

30 YEARS OF THE ENDANGERED SPECIES ACT

DEVILS HOLE PUPPFISH

The Devils Hole pupfish was one of the first species protected under the Endangered Species Act. The tiny fish was in danger of extinction when development threatened the water source for the cave pool in Devils Hole, the pupfish's only natural home.

HISTORY OF ENDANGERMENT

The world's entire naturally occurring Devils Hole pupfish population resides in southern Nevada in a single small pool at the bottom of a limestone cave, where it has evolved in isolation for more than 10,000 years.



Jack Williams

In a move to protect the species, Devils Hole was designated part of the Death Valley National Monument in 1952. However, water use by ranchers and developers near Devils Hole increased until the size of the pool was so small that it put a severe strain on the pupfish population. If water levels recede below the shelf where pupfish feed and breed, it would mean certain extinction for the species. A water shortfall this extreme nearly happened in the late 1960s and early 1970s when the pupfish population dropped as low as 124 individuals.

ROAD TO RECOVERY

The Devils Hole pupfish was listed as endangered in 1967 under the Endangered Species Protection Act, followed by the Endangered Species Act of 1973. By the 1970s, the plight of the pupfish was national news, and the public began pressing the government to protect the rare fish and its unique habitat.

The Endangered Species Act protections for the pupfish were enforced by a 1976

court decision that ruled that groundwater pumping in Ash Meadows should be halted and a minimum water level should be set for Devils Hole. In doing so, the court set a precedent, implicitly reserving groundwater for an endangered species.

The land surrounding Devils Hole was purchased from developers, and the 22,000-acre Ash Meadows National Wildlife Refuge was created in 1984. Because the pupfish's habitat remains at risk, two additional populations were created to be reintroduced to Devils Hole in the event that a natural disaster eliminates the original population.

CONSERVATION TODAY

The protection of the area surrounding Devils Hole helps to ensure that the pupfish will have habitat to survive and thrive. The wetlands, springs, and channels of Ash Meadow National Wildlife Refuge are protected from outside use in an effort to ensure that water levels remain suitable for the Devils Hole pupfish and for other plants and animals that depend on the area for their survival.

ECOLOGICAL VALUE

Ash Meadows National Wildlife Refuge has the distinction of having the highest concentration of endemic species of any location in the United States. It provides habitat for at least 24 plants and animals found nowhere else in the world, including 12 threatened and endangered plants and animals.

The refuge and the Devils Hole pupfish played a formative role in today's environmentalism. The impending extinction of this tiny desert fish caused people to question whether new agricultural and urban development should take place at the expense of the survival of a species and its ecosystem. The court's decision set a precedent that has protected numerous species since 1976.

OUTLOOK FOR THE FUTURE

Though it was once at the brink of extinction, the Devils Hole pupfish has been brought back to a stable population of 450 individuals through the protections of the Endangered Species Act.

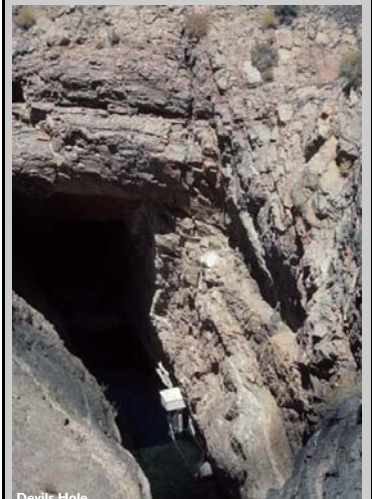
Unfortunately, there continue to be decreases in the water level in the cavern, and the fish is constantly threatened by the effects of natural erosion like surface runoff of silt and sand, vandalism, and development in the surrounding area.



Peter Rissler



E.E. Hertzog/EWS



Devils Hole