

Yellowstone Lake Microbial Bio-Blitz
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During Summer 2012, fifteen teachers from across the country participated in *Yellowstone Lake GeoEcology*, a one-week field course offered through Montana State University's Masters of Science in Science Education program. Through classroom, field, and laboratory experiences, the participants obtained a unique, multidisciplinary understanding of Yellowstone Lake Ecology and the microbial life in the Lake.

The teachers learned from university scientists as well as leading experts from the National Park Service and the United States Geological Survey. After learning about sampling techniques, they sampled and characterized aquatic life along the shoreline of Yellowstone Lake and then performed genetic analysis using PCR and gel electrophoresis in the lab. The samples were then identified in GenBank.

The teachers participated in a "citizen science" bio-blitz that will contribute to the Molecular-All Taxa-Biodiversity Inventory (MATBI) for Yellowstone Lake, which is an ongoing research project at Montana State University. One goal of this project is to characterize the Yellowstone Lake environment using genetic tools and then applying these strategies to more complex ocean systems.

Participants were given a variety of teaching tools including information about C-MORE Science kits and C-MORE's Science Teachers Aboard Research Ships (STARS) program.

