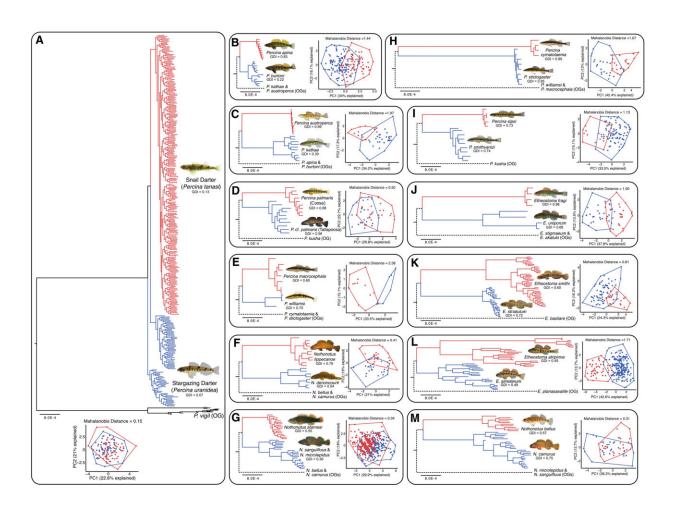


Snail darter revisited: Famous fish that halted a dam's construction is not endangered after all

January 7 2025, by Bob Yirka



Phylogenetic relationships based on genomic data and the results of PCAs using morphological data for each of the sister-species pairs examined in this study. Credit: *Current Biology* (2025). DOI: 10.1016/j.cub.2024.11.053



A team of ecologists, evolutionary biologists and resource managers affiliated with several institutions across the U.S. has found that the snail darter, which was famously used by environmentalists in the 1970s to block construction of a damn, is not actually a distinct fish species. In their study, <u>published</u> in the journal *Current Biology*, the group used standard species determination testing to investigate the distinctiveness of the snail darter.

In 1967, construction began on the Tellico Dam—the aim was to create a reservoir on the Little Tennessee River, approximately 20 miles southwest of Knoxville. The <u>dam construction</u> was led by officials with the Tennessee Valley Authority. Shortly after construction began, a zoologist with the University of Tennessee discovered a previously unknown fish living at the bottom of the river.

A quick study of the fish suggested it was unique and at risk of extinction if the dam was built. That fish, the snail darter, soon became a symbol for the use of an endangered species as a way to prevent the development of projects across the country in the ensuing years.

After the Environmental Protection Agency got into the dispute, the courts became involved. Things were settled when President Jimmy Carter signed a bill exempting the Tellico Dam from protection by the Endangered Species Act—the dam was built and all those involved moved on to other business.

In this new study, the research team took a closer look at the fish involved in the controversy. After conducting standard species identification and classification testing, they discovered that the snail darter was not a unique or endangered fish after all. Instead, it was a member of the stargazing darter species, which is present and plentiful in many places in the U.S.



The researchers conclude their paper by declaring the snail darter was a phantom all along—there never was such a <u>fish species</u>. They suggest the research team who initially studied the fish were more interested in stopping the construction of the dam than in saving a fish species. They describe it as an early example of the "conservation species concept"—where people or groups declare a species at risk to help achieve a larger conservation goal.

More information: Ava Ghezelayagh et al, Comparative species delimitation of a biological conservation icon, *Current Biology* (2025). DOI: 10.1016/j.cub.2024.11.053

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