TRESSA PLUM AND JAMES WOOD, Department of Natural Science and Mathematics, West Liberty University, West Liberty, WV, 26074. Investigating Plastic Accumulation in Sediments on the Banks of the Ohio River Near Wheeling, WV

Plastics are a global threat to biodiversity, especially aquatic ecosystems where plastics from roads and other sources wash into rivers and streams on their way to the ocean. We chose to examine sediments from the banks of the of the Ohio River near Wheeling, WV for plastic debris. At multiple locations we took samples of soil at multiple depths 0-5 cm, 5-10 cm, and 10-15 cm to quantify the abundance of plastics in the riverbank sediments. Sediment samples were collected in the field, placed in glass jars, and then transported to the lab for processing. Samples were washed thorough sieves to separate plastic particles into 3 size classes, > 2.00 mm, 2.00 mm <1000 µm, and1000 µm < 250 µm. Material from each size class was floated in saltwater in order to separate plastics from organic matter. Plastics particles were then placed on gridded petri dish and counted under a microscope. Our research is ongoing, but by continuing the research it will expand our knowledge of how plastics are accumulating in the Ohio River.