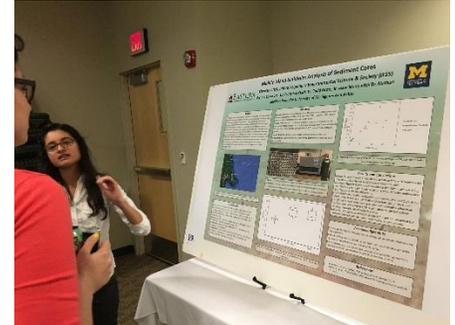


ENVI at the Undergraduate Research Symposium 2016

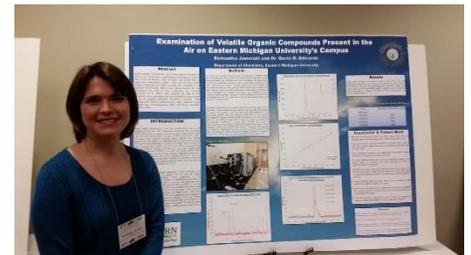
- Clarissa Crist, "Middle Island Sinkhole: Analysis of Sediment Cores"

Middle Island Sinkhole (MIS), located in Lake Huron, allows scientists to visualize what early life in shallow seas could have been like 2.5 billion years ago and how these microbes transformed our planet. The unique environment of the sinkhole is due to the sulfate-rich and oxygen-poor groundwater that features a low redox potential, low pH, low temperature, and high conductivity. I participated in processing sediment cores for an MIS sediments project, where we investigated the sediment samples for carbon and nitrogen content, trace metals, and different forms of iron to understand the redox chemistry of the sinkhole.



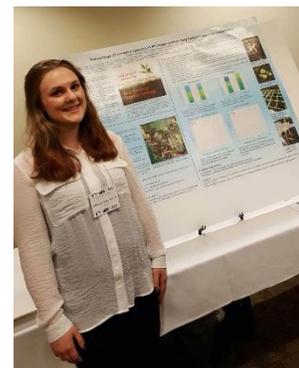
- Samantha Jaworski, "Examination of Volatile Organic Compounds Present in the Air on Eastern Michigan University's Campus"

Volatile organic compounds (VOCs) are organic compounds that are a key contributor to photochemical smog and ground level ozone production, both of which are detrimental to human and environmental health (1). One of the primary contributors of VOCs is fossil fuel combustion by vehicles (2). This research will look at this association by investigating the VOCs present in and around the air at Eastern Michigan University's campus. Their identities and relative concentrations were analyzed using modified gas chromatography (GC) with flame ionization detection (FID).



- Adrienne Kaye Wayne, "Percentage of Invasive Species in Michigan Grassland Seedbanks May Suggest Need for Restoration"

In many cases, the seed bank does not mirror the aboveground community, but instead shows the possible future state of that community by containing seeds that have potential to develop into adult plants. The aim of this study is to compare the seed bank to the aboveground species to be able to make decisions about restoration efforts in an area. To do so, the number of invasive, exotic, and native species in the seed bank and aboveground community were recorded and compared. Thirteen species have been identified so far, of which 15.4% are invasive and 53.8% are exotic. Future efforts may include comparison of the seed bank to pre- and post-restoration aboveground plant communities.





- Caitlyn McGoldrick, "Expansion of the Seaver Farm Property Through Best Practices"

This paper is a target market analysis of best practices to provide guidance for the highest and best use for the Seaver Farm property location in the Charter Township of Ypsilanti. Specifically reviewed are various demographic and economic variables, as well as neighboring uses, and best practices. The purpose of this paper is to adequately analyze the alternatives to identify the best use for the Seaver Farm property including high density uses valuing human scale, walkability, and multi-mobility.



- Leah VanLandingham, "A Profile of Play at Eastern Michigan University"

College students report feeling a lot of stress. Research shows that play can reduce feelings of stress, even in adults. As members of the Honors College, we were inspired by this year's Honors theme, "happiness leads to success," to learn how EMU students embrace play in order to mitigate stress and facilitate academic and personal success. We carried out an original qualitative research project for which we interviewed students about how they used play to help them survive adversity and achieve personal and academic growth. We will share students' attitudes and beliefs regarding play and how play impacts their lives as well as the many ways EMU students play on and off campus.

