

Petitcodiac Watershed Monitoring Group

Groupe de surveillance du bassin de la Petitcodiac

Number 4/numéro 4
March 2000/mars 2000

Hello everyone!

Well, it's only the beginning of March and it already feels like spring! We've been having wonderful weather for the past few days in southeastern New Brunswick; as a matter of fact this winter has been quite mild, could it have anything to do with Climate Change? Find out, in this month's article entitled: "Global Warming: Is it getting warmer in here?"

Also, in this month's issue, you will find an article on the workshop we hosted on February 26. There were about 30 people present and we got a lot of important work accomplished. Thanks again to all who participated! In this month's Current News, you will also find an article on Ecological Restoration and you can read about an exciting project that students and professors at l'Université de Moncton have undertaken in restoring a small pond on university grounds. Finally, as always, we give you links to interesting web sites and also a list of upcoming activities in the region, including a watershed clean up that will take place in June.

Don't forget that we are always looking for suggestions to improve Current News so if you have a great idea, do not hesitate to contact us. We would be happy to hear from you!

Have a great month!
Isabelle

Workshop: Defining a common vision for the Petitcodiac Watershed

On February 26, we hosted a workshop entitled: Defining a common vision for the Petitcodiac Watershed. The goal of this workshop was to gather stakeholders from all over the watershed to discuss our goals and aspirations for water quality in the 21st century. There were approximately 30 people present at this workshop and they represented a variety of stakeholders including: various government agencies, villages and towns in the watershed, the Petitcodiac Sportsman Club, Petitcodiac Riverkeepers, Lake Petitcodiac Preservation Association, Atlantic Salmon Federation, Moncton Fish and Game, and much more.

Our next meeting will be March 22 and will take place at the Fisheries and Oceans building on Université Avenue in Moncton. Every concerned citizen is invited to join us at this meeting. We would like to thank the Petitcodiac Sportsman Club and its president, Gerald Gogan, who has offered us the use of their facility for future meetings. We will certainly take him up on this offer for future meetings, as we plan to meet on a regular basis.

If you would like more information on this workshop, please do not hesitate to contact me.

Ecological Restoration

Ecological restoration is the "process of intentionally altering a site to establish a defined indigenous, historic ecosystem. The goal of this process is to emulate the structure, function, diversity and dynamics of the specified ecosystem"¹. The faculty of science at l'Université de Moncton has recently undertaken the restoration project of a small pond in the hopes of restituting its biodiversity.

The pond is located between the campus and Wheeler Boulevard near Halls Creek at the intersection of Clement-Cormier Street and Université Avenue. In recent years, this small habitat has suffered greatly due in part to the construction of adjacent roads.

The first phase of this restoration project has been to clean the pond with the help of a bulldozer in order to rejuvenate the site and also to remove unwanted road debris. In the coming months, trees will be planted and observation sites will be built. This site will represent a great learning tool, not only for university students, but also school children and naturalists of the greater Moncton area. It will help them learn about the impacts of human activities on habitats and also observe different plant, mammal and bird species. More information will be available on this project in future newsletters.

¹ The Volunteer Monitor, vol. 11, no. 1, Spring 1999

<http://www.web-maestro.com/pwmg/default.htm>

Questions, comments, suggestions?

P.O. Box 23046,
Moncton, N.B.
E1A 6S8
Ph: 858-4529
Fax: 851-6608
Email:
pwmg@nbnet.nb.ca



Petitcodiac Watershed Monitoring Group

Groupe de surveillance du bassin de la Petitcodiac

Climate Change: Is it getting warmer in here?

Everywhere we look today, we hear about Climate Change, Global Warming, Greenhouse effect, etc, whether it's on the news, in newspapers or on the internet. What does it all mean? What is climate change, or global warming? Is there really a warming trend and who or what is responsible? In the next few paragraphs we'll try to answer some of these questions!

Climate change is a shift in climate over a period of time, which ranges from decades to centuries. The ice age is a perfect example of this naturally occurring phenomenon. During the ice age there was a downward shift in global temperatures, which resulted in parts of the planet being covered with ice. This phenomenon occurred through thousands of years. In the past 200 years we have observed another climate change. What is different about this one is its rate, its magnitude and also the fact that it is due, in large part, to human activities, such as the production of electrical energy, heating and transportation and land use modifications (clearing forest land to make way for agriculture). These activities are altering the chemical composition of the atmosphere through the build-up of greenhouse gases. What are greenhouse gases* and does it have anything to do with gardening? Energy from the sun drives the earth's weather and climate, and heats the earth's surface; in turn, the earth radiates energy back into space. Atmospheric greenhouse gases trap some of the outgoing energy, retaining heat, somewhat like the panels of a greenhouse. Without this greenhouse effect, temperatures on earth would be much lower and life would probably not exist, as we know it today. However, problems arise when the atmospheric concentrations of greenhouse gases increases. These increases have enhanced the heat trapping capability of the earth's atmosphere. That is why we talk about global warming, since we produce more greenhouse gases, more energy from the sun is trapped in the atmosphere, which is changing global temperatures. It is estimated that the global temperature on earth has increased by 0.5°C in the last 200 years. We have also observed a warming trend since the 19th century and the 10 warmest years in the 20th century all occurred in the last 15 years of that century, 1998 being the warmest on record.

However, like many pioneer fields of research, there are uncertainties associated with the science of global warming. We are certain that the quantity of greenhouse gases in the atmosphere is increasing due to human activities and this is causing a warming trend. On the other hand we are uncertain about the exact impacts of global warming or what the local changes to climate will be or even how much warming will occur. These questions remain to be answered, but for now we have to use the knowledge we have today and take action. In the next issue of Current News we will look at the activities we can adopt to help reduce our impact on the planet and we will also look at alternative sources of energy.

Information in this article was found at the following web sites: www.ec.gc.ca/climate/ and www.epa.gov/globalwarming/

*Greenhouses gases

Water vapor: it comes naturally from respiration, transpiration and evaporation.

Carbon dioxide: it comes from the decay of materials, respiration of plant and animal life and also through the burning of solid waste, fossil fuels and wood.

Methane: it comes from the production and transportation of coal, natural gas and oil and from the decomposition of organic waste, solid waste landfills and the raising of livestock.

Nitrous oxide: soils and oceans are the primary natural source of this gas. Humans contribute through soil cultivation and use of nitrogen fertilizers, nylon production and the burning of organic materials and fossil fuels.

Ozone: it exists naturally in the lower atmosphere; it can also be produced from a reaction involving several human-produced pollutants and sunlight.

Halocarbons: they are human-produced chemical compounds containing members of the halogen family (bromine, chlorine and fluorine) and carbon; they are used in various industrial and home uses (air conditioning, refrigeration, foam, etc.)

Upcoming activities

- ✓ Planning for change, free workshop —March 25 in Memramcook, call Heather at 902-426-2062
- ✓ Environmental Education Exchange Fair—April 8 at the Université de Moncton
- ✓ Aquaculture Canada 2000, conference—May 28-31, Beauséjour Hotel
- ✓ Earth Day—April 22 at Moncton coliseum, call 853-3516
- ✓ Petitcodiac Watershed Clean-up Project—June, call Daniel at 388-5337

For more information on any of these activities, please call me.

