

# SE&T Colloquium Series-Winter 2015

Speaker	Dr. Dave Stanton Department of Biology
Title	<i>DNA Fingerprinting of Saginaw Bay Walleye</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 has undergone significant variation in size in recent years. In order to properly manage this population, genetic information is required. We obtained fin clips from walleye captured in Saginaw Bay in the summer by trolling and in the winter by ice fishing. With the help of the Department of Natural Resources (DNR), we also obtained fin clips from a spawning population of walleye on the Tittabawassee River and another population on the Shiawassee River. In total, over 300 fin clips were obtained. DNA was extracted, using a DNeasy kit. PCR amplification and capillary electrophoresis were performed in order to determine genotypes for six 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 and assessment of spawning site fidelity. This information will aid management decisions regarding stocking programs, as well as decisions regarding damming of rivers and the construction of ladders to be used by spawning walleye.</p>
Date	Tuesday, March 31
Time	4:10-5:00pm
Place	Pioneer 240
	Refreshments will be served at 4:00pm.