

SE&T Colloquium Series-Fall 2017

Speaker	Dr. Dave Stanton Department of Biology
Title	<i>DNA Fingerprinting of Charity Island Phragmites and Herbicide Resistance</i>
Abstract	<p><i>Phragmites australis</i> is an invasive reed species that was introduced into the United States over one hundred years ago. It has since spread aggressive throughout the Great Lakes region, displacing native species and destroying wildlife habitat. It has already taken over the eastern shore of Saginaw Bay and is taking over the western coast as well. In addition, it has invaded Charity Island in the middle of Saginaw Bay and is dramatically affecting the tourist trade on the island. In partnership with Huron Pines, an eradication program is underway. Herbicide spraying on the island began in the fall of 2015 and will likely continue to the next several years.</p> <p>In order to assess genetic variation, population substructure and the genetic effects of eradication efforts, a DNA fingerprinting survey was begun. Samples were taken from Charity Island prior to herbicide treatment and following one and two years of treatment. Genotypes were determined for 217 samples for 10 loci. The data allow for the determination of genetic variation and modes of recruitment in post treatment populations. They also potentially allow for the detection of selection at particular loci. The results have important implications for treatment strategies in this and other localities.</p>
Date	Tuesday, November 7
Time	4:10-5:00pm
Place	Pioneer 240
	Refreshments will be served at 4:00pm.