

## Philip Mathias

**Graduated in Spring 2009**  
**Bachelor of Science in Environmental Science**

As a junior in high school, Toledo native, Philip Mathias discovered his interest in the field of ecology. While attending a science summer camp for prospective students at the University of Toledo (UT), Phil thoroughly enjoyed doing research on the local ecosystems with the professors of the Department of Environmental Sciences (DES). He credits the science camp for deepening his interest in the field of ecology and it became a major deciding factor for him to attend UT. As an



undergraduate, Phil assisted in a variety of research projects. In Dr. Jon Bossenbroek's lab he worked with GIS and database software to help model the spread of the invasive Dreissenidae mussels and the emerald ash borer. In Dr. Hans Gottgens lab he assisted in sampling fish assemblages in the agricultural drainage ditches found throughout northwest Ohio. Phil discovered his passion for surveying native mussels, while assisting PhD student, now UT professor, Dr. Todd Crail with his native fish and mussel surveys. He carried his newly found passion into his senior honors' thesis, which studied the distribution of mussels in the Ottawa River. His honors' thesis is titled *Distribution of Unionid Mussels (Unionidae) in Ottawa River from the University of Toledo Main Campus to the Stranahan Arboretum*.

***"The University of Toledo provided classes that set me ahead of other colleagues in my field. The University also provided research opportunities and support to gain the experiences I needed to get into graduate school and eventually a career as a state biologist."***

Currently, Phil designs and implements native mussel survey protocols as the state mussel biologist for the Wyoming Game and Fish Department based out of Casper, WY. His duties include planning, organizing, and supervising native mussel survey trips throughout Wyoming with a crew of two technicians to determine what species Wyoming has and each species' distribution and ecology. He also makes management recommendations on the native mussels and determines the overall imperilment of the populations for each species in Wyoming.