

2017-2018

CPAWS Southern Alberta Education Report



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Thank you to all our funders and supporters for helping us inspire the next generation of environmental stewards!

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EXECUTIVE SUMMARY

The Canadian Parks and Wilderness Society (CPAWS) is Canada's voice for wilderness. We are a not-for-profit charity with 13 chapters across Canada, from coast to coast to coast. We work on the ground regionally to contribute to the establishment of new protected areas, and effective management of our parks and wilderness spaces. For over 50 years CPAWS has made significant strides to safeguard Canada's natural capital, and is the only nation-wide organization that has created more than half a million square kilometres of protected areas. Our focus is on public lands and waters, which make up 90% of Canada.

CPAWS Southern Alberta chapter works to protect Alberta's parks and wilderness areas, and educate and inspire Albertans to get outside and engage in stewardship. We have helped create significant protected areas in Kananaskis, the Whaleback, and recently the Castle. We work with government, industry, First Nations, and other stakeholders—using science—to champion conservation solutions. We have a long-standing history in national park management, and our premier national parks, Banff and Jasper, would look very different today if it were not for the work of our chapter. We were instrumental in establishing the wildlife crossing structures in Banff National Park and were the brainchild behind the Yellowstone to Yukon Conservation Initiative (Y2Y).

In addition to our conservation work, CPAWS Southern Alberta is a leader in environmental education, and has won provincial and national awards for our unique education programs. For over 20 years, we have been successfully delivering multi-visit, curriculum-linked, in-class environmental education and outdoor interpretive hiking programs to youth grades 2-12 and adult groups in Alberta, focusing on local stewardship. To date, we have reached over **128,000** participants in this region.





The 2017-2018 school year was a year of growth for our Education Department. We bolstered efforts in adult education and introduced several new programs:

- **Climate Connections** we have strengthened the connections to climate literacy in every program we do, for every age. Climate plays a role in most environmental challenges of today, from species at risk to park ecosystems to watershed health. All Albertans need to take climate action together.
- **Discovering Parks in Canada** an interpretive hiking program to introduce new immigrants to parks, recreation and stewardship.
- **Climate Connect** a multi-visit classroom and hiking program to engage high school students in climate literacy and action. We also offer a corresponding workshop to new immigrants and other community members.
- **YYC Citizen Science** a joint project with Green Calgary that invites students to tackle water and wildlife conservation issues, collect data, and submit observations to citizen science research projects.
- **Take the Action Challenge** a planning session for students to learn how to effectively design and complete an environmental action project.

Our school based education program for Grades 2-12 links local conservation with curriculum, and includes programs on climate literacy, species at risk, trees and forests, water conservation, grizzly bears, and Alberta's parks and wilderness. These programs follow a unique multivisit formula of two in-class visits and a guided hike or snowshoe, fostering a connection to nature, and bringing deeper meaning to the learning experience. Our hands-on interactive programs are extremely relevant for students, teaching them current conservation issues in Alberta; inspiring them to care about our local environment, resources, and species at risk; and empowering them to engage in stewardship to make a difference.

The CPAWS Action Challenge Initiative is a chief component of our environmental education programs. We work with thousands of students each year, providing them with knowledge pertaining to the issues surrounding Alberta's species at risk and their habitats. Our goal is to take the learning beyond the classroom and for students to take action to create a positive impact on the environment. We want students to be inspired and empowered to make a difference, to care about local conservation issues, and engage in stewardship by taking on an Action Challenge project.

Our adult education program is grounded in our expertise with school programming, and extends these learnings to an adult audience, including teachers, corporate groups, community groups, and new immigrants. Program topics include outdoor education, parks and protected areas, water stewardship, grizzly bears, and more. Each year the demand for adult education programming and experience is growing, especially in our successful new immigrant program.

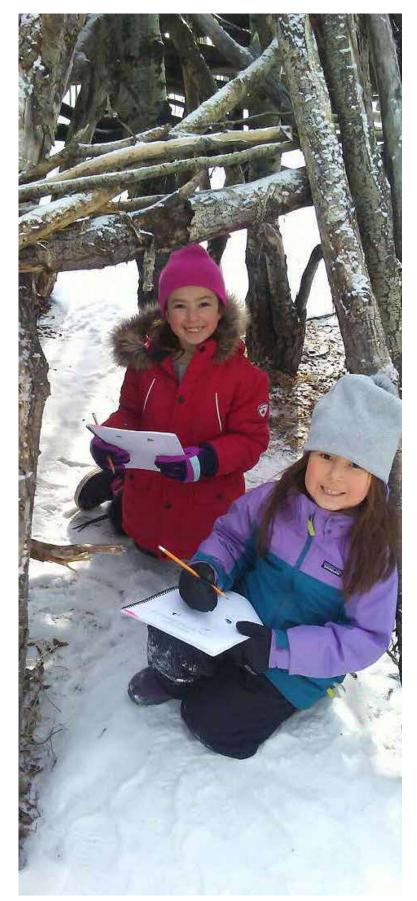
The 2017-2018 school year's results further demonstrate the growing demand, and success, of our education programs. Thanks to continued support, each year we are able to fine-tune



and build our programs to ensure their high quality. This year included developing new programs, adding to our repertoire, engaging more students than ever in environmental action, and continuing to receive positive feedback from participants. In terms of numbers, this meant that from July 2017 to June 2018 we delivered **466 programs to over 10,700 Albertans.** These programs included:

- 171 hikes and snowshoe treks in Alberta's parks and protected areas
- 388 classroom visits
- 51 adult programs
- 50% of our programs were delivered to high needs and rural schools
- 25% to rural schools
- 19% to high needs schools in Calgary
- 6% to high needs schools in rural areas
- 94% of participants committed to or engaged in positive environmental stewardship

Our success and future achievements would not be possible without our funders. Their support not only helps keep program costs at a minimum for schools, it is integral to run the education department, and deliver the sheer number of quality programs each school year. Thank you! The Canadian Parks and Wilderness Society's Southern Alberta Chapter looks forward to sustaining and strengthening these relationships as we continue to provide outstanding educational programming in the region.







OUR EDUCATION TEAM:

The success of our education program directly correlates to the highly skilled and amazing people involved. It is important for us to recognize the incredible talent, passion for nature and conservation, and hard work that goes into running this successful program each year.

Anne-Marie Sylak, *Executive Director* – Anne-Marie has a background strongly rooted in science and education (B.Sc, B.Ed, M.Sc), and has worked in the municipal and the environmental non-government organization (ENGO) sectors with respect to conservation for over 20 years. Anne-Marie's strong ecological principles and enthusiasm for conservation and education translate through her leadership.

Jaclyn Angotti, *Education Director* – Jaclyn is an Environmental Educator with nine years of experience leading science and environmental education programs. She has a BSc. in Biology with a Business minor from the University of Alberta and a Graduate Certificate in Education for the Environment from the University of Calgary. Her passion for connecting others with nature is integral to everything she does.

Vanessa Bilan, *Environmental Educator* – Vanessa is certified as an Apprentice Interpretive Hiking Guide with the Interpretive Guides Association (IGA). Childhood trips to the mountains grew into a passion and lead her to complete a Bachelor of Health and Physical Education in Ecotourism and Outdoor Leadership at Mount Royal University. At CPAWS, Vanessa shares her love of nature and the outdoors with others.



Alex Mowat, *Hiking Guide* – Alex, an IGA Professional Interpretive Hiking Guide, is involved in environmental advocacy, first nations, parks, and guiding work. His recent work has focused on coastal wildlife and bear viewing in the Great Bear Rainforest, as well further north in Churchill, on polar bear viewing. To him, it is an honor and an inspiration to share nature's interconnections with students.

Julie Walker, *Hiking Guide* – Julie has been a hiking guide and outdoor educator for over 20 years. As an IGA Professional Hiking Guide, she has taken people of all ages outdoors, winter and summer. Her specialty is edible and medicinal plants, and the human/natural history connection. Julie's philosophy of "connecting people with nature" drives her in her work as an interpretive guide.



Lauren Bally, *Hiking Guide* – Lauren's love of the wilderness began at 12 when she went on her first weeklong canoe trip. She was so taken with the great outdoors that she completed a degree in Outdoor Adventure Leadership and a teaching degree so she could share it with others. As an IGA Apprentice Interpretive Hiking Guide, Lauren builds future leaders through her outdoor education programs.

Justin Howse, *Hiking Guide* – Justin has a Diploma in Biological Sciences specializing in Renewable Resources from NAIT, and is a Professional Interpretive Hiking Guide with the IGA. With his experience in the outdoors, Justin feels blessed to share his love of the environment with the people who join him on CPAWS hiking programs.

Our education programs would not be possible without the entire CPAWS Southern Alberta team and our dedicated education volunteers. The CPAWS Southern Alberta team includes:

- Katie Morrison, *Conservation Director*
- Kirsten Olson, Office and Fund Program Administrator
- Ian Harker, Communications Coordinator
- Becky Best-Bertwistle, Conservation Engagement Coordinator
- Peter Zimmerman, Parks Program Supervisor
- Erin Dueck, 2018 Summer Outreach Coordinator
- Hannah Penner, 2018 Summer Outreach Coordinator
- 10 Adult Education Volunteers and 2 Education Assistant Volunteers



OUR SCHOOL PROGRAMS AT A GLANCE

ELEMENTARY PROGRAMS

Species at Risk (Grades 2-5)

Classroom Program: We guide students on a unique, hands-on, curriculum-linked journey to becoming Environmental Detectives. They investigate Alberta wildlife that are at risk of becoming extinct.

Guided and Interpretive Hike: Learning moves outdoors with a guided hike! We explore the complex case of local Alberta species at risk while hiking in their natural habitats. CPAWS hiking guides bring curriculum to life through outdoor games, activities, and stories.

Water Rangers (Grades 4-5)

Classroom Program: Students discover a wave of knowledge during an interactive journey down the Bow River. Participants learn about the importance of water in their lives, and how they can become Water Rangers!

Guided and Interpretive Hike: Youth discover the wonderful world of wetlands at a wetland! They collect samples and learn about different organisms that live in these unique habitats and explore the surrounding watershed.

Trees and Forests (Grade 6)

Classroom Program: We begin with tree biology and branch out to forest succession, ecosystems, and the ecological importance of forests. The students explore local tree species and investigate forest issues.

Guided and Interpretive Hike: Youth walk among the giants and discover the important role of various plants in the forest ecosystem. They participate in hands-on identification and other topical activities and games.



Stories in the Snow (Grade 4-6)

Guided and Interpretive Snowshoe Trek: Classes discover dynamic and dramatic stories of the past and present while snowshoeing along a beautiful wilderness trail. Students create their own stories about the surrounding Alberta winter landscape, play games, and discover the wonder of Alberta's wildlife and ecosystems.

YYC Young Citizen Scientists with Green Calgary (Grade 1-6)



Schoolyard Hikes (all grades)

YYC's Young Citizen Scientists introduces students to the fun world of Citizen Science, and teaches them to make and submit observations to a citizen science platform. Getting students involved in citizen science supports their learning in many ways. It strengthens their scientific literacy in both the scientific method and scientific observation skills. It builds on their natural curiosity to foster a connection to place, as well as a heightened interest in the natural world, leading to an increase in environmental stewardship. Moreover, it moves science outside of the merely theoretical, by contributing their work to meaningful scientific research that has real world impact.

We help reinvigorate curriculum by bringing nature into classrooms and classrooms into nature. CPAWS Southern Alberta educators demonstrate nature-based learning that teachers can repeat anywhere, anytime, regardless of school situation. Students participate in fun, curriculum-linked activities. We demonstrate how these nature-based activities can teach science, language arts, art, and social studies from elementary to high school.

Take the Action Challenge (all grades)

Action learning projects involve students tackling an issue or problem, or, in the context of the environment, working to improve an environmental setting. They are inquiry-based projects that allow students to build a deeper understanding of curriculum, while engaging in a current issue and making a positive difference in the world. In this interactive session, CPAWS Southern Alberta leads students through a brainstorming and planning session for their action project. By the end of the session, the class will have chosen an issue and have a plan of action to tackle it.



OUR SCHOOL PROGRAMS AT A GLANCE

SECONDARY PROGRAMS

Discover Parks! (Grade 7-9)

Classroom Program: Students discover, experience, and value park ecosystems and explore the relationship between humans and the environment.

Guided and Interpretive Hike: These youth get outside and discover the wonders of Alberta parks!

Alberta's Winter Playground (Grade 7-9)

Guided and Interpretive Snowshoe Trek: We take science outdoors for the day during this snowshoe program. Classes snowshoe on a beautiful wilderness trail, play games, and discover the wonders of Alberta's wilderness and wildlife. They experience amazing sights and sounds of Alberta winters via the quiet of snowshoes.

Fresh Water Ecosystems Discovery (Grade 8):

Classroom Program: Youth become stewards for Canada's fresh water ecosystems. Students dive into freshwater issues through interactive demonstrations, pictures, videos, and case studies.

Guided and Interpretive Hike: Students discover the characteristics of fresh water ecosystems through site observation, sample collection, testing and exploring the surrounding forest. Interpretive games provide opportunity for students to develop a deeper understanding of our watershed.





Grizzly Bears Forever (Grades 7-12)

Classroom Program: Youth explore the biology of the threatened Alberta grizzly bear and their habitat. Through engaging activities, stories, and biofacts, students learn about bear biology and ecology, human impacts, staying safe in bear country, and the role they can play in grizzly bear recovery.

Guided and Interpretive Hike: The students explore the habitat of Alberta's threatened grizzly bear and learn about current research and human impacts through stories, biofacts, and activities.

Biodiversity in Winter (Grade 10-12)

Guided and Interpretive Snowshoe Trek: Winter offers a unique opportunity to study Alberta's biodiversity and the balances and imbalances of the ecosystem. Classes snowshoe through an Alberta ecosystem to investigate plant and animal population dynamics during the quiet of the winter.

Climate Connect (Grade 10-12)

Classroom Program: Climate change is one of the most challenging issues of our time. Through videos, data, discussions, and case studies, participants explore the science behind climate change. They learn about current climate action and how they can get involved.



Guided and Interpretive Hike: Students get a first hand look at climate change happening in the ecosystem. They learn about species especially impacted by climate change, such as the wolverine, pika, and grizzly bear. Through hiking, games and discussions, they explore climate science and come up with an action plan to tackle climate change.

Aquatic Field Study (Biology 20 and 30)

Classroom: Youth learn about the Bow River watershed, where their water comes from, and the conservation issues surrounding water use in Southern Alberta. Students prepare diagrams of biogeochemical cycles, and then analyze how human activities affect these cycles.

Guided and Interpretive Hike: Students embark on a detailed exploration and analysis of ecosystem health through a comparative wetland study. Interpretive games provide opportunity for students to develop a deeper understanding of our watershed.



ADULT EDUCATION

CPAWS Southern Alberta has a variety of education programs designed specifically for adult audiences including teachers, corporate groups, university classes, and community groups. We took our award winning education model and adapted it for effective learning beyond the classroom to the Alberta public. While youth are our future, adults are the ones making the everyday decisions that influence our local community. Therefore, education for adults is vital for increasing conservation literacy and stewardship in our region.

TEACHER EDUCATION

Having 'green' teachers is vital to supporting environmental education in Alberta schools. Our teacher programs this year focussed on climate literacy, environmental action learning projects, citizen science, and outdoor education. We presented at the Calgary City Teachers' Convention, Palliser Teacher Convention, Association for Experiential Education NW Regional Conference, and the Partners in Place Educators Symposium. We work with the Alberta Council for Environmental Education to ensure teachers incorporate nature learning in the classroom and support environmental education in the curriculum.

COMMUNITY EDUCATION

Conservation education is important in the community to increase awareness and inspire action. Over the past year, the CPAWS's Southern Alberta team has sat on panels and provided guest lectures to many partners and community groups including Yellowstone to Yukon Conservation Society, the Alberta Hiking Association, Alberta Ecotrust, Bragg Creek Community, Mount Royal University, and the Alpine Club of Canada, to name a few. Topics included forestry, parks and conservation, conservation planning, and non-traditional voices



in conservation. Universities often invite us to talk to their students about our work including events with the Environmental Science Students Association and Careers in Sustainability.





NEW IMMIGRANT EDUCATION

Our biggest growing adult education program is with new immigrants. Calgary is the fourth largest centre for newcomers in Canada. With a growing new immigrant population, programs and opportunities to learn about community and conservation are invaluable. Many new immigrants come to Canada with a frame from where they lived. Often this includes ideas such as water is not potable, carnivores are bad, and wilderness is riddled with danger. Education is key. Education not only dispels many misconceptions, it is a path to understanding and belonging in one's community, and one's ecosystem. CPAWS Southern Alberta is the only group in our region currently providing such programming for this demographic. This program builds language skills, conservation learning, and a sense of local community. CPAWS Southern Alberta collaborates with new immigrant groups across the city, including the Calgary Catholic Immigration Society, the Calgary Immigrant Women's Association, and the Calgary Chinese Community Service Association, to provide programming to improve language, enhance conservation literacy of this region, develop a sense of place, build community, and share nature and conservation experiences from different countries.

Community and New Immigrant Programs

Discover Parks!

Alberta is home to magnificent parks and wilderness areas. Participants learn about these amazing places from a user and conservation perspective. They discover the fascinating history and purpose of our parks through bio-facts, pictures, case studies, and stories. Participants come on a journey to discover and steward our Alberta parks! New immigrant participants learn about local parks, outdoor recreation, and stewardship.



Grizzly Bears Forever

The Grizzly bear is an iconic species, symbolizing Alberta's wilderness landscape. To safeguard the survival of this species, we need to understand them and ensure our own safety when recreating in bear country. Through biofacts, pictures, and stories, participants find out how truly fascinating and important grizzly bears are. They explore the impacts we have on bears and how we can all be bear stewards. We bust myths of the grizzly bear for new immigrants, inspiring them to visit bear country safely and responsibly.

In the Know about the Bow

Participants learn about the Bow River watershed, where their water comes from, and the conservation issues surrounding water use in Southern Alberta. Through interactive demonstrations and activities, CPAWS helps participants connect to their community by understanding water issues and learning about the impacts we can all have on our watersheds. New immigrant participants also share stories of water from their home countries and compare it to their new community in Calgary.

Climate Connect

Climate change is one of the most challenging issues of our time. It impacts our food, health, homes and jobs. Through stories and videos, participants learn the basics of climate change. They learn how climate change affects ecosystems, species at risk and human communities. We share easy, affordable ways for all participants (both long-time Albertans and new immigrants) to take action.

Discover Parks in Canada Interpretive Hike

New immigrants get to know Canada's parks in a park! Participants join a CPAWS interpretive guide at a local park for a day





of exploring and learning. This hike is a great opportunity for new immigrants to improve language skills and develop a sense of place in this new home. The focus is on connecting to nature, learning about parks and wilderness in Canada, and learning how to be an environmental steward.

OUTREACH EDUCATION

In addition to more formal adult education programs, CPAWS Southern Alberta makes a concerted effort to provide outreach education to increase conservation literacy and support for parks and protected areas in our province. Each year, we participate in outreach events throughout Southern Alberta. Events include music festivals, farmers markets, sporting events, film festivals, and other community events as the opportunities arise. We attended approximately 30 events from July 1, 2017 to June 30, 2018 and are always looking to build relationships and broaden our scope into our local community.





2017-2018 EDUCATION PROGRAM RESULTS:

SCHOOL PROGRAMS

CPAWS Southern Alberta had a very successful 2017-2018 programming season, delivering **415 school programs**. We exceeded classroom targets and engaged more students than ever in environmental stewardship, inspiring many of them into conservation action. In fact, about **94% of our program participants committed to and/or completed some form of environmental stewardship action**. Of the 415 programs we delivered, **104 were delivered to rural schools**, **79 to high needs schools in Calgary and 23 to high needs schools in rural areas.** Together this accounts for **50% of our programming.** High needs schools include those with students from low-income families and/or with added learning challenges. These schools have a high percentage of new immigrant and Indigenous students. Every year, we continue to build and strengthen relationships with Indigenous groups and provide programming to rural Indigenous communities. This year we provided programming for two Nations, delivering 10 classroom programs (20 visits) to over 200 Indigenous children. The following chart shows the results for our school-based education programs:

Program	# of Classroom Programs		# of Program Visits (based on double visit model)		# of Hikes		# of Students		
	Target	Actual	Target	Actual	Target	Actual	Class- room	Hike	Total
Species at Risk	25	76	50	149	20	17	1,698	432	2,130
Water Rangers (including Fresh Water Ecosys- tems & Aquatic Field Studies)	40	59	80	107	30	34	1,455	874	2,329
Trees and Forests	20	17	40	36	20	38	410	1,003	1,413
Discover Parks!	15	22	30	42	25	15	482	349	831
Grizzly Bears Forever	20	23	40	42	25	27	496	714	1,210
Snowshoeing					15	20		527	527
Climate Connect	5	7	10	12	5	5	136	140	276
Schoolyard Hikes					5	15		235	235
Take the Action Challenge	15	30					715		715
YYC Young Citizen Scientists	5	10					200		200
Totals	145	244	250	388	145	171	5,592	4,274	9,866

CPAWS Southern Alberta School Programs Numbers 2017 – 2018



Overall, we exceeded target numbers for school programs during the 2017-2018 school year. Our in-class program for Discover Parks! was slightly shy of the target. We attribute this to a lack of funding specific for this program, and also have found that with teachers who book every year, they often will alternate between the Discover Parks! to the Grizzly Bears Forever Program.

ADULT EDUCATION

Our adult education programs continue to grow. In addition to new immigrant audiences, we provided adult education opportunities for seniors, public groups, university students, corporate sponsors, and professional development (PD) for teachers. Our outreach team attended approximately **30 events** from July 1, 2017 to June 30, 2018, engaging with **over 600 people** in conservation topics. The following chart shows the results for our formal adult education programs:

	New Immigrant Programs		Communit	y Programs	Teacher PD		
	# of Programs	# of Participants	# of Programs	# of Participants	# of Programs	# of Participants	
Discover Parks!	14	240	5	48	0	0	
In the Know about the Bow	13	278	2	45	0	0	
Grizzly Bears Forever	11	131	1	5	1	20	
Nature Connection			1	10			
Schoolyard Hikes					3	52	
Take Action!					1	40	
Totals	37	649	9	108	5	112	

CPAWS Southern Alberta Adult Education Programs Numbers 2017 – 2018





IMPACT

Part of making positive change includes measuring impact. To understand this impact, we need to measure evaluation feedback and action resulting from our education programs. Our evaluation process includes well-established evaluation of teachers and students, from both forms and interviews, as well as stewardship action taken. We measure the number of participants who commit to and/or take stewardship action through program activities (e.g. stewardship pledges) and evaluation form questions, as well as the projects submitted to the <u>Action Challenge Initiative</u>. This rigorous evaluation and accountability gives us the necessary feedback to maintain our quality, and make improvements where necessary. This is critical to our ongoing success.

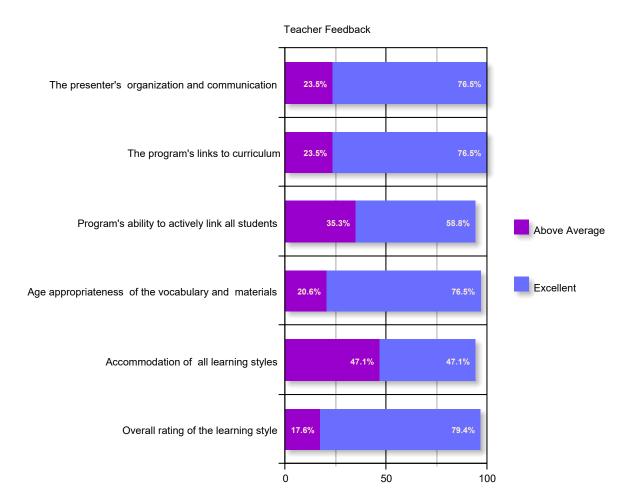
We continue to receive positive feedback for our programs. Indicators demonstrate that our programs are exceeding expectations and inspiring participants to make a difference in terms of environmental stewardship. We continue to see a high percentage of participants engaging, or committing to engage, in stewardship as a direct result of our programs. The graphs below show that all of our program participants (youth, teachers, and adult new immigrants) are enjoying our programs, finding value in them, and being inspired to engage in positive stewardship action.





Impact – Evaluation Forms

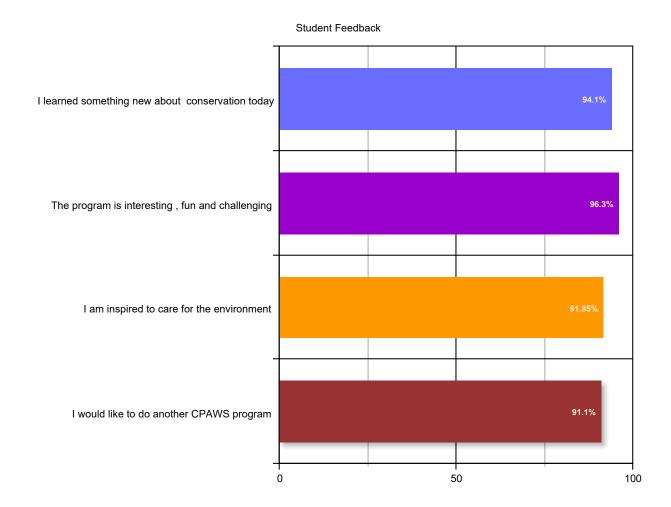
The graph below shows the ratings that teachers gave to various factors of our education programs. Our teachers consistently rate our programs as excellent and above average, across all categories.







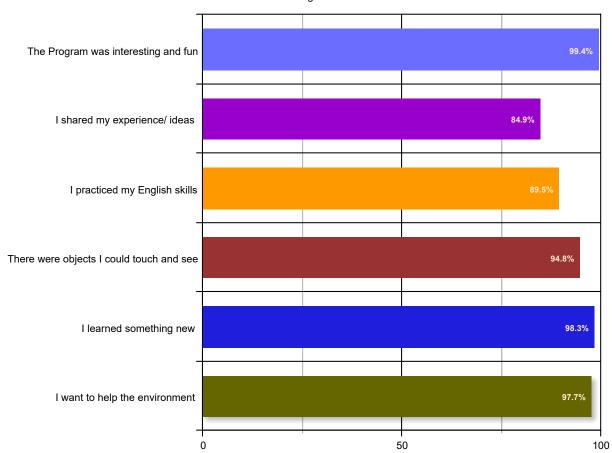
This graph shows student responses to questions about their experience during our programs. Students reported that they had fun, learned a lot, and were inspired to take action for the environment.







The final graph shows the responses of adult new immigrants to questions regarding their experience during our programs. They responded that our programs were highly valuable, fun, and inspiring.



Adult New Immigrant Feedback





Impact - Testimonials

Feedback is critical to ensuring that our programs maintain our high standard. The following are some testimonials that we heard this last school year.

Student Testimonials

"What I enjoyed most about this program is the trips to different parks and places. Also, I really liked the information that I learned on those trips since they were often things I hadn't known beforehand."

-Grade 12 hike and snowshoe participant, Robert Thirsk High School, Calgary

What I liked best about the program was "to have fun with all my friends and you to come here."

-Grade 2 Species at Risk classroom program participant, Kikino School,

The best parts of the program were "The whooping crane game. It really helps put you in a whooping crane shoes."

-Grade 6 Water Rangers participant, West Dalhousie School, Calgary

Teacher Testimonials

"The best part of the program was being outside, making connections between classroom knowledge and the real world. It was a challenging experience for many, which was a great learning opportunity!"

-Grade 4 teacher, Louis Riel School, Calgary, Snowshoe program

"Integrated, informative, beautiful and cohesive." -Grade 8 teacher, St. Cyril School, Calgary, Grizzly Bears Forever hike

"There was a very nice balance of learning new information mixed with engaging activities for students to participate in. I also liked how with the information, students had physical objects to examine and slides/ videos to go along with it."

-Grade 7, 8, 9 teacher, Granum School, Grizzly Bears Forever classroom program







Adult New Immigrant Testimonials

"We really enjoy this morning and leaned many things about nature and wildlife. I feel more confident to go to the parks. After the field trip and talk with the guide man about bears, make me feel more confident about this animal."

"The tour guide was excellent! Her pacing of walking, talking involving children. Her explanation. She attracted us very much. And her knowledge about the nature, her passion to protect the nature. I attended with my husband, neighbours and friend. They satisfied very much as well! We plan to come again. Thank you so much offering us such an opportunity!"

"I'm beginning to understand why you said you are happiest when you're in a park. Coming home today, I felt happy, recharged and renewed. My experience today is an eye opener in terms of how I will see and appreciate provincial and national parks in my next visit. I gained new perspective on the value and importance of keeping our parks clean and healthy because our incredible tour guide, Alex educated us on this. He shared to us facts about animals, plants and their habitat as well as historical knowledge of the place and culture based on his years as world class tour guide. He is an expert and very extraordinary guide.... Sorry, I wrote very long, I was carried away by so much joy that I felt after our hike. My experience today is beyond words and expectations."



Impact – Testimonials

We gathered the most common words from our feedback surveys in the word tree below. The word "More" appeared many times in response to what our participants want to do to help the environment. They want to walk more. Bike more. Play outside more. Recycle more. Compost more. Plant more. Learn more. Create more protected spaces for animals.







IMPACT – ACTION CHALLENGE

The CPAWS Southern Alberta Action Challenge is a unique feature of all of our education programs that truly sets them apart. Each year we work with thousands of students, linking local conservation with curriculum, building knowledge, and creating meaningful outdoor experiences that highlight Alberta's parks and wilderness and some of our local conservation issues. Our goal is to empower students to make a difference, and inspire them to engage in positive environmental stewardship by taking on Action Challenge projects. Projects often include personal conservation efforts, fundraising campaigns, writing letters to government, and education awareness campaigns. Each year we give out three awards to schools and students who have demonstrated extraordinary conservation action, and who are an inspiration to others: our Awesome Action Award; our Hazel Gillespie Water Rangers Award; and our Gareth Thomson Award. We would like to thank the sponsors who donated prizing for the Action Challenge program. CPAWS Southern Alberta congratulates the following 2017-2018 Action Award winners:

Awesome	Hazel Gillespie	Gareth Thomson
Action Award	Water Rangers Award	Award
William Roper Hull School	Hillhurst School	Peter Lougheed School



Awesome Action Award – William Roper Hull School

The Awesome Action Award is for an exemplary action stewardship project. This year's winner is William Roper Hull School. These amazing students from kindergarten to grade 12 and their teachers built and ran a passive solar greenhouse at their school. This has involved getting students involved in soil preparation, bed preparation, seed starting, seedling care, transplanting, and nurturing the crop for the fall harvest. They are growing 150-year-old Italian Heritage tomatoes, peppers, peas, beets, spinach, lettuce, carrots, radishes, and more! The end goal is to expand the operation to a community garden model and provide fresh produce for on campus programming. The students truly engaged when their teachers took them out of a contemporary learning environment and exposed them to new situations, new teacher/ student dynamics, new peer groupings, and alternative curriculum. The teachers enjoyed watching students with some of life's biggest struggles feel successful during this project.

For winning this award, the school received...

- a framed award for display in the classroom
- a gift card to a garden centre to keep their project growing
- a celebration party, including cupcakes and cookies





Hazel Gillespie Water Rangers Award – Hillhurst School

The Hazel Gillespie Water Ranger Award is for an exemplary Action Challenge project, taken on by a class of any grade, focusing on water conservation and stewardship. Hazel Gillespie was a visionary and leader in Calgary who supported the original development of our Water Rangers program. She believed in the importance of inspiring youth to care about the environment and make a difference.

This school year, the Grade 3 and 4 students of Hillhurst School were the recipients of this award. These students explored aquaponics as a way to conserve water and produce more food in a smaller area with fewer pesticides. Students designed and built their own aquaponics system using woodworking, 3D printing, and design thinking. These amazing students were also concerned about the decline of bat populations due to white nose syndrome and the subsequent effects on mosquito population, chemical control, and thus water quality. Through the construction of bat boxes and the development of an awareness campaign (#batfriend-lyYYC), the Hillhurst Grade 3/4's are increasing bat habitat in Calgary and protecting our water bodies.

For winning this award, the school received...

- a pizza party at the Mayor's Environmental Expo
- CPAWS water bottles
- a rain barrel and water conservation stickers donated by the City of Calgary and
- a framed award for display in the school
- Thank you to the City of Calgary for their contributions.





Gareth Thomson Award – Peter Lougheed School

Each year, we grant the Gareth Thomson Award to a junior or senior high class (grade 7-12) who takes on the most inspiring Action Challenge project. Gareth Thomson is the founder of the CPAWS Southern Alberta education program. This year's recipients were the Grade 8 outdoor education students at Peter Lougheed School for their wildfire education project. There have recently been devastating wildfires in the Canadian prairies that have destroyed the homes of humans and animals alike. These Grade 8 students decided to tackle this issue by educating the community about wildfire prevention. More than 50% of wildfires in Alberta are caused by human activities. We can prevent unnecessary damage! The class initiated a social media educational platform to raise awareness and spread change like wildfire throughout our community.

For winning this award, the school received...

- a pizza party at the Mayor's Environmental Expo
- a day pass to The Calgary Zoo for each student, donated by the Zoo
- green cleaning kits, donated by Green Calgary
- a framed award for display in the classroom

Thank you to The Calgary Zoo and Green Calgary for their contributions.





RISK MANAGEMENT

For over twenty years, CPAWS Southern Alberta has been providing safe, positive outdoor learning experiences for participants. A robust risk management plan with certified and highly trained guides ensures the continuation of a highly reputable and safe program. Each year, we update our risk management plan and train our guides accordingly. Our interpretive guides are all certified in Wilderness First Aid and hold their Interpretive Guides Association certifications. Each season, we train our guides in our Emergency Response Plan and the use of the safety equipment they carry, including bear spray, air horns, GPS Spot messenger device, and radios, among other first aid equipment. We also register all programs and locations with STARS air ambulance service. This means that if anything happens, we have the ability to get help right away and trained responders to deal with any situation. CPAWS Southern Alberta is an approved service provider and maintains Master Agreements with the Calgary Board of Education, Calgary Catholic School District, and Rocky View School District. This means that we are a reputable service provider with a known track record for quality and safety. In over 20 years, we have never had a major incident during our programs and we continue to work diligently to put safety first so participants have a fun, positive experience in the outdoors.







STAFF PROFESSIONAL DEVELOPMENT

At CPAWS Southern Alberta, we are lifelong learners. We believe that education not only enhances our lives, but the conservation and education work that we do. CPAWS staff were fortunate this past year to participate in a variety of professional development opportunities, as described below. The major focuses for our learning over the past year were watershed literacy; climate literacy; and Indigenous history, culture, and experience.

WATERSHED LITERACY

- Government of Alberta (Transportation) Springbank Off-stream Reservoir Project
- Bow River Basin Council Quarterly Forum
- City of Calgary Water Resources

• Citizen Science Opportunities for Riparian Monitoring

• Riparian Action Program (RAP): A Blueprint for Resilience

Cows and Fish - Riparian 101: Ecology and Function webinar



CLIMATE LITERACY

- Alberta Council of Environmental Education
 - $^\circ\mbox{Talking}$ Climate with George Marshall (with Alberta Ecotrust and Pembina Institute)
 - Increase Climate Literacy Through Education/Outreach Workshop

°Climate Education and Outreach Webinar

- Canadian Environmental Grantmakers' Network/Sustainability Network Climate Change and Canadians
- Alberta Climate Connect Let's talk Climate Change in Alberta with Katharine Hayhoe and George Marshall
- Alberta Environment and Parks/Climate Change Office Environmental Education Recipients' Forum

ENVIRONMENTAL, EXPERIENTIAL, AND OUTDOOR EDUCATION

- CBE Sustainability CBE Outdoor and Environmental Educators PD
- Alberta Parks Kananaskis Country Service Providers Unite!
- Connect Charter School and Tsuu T'ina Education Partners in Place Educators Symposium
- Association for Experiential Education AEEE Northwest Regional Conference: Growing Beyond
- Campus Calgary / Open Minds Ways of Knowing Beyond the Classroom Conference 2018
- Society for Educational Resource Groups Bimonthly meetings
- Environmental Educators Bimonthly meetings





INDIGENOUS HISTORY, CULTURE, AND EXPERIENCE

- University of Calgary Werklund School of Education – From Reticence to Resistance: Teaching, Learning & Critical Indigenous Environmental Issues
- University of Alberta Alumni Association – Calgary Lecture Series: Truth and Reconciliation
- Glenbow Museum Blackfoot Teachings: From Tradition to Reconciliation
- The Calgary Foundation: the KAIROS Blanket exercise.
- Canadian Environmental Grant Makers: The Return of Wild Buffalo to Banff National Park
- Banff Mountain and Book Festival: Indigenous Learning Panel talking about reconciliation
- CPAWS National Meetings in Haida Gwaii – Indigenous co-management practices



- University of Alberta Indigenous Canada Massive Open Online Course (MOOC)
- Chiniki Cultural Centre Interpretive walk and tipi tour

CONSERVATION, FUND DEVELOPMENT, LEADERSHIP, COMMUNI-CATION, AND RISK MANAGEMENT

- Alberta Ecotrust Gathering Create the Future
- Sustainability Network

• Major Gifts Fundraising Webinar

 ${}^\circ\mbox{The Landscape}$ of Environmental Grantmaking in Canada Webinar

- Training Resources for the Environmental Community (TREC) Executive Director Leadership course
- Calgary Catholic Immigration Society (CCIS) Cultural Thinking Framework
- Rocky Mountain Adventure Medicine Wilderness First Aid Recertification



LOOKING AHEAD

The 2018-2019 school year will be action-packed for our education team. Here are a few of the things we will be participating in, beyond our regular programming.



POO'MIIKAPII: NIITSITAPII APPROACHES TO WELLNESS

This summer, our Education Director, Jaclyn Angotti, starts this graduate program. The program is centered in Niitsitapii (Blackfoot) ways of knowing, being, and doing in relation to poo'miikapii (harmony, balance, unity), and drawing on ground breaking theory and practice in Indigenizing and decolonizing approaches to wellness and counselling. It is designed for service providers, educators, health care professionals, and other community members who work with Indigenous communities.

AMBASSADOR PROGRAM

We are piloting a new program to better connect recreationalists with conservation. The ambassador program will see us working with key individuals from various recreational user groups. We will help education them on relevant conservation issues, connecting these issues with responsible recreation practices. The intent that they will act as ambassadors within their respective circles of influence.



TOUR OF ALBERTA

We are expanding our tour of rural and Indigenous communities this year by bringing two educators along–Jaclyn and Vanessa. With double the staff, we can double our impact in each community! Some of these classes will also get the opportunity to participate in our hiking program, along with the classroom programs that we bring to them.

STEPPING UP TO LEADERSHIP (STEP)

Jaclyn will have the opportunity to participate in the STEP leadership program offered by TREC (Training Resources for the Environmental Community). STEP is designed to support the development of promising staff in conservation organizations who want to increase their awareness, knowledge, skills, and confidence in effective communication, key dynamics of management, and develop personal leadership skills that support leading projects and people.

EECOM CLASSROOMS TO COMMUNITIES CONFERENCE

Jaclyn and Vanessa will be presenting at the Canadian Environmental Education Conference on Ktunaxa Nation in October. The theme for the 2018 Conference is Classrooms to Communities (C2C), which envisions learners and educators being deeply connected to place, community and planet, able to effectively communicate their stories of connectedness, and taking responsibility to do so.





CONCLUSION

2017-2018 was an exciting year where we introduced new programs related to climate literacy, environmental action, introduction to parks for new immigrants, and citizen science. We engaged more people than ever, exceeded program targets overall, and increased our presence in rural and high needs schools throughout Southern Alberta. We reached out to new communities, increased our adult programing audience, piloted and delivered new programs, and saw students engage in amazing stewardship action challenge initiatives. Our program feedback continues to be positive, and we constantly strive to improve our program to suit the needs of our participants and the community.

With the support of our funders and partners, we are able to continue to deliver award winning environmental education programs to thousands of Albertans. Thank you. We rely on you to ensure that environmental education is easily accessible for all in Alberta.

We are currently looking for additional funding for our Species at Risk, Grizzly Bears Forever, and Discover Parks! programs. To support our Education Department, or for more information about our programs, please contact us at education@cpaws.org, 403-232-6686 or check out our website:

http://cpaws-southernalberta.org/campaigns/education

You can also donate directly at https://donate.cpaws.org/page/26361/donate/1.

