The American Fly Fisher

Journal of the American Museum of Fly Fishing



Rods, Reels, and Carvings



46-inch Pike, ca. 2005, oil on basswood with cherry panel (20 x 52 inches), by Stephen R. Smith. From the collection of Gregory Clark.

N 1977, in a postwar angling world that had moved on to rods made of fiberglass and graphite, the first edition of Everett Garrison and Hoagy B. Carmichael's A Master's Guide to Building a Bamboo Fly Rod was published in a run of 11,000 copies. Carmichael had apprenticed with Garrison and, as Garrison's health began to fail, promised his mentor that he "would take on the task of writing the book for him, if for some reason he could not," both to pass along the knowledge and document history. Garrison died in 1975.

The book sold quickly, as did multiple later editions. Many point to its publication as the beginning of a renaissance in bamboo rod building. Among those who recognize the importance and influence of *A Master's Guide* is David Popp.

David Popp is a scientist (and former editor of *Der Fliegenfischer*) who began his own fly-fishing adventures in New England around 1990. "In a dusty corner of Stoddard's fly-fishing shop in Boston, I stumbled across a book called *A Master's Guide to Building a Bamboo Fly Rod*," he tells us. "I didn't know anything about bamboo fly rods then, but the book called out to me, and I bought it. Little did I know how much it would change my life."

Popp began building his own splitcane rods. He had an opportunity to interview Carmichael in Paris. He began working on a book about European bamboo rod makers, but got distracted by his scientific career and research.

Now we are able to share with you fruits of these earlier labors. In "The Post–World War II European Fly-Rod Renaissance: Nine Profiles of Grandmasters" (page 2), Popp presents us with stories of rod builders who kept the European bamboo tradition alive even after the 1950 trade embargo on Chinese goods. He highlights some of the next-generation craftsmen as well, who, like Popp himself, started to build split-cane fly rods after reading the Garrison-Carmichael book.

Hoagy B. Carmichael has more than once been a catalyst to others' creations. He was among those who first encouraged the artist Stephen R. Smith to carve trophy fish and in fact was the first to commission one. Carmichael's second Smith carving—a 35-pound Grand Cascapedia salmon—hangs among eighteen original trophy fish carvings in *Commemorating the Catch: The Fish Carvings of Stephen R. Smith*, now on display at the museum through December 31. In "Stephen R. Smith: Trophy Fish Carver" (page 14) Jim Brown—who himself has two Smith carvings in the show—tells us about the artist's background, the origins of the craft, and how, step by step, Smith creates his incredible works. On page 27, we share some photos from the opening reception.

On August 10, we'll be opening another important exhibit, Side Effects: William Billinghurst and Early Fly-Reel Culture. In 1859, William Billinghurst produced and patented a side-mounted reel, which is widely accepted as the first patented fly reel in America. The Billinghurst reel turns 160 this year and remains an important piece of fly-fishing history. Guest curator Jim Schottenham will showcase a selection of rare and unique examples from his private collection, placing reels crafted by Billinghurst and other early American makers side by side and highlighting Billinghurst's influence on the industry. You can learn about Billinghurst and get a taste of the exhibit by turning to page 17.

Our Izaak Walton Award was established in 2014 to celebrate individuals who inspire others and promote the legacy of leadership for future generations. In March, we bestowed this honor upon Tom Rosenbauer, marketing director for Orvis rod and tackle, author, and podcast host. For coverage of that event, turn to page 23. For notice of other events, as well as announcement of the recipient of our Austin Hogan Award, take a look at Museum News (page 25).

The Fly-Fishing Festival is right around the corner. Please join us on August 10!

KATHLEEN ACHOR EDITOR



TRUSTEES

Foster Bam Robert A. Oden Jr. Dave Beveridge Annie Hollis Perkins Peter Bowden Leigh H. Perkins Mark Comora Frederick S. Polhemus Ronald Gard Roger Riccardi Alan Gnann Robert G. Scott Gardner Grant Jr. Ronald B. Stuckey John Hadden Tyler S. Thompson James Heckman, MD Richard G. Tisch Karen Kaplan David H. Walsh Woods King III Andrew Ward Anthony J. Magardino Patricia Watson Christopher P. Mahan Thomas Weber Walter T. Matia Frankie Wolfson David Nichols James C. Woods Nancy W. Zakon

TRUSTEES EMERITI

James Hardman David B. Ledlie Paul Schullery

OFFICERS

Karen Kaplan President

Robert A. Oden Jr. Vice President

> Andrew Ward Vice President

James C. Woods Secretary

Gardner Grant Jr. *Treasurer*

THE AMERICAN FLY FISHER

Kathleen Achor Editor

Sarah May Clarkson Copy Editor

Sara Wilcox Design & Production

PRESIDENT'S COUNCIL

Foster Bam and Sallie Baldwin
Dave Beveridge
Peter Bowden
Mark Comora
John Redpath
Jon and Deborah Pratt Dawson
Gardner Grant Jr.
Summerfield Johnston
Jill Joyce
Karen Kaplan
Kenneth Kosakoff and Mariann Covello
David and Margaret Nichols
Leigh and Annie Hollis Perkins
Mergand Karen Scott
Nicholas and Jean Selch
Marye and Richard G. Tisch
Paul Volcker
Alan and Nancy Zakon

MUSEUM COUNCIL

Shannon Brightman Robert McGraw Nick Dawes Tom and Laurie McGuane Alex de Latour Teresa and Robert Oden Jr. Tom Evans Erik and Jennifer Oken Alan and Linda Gnann Franklin Schurz Jr. John Hadden Warren Stern Skip and Meg Herman Ronald and Joan Stuckey Phyllis Herrick Tyler and Francis Thompson Paul Tudor Jones Andrew and Elizabeth Ward Art and Martha Kaemmer Patricia Watson Wendy and Woods King III Tom Weber Christopher Mahan Robert Wilson Janet Mavec and Wayne Nordberg Frankie Wolfson

DIRECTOR'S COUNCIL

Louis Bacon
Eugene Conroy
Anthony Davino
Charles Patrick Durkin Jr.
Alan Guarino
James and Susan Heckman
Tim Hixon
Bill and Francesca Leary
Walter and Pam Matia
Bradford and Pamela Mills
Matthew and Taylor Scott
Chris Smith
Nicholas Taro
James Utaski
James Woods

ANGLERS' CIRCLE

Parker Corbin Albert Nichols
Bailey Hallingby David E. Nichols Jr.
Woods King IV Jason M. Scott

S T A F F Sarah Foster Executive Director

Yoshi Akiyama Kelsey McBride Deputy Director Administrative Assistant Alex Ford Samantha Pitcher Digital Marketing Assistant Director of Coordinator Development Shane Quintana Ava Freeman Gallery Assistant Collections Manager Clay Livingston Patricia Russell

> Sara Wilcox Director of Visual Communication

Business Manager

Gallery Assistant

The American Fly Fisher

Journal of ∅ the American Museum of Fly Fishing

The Post–World War II European Bamboo Fly-Rod Renaissance: Nine Profiles of Grandmasters				
Renaissance: Nine Profiles of Grandmasters	SUMMER 2019	VOLUME	45	NUMBER 3
Side Effects: William Billinghurst and Early Fly-Reel Culture	Renaissance: Nine Profiles of		,	
and Early Fly-Reel Culture	= = = = = = = = = = = = = = = = = = = =	n Carver		14
with the 2019 Izaak Walton Award	and Early Fly-Reel Culture			17
				23
Contributors	Museum News			25
	Contributors			28

self-taught German rod maker. Over the course of his lifetime, Kurth built around four hundred fly rods. Photo by Jürgen Preylowski.

ON THE COVER: Some rod-building tools used by the late Bruno Kurth, a

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. Copyright © 2019, The American Museum of Fly Fishing, Manchester, Vermont 05254. Original material appearing may not be reprinted without prior permission. 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.org website: www.amff.org

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

The Post–World War II European Bamboo Fly-Rod Renaissance: Nine Profiles of Grandmasters

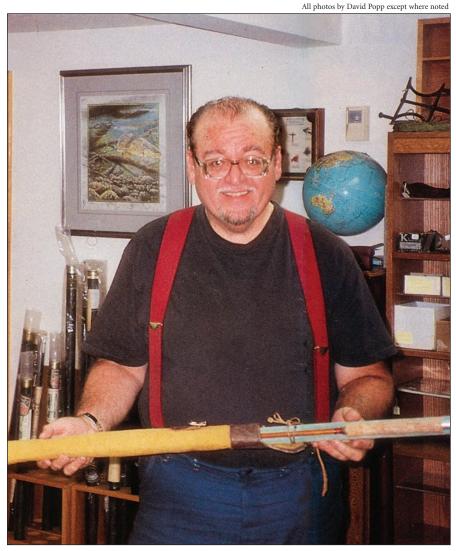
by David Popp

BEGAN MY fly-fishing adventures around 1990 in the tumbling mountain streams of New England. Soon after, in a dusty corner of Stoddard's fly-fishing shop in Boston, I stumbled across a book called *A Master's Guide to Building a Bamboo Fly Rod.*¹ I didn't know anything about bamboo fly rods then, but the book called out to me, and I bought it. Little did I know how much it would change my life. Building a split-cane rod looked complicated, even to this structural biophysicist, but I could appreciate the craftsmanship, passion, and time it must take.

Back then, none of the fly shops I frequented offered bamboo fly rods. They stocked only graphite with its gray-black lead color and (to me) dull and dead look. Today graphite rods come in many colors, at the expense of grinding the power fibers and adding a wrap of colored plastic before lacquering—thus weakening the outer layers and substantially increasing the chances of structural failure.

By chance, I came across an article in *Fly Fisherman* with a photo of a bamboo rod next to a nice-sized brown trout. The warm, lively straw color of "grass" looked so much more appealing to me than graphite. I had to have and fish one.

From then on, bamboo rods intrigued me. In 1990, the only way to reach people dealing with bamboo fly rods was through ads in magazines. It did not take long before I visited Len Codella in Turner Falls, Massachusetts, who then co-owned Thomas & Thomas and was one of the most respected fly-fishing antiques dealers in the United States. I immediately purchased a rod or two and started fishing these bamboo wands. In the small streams



Len Codella in his shop at Turner Falls, Massachusetts, circa 1991.



Jean-Michel Dubos (the famous Paris tackle dealer), Laurent Sainsot (today president of the International Fario Club, France), and Hoagy B. Carmichael testing one of Garrison's fly rods in 1994.



A smiling Hoagy B. Carmichael in front of Jean-Michel Dubos's shop in Paris in 1993. To his right is his bag of vintage bamboo fly rods.

Hoagy B. Carmichael

44 Crosby Road
North Salem, NY 10560

914-277-8611

May 11, 1998

Dr. David Popp
Valentin-Bauer- Str. 16
D - 67059 Ludwigshafen
GERMANY

Dear David:

Please excuse the rather long delay in answering your
letter regarding the book that you are working on. I am very
pleased to see that you are identifying these European
rodmakers, and telling their story. And, from what I can see,
the Garrison book was of some help to many of them, which
pleases me very much.

I have read your sample chapters with interest, and
while I see that you have done quite a bit of research, I
should point out that there are a lot of misspelled words and
sentences that are very poorly constructed. I would be happy
to act as your "editor" if you are unable to find someone in
Germany who can help edit for the English speaking reader.
Please know that I don't mean any harm in saying this to you.
I don't need another project right now, but if I am going to
write a forward for this book, which I would be happy to do
for you, I, like you, would take comfort knowing that the
English used in the text is correct.

Please send a warm "hello" to my friend, Laurent. I will
be in Paris for a week or so in early October of this year,
and will try to see him (and maybe you also) at that time.

With my best regards:

With my best regards:

Hoagy B. Carmichael's 1998 letter to the author.

of the Catskill, Green, and White Mountains, bamboo proved to be just as effective as graphite in catching colorful brook trout. When casting and playing a fish, it had that special beauty and feeling of vibrancy one only experiences with a natural material.

My postdoctoral research in the United States over, I headed back to Germany, where reunification had taken its toll on science. Fortunately, in 1993, the German fly-fishing magazine *Der Fliegenfischer* was looking for an editor and hired me on the spot.

In October 1994, I was sent to Paris to interview Hoagy B. Carmichael, who,

with Everett Garrison, had written A Master's Guide to Building a Bamboo Fly Rod, that book I'd bought in Boston.2 Carmichael was attending the Pêche Classique, a meeting of bamboo enthusiasts, and had with him a whole bundle of classic rods: Garrison, Leonard, Dickerson, Gillum. Besides the rods, Carmichael also brought along the third edition of his book, fresh from the printing press. We talked a lot about the recent bamboo renaissance and the new rod makers entering the trade. He told me that many of these new rod makers fascinated him and that he wished that "Everett Garrison could come back for just a few

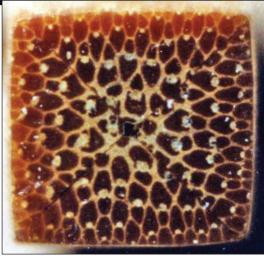
hours to see what has happened due to his persistence of keeping the bamboo rod-making tradition alive."³

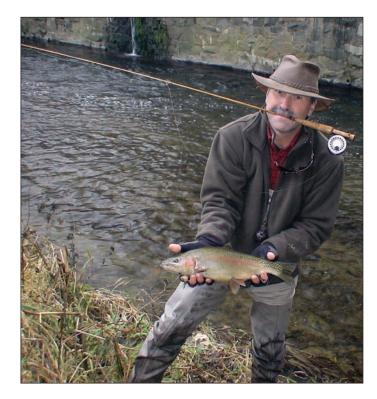
Soon after this, I started building my first split-cane fly rod. At the time, it was not easy to find the bamboo and the tools, but I got obsessed with it. I hand planed twenty rods in quick succession and gave them to fly-fishing friends and acquaintances to try for free. This was the beginning of my own small bamboo fly-rod operation.

In 1998, Volker Engelmann and I published an article on the history, physics, and prospects of bamboo fly rods, with special emphasis on quadrate rods, a



Cross sections: a six-strip bamboo rod (above) and a quadrate rod (right). In 1998, the author, with Volker Engelmann, published an article on the history, physics, and prospects of bamboo fly rods, with special emphasis on quadrate rods.





concept that had been pretty much forgotten after the Edwards Rod Company folded in the 1950s.⁴ No one was making quads in Europe then, but through our sharing this knowledge, it soon caught on again.

I began to compile a book on European rod makers. I thought it would be interesting to learn about their ideas and for bamboo enthusiasts to come to know the makers more personally. Compared with their American counterparts, who were promoted in various books,⁵ not much was known about Europeans building fly rods from bamboo. I mailed questionnaires to all the rod makers I could find, a more difficult task in the days before the Internet.

Europe has a rich tradition in splitcane rod making. The invention of the four-strip split-cane rod is generally credited to the American gunsmith Samuel Phillipe in the 1840s, but a foursectioned split-cane rod was mentioned in an English book by Charles Snart in 1801.⁶ Regardless of when the four-sectioned rod first turned up, rods with six splices soon took over. Because of their symmetry, they were much easier to manufacture. In 1875, Hiram Leonard and his Leonard Rod Company began to mass produce them.

My book would *not* be about the big firms that shaped the European fly-fishing scene (e.g., Hardy, Milward, Sharpe's, Pezon & Michel), but the individual postwar split-cane makers who kept the tradition alive, some of whom got into rod making only after acquiring the Garrison-Carmichael book. By 1998, I had assembled a manuscript profiling more than forty European rod makers, but never published it. I went back to my first love—science—and was distracted for the next two decades chasing the primordial actin filament.⁷ Only recently have I been able to refocus on the subject of bamboo fly-rod making.

So, who were among the artisans devoted to keeping the tradition of building split-cane bamboo fly rods alive after World War II? And why should we be so proud to own or even fish one of their fly rods? What follows are accounts of nine men and their rodmaking work.

Bamboo rods are wonderful fishing tools. Here is Volker Engelmann with nice rainbow caught on a quadrate rod of his own making in a small stream in the Erzgebirge mountain range (former DDR), circa 1998.

THE OLD-TIMERS

Six rod builders were among those who kept the European bamboo tradition alive after World War II, especially after the supply of Tonkin cane dried up in the early 1950s because of the trade embargo on Chinese goods. Big firms were squeezed first and forced to switch to fiberglass to meet the demand and keep afloat. Many of these great craftsmen have passed away, but they live on through their bamboo fly rods, which sometimes appear at auction. These are their stories.

Fritz Schreck (Switzerland)

Before World War II, all fishing rods in Switzerland were imported. When the war started, rods could no longer be purchased. It was then that Fritz Schreck started building his first split-cane rod. He managed this by hand, without literature or mentor, using only a steel file. He gave the rod to a friend, who showed it to a local tackle dealer. The tackle dealer liked the rod and asked Schreck to build some rods for him. Schreck, a twenty-one-year-old barber, had just found a new career.

In the beginning he used bamboo from dye houses, where the dyed cloth was hung up for drying on bamboo poles. After the war, he started a much larger operation. He designed and built a lot of machinery, including a bamboo splitting and milling machine, and an infrared oven to cure the splices. He purchased large quantities of Tonkin cane from a dealer in the Netherlands. By the end of the 1940s, his rod-building enterprise had an output of about two hundred rods per week. His wife did the wrappings and sewed the rod bags.

Around the same time, Schreck began participating in fly-casting tournaments. He soon became one of the world's best casters. His experience led to completely new taper designs. Soon Schreck rods, with the famous Kingfisher logo, were well known among casters and pure fly fishers alike.

Schreck never advertised anywhere; his rods sold solely by word of mouth. His split-cane rods are usually dark tan. They have a parabolic action with a very steep taper in the bottom 20 inches to maximally accelerate the fly line. Schreck never had any contacts with other rod builders, except Charles Ritz from Pezon & Michel, who visited him at his home near Zürich

to try his rods and talk about rod design. It turned out that both of these great men had essentially the same philosophy on rod building. In the mid-1950s, when fiberglass first came onto the market, Schreck produced fewer and fewer bamboo rods; when graphite appeared in the 1970s, he stopped making bamboo rods entirely. He had to make a living from rod making, and that was only possible by converting to the new materials.

Still, he continued to be innovative in rod design. He was the first to incorporate a piece of solid fiberglass at the rod tip. This allows for a thinner tip and resulted in additional speed of the fly line. By alternating pieces of hollow and solid fiberglass and later graphite within the entire rod, he could alter and finetune rod actions with amazing results.

In the mid-1990s, I visited Fritz Schreck at his home near Zürich for an interview. Reinhold Bruder, a friend of mine and a German fly-casting champion who knew Schreck from casting tournaments, set up the meeting. I remember packing fifty poles of Schreck's very well-seasoned bamboo (cut in half) into the back of my VW Golf, with Reinhold and me in the front. I'm not sure how we managed the long trip home with all that grass in the car.



Fritz Schreck's hollow-built rods (left) and double-built salmon rods (right), highlighting the cross sections.



A stock of sixty-plus-year-old bamboo that the author obtained from Fritz Schreck.



Fritz Schreck in his workshop, circa 1996.

Bruno Kurth (England)

Bruno Kurth was a German prisoner of war in England when he first came into contact with fly fishing. After the war, he stayed in England, applied for membership in a local angling club, and was allowed to fish one of the streams. There he met an older English gentleman and fly fisherman. As it turned out, neither could afford high-end Hardy fly rods, which, at the time, cost an average monthly wage. On that day, the idea to make a bamboo fly rod was born.

The two bought a thin book on rod making and ordered bamboo, cork ring, and ferrules from an English supplier. Kurth built a wooden planing form himself and hand planed an 8-foot, 5-inch rod for a 5-weight line. Of course, it was far from perfect, but it was fishable. That was in 1952.

Kurth stayed in England as a farmer until 1966 and built quite a few rods, each better than the last. He tested his rods on the Dee and other trout streams in Wales. After several years, his standard of workmanship was so high that Kurth rods were well thought of by English anglers. In Germany, Kurth was the only person building split-cane rods. But because of the new fiberglass material on the market and the difficulty getting raw bamboo, sales plummeted, and Bruno gave up making bamboo rods around 1975.

Jürgen Preylowski, a German artist who had started to acquire a large collection of antique fly-fishing tackle, eventually persuaded Kurth to continue his rod-building operation several years later. After the Garrison-Carmichael book appeared, new aspiring rod builders emerged, many of them visiting Kurth to gather advice. The high standards for bamboo fly rods that have been achieved in German-speaking countries have some of their roots in the work of Bruno Kurth.

Before his death in 1994, Kurth built around four hundred fly rods. Most were labeled Rur Favorite, named after the River Rur close to his home. These rods are a rare find on today's market, as most owners cherish them dearly. Kurth made rods of many sizes and types, from "pouchers" that would fit into a walking stick to long and strong multipiece salmon rods. He fished bamboo rods all his life. Kurth used to say, "If God wanted rods made from fiberglass or graphite, he would have created a plant that produces these substances naturally."



Bruno Kurth, circa 1985.



Some rod-building tools used by the late Bruno Kurth.



Markus Warwick casting in Krainach, circa 1996. He is either casting his own rod or one that the author built.



Beautiful script on Marcus Warwick's rods.

Markus Warwick (England)

Markus Warwick started his fly-fishing career just after World War II when a Scottish friend taught him to cast a fly with a split-cane bamboo rod. His favorite fishing destination was the great wilderness of Scotland, where he would equip himself with only six different flies. For Warwick, this was a way to return to some long-forgotten, almost extinct way of life.

Warwick started making rods in 1949. He could not afford to buy a rod with his traveling-salesman wages. After coming across G. Lawton Moss's book, How to Build Your Own Split Cane Fishing Rod: A Manual of Instruction in the Art of Rod Making for the Amateur (1947), he became ambitious and ordered several poles of Tonkin cane. A friendly carpenter made a couple of triangular forms, and a local baker agreed to heat treat the bamboo after the bread was baked. After a lot of work and many mistakes, Warwick finished his first rod. It was not very pretty, but it did catch fish.

Once Richard Walker's *Rod Building* for Amateurs (1952) became available, Warwick asked a friend and local engineer to build a metal form with seven

groove sizes, allowing him to build anything from tiny-midge to beefy-salmon rods. As a traveling industrial salesman in the Midlands (at the time, the heart of the British tackle industry), he visited all known rod-manufacturing companies to sell them his products. He was shown around many factories. He asked the odd question, but mainly he watched and absorbed information.

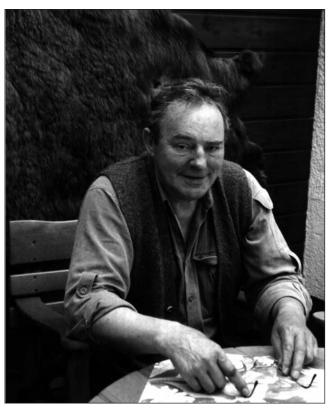
Finally, Warwick was encouraged by friends to become a professional rod maker. The idea was good, but had one flaw: Warwick did not have the equipment to enable him to earn a living from rod building; people would or could not pay the price for a hand-planed rod.

Then Warwick got lucky. An old rod maker wanted to retire and sold Warwick his entire operation, including an ancient beveller. The beveller, unfortunately, turned out to be inaccurate and required a lot of work to be brought up to spec. Warwick put in that work, and the business was born in the early 1960s.

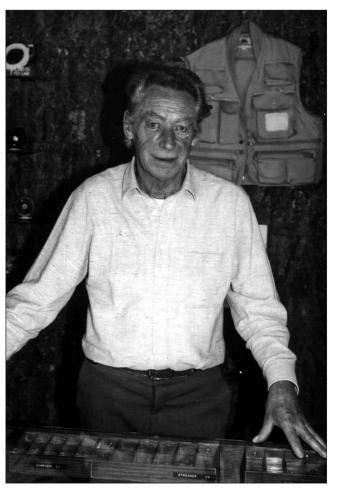
Warwick's philosophy about rod building was simple: you can either get it right or wrong. He was a perfectionist; being good enough did not meet his standards. Warwick aimed to create that special rod for each costumer that would become a part of the angler. He flame tempered all his bamboo. He felt that this method was superior to oven baking, which for him was only a form of kiln drying. Tapers were constructed empirically based on rods from past masters that Warwick had restored over the years; feeling their actions and measuring their tapers taught Warwick a lot. He preferred a faster, mid- to tip-action rod, but would build custom rods of many actions and lengths.

I met Markus Warwick at Krainach in Franconia, Germany (home of many small chalk streams with magnificent mayfly hatches), in 1996 and corresponded with him over several years. I even had plans to buy his beveller one day. Warwick was a great guy to talk with, and he was very supportive with my own rodbuilding efforts, hooking me up with fantastic English craftsmen who made wonderful ferrules and leather rod tubes.

After his death in 2012, I acquired two of Warwick's bamboo rods on the Internet to remember him by. One is a powerhouse of a rod for salmon and steelhead, 8 feet long for an 8-weight line. Given the small size of the agate ring at the tip, it is obviously an early model designed to cast silk lines.



Fritz Kuckuck, circa 1996.



Walter Brunner in his shop, circa 1994.

Fritz Kuckuck (former DDR)

Fritz Kuckuck was the only maker of bamboo rods in the former East Germany (DDR). After World War II, it was almost impossible to obtain fishing tackle in the Soviet-occupied section of Germany. Kuckuck and his father were not only avid anglers, they were cabinetmakers by profession, so building their own rods was a natural thing to do.

Around 1950, they started selling them. Ten railroad cars full of Tonkin cane from China were obtained via contacts in fellow Communist country North Vietnam. They designed and built a beveller and other machinery. Tapers were developed empirically.

Kuckuck was also involved in the sport of fly casting, which had become popular in the former DDR. Understanding the needs of distance casting and precision casting influenced his taper design substantially, which also affected the rods he produced for the average fly fisher.

By 1955, Kuckuck rods were well accepted; he had thirty-five employees and produced about two hundred rods

per week. One of his most interesting models was a multipiece rod: by changing mid and tip sections, you could create either a bait-casting, spinning, or fly rod.

With the introduction of fiberglass, bamboo production dwindled. Like today, people got excited about the new, whether or not it was better. Kuckuck decided to fill customer demand. He developed his own mandrels to make fiberglass rods and obtained a patent on the process. He soon also introduced fiberglass ferrules, displacing the nickel silver ones even on bamboo rods.

At end of the 1960s the firm was seized under the Communist regime. Kuckuck was first appointed production manager, but was later fired and tried at court as a traitor. Eventually, the case was dropped, but Kuckuck was no longer allowed to build rods and had to work as a miner until the end of Communism in 1989. He opened a small shop near Leipzig building graphite and fiberglass rods that catered to the fly-casting community, where he still had a strong following. In his declining years, he continued to repair and restore all kind of rods, including bamboo.

Walter Brunner (Austria)

Walter Brunner started to build bamboo rods at end of the 1950s. He got interested in fly fishing after seeing an Englishman casting a fly rod on the River Enns in Austria. Shortly after this, he purchased a German book on angling (Max vom dem Borne and Karl Fliege's Die Angelfischerei, 1933),9 which included a short chapter on rod making. Upon reading it, Brunner decided to build his own split-cane rods. He had seen a rod case made of bamboo in the shop window of a local tackle dealer. It turned out that there were several poles of Tonkin cane stacked away in a corner of the shop, and the dealer was happy to sell them to Brunner for a song.

Brunner was a self-taught rod builder. He never had a mentor, and the Borne/Fliege book was the only one he ever read. But he was a cabinetmaker by trade, and he knew a lot about wood. It did not take him too long to manufacture fine handplaned bamboo rods, both for spin and fly fishing.

In 1961, Brunner met Hans Gebetsroither, the famous riverkeeper of the

Gmundner Traun in Austria who was later dubbed the "European Lee Wulff." Gebetsroither had already developed his ingenious Austrian casting style, which worked especially well with short, fast rods. Gebetsroither's influence led to Brunner's ultrafast rods series, Wildwasser. It was around this time that Brunner decided to devote all his time to rod building, but it took several years before he could carve a living out of it. The minimum order of one ton of nickel silver to make his own ferrules had cost him a fortune. He developed new splitting, milling, and wrapping machines and other instruments, which helped him keep the close tolerances in his rods that he was famous for.

During the heyday of the Austrian casting style, the tendency to build fast and ultrastiff rods for the market had its drawbacks. Some of the "broomsticks," which many of his customers preferred for laying out a full fly line, were not sensitive enough for practical fishing purposes. This bothered Brunner a lot. So in the early 1980s, he began experimenting with more moderate tapers, which resulted in the Salza and Pielach series. They were named after two rivers known for their healthy population of large trout and grayling near his home in Steyr. To more specifically target the grayling with

a fly, Brunner developed the extremely sensitive Amabile and Thymalli rods. Brunner passed away in 2007. His rods are cherished by their owners and fetch among the highest prices for used bamboo rods on eBay.

I was lucky enough to once meet Walter Brunner when my friend Roland Thräner took me to his shop. I wanted to get some advice from one of the greatest living rod-building legends and, if possible, buy a few poles of good bamboo, which was difficult to come by in the mid-1990s. Brunner received us well and gave us the tour of his facility. The advice he gave me was simple: it will be difficult to establish yourself as a rod builder, but if you want to pursue this route in your life, never give up. He showed me his large stock of well-aged, straw-colored bamboo (a supply to last two lifetimes!) and instructed me in detail as to how his sophisticated beveller worked. I wonder what happened to all those raw materials and machines when he passed.

During our visit, my friend ordered a rod from the Amabile series. This put Brunner in an extremely good mood—but not good enough to sell me any of his bamboo poles. He was convinced that he would be able to transform all of them into fly rods.



Preben Torp Jacobsen (Denmark)

Preben Torp Jacobsen, a veterinarian by profession, was one of the first individual craftsmen to build cane rods again in Europe after the decline in interest began in the 1950s. He is also known as one of Denmark's best fly tiers.

For Jacobsen, learning about rod building through reading books came naturally. He started fly fishing in the early 1950s and was fortunate to have many fly-fishing friends from different backgrounds who aided his rod-making aspirations. From a cabinetmaker he learned to sharpen the plane irons and work with wood. Another friend showed him how to use a lathe so he could make his own ferrules, first from drawn brass, later from nickel silver, and finally from titanium.

Titanium was not easy to obtain in the 1960s. Most material went either for military use or to water-distillation plants in Arabian countries, and the firm selling it did not believe Jacobsen's application for fly rods. A friend from the paint business gave Jacobsen invaluable information about varnishes and glues. Through his study of basically all available literature, he was able to evaluate the virtues as well as pitfalls of split-cane rod making. For example, Jacobsen did not remove the protective enamel of the outer bamboo layer completely. Instead, he preserved the underenamel. You will barely see any power fibers in his rods, as he believed that this would better protect the rod against moisture.

By the end of the 1990s, Jacobsen's health problems had slowed down his rod-building efforts considerably. I asked him for advice. He said that the most important thing when building bamboo rods is patience, and one should take one's time so that each individual step is done as accurately as possible. Between processes, give the bamboo a rest, so that the living wood can get accustomed to its new shape—leave a week between each major step. If you can read Danish, check out Jacobsen's book Stangbygning, which describes his views on building the perfect split-cane fly rod.10 He once sent me a signed copy of his book, along with a letter of advice. I still treasure them.

Preben Torp Jacobsen, circa 1996.

THE NEXT GENERATION

Some of the best newer-generation bamboo craftsmen in Europe started to make split-cane fly rods after reading the Garrison-Carmichael book. Three of them are G&G (the team of Gerrit Glezer and Ger Vroomen), Günter Henseler, and Bjarne Fries.

Gerrit Glezer and Ger Vroomen (G&G, Netherlands)

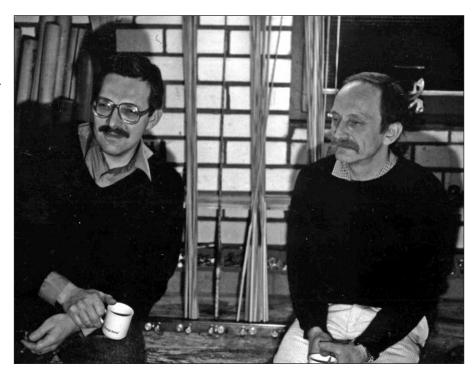
Gerrit Glezer and Ger Vroomen founded G&G in 1986. Glezer started fly fishing in 1969 and was one of the only fly anglers in the Netherlands at the time. Vroomen began his fly-fishing career around 1980 after he quit hunting. Glezer and Vroomen first met on the river Maas. While fishing together, they came across some fellow anglers still using bamboo rods. Both were impressed by these rods, but at the time could not afford them, so they decided to build their own.

The first steps were hard. Glezer and Vroomen had no contacts or tools. It was the Garrison-Carmichael book that got them started. But like other rod builders in the 1980s, they found that it was difficult to obtain the raw materials, planing forms, glues, and varnishes that they needed. Information itself was extremely difficult to come by. The few other European rod builders were notorious in their secrecy.

In their crusade to change the world of rod building, Glezer and Vroomen manufactured special tools and published their improved techniques. They made a beveller for rough tapering strips, special forms to make swelled butts, and grinding machines for "knotless" rod building. In the knotless rodbuilding method, the structurally weak knots in a splice of bamboo are cut out and glued together again. This method stiffens the rod, resulting in a slightly smaller final diameter. Originally G&G made very fast rods, but over the years, the tapers got more moderate, even down to parabolic tapers, according to each customer's specifications.

G&G's trademark was a figure resembling a star just above the cork grip, achieved by flaming alternate bamboo strips. The handmade nickel silver ferrules could be custom engraved, and rods came in an elegant leather rod case.

Glezer and Vroomen claim that the greatest drawback of graphite rods is their lack of mass. The extra mass of bamboo is necessary for smooth handling and positioning of the fly. Both



Ger Vroomen (left) and Gerrit Glezer (right), circa 1996.



The unique G&G design at the swelled butt of the rod.

G&G men felt that most anglers in the western world were unable to discriminate between a mass-produced graphite rod and a handcrafted bamboo rod made with great love, and that the price difference (if any) never seriously reflected the difference in craftsmanship.

I met both artisans at a fly-fishing show in Hanover, Germany, in 1992 and was impressed by both their rods and their personalities. Glezer and Vroomen make one of the most beautiful bamboo rods on the market, bur remain humble and good-natured human beings.

Günter Henseler (Germany)

Günter Henseler has been an enthusiastic fly fisherman since 1970. For him, fly fishing is the fairest way of catching fish, as well as the best way to relax. Henseler started to build split-cane fly rods around 1980, when he came across a copy of the Garrison-Carmichael book.

In 1982, Henseler met Bruno Kurth, who helped him overcome many of the initial difficulties in rod building. There were many problems at the beginning, like splices baked unevenly in the oven and glue that did not cure properly. It took Henseler a lot of patience and endurance to get it right, but after building for three years, he offered his rods for sale.

With a background as a cabinetmaker, working with bamboo came naturally to

Henseler. In contrast to most other rod builders, he did not offer any specific rod series. He custom built all his rods. He knew that every fly fisher casts slightly different and fishes specific waters, so he fine-tuned each rod for the individual customer.

Henseler developed his go-to tapers by first basing them on Garrison, then refining them over the years, eventually using computer programs to take them even further. He built his own equipment for heat treating and gluing the strips. He hand planed all his rods, but used separate steel-planing forms for the butt and the tip, which meant fewer adjustments. Henseler also constructed a special device to heat press the nodes, which were among the shortest you will ever find. Rods were dipped in varnish, which dried to a smooth, glasslike finish.

The silk windings turned transparent in the process, showing off the beauty of the mostly natural-colored bamboo underneath. For the customer who really wanted one, Henseler would also make a flamed or hollow-constructed rod.

I met Henseler at the Fly Fair in the Netherlands in 1996, where he had a stand with his rods on display. He had heard I was building too and wanted to see and cast one of my rods. So I walked the mile back to my car in the middle of this famous Dutch grassy marshlands parking lot to get one of the new quadrate split canes I had brought along. After casting it on the grass behind the show tents, he gave me the thumbs up for both action and looks. I was proud. My impression of Henseler is that of a soft-spoken, warmhearted, and true gentleman.



Günter Henseler at a fly-fishing show in Stuttgart, circa 1994.



Bjarne Fries planing away, circa 1996. He is quite a craftsman, at one point even attempting to forge Japanese swords.

Bjarne Fries

The state of the

Bjarne Fries rods display the cross section at the end of the grip. A unique and beautiful feature.

Bjarne Fries (Denmark)

Bjarne Fries started fly fishing in 1974. To execute a perfect cast to a rising or nymphing fish brought his spirits into harmony with nature and the world, an experience only matched, he believed, by practicing tai chi.

Right after Fries began fly fishing, his (now former) wife presented him with a bamboo fly rod, and it was love at first sight. Since then, bamboo as material fascinated him, and he started thinking about building his own rods. He got hold of an old Danish rod-making book, bought tools, and made his first planing form himself out of teakwood. Everything was rather primitive, as he could only build straight tapers, but it was a start. He became so fascinated with rod building that he began to neglect his music courses at college.

For Fries, the breakthrough came after acquiring the Garrison-Carmichael book in an English bookshop in Copenhagen. The descriptions—how to build proper steel planing forms, how to design rod tapers—were a revelation for him. In those years, his main problem was obtaining an adjustable planing form and a good stock of Tonkin cane.

Since 1987 Fries has been a full-time rod builder. His rods have been highly sought after, especially in Japan, where top craftsmanship is highly valued. Fries's rods were designed to cast without effort, giving the owner a truly enjoyable fly-fishing experience. Fries believed bamboo fly rods were at their best with light lines and deepworking semiparabolic actions. With a proper taper, he felt bamboo rods were easier to cast for the average fly fisher compared with graphite, as the frequency of bamboo was closer to the average arm stroke frequency. The higher harmonic frequency waves, which often cause wavy lines when casting graphite rods, could be better suppressed by bamboo's higher mass and nonlinear compound tapers. After hooking a fish, the higher bamboo mass will also tire the fish more quickly.

Fries's rods were, from the start, an art of plain elegance, the reel seats built so you could see the cross sections of the bamboo at their end. Everything except the guides was hand built by Fries, including the aluminum rod cases. Fries used to write for *Der Fliegenfischer* back in the day. I met him a few times at shows, and he always seemed to have new projects besides rod building going on, like forging Japanese katana swords or painting pictures. Unfortunately, according to a Singaporean bamboo enthusiast who bought two of his rods, Fries is no longer building bamboo fly rods on a regular basis.



Some of the author's own hand-planed bamboo rods of hexagonal and quadrate design.

Outlook

Of course, there have been and are many more talented rod builders in Europe, too many to describe here. Among them are Leen Huisman from the Netherlands. who often displayed his craft at the local Fly Fair and inspired newcomers to the trade; the German Ludwig Reim, who took an engineering approach to bamboo rod making, leading to his specialty, the Octavia, a sixteen-strip bamboo rod; and the Frenchman Josselin de Lespinay, who not only was a bamboo craftsman in his own right, but in 1991 founded the Club Français du Refendu, which served as a meeting place for rod builders and collectors of split-cane rods in France.

The Internet has made everything about bamboo fly-rod making—getting information, tools, and raw materials—much easier since 2000. The number of people manufacturing bamboo fly rods has increased almost exponentially, most of them amateurs or semiprofessionals.

With this growth came a big drop in prices. Even some entirely hand-planed rods can be obtained for quite a bit less than high-end graphite rods from bigname companies. It's a shame, really, but something we owe to globalization. On the other hand, there is now a good opportunity for the bamboo lover to acquire and fish a fly rod from the bright side of nature at an affordable price.

ENDNOTES

1. Everett Garrison and Hoagy B. Carmichael, *A Master's Guide to Building a Bamboo Fly Rod* (Katonah, N.Y.: Martha's Glen Publishing, 1977).

2. That interview was later published in two installments as David Popp, "Im Interview: Hoagy B. Carmichael," *Der Fliegenfischer* (December 1994, no. 116, 22–25) and David Popp, "Hobeln Spezial," *Der Fliegenfischer* (February/March 1995, no. 117, 28–29).

3. Popp, "Hobeln Spezial," 25.

4. David Popp and Volker Engelmann, "Quads, Gespliesste mit quadratischem Querschnitt," *Der Fliegenfischer* (March/April 1998, no. 130), 26–31.

5. Dick Spurr, *Classic Bamboo Rod Makers Past and Present* (Grand Junction, Colo.: Centennial Publications, 1992).

6. Charles Snart, *Practical Observations* on *Angling in the River Trent* (Newark, England: S. and I. Ridge, 1801).

7. Umesh Ghoshdastider, Shimin Jiang, David Popp, Robert C. Robinson, "In Search of the Primordial Actin Filament," *Proceedings of the National Academy of Sciences of the United States of America* (2015, vol. 112, no. 30), 9150–51.

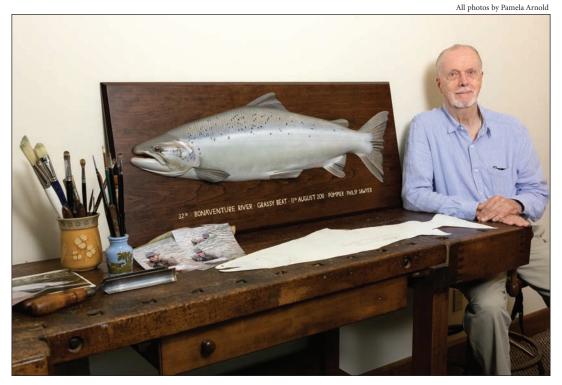
8. That interview was later published as David Popp and Reinhold Bruder "Fritz Schreck," *Der Fliegenfischer* (September/October 1997, no. 128, 38–40).

9. Max vom dem Borne and Karl Fliege, Die Angelfischerei (Berlin: Paul Parey, 1933).

10. Preben Torp Jacobsen, *Stangbygning:* bygning af splitcane-fluestænger (Hobro, Denmark: Flyleaves, 1982).

Stephen R. Smith: Trophy Fish Carver

by Jim Brown



Stephen R. Smith in his Jamestown, New York, workshop.

Stephen Smith's stunning work is on display at the American Museum of Fly Fishing in the exhibit Commemorating the Catch: Fish Carvings by Stephen R. Smith, May 18 through December 31. Smith's artistry captures the essence of each fish through vibrant colors and subtle details, immortalizing the angler's experience on the water. We hope to see you soon!

TEVE SMITH MAY BE one of the best unknown artists working in angling arts today. Over the past thirty years he has created 121 carvings of trophy fish that now hang in homes, offices, and sporting camps across the land. He mostly carves Atlantic salmon, but he has also carved close to twenty other species—from foot-long bluegills to 7-foot tarpon. All are uniquely beautiful. This is the story of the man and his art.

EARLY YEARS

Born in Erie, Pennsylvania, in 1942, Steve developed an early love of nature and fishing during family visits to his grand-parents' farm in Cherry Grove, Pennsylvania. His father was a fly fisherman, and Steve pursued brook trout in the local streams as well as black bass in nearby ponds. As soon as he was old enough to drive, he was fishing as often as possible throughout the Allegheny National Forest and Presque Isle State Park.

At age fourteen, Steve was encouraged to take up the bassoon, and another passion—one for music—began. He later graduated from Carnegie Mellon University with a BFA in music performance and spent several years touring with some of the nation's great orchestras, including the Kansas City Philharmonic, Dallas

Symphony, San Antonio Symphony, and Austin Symphony. He subsequently settled in western New York near Jamestown, where he taught music for several years and where he and his wife Barbara began raising a family. In 1973 he became a tenured member of the Chautauqua Symphony Orchestra—a position he held with distinction for more than forty years until his retirement in 2016.

It was during the Chautauqua years, in 1985, that Steve first saw and subsequently purchased a John Tully salmon carving. John Tully (1862–1931) was a Scottish model maker, one of the earliest, and arguably one of the most influential, of his day. Tully's influence on Steve was significant. Following some additional encouragement from Hoagy Carmichael and Ron Swanson, the first Smith trophy fish carving was made in 1988.

ORIGINS OF THE CRAFT

While fishermen have long made drawings, outlines, cutouts, and paintings to record their catches, the specific craft of half-body trophy fish carving appears to have started in nineteenth-century Britain. In simplest terms, a half-body fish carving displays a longitudinal cross section of the fish attached to a board that typically bears a legend of the fish size, where and when caught, fly used, and angler's name or initials. This sounds simpler than it is (see below).

The most authoritative account of half-body fish carving is Ron Swanson's Fish Models, Plaques & Effigies (Meadow Run Press, 2009), and the following very brief summary derives from his study. John Russell (1819–1893) of Fochabers, Scotland, is usually credited as the father of this craft. Russell was a well-known riverscape painter by the time he took up fish carving in the mid-1880s. He soon hired John Tully as an assistant. Following Russell's death, Tully continued the business, marrying Russell's daughter, Dhuie (1864–1950). The pair contin-

ued this trade for more than three decades. Dhuie was a full partner and painted many, if not all, of the Tully fish.

Other craftspeople followed. Major British tackle houses such as Malloch's of Perth (Scotland), Hardy Bros. (Alnwick, England), and Farlows (London) offered the service of trophy fish carving. In North America there seemed to be a less organized trade in such carvings, and although some notable North American carvers such as Tommy Brayshaw (1886–1967) of Vernon, British Columbia, and Shang Wheeler (1872–1949) of Stratford,

HOW A SMITH HALF-BODY TROPHY FISH CARVING IS MADE

As mentioned, the production of a half-body trophy fish carving is a more complex undertaking than immediately evident. Here are some of the steps that go into a Smith carving:

- Working from photos and measurements of a specific trophy fish, a silhouette drawing of the fish is made.
- This drawing is then used to band-saw a block of basswood or tulipwood to size.
- The board, or panel, for the carving is also built at this time. It is usually cherry. Finished to look like a single board, it is in fact assembled of several alternating-grain boards to avoid any warping of the finished panel.
- The basswood or tulipwood block is rough shaped.
- Finished carving of the fish body is done with an assortment of about two dozen mostly vintage gouges of different sizes and configurations. Rifflers and sandpapers are also used.
- The side fins are carved separately and inlaid.
- The scale patterns are made with wood-burning tools. Many are custom tools as the scale patterns of different species vary.
- The carved wood fish is sealed with shellac and after drying, it is covered in gesso, to prepare it for paint.
- The final painting is done in layers with washes and blending of colors. About a dozen brushes of various types are used. When dry, the painted fish is coated in a light layer of varnish.
- The final steps are to screw the half-body fish to the panel, paint a legend of the catch beneath the fish, and on the lower left edge of the panel, inlay a maker label. The label is elephant ivory from a disused piano key and reads: "Stephen R. Smith, maker."



Above left: The tail fin on a Smith carving is carefully brought to life. His fin work is remarkably detailed and feathery, seemingly caught in midquiver.

Above right: Every fish species has a unique scale pattern. Steve captures this with a series of custom-made wood burning tools.

Right: Special treatment creates a realistic eye and deft paint shadowing suggests underlying anatomical structures, a combination of realism and trompe l'oeil techniques.







A Smith half-body trophy carving takes at least a month to create, some of it literally backbreaking work.

With tracings and photos in the foreground, the finished product, a bright Atlantic salmon, is shown here suspended against a dark wood panel. This work is at once a celebration of natural beauty, an angler's luck, and the artist's skilled hand.

Connecticut, produced some beautiful fish carvings, their output was limited.

By World War II, the tradition of half-body trophy fish carving was already in decline. It was always a high-skill, labor-intensive craft, and during the war years, able-bodied craftspeople were in short supply. Taxidermy and the emerging technology of fiberglass molding may have also been a contributing factor. Whatever the cause, by the late 1980s, when Steve Smith began to carve trophy fish, he was revisiting a craft that had been moribund for nearly fifty years.

FROM CRAFT TO ART

One might reasonably ask why, in an age of instant cell-phone photos, a man would devote a month of his life to carving and painting a wooden fish. Leaving aside the fact that reason and art are at best intermittent partners, it may well be that the ubiquity of photography itself creates a special appreciation for the fuller dimensionality of carving. Photos are comparatively small, static records. A life-size carving, on the other hand, has immediate visual impact. A carving also continuously reveals new aspects of itself depending on the angle and intensity of light. This confers an ever-renewing freshness that a photo doesn't capture.

"Catch and release" and "keep 'em wet" are necessary protocols for modern sport, but they do result in an abbreviat-

ed period of appreciation for caught fish. This is usually fine, but when things go completely our way and a fish of a lifetime is captured, then fleeting glimpses just don't seem enough. Little surprise then that more than a hundred modern anglers have sought the artistic skills of Steve Smith to memorialize their best fish and gain a much longer look.

It is anyone's guess how many half-body fish carvings have been done in the 130 years since John Russell's first efforts of the 1880s, but we do know that some of the finest examples of this craft are now being produced by Steve Smith. In a July 2018 sporting sale at Copley's in Boston, the prices for two Smith pieces soared well past a field of a dozen classic half-body fish carvings, including examples by Russell, Tully, and Malloch.²

Close examination of Smith carvings helps explain what sets his work apart. He is recreating specific great fish, rich in distinctive individual detail, not generic representations. The presentation is admirably formal. The fish are not dramatized but rather respectfully displayed, fully extended to reveal their best form and color. It is as if they are laying in state in some unspoken honor ritual. The contours are precise, colors impeccable, and the fins delicate and feathery.

There are elements of both realism and impressionism in his work. Steve knows the exact scale count on the lateral line of an Atlantic salmon and incorporates this into his carvings, but he does not exactly replicate the number of rays on a salmon's fins. He prefers to alter anatomy to create a sense of quivering movement. Likewise, the colors of these carvings are remarkably lifelike, but trompe l'oeil shadings suggest dimensionality and even interior structures glimpsed through translucent flesh. This blending of techniques is masterful yet so subtle that it creates a unique visual experience.

BONAVENTURE RIVER GRASSY BEAT 110 AUGUST 2011 - RUMBER INCH

Viewing Steve Smith's carvings, you can't help but wonder how nature came to create such beautiful and mysterious creatures. And this is the point. There is a reverence for nature at the heart of all Smith's work. He is copying the work of a greater hand. These carvings transcend craft. They are art.

 \sim

ENDNOTES

- 1. Ronald S. Swanson, Fish Models, Plaques & Effigies (Far Hills, N.J.: Meadow Run Press, 2009), 147–52.
- 2. Copley Fine Arts Auctions, *The Sporting Sale 2018* catalog [July 20, Hotel 1620, 180 Water Street, Plymouth, Massachusetts, plus Unofficial Prices Realized sheet] (Boston: Copley Fine Arts Auctions, LLC, 2018). Smith, items 309 (\$9,600) and 310 (\$10,800), page 106; Russell, item 308 (\$6,000), page 105; Tully, item 314 (\$1,800), page 108, and item 307 (\$5,400), page 104; Malloch, item 328 (\$3,900), page 113.

Side Effects: William Billinghurst and Early Fly-Reel Culture

by Jim Schottenham

The American Museum of Fly Fishing welcomes guest curator Jim Schottenham with the exhibit Side Effects: William Billinghurst and Early Fly-Reel Culture, opening in August 2019. The exhibit will showcase a selection of rare and unique examples from Schottenham's private collection, placing reels crafted by Billinghurst and other early American makers side by side and highlighting his influence on the industry.

doday's modern fly-reel design can trace its beginnings back to an invention of Vermont native Charles F. Orvis, who in 1874 patented his "Improvement in Fishing-Reels," which was produced in New York State by the Manhattan Brass and Manufacturing Company of New York City. However, the American fly reel can boast roots that predate the Orvis reel with the invention of a well-respected gunsmith by the name of William Billinghurst. A New York native, he produced and patented what is widely accepted as the first patented fly reel in America, a sidemounted reel granted patent number 24,987, on 9 August 1859 (Figure 1).

William Billinghurst was born 10 February 1807 in Brighton Township, New York. He moved to Rochester in 1823 and began his primary career as a gunsmith, apprenticing under James and John Millar, also of Rochester, who are best known for holding the patent for the first cylinder rifle, dating back to 1829. It was thought that of all the apprentices working with the Millars, Billinghurst produced the highest-quality work, a reputation that would remain with him throughout his lifetime.¹

Records show that in 1841, William Billinghurst bought out James Millar, setting up shop under his own name. According to press reports that year, the Billinghurst repeating rifle made quite a name for itself. As reported in the *Rochester Gem and Ladies' Amulet*, on 24 July 1841,

Emperor Dom Pedro D'Alcântara of Brazil had inquired about having a "valuable Yankee rifle" built for him.² He was directed to gunsmith William Gardner of Geneva by a dentist named Badell, who

had traveled to Rio de Janeiro and became acquainted with the emperor. Badell recommended Gardner as being the only gunsmith of much celebrity with whom he was acquainted. Gardner soon received

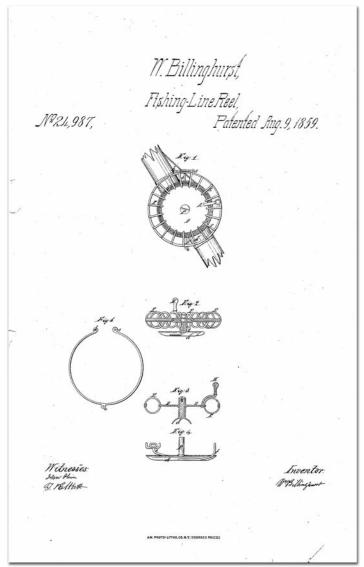


Figure 1. First page of the United States Patent Office submission by William Billinghurst for his Fishing-Line Reel.



Photos by Jim Schottenham, except where noted

Figure 2. Frederick Skinner's Archimedian reel was assigned a "non-ornamental registered design" in 1848. British patents were not officially numbered until the Act of 1852.

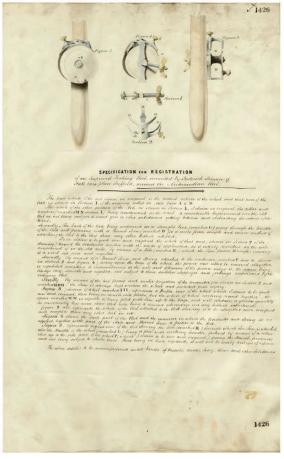


Figure 3. Skinner's design, dated 1848.

an order for three rifles: one for the emperor, with the only direction given to "unite beauty and perfection in the manufacture of the article"; one for Badell; the third for an unnamed person. Gardner readily consented to make the

first two rifles but declined the order for the third, fearful that it might not be sufficiently perfect to meet the emperor's expectations. Having the utmost respect for the work of William Billinghurst, Gardner transferred the order to him. This garnered rather high praise from the Rochester paper, both for the already celebrated Gardner for giving the order to Billinghurst, and for Billinghurst, whom it called "one of the best gunsmiths in the country who will, we doubt not, execute the order as satisfactorily to the Emperor as credibility to himself."

Other dignitaries also sought rifles produced by Billinghurst, as recorded in various press reports between 1841 and 1852 in the Rochester newspapers. Not limited to target rifles or pistols, Billinghurst was also instrumental in developing the Requa-Billinghurst machine gun (a twenty-five-barrel rapid-fire weapon used in the American Civil War) in conjunction with Dr. Josephus Requa, a former apprentice and friend of Billinghurst. Having well established himself as the premier gunsmith in the state, if not the country, Billinghurst turned his talents to building fishing reels as well.

Billinghurst's new design differed greatly from the contemporary reels made in the United States and the vast majority of those imported from England, with the lone exception being the Frederick Skinner Archimedian reel (Figure 2), a British reel that was issued design patent no. 1426 in 1848 (Figure 3). Skinner's reel was also configured to mount horizontally on the rod, and in some cases featured holes in the spool flanges to facilitate drying of the line. It is not known if the Archimedian influenced Billinghurst, as there is no documented evidence to support the claim, yet it seems more than just plausible.

In the United States, the Billinghurst reel influenced reel makers along the Mohawk River corridor (a portion of New York State that stretches from Albany to Buffalo) for more than forty years. This side-mounted reel featured several improvements that Billinghurst pointed out in his patent description, the most notable relating to the line-drying qualities of his caged design, referred to today as a birdcage reel. By creating space between the rings that compose the spool, the line had vastly increased exposure to air. This eliminated the need to unwind the line from the reel to air dry, a necessary practice for the horsehair and silk lines of the day. The second advantage over conventionally mounted upright reels was the slim-line compact form, aptly described in the patent: "Aside from the great reduction in weight and cost over a reel constructed in the ordinary manner, the general form is much more convenient for carriage in the pocket, as the whole thing, line and all, forms a flat disc of no very great dimensions, and which lies snug and close to the person . . . "5 The third significant change centers on improving the rapid



Figure 4. Colby Sorrells of Mansfield, Texas, recently brought this ca. 1860 Louisville, Kentucky, newspaper ad to the attention of collectors (www.newspapers.com/newspage/119220750/).



Figure 5. The earliest known example of a Billinghurst fly reel. The maker's stamp differs from any other known Billinghurst, with a patent date stamped on the reel foot.



Figure 6. Close-up of the stamp used on a pre-1860 rifle by William Billinghurst, with an identical imperfection in the first letter S, matching the stamp on the earliest known Billinghurst reel.

retrieval of line without the need for "complicated and expensive gearing." By building the reels with a central disc that had a diameter much larger than the tiny diameter of a "standard" spool arbor, the Billinghurst reel claimed to be able to "take up more than seven inches of line, or nearly ten times the amount taken up by one turn of the common reel handle."7 Add to these the use of a line guide, weight-reducing frame, and later addition of a folding handle, and you can understand the significant contribution Billinghurst made to the fly-fishing community with his sole fishing-reel submission to the U.S. Patent Office in 1859.

An announcement was made in the 8 October 1859 edition of Scientific American, introducing the world to the invention of William Rillinghurst—an error that was noted and corrected in the following issue. That would not be the last time Billinghurst had his name misspelled in print; Genio Scott's 1869 book, Fishing in American Waters, printed the name as Billinghast. The popularity of the reels did not suffer from incorrect spelling, however. Events such as tournament-casting contests held in various states in the Northeast boasted prizes that included the celebrated Billinghurst reels to the winning contestants, with some of the best casters of the day reportedly having a Billinghurst reel on their rods during competition. This may have served as effective advertising, as printed ads are extremely limited, found only in 1860s newspapers (Figure 4); ads for his gunmaking activities were more common.

The Billinghurst reel enjoyed a long production run of more than twenty years, during which time Billinghurst offered several sizes, in an assortment of finishes such as brass, nickel-plated brass, solid nickel silver, and coin silver. This production run ended with Billinghurst's passing on 4 March 1880. The most common sizes found by collectors today are the trout and bass reels, with approximate diameters of 2½ inches and 3¼ inches, respectively, with the larger-size reels limited to only a few known, existing in private collections, consisting of a 5-inch reel and a giant 7-inch reel.

The earliest known example, a brass reel with a 3¼-inch diameter (Figure 5), features unusual markings on the spool, having two straight lines of text as opposed to the common circular markings, identical to the stamp used on Billinghurst's guns before 1860, right down to a small imperfection in the letter S (Figure 6). It is quite possible this stamp was lost in a fire that consumed the building that Billinghurst occupied

Figure 7. Mostly hidden from view when the spool is mounted, this patent-date-stamped foot is the only known example of its kind.



on Water Street in 1856; the newspaper reported losses to Billinghurst totaling \$800.9 It is suspected that this is a prepatent spool, built before the use of the now-familiar circular stamp on all other examples. The reel has a patent date—typically found on the top of the spool disc in the circular pattern—on the brass reel foot (Figure 7), hidden from view by the spool, perhaps added after the patent was issued. Also noteworthy is the fixed handle, a feature found on the earliest reels. Viewing the patent drawings, it is

clear that the folding handle was somewhat of an afterthought. The drawings do not show the provisional hole in the spool that allows for the additional arched post attached to the handle, which provides support for the more common handle configuration; nor is there any mention in the patent for this feature. This example also displays the brass saddle-style reel foot, later changed to an all-cast, one-piece foot.

The second version of Billing-hurst's reels all have a circular stamp that reads BILLINGHURST'S PATENT – ROCHESTER NY – AUG 9 – 1859 surrounding the domed center-post spool screw. The reels at this time were predominantly con-

structed of all brass, with a small number of special reels made of solid nickel silver or an even rarer version made of coin silver, reportedly given out at the aforementioned early casting competitions. With the addition of the folding handle, the reel is even more compact and easier to fit into the angler's vest or shirt pocket. Drag is supplied by two thin rods that apply pressure to the large spool rings, which can be moved away for friction-free movement by means of a small sliding collar supported by a central rigid rod.

A third version—made with a few modifications, such as a spring-aided drag system (the friction rods no longer present) added between the reel foot and the underside of the spool—made its appearance after 1873, at which time most all Billinghurst reels received nickel plating over the brass components. The circular maker stamp sports an additional &1873 mark, added when Billinghurst applied for a seven-year patent extension that was granted after the initial fourteen-year limit had run its course (Figure 8).

No Billinghurst reel today can be called common, but there are a few select reels that can be considered rare, with the aforementioned all-nickel-silver reels and coin-silver reels falling into that category. Beyond those rarities, there are a few items that deserve special recognition, some known and in collections, and some undiscovered items, known only through a descriptive last will and testament from William Billinghurst.

Tackle collectors today understand the boxes that once contained the lures and reels we seek are much more difficult to find than the contents themselves. Perhaps the oldest surviving American fishing tackle—related box is the only known complete circa 1859 Billinghurst reel box (Figure 9) with a line drawing on the fragile paper lid. I've always appreciated the



Figure 8. From left to right: brass with single patent date, trout size; nickel-plated brass, bass size, with additional &1873 stamp; brass with single patent date, bass size; unusual unstamped nickel-plated brass, trout size.



Figure 9. The only known complete box for a Billinghurst reel. Note the line drawing on its fragile paper lid.



Figure 10. The only known 7-inch-diameter German silver Billinghurst reel.

Figure 11. Unusual unmarked Billinghurst reel, perhaps among the last to leave his shop after his passing.



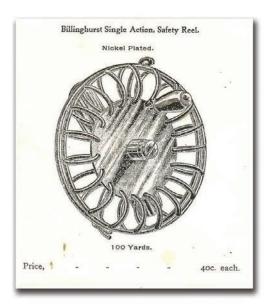


Figure 12. The Billinghurst Safety Reel, offered in the 1902 Clark & Horrocks tackle catalog.

line penned by the late author A. J. Campbell, who wrote, "Needless to say, almost all of these boxes helped start some sport's wilderness campfire on a damp chilly morning,"10 a fact that has resulted in the demise of many a lure and reel box. Another only known example, a giant Billinghurst reel measuring 7 inches in diameter, is a remarkable reel (Figure 10). From his will, we know that there were "2 extra large reels @ \$3.50 each"11 in Billinghurst's inventory, and it is unclear if there were any others ever produced, with this the only surviving reel of its size. Inventory documented from the same will lists a few items that have yet to be discovered, such as a Billinghurst reel sign that likely hung in or outside his shop, and three fishing spoon dies, indicating that he produced at least a few lures at one time. Billinghurst was very proud of his work, rightfully so, and stamped everything he built with his name, which leads me to believe a reel bereft of any stamping (Figure 11) was assembled just before his passing, escaping the shop after he died.

The popularity of Billinghurst's design did not end with his death, as evidenced by the appearance of other manufactured birdcage reels, as well as the efforts of individual reel makers who closely mimicked his invention. A Matthews reel appeared in the 1888 A. F. Seeberger catalogs, and a Billinghurst Safety Reel appeared in a 1902 Clark & Horrocks catalog (Figure 12), each with fewer spool rings than the original Billinghurst reel, which in my examination consisted of twenty rings (the lone exception the giant reel). The later Matthews and Clark & Horrocks reels each have nineteen rings. Other slight differences include the small round line guide, as opposed to the wide and flat guide on the originals (Figure 13).



Figure 13. Unmarked, these nineteen-ring birdcage fly reels differ slightly from the original Billinghurst design.

Other unknown makers, obviously influenced by Billinghurst, produced some high-quality reels, such as the thirty-six-ringed example (Figure 14) with an unusual drag mechanism mounted under the spool. It was more than fifty years later that the last of the birdcage reels was produced: the Elmer J. Sellers Bas-Kit Reel (Figure 15). Offered in three finishes, it was the last of the singleaction side-mounted reels to receive a patent, issued number 1,947,141 on 13 February 1934. Other well-known upstate New York reel makers, such as Morgan James, Alonzo Fowler, Albert Pettengill, and Edward Follett, and one Connecticut reel maker, Anson Hatch (Figure 16), all produced side-mounted reels at various times from the 1860s to 1900. It is interesting that the side-mounted reel never found favor outside the Mohawk River corridor, aside from the 1866 Hatch patent reel of Connecticut and the automatic reel, which many still use today.

Turning 160 this year, the Billinghurst reel remains an important piece of flyfishing history.

ENDNOTES

- 1. Norm Flayderman, *Flayderman's Guide to Antique American Firearms and Their Values*, 8th ed. (Iola, Wisc.: Gun Digest Books, 2001), 589–90.
- 2. "Dom Pedro D'Alcântara, a Patron of Rochester Mechanism," *Rochester Gem and Ladies Amulet* (7 August 1841, vol. xii, no. 16), 131.
 - 3. Ibid.
 - 4. Ibid.
- 5. United States Patent and Trademark Office, "W. Billinghurst, Fishing-Line Reel, No. 24,987, Patented Aug. 9, 1859," https://pdfpiw.uspto.gov/.piw?PageNum=o&docid=00024987&IDKey=&HomeUrl=%2F. Accessed 8 March 2019.
 - 6. Ibid.
 - 7. Ibid.
- 8. Rochester Directory, 1880, www.libraryweb.org/rochcitydir/images/1880/1880a-b.pdf, 71. Accessed 8 March 2019.
- 9. "By Telegraph," Buffalo Evening Post (24 May 1856), 3.
- 10. A. J. Campbell, Classic & Antique Fly-Fishing Tackle (New York: Lyons Press, 2002), 84.
- 11. Jim Wheeler, "The Estate of William Billinghurst, 1807–1880," *The Reel News* (July 2004), 16–17.

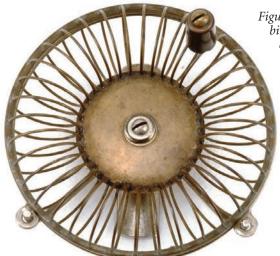


Figure 14. Exceptional quality birdcage reel with finely soldered connections at the end of each of the thirty-six fine-wire rings.



Figure 15. Complete package from Elmer J. Sellers including box, pouch, and paperwork—from his 1934 Fly Casting "Bas-Kit Reel" in chromium plate finish.



Figure 16. The "Improvement in Fishing Reels" by Anson Hatch was granted the second U.S. patent for a side-mount fly reel, number 55,653, in 1866.

AMFF Honors Tom Rosenbauer with the 2019 Izaak Walton Award



From left to right: Doug Lopez, Tom Rosenbauer, Brooke Rosenbauer, Sean Callinan, Bill McLaughlin, Jim Lepage, and Paul Fersen.



2019 Izaak Walton Award honoree Tom Rosenbauer accepts his award from Trustee Gary Grant.

THERE WAS A HINT of spring in downtown New York City on March 12 as the American Museum of Fly Fishing was kindly welcomed to the Anglers' Club, where we presented the 2019 Izaak Walton Award to the extraordinary Tom Rosenbauer, marketing director for Orvis rod and tackle, author, and host of the Orvis Fly Fishing Guide podcast.

The museum established the Izaak Walton Award in 2014 to honor and celebrate individuals who live by the *Compleat Angler* philosophy. Their passion for the sport of fly fishing and involvement in their angling community provides inspiration for others and promotes the legacy of leadership for future generations.

Guests were treated to a myriad of enticing auction items on display during the cocktail hour. To honor Tom Rosenbauer and support the museum, many Orvis-endorsed guides and lodges had donated days of fishing and overnight stays. Orvis history was reflected in a Wes Jordan—era Superfine rod and a light-as-air Helios 3 outfit, both on offer to the evening's bidders. Nick Dawes of Heritage Auctions once again successfully helmed our live auction, the highlight of which was a day of fishing with Tom.

Author and longtime Orvis colleague Paul Fersen was on hand with some wonderful stories, concluding that Tom's legacy at Orvis and in the industry will live forever. "There is an interesting, but not surprising, symmetry in the trajectory of Tom's career and Orvis's growth," notes Fersen. "As the company grew through the wild *A River Runs Through It* growth spurt of the mid-nineties and into the twenty-first century, so too did Tom's stature in the industry." AMFF Trustee Gary Grant presented the award to Tom, "honoring his passion for the sport of fly fishing as a guide, teacher, writer, and innovator." The honoree then treated the audience to some gracious, wise, and hopeful words. He considers the sport to be in great hands and is encouraged by the passion and knowledge of the latest generation of anglers, including the museum's ambassadors.

AMFF would like to thank all of the evening's guests for attending. We greatly appreciate the following sponsors, auction contributors, and those who made donations in honor of Tom: Allenberry Resort, Ray Berumen, Tony Biski, Robert Cochrane, Rachel Finn, E. & J. Gallo, Jim Heckman, Art Kaemmer, Joan Kelleher, Norton Kennedy, Rene Letourneau, Carmine Lisella, Joe Mattioli, Barry Meinerth, Orvis, Christian Pedersen, Leigh and Annie Perkins, Restigouche River Lodge, Alberto Rey, Mike Rice, Tom Rosenbauer, Fran Sargent, Paul Schullery, Rich Strolls, Ted Tafaro, Tailwater Lodge, Steve Woit, and Jamie Woods. Finally, AMFF would like to thank the Anglers' Club for their wonderful hospitality.

 \sim



2018 Izaak Walton Award honoree Rachel Finn congratulates Tom Rosenbauer.



Trustee Woods King III and Anglers' Circle member Parker Corbin.



From left: Steve Woit, Joe Vaccaro, and auctioneer Nick Dawes chat before dinner.



John Larkin (right) with his son Jack.



Tom Rosenbauer addresses the crowd.



Lance Hidy Named 2018 Austin Hogan Award Recipient

Lance Hidy, author of "Vernon S. 'Pete' Hidy: The Chronology of a Reluctant Fishing Icon" (Winter 2018, vol. 44, no. 1), has been named the recipient of the museum's 2018 Austin Hogan Award. The award, which recognizes exemplary contributions the *American Fly Fisher*, was established in 1985 to honor the memory of Austin Hogan, who founded the museum's journal in 1974.

Hidy, the son of writer/editor/fly tier Pete Hidy (1914–1983), inherited his father's collection of correspondence, essays, and fishing and tying equipment in 2006. As writers, historians, and collectors contacted him, Lance began to organize the archive. From this, he put together a detailed chronology of his father's life; this documentation led to Pete Hidy's October 2017 induction into the Fly Fishing Hall of Fame. The chronology, a definitive piece of fly-fishing history, became the basis for his article in the *American Fly Fisher*.

Lance Hidy will be presented with the Austin Hogan Award at the October meeting of the board of trustees.



Lance Hidy



Our Frequent Fly Tier program on March 9 featured tiers Paul Sinicki and Kelly Bedford. Wendy Gawlik from Casting for Recovery and her husband Joe came to tie flies with us. Paul and Kelly started off with the Woolly Bugger, then moved on to the more challenging Ant (foam! bungee cord!). It was a great day for tying.

Recent Donations to the Collection

Ken Walrath of Rochdale, Massachusetts, donated seven vintage Weber flies in original packaging; two vintage flies tied by Bert Quimby of South Windham, Maine; and thirteen contemporary flies he tied himself. **Judy Helm** of Toledo, Ohio, sent us a collection of flies tied by her late husband, Chris Helm.

Ted Chivers of North Springfield, Vermont, donated a 9-foot Orvis 99 bamboo fly rod owned by Joe Brooks with a letter of documentation.

An anonymous donor gave us a collection of 216 works of fine art. Another anonymous donor sent an oil painting by Carl Laughlin titled *Spirit of Fly Fishing* and six copies of a publication about the artist.

Elisha Lee Jr. of Dover, Massachusetts, donated four nine-teenth-century fishing diaries by Waldron Bates titled *Fish and Fishing*; one Tihonet Club logbook recording club activity from 1957 to 1972; an outline of a trout drawn by Frank W. Benson on a wooden seat from a canoe; a watercolor of the Tihonet Club by his mother, Mrs. Elisha F. Lee; and two outlines of trout drawn by his father, Elisha F. Lee.

Kelsey McBride



AMFF President Karen Kaplan welcomed guests to a May 3 reception at the Yale Peabody Museum of Natural History, which is featuring the museum's latest traveling exhibition, On Fly in the Salt: American Saltwater Fishing from the Surf to the Flats. Karen thanked all of the supporters who made the exhibition possible, including AMFF Trustee Foster Bam, who sponsored the evening's event. The exhibit is on display at Yale through October 13.

Upcoming Events

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

July 11, 18, and 25 (Thursdays) Kids Clinics 10:00 a.m.–11:00 a.m.

August 10 12th Annual Fly-Fishing Festival 10:00 a.m.—4:00 p.m.

December 7 Hooked on the Holidays 1:00 p.m.-4:00 p.m.

Always check our website (www.amff.org) for additions, updates, and more information or contact (802) 362-3300 or amff@amff.org. 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.

2019 Fly-Fishing Festival







Join us on August 10th from 10 am to 4 pm for the 12th annual AMFF Fly-Fishing Festival. This is our signature event of the summer, which celebrates the joy of fly fishing with demonstrations, vendors, and other enthusiastic anglers and lovers of the sport. Enjoy fly-tying and casting demonstrations, trying your hand at casting vintage rods, learning how to tie a saltwater fly, and so much more. Bob Selb of the Classic Fly Fisherman will be available for free tackle appraisals throughout the day.

Visit www.amff.org/2019-festival for updates on vendors, tying and casting instructors, and other festival news.





Photos by Sara Wilcox



Guests gathered at the museum on May 18 for the opening of Commemorating the Catch: Fish Carvings by Stephen R. Smith. Here Steve Smith (left) addresses the evening's attendees, while his wife, Barbara, and Jim Brown, who wrote the introduction to the exhibition catalog, look on.



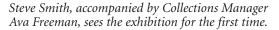
Also featured in the show are historical examples of the craft from the collection of Trustee David Nichols, who also sponsored the exhibition catalog.



A look at some of the carvings on display.



Steve Smith poses with one of his works.





CONTRIBUTORS



Jim Brown is a retired librarian who now lives in Seattle. He is an avid fly fisher and collector of flyfishing antiques. He specializes in collecting American fly reels. He is the author of the museum's fishing reel catalog, A Treasury of Reels (1990), and has written numerous articles on fly-fishing history and collectibles. Jim has fly fished in forty-one of the fifty states for trout and bass, and worldwide for trout, salmon, peacock bass, freshwater dorado, tigerfish, and mahseer. He's not planning to stop fly fishing anytime soon.

David Popp, Ph.D., has spent his scientific career investigating the fundamental principles and atomic structures of biological filament systems like F-actin, which are crucial for cellular processes such as muscle movement, DNA segregation, and cell division. He has worked at scientific institutions all over the world, including the Max Planck Institute for Medical Research (Germany), Rosenstiel Center (USA), RIKEN (Japan), and Institute of Molecular and Cell Biology (Singapore).

Popp has fished for more than fifty years, having been tutored by his father from the tender age of three. As a postdoctoral researcher at Brandeis University, he discovered fly fishing and has pursued it ever since with at least the same passion as science.

In the 1990s, Popp served as editor of the world's second-oldest fly-fishing magazine, the German Der Fliegenfischer. He started to build and experiment with bamboo fly rods, which are also made of a biological filament system: the plantspecific cellulose. Popp was the first to build and reintroduce quadrate split-cane bamboo rods in Europe around 1995. He has recently picked up his planing form again and is beginning to carve out a living making handcrafted bamboo wands in Japan, where traditional crafts and the masters behind them are still highly valued.





Jim Schottenham has been collecting and writing about early American fishing tackle for the better part of twenty years. A regular contributor to Hunting & Fishing Collectibles magazine, he has also contributed articles to publications such as Anglers Journal, Opulence, and the Reel News, a publication of the Old Reel Collectors Association, where he served as director (2003–2007) and president (2007–2011). In addition to his writing, he has supplied antique tackle displays and appraisals for organizations such as the Catskill Fly Fishing Center, Bass Pro Shops, the American Sportfishing Association, and other regional outdoor shows. Jim was recently included as one of the featured collectors in the newly published book by Steve Woit, Fly Fishing Treasures: The World of Fly Fishers and Collecting. A former IT manager at an upstate New York hospital for many years, Jim left to pursue a job as an appraiser for Lang's Tackle Auction, a position he's held for more than ten years. He currently lives with his wife and two dogs in upstate New York, a location that has yielded many new additions to his growing collection of early American fly reels.

Better Together

Courtesy of the Wonders of Wildlife National Museum and Aquarium



Above: The Wonders of Wildlife National Museum and Aquarium in Springfield, Missouri. Visit their website at www.wondersofwildlife.org.

> Right: Executive Director Sarah Foster checks out a large grouper while touring the Wonders of Wildlife aquarium in January 2018.

NGLERS HAVE LONG BEEN on the forefront of conservation, and it's heartwarming to see new generations with an innate need to protect fish and water—a need essential to the future of fly fishing. In line with this movement, we are fortunate to witness the creation of a tourist destination solely dedicated to building awareness of the great outdoors, one that educates, interests, excites, and influences visitors to protect our resources.

In 2017, noted conservationist and Bass Pro Shops founder and CEO Johnny Morris opened the Wonders of Wildlife National Museum and Aquarium. This unique facility in Springfield, Missouri (within a day's drive for half the country's population), is a 350,000-square-foot experience space celebrating those who hunt, fish, and act as stewards of the land and water. This not-for-profit organization has partnered with others including the International Game Fish Association (IGFA) Fishing Hall of Fame, the Bass Fishing Hall of Fame and Museum, the Boone and Crockett Club's National Collection of Heads and Horns, the National Audubon Society, and the Archery Hall of Fame and Museum—to create a must-see destination.

True to our mission, the American Museum of Fly Fishing is 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, through a variety of outreach platforms, uses these resources to engage, educate, and benefit all.

In support of our mission, we are thrilled to announce that the board of trustees has voted to partner with Johnny Morris

and the Wonders of Wildlife to install an exhibition there highlighting the history of fly fishing. Using a mix of historic artifacts, interactive multimedia experiences, artwork, and photography, this exhibition will showcase the rich history of fly fishing and the ongoing conservation efforts of anglers to protect our water and fish for future generations.

Introducing new generations to fly fishing is critical to the long-term future of AMFF and the sport we love. Reaching a substantially wider audience (Wonders of Wildlife welcomed an incredible 1.6 million visitors in its first year of operation) and having expanded space to exhibit significant artifacts from our diverse collection (many of which have never been on public display), we are confident that this partnership will better position AMFF to fulfill its mission.

The American Museum of Fly Fishing will continue as before in its Manchester, Vermont, location, offering exhibitions, educational programming, access to the Gardner L. Grant Library, and production of the American Fly Fisher journal, one of the greatest benefits of being a member. Your membership will help us to grow interest in fly fishing and expand our overall impact.

We anticipate the new space at Wonders of Wildlife to open sometime in 2020 and will share updates as these exciting plans come together. If you have any additional questions, please contact me directly at sfoster@amff.org or 802-362-3300, ext. 201.

> SARAH FOSTER **EXECUTIVE DIRECTOR**

Yoshi Akiyama



Catch and Release the Spirit of Fly Fishing!

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

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, through a variety of outreach platforms, uses these resources to engage, educate, and benefit all.

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 amff@amff.org 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 Samantha Pitcher at spitcher@amff.org 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. If you wish to contribute funding to a specific program, donate an item for fund-raising purposes, or place an advertisement in this journal, contact Sarah Foster at sfoster@amff.org. We encourage you to give the museum consideration when planning for gifts, bequests, and memorials.

Join

Membership Dues (per annum)

Patron	\$1,000
Sustainer	\$500
Contributor	\$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 Samantha Pitcher at spitcher@amff.org.

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



space for FSC info