

# Sustainability of a Largemouth Bass Population in Lake Archer

Students: Matthew Hersh and Frederick Offenburger

Mentor: Dr. Emily Basile

Even though Largemouth bass (*Micropterus Salmoides*) can live in almost any body of fresh water, they have a very limited population in Lake Archer. The purpose of this project is to grow a population using a rearing tank connected to the lake with pumps. A 350-gallon rearing tank is set up by Lake Archer and is ready for the introduction of fish. Once the fish are large enough, they will be released into the pond to see if their population is sustainable. The fish will be tagged for identification purposes prior to releasing them into the pond. After release, the fish will be recaptured for further data collection. This semester was spent by averaging weekly water testing values and comparing it to a healthy pond ecosystem. Before the bass can enter the tank, the water quality needs to be measured and compared to Lake Archer and by using traps to catch fish, crayfish, and other inhabitants of the pond we can further prove the sustainability of Lake Archer. In addition, this allows us to continue a population survey and estimate.

Lake Archer is a 1-acre man-made pond located on the campus of Delaware Valley University. Lake Archer has lots of organisms living within it, yet a very limited number of largemouth bass. This could be due to a few different

