitcher and Hollingworth, *Recreational Fisheries*.

19. Humphrey Davy, *Salmonia* (London: John Murray, 1828), 11.

20. Charles Cotton, in Izaak Walton, *The Compleat Angler; Or, the Contemplating Man's Recreation*, 5th ed. (London: Ingram, Cooke, and Co., 1853), 288.

21. Frederic M. Halford, *The Dry Fly Man's Handbook* (1913; Lyons, Miss.: Derrydale Press, 2000), 309.

22. Randall Kauffman, *Tying Dry Flies* (Moose, Wyo.: Western Fisherman's Press, 2001), 62.

23. John Reiger, *American Sportsmen and the Origins of Conservation* (New York: Winchester Press, 1975), 37–49.

24. Anders Halverson, *An Entirely Synthetic Fish: How Rainbow Trout Beguiled America and Overran the World* (New Haven, Conn.: Yale University Press, 2010).

25. Malcolm Draper, "Going Native? Trout and Settling Identity in Rainbow Nation," *Historia* (2003, vol. 48, no. 1), 55–94.

26. Alfred Crosby, *Ecological Imperialism: The Biological Expansion of Europe, 900–1900* (Cambridge: Cambridge University Press, 1986).

27. Reiger, *American Sportsmen and the Origins of Conservation*, 52.

28. Quoted in Robert M. Poole, "Native Trout Are Returning to America's Rivers," *Smithsonian Magazine* (August 2007), http://www.smithsonianmag.com/science-nature/trout_main.html. Accessed 8 November 2013.

29. According to Marshall Cutchin in personal correspondence with Samuel Snyder, 18 April 2009.

30. Halverson, *An Entirely Synthetic Fish.*

31. Herbert Hoover, "A Remedy for Disappearing Game Fishes," excerpted in *The American Fly Fisher* (Fall 1979, vol. 6, no. 4), 24–29, 25.

32. Herbert Hoover, *Fishing for Fun—and to Wash Your Soul* (New York: Random House, 1963), 34.

33. Livingston Stone, *Domesticated Trout: How to Breed and Grow Them* (Boston: J. R. Osgood and Company, 1873), 200.

34. Paul Schullery, *Royal Coachman: The Lore and Legends of Fly Fishing* (New York: Simon and Schuster, 1999), 189.

35. Aldo Leopold, "Mixing Trout in Western Waters," *Transactions of the American Fisheries Society* (1918, vol. 47, no. 3), 101–02; Julianne Newton Warren, "Weaving a Wider Net for Conservation: Aldo Leopold's Water Ethic," unpublished White Paper, 2010.

36. Brown, "Why Are Mountain Whitefish Ugly?," 3.

37. S. J. Lowe, M. Browne, and S. Boudjelas, *100 of the World's Worst Invasive Alien Species* (Auckland, N.Z.: IUCN/SSC Invasive Species Specialist Group, 2000).

38. Schullery, *Cowboy Trout*, 206–7.

39. Rick Williams, Federation of Fly Fishers Native Fish Policy, 2001. http:// nativefishsociety.org/conservation/history_and_solutions/general_information/historical/FFFNative.htm. Accessed 20 June 2013.

40. Bylaws, New Mexico Trout, http://newmexicotrout.org/about/our-values. Accessed 20 June 2013.

41. John Ross, *Rivers of Restoration: Trout Unlimited's First 50 Years of Conservation* (New York: Skyhorse Publishing, 2008).

42. E. F. Granek, E. M. P. Madin, M. A. Brown, W. Cameron Figueira, Z. Hogan, G. Kristainson, P. De Villiers, J. E. Williams, J. Post, S. Zahn, and R. Arlinghaus, "Engaging Recreational Fishers in Management and Conservation: Global Case Studies," *Conservation Biology* (2008, vol. 22, no. 5), 1125–34, 1125.

43. Dylan Tomine, "State of Steelhead: The Canary Ain't Singing Anymore, But the Fat Lady's Just Warming Up" (Kirkland, Wash.: Wild Steelhead Coalition, 2009), www.wildsteelheadcoalition.org/Repository/WSC_State_of_SH_layout_1pp_.pdf . Accessed 8 November 2013.

44. Paul Schullery, *If Fish Could Scream: An Angler's Search for the Future of Fly Fishing* (Mechanicsburg, Pa.: Stackpole Books, 2008), 55.

Catch-and-release sign, photographed in Asheville, North Carolina, in 2008 by Jim Kelly. http://www.flickr.com/photos/pthread/3153628307/. Accessed 12 September 2013.

The Brook Trout as Icon

by Michael Steinberg

I once fished a river in Connecticut fed by many springs. It headed into a tangled field of deadfalls and thick grasses, a swampy place through which ran rivulets of cold crystalline water dimpled everywhere with the rises of little fish. The rises were all from wild brookies. They were no more than four or five inches long—sleek velvety fish with black mottled backs and jewel-like bright red spots. When I hooked them on a Hairwing Royal Coachman, they seemed to pop directly up out of the water, wriggling vigorously. I marveled at their beauty and each of them made me smile. We were not ten miles from a suburban world peppered with strip malls, used car lots, gaudy gas stations, and fast-food restaurants, but this was a place exquisitely separate, quiet, and wild, and I was hugely grateful for it, for the rich satisfaction it brought me, for the wild brookies that are the emblem of such increasingly rare wildness.

—Nick Lyons
correspondence with author
6 November 2009

A Brook Trout *by Winslow Homer. Watercolor, 1892. Private collection.*

The brook trout is a most iconic species among anglers in eastern North America. This lovely fish registers as a powerful symbol for several reasons: its beauty, its imagery in art and literature, and its role as an indicator species.

My use of the word *lovely* gives away the reason I hold this small fish in such high regard. There isn't a more striking fish in the East. The sides of the brook trout are sprinkled with dots and dashes of red, orange, yellow, and the occasional blue. Its belly—especially in the fall—turns to bright orange, while its upper back is dark green or even black, providing stunning contrasts. The first time I held a brook trout, I thought that an artist had painted all the colors of a fall Appalachian forest on this one small, living palette.

Yet the camouflaged back of this fish makes it almost invisible in a stream. It is not until one is pulled from the depths of its icy, dark pool that we can see and truly appreciate these small masterpieces. Sometimes when I sit near a stream, I almost feel sorry for the hikers who quickly walk by, seemingly oblivious to the beauty of the creatures hiding among the rubble on the stream floor. The hikers' lack of attention in turn makes me think deeper about what I might be missing in nature when I'm distracted.

For centuries, the brook trout has served as a point of inspiration in both art and literature. Its image has graced the canvases of America's best sporting artists, beginning in the nineteenth century with Winslow Homer's paintings of leaping brook trout. His celebrated *A Brook Trout* is one of the most recognizable fish images in American art. It both accurately depicts the species itself and places the fish in an almost unimaginable aerial pose.

Homer's focus on brookies shouldn't be particularly surprising given that in the nineteenth century, it was the only salmonid in many northeastern rivers, a prominent setting for his art. The brook trout remains a popular subject today among piscatorial artists, such as James Prosek, whose vivid watercolors of small brook trout are set among the streams in his native Connecticut; Joseph Tomelleri,

Small Fry—Brook Trout. *Oil, 2009.*
BobWhite—BobWhite Studio. Used with permission.

whose scientifically detailed work has appeared in more than a thousand publications and whose client list (ranging from Zebco to Bass Pro) makes him perhaps the best-known fish illustrator today; and Bob White, whose fish and fishing watercolors inspire me to start planning my next trip. These individuals are not only talented artists, but also avid anglers who effectively depict the essence of fish and landscapes.

The allure of brook trout and the landscape in which they are found is also reflected in an abundance of literature. Contemporary authors such as Nick Lyons, W. D. Wetherell, Jim Babb, John Gierach, Craig Nova, and Chris Camuto have all written in great detail about the intersection of life and brook-trout angling. Their work has led me to contemplate the role of the brook trout in my own life. Before these scribes, the connection between literature and brookies specifically is harder to trace, but trout in general and fly fishing in particular provided fertile waters for a rich body of work. Authors Roderick Haig-Brown, Theodore Gordon, Norman Maclean, Henry David Thoreau, and Ernest Hemingway all fished in brookie waters.

Beyond creative inspiration provided by the brook trout is the fact that its presence tells us a great deal about the health of the larger environment. The brook trout is an indicator species for streams, lakes, and watersheds in largely unspoiled conditions. This association with clean, intact environments is another reason the brookie has developed a dedicated following among fly anglers. When I have a brook trout in my hand, I know the water in which I am standing is close to pristine.

Writer Chris Camuto noted in *A Fly Fisherman's Blue Ridge*, "Wild trout are a sign the land is doing well."[1] According to former Trout Unlimited Eastern Brook Trout Campaign Coordinator Gary Berti, "Brook trout are the canary in the coal mine when it comes to water quality. . . . Declining brook trout populations can provide an early warning that the health of an entire stream, lake or river is at risk."[2]

The brook trout is an iconic species also because it is the most widespread. It is often described as the only native member of the Salmonidae family found in the eastern United States. This is technically incorrect because the closely related Arctic char is found in a handful of isolated ponds in northern Maine, Atlantic salmon continue to swim in the waters of several rivers in Maine and many more in eastern Canada, and lake trout are also found in the deep lakes of New England. However, the brook trout is the only native Salmonidae found south of New England, in highland areas such as the Allegheny and Blue Ridge mountains.

The brook trout's native range roughly spans the spine of the Appalachian Mountains, from northern Georgia to northern Labrador in Canada, and west to the Great Lakes and Hudson Bay regions. Within this vast geography exist such distinct populations as "coaster" brook trout in the Great Lakes, "salter" or sea-run brook trout along the coast of New England, southern and northern strains in the Appalachian Mountains, and unique strains in some Maine ponds. Fish size changes based on geography. Brook trout in the southern mountains are generally small because they are today limited to headwater streams with less food and cover. Farther north, brookies are found in larger streams, rivers, and lakes, all offering a wider assortment of such high-reward food items as forage fish. Habitat scale or opportunities correspond with the scale or size of the fish. It is a strange feeling, though, knowing that the tiny 6-inch brook trout I caught in foot-deep clear streams in South Carolina is the same species as the giant 20-incher I caught in the deep black rivers in Labrador.

Because of stocking efforts during the past two centuries, char and trout today are found outside their natural range and overlap with introduced species such as brown and rainbow trout. The brook trout is now widespread in western North America and has become an invasive pest, displacing many native cutthroat trout species. So while conservationists in the East work to protect brook trout, those in the West seek to remove them. Their presence and impact became clear to me while fishing with my wife a few years ago in Montana's Lee Metcalf Wilderness Area, far outside the brook trout's natural range. For every native cutthroat we caught, we probably landed ten brook trout—my wife cut her fly-fishing teeth on hungry brookies that day. Although that experience remains special, the memories are somewhat tempered because brook trout don't belong in Big Sky country. The experience would have been more "pure" had we only caught native cutthroats.

Beyond the iconic status of the brook trout itself, the environment in which it is found is also part of its past and present appeal. To fish for brook trout is

Bob White's One Last Look *series perfectly captures the personal moment immediately before a trophy fish is released. Any angler can envision him- or herself in exactly that moment: appreciative of the fight and beauty of the fish, and slightly reluctant to let it go without another look. BobWhite—BobWhite Studio. Used with permission.*

often to fish in the last remote and rugged landscapes in the East. Part of the allure of fishing in general is the landscape, whether it's the junglelike mangrove swamps of the tropics or the cold, boulder-laden streams flowing from mountains. The brook trout's home environment—streams in the hemlock-covered Appalachian Mountains and silent ponds in northern New England—are some of the most beautiful landscapes in the eastern United States. One inviting feature of these waters is that they do not receive the same levels of fishing pressure when compared with lower-elevation, more-accessible streams. It is not uncommon to spend a day completely alone while hiking up a brookie stream, even though you may only be a few hours from New York or Atlanta. During most brook-trout fishing trips, my only companions are brightly colored salamanders, birds in the treetops, and an occasional black bear.

These streams are not home to large, blandly colored, hatchery-reared fish. Instead, these cold trickles are for anglers who appreciate the intangibles that nature has to offer: great views from the tops of mountains, the physical challenge of hiking up rugged streams, and the chance to catch colorful native fish. When brookies strike at the end of my invisible leader, the mountain has bestowed upon me a living gift.

Today, brook trout in the eastern United States receive more conservation attention than they ever have through growing numbers of federal, state, and local conservation and restoration projects. This interest is not driven by the simple, yet understandable, desire to catch big fish. Brookies, in most instances, are not and never will be big fish; I feel a sense of accomplishment when I catch an 8-inch fish in a headwater stream. The motivation to improve and protect brook-trout habitat is driven largely by the love of native fish and their landscape. The interest in making spaces for native species for the sake of simply having native species seems like a healthy motivation compared with managing a species and ecosystem solely for producing trophies.

I am not naïve about our past or present impacts on native-trout landscapes. In almost all areas where brook trout are found, the ax and plow were close at hand at some point during the past three hundred years. And before European impacts, Native Americans too altered the landscape through fire and agriculture. Pristine forested landscapes are rare in eastern North America today, except for a handful of remote old-growth forests scattered throughout the mountains. Historic nineteenth-century photos of the Green or Shenandoah mountains show fields growing stumps and stone walls, not the mature forests we associate with these areas today. But wilderness also can be thought of not in hard measurements (such as miles from roadways or thousand-year-old forests), but in terms of personal meaning.

When I hike and fish up a mountain stream, I sometimes like to imagine that its true headwater or source is in some far-off remote wilderness, well beyond my reach, rather than my stopping point at the moment. Even if headwaters are within reach, I often stop fishing and hiking short of them so that the stream retains some secrecy in my mind. Wilderness is a place where native species still dominate, where one can find peace, meaning, and some mystery in the natural landscape. These places are the mountaintops, gorges, and remote ponds where colorful brook trout still hover in their frigid dark water. If there still are wild and native brook trout out there, wilderness abides.

ENDNOTES

1. Chris Camuto, *A Fly Fisherman's Blue Ridge* (Athens: University of Georgia Press, 2001), 24.

2. Gary Berti, Trout Unlimited press release, 3 May 2006, www.tu.org/press_releases/2006/new-data-shows-brook-trout-imperiled-throughout-entire-eastern-range. Accessed 1 May 2008.

BOOK REVIEW

Schullery's *The Fishing Life: An Angler's Tales of Wild Rivers and Other Restless Metaphors*

by Jim Merritt

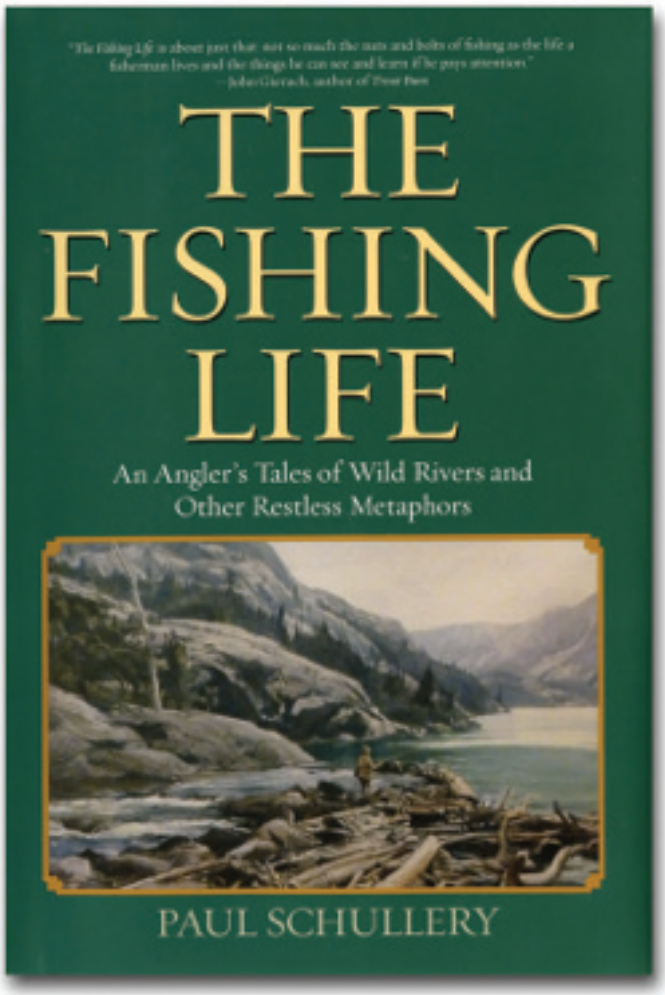
Paul Schullery is unique among contemporary authors who write about fly fishing. He is not a fly-fishing writer per se, but a historian, naturalist, and philosopher whose fishing informs his writing but isn't always central to it. He is difficult, maybe impossible, to pigeonhole and emphatically not a writer of the how-to, where-to variety. Nor is he strictly a storyteller or essayist in the mold of Nick Lyons or Ted Leeson. If there is a theme that runs through Schullery's writing, it is a skepticism of consensus. He reflexively challenges the conventional view, although never in a harsh or mean-spirited way.

A native of Ohio, Schullery took up fly fishing four decades ago while working as a ranger/naturalist in Yellowstone National Park, where he eventually became the resident historian. (He is also a former director of the American Museum of Fly Fishing.) Arguably, his formative years in the Midwest and Rockies gave him a broader perspective than someone who cut his angling teeth on "hallowed" waters like the Beaverkill and other eastern streams regarded as the fountainhead of American fly fishing.

His gentle contrarianism is displayed in many of the twenty-one pieces (most previously published) in *The Fishing Life: An Angler's Tales of Wild Rivers and Other Restless Metaphors*, the wide-ranging eclecticism of which is suggested in the subtitle.

In an engaging and discursive way, Schullery writes about big rivers in Alaska and Montana but also about the little walled-in, trash-strewn creek in the town where he grew up, and the excitement of realizing that its meanders followed the same rules of hydrology as the Yukon and the Missouri. (It even held a few fish.) He champions unglamorous species like suckers, arguing on their behalf for the benefits they confer on trout (which feed on their spawn and young) and for their own sake as integral parts of a stream's ecosystem. He is partial to the lowly chum or "dog" salmon of the Pacific Northwest. He writes lovingly about crayfish and their natural history in a piece without a single word about fishing.

Schullery's interest in the culture and many subcultures of fly fishing leads to ruminations on the river grayling, respected on this side of the Atlantic as a worthy game fish but viewed as something of a trash fish in Britain. In "The Adams Hatch," he ponders the evolution of one of our most popular and enduring dry flies. The first "ancestral" Adams, which had a tail of golden pheasant and came in both upright- and slanted-wing versions, was tied by Leonard Halladay in Michigan in 1922. It was a homely, ungainly thing, with a "thick, even lumpy" body and bushy, oversized hackle. Before long, it migrated east and took on the sleek aesthetics of the Catskill school, embraced for its effectiveness but modified beyond recognition. By contrast, in the tradition-oblivious Rockies, it



Some of Louis Rhead's insect classifications and illustrations. From Louis Rhead, American Trout-Stream Insects *(New York: Frederick A. Stokes Company, 1916), facing page 68.*

retained for many years the "hearty, rough-water" style of the original. Western anglers, notes Schullery, "recognized the big Adams as one of their own, and didn't feel the need to put it on a diet" (78). It's obvious where his sympathies lie.

Few writers are more knowledgeable about fly-fishing "literature"—a perhaps overblown term, because, as Schullery points out, most of what's been written about the sport is utilitarian and forgettable. In "Crazy Coots and Mere Farragos" (a version of which was published in the Fall 2004 issue of this journal), he has fun with "bad" fishing writers scorned over the centuries for their weirdness, wordiness, and mendacity, among other failings. While generally agreeing with the critical consensus on these writers, he plumbs their sometimes impenetrable prose for overlooked virtues.

He is sympathetic to Louis Rhead, an early American hatch-matcher dismissed for his idiosyncrasies of insect classification, and to the irascible Minnesota tackle merchant George Leonard Herter, author of the self-published *Professional Fly Tying, Spinning and Tackle Making Manual and Manufacturer's Guide* (1941), which Herter claimed sold more than 400,000 copies. Herter, Schullery suggests, was "vastly experienced in fly fishing, and he mixed relentless crankiness with a startling awareness of environmental issues. And his book is undeniably full of really useful information and advice" (164). Herter also suffered, according to Schullery, from being "an outsider, a boisterously self-promotional, unpolished, and belligerently confident writer from America's uncosmopolitan upper Midwest," whose bombast alienated the über-cosmopolitan New Yorker Arnold Gingrich "and other modern tastemakers" (by "modern," read "eastern") (163).

In the collection's closing piece, Schullery probes the ethics of fly fishing as they relate to catch-and-release, a widely practiced conservation measure seen by animal-rights advocates as something more akin to catch-*torture*-and-release. Schullery lays out the animal-rights argument in a dispassionate way. He then rebuts it, but in a nuanced fashion that cannot be neatly summarized and without even addressing the central question about whether fish feel pain; his counterargument goes on for pages. It's personal, he says, and complicated, and ultimately spiritual in the connection it allows him to make with the fish and its environment and the natural world that enriches and sustains us all: "I try to imagine the last thirty years of my life without all those hundreds of glowing days along wild mountain streams all over North America—all the beauty I've absorbed, all the shared and remembered wonder, all the gratitude I've felt not just to the fish but to the rivers they glorify with their presence" (171–72). He fishes because he must.

J. I. (Jim) Merritt is the author of Trout Dreams: A Gallery of Fly-Fishing Profiles *(2000). His last article in this journal was "Hunting Dr. Slack: American Fish Culture's Forgotten Man" (Winter 2011).*

The Fishing Life: An Angler's Tales of Wild Rivers and Other Restless Metaphors
by Paul Schullery
Skyhorse Publishing, 2013
$24.95 (hardcover)
www.skyhorsepublishing.com

Marc Aroner, Rod Maker: A Living Link to Leonard

by John Mundt

John Mundt

The author's Aroner rod, a 7½-foot, 5-weight Hunt Pattern Special.

Many fly fishers are pilgrims: we seek out the sacred places associated with the history of our grand sport and try to connect with its past. One such place for me has always been Marc Aroner's rod shop. Hidden not far off the Mohawk Trail in the Berkshire Hills of Massachusetts, it is a place where the legacy of fly-rod pioneer H. L. Leonard resides. In my mind, Marc is a direct link to the old H. L. Leonard Rod Company.

Aroner's shop is typical of the bamboo rod maker, crammed with the materials, tools, and purposeful clutter necessary to turn out the finest angling instruments. What makes his shop truly historic is that the whirring hum that can be heard on any given day emanates from the H. L. Leonard Rod Company beveling machine being operated under the watchful eye of Aroner, a former Leonard employee.

Aroner has been at it for more than forty years. He began his career with the Thomas & Thomas Rod Company in Greenfield, Massachusetts, then migrated south to join the H. L. Leonard Rod Company in Central Valley, New York. For the past three decades, he has been producing his own exquisite rods.

Fate met function when the effects of the H. L. Leonard Rod Company were being auctioned off after its closure in 1984. In Aroner's words:

> I got a phone call from a friend one day who said, "Hey, Leonard is going out of business and all of their equipment is going to be auctioned off tomorrow. You need to get down here." So I hopped in my car and drove to New York that night. Of course, the next day the place was crawling with every rod builder on the east coast, so I thought to myself, "No way." I was young and didn't have any money at the time. Yet for some reason—and I still can't explain it to this day—there was a kind of lull during the middle of the auction. It was a hot summer day and perhaps people were a little tired—I don't know. But the biggest lot came up, the one with all of Leonard's major equipment, and no one really realized it. I couldn't believe it. So I shot my arm up and the next thing I know I was being mobbed with congratulations. I was now the proud owner of all of the cutting equipment from the entire Leonard rod shop.[1]

Aroner once explained to me that after the hammer dropped on his modest bid, he was informed that there was also a trailer full

Marc Aroner in his rod shop during the author's first pilgrimage, c. 1991. Photos by Carl-Erik Folkesson.

of material and equipment included with the lot. He returned to Massachusetts with the Leonard beveler, a few hundred culms of bamboo, and numerous other effects. His smile was bright with amazement that this all had occurred at that well-attended, historic auction.

Watching Aroner at work has always been a great thrill. The sights, sounds, and scents inside his shop give one a real-time connection with the art of the bamboo fly rod and the old makers who developed the craft. He even produces his own rod hardware on several specialized machines that he adapted for the purpose. His rods are currently being produced under the name Spinoza Rod Company (Spinoza being the mythical 3-ounce rod featured in John Taintor Foote's humorous work of fiction, *A Wedding Gift*).[2]

Like all great rod makers, the waiting list for one of Aroner's rods is a long one, with three to five years being typical. Aroner's Spring Creek, Hunt Series, and Spinoza patterns range in price from $3,950 to $4,500 and are sold price upon delivery (the current price at time of completion). His production averages only sixteen to eighteen rods per year for an approximate total of 800 rods over his career thus far; for comparison purposes, Antonio Stradivari reportedly produced more than 1,000 violins, violas, and violoncellos during his lifetime, with approximately 650 extant.[3] These rods represent the pinnacle of the art being practiced today, provide a link back to Hiram Lewis Leonard's first efforts in 1869, and are a delight to cast and play a fish with.

Marc Aroner is a true keeper of the flame, and our sport continues to be enriched by those like him.

For those who may wish to connect with the history of H. L. Leonard while waiting for a Spinoza, many original H. L. Leonard rods can be found on the secondhand market. New rods are being manufactured and sold under the H. L. Leonard name by Brian J. McGrath at www.hlleonard.com.

ENDNOTES

1. Spinoza Rod Company, "About Marc Aroner," www.spinozarods.com/about-marc-aroner/. Accessed 27 January 2014.
2. John Taintor Foote, *A Wedding Gift* (New York: D. Appleton and Company, 1924).
3. Stradivarius, "The History of Stradivarius Violins," www.stradivarius.org/stradivarius-violins. Accessed 20 February 2014.

John Mundt is a former trustee of the American Museum of Fly Fishing.

Museum Donors

The museum gratefully acknowledges the outstanding support of our 2013 donors. This comprehensive list includes all contributors who helped to further the museum's mission by donating to special project campaigns, attending fund-raising events, purchasing auction items, lending historic artifacts, and providing goods and/or services. Please accept our apology if any names have been misspelled, placed under the incorrect contribution heading, or inadvertently excluded.

$25,000 and more
Foster Bam and Sallie Baldwin
Tim Hixon
Leigh and Anne Perkins
Robert and Karen Scott
Richard G. Tisch
David and Jade Walsh

$10,000–$24,999
William E. Andersen
E. M. Bakwin
Bradford and Pamela Mills
Eric and M. C. Roberts

$5,000–$9,999
Michael Bakwin
David J. Beveridge
Jane Cooke
Jon and Deborah Pratt Dawson
E. Bruce and Denise DiDonato
Ezra Field
David Ford
George and Beth Gibson
Gardner Grant Jr.
Arthur and Martha Kaemmer
Karen Kaplan
Woods and Wendy King III
Bill and Francesca Leary
Anthony and Patricia Magardino
William and Lynn McMaster
New England Interstate Water Pollution Control Commission
David and Margaret Nichols
Erik and Jennifer Oken
The Orvis Company
William and Candace Platt
Steven Price
Bobby and Mary Russell
Franklin Schurz Jr.
Nicholas and Jean Selch
Sentient Jet, LLC
Ronald and Joan Stuckey
Tyler and Francis Thompson
Andrew and Elizabeth Ward
Alan and Nancy Zakon
Steve Zoric and Sarah Bryant

$1,000–$4,999
Thomas Belk Jr.
Stephen and Sandra Bogdan
Peter Bowden
Pat Bowman
Harold and Mona Brewer
Carolyn Brogan
Jon Brower
A. S. Cargill
Paul Caruso
Hugo Cassirer
Fitz Coker and Dotty Ballantyne
Parker Corbin
Anthony Davino
Day Family Foundation
Stephen and Adriana DiGiacomo
Peter Esler
Ronald and Jane Gard
Alan and Linda Gnann
Timothy Grell
Bailey Hallingby
Melvyn Harris
James and Susan Heckman
Leon and June Holt
James Houghton
Jefferies LLC
Alex Jinishian
Harold Johnson
Peter Kellogg
Woods King IV
Alexander and Amanda Kinsey
Casey Knoll
Jim and Debbie Lepage
Christopher Mahan
Leon and Shirley Martuch
Linda Martuch
Walter and Pam Matia
Robin McGraw
Fred Middleton
Johnny Morris
John Neukom
Albert Nichols
Den Nichols
Robert and Teresa Oden Jr.
Ben Pastor
Perk Perkins
Pheasant Hill Foundation
John and Cathy Rano
Jason Scott
Matthew and Kerry Scott
Jason and Deborah Selch
Gary Sherman and Lyn Kohls
John Taylor
Urban Angler
Frances Wolfson
James Woods and Charity Chapman
Jeff Yates
Daniel Ziff
Martin E. Zimmerman

$500–$999
Paul F. Balser
Peter Colhoun
Bob and Posie Constable
John Dale
Nathaniel Day
Raymond Dorado
E. & J. Gallo Winery
Lawrence Evans
Finn and Stone
Margie Kaat
Tom J. Kukk
Peter Laurelli
Michael S. Luzich
Chris and Ami Martino
Frederick and Cassie Polhemus
Project Healing Waters
Pendennis Reed Jr.
James and Donna Reid
Diana Rudolph
Philip and Lisa Sawyer
Mark Sherman
Nelson and Janie Sims
Charles Walton
William F. Willson
William J. Wilson
John Zuccotti

$250–$499
John Abplanalp
Kathleen Achor
Peter and Anne Angevine
John Barnes
Stan and Patty Bazan
Edward Beddow
Berkshire Bank
Shannon Brightman
Keith Burwell
William Casazza
Joseph and Beth Clark
Cathi Comar
Peter and Lillian Corbin
Frank Crescitelli
Jace and Jacko Day
Curtis Duffield
Jon Eggleston
Robert and Connie Ferguson
Lloyd Fields
Russell Fisher
David Handy
Mary Hanel
Paul Jennings
James Katlenbach
Joan Kelleher
Steve Lampe
James J. and Patricia Lee Jr.
Andrew Luedeke
Lee W. Mather Jr.
William and Megan McCollum
Lee Meadow
Richard Morse
Perkins Charitable Foundation
Steve Rehmus
Chris Riegler
rk Miles, Inc.
James Specter, DDS
Jacques Torres
The Vermont Country Store
David K. Whitney
Joseph A. Wright

Up to $249
Dorothy and William Achor
John and Cindy Affleck
Gary Allen
Alan Amendt
Robert Anderson III
Anonymous
Anonymous
Stephen W. Asher, MD
Edgar Auchincloss IV
Louis Bansbach III
Charles B. Barnes Jr.
Christopher and Susan Barrow
Martin R. Bartlett
Frank and Mary Bartow
Ronald Bean
Richard and Anne Bell
Steve and Amaya Bell
Paul Benedum Jr.
Bighorn River Lodge
George Boder
Paul Bofinger
Jay and Buff Bonanno
E. Arroll and Mercer Borden
James and Judith Bowman
Murray Bring
Howard and Sarah Brooks
Daniel Bullock
Bill and Becky Burke
Brad Buzzi
Marc Cabot
Gordon Calder Jr.
Joseph Carabello
Chris Carlino
James Carlino
Benjamin Carmichael
TC Cassidy
Philip Castleman
Loise Chapin
Michael Coe
Edward Collins
James C. Collins
Clifford W. Colwell, MD
Judy Comar
Conneaut Land Conservancy
Woodward and Betsy Corkran
William and Judy Cosgrove
Henry Cowen
Colin M. Cunningham Jr.
Jerry Curtis
Thomas Daniels
Bill Dawson
Christina Diedrichsen
Jim and Ginger Dolberg

Charles A. Donovan Jr.
Thomas Doolittle, DDS
Glenn Dopf
John Walter and
Mary Jane Dreyer
Audrey Drobkov
Patricia Dupree
Bruce Eckstein
Atticus Fallon
Patrick and Kathryn Feeley
John Feldenzer, MD
Joel Filner
David Finkel
James J. Ford Jr.
Paul Ford
Keith Fulsher
William Garapick
Russell (Chip) Gaudreau
Chris Gibson
Geoffrey Gold
Jay Goldsmith
Anthony Grassi
Vicki Green
Philip Greenlee
Dale Greenley
Willard Greenwood
Jonathan Grimm
Noble Gulledge
Thomas and Henrietta Hakes
Michael Hamburg
Steve Hannan
Bruce Harang
Charles Harden
Garry Harrington
Ray Harrington
Johnny Harrison
Jim Head
Robert Heintges
William Hennrich
Scott Herbst
F. Robert Hewett
Errol L. Hill
Fred Hinkley
Holland and Holland
Shepard Hurwitz, MD
Robert Ingham
Yuji Ishikawa
Richard Jackson
Lloyd and Sue Jacobsen
Rupert Jennings
David Sirrine Johnson
Ethan Johnson, Esq.
William Jordan
Michael and Jean Kashgarian
Thomas Keesee III
Loretta Keller
Tom Kelly
James F. Kennedy
Norton Kennedy
John King
George Klein
William Knobloch
David Kolstad
Kenneth Kosakoff and
Marian Covello
Martha Kropf
John I. Larkin, MD
Elisha F. Lee
Victor J. Leon
Maxwell and Mary Lester
Carmine and Judith Lisella
Fred Lowenfels
Lisa Kwasnoski Lucas
Tim Lum
James Lyons
James MacMahon
Michael Maher
Darren Maloney
Douglas and Juliet Marchant
Lawrence Marsiello
Travis Mason
Barry and Michele Matlack
Edward Matuizek
Ron and Joyce Mazzarella
Charles McCaughtry
Duncan McDonald
Doug McFayden
Charles McIntosh, MD
Theodore and Ann McKenzie
Paddy McNeely
Paul McRoberts
Barry Meinerth
John Merritt
John and Nancy Merritt
F. D. Meyercord
Evan Miller
Robert Miller
Tom Miller
Robert and Louise Molzahn
Fen Montaigne
William Moore III
Lester Morse Jr.
Bob and Joanne Moser
Paul and Claire Murphy
Rose Napolitano
Mitchell Nelson
Michael and Martha Nesbitt
W. Kemp Norman Jr.
Stephen O'Brien Jr.
David and Peggy Ody
Vincent Pacienza, MD
Arthur E. Pape
Scott Parker
Nina Patterson
Helene Peddle
Casey Peltier
Carroll Pereira
Melissa Pflug
Stephen Pioso
Mike Pizzi
Nina Platt
Carol Prince
Michael Reagor
L. Keith Reed
Fred Rehmus
Philip Roy Rever
Roger Riccardi
Robert Rich
Victor and Donna Ruiz
J. Wright Rumbough
Michael Ryder
Walter Sawyer Jr.
Joan Scharrott
Albert Scherb—in honor of
Tim Hixon
Ernst Schleipmann
Mickey Schwartz
John Scully
James Secor III
Bob Selb and Diane McCabe
Wendy Serrell
David Sgorbati
Frederic and Jean Sharf
Harry Shaw
Jason Sherman
Stephen Sherman
Carl Shrake
Guy Duncan Silva
Adelaide Skoglund
Elias Smith
Carl A. Soderland, MD
Elizabeth Soderstrom
Colby Sorrells
James and Carol Ann Spendiff
Kenneth Sroka
Mary Stammen
Patrick Stevens
James Stewart
James and Judy Stone
Thayer Talcott Jr.
Tamarack Preserve, Ltd.
Joan Tayler
Kenneth Tedford
Charles and Ann Thacher
Melinda Thomas
Jerome and Elizabeth Tone
John Tongue, MD
Courtney Tuttle
Catherine Varchaver
Schenley Walker
Meredith Warren
Eugene Weber
Chip Weinberg
Michael Whelan
Gary Widman
Klaus Wiese-Nielsen
Peyton Wise

In Honor of Leon Martuch
Dorothy and William Achor
Mary Barley
Austin and Meg Buck
Benjamin W. Cart
Ralph A. Cole
Thomas M. Evans Jr.
James and Susan Heckman
Shepard Hurwitz, MD
Joan Kelleher
F. R. (Pete) Lehman
Barry Meinerth
Bradford and Pamela Mills
Albert Nichols
Alan and Jean Ott
Joseph and Amy Perella
James Woods
Alan and Nancy Zakon

In Honor of Lefty Kreh
Foster Bam and Sallie Baldwin
Hugo Cassirer
Shepard Hurwitz, MD
Paul Tudor Jones
Arthur and Martha Kaemmer
Thomas Keesee III
Bradford and Pamela Mills
Mauro Romita
David and Jade Walsh

In-Kind Donor of Goods or Services
Addeo Family
Ande, Inc.
E. M. Bakwin
Don Bastian
Beaverkill Rod Company
Jason Borger
Jerry Bottcher
Debby Carey
Roger Clark
Tom Colicchio
Peter and Lillian Corbin
Henry Cowen
Bert Darrow
Nick Dawes
Robert DeMott
Tony DiLernia
Echo Farm Hunt Club
Charles (Buzz) and
Annaick Eichel
FishPond
Patrick Ford
Mac and Ross Francis
Galvan Fly Reels
George and Beth Gibson
Mike and Kim Gorton
Timothy Grell
Claude Guillaumin
Kathleen Guzman
Luther and Sue Hall
James and Pat Hardman
James and Susan Heckman
Holland and Holland
Hotel W South Beach
Diane Inman

Gloria Jordan
Karen Kaplan
Mike Kozma
Lefty Kreh
Fanny Krieger
James and Deborah Lepage
Carmine and Judith Lisella
Sara Low
Fred M. Lowenfels
Nick and Mari Lyons
Walter and Pam Matia
Mulligan's of Manchester
David and Margaret Nichols
The Orvis Company
Dave Pecci
Dale Perez
Greg Poland
Bob Popovics
Cheryl Pozsonyi
Pendennis Reed Jr.
Roger Riccardi
Rodney Strong Vineyards
Kristoph and
Elizabeth Rollenhagen
Tom Rosenbauer and
Robin Kadet
Bobby and Mary Russell
Gary Sherman and Lyn Kohls
Mark Sherman
Stephen and Deborah Sherman
Simms Fishing Products
Skyhorse Publishing
South Holston River Lodge
Ray Stachelek
Stackpole Books
Mark Susinno
Richard G. Tisch
Jacques Torres
Urban Angler
George Van Hook
Paul Volcker
Alan and Nancy Zakon
Martin E. Zimmerman

Journal Contributors
Frederick Buller
David Burnett
Devin Dotson
Jerry Gibbs
James D. Heckman
Graydon R. Hilyard
Robert E. Kohrman
Brent Lane
Richard Lessner
John Mundt
Harry L. Peterson
Gordon M. Wickstrom

Volunteers
Kelly Bedford
Peggy Brenner
George Butts
William Cosgrove
Tim Delisle
Dan Denn
Erika Kornbluth
Jennifer Lalli
Carmine Lisella
Sara Low
Andrew Napolitano
Rose Napolitano
Bob Selb
Paul Sinicki
Ray Smith
Ron and Cheryl Wilcox

Exhibition Lenders
Stu Apte
Dan Blanton
Jon B. Cave
Judith Charlton
Bill Curtis
Patrick Ford
G. Loomis, Inc.
Gerald Gibbs
Jim L. Holland
Lefty Kreh
Leon L. Martuch
Microwave Telemetry Inc.
Andy Mill
Bob Popovics
President Calvin Coolidge
State Historic Site
Scientific Angler
Robert and Karen Scott
Tarpon Genetic
Tibor Reel Co.
Wildlife Computers
Joan Wulff

Donors to the Collection
Anonymous
Leslie Barclay
Peter Brach
David K. Chase
Thomas Davidson
Robert DeMott
Julian A. Dixon
Charles (Buzz) and
Annaick Eichel
Sid Garber
James and Pat Hardman
Christopher Harris
James and Susan Heckman
Carmine and Judith Lisella
Sara Low
Nick and Mari Lyons
Leon and Shirley Martuch
Jason McKlemurry
Gary Merriam
Tom Morgan
Pennsylvania Fly Fishing
Museum Association
Frederick and
Cassie Polhemus
Pendennis Reed Jr.
Elise Robinson
Dennis Swope
R. Victor Turriziani
James Woods and
Charity Chapman
Joan Wulff and Ted Rogowski

Brick Sponsors
David and Kathy Brown
Clifford and Lucinda Cooper
Carl and Cheryl Doughty
Dana Gray
James and Susan Heckman
Dana Jacoby
Timothy Lott
Nick Newman

Event Contributors
John Abplanalp
Chris Alafi
Jill Alcott
Richard Alsop
William E. Andersen
E. M. Bakwin
Foster Bam and Sallie Baldwin
Douglas Barone
Dave Beveridge
Dave Black
Buff Bonanno
Jay Quentin Bonanno
Tim Bontecou
Peter Bowden
Pat Bowman
Shannon Brightman
Brad Buzzy
Chris Carlino
Charlie Carpenter
William Casazza
Hugo Cassirer
Jane Cooke
Jim and Joanne Cooper
Parker Corbin
Peter Corbin
Henry Cowen
Frank Crescitelli
Colin Crowley
Guy and Stacy Davies
Anthony Davino
Nick Dawes
Bill Dawson
Jace Day
Pascal Delisse
Paul Dibenedetto
Glenn Dopf
John and Mary Jane Dreyer
Peter Esler
Tim Evans
Michael Farley
Ezra Field
Joel Filner
Andrew Fink
David Finkel
Jon Fisher
David Ford
Chip Gaudreau
George and Beth Gibson
Alan and Linda Gnann
Geoffrey Gold
Steven Gold
Anthony Grassi
Phillip Greenlee
Tim Grell
James Heckman
Lloyd Jacobsen
Eric Johnson
Karen Kaplan
James Katlenbach
Anne Kieve
Loren and Loretta Kieve
Johnny King
Casey Knoll
Lefty Kreh
Fanny Krieger
Martha Kroph
Kirsten Lamotte
Bill and Francesca Leary
Stuart and Sondra Levine
Carmine Lisella
Sara Low
Tim Lum
Anthony Magardino
Christopher Mahan
Chris Mailman
Tony Marcucci
Ron Mazzarella
John and Pam McCosker
Douglas McFayden
Barry and Marcia Meinerth
David H. Miller
Kimberly Mitaratonna
Craig Moody
John Muly
Joe Mustari
John Neukom
David Nichols
Den Nichols
Erik Oken
Sandy Osborne
Mike Pizzi
Nina Platt
William Platt
Fred Polhemus
Charley Pope
Bob Popovics
Steven Price
Carol Prince
John Rano
Bruce Ratner
Fred Rehmus
Steve Rehmus
Roger Riccardi
Eric Roberts
Mary Robinson
Michael Ryder
Philip Sawyer
Jason Scott
Matthew Scott
Robert Scott
Joan Sharrott
Drew Shea
Gary Sherman and Lyn Kohls
Mark Sherman
Sean Sherman
Steve Sherman
Homer Shirley
Elias Smith
Elizabeth Soderstrom
Larry Solomon
Jim Stafford
Mark Susinno
Jay Tayler
Joan Tayler
Richard Tisch
Jacques Torres
Courtney Tuttle
Jen Vindom
Andrew Ward
Meredith Warren
Eugene Weber
Bo Wholey
Gary Widmen
Eric Wooley
Martin Zimmerman
Steve Zoric and Sarah Bryant

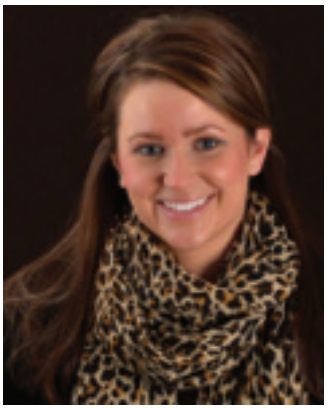
Museum News

Staff Updates

Born in Illinois and raised in New York State, the museum's coordinator of events, **Christina Cole**, is a Vermonter at heart: she completed her bachelor's degree in business marketing and management at Castleton State College, and the Green Mountains inspire her love for hiking, cross-country skiing, horseback riding, and the beautiful outdoors. Christina joined the museum in spring 2013 and is excited to add events work to her repertoire.

Samantha Pitcher joins the museum as our program assistant after five years of working in membership and development at the Clark Art Institute in Williamstown, Massachusetts. Sam was educated in the U.K. and holds a BA in history and history of art from the University of Bristol. Besides living in England, she has also called Los Angeles and Fort Lauderdale home and is a new resident of Dorset, Vermont. Sam is excited to introduce her husband and two daughters to the wonders of fly fishing. She loves visiting her local farmers' market on Sundays and after ten years in the state is proud to call herself a Vermonter!

Andrew Ciccarelli



Sara Wilcox

New museum staff members
Christina Cole (left) and Samantha Pitcher.

Recent Donations to the Collection

Sid Garber of La Quinta, California, donated his article, "History of Glen L. Evans Fish Factory," along with photographs and sample flies. **Tom Morgan** of Manhattan, Montana, gave us his Morgan Handmill for bamboo rod making and its accessories. For a detailed list of accessories, contact the museum.

Sara Low of Providence, Rhode Island, donated a first-edition copy of her book, *A Guide's Guide to Fly Fishing Mistakes* (Skyhorse Publishing, 2013). And **James C. Woods** of Cambridge, New York, donated a collection of thirteen books. For a detailed list, contact the museum.

Christina Cole

For anglers, the off season is for fly tying! Thank you to the volunteer tiers who helped to make our annual Fit to be "Tyed" series a great success in January and February: Yoshi Akiyama, George Butts, Peggy Brenner (pictured), Paul Sinicki, and Kelly Bedford.

Back Issues!

Vol. 1:	Nos. 1, 3, 4	Vol. 21:	Nos. 1, 2, 3, 4
Vol. 2:	Nos. 2, 4	Vol. 22:	Nos. 1, 2, 3, 4
Vol. 3:	Nos. 1, 2, 3	Vol. 23:	Nos. 1, 2, 3, 4
Vol. 4:	Nos. 2, 3	Vol. 24:	Nos. 1, 2, 3, 4
Vol. 5:	Nos. 1, 3, 4	Vol. 25:	Nos. 1, 2, 4
Vol. 6:	Nos. 1, 2, 3, 4	Vol. 26:	Nos. 1, 2, 4
Vol. 7:	Nos. 1, 2, 3, 4	Vol. 27:	Nos. 1, 2, 3
Vol. 8:	Nos. 1, 2, 3	Vol. 28:	Nos. 1, 2, 3, 4
Vol. 9:	Nos. 1, 2, 3	Vol. 29:	Nos. 1, 2, 3, 4
Vol. 10:	Nos. 1, 2, 3, 4	Vol. 30:	Nos. 1, 2
Vol. 11:	Nos. 1, 2, 3, 4	Vol. 31:	Nos. 1, 2, 3
Vol. 12:	Nos. 1, 2, 3, 4	Vol. 32:	Nos. 1, 2, 3, 4
Vol. 13:	Nos. 1, 2	Vol. 33:	Nos. 1, 2, 3, 4
Vol. 14:	Nos. 1, 2	Vol. 34:	Nos. 1, 2, 3, 4
Vol. 15:	Nos. 1, 2, 3	Vol. 35:	Nos. 1, 2, 3, 4
Vol. 16:	Nos. 1, 2, 3	Vol. 36:	Nos. 1, 2, 3, 4
Vol. 17:	Nos. 1, 2, 3, 4	Vol. 37:	Nos. 1, 2, 3, 4
Vol. 18:	Nos. 1, 2, 3, 4	Vol. 38:	Nos. 1, 2, 3, 4
Vol. 19:	Nos. 1, 2, 3, 4	Vol. 39:	Nos. 1, 2, 3
Vol. 20:	Nos. 1, 2, 3, 4	Vol. 40:	No. 1

Back issues are $10 a copy for nonmembers, $5 for members.
To order, please contact Christina Cole at (802) 362-3300 or via e-mail at ccole@amff.com.

Upcoming Events

Events take place on the museum grounds in Manchester, Vermont, unless otherwise noted.

April 24
Heritage Award Event
Honoring Robert E. Rubin
Harmonie Club
New York City

May 17
Board of Trustees Meeting

May 26–September 1
Blue Star Museums Program
Free admission for active military personnel

July 1–31
Angling and Art Benefit Art Sale

July 20
Celebrate National Ice Cream Day!
Fly-fishing activities and free ice cream

August 9
Fly-Fishing Festival
10:00 a.m.–4:00 p.m.

September Screenings
Movie showings every weekend in September

September 6
Members-Only Event: Rare Rod Rendezvous
1:00 p.m.–3:00 p.m.

September 27
Smithsonian Magazine Museum Day Live!

October 18
Board of Trustees Meeting

October 18
Annual Members Meeting

October 23–24
Friends of Corbin Benefit Shoot
Hudson Farm in Andover, New Jersey
Portion of proceeds to benefit AMFF

December 6
Hooked on the Holidays

Always check our website (www.amff.com) for additions, updates, and more information or contact Christina Cole at (802) 362-3300 or events@amff.com. "Casting About," the museum's e-mail newsletter, offers up-to-date news and event information. To subscribe, look for the link on our website or contact the museum.

CONTRIBUTORS

Liz Snyder

Samuel Snyder, PhD, currently works for Alaska Conservation Foundation as the director of the Bristol Bay Fisheries and Watershed Protection Campaign, where he helps coordinate the collective campaign to protect Bristol Bay from the threats of the proposed Pebble Mine. He has written extensively on fly fishing, the history of angling, and fisheries conservation. He sporadically writes a blog at www.headwatersofhistory.com and is currently editing a book on the history of fly fishing and conservation.

Barbara Schlichtman

Michael Steinberg is an associate professor of geography and interdisciplinary environmental studies at the University of Alabama. Author of *Stalking the Ghost Bird: The Elusive Ivory-Billed Woodpecker in Louisiana*, his research is focused on endangered and extinct species, and the role that anglers and hunters have in conservation success stories.

Pete Tyson

Bob Stearns is editor-at-large for *SaltWater Sportsman* and boating editor for the digital *Fly & Light Tackle Angler*. He was the boating and saltwater fishing editor for *Field & Stream* for twenty-two years. Stearns started writing for fishing and boating magazines regularly in 1969 and became a full-time writer/photographer and consultant to the fishing/boating industry in 1973, publishing more than 2,000 feature articles and columns, plus thirty-two magazine covers and an estimated 4,400 inside photographs. His books include *The Fisherman's Boating Book* (Nick Lyons Books/Winchester Press, 1984) and the revised *Saltwater Fisherman's Bible* (with Erwin A. Bauer, Doubleday, 1991). Stearns has appeared on a number of television fishing programs, such as *The Fisherman*, *Outdoor Life*, and *Sportsman's Adventures*, and hosted a video production titled *The Alaskan Angler*. He has consulted with boat and boating materials manufacturers, especially in areas of design utilization, safety, and fuel efficiency, and he has worked with several fishing tackle manufacturers on product development. Stearns lives in Miami, Florida.

Connect with us online!

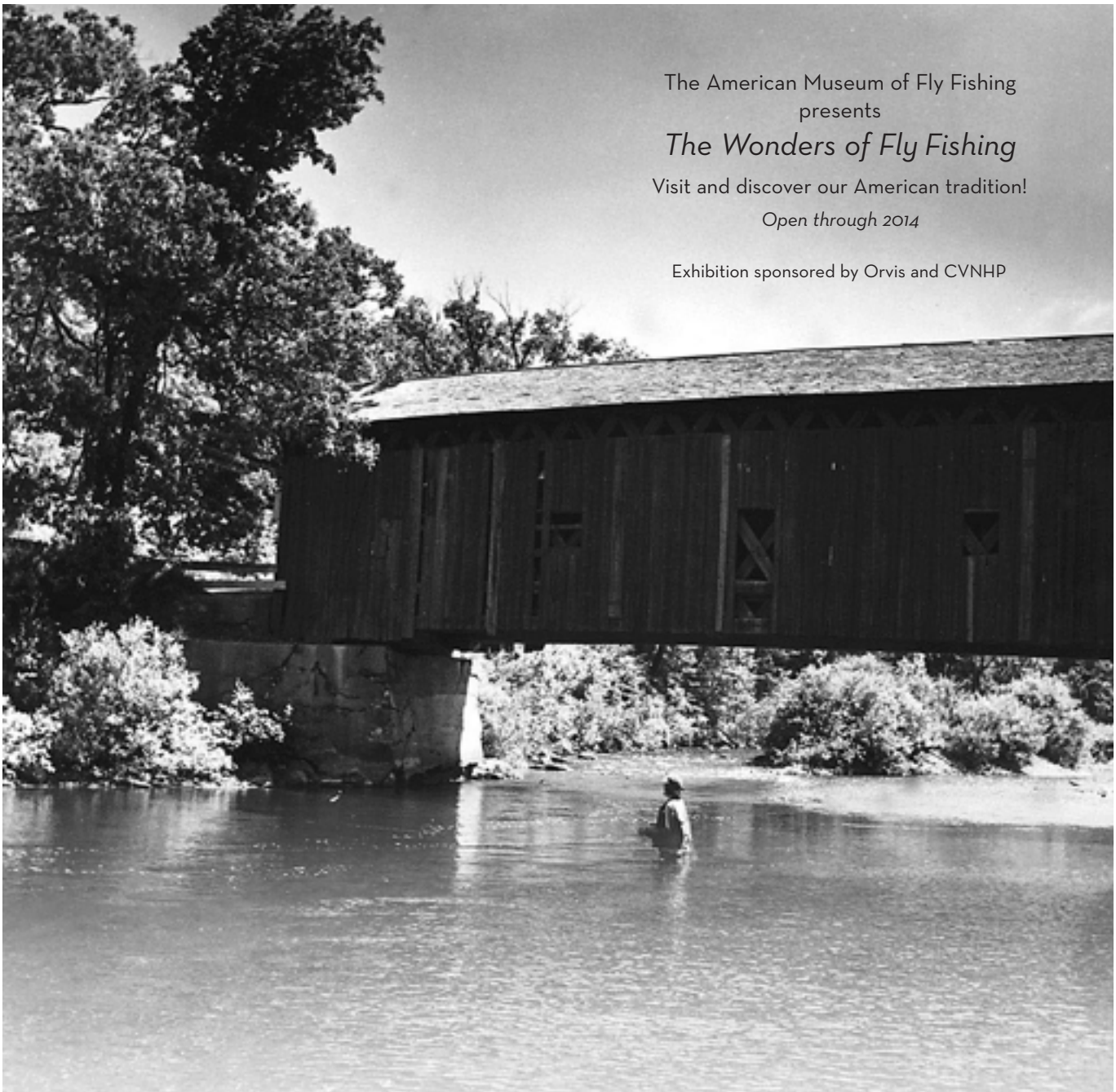
https://twitter.com/amffvt

http://www.youtube.com/amffvt

http://instagram.com/amff_vt

http://pinterest.com/amffanglers/

https://www.facebook.com/pages/American-Museum-of-Fly-Fishing/116702090607



AMFF in the Digital Age

This QR (Quick Response) code can be scanned to see the museum's Google tour page.

Over the past several years, the museum has embraced digital technology as a tool to promote our programs and events, as well as a way to share our collection, research, and resources.

The museum's first website was launched in 2000, and its successor was launched in 2006. By 2012, it became difficult to post new information, provide links, and improve its overall appearance; we had outgrown it. In early 2012, the staff worked with a Vermont-based firm whose past designs featured the dynamic style we desired. As a result of the generosity of several museum trustees, we launched our current website in September 2012. We continue to use the website as a way to keep in touch with our members, supporters, visitors, and potential contributors. Each week we update information, archive past events, change the featured "Anglers in Action," and/or post new images from our collection. Soon the website will include electronic access to past issues of the journal.

In 2009, we opened our Facebook account and periodically posted event information. Followers were slow in "liking" our page, so in 2012 we began a regular posting schedule. In 2013 we again increased our postings to include interesting facts about fly fishing, and our number of followers increased by more than 300 percent!

We now have a YouTube channel and a Pinterest account. A portion of our interview with saltwater pioneer Lefty Kreh was available to view on YouTube last year when we celebrated his rich career. To maximize the capabilities of our Pinterest account, we currently link our website collection images to Pinterest to give viewers the ability to see image details.

If you look on the back cover of this journal, you will see a QR (quick response) code that can be scanned by any smartphone. This code will bring anyone directly to the collections landing page on our website. As our website is enhanced, this directional code will be periodically changed to feature different landing pages of interest.

You can also now go to Google Tours (via our website) to take a virtual tour of the museum building, including the Leigh H. Perkins Gallery, the Gardner L. Grant Library, and the museum gift shop. This online component will be updated as exhibitions and programs are changed.

Last, we are working on our first virtual exhibition. Our groundbreaking *A Graceful Rise: Women in Fly Fishing Yesterday, Today, and Tomorrow* is being developed into an online exhibition to include the biographies, images, and artifacts featured in the gallery installation. It will also include taped interviews with participants and portions of the films and television series produced throughout the years. Our target launch is May. *A Graceful Rise* will serve as the template for our next online exhibition, *On Fly in the Salt: American Saltwater Fly Fishing from the Surf to the Flats.*

We have made great strides using these digital tools, but we need to do much more. Our Junior Committee is working with the staff to expand how we use this technology to strengthen our outreach and to capture a larger audience from the fly-fishing community. By early summer 2014, we plan to have a new full-time communications manager on staff, a fly-fishing enthusiast who understands the ins and outs of social media, websites, and other digital tools that we have yet to discover. If you know of anyone who might interested in this position, please direct him or her to our website to read the full job description and digital initiative overview. This is an exciting project that will continue to propel the museum into the digital age.

Stay tuned!

Cathi Comar
Executive Director

The American Museum of Fly Fishing

4070 Main Street • PO Box 42
Manchester,Vermont 05254
Tel: (802) 362-3300 • Fax: (802) 362-3308
E-MAIL: amff@amff.com
WEBSITE: www.amff.com

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, exhibitions, and public programs provide documentation of the evolution of fly fishing as a sport, art form, craft, and industry in the United States and abroad from its origins to the present. Rods, reels, flies, tackle, art, books, manuscripts, and photographs form the basis of the museum's collections.

The museum provides public programs to fulfill its educational mission, including exhibitions, publications, gallery programs, and special events. Research services are available for members, visiting scholars, students, educational organizations, and writers. Contact Yoshi Akiyama at yakiyama@amff.com to schedule a visit.

VOLUNTEER!

Throughout the year, the museum needs volunteers to help with programs, special projects, events, and administrative tasks. You do not have to be an angler to enjoy working with us! Contact Sarah Foster at sfoster@amff.com to tell us how we would benefit from your skills and talents.

SUPPORT!

The American Museum of Fly Fishing relies on the generosity of public-spirited individuals for substantial support. Please contact us if you wish to contribute funding to a specific program, donate an item for fund-raising purposes, or place an advertisement in this journal. We encourage you to give the museum consideration when planning for gifts, bequests, and memorials.

JOIN!

Membership Dues (per annum)

Patron	$1,000
Sponsor	$500
Business	$250
Benefactor	$100
Associate	$50

The museum is an active, member-oriented nonprofit institution. Membership dues include four issues of the *American Fly Fisher;* unlimited visits for your entire family to museum exhibitions, gallery programs, and special events; access to our 7,000-volume angling reference library; and a discount on all items sold by the museum on its website and inside the museum store, the Brookside Angler. To join, please contact Sarah Foster at sfoster@amff.com.

Scan with your smartphone to visit our collection online!