## SCIENCE NEWS®

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COVER: The Deep Sea Drilling Project has wandered the world's oceans for ten years, exploring more than 450 sites. As it comes due for renewal, the project faces scientific and government scrutiny. See story p. 408. (Map by Heezen and Tharp/L-DGO, courtesy NSF)

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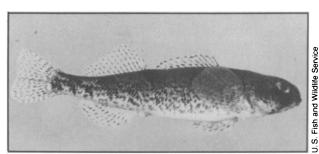
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## SCIENCE NEWS OF THE WEEK

## Snail Darter Halts Dam— For Now



Three-inch fish takes on million-dollar dam.

In what one dissenting justice labeled an "absurd result," the Supreme Court ruled 6 to 3 last week that a \$120 million dam on the verge of completion in Tennessee must be stopped in order to save an endangered species of fish. The snail darter, a small, bottom-dwelling perch, is safe for the moment. But the ruling may ultimately fuel amendments to the 1973 Endangered Species Act, making it "more flexible" and enabling some federal projects to proceed even if certain species die off in the process.

It began with a three-inch fish. The snail darter was discovered in 1973 by a University of Tennessee ichthyologist. Ecologists soon found that the fish lived in the last 38 miles of the Little Tennessee River and required shallow, fast-flowing water to live and spawn. Estimated to number between 10,000 and 15,000, the darter was quickly put on the endangered species list. The Tellico dam, under construction since 1967 by the Tennessee Valley Authority, would create an impoundment and destroy the darter's critical habitat. It would also provide electricity to light about 20,000 homes, improve down-stream flood control and create hundreds of miles of shoreline for recreational development. Moreover, the Interior Department's Fish and Wildlife Service says it may take 10 to 15 years to determine if the darter can be successfully moved away from the area around the dam to another environment.

Testifying before a Senate subcommittee, Senator Jake Garn (R-Utah) represented one school of thought, saying: "I do not believe that any animal, no matter how worthless, ought to be allowed to halt any project, no matter how valuable." Dam proponents note that the darters are hardly a rare item, unlike the endangered manatee or whooping crane. In Tennessee alone, there are 85 to 90 species of darters, with new ones being discovered at the rate of about one per year. Even trained ichthyologists find species of darters hard to tell apart.

Side-stepping this attack, conservationists have hit the dam rather than tout the fish. According to the Environmental Policy Center, the value of the 16,000 acres of threatened cropland "is greater than the cost of the dam" and its "annual productivity would exceed in value the power

revenues from the tiny amount of hydropower produced." Conservationists also point to the loss of a renowned trout fishery and the inundation of more than 200 historical and archeological sites, including the ancient Cherokee village of Tenasi, which gives its name to the state. At best, flood control would cut the crest at Chattanooga by about two inches. And stopping the dam is not a total waste, they argue. A majority of the project's \$120 million budget has purchased agricultural lands, new bridges and better roads that will still be usable if the dam is never put into operation.

Heated opinions did not ruffle the Supreme Court. In a 40-page ruling, the Court found that by writing the Endangered Species Act, Congress has settled the issue in absolute, uncompromising terms. The darter is endangered. The Little Tennessee River above the dam site is its critical habitat. Therefore, the law forbids the operation of the dam. "The plain intent of Congress," wrote Chief Justice Warren Burger for the Court, "was to halt and reverse the trend toward species extinction, whatever the cost." In a dissenting opinion, however, Justice Powell noted that "there will be little sentiment to leave this dam standing before an empty reservoir, serving no purpose other than a conversation piece for incredulous tourists."

Too true. Already the House is moving to gut the Endangered Species Act or to flatly exempt the Tellico dam. More likely to pass, however, is a carefully drafted bill by Senators Howard Baker (R-Tenn.) and John Culver (D-Iowa). That measure, now awaiting Senate consideration, would establish general criteria and procedures for resolving both the Tellico tangle and future conflicts of this sort. It would create an interagency review board of high-level government officials who could permit a federal project to destroy a species of life if the project's benefits "clearly outweigh" the value of the species.

The problem, as conservationists see it, is that some species are found "valuable" only in retrospect. By allowing plants and animals to die off, they argue, we may be losing things of value to the human race. Who, for example, knew the value of bread mold 50 years ago? But the discovery of penicillin has saved millions of lives.

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