







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 almost 300,000 km² of Canada's spectacular wildlands. Built from the ground up, we have eleven chapters across the country, where people passionate about nature can get actively involved.

The CPAWS Calgary-Banff Chapter is the only CPAWS chapter to have a full-time education office. Our education program delivers customized workshops and programs about biodiversity, ecosystem management, wilderness, and other concepts relevant to the CPAWS mission. For more information about our programs visit our website, www.cpawscalgary.org/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@cpawscalgary.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*)

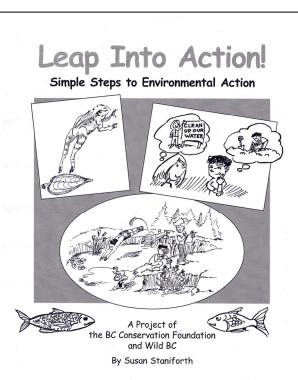
Educate and Inform: Projects that teach other people about an issue. Examples include writing newspaper articles, pamphlets, plays, poems and songs, making posters, murals and advertisements, and hosting school celebrations.

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

Consumer Action: Investigating stores and business to see how their products can be more environmentally friendly, and making suggestions for change.

Political Action: This sounds pretty serious (!) but includes things like meeting with local government people about issues, speaking at public meetings, developing and passing around petitions, and writing letters, doing media releases etc.

"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: Encouraging and supporting environmentally-sound decisions like: walking, biking, using proper trails, taking public transport over taking a car, consuming less, recycling more, choosing "lowimpact" recreation like hiking and canoeing.



For a more detailed teachers guide to action-taking in the classroom (includes classroom activities and numerous case studies), CPAWS recommends *Leap Into Action - A Guide to Environmental Action Projects*. For information on how to order this document, please contact Wild BC at 250-356-7111, or wild@gems5.gov.bc.ca. For more information visit www.hctf.ca and click on Wild B.C.

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 fieldtesting, 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 3-12. To get a running start at your action projects, check out these connections in the Appendix.

Tools for Action

The CPAWS website (<u>www.cpawscalgary.org/campaign</u>) 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, or participate in our annual spring fundraising event called "Running Wild", please contact the CPAWS Education Team (403-232-6988).

Our Education website boasts a wealth of resources that can be incorporated in to your classroom and action projects. Free downloadable resources on a variety of subjects and links to other environmental resources can be found at www.cpawscalgary.org/education. The newest addition to our website, **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 schools and classes have done through participating in the Community Action Challenge program. Check out the Awesome Action portion of the site to get some great ideas! Also, let US know what you and your students decide to do so we can feature your class's Awesome Action!

We know that teachers are always on the look out 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!

Hammond's Action Guidelines

Take only positive actions: Be *for* something you propose, rather than against something someone else proposes.

Keep a balanced viewpoint - empathize: Treat every person you encounter as you wish to be treated, with respect and consideration

Do your homework: Study the issue and all its facets, dimensions, and viewpoints. **Avoid stereotyping**: 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.

Eliminate scapegoating, accept responsibility: Don't blame your lack of success on something or someone else. Accept responsibility and move on.

Recycle: If at first you don't succeed - rethink and start again.

Be persistent: Environmental problems are some of the most complex issues of our time. Long-term commitment and the will to succeed are both necessary.

Hammond, William (1997) "Educating for Action: A Framework for Thinking about the Place of Action in Environmental Education." *Green Teacher* Winter 1996-97. pp6-14.

Tools for Teachers

The following tools can all be obtained through a free download at <u>www.cpawscalgary.org/education/</u> or <u>www.actionchallenge.ca</u>:

- EduAction Teaching Kit
- Teaching Controversial Issues
- Action Challenge Menu. We have designed a fun way of getting your students to consider taking action. Students can "order off the menu," selecting anything from an Action Appetizer to the Spécial du Jour – depending on their appetite!
- Awesome Action. See what other classes have done under the Awesome Action link
- Who do we write too? We know it can be confusing deciding to whom you should address your letters and petitions. Visit *www.cpawscalgary.org/action* to find the addresses and names of politicians

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.

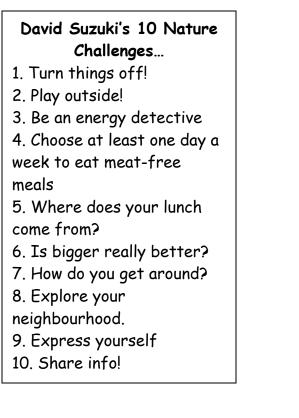


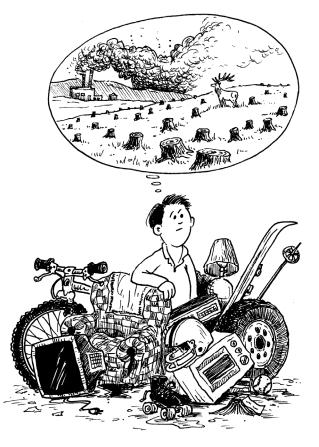
Tools for Students

• Check out David Suzuki's Nature Challenge 4 Kids at *www*.

davidsuzuki.org/kids/challenges

- 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 commited to improving their scores. Visit <u>www.myfootprint.org</u> to take the test and challenge yourself to get a better score!
- Find out what other students and classes have done for their Action Challenge visit **the Awesome Action link on www.actionchallenge.ca**





Thinking about his impact...



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 Community Development

Fish Creek Provincial Park Environmental Learning Centre The educational programs at Fish Creek Provincial Park focus on students' exploration and connection to a variety of natural ecosystems found there. Programs from Kindergarten-Grade 12. www.cd.gov.ab.ca/enjoying_alberta/parks/feat ured/fishcreek/ Phone: 403-297-7827

Kananaskis Country Environmental Education Provides teacher in-services and/or staff led field studies in Kananaskis Country. Available for all grades.

http://www.cd.gov.ab.ca/enjoying_alberta/par ks/featured/kananaskis/ed_programs.asp Phone: 403-678-5500

Alberta Ecotrust

Information on Schoolyard Naturalization grants which can be applied for to turn a barren playground in to a natural space for learning and relaxing! www.albertaecotrust.com Phone: 1-800-465-2147 Email: ecomail@albertaecotrust.com

Alberta Institute for Wildlife Conservation

Provides a variety of in-class presentations as well as site visits for all grades. They also run an adoption program for injured wildlife. Website: www.aiwc.ca Phone: 403-946-2361 Email: info@aiwc.ca

Bow Habitat Station at Sam Livingstone Fish Hatchery

Provides a variety of programs including water conservation for grades 4-9, grade 3 lifecycles and grade 5 wetland programs www.bowhabitat.gov.ab.ca Phone: 403-297-7058

Calgary Zoo

Zoo presentations and tours Zoo School, teacher professional development workshops, behind the scenes tours, and Grounds for Change schoolyard naturalization program. www.calgaryzoo.ab.ca Phone: 403-232-9300

Clean Calgary

Non-profit dedicated to assisting Calgarians in leading environmentally sustainable lifestyles. Recycling and composting information and school programs are available. www.cleancalgary.com Phone: 403-230-1443 Email: cleancalgary@cleancalgary.com

Cross Conservation Area

Natural area close to Calgary that offers on-site nature-based programming for grades 1-6 on curriculum related topics. www.crossconservation.org Phone: 403-931-2042 Email: 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 Phone: 1-888-426-3138 Email: 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. See website for more details.

Website: www.evergreentheatre.com Phone: 403-228-1384 Email: etheatre@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 Phone: 403-238-3841 E-mail: ffcppsoc@iul.net

Inglewood Bird Sanctuary

Programs such as Nature Discovery and Wetland Adventures are available to school children from pre-school to Grade 9. Phone: 403-221-4532 Email: InglewoodBirdSanctuary@calgary.ca

Inside Education (Formerly known at FEESA)

Environmental education materials and services, and public education and outreach programming. Inside Education also provides teacher training on a variety of subjects. See their website for more detailed information. Website: www.insideeducation.ca Phone: 780-421-1497 Email: info@insideeducation.ca

SEEDS

How does your school become a Green School? For more information on this, and SEEDS' climate change resources, view their website. Website: www.greenschools.ca Phone: 403-221-0873 Email: seeds@telusplanet.net

Sustainable Calgary

Calgary Green Map information and tips for reducing size of ecological footprint. Also check out Calgary's Green Map which is an education, advocacy and planning tool for community groups, governments, and the private sector. The map includes approximately 50 icons that highlight Calgary's environmentally friendly and not-so-friendly sites. www.sustainablecalgary.ca Phone: 403-270-0777 Email: info@sustainablecalgary.ca

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! Website: www.y2y.net Phone: 403-609-2666 Email: info@y2y.net

Action-Related Websites

David Suzuki Nature Challenge 4 Kids

Fun on-line activities and environmental links. See "Tools for Students" for the top 10 things kids can do and visit the website below for more details.

Website: www.davidsuzuki.org/kids/

World Wildlife Fund - Canada

Great information on action projects your class can take to help wildlife in Canda. Website: http://www.wwf.ca/ or

Nature Conservancy of Canada

Features conservation work done across Canada. Opportunities to raise money for donations to conserve wilderness in Alberta. http://www.natureconservancy.ca/files/index. asp

EcoKids Club Home Pages

See some success stories that the schools themselves have sent in at: Website: http://www.ecokids.ca/pub/ek_club/club/ho me_pages/index.cfm

Adopt a...

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

Vancouver Island Marmot Recovery Project -

Adopt a Marmot program: www.marmots.org

Cochrane Ecological Institute – Swift fox reintroduction program: www.ceinst.org/swift_fox.html

Canadian Peregrine Foundation

Website: www.peregrinefoundation.ca/programs/adoptem/adoption.ht ml

Alberta Birds of Prey Centre – Sponsor burrowing owls and more: www.albertabirds.com

WWF Polar Bear Adoption

Website: http://secure.worldwildlife.org/forms/support _polarbears.cfm

Alberta Institute for Wildlife Conservation – adopt injured wildlife Website: www.aiwc.org



Grizzly Bear Websites

Brown Bear Resources Website: www.brownbear.org

Hinterland Who's Who Website: *www.hww.ca* (you'll find grizzlies under "Species" and Mammals") *Grizzly Action Centre* Website: *www.savethegrizzly.org*

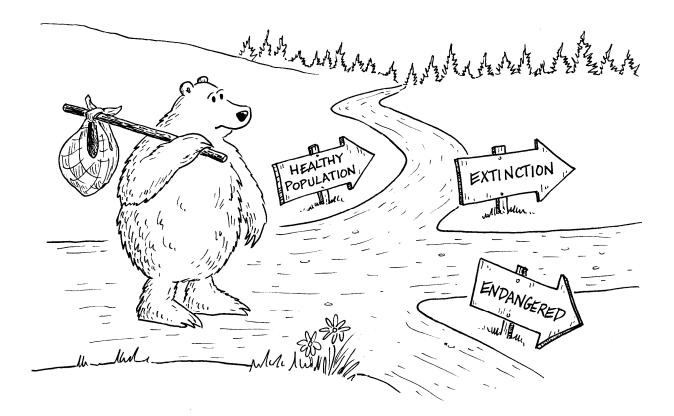
World Wildlife Fund Website: *www.wwfcanada.org*

Endangered Species Websites

Species at Risk in Canada Website: *www.speciesatrisk.gc.ca/*

World Wildlife Fund Website: www.wwfcanada.org

Species at Risk in Alberta Website: www3.gov.ab.ca/srd/fw/speciesatrisk/



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:

- o 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
- o 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
- o A sense of responsibility for personal and group actions
- o Respect for living things and environments, and commitment for their care.

Knowledge: Some specific learner expectations:

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; eg.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 lifesupporting 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.

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 nations...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 will take to help grizzly bears or endangered species. 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)
Action Challenge Coordinator
Suite 1120, 1202 Centre Street SE
Calgary, AB T2G 5A5
Email: education@cpawscalgary.org
Fax: 403-232-6988



A Teacher's Guide to Community Environmental Action

(For Back Page, if space)



1120, 1202 Centre Street SE Calgary, AB T2G 5A5

www.cpawscalgary.org/education