

SE&T Colloquium Series-Fall 2018

Speaker	Dr. Dave Stanton Department of Biology
Title	<i>DNA fingerprinting of walleye (<i>Sander vitreum</i>) from Saginaw Bay: Genetic Effects of Stocking</i>
Abstract	<p>There is a large population of walleye in Saginaw Bay that is both economically and ecologically important. The population is heavily managed and was stocked extensively up until 2006. In order to properly manage this population and to determine the genetic effects of stocking, genetic information is required. We obtained fin clips from walleye captured in Saginaw Bay by trolling. With the help of the Department of Natural Resources (DNR), we also obtained samples from several spawning populations and from the Muskegon River, which was the source of fingerlings used for stocking. In total, nearly 500 fin clips were obtained. DNA was extracted, using a DNeasy kit. PCR amplification and capillary electrophoresis were performed in order to determine genotypes for ten fingerprint loci. This data provides genetic markers that allow for the assessment of genetic diversity and population substructure, as well as the determination of important spawning sites, determination of spawning site fidelity and the genetic effects of stocking. This information will aid management decisions regarding future stocking programs. In the future, we also hope to assess how the population is changing over time, since stocking was ceased.</p>
Date	Tuesday, November 6
Time	4:10-5:00pm
Place	Pioneer 240
	Refreshments will be served at 4:00pm.