A Teacher’s Guide to Community Environmental Action!
About the Canadian Parks and Wilderness Society (CPAWS)

The Canadian Parks and Wilderness Society was founded in 1963 and is Canada’s true grassroots voice for wilderness. Our mission is to establish new parks and make sure nature comes first in their management. CPAWS has played a key role in saving about 500,000 km² of Canada’s spectacular wildlands. Built from the ground up, we have thirteen chapters across the country, where people passionate about nature can get actively involved.

The CPAWS Southern Alberta Chapter provides award-winning environmental education programs for adults and youth in Calgary and the surrounding areas. Students learn environmental stewardship through our interactive programs. Since 1997, we have engaged over 115,000 students with environmental programs that link to the Alberta curriculum. We offer classroom programs and guided interpretive hikes for grades 2 to 12, as well as adult education for teachers and community groups. For more information about our programs visit our website at http://cpaws-southernalberta.org/campaigns/education.

This guidebook is a living document and is one of the vital components of the Canadian Parks and Wilderness Society’s education programs. We welcome all feedback and will incorporate suggested changes. Please send comments, questions and inquiries to education@cpaws.org. For more information about our Action Challenge program visit www.actionchallenge.ca

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What is an Action Project?

Action projects involve students tackling an issue or problem, or, in the context of the environment, working to improve an environmental setting. These projects can be as simple or as complex as you want and they are often most successful when focused at the local community level, where the issue has the most relevance to the students.

Action projects come in many different shapes and forms. Here are a few types of action projects that you and your class might be interested in! (Leap into Action, Oct. 2003, p.24)

**Educate and Inform:** Teach others about an issue: write newspaper articles, pamphlets, plays, poems and songs, make posters, websites, murals, advertisements and social media campaigns, and host school celebrations.

**Shopping Habits:** Look hard at what you buy/eat/wear everyday, and try to change your shopping habits. Cut down on what you buy and support local farmers and businesses.

**Consumer Action:** Investigate stores and business to see how their products can be more environmentally friendly and make suggestions for change.

**Political Action:** Meet with local government people about issues, speak at public meetings, develop and pass around petitions, and write letters or media releases.

**“Get Down and Dirty” Projects:** These action projects make direct changes to the environment, like greening your schoolyard, raising Northern Leopard Frog tadpoles, tree planting, stream cleanups, gardening etc.

**Lifestyle Choices:** Encourage and support environmentally-sound decisions like: walking, biking, using proper trails, taking public transport over taking a car, consuming less, recycling more and choosing “low-impact” recreation like hiking and canoeing.

For a detailed teachers guide to action-taking in the classroom (including classroom activities and numerous case studies), CPAWS recommends *Leap Into Action - A Guide to Environmental Action Projects*. To order a free hard copy visit [https://hctfeducation.ca/product/leap-into-action/](https://hctfeducation.ca/product/leap-into-action/)
Why do Action Education?

Not only is action education a direct component of the Alberta learning curriculum (see below), but it also works to empower and inspire students as well as prepare them for the real-world problems they will face as adults:

“Action projects provide venues for skills development, practice and field-testing, and support students in actually taking responsible action on issues and problems that affect them and their community.”

(Leap into Action, Oct 2003, p. 6)

Incorporating action learning in to your classroom is important because it:

- Helps students develop control over their lives
- Enhances creative and critical thinking skills by making learning relevant, alive and real
- Facilitates the development of knowledge, understanding and wisdom
- Integrates diverse subject areas
- Connects students to the broader community
- Provides opportunities to develop citizenship skills
- Provides opportunities for students to build teamwork and cooperative learning skills

(Leap into Action, Oct. 2003, p.6)

How does Action Education fit into the curriculum?

You may be wondering, “how can I justify incorporating an action project in to my classroom?” Well, according to Alberta Learning student outcomes, critical thinking, problem solving, as well as working independently or as part of a team are skills that students need to learn at every grade level. Not only this, but references to taking action can be found directly within the science and social studies curriculum for most grades (see Appendix A). For example, in the grade 5 science curriculum, it clearly states that students should be able to “identify individual and group actions that can be taken to preserve and enhance wetland habitats”. We have identified all of these curriculum connections for grades 2-12. To get a running start at your action projects, check out these connections in the Appendix.

Tools for Action

The CPAWS website (http://cpaws-southernalberta.org/campaigns) has great information on conservation work that is being done right here in Alberta. If your class would like to get involved in one of our campaigns, please contact the CPAWS Education Team at 403-232-6686 or education@cpaws.org.
Our Education website boasts a wealth of resources that can be incorporated into your classroom and action projects. Free downloadable resources on a variety of subjects and links to other environmental resources can be found at [http://cpaws-southernalberta.org/campaigns/resources-for-environmental-education](http://cpaws-southernalberta.org/campaigns/resources-for-environmental-education). The newest addition to our website, [www.actionchallenge.ca](http://www.actionchallenge.ca), is a must-see action education resource! It contains much of the information found in this document, as well as examples of what other classes have done through participating in the Community Action Challenge program. Check it out to get some great ideas! Also, let us know what you and your students decide to do so we can feature your class' Awesome Action!

We know that teachers are always on the lookout for great resources. But we also recognize that teachers are very busy and this can be a timely process, so we’ve done some of the work for you! Below we have provided you with a listing of local and regional groups your class may want to become involved with, our own tips and tools for teachers and students who want to take action, as well as a fairly comprehensive compilation of websites that can be of great use to your action project. Whether your class wants to adopt an animal, take political action for an endangered species, or build a schoolyard composter, we can help get you started!

<table>
<thead>
<tr>
<th>Hammond’s Action Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Take only positive actions:</strong> Be for something you propose, rather than against something someone else proposes.</td>
</tr>
<tr>
<td><strong>Keep a balanced viewpoint</strong> - empathize: Treat every person you encounter as you wish to be treated, with respect and consideration</td>
</tr>
<tr>
<td><strong>Do your homework:</strong> Study the issue and all its facets, dimensions, and viewpoints.</td>
</tr>
<tr>
<td><strong>Avoid stereotyping:</strong> It is easy to lump individuals into a category or group. When you do so, you tend to minimize their contributions as a person. Role playing exercises can help to break down these barriers.</td>
</tr>
<tr>
<td><strong>Eliminate scapegoating, accept responsibility:</strong> Don’t blame your lack of success on something or someone else. Accept responsibility and move on.</td>
</tr>
<tr>
<td><strong>Recycle:</strong> If at first you don’t succeed - rethink and start again.</td>
</tr>
<tr>
<td><strong>Be persistent:</strong> Environmental problems are some of the most complex issues of our time. Long-term commitment and the will to succeed are both necessary.</td>
</tr>
</tbody>
</table>

Tools for Teachers

The following tools can all be obtained through at [www.actionchallenge.ca](http://www.actionchallenge.ca) or [http://cpaws-southernalberta.org/campaigns/resources-for-environmental-education](http://cpaws-southernalberta.org/campaigns/resources-for-environmental-education)

- Teaching Controversial Issues
- Environmental Experts List
- Action Challenges Contests
- Awesome Actions by other classes
- Who do we write to?

How will I measure the success of my class’s action project?

**Assessing student knowledge:**

- Keep a video or photo log of project highlights.
- Collect memorabilia to create an action project scrapbook that students can sign and write in.
- Have students write essays and/or keep a journal.
- Have students evaluate other members of their group, as well as themselves.

**Assessing Project Success:**

- Have students describe how well they think their project accomplished the objectives they outlined at the start.
- Have students conduct surveys, field studies, or interviews to assess the success of their project.
- Evaluate how the students planned for ongoing maintenance and sustainability of the project.
Tools for Students

- Why not encourage your classmates to take an EcoAudit? That’s what Mr. Tavernini's grade three class did at General Stewart Elementary. They worked through a questionnaire to see how environmentally friendly their lives were, and committed to improving their scores. Take the test and challenge yourself to get a better score! [http://www.footprintnetwork.org/en/index.php/GFN/page/calculators/](http://www.footprintnetwork.org/en/index.php/GFN/page/calculators/)
- Find out what other students and classes have done for their Action Challenge – visit [www.actionchallenge.ca](http://www.actionchallenge.ca)

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**David Suzuki’s 10 Nature Challenges...**

1. Turn things off!
2. Play outside!
3. Be an energy detective
4. Choose at least one day a week to eat meat-free meals
5. Where does your lunch come from?
6. Is bigger really better?
7. How do you get around?
8. Explore your neighbourhood.
9. Express yourself
10. Share info!
Contact Organizations

We have collected the contact information for a few organizations that can offer you opportunities for outdoor and environmental education programmes, action projects, camps, and field trips in Calgary and around Alberta.

**Alberta Institute for Wildlife Conservation**
Variety of in-class presentations provided for all grades. They also run an adoption program for injured wildlife.
[www.aiwc.ca](http://www.aiwc.ca)
403-946-2361
education@aiwc.ca

**Alberta Parks - Fish Creek Provincial Park Environmental Learning Centre**
Focus on students' exploration and connection to the variety of natural ecosystems in the park. Programs are available for K-Grade 12.
[www.albertaparks.ca/fish-creek/education/school-programs/](http://www.albertaparks.ca/fish-creek/education/school-programs/)

**Alberta Parks - Kananaskis Country Environmental Education**
Provides teacher in-services and/or staff led field studies in Kananaskis Country. Programs are available for Grades 4-12.
[www.albertaparks.ca/kananaskis-country/education/environmental-education-programs-resources/](http://www.albertaparks.ca/kananaskis-country/education/environmental-education-programs-resources/)

**Alberta Tomorrow**
Educational tool to understand the process of sustainable planning to balance land-uses such as agriculture, oil and gas and forestry with ecological integrity. Free lesson plans provided.
[https://albertatomorrow.ca](http://https://albertatomorrow.ca)

**Bow Habitat Station at Sam Livingstone Fish Hatchery**
Provides a variety of programs for Kindergarten to Grade 6 plus the Fish In Schools program.
[www.bowhabitat.gov.ab.ca](http://www.bowhabitat.gov.ab.ca)
403-297-6561

**Canadian Wildlife Federation**
Programs for youth and teachers and resources that connect people with wildlife and nature through experiential learning.
[www.cwf-fcf.org](http://www.cwf-fcf.org)
1.800.563.9453

**Calgary Zoo**
Zoo presentations and tours, Zoo School and teacher professional development workshops.
[www.calgaryzoo.com](http://www.calgaryzoo.com)
403-232-9300
City of Calgary
The City of Calgary’s Nature Explorations programs provide environmental education and nature experiences for students in preschool to Grade 12.
www.calgary.ca/CSPS/Parks/Pages/Programs/School-programs/School-programs.aspx

Cross Conservation Area
Natural area close to Calgary that offers on-site nature-based programming for grades 1-9 on curriculum related topics.
www.crossconservation.org
403-931-2042
info@crossconservation.org

Evergreen Foundation
Evergreen’s Learning Grounds program brings school communities together to transform typically barren school grounds into healthy, natural and creative outdoor classrooms.
www.evergreen.ca
info@evergreen.ca

Evergreen Theatre
Evergreen Theatre Society is a touring, educational theatre company dedicated to science theatre of the natural world. Has a variety of programs available, including a residency program.
www.evergreentheatre.com
403-228-1384
info@evergreentheatre.com

Friends of Fish Creek Provincial Park
A variety of programs your class can become involved with including monitoring (wildlife and weed monitoring), naturalization and stewardship projects including park cleanups.
www.friendsoffishcreek.org
403-238-3841
info@friendsoffishcreek.org

Green Calgary
Non-profit dedicated to assisting Calgarians in leading environmentally sustainable lifestyles. Recycling and composting information and school programs are available.
http://www.greencalgary.org/
403-230-1443

Inside Education
Environmental education materials and services and public education and outreach programs provided. Inside Education also provides teacher training on a variety of subjects.
www.insideeducation.ca
403-263-7720

RiverWatch
Students learn about their local river ecosystem on a fun-filled rafting trip with their friends. This trip takes them out of the classroom and puts them right in the middle of the action.
www.riverwatch.ab.ca
780.919.7907
business@riverwatch.ab.ca

SEEDS
How does your school become a Green School? For more information on this, and SEEDS’ climate change resources, view their website.
http://seedsconnections.org/
403-264-5959
info@seedsconnections.org

Spark Science
TELUS Spark brings students hands-on experiences designed to encourage open-ended exploration, inquiry and participatory investigation.
www.sparkscience.ca
403.817.6800
info@sparkscience.ca

Trout Unlimited
Trout Unlimited’s Yellow Fish Road program educates Canadians that storm drains are the doorways to our rivers, lakes and streams. Participants learn that together we can prevent pollutants from entering our storm drains and protect Canada’s water.
http://tucanada.org/
403-221-8360

Yellowstone to Yukon Conservation Initiative (Y2Y)
Learn more about wildlife corridors, why they are important and what people are doing to conserve them. Learn what your class can do!
www.y2y.net
403-609-2666
info@y2y.net
**Action-Related Websites**

**David Suzuki Superhero Challenge**  
Fun activities that help teach kids about our right to a healthy environment and connect them to the great outdoors.  
Website: [http://getbackoutside.ca](http://getbackoutside.ca)

**EcoKids Club Home Pages**  
Easy activities and fun games to help make the planet a little greener.  
Website: [https://ecokids.ca/take-action](https://ecokids.ca/take-action)

**Nature Conservancy of Canada**  
Features conservation work done across Canada.  
Website: [http://www.natureconservancy.ca](http://www.natureconservancy.ca)

**World Wildlife Fund - Canada**  
Great information on action projects your class can take to help wildlife in Canada.  
Website: [www.wwf.ca](http://www.wwf.ca)

See more at [www.actionchallenge.ca](http://www.actionchallenge.ca)

**Adopt a...**

If your class is interested in raising money to support conservation efforts of a specific endangered species, check out these sites:

**Alberta Birds of Prey Centre**  
Sponsor burrowing owls and more:  

**Alberta Institute for Wildlife Conservation**  
Adopt injured wildlife: [www.aiwc.org](http://www.aiwc.org)

**Canadian Peregrine Foundation**  

**Cochrane Ecological Institute**  
Swift fox reintroduction program:  
[www.ceinst.org/endangered-species.html](http://www.ceinst.org/endangered-species.html)

**Vancouver Island Marmot Recovery Project**  
Adopt a Marmot program: [www.marmots.org](http://www.marmots.org)

**WWF Species Adoptions**  
Grizzly Bear Websites

Friends of Banff www.friendsofbanff.com/learn-more/edu-kit-rentals/big-bear-edu-kit/


International Association for Bear Research and Management www.bearbiology.com/

Why Bears? www.youtube.com/watch?v=yGC6Ja1ZZkQ

Endangered Species Websites

Species at Risk in Alberta http://aep.alberta.ca/fish-wildlife/species-at-risk/

Species at Risk in Canada www.sararegistry.gc.ca

World Wildlife Fund www.wwfcanada.org
APPENDIX A
Action in the Alberta Curriculum

** Please note that all of the following text is extracted from the relevant Government of Alberta curriculum document.

Mission of Alberta Learning
Alberta Learning, through its leadership and work with stakeholders, ensures that learners are prepared for lifelong learning, work and citizenship so they are able to contribute to a democratic, knowledge-based and prosperous society. Student learning outcomes include:

- Research an issue thoroughly, and evaluate the credibility and reliability of information sources
- Demonstrate critical and creative thinking skills in problem solving and decision making
- Know how to work independently and as part of a team

Elementary Science

Curriculum’s emphasis is on science inquiry and problem solving using technology. The following attitudes are prescribed for all grades:

- Appreciation of the benefits gained from shared effort and cooperation
- A sense of responsibility for personal and group actions
- Respect for living things and environments, and commitment for their care.

Knowledge: Some specific learner expectations:

**Grade 2, Topic A: Exploring Liquids**
*Students will:*
- Recognize human responsibilities for maintaining clean supplies of water, and identify actions that are taken to ensure that water supplies are safe.

**Grade 3, Topic E: Animal Life Cycles**
*Students will:*
- Identify examples of environmental conditions that may threaten animal survival, and identify examples of extinct animals
- Recognize that habitat preservation can help maintain animal populations, and identify ways that student actions can assist habitat preservation
- Demonstrate knowledge of the needs of animals studied, and demonstrate skills for their care.

**Grade 4, Topic A: Waste and our World**
*Students will:*
- Identify actions that individuals and groups can take to minimize the production of wastes, to recycle or reuse wastes and to ensure the safe handling and disposal of wastes.
- Develop and implement a plan to reduce waste, and monitor what happens over a period of time.

**Grade 5, Topic D: Weather Watch**
*Students will:*
- Recognize that human actions can affect climate, and identify human actions that have been linked to the greenhouse effect
Grade 5, Topic E: Wetland Ecosystems

Students will:

- Identify human actions that can threaten the abundance or survival of living things in wetland ecosystems; e.g., adding pollutants, changing the flow of water, trapping or hunting pond wildlife.
- Identify individual and group actions that can be taken to preserve and enhance wetland habitats.

Grade 6, Topic E: Trees and Forests

Students will:

- Identify human actions that enhance or threaten the existence of forests.
- Identify an issue regarding forest use, identify different perspectives on that issue, and identify actions that might be taken.

Junior High Science

All four Science foundations support action activities:

Foundation 1: Science, Technology and Society (STS) – Students will develop an understanding of the nature of science and technology, the relationships between science and technology, and the social and environmental contexts of science and technology.

Foundation 2: Knowledge – Students will construct knowledge and understandings of concepts in life science, physical science and Earth and space science, and apply these understandings to interpret, integrate and extend their knowledge.

Foundation 3: Skills – Students will develop the skills required for scientific and technological inquiry, for solving problems, for communicating scientific ideas and results, for working collaboratively and for making informed decisions.

Foundation 4: Attitudes – Students will be encouraged to develop attitudes that support the responsible acquisition and application of scientific and technological knowledge to the mutual benefit of self, society and the environment.

Skills: Each grade contains a unit that focuses on Developing a Social and Environmental Emphasis (Grades 7-9). Skills (which focus on research and inquiry skills to inform the decision-making process) include:

Initiating and Planning:
- Identify science-related issues
- Identify questions to investigate arising from science-related issues.

Communication and Teamwork:
- Work cooperatively with team members to develop and carry out a plan and troubleshoot problems as they arise
- Defend a given position on an issue, based on findings
- Evaluate processes used to investigate an issue and evaluate alternative decisions.

Knowledge: Some specific learner outcomes

The following Specific Learner Outcomes can be found in this curriculum:
Grade 7, Unit A: Interactions and Ecosystems
Students will:
- Describe the relationships among knowledge, decisions and actions in maintaining life-supporting environments.

Grade 8, Unit E: Freshwater and Saltwater Systems
Students will:
- Analyze human impacts on aquatic systems; and identify the roles of science and technology in addressing related questions, problems and issues.

Grade 9, Unit A: Biological Diversity
Students will:
- Identify impacts of human action on species survival and variation within species, and analyze related issues for personal and public decision making.

High School Science: Bio 20-30

Goals: Biology 20-30 is an academic program that...develops in students the knowledge, skills and attitudes to help them become capable of, and committed to, setting goals, making informed choices and acting in ways that will improve their own lives and life in their communities.

Students will be expected to demonstrate an understanding of...
- The ability and responsibility of society, through science and technology, to protect the environment and use natural resources judiciously to ensure quality of life for future generations.

The following Specific Learner Outcome can be found in this curriculum:
Bio 20 - Unit B: Ecosystems & Population Change / Bio 30 - Unit D: Population & Community Dynamics
Students will explain how science and technology have both intended and unintended consequences for humans and the environment.

Social Studies, K-12

The Social Studies curriculum is replete with support for education about, through, and for action...

Values and Attitudes
Students will demonstrate a consciousness for the limits of the natural environment, stewardship for the land and an understanding of the principles of sustainability relationships with the natural environment.

Knowledge and Understanding
Social studies provides learning opportunities for students to:
- Understand their rights and responsibilities in order to make informed decisions and participate fully in society
- Apply historical and geographic skills to bring meaning to issues and events.

Skills and Processes
Social studies provides learning opportunities for students to:
- Engage in active inquiry and critical and creative thinking
- Engage in problem-solving and conflict resolution with an awareness of the ethical consequences of decision-making.
Core concepts of Citizenship
The goal of social studies is to provide learning opportunities for students to:
- Understand the principles underlying a democratic society
- Demonstrate a critical understanding of individual and collective rights
- Understand the commitment required to ensure the vitality and sustainability of their changing communities at the local, provincial, and national levels.

An Issues-focused approach to teaching Social Studies: Controversial Issues
Opportunities to deal with controversial issues are an integral part of social studies education in Alberta. Studying controversial issues is important in preparing students to participate responsibly in a democratic and pluralistic society. Such study provides opportunities to develop the ability to think clearly, to reason logically, to open-mindedly and respectfully examine different points of view and to make sound judgments. Controversial issues should be used by the teacher to promote critical inquiry rather than advocacy and to teach students how to think rather than what to think.

Power, Authority and Decision Making (one of the six strands of Social Studies)
Examining the concepts of power, authority and decision making from multiple perspectives helps students consider how these concepts impact individuals, relationships, communities and nation. A critical examination of the distribution, exercise and implications of power and authority is the focus of this strand. Students will examine governmental and political structures, justice and laws, fairness and equity, conflict and cooperation, decision-making processes, leadership and governance. This examination develops a student’s understanding of the individual’s capacity in decision-making processes and promotes active and responsible citizenship.
APPENDIX B

CPAWS’ Action Challenge Reporting Form

We are so happy you’ve decided to do something to help the environment – every action, large or small, counts! We’d like to find out what you’ve done so we can profile your work on our webpage and send you a certificate for participating in our program!!!

Please fill out this form and send to the address below. Please print clearly.

School Name: ___________________________________________

Teacher name, # of students: __________________________________

Name on Certificate:_________________________________________

School Address:______________________________________________

Tel/Fax:_______________________________________________________

Email:_______________________________________________________

School Website URL: _________________________________________

Please describe the action your class took/will take to help endangered species and spaces. Feel free to use extra pages. If you need help with your action plans, contact us – we have lots of great ideas!

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

How much time did it take to work towards your project goals? __________

What resources will/did you need? ________________________________

* Please send/email us pictures of your class, posters or events, and copies of any letters, reports or posters you create so we can post them on: www.actionchallenge.ca

SEND TO: Canadian Parks and Wilderness Society (CPAWS)

Education Director
88 Canada Olympic Road, SW
Calgary, AB T3B 5R5

Email: education@cpaws.org
Fax: 403-232-6988