habitat in the balance

modules and curriculum match

NOTE: This document requires updating.

Curricular connections to the resource are presented in this guide. Look for opening comments for clarification followed by a listing of modules under their topic area heading and then summaries of provincial curricula sorted alphabetically by province.

about modules and curriculum match

Already mentioned in the Guide "process skills," the **Habitat in the Balance** program directs a user through socio-scientific decision-making – a mandated component of many Canadian programs of study. Learners are also engaged in the skills of:

conducting a search and researching,
asking and refining questions,
examining concepts,
recognizing features,
selecting appropriate data and information,
interpreting information,
describing in general terms and providing examples,
recording,
investigating linkages and relationships,
understanding of practical and ethical issues,
analyzing impacts and alternatives,
identifying characteristics and current practices,
addressing questions, problems and issues,
critically considering social and environmental implications,
evaluating alternatives,
defending a given position on an issue based on findings, and/or
communicating questions, ideas, intentions, and results.

In conjunction with skills, attitude and curricular content objectives are reinforced throughout modules and in hyperlinked Library descriptions. For uniformity of information these modules are focused on a specific issue, one question, and a target grade level for the audience. However, module application can be broader. Therefore, descriptions of each module below are provided to assist with selecting general and specific learner outcomes from topics in the provincial curricula that follow.

water

Allocation (W0801)
"**Who Will Provide the Water? Based on a case study from Alberta**"

Allocation is the first water module created in the **Habitat in the Balance** program. The issue explored is making a choice among different water sources for commercial water needs. It is targeted at middle school curriculum, mainly the Grade 8 learner.

Contaminants (W0901)
"**Too Much of a Good Thing? Impacts of chemical contaminants on waterways**"

The contaminants water module explores using limited funds to deal with chemical contaminants (pollution of excess or unwanted nutrients) that impact a river. It is targeted at middle school curriculum, mainly the Grade 9 learner.

inhabitants

Electronic modules in this area of the program are currently under development. Curriculum connections will be added with each module, look for updated versions of this guide with the appearance of those new modules.

land

Electronic modules in this area of the program are currently under development. Curriculum connections will be added with each module, look for updated versions of this guide with the appearance of those new modules.

air

Electronic modules in this area of the program are planned as a future addition. We welcome suggestions about module issues to develop in this and other topic areas.

Alberta -- curriculum connections

Science
(www.education.alberta.ca/teachers/program/science/programs.aspx)

- 7: Interactions within Ecosystems
  - Identify environmental, social, and economic factors that should be considered in the management and preservation of ecosystems.
- 8: Freshwater and Saltwater Systems
  - Analyze human impacts on aquatic systems; identify the roles of science and technology in addressing related questions, problems and issues.
- 9: Biological Diversity
  - Identify impacts of human action on species survival and variation within species; analyze related issues for personal and public decision making.
- 9: Environmental chemistry
  - Investigate/describe, in general terms, the role of different substances in the environment in supporting or harming humans and other living things.
- 20: Changes in Living Systems
  - Analyze and investigate the cycling of matter and the flow of energy through the biosphere and ecosystems as well as the interrelationship of society and the environment.
- 30: Chemistry and the Environment
  - Analyze, from a variety of perspectives, the risks and benefits of using chemical processes in meeting human needs and assess technologies for reducing the impact of chemical compounds on the environment.

Social Studies -- Canadian and World Studies
(www.education.alberta.ca/teachers/program/socialstudies/programs.aspx)

- 9: Canada: Responding to Change
  - Economic growth and technological change affect the quality of life. Identify and evaluate alternative answers, conclusions, solutions or decisions regarding questions and issues used for inquiry and research on responding to change.
- 10: To what extent should we embrace globalization?
  - Does globalization contribute to sustainable prosperity for all people? Analyze the impact of actions and policies associated with globalization on the environment (land and resource use, resource development agreements, environmental legislation).
- 30: Political and Economic Systems
  - Political systems are organized to allocate political power that involves the authority to make and to implement decisions in society. Logically defend a position on an issue or a problem.

British Columbia -- curriculum connections

Science
(www.bced.gov.bc.ca/irp/irp_sci.htm)
7: Ecosystems
8: Water Systems on Earth
10: Sustainability of Ecosystems

Science and Technology
11: Natural Resources and the Environment
Analyse the need for effective management of resources and the issues related to their impact on the environment.

Sustainable Resources
11 and 12: Agriculture, Fisheries, Forestry, Mining
Analyse the environmental, social, and economic significance of each topic at the local, provincial, and global levels.

Social Studies
(www.bced.gov.bc.ca/irp/ss810.pdf)
9-10: Applications of Social Studies
Defend a position on a controversial issue after considering a variety of perspectives. Plan, revise, and deliver formal oral and written presentations.
Co-operatively plan, implement, and assess a course of action that addresses the problem, issue, or inquiry initially identified.

Civic Studies
11: Civic Deliberation & Civic Action
Analyse the domestic and international effects of Canada's record with respect to issues and events in the environment. Apply skills of civic discourse and dispute resolution, including consensus building, negotiation, compromise, and majority rule; evaluate the ethics of selected civic decisions; implement a plan for action on a selected local, provincial, national, or international civic issue.

Geography
12: Resources and Environmental Sustainability
Assess the various considerations involved in resource management, including: sustainability, availability, social/cultural consequences, economic consequences, political consequences. Assess the environmental impact of human activities, including: energy production and use forestry, fishing, mining, agriculture, waste disposal, and water use.

Manitoba -- curriculum connections

Science
(www.edu.gov.mb.ca/k12/cur/science/scicurr.html)

7: Interactions within Ecosystems

7-1-06 Identify environmental, social, and economic factors that should be considered in the management and preservation of ecosystems.

8: Water Systems on Earth

8-4-17 Identify substances that may pollute water, related environmental and societal impacts of pollution, and ways to reduce or eliminate effects of pollution.

8-4-18 Identify environmental, social, and economic factors that should be considered in the management of water resources.

10: Senior 2: Dynamics of Ecosystems

S2-1-10 Investigate how human activities affect an ecosystem and use the decision-making process to propose a course of action to enhance its sustainability. Include: impact on biogeochemical cycling, population dynamics, and biodiversity.

11: Senior 3: Current Topics in the Sciences

General Learning Outcome B: Science, Technology, Society, and the Environment -- Explore problems and issues that demonstrate interdependence among science, technology, society, and the environment.

General Learning Outcome C: Scientific and Technological Skills and Attitudes -- Demonstrate appropriate inquiry, problem-solving, and decision-making skills and attitudes for exploring scientific and/or technological issues and problems.

Social Studies
(www.edu.gov.mb.ca/k12/cur/socstud/index.html)

10: Senior 2: Geographic Issues of the 21st Century

Natural Resources -- Identify where major natural resources are located, consider diverse perspectives towards ownership and development, and examine issues related to the sustainability of resource extraction and consumption including the implications of their personal consumer choices.

Industry and Trade -- Identify current issues related to industry, trade, and globalization, and consider the economic, social, and environmental impacts of their consumer choices.

New Brunswick -- curriculum connections

Science
(www.gnb.ca/0000/anglophone-e.asp#cd)
7: Interactions within Ecosystems
8: Water Systems on Earth
10: Sustaining Ecosystems

Biology
11: Biodiversity & Interactions Among Living Things

Environmental Science
122/123

Social Studies
9

Canadian Geography
120

Economics
120

Newfoundland and Labrador -- curriculum connections

Science
(www.ed.gov.nl.ca/edu/sp/pcdbs.htm)
- 7: Interactions within Ecosystems
- 8: Water Systems on Earth
- 9: Environmental Quality
- 1206: Life Science
  - Sustainability of Ecosystems
- 2206: Ecosystems

Social Studies
- 9: Atlantic Canada in the Global Community
  - Economics
  - Technology
  - Interdependence

Canadian Geography
- 1202
  - Natural Resources
  - The New Economy
  - Connections

Canadian Issues
- 1209: Canadian Economic and Environmental Concerns

Canadian Economy
- 2203: Economic Issues

Nova Scotia -- curriculum connections

Science
(https://sapps.ednet.ns.ca/Cart/index.php?UID=20081003171156216.123.226.170)
7: Interactions within Ecosystems
8: Water Systems on Earth
10: Sustaining Ecosystems

Biology
11: Biodiversity
Interactions Among Living Things

Social Studies
8: Canadian Identity Geographic Influences,
Decades of Change, and Citizenship
9: Physical Setting, Culture, Economics, Technology, and Interdependence

Canadian Studies
10: Historical and contemporary factors form and continue
to influence our identity as a country.
Areas of study include geography, history, economics, culture, and
citizenship.

Canadian Economy
2203

Global Geography
12

Ontario -- curriculum connections

Science
(www.edu.gov.on.ca/eng/curriculum/elementary/scientec.html)
(www.edu.gov.on.ca/eng/curriculum/secondary/science.html)
7: Interactions within Ecosystems
9: Biology – Sustainable Ecosystems

Social Studies - Canadian and World Studies
(www.edu.gov.on.ca/eng/curriculum/secondary/sstudies.html)

Geography of Canada
9: Human-environment interactions
Understanding and managing change

Civics
10: Informed, purposeful, and active citizenship

Economics
11: The individual and the economy
Making economic choices

Economics
12: Analyzing current economic trends

Geography
12: Canadian and world issues
World geography: human patterns and interactions
The environment and resource management

Prince Edward Island -- curriculum connections

Science: Junior high Programs
(www.gov.pe.ca/educ/index.php3?number=74904&lang=E)
- 7: Interactions within Ecosystems
- 8: Water Systems on Earth

Science: Senior high Programs
(www.gov.pe.ca/photos/original/ed_sps_0809.pdf)

Science
- 10: Sustaining Ecosystems

Biology
- 11: Biodiversity
  - Interactions Among Living Things

Agriscience
- Air, Water and Soil Quality
- Forestry and Wildlife Management

Social Studies
- 8: Canadian Identity Geographic Influences, Decades of Change, and Citizenship
- 9: Physical Setting, Culture, Economics, Technology, and Interdependence

Canadian Studies
- 10: Historical and contemporary factors form and continue to influence our identity as a country.
  - Areas of study include geography, history, economics, culture, and citizenship.

Geography
- 11: Geographic patterns in the natural world linking land, oceans, natural resources, climates, and human activity

Global Issues
- 12: Physical geography, cultural geography, economic geography, environmental, and future studies.

Quebec -- curriculum connections

Science
(www.mels.gouv.qc.ca/gr-pub/menu-curricu-a.htm)

Ecology

Economics Secondary V

General Biology

General Geography

Geographic Organization in the Modern World

Saskatchewan -- curriculum connections

Science
(www.sasked.gov.sk.ca/branches/curr/evergreen/science.shtml)

- 7: Renewable Resources in Saskatchewan
  - Explore the implications or consequences of human actions.
- 8: Freshwater and Saltwater Systems
  - Analyze human impacts on aquatic systems; identify the roles of science and technology in addressing related questions, problems and issues.
- 9: The Environment
  - Explore the effects of human activity on the landscape of Saskatchewan.

Science

- 10: Life Science: Sustainability of Ecosystems
  - How do human activities affect the sustainability of an ecosystem?

Biology

- 20: Ecological Organization

Social Studies - Canadian and World Studies
(www.sasked.gov.sk.ca/branches/curr/evergreen/social.shtml)

- 10: Political and Economic Decision Making
- 20: Environment
- 30: Economic Development