

## GAMS initiates climate change coastal mapping project

The Gulf Aquarium and Marine Centre Cooperative (GAMS) has initiated a project to examine climate change and sea level rise in the southern Gulf of St. Lawrence. Coastal communities in the gulf will increasingly experience the effects of sea level rise that include acceleration of coastal erosion and loss of wetlands and other habitats, as well as more subtle effects of climate change. Remi Aucoin of Grand Etang has been hired as a research associate for the project with initial funding from Environment Canada. Aucoin will use GIS (geographic information systems) technology to analyze coastal data from

different time frames in order to provide baseline maps of the coastal margins and ecosystems, and to establish rates of change and the areas of greatest concern.

Mr. Aucoin has completed studies in both physical geography and GIS technology. Spending several years in gaining additional professional GIS experience in the nation's capitol, Aucoin reports that he is very pleased with "returning to map my own community and focusing on an issue with much needed attention."

The new mapping project will provide the groundwork for a larger "Pilot Project on Climate Change" being developed

by diverse groups including Environment Canada, Fisheries and Oceans, and the Ecology Action Centre. These groups will work with GAMS on establishing guidelines for communities to follow for adaptation to climate change impacts. At a recent working group meeting in Moncton representatives from these organizations were pleased to see that GAMS was taking this initiative and that the project was focused on the coastal communities of the Cheticamp region. In the course of its research, GAMS will also examine historical photographs and documentation of coastal parameters of the region.

A local non-profit

organization, the Gulf Aquarium and Marine Station Cooperative has been in existence for over three years and has played a key role in the community by researching fisheries, resources and ecosystems on the southern Gulf of St. Lawrence, providing marine education through various programs including a small interpretive centre and summer camps for children, and collaborating with fishermen and community leaders.

For more information on GAMS and its research, please contact its office at 902-224-1623.

# GAMS explores coastal erosion in county

-by John Gillis

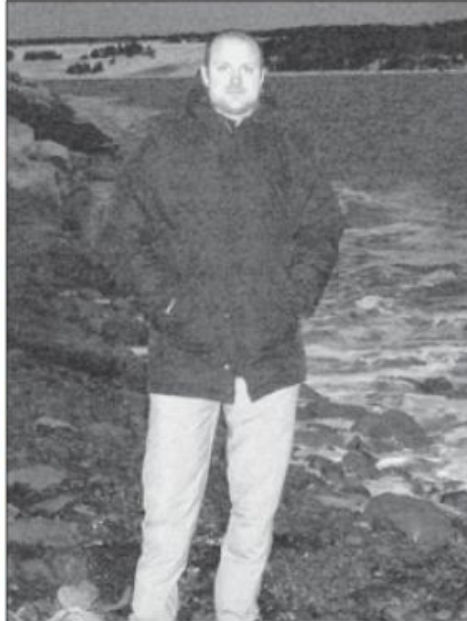
A new project underway in Cheticamp is exploring the impacts of climate change and coastal erosion on the Cheticamp coastline.

The project is sponsored by GAMS (Gulf Aquarium and Marine Stations Cooperative) and funded by Environment Canada.

GAMS has hired Remi Aucoin from Grand Etang to begin initial GIS (geographic information systems) mapping of shorelines and wetlands in an effort to establish a baseline against which to compare historical and future data on coastal erosion.

Aucoin's work will form the foundation for ongoing work for prediction and adaptation to rates of sea level rise and other effects of climate change on coastal communities and the ecosystems.

GAMS has also been



Remi Aucoin from Grand Etang has been hired to do the initial work.

monitoring rates of loss of salt marsh in the Cheticamp harbour due to sea level rise for several years, and it will be initiating similar projects to measure rates of beach erosion in the area.

Aucoin studied GIS mapping at the University of Moncton and NBCC. He has worked for a geomatics company in Ottawa and the Department of Indian and Northern Affairs. He has also worked in wind energy research and is a small business owner.

GAMS will be working with other partners on this climate change study, according to Aucoin.

Cape Breton Highlands National Park has also been a helpful partner and may be quite interested in the results of the research as well, according to Aucoin.

"With this type of data there's not a lot of it available to our knowledge. There may be some of it out there, and we are attempting

to find it, but we are also looking at creating the data ourselves through looking at aerial photographs and integrating that material into GIS applications. We believe that could serve as a good baseline for our research," says Aucoin who notes that the lack of big ice locally in recent years may also be contributing to the problem.

Aucoin says he will have an opportunity to present some of his findings to the community on March 29<sup>th</sup> when GAMS will hold a fisheries forum in Cheticamp.

"We're open to hearing from anyone who might have some data or interesting information or observations they want to offer," says Aucoin.

Anyone wishing to contact GAMS to assist with the climate change project may do so by contacting Remi Aucoin at (902) 224-1623.