

## New institute boosts water research

Scientists at the Mersey Tobeatic Research Institute have been conducting research on how to keep Nova Scotia's lakes and rivers clean by analyzing water and insect samples collected over the summer at the new facility in southwestern Nova Scotia. The purpose is to study the effects of acid rain, climate change as well as industrial and residential development on water quality. "We are part of the Southwest Nova Biosphere Reserve," says Amanda Lavers, the research institute's project scientist. "That means that we are committed to managing this unique part of the world for long-term sustainability, and we will gather knowledge and information to help us to keep that commitment."

"Scientists are looking at pH, chemicals and nutrients in the water and the type health of the insects that live in and around the water," says Environment and Labour Minister Kerry Morash. "That will help determine if there are any environmental effects on water quality. Having facilities right here in the field is a great help to research efforts."

One of the 14 research projects is looking at impact of human activities on water quality in the Upper Mersey watershed. To achieve this, the Canadian Aquatic Biomonitoring Network (CABIN) protocol, that has been developed and is maintained by Environment Canada, is being used. According to Pierre Martel, the institute's aquatic ecosystem biologist, this project has four specific objectives: establish reference sites for long-term monitoring, assess aquatic health in the watershed, contribute to the CABIN national reference database on benthic macroinvertebrates and determine

the effects of silviculture treatments on water quality.

The institute, opened in December 2004 in Kempt, Queens County, is developing best practices for conservation and promoting sustainable use of natural resources while supporting the province's ability to compete in the global market. It also offers a public seminar series on various research topics. Seminars for the first half of 2006 include a January 30 event with Laurie Lacey that discusses Mi'kmaq medicinal plants; a February 23 date dealing with research on moose in the Tobeatic with Tony Nette; and an April 26 get-together with Rochelle Owens that will explore old growth forests in Queens County.

As a non-profit co-operative, the institute's board of directors represents members of the general public, landowners, industry, educators, researchers and three levels of government. The co-operative employs three full-time scientists to co-ordinate projects. The facility is available to researchers from universities, governments, businesses and associations, with modest fees covering the institute's operating costs. This year, researchers from across Nova Scotia are using it for projects ranging from water chemistry to wildlife biology. The research conducted will provide more information to help government initiatives, such as water and air quality programs and protected areas management.

The Department of Environment and Labour provided \$25,000 in June 2005 to help establish the facility, especially covering start-up costs for the institute's permanent home in a former Bowater Mersey Paper Company field office. Federal and municipal governments also contributed.