

Trout *by the* Pound

The commission is utilizing an invasive forage base to grow big trout for anglers.

WRITTEN BY MIKE ZLOTNICKI & PHOTOGRAPHED BY MELISSA McGAW

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hen Powell Wheeler and Amanda Bushon, fisheries biologists for the N.C. Wildlife Resources Commission, were conducting research on Apalachia Reservoir in 2011, they found both good and bad. The good was discovering the temperature and dissolved oxygen profiles would support stocked trout. The bad was the presence of invasive blueback herring in the reservoir. That left the question of what to do.

“Like with any fisheries related issues, we’re always asking ourselves ‘what’s the best fishery we can create in a given situation,’” said Wheeler. “Given the cold water of the system, we felt that there was an opportunity to adjust how we managed the reservoir. Looking at the resource, we thought about what could provide a unique fishery, and trout was certainly an option.”

The notion of a trophy trout fishery in the Southeast is not unique. Lake Jocassee in South Carolina, Lake Moomaw in Virginia, Lake Lanier in Georgia and Bull Shoals Lake in Arkansas have been managed as trophy trout fisheries for decades. Lakes may lend themselves to trophy trout fisheries when you have cold water and an abundance of forage for trout to eat and grow.

The Apalachia project is a pilot study, and the first reservoir in North Carolina being managed as a trophy trout fishery. And so far, it’s succeeding.

Starting in 2012, a total of 5,000 brown and rainbow trout were stocked in Apalachia each year. Commission biologists began a creel survey on the lake last December, which will run through November 2015, to determine if the stocked fish are being harvested by anglers. Biologists have also conducted both gill net and electrofishing surveys to determine the status of the trout population. “Initial results are positive,” said Jake Rash, coldwater research coordinator for the commission. “We’re seeing growth and it’s clear they’re taking advantage of the herring. The long and short of it; I think it’s going to be successful. I think it’s a real opportunity for us to provide trophy trout and provide a new angling experience for our anglers. We’re optimistic it can be a destination fishery.”

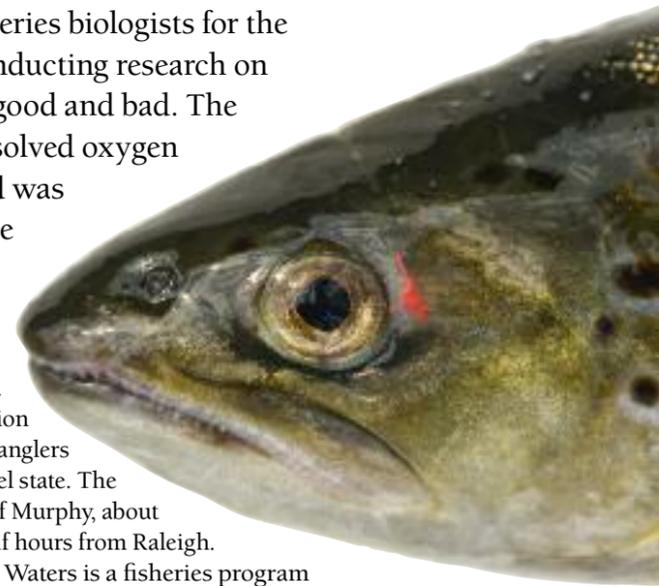
It will be a long destination trip for most anglers in the Tar Heel state. The lake is west of Murphy, about six-and-a-half hours from Raleigh.

Christian Waters is a fisheries program manager who oversees the fisheries management program for the commission. He said, “The reason we’re able to do this at Apalachia is that the conditions are right for this kind of fishery. At this point we have not identified another system with conditions like Apalachia.”

All stocked trout were marked with visible implant elastomer (VIE) to denote size and year of stocking. To differentiate between sizes of fish at stocking, 10-inch fish were marked with VIE in the left cheek and 14-inch fish were marked in the right cheek. Different colors of VIE were used each year, fish stocked in 2012 were tagged with red, blue in 2013, and yellow in 2014.

“Generally, when you look at studies on reservoir trout stocking, they suggest stocking larger fish. At that point they are more likely to adapt to piscivory-eating fish like blueback herring,” said Bushon. “To determine the size of each fish when stocked, we utilized VIE marks. Color indicates year,

Opposite page: The commission employs gill nets to sample for trout and have caught trout up to 6 pounds. Above, to identify which year they were stocked and what size they were at stocking, the trout are marked with a visible implant elastomer on a cheek. Color indicates year, and which side of the fish identifies size at stocking.



location [on the fish] is size. These data will determine the most appropriate size trout for stocking.”

Determining the most appropriate size of trout to stock is important to biologists. There’s a cost to stocking a larger fish. Not just in feed, but also in space and time. “Stocking larger fish not only requires our hatcheries to hold fish for an extra year, but it also requires more space than 10-inch fish,” said Kyle Briggs, fisheries program manager with the commission. “There is a trade-off. If we raise more 14-inch fish, we reduce the numbers of 10-inch fish that can be raised for stocking elsewhere.”

FUNDING FOR THE FISH

“This project, like most of the fisheries research we do, is funded by Sport Fish Restoration funds, which is three-quarters

federal dollars,” said Briggs. “So, that’s leveraging federal money from excise taxes via the Dingle-Johnson Act. The state funds come from license purchases and the federal funds come from excise taxes on fishing tackle and other fishing-related expenditures.”

Currently, Apalachia is not designated as Public Mountain Trout Waters. “We want to make certain that our experiment creates successful trout management before formally bringing the lake into our Trout Program” said Jake Rash. Because the lake is undesignated, anglers can harvest seven trout per day, year-round, with no bait or lure restrictions.

“Folks who are fishing it are learning how to catch the trout we are stocking,” said Briggs. “Again, it goes back to having an opportunity to enhance the fishery. You’ve got forage that’s not necessarily being utilized and so ‘what can you do?’ This is an example

of what we can do—create a unique opportunity for our anglers.”

SUCCESS, SO FAR

“We’ve fished gill nets in the fall of 2013 and 2014,” said Bushon. “So far, the largest trout we found was a 23-inch brown that was about 6 pounds. That’s extremely fast growth and we’re excited to see how large they will get. The trout anglers are ecstatic about it. It’s early, but the idea of having a trophy trout fishery is exciting.”

One person excited about it is David Woody, a conservation technician with the commission. In addition to helping with stocking and collecting trout at Apalachia, Woody is an avid angler who has fished the lake for years. “I fish the lake a lot and am very interested in the project,” he said. “Personally, I like to fly-fish with sinking lines and streamers; anything that resembles a blueback, 3–5 inches,” he said. “I caught one brown 17 inches and when I got him in the net he coughed up two 6-inch bluebacks.”

Woody said anglers using conventional gear throw spoons, swimbaits and crankbaits that resemble blueback herring. Many troll, and they often use planer boards and spoons. Woody emphasized how plentiful the forage is at Apalachia, recalling how he once saw a school of bluebacks that must have been 50 yards long when it passed by his boat.

This isn’t dainty. When fly-casting, Woody typically uses at least a 7-weight outfit and sometimes bigger. “You need a heavier rod because you’re throwing bigger flies,” said Woody.

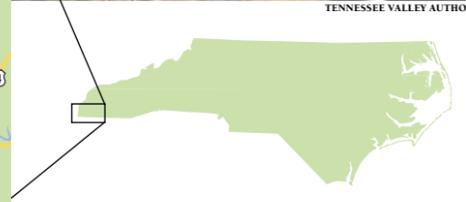
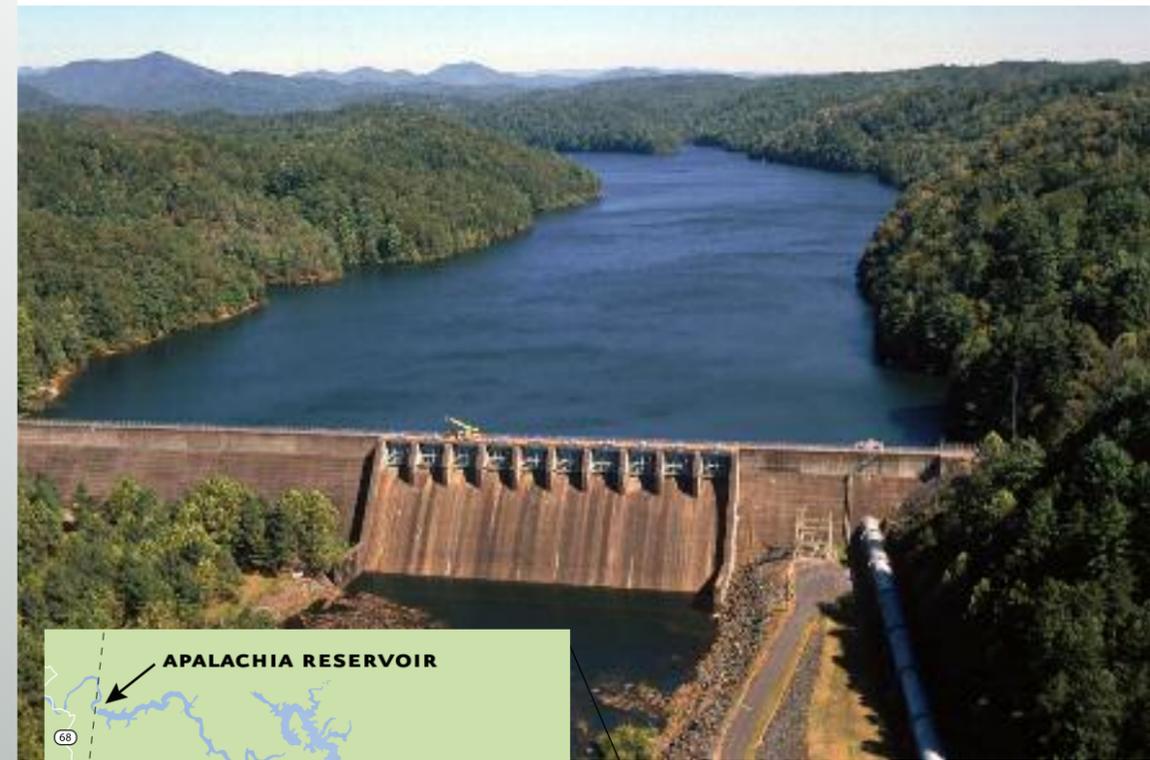
Woody said flies are Clousers and Deceivers in blue-white and solid white. Tippet 0X to 2X is a good choice, or 10- to 12-pound test fluorocarbon. In late spring, the fish can be caught on top, but when they’re deep Woody will use a 10-weight with 11-weight line for casting, not because he needs the heavier rod to fight fish. Heavy line and big flies require heavier tackle. He often uses the countdown method to get his fly where he wants it. He uses the same equipment for stripers on the Roanoke that he uses for trout at Apalachia.

His personal best is a brown almost 21 inches long and over 4 pounds. He did say he met a man who had pictures of brown trout that went 9 and 11 pounds, and given his experience with the trout he believes the weights to be accurate.

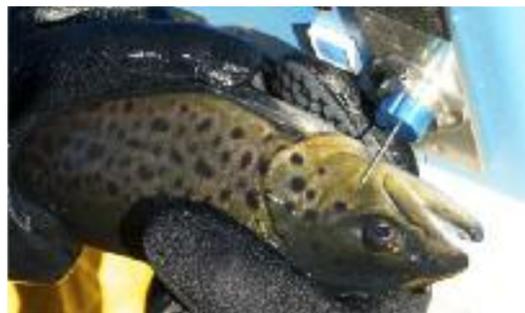
APALACHIA RESERVOIR

- Construction of Apalachia Dam began in 1941 and was completed in 1943. The dam is 150 feet high and stretches 1,308 feet across the Hiwassee River.
- Apalachia Reservoir is 9.8 miles long with 31 miles of shoreline and about 1,070 acres of water surface. It collects rainfall from a 1,018-square-mile watershed.
- A pipeline and tunnel system carries water from the reservoir 8.3 miles downriver to the powerhouse to generate electricity.
- Apalachia is a run-of-river reservoir, meaning that water is passed through the reservoir without being stored long term. The water level fluctuates about 8 feet (between elevation 1,272 and 1,280) on a daily basis.
- Apalachia Dam has two generating units with a net dependable capacity of 82 megawatts. Net dependable capacity is the amount of power a hydroelectric dam can produce on an average day, minus the electricity used by the dam itself.

Source: Tennessee Valley Authority



Conservation technicians Wes Humphries, left, and Brian Rau remove a brown trout from a gill net. This brown trout is in the process of having a coded wire tag injected in it at the Setzer Hatchery in Pisgah Forest. Later an electronic wand will be used to determine which trout have the coded wire tags in them.



His advice for newcomers wanting to try this unique fishery? “It’s a lot like striper fishing, he said. “In the summer they can be 40 feet down or busting on the surface. When it gets about 70–75 they’re not going to hang out on top. They bite better when they’re generating power. It’s a great small-mouth lake, and they seem to inhabit different habitat from the browns.”

Mark Swann, a former state record-holder for kokanee salmon, grew up fishing Fontana Lake and has spent a lot of time on Lake Jocassee. He started fishing Apalachia in 2012. His nephew boated one brown that went 4.5 pounds.

“We had a pretty good trip the first time we went,” he said. “We caught seven trout, the largest being 17 inches. I’ve been trolling for trout forever. This is going to be as good as Jocassee ever was.”

Swann uses spoons like the Little Cleo minnow-imitating lures, but some anglers use live bait, such as night crawlers. In the summer

he uses lead-core line to get his offerings down to 20 to 50 feet. When it’s cooler he’ll flat line Rapalas and other minnow plugs.

“It’s awesome that this is happening,” he said of the project. “I’m glad to see the commission put this to use. I hope they find some other lakes to do this. The potential is great for really big fish.”

The trophy trout fishery at Apalachia is not only a boon to anglers, but also an opportunity for the commission biologists to add to their knowledge, from hatchery science to resource management.

“We’re going to learn a lot from this and maybe we will be able to apply that to some other places, but it’s not like we can say we’re going to start managing reservoirs this way in the mountains,” said Bushon. “Apalachia is a unique system.”

Waters concurred, commenting on the picture aspect of the Apalachia experiment.

“Apalachia is indeed unique. Generally when exotic fish are introduced into a system,

the impacts on the existing fishery are negative,” he said. “However in this case, we are trying to turn that into a positive and utilize the forage that is now available.”

“We’re looking for opportunities to produce trophy fisheries. People want to catch big fish, we want to provide big fish,” he added. “This fits into our Trout Management Plan and part of our ongoing efforts and we’ll use what we learn here elsewhere. I don’t anticipate us duplicating this exactly elsewhere because we won’t have these exact circumstances, but we’ll certainly learn a lot about what we can do.”

So far Apalachia is looking like a successful experiment and a place where trout are measured by the pound, not the inch, because everyone loves a big fish! ♡

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