

What Can Brown Do for You?

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River Smallmouth Bass Fishing & Management in North Carolina

It's first light, and the rush of anticipation from the night before has created obvious symptoms of weariness and dry eyes. This morning's adrenaline, however, along with the singing of song birds and the lush mountain foliage helps to revive and remind you of the moment's worth.

Stepping into the cool water, you stop and look at the rocks barely visible beneath the flowing surface. At once, childhood memories of hunting crayfish in the creek come back to mind and the small grin across your face answers the silent question, "Is this where it all started?" The remembrance is shattered like glass as you look upstream. Riffle, run and pool habitats defined by flowing water (or lack thereof), shift your thoughts to the first cast of the day, knowing the brown predator you seek could be anywhere.

You survey the water and make the decision to cast your choice top-water lure into the back eddy just off the main current. Uncertain what the day might hold in terms of fishing, questions run through your mind with each cast. "Are they active?" "What are they biting today?" Suddenly the water explodes as if a large object was dropped from a nearby bridge, and between the line, pull and the pure visual stimulation of the aggressiveness just witnessed, you react in amazement and set the hook. The battle ensues as the feisty smallmouth bass begins its classic digging and drag confirming the validity of the old quote, "Inch for inch, pound for pound, this is the gamest fish that swims." Within a couple of minutes, the fish with the striking red eyes is landed, lipped, and carefully inspected for its sure bronze beauty. The angler releases the animal back to its watery home, thinking, "That was fun . . . let's do it again."

Anyone who has fished for smallmouth bass in rivers and streams can relate to this story. It's what drives the smallmouth angler each spring, summer and fall to seek the popular gamefish. As with many wild trout destinations, smallmouth bass fishing in the North Carolina foothills and mountains can provide attractive experiences of natural scenery and unrivaled fishing satisfaction. To help you enjoy the experience even more, we've put together some information on the smallmouth bass: where it can be found, the state's management emphasis on the species in North Carolina, as well as a few fishing tips on catching them.



Otoliths (inner ear bones) from fish are used to determine the age of the fish, much like the rings in a stump can date a tree. On average, it takes five to six years for a smallmouth to reach 12 inches in our state.

Recognizing the need for additional information, NCWRC fisheries biologists initiated a study in 2007 to collect population data and determine smallmouth bass distribution in western North Carolina rivers and streams. A variety of sampling techniques were used, such as boat and backpack electrofishing, angling and seining gears. Primary study goals were to:

- ∞ collect smallmouth bass population data (e.g., length, weight, age and condition)
- ∞ educate anglers regarding good North Carolina smallmouth fishing destinations
- ∞ improve angler access to rivers and streams with good smallmouth bass fisheries. From 2007 to 2009, commission biologists collected over 2,800 smallmouth bass from 42 stream reaches, ranging from streams less than 25 feet wide to rivers over 500 feet wide.

All smallmouth collected were measured, weighed and analyzed for growth information. For many populations, the average-sized fish ranged from 8 to 10 inches; however, smallmouth close to 20 inches in length were observed at the Broad River (Cleveland County), Yadkin River (Surry, Yadkin, and Forsyth counties) and Nolichucky River (Mitchell and Yancey counties), indicating potential to catch large fish at select rivers. In general, while many smallmouth bass collected were less than 14 inches, fish exceeding 14 inches in length were collected from the majority of the streams surveyed. “Large” fish (greater than 17 inches) were collected from 12 percent of streams and rivers surveyed. Based on these findings, anglers targeting smallmouth bass can enjoy a variety of fishing experiences consisting of high catch rates and good quality fish depending on the river or stream frequented.

IDENTIFICATION

The smallmouth bass is most often bronze to brownish green (hence the nicknames bronzeback or brown fish), with dark vertical bars on its sides. Unlike the largemouth bass, the smallmouth has an upper jaw that extends only to the area below the middle of its reddish eyes. Its dorsal fin has no deep notches, and three distinct dark bars radiate from around the eye.

HABITAT AND HABITS

Smallmouth bass are native to interior eastern North America (west of the Appalachians) but have been introduced elsewhere. Smallmouth bass often inhabit coolwater streams and reservoirs in the Mountains and western Piedmont areas of the state that contain diverse habitats such as logs, stumps and rock outcroppings. In streams and rivers, such habitats with current are preferred. Insects and small fish constitute the bulk diet for juvenile smallmouth bass while adults will forage on a variety of food items. Stream-dwelling smallmouths eat predominately minnows and crayfish; however, hellgrammites, salamanders and terrestrial insects are also devoured by this voracious predator.

NCWRC MANAGEMENT HISTORY

Historically, despite the smallmouth bass' current and growing popularity among river anglers nationwide, little management activity has been directed toward western North Carolina fisheries. In the 1980s and '90s, N.C. Wildlife Resources Commission (NCWRC) management efforts focused predominately on the evaluations of fingerling stocking in the Dan, Yadkin and Catawba River basins, made necessary by habitat loss or investigatory fishery manipulations. Additionally, general monitoring surveys were conducted by NCWRC biologists at the New River in Ashe and Alleghany counties in the late-1990s to mid-2000s in response to angler reports of declined fishing success.

Using small, inner ear bones called otoliths, biologists were able to determine fish age and used this information to observe the time (years) it took for smallmouth bass to reach particular lengths of interest. On average in western North Carolina rivers and streams, it takes approximately five to six years for a smallmouth bass to reach 12 inches in length. This average growth is slower than smallmouth bass populations in states such as Tennessee, Virginia and Alabama, likely due to differences in elevation, nutrient levels, geology and/or water temperature. Since fish are cold-blooded animals, feeding activity and growth are dictated by their immediate environment, especially by water temperature. Therefore, high-elevation mountain streams generally provided slower growth rates when compared to low-elevation rivers due to colder temperatures and a shortened growing season.

Although average growth rates for North Carolina smallmouth bass populations may be slower than neighboring states, individual populations reflected rapid growth rates. For example, smallmouth bass reached 12 inches in length in an average of 2.8 years at the Broad River, 3.3 years at the Yadkin River, 4.1 years at the Fisher River and 4.2 years at the Dan River. Conversely, the slowest-growing smallmouth bass population found through the study was in the Hiwassee River, where water is cooled by releases from Lake Chatuge upstream, and where it took 8.6 years for fish to reach 12 inches! The oldest fish caught was in the North Toe River was 16.2 years old and 15 inches long. Smallmouth bass older than age 10 were generally rare.

REGULATION CHANGE

Using fish length, weight and age data, biologists modeled several different fishing regulation effects on major smallmouth bass populations including those in the French Broad, North Toe/Nolichucky, Little Tennessee, Pigeon, Broad, Yadkin and Dan rivers. The model included the following harvest regulations: 10-, 12-, 14-, and 16-inch minimum-size limits and two protective slot

limits (13 to 17 inches and 14 to 20 inches). Minimum-size limits are defined by the required length to a particular fish. Protective slot limits provide a range of lengths in which fish must be released; but fish can be harvested above and below the slot-limit range with the intended purpose of allowing fish to grow larger by thinning out the small fish below the slot and protecting fish within the slot. Model predictions indicated the 14-inch minimum-size limit was the best “fit” for western North Carolina river and stream smallmouth bass populations under increased angling pressure and natural mortality. As a result, fisheries managers proposed to

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increase the statewide minimum-size limit for smallmouth bass to 14 inches from 12 inches. This proposal was vetted through a process of internal staff, legislative and public review, and on August 1, 2012, the new 14-inch minimum-size limit for smallmouth bass became law.

FISHING ACCESS

Although fisheries biologists use tools such as regulations to manage fish populations, other aspects of fish management are equally important. During recent smallmouth bass surveys, NCWRC biological staff recognized the need for public access locations on many river resources. NCWRC biologists continually seek public access locations for anglers through direct ownership and/or partnerships with other government organizations, municipalities or local landowners. One successful tool used in securing public access on private lands is the signing of Memorandums of Agreement (MOAs) with landowners, allowing the NCWRC to co-manage access areas adjacent to river resources. By signing these agreements, landowners allow NCWRC biologists to access their property for fishery surveys and permit NCWRC law enforcement personnel to enforce posted Fishing Access Area (FAA) regulations at these sites, while anglers enjoy the simple benefit of accessing the river in order to fish. FAA regulations specifically prohibit the use of activities other than fishing, unless permitted by the landowner, and are posted accordingly on-site; therefore, users will receive citations by NCWRC enforcement staff if compliance to FAA regulations are not adhered to. Several MOAs have been implemented at the North Toe/Nolichucky, New and Dan rivers. These FAAs usually consist of 2- to 3-car gravel pull-offs for wade-fishing or for launching and retrieving canoes or other small portable vessels.

Please note: while many streams and rivers have public access areas, others are located on private property and public access should not be assumed. To ensure the future of fisheries located on



private property, anglers should respect landowner's rights by obtaining permission to enter the property (Landowner Protection Act: ncwildlife.org/Licensing/Regulations.aspx) and leave the area cleaner than they found it. Public access points, as well as other smallmouth bass fishing destinations can be found at: ncwildlife.org/Fishing/Wheretofish.aspx.

FISHING TECHNIQUES

Smallmouth bass are often regarded as one of the sportiest freshwater fish, known for their stamina and fighting ability. Like other basses, smallmouths may be caught using a variety of baits and methods. Although there is never a magic bait or fishing method that works at all times, general knowledge and experience of angling gear, river conditions, optimal habitats, seasons and lure presentation can consistently result in fishing success.

ANGLING GEAR

In rivers and streams, smallmouth bass generally prefer smaller lures ($\frac{1}{32}$ to $\frac{1}{4}$ oz.); therefore, using 6- to 7-foot light to medium-heavy action rods spooled with light (4- to 10-pound test) monofilament or fluorocarbon lines may allow for increased casting distance. Additionally, many smallmouth rivers run clear under stable weather conditions; consequently, fish may become "line shy" and spook easily due to increased visibility. Anglers using light-line and finesse presentations may alleviate challenges associated with clear water, whereas increasing line size or altering line type may be more appropriate for stained or muddy water situations. Small-diameter braided lines offer the same casting efficiency as small-diameter monofilament or fluorocarbon and enhance line sensitivity and hook-setting power. Rod action may be chosen based on lure type and presentation. For example, anglers fishing with Texas-rigged soft plastic baits may opt for a long, fast-action rod for increased hook penetration, while anglers fishing exposed-hook baits such as hard jerkbaits, tube jigs or Rooster Tails may select slow- or medium-action rods, increasing flexibility (line give) to improve fish landing chances. Though gear selection is important for any fishing trip, knowledge of current river conditions can be essential for river and stream smallmouth bass fishing.

RIVER CONDITIONS

Before traveling to a river or stream, especially on long-distance trips, anglers should check North Carolina river conditions using the U.S. Geological Survey's website: usgs.gov/state/state.asp?State=NC. This site provides real-time water data (flow and gauge height) at select rivers across the state. Many riverine resources become very turbid after thunderstorms and other climactic events, which greatly reduces the smallmouth bass' visibility and causes the fish to alter their feeding behavior by focusing on sensation rather than sight.

Consequently, fishing in muddy water can not only yield poor catch rates, turbid water can also be hazardous for navigation and wade fishing. If anglers fish in turbid or stained water conditions, bright colored lures (chartreuse, yellow, firetiger, brilliant white) with rattles (crankbaits) or vibration (spinner baits, chatterbaits, swimbaits) are recommended.

SPRING

Water clarity is a critical variable to consider when river smallmouth bass fishing. Understanding seasonal influences on fish distribution and activity may also reap benefits. During early spring months (late March–May), smallmouth bass should be targeted in prespawn holding patterns. Anglers fishing these months should particularly target stream banks (slack-water areas off the main current) during afternoon hours. These pockets provide optimal refuge during above-average flows, while facilitating conditions desired for producing and raising juvenile smallmouth bass. Popular artificial baits fished slowly during this time include spinner baits, Texas-rigged soft-plastic lures (e.g., lizards, worms, Senkos and creature baits), swim baits and jigs. Another benefit of fishing early for river smallmouth is having ample opportunity to catch larger-than-average fish. Although fish over 18 inches in length can be caught during summer months, large, prespawn females are more active and susceptible during the early spring. Consequently, many anglers wishing to catch "big" smallies should increase lure size or use live bait (e.g., hellgrammites, minnows and crayfish) to enhance their chance of landing a spring trophy.



A good selection of lures is paramount for successful fishing. Downsizing is good for rivers and streams, with jigs starting at around $\frac{1}{32}$ of an ounce. Texas-rigged plastic baits and in-line spinner baits are popular.

morning/late evening) feeding cycles. Small top-water lures such as buzzbaits, Spook Juniors, Pop-Rs, Torpedoes and Jitterbugs fished during this time can be highly rewarding, as anglers experience extraordinary visual strikes and drag-screaming hook sets.

Popping bugs presented by a fly rod is also a popular technique for top-water action. During late-morning and early afternoon hours, smallmouths often occupy deeper runs, especially on bright, sunny days. Anglers targeting these habitats do well using small crankbaits (e.g., crawfish, Shad Raps, etc.) soft and hard jerkbaits (e.g., flukes, Jack's worms, Rapalas, etc.), tube jigs, Texas-rigged soft plastics, Rooster Tails and curly-tail grubs. Casting upstream and retrieving these baits with the current not only presents a more natural drift but also allows the angler to fish deeper than merely reeling against the current. As water temperatures warm significantly through the "dog days" of August, smallmouth become

SUMMER

By early June, smallmouth bass start concentrating in the shallow riffles (swift water with increased surface agitation) and deeper runs (flowing water with little surface agitation) within the main current, where they transition to aggressive crepuscular (early



Slack-water areas and stream banks are reliable areas to target smallmouths in the spring during their pre-spawn phase. Lower water flows in the fall help eliminate boats from the equation and concentrate fish for wading anglers.

sluggish; therefore, anglers fishing early and late, (exercising patience during midday hours and fishing slowly in flowing water with depth), will generally produce good catches of smallies.

FALL

September through mid-October brings cooler weather resulting in decreased water temperatures and increased smallmouth activity. These months can result in phenomenal fishing for several reasons. Streams and rivers predominately are at their lowest annual flows becoming a wade fisherman's paradise; thus, canoes, kayaks and other small vessels generally are not needed to access even larger rivers. Furthermore, the low-water conditions concentrate fish in good habitats, increasing the angler's chance at catching numerous fish per location. Plus, the cooler weather brings changing fall foliage with hints of yellow, orange and red illuminating North Carolina's mountains, creating an aesthetically pleasing backdrop to any outing.

Finally, river smallmouth bass become more aggressive, as they take on an "eat before it gets too cold" feeding behavior. Much like early spring, fall fishing increases the likelihood of catching big smallies, and early spring fishing lures aforementioned can be mimicked with successful results. Anglers fishing soft-plastic baits in deep runs and eddy pockets can also experience high catch rates. As observed during early spring months, anglers fishing afternoon and evening hours in mid- to late-fall generally have the best luck. By October's end, water temperatures have cooled dramatically, and river smallmouth anglers should concentrate on fishing low-elevation, warmer resources (e.g., Broad, Yadkin, and

Dan rivers) and use slow, bottom-dragging presentations such as Texas-rigged soft-plastic baits, slow-rolled spinner baits and shakey head jigs.

CONCLUSION

Throughout the years, river smallmouth bass fishing has increased nationwide. NCWRC fishery managers have responded to increased angler attention to smallies through various surveys and subsequent management actions highlighting the smallmouth bass in western North Carolina. Educational outreach efforts (ncwildlife.org/Learning/Species/Fish/SmallmouthBass.aspx) are ongoing and public access locations to benefit anglers have increased. And now, a new smallmouth bass statewide regulation has been enacted directly from river surveys. It is our hope and mission that visitors, current residents and future generations of anglers will be able to enjoy the same river smallmouth fishing experiences and opportunities afforded today. For some, the experience of navigating or wading through flowing water will always correlate to childhood memories of fishing in the creek and somehow, that connection enhances the already abundant presence of nature and tranquility that fishing for smallmouth bass in our rivers encompasses. While anglers can fish for smallmouth bass in reservoirs and lakes, it's good to remember that fishing from canoes, kayaks, or by wading in North Carolina streams and rivers can also be productive, challenging and aesthetically unmatched. ⚡

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