



Eel Ladder at Daniels Dam

“Don’t it always seem to go that you don’t know what you’ve got til its gone...”

This lyric from Joni Mitchell’s 1970 song applies to many relationships between “civilization” and nature. On seemly rare occasions, we see nature starting to recover from the encroachments of civilization. One example is in our Patapsco River above Daniels Dam; there the American eels have dramatically increased the last couple of years. How do we know this? Why is it occurring? Why would we care? Read on to find out.

Some species of mussels are totally dependent on eels to transport them upstream. Young female eels become unwitting hosts to our native [Eastern elliptio mussel](#) larvae. This freshwater mussel’s larvae attach to the eel’s gills for transportation to headwaters. Once upstream, the mussels drop off from the eels into the stream-bed to begin their life filtering the water. A single mussel can filter up to 15 gallons of water daily, improving water quality.

Eels are effective apex predators in headwaters. Maryland DNR biologist compared headwater survey data of those containing eels to those that no longer contain eels (because of dams). They found lower fish density and higher aquatic insect density in water that

contained eels.

Historically eels comprised about 50% of the fish in Maryland rivers. Dams and overfishing have dramatically reduced their presence. Commercial fishermen sell adult American eels for food to Asia and Europe, mid-sized eel for bait and glass eels to Chinese fish hatcheries.

There is hope. Maryland environmental agencies removed 3 dams on the lower Patapsco River. In 2014 they installed an eel ladder at Daniels Dam. For the first several years, their monitoring counted about 30 eels annually, then jumped to over 300 after the last downstream dam was removed. In 2022, over 36,000 eels ascended the Daniels ladder.

Paradise is being restored!

[A video of an eel ladder at Roanoke Rapids Power Station](#)



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