

ROCK YOUR PLANET!

2007-2008 National Youth Program



Biosphère

Environment Museum

Sainte-Hélène Island, Montréal, Quebec



Environment
Canada

Environnement
Canada

Canada

An architectural masterpiece in Montréal since Expo 67, Environment Canada's Biosphère is a premier venue for information, education and awareness on the major environmental issues related to water, air, climate change, sustainable development and responsible consumption.

As an environment museum, the Biosphère offers permanent and temporary exhibitions, events for the general public, and guided activities that are as informative as they are entertaining for youth and adults alike.

1 As Environment Canada's national center of expertise in environmental education and engagement, the Biosphère develops educational products and activities with partners across Canada and provides a forum for exchanges and a one-of-a-kind location for environmental events.

The Biosphère Youth Program is available to school groups from sea to sea. It is made up of educational activities that can be carried out at the museum, in the classroom, in the field or via distance education. This year's new educational activities include one on air quality and climate change for high school students, who can participate via videoconference.





Enjoy a stimulating experience with your students

by participating in the Biosphère's Youth Program!

These activities are tied in with the Education Program of the ministère de l'Éducation, du Loisir et du Sport du Québec [Quebec Department of Education, Recreation and Sport] and relate to one or more of the following disciplines: science and technology, social sciences, and the arts. All activities are aimed at encouraging young people to act in harmony with their natural and built environments.

This guide gives you an overview of the activities offered. You can find out more from the detailed fact sheets on each of the activities, which are available on request.

Information: 514-496-8282 or 1-866-487-8282 (toll free),
reservations.biosphere@ec.gc.ca or www.biosphere.ec.gc.ca,
"Activities for Groups" section.

The Biosphère is pleased to present its Youth Program,
which offers a wide range of
activities adapted to the needs and interests of
elementary and high school students and teachers
across Canada.

Through play, experimentation and creation,
students will develop their teamwork, co-operation
and problem-solving skills, and learn to apply them
to environmental protection.

Youth Program activities are held at the Biosphère,
in class, in the field or via distance learning
in real learning situations.

Choose the activities that correspond to your level



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“Environment and Science” activities

These activities, with links to the world of science and technology, explore one or more of the following themes: water, the St. Lawrence River, meteorology, climate change and responsible consumption.

“Environment and Observation” activities

In class or in the field, young people take part in concrete observation and ecoaction projects. They collect data on water quality, climate change, water conservation, fish health, frogs and other indicators of ecosystem health, or observe their own life habits with a view to making changes to them. For certain activities, training, activity guides, materials or field guides are offered to teachers. Many of these projects are directly accessible over the Internet. The projects last at least two hours and may extend over the whole school year. Some of these activities are co-ordinated by the Biosphère’s collaborators.



	Activity	Grades	Kindergarten	Grades 1-2	Grades 3-4	Grades 5-6	Grades 7-8	Grades 9-12	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	pages
Biosphère at your school	A Change in the Air	Grades 8-12						● ●				■		■	■	■	■	■	■	■	4
In class or in the field	H ₂ O Project	Grades 5-6				●			■	■	■	■	■	■	■	■	■	■	■	■	5
	Adopt a River	Grades 5-12				●	●	●	■	■	■	■	■	■	■	■	■	■	■	■	5
	FrogWatch*	All	●	●	●	●	●	●	■	■	■	■	■	■	■	■	■	■	■	■	6
	PlantWatch*	All	●	●	●	●	●	●	■	■	■	■	■	■	■	■	■	■	■	■	6
	IceWatch*	All	●	●	●	●	●	●	■	■	■	■	■	■	■	■	■	■	■	■	6
	WormWatch*	All	●	●	●	●	●	●	■	■	■	■	■	■	■	■	■	■	■	■	■

* Activity developed and managed by Environment Canada’s Ecological Monitoring and Assessment Network



“Environment and Science” activities

> *Biosphère at your school*



NEW!



A Change in the Air

Target audience: Grades 8-12

Duration: 50 to 75 minutes

This unique educational activity fosters discussion about the very latest scientific information on air quality and climate change, their impacts on the environment and what we can do about it. It includes several visual simulations and provides an opportunity for exchanges between students and an expert facilitator. This free activity is offered through presentations in schools in Montréal and the surrounding area, and by videoconference in other Canadian educational institutions.

Videoconference:

To participate in this activity, schools must have the necessary videoconferencing equipment set up in a room that can accommodate one, two or three classes (maximum of 100 students). Several schools across the country can take part in a videoconference at the same time, thereby encouraging discussion among youth in different cities or provinces. The videoconference is offered outside of the Montréal area between 9:30 a.m. and 4:30 p.m. (Eastern Time).

In-school presentation:

The activity is offered to groups of 100 to 300 students in the Montréal area, but will also be presented in other Canadian cities during the 2007-2008 school years.

Information: 1-866-487-8282 (toll free) or edl-edc.biosphere@ec.gc.ca

Reservations: www.biosphere.ec.gc.ca

“Environment and Observation” activities

> *In class or in the field*



Adopt a River

Target audience: Grades 5-12

Duration: 25 hours

Students evaluate water quality in a river in their community by identifying benthic macroinvertebrates and or by analyzing six physicochemical and bacteriological parameters. In this way, they succeed in understanding their environment and identifying action they can take to improve it. Training and scientific support provided. **This is a field project.** This project is co-ordinated by the Comité de valorisation de la rivière Beauport (CVRB) [Beauport River enhancement committee] with the support of the Biosphère.

Information and reservations: www.cvrbr.qc.ca



Project H₂O

Target audience: Grades 5-6

Duration: Minimum 10 hours

After reviewing their water consumption at school or at home, with the aid of an online calculator, students look for ways to cut down on the amount of water they use. Three missions are offered, at the teacher's choice. A Web site has been put up so that the results may be shared with schools here and elsewhere. **This is a classroom project.**

Information:

www.on.ec.gc.ca/reseau/watercalculator/login_e.html,
“Project H₂O” section





FrogWatch

Target audience: All

Duration: Variable

Observation of frogs and toads may help us understand the changes taking place in the environment. The participants choose a lake, pond or wetlands area close to home, learn to recognize the cries of frogs and toads, then post their findings on a Web site. This project is part of *NatureWatch*, a series of voluntary monitoring programs designed to try and identify ecological changes that may be affecting our environment. **This is a field project.** This project is co-ordinated by Environment Canada's Ecological Monitoring and Assessment Network.

Information and reservations: www.naturewatch.ca



PlantWatch

Target audience: All

Duration: Minimum 3 hours

Blooming times are excellent indicators of climate change and its effects. On a Web site, the participants track these changes by recording the flowering dates of selected plants. These plants include certain wildflowers, lilacs and even dandelions. This project is part of *NatureWatch*, a series of voluntary monitoring programs designed to try and identify ecological changes that may be affecting our environment. **This is a field project.** This project is co-ordinated by Environment Canada's Ecological Monitoring and Assessment Network.

Information and reservations: www.naturewatch.ca



IceWatch

Target audience: All

Duration: Minimum 2 hours

On a Web site, participants record their observed dates of "freeze up" and "break up" for a nearby lake or river. Ice observation gives excellent clues to the effects of climate change. This project is part of *NatureWatch*, a series of voluntary monitoring programs designed to try and identify ecological changes that may be affecting our environment. **This is a field project.** This project is co-ordinated by Environment Canada's Ecological Monitoring and Assessment Network.

Information and reservations: www.naturewatch.ca



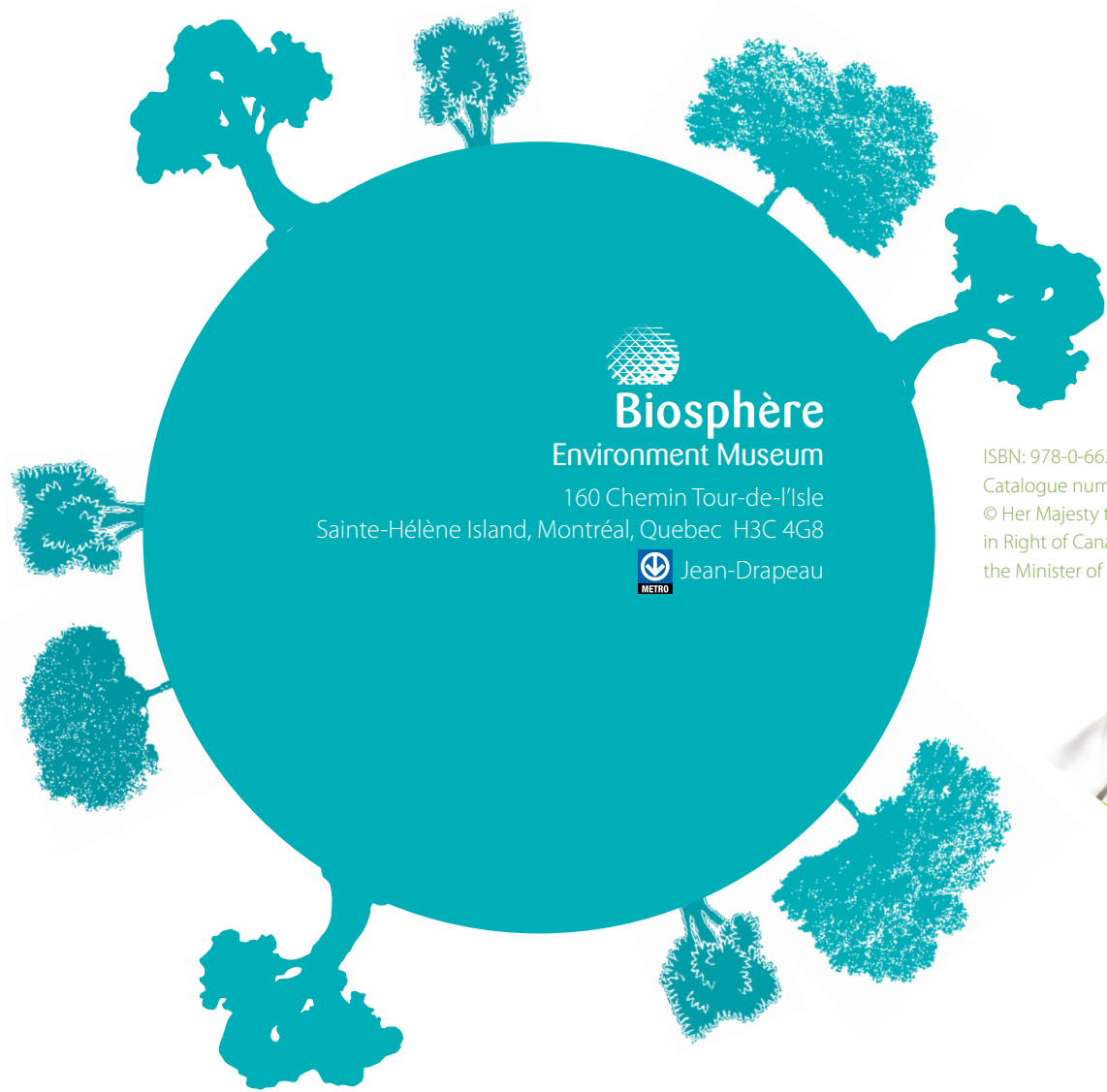
WormWatch

Target audience: All

Duration: Minimum 3 hours

Participants prepare a worm inventory by sampling and identification. The data gathered, which is published on the Internet, gives insight into soil biodiversity. *WormWatch* includes classroom activities and others to be done in the schoolyard. This project is part of *NatureWatch*, a series of voluntary monitoring programs designed to try and identify ecological changes that may be affecting our environment. **This is a field project.** This project is co-ordinated by Environment Canada's Ecological Monitoring and Assessment Network.

Information and reservations: www.naturewatch.ca



Biosphère Environment Museum

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ISBN: 978-0-662-46388-7
Catalogue number: En151-3/2-2008E-PDF
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