Alabama tops the list

USGS ranks state No. 1 in aquatic biodiversity

LAKE WATCH
BY ERIC REUTEBUCH

The first governor of the Alabama Territory (William Wyatt Bibb) designed the Great Seal of Alabama in 1817. Owing to their importance, the major rivers of the state were prominently depicted on the seal. Water remains a high priority to this day, as attested by the "Water Wars" that have raged on for the past couple of decades – a conflict between Alabama, Georgia and Florida over the rivers flowing across their lands.

This conflict may seem a bit odd, given that Alabama and the southeastern U.S. are blessed with abundant precipitation. At 56 inches per year, Alabama ranks third in average annual precipitation among all 50 states, behind Hawaii at 110 inches per year and Louisiana at 57 inches per year. In fact, the Southeast is the wettest region in the continental U.S.

The number of rivers and streams in the state has been estimated at greater than 77,000 miles for many years. And that number just got a whole lot bigger; in mid-2016, the Geological Survey of Alabama (GSA) recalculated the river/stream mileage using new GIS data (USGS National Hydrography Dataset – Best Resolution for Alabama), and the new value for our state is a whopping 132,419 miles of rivers and streams.

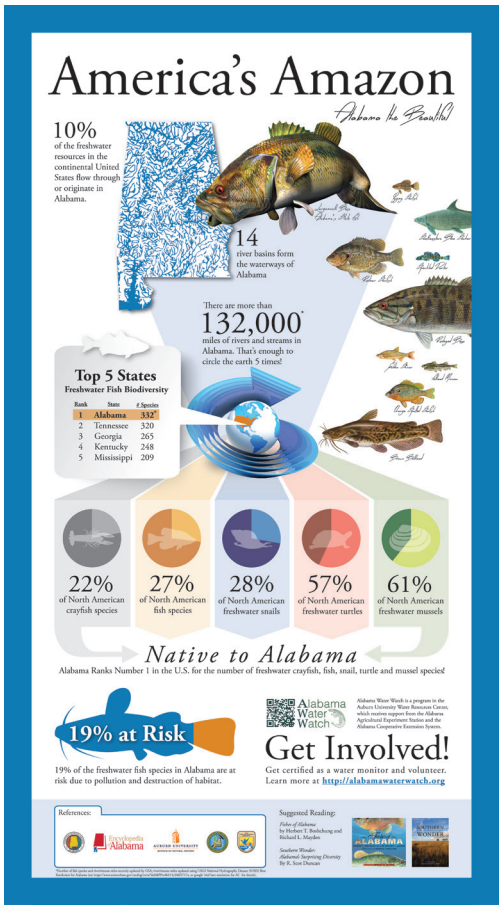
Though there are states that have more river/stream miles owing to their larger area, Alabama is number one in river/stream miles per landmass, with more than 2.5 miles of rivers/streams for every square mile of area.

More amazingly, Alabama is also number one among all 50 states in aquatic biodiversity. Alabama has more species of fish, crayfish, freshwater mussels, freshwater snails and freshwater turtles than any other state.

It is truly a fisherman's (and an aquatic biologist's) paradise and for one reason: We have so much water. Overlay that with a mild climate and a tremendous diversity of landforms or physiographic provinces – including the Piedmont, which is the home of Lake Martin – and voilà – a kaleidoscope of life. For a much more in-depth and fascinating explanation, check out Dr. R. Scott Duncan's *Southern Wonder: Alabama's Surprising Biodiversity*.

The GSA recently updated the state's freshwater fishes from a total of 325 to 332 species. That's a lot of different fishes, especially considering the fact that several states only have as many as 30-40 species of fish.

Some of the stream fish in Alabama rival tropical fish in their beauty, most notably the darters. Take a look at the rainbow darter; it is aptly named. Others of equal beauty include the banded darter, the speckled darter, the lipstick darter, the redfin darter, the watercress darter, the holiday darter, the harlequin darter and our very own Tallapoosa darter, to name a few. Stunningly beautiful, several of these small stream fishes, which grow to only a few inches in length, are highly endangered – some of the rarest fishes on the planet. Some, like the watercress darter, exist only in a few isolated springs or stream sections in Alabama – the only places they are found on the entire planet.



This treasure of a world-class array of aquatic species that few Alabamians either know about or fully appreciate was the impetus behind the development of the infographic *America's Amazon – Alabama the Beautiful*.

Every Alabamian should know of this awesome living treasure that calls Alabama its home, and they should be proud of it. The folks at Alabama Water Watch hope to get this new infographic and its message out to every school and every student in Alabama.

Being number one in God's beautiful creation of life is truly something to cherish and protect. This is part-and-parcel of the mission of Lake Watch of Lake Martin. As we work to protect the streams and rivers that flow into Lake Martin, we protect the lake. To learn how you can join us in this effort, visit us at www.lakewatch.org.

Eric Reutebuch is president of Lake Watch Lake Martin.