Graduate Opportunity: Modifying the Community Aquatic Monitoring Program (CAMP) to support Marine Environmental Quality (MEQ) monitoring in PEI estuaries

This PhD or Masters opportunity is a collaboration with DFO-Gulf Region. Since 2004 DFO has been working with the Southern Gulf of St. Lawrence Coalition on Sustainability and watershed environmental groups to sample the nekton (nearshore fish, shrimp and crabs) in up to 36 estuaries of the southern Gulf of St. Lawrence. Every summer community groups collect environmental data and sample nekton by beach seine from six standard stations around their estuary. Recent research has shown that the head of the estuary, where rivers meet the salt water, are critically important areas for monitoring environmental quality. Therefore, the first goal of this project is to investigate the feasibility of monitoring nekton at the head of the estuary and to compare this nekton community to the community found at the standard CAMP stations further downstream. But we also know that in some PEI estuaries sampling with a beach seine at the head of the estuary is very difficult because of blooms of sea lettuce (Ulva sp.). Therefore, a second goal is to investigate the potential of environmental DNA (eDNA) as an alternate method of assessing the nekton community. This project is fully funded, suitable as either a PhD or Masters thesis and is available immediately. Please contact:

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