O Boulder, Where Art Thou?

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Freshwater Biology, Fall-2022, University of Maryland

Rocks. We see them constantly in nature, on the field trip to Fishing Creek, and honestly almost everywhere. However, unless we're geologists, we do not really pay attention to the importance of rocks to our ecosystems and habitats. And yet, rocks are important parts of nature, especially in our aquatic habitats. Let's take Fishing Creek here in our own state, Maryland, as an example.

Photo by Yulia Lim, Fishing Creek, North of Frederick, MD

During our field trip to Fishing Creek, we could see rocks of all sizes laying around and in the stream. There were small rocks littering the bottom of the stream and large rocks, boulders if you will, sticking out and giving us a place to step on so we would not get our shoes wet. Despite seeing these rocks in the stream, we did not really pay attention to their purpose, instead we were focused on catching different aquatic macroinvertebrates for our lab collection.

If we paid closer attention, we would notice how the formation of the rocks helped control the flow and direction of the stream. The water would gather and flow through the cracks of where large rocks were, thinning the flow or where the stream would break off into smaller parts in order to flow around the rocks. Apart from this, the rocks also serve an important purpose to the aquatic macroinvertebrates. Where the rocks are gathered in a pile, you can usually find bunches of leaves and branches which make great places for macroinvertebrates to live. It was there that students found plenty of rare plecopterans and other macroinvertebrates. The bottom side of rocks can also be home to aquatic Lepidoptera. Furthermore, the tops of rocks can have algae growth which can be food for aquatic macroinvertebrates, specifically scrapers.

So as you can see, rocks are important to aquatic habitats and they're not just there to be part of the nice scenery. They can alter the flow and shape of the stream, as well as be a source of shelter and even help with food for aquatic macroinvertebrates. Who knew rocks could be so versatile?