

# THE BLACKSIDE DACE AND CUMBERLAND DARTER

## How mountaintop removal coal mining is endangering aquatic wildlife

### WHAT ARE THE BLACKSIDE DACE AND CUMBERLAND DARTER?

These two small rare freshwater fish are native to the upper reaches of the Cumberland River system in Kentucky and Tennessee. The Blackside Dace has disappeared from at least 24 streams since 1960 and was listed as threatened under the Endangered Species Act in 1987. The Cumberland Darter now exists in sparse, isolated regions in just 13 streams above the Cumberland Falls in Kentucky and Tennessee. The Fish and Wildlife Service listed it as an endangered species in 2011 and designated Jellico and Capuchin Creek's in Tennessee as critical habitat for the species in 2012.

### WHAT ARE THE THREATS TO THESE TWO SPECIES?

Mountaintop removal mining has caused a significant decrease in the Dace and Darter populations. Mountaintop removal is an extremely

destructive form of coal mining. Mines clear-cut timber and undergrowth, blast open the earth, and destroy streams, including by filling them with mining waste. This devastating practice poisons drinking water, lays waste to wildlife habitat, increases risk of flooding, and wipes out entire communities.

According to a 2005 Environmental Impact Statement, mountaintop removal coal mining has buried and contaminated more than 2,000 miles of streams in Appalachia – and many more miles have been buried since then.

Specifically, it is the pollution identified by high conductivity levels in water downstream from mountaintop removal sites that poses the clearest danger to the Blackside Dace and the Cumberland Darter

### WHAT IS CONDUCTIVITY?

Conductivity is a measure of certain pollutants in water and the EPA has stated that “high levels of conductivity, dissolved solids, and sulfates are a primary cause of water quality impairments” downstream from valley fills and other mining operations.

When conductivity levels get too high scientific studies show that the Blackside Dace and Cumberland Darter cannot maintain healthy populations. In fact, the U.S. Fish and Wildlife Service has stated that the “maintenance of conductivity at a level that is suitable for the Blackside Dace is crucial to the species’ recovery.”

Recent scientific studies have shown that mining wastewater increases the level of conductivity in Cumberland River system streams well above the



Blackside Dace. PHOTO: Conservation Fisheries



Cumberland Darter. PHOTO: Conservation Fisheries



Zeb Mountain site in Tennessee. PHOTO: Courtesy of Statewide Organizing for Community eMpowerment

amount that the Dace and Darter can withstand and maintain healthy populations. Further, mining-caused increases in conductivity correspond closely with the decrease in population of both species.

In 2010 the Environmental Protection Agency reviewed state mining permits in Appalachia and found that none of them took steps to prevent pollution that increases conductivity in streams they filled with debris.

### WHY DOES THIS MATTER TO YOU?

We all live downstream from waterways damaged by mountaintop removal and these two species are just one indicator of the tragedy that mountaintop removal represents to our wild spaces. The Blackside Dace and Cumberland Darter are on the brink of extinction and, rather than destroying them, we should act as stewards of creation.

Tennessee is home to beautiful lakes, streams and rivers that people from all over the country come

to visit. Fishing is a natural part of our heritage and any threat to that life cycle threatens our outdoor heritage.

Finally, mountaintop removal is simply a dangerous practice. Mountaintop removal operations frequently contaminate local water sources. They release toxic pollutants such as selenium and heavy metals. Communities near mountaintop removal mines experience elevated rates of serious health problems such as cancer and birth defects.

It's up to us to preserve our natural habitats for our children and for future generations.

### WHAT CAN I DO TO HELP SAVE THESE SPECIES AND PUT A STOP TO MOUNTAINTOP REMOVAL?

- Help stop the devastating practice of mountaintop removal coal mining: <http://www.sierraclub.org/mtr>.
- Get involved with the Sierra Sportsmen Network on angler issues: <http://www.sierrasportsmen.org/>.
- Write a letter about the coal industry and selenium to the editor of your local newspaper.



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