

Two species found 'nowhere else on the planet' documented in western N.C, museum says

April 24 2023, by Mark Price, The Charlotte Observer



Credit: *Zootaxa* (2023). DOI: 10.11646/zootaxa.5270.2.3

A feisty looking crustacean in North Carolina's Blue Ridge Mountains is a new species found nowhere else in the world, according to the North Carolina Museum of Natural Sciences.

Called the Stony Fork Crayfish, it is one of two [new species](#) revealed in [research](#) by a team of North Carolina scientists published April 20 in *Zootaxa*. The other [species](#) is called the Falls Crayfish.

Both creatures resemble miniature lobsters: The Stony Fork Crayfish is just under 4 inches from nose to tail, and the Falls Crayfish is slightly smaller, the [museum](#) reports.

They were discovered "tucked into niches of neighboring streams" that feed into the western upper Yadkin River basin in western North Carolina, officials said.

Bronwyn Williams, a museum research curator of non-molluscan invertebrates, conducted the extremely dirty research nearly six years ago with experts from the N.C. Wildlife Resources Commission.

Williams caught her specimens in a variety of ways, including seine netting and dip netting, as well as "simply flipping rocks."

"I vividly remember catching one of these [crayfish](#) ...(and) being really confused. It looked like the Big Water Crayfish, which is known from the complete opposite side of the Eastern Continental Divide, in the Watauga and New Rivers," Williams told McClatchy News.

"But here we were in a smallish tributary to the Yadkin River, which flows the complete opposite direction, into the Atlantic Ocean."

The best explanation is a geologic phenomenon known as stream piracy in which "a waterway erodes into a divide, capturing or diverting an adjacent waterway into itself," the researchers say.

"This is really neat, as it suggests that a previously unknown, localized, temporary, aquatic connection bridged the Eastern Continental Divide

near where the headwaters of the Stony Fork and Lewis Fork are now," Williams said in the release.

The two new species live in "highly restricted" ranges, which means they have adapted to specific conditions, the museum says.

Williams worked with Michael Perkins and William Russ from the N.C. Wildlife Resources Commission on the research, officials said.

More information: Michael A. Perkins et al, Integrative taxonomy reveals two new narrowly-endemic crayfish species (Decapoda: Cambaridae) from the Yadkin River Basin in western North Carolina, USA, *Zootaxa* (2023). [DOI: 10.11646/zootaxa.5270.2.3](https://doi.org/10.11646/zootaxa.5270.2.3)

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Citation: Two species found 'nowhere else on the planet' documented in western N.C, museum says (2023, April 24) retrieved 16 July 2024 from <https://phys.org/news/2023-04-species-planet-documented-western-nc.html>

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