

# CASH FLOW

*North Carolina's mountain rivers and streams are brimming with trout, including many stocked by the N.C. Wildlife Resources Commission. A recent study reveals that the pursuit of those trout provides a significant economic benefit to the state.*

WRITTEN BY JIM WILSON  
PHOTOGRAPHED BY CHIP LAUGHTON



“IF YOU GO TO THE CHARLOTTE FLY-FISHING SHOW, YOU’LL SEE ALL SORTS OF PEOPLE WHO HAVE NEVER FISHED IN THEIR LIVES, BUT ARE INTERESTED IN OUT-DOOR RECREATIONAL ACTIVITIES.”

What is the value of a trout? The answer depends on whether you’re talking about economics or aesthetics. There might be as many ways of defining the aesthetic worth of a trout as there are anglers in North Carolina. The value of the fish is intertwined with the experience of fishing, with the thinking or dreaming about fishing.

As far as economics, the value of the fish can be pretty straightforward. In 2008, for example, the N.C. Wildlife Resources Commission stocked approximately 830,000 trout in western North Carolina at a cost to the agency of about \$1 million. The economic contributions of those fish to the state, however, remained undetermined until a recent report.

“The Economic Impact of Mountain Trout Fishing in North Carolina,” a study conducted by Responsive Management and Southwick Associates, revealed that the commission’s trout program is bringing considerable money to the Mountains, a region that has experienced the loss of many jobs in the manufacturing and furniture businesses. The study was conducted under contract with the commission and funded by Federal Aid in Sport Fish Restoration funds.

In 2008, the study found that the nearly 93,000 trout anglers who fished our state spent \$146 million on trips and equipment. When the secondary effects of those dollars (such as employment and income) were figured, the economic output of the commission’s trout management program reached \$174 million, which puts it just behind the western North Carolina craft guild and not too far behind the state’s wine industry in economic impact.

The telephone survey contacted over 1,200 resident and nonresident licensed anglers and questioned them about their number of days and types of trout waters fished, trends in participation in 2008, duration of trips, and expenditures.

Survey results coupled with the number of licensed anglers in 2008 and estimates of fishing activity provided estimates of total angler expenditures and goods and services purchased. “This information is important for evaluating the

effectiveness of our trout management program,” said Kent Nelson, fisheries program manager for the Division of Inland Fisheries. “Results of this survey in conjunction with a 2006–2007 trout angler opinion study help us understand and meet angler expectations and will guide undergoing revisions to our trout management plan.”

“We were interested in knowing the value of our different trout fishing programs in North Carolina,” said Doug Besler, supervising fisheries biologist for the Mountain region. And that’s exactly what the commission got. The total economic impact in 2008 of Hatchery Supported waters measured \$72.7 million, \$55.2 million for Wild Trout waters and \$46.5 million for Delayed Harvest. Besler calculated, based on the number of locations that year, that each Hatchery Supported location was worth approximately \$500,000, and each Delayed Harvest location about \$2.2 million to North Carolina’s economy.

Hatchery Supported were the most frequently fished waters (625,147 days), followed by Wild Trout waters (422,671 days); and Delayed Harvest waters (374,611 days).

These data confirm information from the 2006–2007 trout angler opinion survey, which revealed that anglers most often fished and preferred to fish Hatchery Supported waters. Four of the commission’s state fish hatcheries—the backbone of the Wildlife Commission’s trout program—combined to produce and distribute more than 900,000 brook, brown and rainbow trout in 2009. Ninety-six percent of trout stocked into Hatchery Supported and Delayed Harvest waters average 10 inches or longer, with the remainder over 14 inches.

From 2000 to 2009, the numbers of trout stocked by commission hatcheries increased from 775,868 to 901,477. Major renovations and new technologies such as liquid oxygen systems enabled the hatcheries to meet increasing stocking demands, but space and water remain limiting factors. Meeting the challenges of increased production could require additional renovations of existing facilities and construction of new hatcheries.

The information obtained from the recent survey does more than document economic contributions of trout anglers to North Carolina. It paints a picture of a fishery in a state

of change. Decades ago, trout fishing in the mountains was a more regional and local affair. In those days, the mountains were remote, the people clannish and the journey was something of an expedition. Trout-fishing day trips, except for locals, were all but nonexistent. Those days are no more.

One trend the survey showed is that the number of trout anglers from the Piedmont and its large urban areas—Raleigh, Charlotte, Greensboro and Winston-Salem—is increasing, while the relative number of anglers from the mountain region is decreasing. The number of mountain residents who trout fish remains sizable, but the percentage is decreasing.

“If you go to the Charlotte Fly-Fishing Show, you’ll see all sorts of people who have never fished in their lives, but are interested in outdoor recreational activities,” Besler said.

Today’s trout angler, or landowner, might be more a Charlotte banker, originally from New York, than a Mountain native such as legendary fisherman Mark Cathey. That demographic change is having effects on trout fishing, particularly as it relates to fishing access.

For many years, commission biologists would simply have verbal agreements with landowners to allow angler access to streams flowing through their property. “For years and years—the first 60 years—that worked great,” Besler said. “It was primarily local anglers fishing streams who knew the landowners. Now it’s out-of-town anglers and landowners.” Increased population growth and development in the mountains has created difficulties.

“We’ve seen an increase in posting against trespass,” Besler said. “Landowners are scared of liability issues, even as it relates to fishing. On average, about nine percent of every stream in our program is posted against trespass on private land. In 25 years we’re likely to see more posting. As such, it’s critical to maintain public fishing access to private lands and find new fishing opportunities.”

Providing access for fishing or hunting is a priority for the Wildlife Commission. It’s also at times a daunting task, and almost always an expensive one. And obtaining access on trout streams can be particularly expensive.

“It’s a lot cheaper to buy land that’s already been logged for a game land in the



Trout angling in the Mountains is a traditional activity that has evolved into a huge fishery with significant economic implications for regional towns and counties.



## TROUT NUMBERS

### THE BASICS

Trout Anglers	92,769
N.C. Resident	76,761
Nonresident	16,008
Age	50
Sex	93 percent male
Days Fished	1.42 million

### ECONOMIC CONTRIBUTIONS

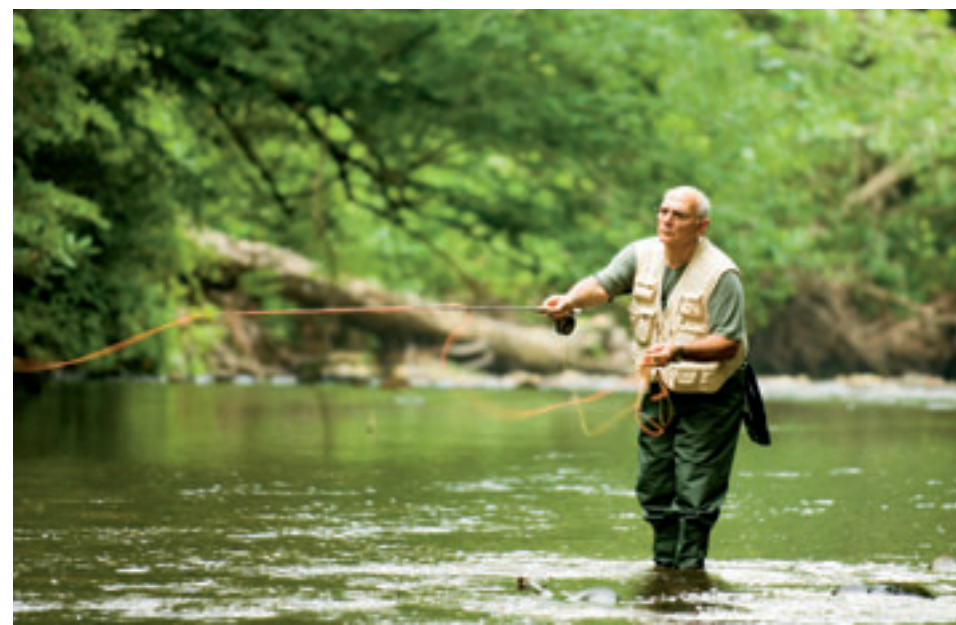
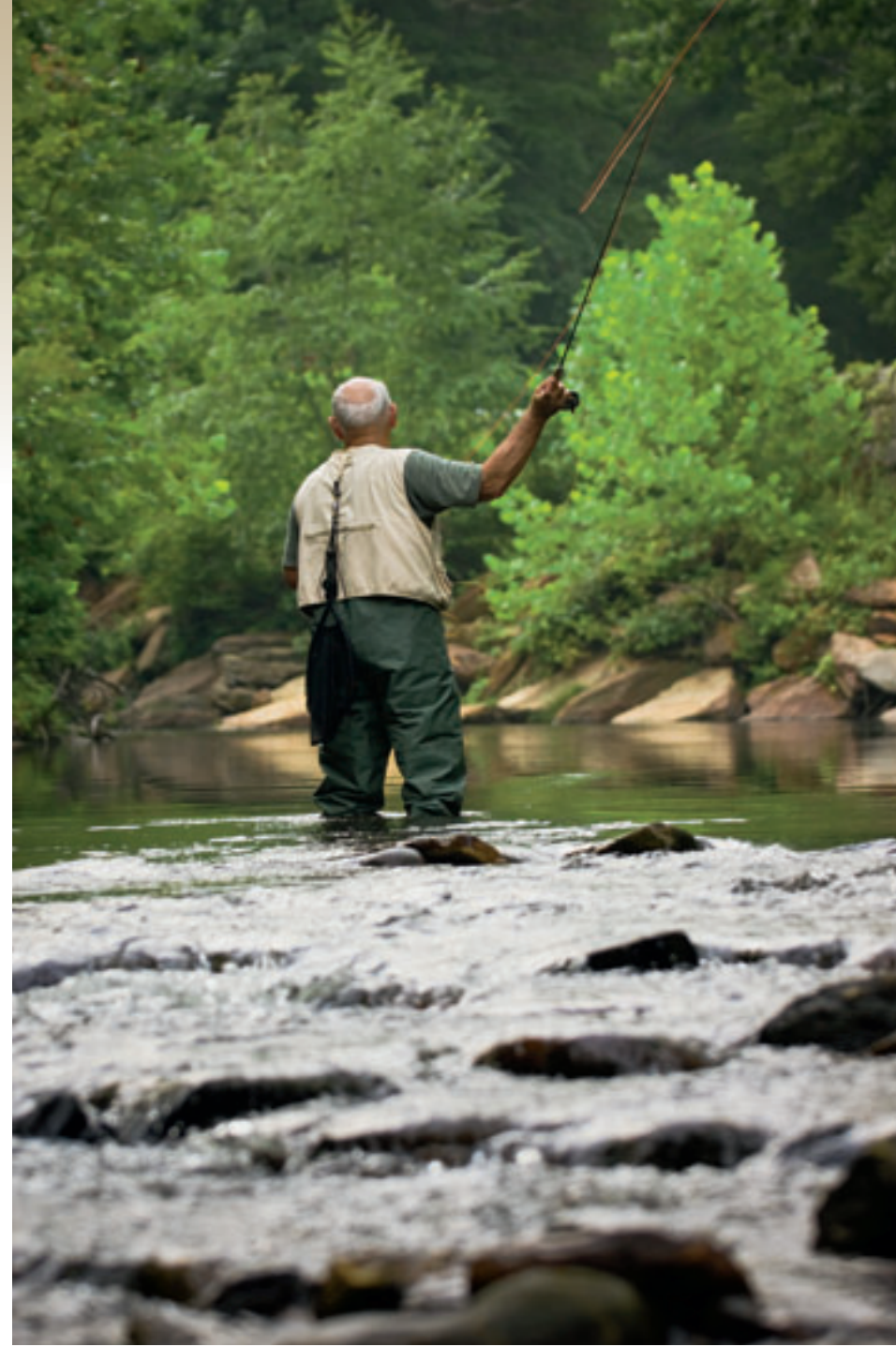
Hatchery Supported Waters	\$72.7 million
Wild Trout Waters	\$55.2 million
Delayed Harvest Waters	\$46.5 million

### CLASSIFICATION POPULARITY

Percentage of anglers who frequently or occasionally fished these stream classifications:

Hatchery Supported	
Resident	75
Nonresident	68
Wild Trout	
Resident	44
Nonresident	44
Delayed Harvest	
Resident	40
Nonresident	44

To read the full report, visit [www.ncwildlife.org/Fishing/documents/TroutEconomicImpactsFinal\\_08062009.pdf](http://www.ncwildlife.org/Fishing/documents/TroutEconomicImpactsFinal_08062009.pdf)



**Anglers from all sorts of backgrounds and locations have embraced fly-fishing for North Carolina trout. Their dedication shows in the money they spend to pursue trout fishing.**

eastern part of the state than it is to buy 5 miles of pristine trout stream,” Besler said. For example, the commission’s acquisition of the International Paper lands, some 60,000 acres, cost about \$66 million dollars, roughly \$1,000 an acre (see “The Big Buy,” Oct. 2009). Recently, about 700 pristine acres along Wilson Creek that were added to Pisgah Game Land cost about \$7 million,

10 times the cost per acre of the IP lands in the Piedmont and Coastal Plain. The purchase, with Natural Heritage Trust Fund and Clean Water Trust Fund monies, provides about 3½ miles of fishing access.

As part of the Delayed Harvest program, the commission stocked 28,000 trout into Wilson Creek.

But access itself need not be so expensive. That’s where the economic study comes into play. Besler hopes to use the results of the study to promote trout fishing in western North Carolina towns and counties that have property adjoining trout waters. It’s a win-win situation for both local governments and trout anglers. Towns and counties benefit from the economic contributions of anglers, and anglers benefit from increased fishing opportunities. The study documents the economic benefits of trout fishing with many of the trip-related expenditures, including lodging, restaurants, groceries, fuel and bait, occurring locally.

Some towns already have seen the benefits of providing fishing access. Bakersville and Old Fort now have Delayed Harvest water in their towns. At one time the Ararat River in Mt. Airy was degraded to the point that the commission removed it from the

Hatchery Supported program. With the river cleaned up and access provided by the city, the location was returned to the program and could soon have a Delayed Harvest section.

Spruce Pine was hit hard by hurricanes Ivan and Frances in 2004, losing businesses and houses along the North Toe River because of flooding. Prevented from rebuilding in the flood plain by FEMA, the town has turned part of those locations into a park with fishing access.

“They can’t build back, so they’re utilizing the North Toe River as the natural resource to attract people to come to Spruce Pine,” Besler said. “Now there’s public access to the river and we added this section to the

Delayed Harvest program two years ago. There are fly shops opened up in town now. Now that there is permanent access we’re working with the town to put in fishing platforms for physically challenged anglers.”

Besler said he considered any negatives for a town or county, but has not been able to identify any; he hopes that towns and counties will consider developing trout fishing opportunities. “Take the more rural counties like Alleghany or Ashe, for example. If the county could provide access to a section of stream within 3 miles of West Jefferson, there would be significant economic benefits to West Jefferson.”

A different way of looking at access is not the only new idea we might see as the commission’s Division of Inland Fisheries prepares its new trout plan, due in 2011. Besler said we should address the recruitment of trout anglers and provide quality fishing experiences.

“We can’t have the expectation that everybody will grow up hunting and fishing, that everybody knows where to hunt and fish,” Besler said. “If we want to capture new anglers and hold on to our existing ones—and hunters—we’ve got to treat people like it’s the first day they’ve ever been in North Carolina and it’s the first day they’ve ever fished. If we can accommodate those things, we’ll continue to have people who will fish.”

And that ties back to access. Anglers want fishing locations well defined. “If you come into town as a visitor and there’s a park or greenway to fish, I’d feel comfortable. I’d think, *I could fish there*. That’s an impetus behind us in trying to get towns interested in the commission’s trout management program. People want a location where they can fish and not worry about violating somebody’s private property.”

Besler sees great things ahead for trout fishing in North Carolina, as does Robert Curry, chief of the Division of Inland Fisheries, who said, “In addition to the economic contributions, trout fishing provides are intangible benefits of a wholesome outdoor recreational activity that is family-oriented and adds to our quality of life.”

*Jim Wilson is the associate editor of Wildlife in North Carolina. He may be contacted at [jim.wilson@ncwildlife.org](mailto:jim.wilson@ncwildlife.org).*