ALL BOWED UP



Chapel Hill, North Carolina

"Though the dinosaurs are long gone, the Bowfin has survived."

Eugene Hester wrote those words in the July 1995 issue of *Wild-life in North Carolina*. It would be rare today to see that sort of generosity afforded to the Bowfin *Amia calva*, a resident of many Carolina lakes, rivers and streams, but it was rarer still a quarter century ago. Most publications ignored that unique native species or disregarded it as a "trash fish." The Bowfin didn't only survive the dinosaurs, it survived a lot of bad press.

We all feel like survivors of late, I should hope. It's been that kind of year, or two. It's been an ordeal for all of us and a tragedy for too many. I feel lucky to gather again with friends and chat with fellow anglers at a boat launch. Survival is luck to some and it is fate to others. For me, survival is a chance to reflect on the good things when we wake to another day and venture to water for another cast.

The Bowfin's survival offers some perspective. Pandemic? No problem. Try surviving the global extinction of most of the dominant saurian species, the rise of the mammals, and the Industrial Age, to name a few significant events. More specifically (and recently), try surviving the rise of a bipedal species with fishing poles and opposable thumbs. Mr. Hester chose his words well, that's for sure.



The author with an early-spring Bowfin in North Carolina.

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Henry Veggian teaches in the Department of English at UNC Chapel Hill. A member of the Jackson Kayak Fishing Team and a former director of the Carolina Kayak Anglers Kayak Fishing Trail, he writes about fishing and kayak fishing and reviews fishing books for his "Bowfin Country" blog, *Kayak Bass Fishing*, and elsewhere. He knew something that anyone who has ever tangled with the Bowfin on a rod and reel knows well: They never give up on a fight. Hook one well and pray you tied a good knot. The bite will run up your arm like an ungrounded current and tell your brain you hooked a tuna. Then hold on: A mad Bowfin pulled a jon boat loaded with gear, me, and my friend Steve across a bay; later that same year, another one did the same, but upstream, against current, on the Haw River. Both fish weighed just over 10 pounds. Our combined weight was over 400.

Some Bowfin are acrobats, some just dig for deep water. Some play possum until they get to the boat or the bank, and then you have

Editors' Note: Bowfin was considered a single species for 125 years, but in 2022 (i.e., after the original publication of this article), analysis showed "unambiguous molecular evidence for the presence of at least two living *Amia* species with more likely to exist" (Wright et al. 2022). Two species are recognized: *Amia calva* ("distributed from the Pearl River in Louisiana and Mississippi, to the Florida Peninsula, and the rivers draining to the Atlantic Ocean in Georgia, South Carolina, North Carolina and Virginia") and *A. ocellicauda* ("from the Lake Pontchartrain system west in Gulf of Mexico draining rivers to the Colorado River system in Texas, throughout the Mississippi River Basin, the Great Lakes Basin, the St Lawrence River system, including Lake Champlain, and the Atlantic draining Connecticut River system") (Brownstein et al. 2022).

Brownstein, C.D., Kim Daemin, O.D. Orr, G.M. Hogue, B.H. Tracy, M.W. Pugh, R. Singer, C. Myles-McBurney, J.M. Mollish, J.W. Simmons, S.R. David, G. Watkins-Colwell, E.A. Hoffman. and T.J. Near. 2022. Hidden species diversity in an iconic living fossil vertebrate. Biology Letters 18(11). http://doi.org/10.1098/rsbl.2022.0395.

Wright, J.J., S.A. Bruce, D.A. Sinopoli, J.R. Palumbo, and D.J. Stewart. Phylogenomic analysis of the bowfin (*Amia calva*) reveals unrecognized species diversity in a living fossil lineage. Scientific Reports 12. https://doi.org/10.1038/s41598-022-20875-4.



A Bowfin in a clear Florida spring. (Photo by Isaac Szabo)



A male Bowfin *Amia ocellicauda* in spawning condition from a Minnesota River backwater. (Photo by Gijs Van Straten)

a new fight on your hands. Try handling a Bowfin in the confines of a fishing kayak and you should probably earn a black belt.

I could never grasp why the Bowfin is a divisive topic among anglers. I primarily fish for them in the rivers and creeks around Jordan Lake, but I have ranged far and wide to catch them. Using artificial lures like topwater baits, plastic crayfish, and in-line spinners, I fish for them as I do for other sport fish. Yes, I said it—the Bowfin is a sport fish in my book, and one of the best (we'll get back to that).

The Bowfin is also a singularity, literally. Among freshwater fishes, it looks like no other. The gular plate, a bone on the underside of its jaw, is unique. It gulps air from the surface and can live out of water for much longer than other fishes. And it has no scales on its head (this is why Carl Linnaeus partly named it "*calva*" from the Latin word for "*bald*"). And the entire package, from the short whiskers on its nose to the wide, almost circular tail, adds up to make the fish a living, breathing, and fighting reminder that it is the last living member of a family of fishes (Amiidae) that is otherwise extinct.

There's a kinship among the underdogs and stubborn mules that persists despite the odds. Being a fisherman, I look to the Bowfin as a sort of spirit animal. And so, I want to pick up the line where Mr. Hester left us with his appreciation for the Bowfin and make a case for the recognition it deserves.

THE SEASON OF OUR DISCONTENT

Winter is not only a season to anglers, it is also a state of mind. It's a time to reflect on the fish we caught and the memories we share with others of catching them, of longer days, warmer mornings, and of fish waiting near a grass line for a foolish frog to test the water. Winter is also time to reflect on the year ahead, to hoard tackle we probably don't need to buy, and to repair things we broke while using that same tackle we probably didn't need. In the early winter of 2012, I decided to start tournament bass fishing from a kayak. I had just started fishing from a Jackson Coosa, a loaner from my friend Joe, and he persuaded me to fish a local kayak event earlier that fall. I had a good showing and decided to commit.

But I had another motive. Until that time, I spent most days fishing for Bowfin on the Haw River, Jordan Lake, or Shearon Harris. And I had them dialed in, as they say. An example: in 2007, I submitted my first of six applications to the North Carolina Angler Recognition Program (NCARP). All were for Bowfin. When



Iris Nelson loves Bowfins, as everyone should (Newton County, Indiana). (Photo by Olaf Nelson)

it was over, I had my "Master Angler" certificate and patch. And I kept going, catching hundreds more along the way. Over the next few years, I was interviewed in newspapers and outdoor magazines, a TV producer contacted me about a reality TV show, and in 2014 I earned a grant to finish a book I was writing about the fish. I had become "the Bowfin guy." I've worn many hats proudly in life (dad, professor, musician), but that one fit really well.

I wanted to catch Bowfin elsewhere. I wanted to see more of America, and I reasoned that I could use tournament fishing as a premise for "research." Surely, I'd catch Bowfin wherever I went in North Carolina and beyond.

Boy, was I wrong. I spent the next three years driving around North Carolina and barely winning any money. The competition was tough, the sport was booming, and my research idea was a failure. I doubled down. Between 2016 and 2020, I fished tournaments in Texas, Tennessee, Kentucky, Louisiana, and Arkansas, to name a few places, winning just enough money to keep the foolish idea alive. I watched kayak fishing grow and reach a new generation of anglers, and I caught fishes from lakes I only dreamed of fishing when I was a boy. But I never caught a Bowfin, or even saw one, despite fishing through more than a dozen states. Ironically, the fish that I had found so easy to catch in some Carolina lakes were like ghosts everywhere else.

I spent 2020 fishing in a different state. It wasn't on any map, but it was located somewhere between panic and stubborn denial. Frequently asked questions associated with this state include "What on earth is going on?" and "How am I going to go fishing without getting in trouble at work?" I had stopped traveling to out-of-state events, too, but I made an exception for the KBF National Championship. So, in early October I booked a single cabin to myself, turned off my phone, and drove to Lake Guntersville in Alabama. But I wasn't only there to catch bass.

One day, it finally happened. With my pedals and propeller lifted, I was paddling over submerged grass. The sun was behind me and the grass-filtered water was as clear as the air. There, in a deep hole, about four feet under the surface, was a fat Tennessee River Bowfin. It was parked in the shade, wearing a mottled green coat, its long dorsal fin shimmering like a leaf, its beady little eyes looking right through me. Time stops in such instances, and for all I knew that fish had been sitting there for 200 million years, and I had too.

I remember thinking we were going to survive—not necessarily that fish, or even me—but something somewhere would persist.

A WORTHY FISH

We've all seen license plates with trout on them. Some of you even have one. It's a reminder of what anglers can get done when they have a cause, an organization, and a strong case to make. Consider the Red Drum, our [NC] state fish; we celebrate it with stickers and shirts, and do our best to protect it. We build tackle, boating and guide industries, lodges and resorts, and our fisheries biologists study them in the field and labs, producing valuable data that helps them to manage water and species. All of that translates into the protection these beautiful fishes deserve and need. Conservation, understood in the true sense of the American movement that has for the past century advocated on behalf of the scientific study and protection of the environment, has achieved amazing things for many species. Think of the Bald Eagle, the Striped Bass and the Grey Wolf.

The Bowfin gets no license plates or fancy stickers. There are few tournaments for it, there is no specialized tackle, and while many scientists study its unique scales and musculature, its bones and fossils, there is little written about how it lives, or where.

I've caught Bowfin in every season, with every manner of lure, from the shallowest creeks to the deepest lakes. And I've seen a few weird things along the way. I call them "Unexplained Fishing Observations." I was fishing on Shearon Harris in the early summer of 2017 and a commotion broke the surface on a grassy point near a small cove where a beaver hutch lords over a small creek. I paddled over.

Baitfish were scattering every so often. The water was clear. To my left a school of Largemouth Bass herded the bait toward the right. When the bait moved too far, the wake on my right sprang. It was a big Bowfin. A swirl, and some bait was gone. And then it stalked the bait to the left side of the boat, and the bass would explode. From my perspective, it looked like the bass and Bowfin were cooperating.

ALWAYS A SPORT FISH TO ME

Survival doesn't just happen. We can help it through scientific stewardship and conservation, communication and hard work. I've been attending the meetings of the N.C. Wildlife Resources Commission working group that is restoring native vegetation to Shearon Harris and building new habitat for fishes. We've been meeting to discuss strategies and implement plans. Representatives of the fishing community regularly attend meetings. The B.A.S.S. representative shows up, local guides participate, our kayak fishing clubs are involved, and (if the meetings aren't too early in the afternoon) a representative of a local collegiate fishing club may be present.

I have ulterior motives, of course. When Hurricane Matthew came roaring over us in the fall of 2017, it destroyed the vegetation at the east end of the lake. The wind and rain literally tore out large fields of plants and swept them into coves, creating land where water had been and eliminating habitat where Bowfin build spawning nests on that far end of the lake. The Bowfin and bass I had seen earlier that year had lost prime hunting and spawning areas. Oh, the bass and Bowfin are still there, but they live offshore now.



Juvenile Bowfin, North Carolina. (Photo by Scott Smith)

And so, word on the street is that "Harris isn't what it used to be." That's true in the sense that the fishery has changed, but the more important question is "What will Harris be in a few years?" As native plants are seeded, and the Bowfin, bass and pickerel move back into their weedy haunts, I have a feeling the grumbling will be replaced by anglers singing Hallelujah from one end of the lake to the other.

I noted earlier that winter is a state of mind. It will be late winter when this article appears. The White Bass will be staging for their springtime runs, the frogs will be croaking in ditches on the warm days, and most of us will be sharpening our hooks. Soon, we will be back on the water. Like Shakespeare's Richard the Third, we may plan to make glorious summer of it.

But we aren't Shakespearean villains, and neither is the Bowfin. More than one of you will catch a Bowfin along the way. Some of you may be disappointed to find a Bowfin (or grinnel, or dogfish or mudfish) on the end of your line. Some of you may be confused by it, not having seen one before. You may turn to the *North Carolina Sportfish Identification Pocket Guide* and find it there, where it is listed among "other sport fish."

Is the Bowfin a sport fish? I can quote a hundred sources that attest to its ferocity. I can muster scientific literature that explains why its jaw is so strong or why its smooth head and wide tail make it a powerful swimmer. I can even quote Friedrich Nietzsche to remind us why we admire fishes so much that we chase them down like zany philosophers after a slippery truth. But while it is implied in some places that the Bowfin is a sport fish, and few deny it offers "sport," it is technically not listed as a sport fish, with the associated protections, creel limits, seasons, etc. You can catch, keep and kill as many as you want in North Carolina (granted, it is illegal to "waste" them).



On the prowl. (Photo by Derek Wheaton)

We've been through a lot of late. Our fishing lives have changed. The good news is that many people are taking to fishing and boating again. The bad news is that everyone seems to be fishing in our honey holes. It's a mixed blessing. I've been back at my old haunts around Jordan Lake again, and I've noticed a lot more dead Bowfin on the banks.

Those dead fish are a reminder that we must work together and educate anglers new and old about our fishes and fisheries, about the wonders that live in our lakes and rivers, to celebrate the survival of any and all things and protect the fishes that make our waters healthy and unique. Survival is not something we should take for granted, but it is something we can fight to achieve. What better fish than the Bowfin to remind us, as Eugene Hester did all those years ago, of how important and precious that is?



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NANFA 2022 FINANCIAL SUMMARY Submitted by Tom Watson, Treasurer

BEGINNING BALANCE: \$54,652.24 (AS REPORTED IN APR. 2022 AC) INCOME EXPENSES Membership Dues 14,579.16 Convention² -4.100.57533.62 T-shirt sales Snorkle Guide³ -444.34 Snorkel Guide 590.31 AC -17,756.75 Convention 10,415.65 Grants -2,085.00 Donations 3,393.35 USPS -1.043.11 Misc. Income1 Web Site -1,109.23713.58 TOTAL INCOME TOTAL EXPENSES 30,225.67 -26,539.00 YEAR END BALANCE (12/31/2022) \$58,338.91

¹Includes hats, cards, decals, *AC* CD, etc.

²Includes facilities, food, and t-shirts.

³Postage and reimbursements to Freshwaters Illustrated.



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