



Plecoptera? More like Ple-cute-ra!

By Sam Luitjens

Freshwater Biology, Fall-2019, University of Maryland

As you wade around in the water, you're probably thinking of all the horrific, disgusting, creepy bugs that are crawling all around you. They may be in your shoe or up your leg, who knows! They say the biodiversity of bugs is important, but to you, the less bugs out here, the better. Why bother learning about them, let alone saving them?

Yet the more you pull out your net and investigate the contents, the less you find yourself wincing at what's inside. You become more and more fascinated by the little creatures, and find yourself enjoying identifying them and investigating what characteristics they have. Eventually, you let them climb up on you so you can really get a close look at them.

You continue your search for specimen in a fast paced area of Fishing Creek. A certain rock draws your attention, so you pick it up and investigate.

A plecopteran- the first find of the year! You finally get to admire the specific adaptations of this order.

This specimen is special, because it indicates something about the water. Fishing Creek is different from the other sites, and the presence of this order proves it.

Plecoptera are indicators of a clean ecosystem, because they require well-oxygenated water. Many conservation efforts use the presence or absence of stoneflies as a sign of ecosystem health. The disappearance of stoneflies from an area they used to inhabit suggest that there is something wrong with the water.

Marine ecosystems are usually the bodies of water that get most attention in the world of conservation biology. However, freshwater deserves some attention, too. It may not have the classic flagship species like the polar bear or humpback whale, but the little guys are just as important. Conservation of insects and freshwater ecosystems are just as important. Learning about their adaptations and characteristics can help conservationists improve the health of the environment. Understanding all the living organisms in the environment will create a greater appreciation for the ecosystem.



Fishing Creek, north of Frederick, MD, 25-26 Sep 2019