

## Among the Leaves, a Source of Snacks

By Katie Stennette

Freshwater Biology, Fall-2018, University of Maryland

When we arrive at Fishing Creek, the sky has already begun to darken with the threat of rain. The creek flows swiftly over the rocks, rushing over thick tree roots and large boulders laden with lichen. Overhead, the trees sway with the wind from the oncoming storm, knocking leaves from the branches. The leaves drift lazily towards the water, where the current will push them into the calmer pools along the shore of the creek. There, they will provide food—an allochthonous source of energy for the macroinvertebrates that make Fishing Creek their home.

Our search for macroinvertebrates begins in one of the pools near the shore. We stumble upon two odonates in our first pull, but otherwise, our D-net comes up with nothing but thick, gravelly substrate, small twigs, and tangles of dark green moss.



Fishing Creek, north of Frederick, MD, on 26-Sep-2018

After several failed attempts, our teaching assistant joins us in the pool and asks us how we're doing. When we admit that we're struggling, she nods thoughtfully and asks us about carbon sources in the creek. "Is it all coming from the creek itself?" We remember the leaves falling from the trees growing beside—and as show in the picture, also in the middle of—the creek and tell her this. She nods again. "Check the leaves. I bet you'll find something there."

Newly invigorated, we move to the clusters of dead leaves that have accumulated in pockets within the pool and pile them onto our tray with our forceps. As we sift through, we find a variety of macroinvertebrates hunting for snacks, either from the leaves themselves or from the other organisms that live among the layers of leaves.

In the end, our trip is cut fifteen minutes short when the storm hits, but all the same, we still learned a lot about how outside sources of energy from trees can affect food webs in a lotic environment like Fishing Creek—and how sometimes the easiest way to see it is to go digging in the leaves for bugs.