I took this photo while co-instructing a course for the U of S Department of Educational Foundations called Urban Education. It focuses on how urban experiential and community-based learning can contribute to both personal and educational decolonization and reinhabitation in relation to social and ecological justice issues in a Saskatchewan context. Participants are introduced to critical eco-pedagogical theories and practices, with a particular focus on urban issues and spaces such as Indigenous and settler youth cultures and orientations to place and environmental issues, environmental justice and racism, schoolyard greening and urban gardening, and various other facets of community-based learning and engagement.

Thank you to this issue's funders:
Since the Industrial Revolution, we have seen an increasing number of people moving away from rural lifestyles into urban centres. As Dr. Vanessa Mathews states in the “Research from the Field” article entitled Reusing Buildings “Saskatchewan’s urban population is 67% and climbing” (p. 12). In many places in Canada, and especially apparent in Saskatchewan, places are growing outward instead of upward. We see challenges environmentally with land use when a city grows outward as it means more road development, more plumbing, longer bus routes, habitat fragmentation, longer commutes, etc. A sustainability challenge that Mathews brings attention to is the “new as better” discourse relating to the housing market - in other words, tearing down old homes and infilling with newer buildings with a shorter life expectancy. Urban planning is more influential than one would think when it comes to environmental education pedagogy and Mathews finishes her article with several suggestions on how to bring urban planning into the classroom.

In addition the the numerous environmental challenges to consider, there are also many social issues we face in urban centres such as gentrification, environmental racism, poverty, at-risk youth, aging buildings and infrastructure, and so on. Many of these issues are addressed through the educational programming that the White Buffalo Youth Lodge offers, and is described in our Towards Decolonization article (page 35). The SAGE journal of Urban Education focuses on “critical concerns facing inner-city schools”. Where educators can bridge the gap between literatures in the field of environmental education and the field of social justice education such as urban education described previously, we have a field of critical environmental education. Critical EE aims at bringing together social and environmental issues and finding solutions to those issues together. One branch of critical environmental education is urban environmental education. The Urban Environmental Education Review edited by Alex Russ and Marianne E. Krasny defines urban environmental education as, “any practices that create learning opportunities to foster individual and community well-being and environmental quality in cities. It fosters novel educational approaches and helps debunk common assumptions that cities are ecologically barren and that city people don’t care for, or need, urban nature or a healthy environment” (Cornell University press website).

The current issue of Of Land & Living Skies: A Community Journal on Place, Land, and Learning takes a look at a number of educational approaches that work within the framework of urban environmental education. We have highlighted programs based in Saskatoon which emphasize growing plants as a way to consider educational experiences in a city. The askîy project (page 7) does this by reconceptualizing urban space to grow food while integrating Indigenous cultural connections and empowering youth. The Healthy Yards program (page 22) identifies that much of the green space in Saskatoon is comprised of residential yards and gardens and in fact more land is in private yards than in public parks. Therefore the focus of the program is to educate the public about sustainable landscaping that is good for people and the whole ecosystem.

An urban nature program targeted at youth called Wascana Junior Naturalists (page 4) takes a look at connecting kids to the natural world in a time when our society is addicted to screens. While our Photo Essay written by Dr. Jesse Bazzul, Neil Adolph and students takes a different approach to urban environmental education and involves using graphic novels as a transformative pedagogy. Both approaches, although different, aim at working towards what Arjen Wals considers “the key challenge of our time: reconnecting people and planet” (Urban EE book).

We have a story in the current issue about children taking to the streets, literally, through Jane’s Walks Regina. A six year old led a walk to share his neighborhood with his community and is interviewed by his mom about this (page 30). In Saskatoon, a group of aged 10-12 year old girls claimed some space as their own over their February break with 3 experienced leaders to partake in a program called “Snowlandia” (page 32) where they had an urban campout and developed their skills to survive in the outdoors while also building confidence.

As we contemplate the various articles in this issue, Arjen Wals words of caution come to mind, “As more and more people live in urban areas and spend time behind screens, the need to develop meaningful connections between city residents, communities, urban places and the natural world seems more crucial than ever” (Urban EE book).
BRITNEY PRICE is a fourth-year University of Regina student. She is currently in her internship with the grade 8 Ecoquest program in Saskatoon, Saskatchewan.

JANA MILLER grew up on a farm South of Prince Albert where she took pride in maintaining foot trails, building fortes and helping grow food on her parents’ farm. She believes in the importance of nature immersion, and is currently teaching in the Outdoor School program with Saskatoon Public Schools and running her own business called Wildernook.

JESSE BAZZUL is Associate Professor of Science and Environmental Education at the University of Regina. He believes imaginative work in education is needed more than ever to find new collective ways of living together.

KEITH ADOLPH is the past operator of the Teaching preparation centre at the University of Regina. He was previously a Secondary teacher in Regina and Swift Current.

MICHELLE ZINCK is a 24 year old Denesuline woman from Fond Du Lac First Nation. She is a fourth year student, majoring in Indigenous Studies at the University of Saskatchewan, where she plans on entering law school to study environmental law. Michelle is also an intern with CHEP Good Food Inc., working on the askîy project to promote food sovereignty through sustainability, culture and community. She is an Indigenous feminist who enjoys camping, fishing, gardening, painting and beading.

NICOLE HUCK and her husband Shawn live on Treaty 4 territory in Regina with their three little kids. When she’s not parenting she is a journalist at CBC Saskatchewan, a dancer, a bicyclist, a traveller and enthusiastic beginner uke player. Her oldest son Rye, who she interviews in the article is 7 years old and attend Ecole Connaught Community School. He’s a very introspective and thoughtful guy with a passion for performance.

RACHEL MORGAN, Bachelor of Education (Middle Years) 3rd year, currently pre-interning. Previous degree in Art History at the University of Victoria.

REBECCA BASSET the owner of Back 40 Wilderness First Aid. Rather than simply providing certification courses she targets first aid instruction to specific purposes. Her first aid interest and expertise guided Rebecca to become involved in Search and Rescue. She’s also passing on knowledge to her girls (they carry their own backpacks and a bit of gear on every outing) and instilling them with confidence and an appreciation of the outdoors.

SAM GUNN leads the Brightwater Science, Environmental, and Indigenous Learning Centre with the Saskatoon Public School division. With experience teaching and tripping in all seasons, Sam brings a wealth of outdoor leadership experience to the Snowlandia program.

SHANNON DYCK Throughout her life, Shannon has strived to seek out opportunities relating to sustainability and design. Her jobs, volunteer positions, education, and business ventures have provided her with creative outlets and opportunities to grow, helped connect her to inspiring and exceptional people. These meaningful pursuits have taught her that effort, collaboration, resiliency, and hope are all necessary to bring about change. Perhaps more importantly, they have taught her that certain amounts of incompleteness, imperfection, and failure are also part of the process.

VANESSA MATHEWS is an Assistant Professor at the University of Regina in the Department of Geography & Environmental Studies. She researches heritage, housing, and urban change in Regina and Toronto. She hopes to encourage positive engagement with older buildings given the value of these structures for urban sustainability.

ZOE ARNOLD and ADITI GARG are board members of SaskOutdoors and are passionate about youth engagement and nature.
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WHAT IS A NATURALIST?

The dictionary says “a person who studies or is an expert in natural history, especially a zoologist or botanist.” However, here at Wascana Centre we view a naturalist as anyone who is interested in the natural environment and can appreciate the joys nature has to offer. A naturalist is someone who respects the environment and realizes that a healthy ecosystem is a good thing for wildlife as well as a good thing for humans.

HISTORY AND OBJECTIVE

The Wascana Junior Naturalist program was established at Wascana Centre in the City of Regina, Saskatchewan in the fall of 2009. In a day when youth are becoming increasingly disconnected from the natural environment around them, this program aims to provide them with an opportunity to connect with nature. Our focus is to bring like-minded children together to learn of the simple joys nature can give them and offer them a chance to discover nature right in Wascana Centre. We hope this program will help youth to realize that there is more than one species of birds in their backyard or that they can see a beaver right here in the middle of their city, or that sitting and studying a wild licorice seed head (nature’s original velcro) can be fascinating and rewarding!
The Fall 2017 session of the Wascana Junior Naturalist Program was open to children ages 9-13 and ran on Tuesday evenings from 6 – 8pm. All programs happen within Wascana Centre, and will be exploring the Habitat Conservation Area, a natural gem within the city of Regina!

Some of the topics covered in the Fall 2017 session include:
- Geology
- Mammals (special dissection)
- Halloween Howls
- SOS Calls, Knots & Shelter Building
- Winter Birding
- Reptiles (Exciting Meet & Greet)
- Yellow Fish Road (with Pike Dissection)

Here are a few examples of what Junior naturalists have done over the last few years:
- Learned about the exciting lives of bats!
- Visited a Northern Saw-whet Owl banding station!
- Explored the Habitat Conservation Area for birds, mammals, frogs and turtles!
- Visited the Saskatchewan Science Centre!
- Discovered the many species of birds that visit Wascana Centre in a year and learned how to identify them!
- Built their own bird house to put up in their yard!
- Discovered the challenges of migration by playing the Great Migration Challenge!
- Planted seeds and watch them grow into native grass!
- Helped plant shrubs and grass in the Habitat Conservation Area for wildlife!

The habitat conservation area is part of Wascana Centre that is right in the middle of the city of Regina, which is pretty unique. This 23 acre area has been set aside for wildlife to utilize. We can regularly find beaver, muskrat, mink, white-tailed jackrabbits, and red foxes.”

—Jared Clarke, past Park Naturalist
The askîy project is an urban agriculture initiative of CHEP Good Food which provides Indigenous and non-Indigenous youth in Saskatoon opportunities to gain knowledge and experience of growing, harvesting, marketing and selling food. Through social enterprise, youth are connected with local producers and community organizations to share a love of growing food, learn from each other, and create an alternative marketplace for goods. The askîy project demonstrates the possibility of re-conceptualizing urban space to grow food, while empowering youth to practice food sovereignty through sustainability, culture, and community.

Jacob, a returning intern this season, says, “In my first internship in 2015, I felt that I was a young plant that needed to be watered with knowledge, and being a returning intern, I feel that I can bring my knowledge that I have learned and give it to my fellow interns. The internship has given me the help I need to become the man I am supposed to be.”

In 2014, a pilot project was initiated with two youth interns growing produce in underused backyards of homeowners in Saskatoon’s core while using “pedal power” and bicycle trailers to take their harvest to the Saskatoon Farmer’s Market. In 2015, the internship formally was named the “askîy project”,

CHEP Good Food Inc. works with children, families and communities to improve access to good food and promote food security. CHEP is a non-profit, charitable organization in Saskatoon with a vision for a food secure community. For almost 30 years, CHEP Good Food has been promoting – and providing – healthy food options to Saskatoon residents. Geography, income, and transportation are three key barriers to being able to eat healthy food. CHEP Good Food addresses each of these in a respectful, integrated way.
embedding Indigenous cultural connections and traditional knowledge within the project. The need for a permanent growing site was realized in 2015 with the creation of kiskikânis, the project’s container farm. It is on a City of Saskatoon lot near Station 20 West, CHEP’s office location. This season, five interns have joined the askîy project coordinator to grow and learn together.

The askîy project practices sustainability through an innovative model focused on environmental justice. kiskikânis is a container farm located on a “brownfield”, which means that the soil is contaminated from previous use as industrial fuel storage. Due to soil contamination, food is grown in over 400 repurposed containers, proving you can “grow where you’ve never grown before”. In 2017, the askîy project won best small project at the national Brownie Awards, which recognizes projects that use brownfield sites in positive ways.

All produce is grown without the use of chemical fertilizers and pesticides. Companion planting is practiced, which means planting two or more plants together that will benefit one another, either by repelling pests, attracting beneficial insects or providing shade and support. Companion planting also increases diversity and boosts resilience. Interns learn to plant the three sisters of corn, beans, and squash as an example of companion planting which incorporates Indigenous cultural perspectives on growing.

The askîy project allows interns to practice food sovereignty by taking control over how food is locally produced and distributed. Louisa, an intern this year, is working on a seed saving project. She says, “Seed saving is an important way to keep plants genetically true to type, while maintaining the culture, history of native plants.” The interns are able to grow food that is healthy and culturally appropriate through ethical means based on sustainability to benefit the community as well as the environment.

Culture is an important aspect of the project; Indigenous and non-Indigenous students are encouraged to engage with Indigenous cultural connections within the community. Cultural components are embedded within the askîy project. Indigenous language included into the askîy project; both askîy and kiskikânis are Cree words that translate to “earth” and “garden” respectively. Signs are posted throughout the site with Cree names for plants and vegetables grown. A medicine wheel is incorporated into the design of kiskikânis to represent holistic understandings of the four directions with specific teachings, principles, beliefs and values that are embedded in Indigenous epistemologies and worldviews. Because culture is an imperative part of the askîy project, Elders within the community are invited to share cultural teachings and ceremonies, as well as mentor the youth interns.

The askîy project is one of the many initiatives of CHEP Good Food that work to increase food security within Saskatoon. With the location of kiskikânis in Saskatoon’s core, a notable food desert, interns have the chance to increase local food production. Through social enterprise, interns participate in the distribution of food by selling produce at local markets and restaurants. Throughout the summer, interns connect with the community through partnerships with local organizations and businesses. The askîy project gives the youth interns the opportunity to gain the knowledge and experience needed to live sustainably, while promoting food sovereignty, which is essential to combating the consequences of the global food system and the commodification of food.
If you would have told Caren Gilroy or Jeff Moore 10 years ago that the Greenall Outdoor School would be getting ready for its 10 year celebration now, they would have found that very hard to imagine. From that crazy idea presented to Ron Reinhart and Dion Hrynewich to now has been a long journey! Over 10 years ODS students have paddled more than 500 kms (and portaged over 30 kms), hiked over 1000 kms, and dehydrated 210 meals. They have spent over 300 combined total nights in quinzhees and have dug too many pit latrines to count. Most importantly, ODS has changed 250 lives forever!

Throughout the years, the ODS staff has changed, but their dedication and commitment have remained consistent. Lasting contributions have been made by Caren Gilroy, Brenda Werner, Heidi Dufour and more recently by Heather Maurer. It is the dedication of these amazing individuals that has made ODS such an incredible experience for so many people. 10 years of putting up with Jeff might be the most impressive undertaking by these 4, but they did it with a smile.

As one of only two remaining, full five credit outdoor school programs in the province, ODS owes a debt of gratitude to so many people. From a school division that has shown a commitment to being a leader in outdoor education, to the in school administrators at Greenall, each and every one of whom has been an amazing voice of advocacy and support. From our friend Colin Frey whose stamp is engrained in the very essence of ODS to each and every one of the amazing community volunteers who support us every year to the staff at Greenall who are always there to help when needed. Thank you as well to everyone who has supported us in a bottle drive, or who bought entertainment books or coupons from us. And thank you to the Prairie Summit Shop for allowing us to partner with them in the Prairie Summit Run each September that has allowed us to cut out countless fundraising drives. Thank you to everyone who has helped us get to this point.

ODS is indebted to a great many people, but it wouldn’t have made it this long without the buy-in of so many fantastic students. Nearly 250 students have taken a chance on a program that is anything but typical. These dedicated students are away from their families and friends for nearly a month in the spring semester of their grade 11 year. Those students who each year spend a few nights in a pile of snow, hike countless kilometers with a heavy backpack as their burden, portage through knee deep mud and muck with an enviro stove digging into their lower back. Students who are sometimes surprised that there are no plug-ins in the wilderness, shocked that there is no cell service and often appalled when handed a trowel and a bag with toilet paper in it and pointed to the bush when they make the mistake of asking where the bathroom is. Thank you for all of your contributions, and most of all, thank you for being a part of the ODS family!
REUSING BUILDINGS

BY VANESSA MATHEWS

INTRODUCTION

Consumer society has shortened the life cycle of just about every product – from refrigerators to automobiles – leading to a throw-away culture of consumption and mass amounts of waste. When a product starts to show inefficiencies in performance, we simply dispose of it for a newer and “better” model. This discourse of the “new as better” has extended into the housing market where numerous buildings are demolished annually across Canada to make room for new construction that promises greater energy efficiency, more square footage, and modernized features. This practice runs counter to the goals of urban sustainability, as many of the structures are demolished prematurely, shortening their life cycles. There are questions being raised about how long the new buildings will last (will it be more than 40 years?) and whether the original structures would have lasted longer following their rehabilitation. There is a growing body of research on the benefits of reusing historic buildings as part of an urban sustainability framework (see Bullen & Love, 2010). During this process, a building is adapted to another purpose while retaining its value. In what follows, I celebrate old houses in Regina, Saskatchewan for their contributions to sustainable city-building.

A RETURN TO TRADITIONAL PLANNING

In the 19th and early 20th centuries, neighbourhoods were constructed with the following principles in mind: walkability, access to alternative transportation, mixed land use and tenure type, and variation across structures. After WWII, increased homeownership, an emphasis on the nuclear family, and a desire for more space inside and outside the home led to the rise of the car-oriented suburban model. To satisfy demand for suburban living, developments were laid out to maximize residential use. Suburban living led to an exodus of residents from the downtown and diverted resources away from the core to support new infrastructure and transportation costs. Shopping malls soon followed the customer base and were constructed on the outskirts of the city to take advantage of lower land values, all to the detriment of core neighbourhoods, commercial activities, and services.

In the late 20th century, planners and policy makers responded to the sprawling suburbs with theories and practices supporting sustainable development. While there are a variety of names for these plans – complete neighbourhoods, new urbanism, compact development, smart growth – they generally share one commonality: a return to traditional neighbourhood design and planning. Older urban areas were premised on these ideas (often out of necessity), and offered, and continue to offer, their occupants a sense of place and quality of life through their connectivity and diversity of uses/users. I celebrate established neighbourhoods in Regina for their built-in sustainable features.

Established neighbourhoods offer traditional design features such as walkability and variation, as well as mature greenery and trees.
OLD BUILDINGS = GREEN BUILDINGS

Saskatchewan's urban population is 67% and climbing. The majority of structures in the province’s urban centres are already built, meaning that the focus needs to shift towards how best to deal with aging infrastructure and buildings. Rehabilitation of existing building stock through adaptive reuse encourages alternative uses and/or users. Given the pressures of development across urban centres (typically where land value exceeds the value of the building currently on the land), assessments that measure the costs and benefits of rehabilitation versus new construction are critical.

Life cycle assessments take into account the energy and waste associated with the entire building process. In the case of existing buildings, it calculates the “embodied energy” from the production process alongside current operating performance. The term “embodied energy” is used to express the energy that is contained with an already existing building (as a product of the energy used to source, fabricate, and build the structure). If the building is demolished prematurely before it has run its life cycle, then all of the energy that is contained within its construction and alteration over time is wasted, and an additional amount of waste is created to deconstruct and construct another building in its place. As Kalman (2014: 89) simply states, “demolition is wasteful and waste is bad”. The demolition of historic buildings is routinely practiced and often framed as a response to declining operating performance. It is true that new construction can offer greater energy efficiency in comparison with older construction, but the current focus on building performance ignores other important measures of sustainability.

Buildings that are still structurally sound are being demolished, prematurely shortening their life cycle. When demolition is selected as a course of action, the decision should consider the loss of embodied energy, the waste/energy associated with building deconstruction, the energy associated with sourcing materials for the new structure and the building process. There are many instances where building demolition is the appropriate course of action; not all buildings should be rehabilitated, but all buildings should be assessed for their potential for reuse. When evaluating the viability of an existing building, consideration must be given to (public) safety, condition, and potential (for current or future use). Older houses need to be valued for the energy and materials that they already embody, and for their ability to undergo retrofitting to increase insulation, sealing, and efficiency in energy source.

PROTECTING BUILDINGS

There are a number of tools in the municipal toolkit that can protect individual buildings and broader areas of buildings from demolition. There are approximately 90 buildings under official heritage designation in Regina. These structures receive protection from demolition, and are eligible for financial incentives to ensure their appropriate maintenance. In addition, 230 properties are listed under the Heritage Holding Bylaw for their potential heritage value. If the owner of a listed property applies for demolition or major alteration, City Council has 60 days to assess whether to approve the request or designate without owner consent. During this period, the planning department works with the owner to educate them on the value of the structure, and the financial incentives that accompany designation.

Despite the delaying mechanism, the holding bylaw does not have the teeth to protect structures from demolition and/or owner neglect, and Regina has lost a number of listed properties over the past decade. In response, the City is reviewing the bylaw with the aim to get rid of it altogether, and replace it with an inventory list and proactive discussions with relevant owners. These discussions would focus on the benefits of a historic property and the incentives tied to full heritage designation (property tax incentives and circumvention of rules relating to parking stalls and conversions). Without the holding bylaw, permits for demolition or alteration can be stayed for an effective period of time. One of the biggest issues in protecting historic buildings is a lack of enforcement of the rules and regulations. In a letter to City Council in April 2016, Jackie Schmidt of Heritage Regina writes, “There is no policy or direction that indicates at what point a property is beyond repair or what repairs are essential, nor are there consequences for not repairing a structure on the Heritage Holding Bylaw list”. Creating a clear policy on the roles and responsibilities of owners and the roles and responsibilities of the City to enforce maintenance and infractions is critical at this juncture.

Beyond individual buildings, there is also the potential to protect historic buildings on a larger scale. In Design Regina, Regina’s Official Community Plan, several potential Municipal Heritage Conservation Districts are laid out in established core neighbourhoods (City of Regina, 2013). This broad level of designation would allow City Council to pass guidelines relating to scale and proportion of new construction and rehabilitation. These proposed districts require additional study to determine their potential, but offer promise for older core houses.

Another potential form of broad designation that is used in other Canadian municipalities is demolition control. Typically, if an applicant wishes to demolish a structure within an area of demolition control, not only must they submit detailed plans concerning current and proposed use, they are asked why the
current structure is not being considered for reuse. Applications in some municipalities require a planning fee (which can amount to several thousand dollars) to allow assessment. In Regina, if a property owner wishes to apply for demolition, there are no questions pertaining to the potential for reuse, and the costs associated with the application for demolition amount to a couple hundred dollars (City of Regina, 2018). Regina City Council has the power to create broad areas of demolition control, which would protect all existing buildings.

**FOR THE LOVE OF OLD BUILDINGS**

Older buildings contribute to sustainable city-building in social, cultural, economic and environmental ways (see Kalman, 2014 for an overview).

- **Social:** As buildings age, they deteriorate and typically filter-down in value. These spaces become affordable for lower income households who are often priced out of new construction. Established older urban areas with smaller houses typically contain higher densities and greater diversity in comparison with their suburban counterparts (Rypkema, 2002).

- **Cultural:** Older buildings contribute to our sense of place, and contain stories relating to their occupants, their construction and their uses (Tweed & Sutherland, 2007). These structures contain tangible and intangible heritage that contributes to liveability, attachment to place, and community/personal identity (Heritage Saskatchewan, 2012).

- **Economic:** On average, it costs less to rehabilitate older buildings than it does to build new (Kohler and Yang, 2007). In addition, rehabilitation can stabilize and increase property values when appropriate maintenance is applied (Shipley et al, 2011). Older buildings offer potential for innovation and creativity – from new start-ups to live/work arrangements – due to their economic value and aesthetic. Given that renovating and reusing buildings is more labour intensive than new construction, rehabilitation is associated with local job creation (and training) in the skilled trades.

- **Environmental:** The retention of older buildings conserves resources, reduces greenhouse gas emissions, and diverts waste from landfills (Itard & Klunder, 2007). While there are some important changes to the building standards in new commercial and residential buildings (pertaining to energy efficiencies), energy retrofits on older buildings can increase insulation and sealing. Suburban houses rarely display their true costs when infrastructure and connectivity is factored in.

Henderson Terrace is a Municipal Heritage Property in Regina that dates back to 1913. The eight attached dwellings carry stories about the people who built, worked on, lived in, and passed by these structures.
Infill development

In Regina, “infill development” pressure in historic neighbourhoods often pits old and new houses against one another. Infill is defined as the development of under-utilized land in an already established area. As such, this form of development plays an important role in sustainable city-building: by filling a gap in a serviced, existing urban area, the costs of infrastructure and transportation connectivity are minimized (water, sewers, roads). In Design Regina, the City aims to direct 30% of future population growth into already existing areas as part of an intensification of lands (City of Regina, 2013: 19). Not all forms of infill development will add density. For example, demolishing a single-family residence and rebuilding a single-family residence may add square footage, but not always population. Increased density should be encouraged wherever possible.

Debates about infill housing typically relate to incompatibility of new construction with existing building stock, and its affects on the character-defining features of an established neighbourhood. Targeted planning policies outlining the scale and proportion of new buildings, their location, and relationship with surrounding structures will help to alleviate some pressure. The City of Regina completed a report on Infill
Housing Guidelines in 2017, and is currently developing a set of regulations from these guidelines. In addition, the City is undertaking an Underused Land Study, which will help direct infill to vacant and underused lots. Incentivizing the intensification of these lands will heighten the viability of this option for developers and builders.

CONCLUSION

Older buildings are an important component of contemporary city-building. Located in established areas of the city that reflect sound planning principles (mixed use, connectivity, walkability), they contribute to sustainable forms of growth and development. Rather than seeing older buildings as outmoded, they should be viewed as green buildings, affordable housing, economic levers, and social anchors.

The successful coexistence between old and new housing requires clear planning and policy provisions (broad designations as well as clarity and enforcement of listed historic buildings) that sets out land use regulations, financial incentives, and taxation. In addition to regulatory measures, consumers need to see (and value) existing buildings as an environmental responsibility. Older houses may not have the walk-in closets and exact room sizes and locations that made to order housing allows, but they contain value that responds to our current urban-environmental responsibilities.

CLASSROOM EXERCISES

Each of the exercises below can be modified across levels, and can be completed either on an individual basis or in small groups. They are designed to encourage different ways of seeing and valuing historic buildings as a component of place-based learning and to position students as important actors in urban environmental stewardship.

• Ask students to select an older building and write a fictional story about the people and/or practices that may have filled it at some point during its life cycle. Have a discussion about the intangible forms of heritage (stories, representations, spaces) associated with older buildings.

• Ask students to select an older underused building and consider its future potential. Do they think that the building could be modified for another purpose? This exercise allows students to evaluate the potential for reuse.

• Lead a mapping exercise of vacant and/or underused lots in a neighbourhood. You can either walk the area, or use Google Street View to find relevant lots. You can print out a land use map for the selected area from Design Regina (or the official community plan from another municipality if available). Encourage students to select a vacant/underused lot and brainstorm how it could be repurposed (as residential, commercial, park/community space).

• Ask students to select a municipal/provincial designated heritage building and learn about its history. Ask the students to consider how they might animate this history in an alternative format (play, drawing, story, poem) to reach a different audience.

• Working individually or in small groups, task students with designing a sustainable neighbourhood. What would they include and exclude? Consider providing them with a list of potential elements to include in their design: streets, houses, stores, school, trees, bus stops, parks, energy source, community gardens, recreation/open spaces. Ask them to consider how different functions would co-exist and how they might minimize travel and waste. A range of mediums can be used to express the final neighbourhood plan (paper, clay, blocks).

REFERENCES


City of Regina (2018a) Apply for a Demolition Permit, https://www.regina.ca/residents/building-demolition/demolition/apply-demolition-permit/

City of Regina (2018b) Underutilized Land Study http://www.desigregina.ca/currentprojects/underutilized-land-study/


University of Regina’s Education in a Winter Environment 338 class’ Group Poem from Moose Jaw

The sound of my heart, the rhythm of my snow.
Sun shining through the tunnel of trees.
The whistling of the wind as it blows through my hair.
Hear the birds chirping in the distance.
The sun shining among the horizon.
I tried using my balance to go up and down the hill,
Birds feeding off the berries, flying into the sky.
Wind against my face as I walk through the bush.
Snow lies like a thick blanket upon the earth, protecting life that peaks its head above the covers,
the warm sun shines down from the heavens.
The sun above my head, warming my body. Snow on my feet reminding me it’s winter.
Bird circling in the sky announcing spring is here!
The hike up the hill was hard on my back, but from the view, you’d never know I’m somewhere flat.
Striding and gliding, ice crunching and chunking.
Chirps from the birds, flowing in the wind.
The snow crunches beneath my feet.
Ice cold and dry, sun warm and free.
Sun beating down on my face.
All I hear is the wind, even though I’m right by a road.
Collective community building, experiencing each other’s outdoor energy.
SHIFTING WHAT IS VISIBLE IN ENVIRONMENTAL EDUCATION: USING GRAPHIC NOVELS TO EXPLORE STORIES AND/issues

JESSE (INSTRUCTOR): One of the biggest challenges facing educators is how to shift what is possible for students to see (sense), imagine and do. Educating for social and political transformation therefore involves a shift in aesthetics just as much as it involves a shift in consciousness and/or ethical considerations. This article outlines an assignment idea for an undergraduate environmental education class, the design and creation of a graphic novel excerpt, through a dialogue that features the voice of the instructor, project facilitator, and two students. The assignment was an attempt to shift what was possible for students (in this case teacher candidates) to see and imagine in relation to environmental education. Since urban spaces are contact zones for wide variety of cultural forces and sociopolitical issues and contexts, graphic novels provide an open site for these forces, issues, and contexts to intermingle. Students were asked to create a graphic novel excerpt that made readers want to learn more about an issue, had a demonstrable creative element, addressed multiple social, cultural and/or political perspectives of a pressing environmental issue (click here for outline). However, as the instructor of an environmental education course, I needed assistance with the artistic and instructional aspects of such a project. To get the assignment started I turned to our Teaching Preparation Centre coordinator (Keith), and later the expertise and abilities of our class community.

KEITH (SUPPORT): Jesse approached me about using the graphic novel/comic book medium to explore environmental issues with his students rather than a traditional poster or report. My graduate studies work deals with this. I’m also a geek. So I was excited to team up on this.

One of the great things about the graphic novel approach is that it allows the creators to present their ideas in many ways. They are far more flexible than essays or reports. However, the process of making one is also intensive and requires them to dive deep into their topic. Students do not just have to know content, they have to know how things look, how they interact, and how to present the content in a coherent way for a reader. My role was to present the students with some background on their medium, as well as model a possible process. I then sat back to watch the students work and offer support where I could.

RACHEL (STUDENT/ARTIST): As soon as the details of this assignment were presented I was inspired to choose Wiebo Ludwig as a central character. Having grown up in Northern Alberta during the time when he was most active, I remembered his infamy instantly and thought that he would make an excellent antagonist. However, after returning to his story and researching his life I realized that there were in fact several sides and perspectives that needed to be included in this narrative. This is the reality of untangling social justice, it is messy, complex and often involves a blurring of the lines between what legal systems, individuals, and groups consider to be true and just. I walked away with a powerful new perspective, and learned a valuable lesson.
in the importance of being critically engaged with social justice issues. There is no neutrality. The stories we grow up with are just as prone to bias as those represented in our medias, and too often we forget to question who is telling these stories and how they may have been altered to support a particular narrative. I ended this project with a completely new understanding of the powerful influences money and resources have on historical ‘truths’. I had begun with a faceless villain I assumed I had little common ground with, and submitted a project that depicted the impassioned struggles of a human being I could empathize with. I hoped to reflect this internal conflict within the complexities of this piece. I wanted to re-write the story I had been so influenced by, and encourage others to question circumstances that are presented as simply “black and white”, “good vs bad”, “terrorist vs environmental activist”.

RACHEL: The most important part of this process was humanizing Wiebo Ludwig and that began with giving him a face, his face. I wanted anyone who had ever heard about him to first be confronted by the reality of him as a human being. His name was infamous and I wanted the reader to begin by making their own judgements, confronted by a man first, followed by his acknowledgement.

KEITH: The layout of this page guides the reader’s eyes through the content. The use of the arrow on the left reinforces this. Also, drawing complex items like a gas well is really hard.
RACHEL: I had designed the previous frames to demonstrate a building up of intensity and frustration. Having tried the conventional channels with no success, I imagined that this point of his fight, this decision was made out of complete desperation. I wanted to create energy on the page and dramatize his emotions, try to connect the reader with that hopelessness.

KEITH: Convincingly drawing immaterial things like fire and smoke is really difficult. The use of negative space really adds to the page. Also, the triangle of the oil rig is inverted by the fire, creating a ‘hill’ shape to guide the pages action.

BRITNEY (STUDENT/ARTIST): The graphic novel assignment in Jesse’s class had me really excited to explore a topic of personal interest. After watching a documentary called True Cost on the impact the fashion industry has on the environment and people that work in the factories, I was immediately connected to a personal experience. I saw first-hand the impact these types of large scale factories have on the environment when I lived and worked in Guangdong, China. I also work in a clothing store in Regina and therefore feel intricately entangled with impacts the fast fashion industry has on the environment. I became intrigued at how change might happen in the fashion industry, considering its large negative environmental impact, and began researching sustainable (eco) fashion.

The graphic novel allowed me to research the environmental and human impact of fashion industries, while giving me a chance to be creative and explore a teaching tool that I might use to differentiate instruction in my own classroom. I began my graphic novel by researching my topic further, then created a fictional story line, which required (a few) rough copies before
the final copy was ready. With help from Keith, I managed to organize my pages in a creative way that captured the interest of a reader. I would say the most difficult part was simultaneously ensuring the reader would be able to follow along with the story, and that the content was still clearly communicated.

BRITNEY: I incorporated the squiggly lines and words on top of the television so the reader could tell that the character was being sucked into another dimension or world. This is the beginning of her journey of learning something impactful.

BRITNEY: I chose to use simple characters to give more importance to the story being told. ‘The True Cost’ is the actual documentary I first watched that inspired me to make this graphic novel. Since I work in the clothing industry I thought it was more influential to use two trendy main characters to sink in more with the reader.

KEITH: The four exterior panels can be read in any order, but by including the shocked character in the centre, the reader is given the impression that all of them are impacting the character at the same instant or with the same weight.

RACHEL: I believe that true engagement with social justice requires an internal shift from “neutral” apathy towards “active” agency. This is not a lesson that can be effectively taught in a classroom by writing words on a board or assigning an essay. If curricular praxis and social consciousness are truly goals of education, then lessons must have individuals grapple with complex issues and experience internal conflict. Whether it is through artistic expression, informed by injustices, or humanizing infamous individuals of the past, ending apathy requires deeper engagement. Social justice is messy regardless of the issue. Standing up for what you believe in requires both dedication and passion. It demands we stand.
against destructive norms and institutions, and stand in solidarity with those who need teachers to do so. That kind of commitment will not be achieved by simply reading a textbook. Praxis requires authentic encounters and difficult conflicts. Despite all of his flaws and legally irresponsible actions Wiebo Ludwig was right in the end. The sour gas wells that surrounded his compound were killing his people, his land and his livelihood. At what point does fighting for everything you love become environmental terrorism when no one is willing to listen? Help students find stories that make them uncomfortable. Help them see difference through story, detail, and artistic expression. Help them experience the complexities of social justice and we believe you will inspire change.

BRITNEY: The assignment was open in that we were encouraged to choose topics that were of personal or special interest to us. This aspect had the deepest impact on me because it helped me hold myself accountable to choosing more ethical fashion options. My end goal was also to hopefully make some impact on other students that read my graphic novel, and get them to think critically about their fashion choices. I think this was a great teaching tool and will help my class work in the future. Never having a chance to really be a student of a guided inquiry project, I now understand the benefits it has. I plan to give it a try someday soon in one of my classes, as I see it having considerable value for learning about environmental issues that are important for students.

JESSE: While some graphic novels displayed sensational artistic talent, or captivating story lines, the big idea was to shift the aesthetic boundaries of what kinds of texts/media, environmental issues, and ethical actions informed our class experience. Many students told stories from the perspective of non-human (more than human!) beings, and many students took the chance to express and explore their commitment to education that might disrupt neocolonial narratives of environment and work toward reconciliation. Brittany and Rachel’s graphic novels provided a storied aesthetic experience that other members of our class community might never had been able to imagine on their own. My only practical suggestion in retrospect is to scaffold the assignment so students have ample time to finish their print copies--which require attention to format and detail.

KEITH: I would echo Jesse’s comments here. For students who aren’t familiar with creating graphic novels, it’s a daunting task. Some of my instruction was on the labour-intensive process of creating my short comics, but until you take the time to do it yourself you don’t realize the work that goes into it. I think it’s a great way to explore an issue, but as with any diversion from the norm, it takes a little extra time to develop and support. That said, the tools are all out there. Paper and pencil are all you need to begin playing. The hard work should not discourage anyone from engaging with the fun that comes from creating comics on any topic.
The Healthy Yards program was launched in Saskatoon in the spring of 2015 as a partnership dedicated to sustainable gardening practices, environmental protection, and community building. The program provides no- and low-cost resources, educational opportunities, and outreach on a variety of topics, including growing food, composting, low-water gardening, biodiversity, boulevard gardening, and chemical free yard practices. It also runs a demonstration garden at the Saskatoon Food Bank & Learning Centre’s Garden Patch.

A significant portion of our urban areas are comprised of residential yards and gardens. In Saskatoon, single- and multi-unit residential properties provide a total of 1,870.6 hectares of permeable land (i.e. yard and garden space), which is approximately 8% of Saskatoon’s total area and 17% of Saskatoon’s permeable area. As a comparison, yards and gardens in Saskatoon occupy more land than the City’s public park.
system, which offers 1,408.4 hectares of greenspace. In other words, creating “healthy yards” could truly transform where and how we live. For example, greening our neighbourhoods could improve the liveability of our city, offer us nature right outside our doorsteps, develop our community’s sense of environmental stewardship, and establish a strong public commitment to preserving and maintaining urban greenspace.

So, what are healthy yards? The program defines them as:

• **GOOD FOR THE ENVIRONMENT:**
  
  Healthy yards mimic the patterns and relationships found in healthy, functioning ecosystems. They are chemical free spaces that provide habitat for insects, birds, and wildlife; build healthy soil; purify water; reduce flooding and erosion; divert waste from the landfill; sequester carbon; and conserve water.

• **MEANT FOR EVERYONE:**
  
  Healthy yards can be created and enjoyed by people of all ages, abilities, cultures, and backgrounds. They help build our collective capacity to take up practices that are good for the garden and for the gardener.

  As our world and communities face unprecedented challenges, such as addressing and adapting to climate change, habitat and biodiversity loss, pollution, food insecurity, and political unrest, there is a pressing need to support each other to build healthy, sustainable relationships with people and the planet. While “changing the world” is quite a tall order, perhaps we can start one garden at a time.

  The **Healthy Yards program is a partnership between the City of Saskatoon’s Environmental & Corporate Initiatives division, the University of Saskatchewan’s Gardening at the U of S outreach programming, the Saskatoon Food Bank & Learning Centre, and the Saskatchewan Waste Reduction Council’s Compost Coaches.**

  To learn more, visit Saskatoon.ca/HealthyYards.

• **GOOD FOR PEOPLE:**
  
  Healthy yards provide social, physical, emotional, and spiritual wellbeing. They create spaces that foster relationships with people and nature, reduce stress, improve concentration, encourage exercise, build skills, and provide beauty. They can also increase food security.
WOODLANDS CREE VALUES THAT GUIDE

DR. HERMAN MICHELL

The Woodlands Cree of Northern Saskatchewan and Manitoba have always had a set of Traditional Values that guide daily life. These values emerged out of a deep relationship with the land, lakes, and rivers. The Elders say traditional values are teachings and lessons of how to live in a good way. They guide our thinking and actions. Woodlands Cree values are passed on by Elders and reinforced through role modeling, living by example, coming together with relatives from across the country, sharing knowledge, engaging in ceremonies, prayer, songs, dances, stories, art, drama, writing, crafts, and other traditional expressions....

Strength

is a Cree Value that is often symbolized by Grandfather Rocks. We must be as strong as the rocks that we see on the shoreline. They have seen many seasons. They have experienced the ravages of winter and the warm rays of summer.

Our Kookums say we must be strong inside. Take all your experiences and turn them into something positive. We all have will-power that propels us forward even at the weakest of moments.

Sôkâtîsôwîn
Food Across The World

How can cities grow vegetables to feed themselves in winter?

Rooftop Gardens

Vertical Gardens

Greenhouses

Places We Went!!
The program has been recognized for its holistic approach to sustainability education. Since its inception in 2013, it has strived to:

- Build teachers’ capacity to offer inquiry- and action-based learning. Participating teachers are provided with professional development, planning time, networking opportunities, action project funds, and access to resources and environmental professionals.
- Provide a framework that is adaptable to the participants’ interests, cultural contexts, and learning outcomes.
- Include youth in decision-making by using inquiry to guide both the process and results of the program.
- Build participants’ capacity to plan and deliver environmental action projects and make the “leap” from knowing to doing.
- Achieve environmental outcomes that are measurable and experiential. For example, the program assists students with conducting environmental audits in order to measure the energy, water, waste, fuel, and greenhouse gas reduction impacts of their action projects.
- Connect classrooms with community partners who provide authentic and meaningful educational experiences.
- Provide support to teachers to integrate a variety of knowledge perspectives, practices, and cultures into their teaching, with a particular focus on Indigenous Ways of Knowing and Being.
- Extend and enrich learning within a variety of curricular areas including: English Language Arts; Science; Fine Arts; Social Studies; Health and Wellness; Mathematics; Phys. Ed; and Career Ed.
- Engage youth and teachers in politics. For example, the City of Saskatoon has played a leading role in developing, delivering, and funding the SASF program, which has opened up opportunities for teachers and students to engage with their local government.
- Celebrate participants’ learning journeys by providing the opportunity for students to highlight their experiences and results at a year-end showcase.

Projects vary year to year and have included initiatives such as:

- Developing a bike generator to charge cell phones;
- Setting up composting and recycling systems;
- Reducing idling in front of schools by talking to drivers and putting up Idle Free Zone signage;
- Growing vegetables and micro-greens in classrooms;
- Creating an Indigenous Healing garden in the school yard;
- Building solar ovens;
- Installing LED lights;
- Performing water and energy audits and conservation at homes and school; and
- Holding school wide lights-out and lights-half-out campaigns.

In addition to the many measurable successes that have resulted from this program, the compelling stories, new relationships, meaningful experiences, and improved confidence to participate in sustainable solutions will leave a lasting legacy and contribute to the cultural shift that is necessary in our communities to address sustainability in a holistic manner.

The Student Action for a Sustainable Future program is a partnership between the City of Saskatoon, Saskatchewan Environmental Society, Saskatoon Public Schools, Greater Saskatoon Catholic Schools, Sustainability Education Research Institute, and a number of educational stakeholders and community organizations. The program has received both international and local recognition, and is featured as an environmental literacy case study by the Global Environmental Education Partnership (GEEP).

To learn more, visit Saskatoon.ca/StudentAction.

Written by Shannon Dyck in partnership with the Student Action for a Sustainable Future committee.
Jane’s Walks

By Nichole Huck and Rye Huck Fraser

This year marked the 10th Anniversary of Jane’s Walks in Regina.

These community led walks were inspired by urbanist Jane Jacobs; the walks explore the everyday and the extraordinary parts of our city and connect people with their neighbours.

This year six-year-old Rye Huck Fraser led his own Jane’s Walk through some of his favourite places in his Regina neighbourhood. Rye had participated in a walk before as a young child, but this year he decided he was old enough to lead his own.

In preparation for the walk his mother read him a children’s book about Jane Jacobs and they watched online videos about Jacobs to understand her views about cities and how she inspired community walks all around the world.

Here is Rye in conversation with his mother Nichole:

Who is Jane Jacob?

She is a person who thought that everyone is an expert in their own neighbourhoods and the best way to get to know your city is by walking.

Some of the stops included: The Alley Gallery (curated art show in the back alley showcasing the work of neighbourhood kids, this show’s theme was Feather and Bones). Other stops included a front yard bench with neighbourhood kid handprints, back-alley raspberry bushes that anyone can eat from, wheelchair accessible playground and the vending machine at Malty National brewing with a kid-positive vending machine that is always stocked with treasures. The day of the walk they were hosting a bike workshop so Rye brought his bike in to get fixed.
What do you like about your neighbourhood?

I like that the grocery store is so close I like that I have neighbours that I know and I can walk to my friends houses.

What did people learn from your walk?

I would say that a Jane’s walk is good to teach people that walking is nice, if you walk you can meet a lot of new people.

Kids often notice things other people don’t because they walk slowly and look around. You can meet new people and make new friends and it’s just good to go outside.
“Where are all the other girls who want to build forts?” Jana remembers asking her parents. She knew they were out there, but didn’t have a way to find them. It was around grade seven when friends from school seemed to lose interest in playing outside. In junior high, the way she related to nature changed: “I was the kind of kid who hid behind her hair in the hallway and threw up on the bus on the way to school. I didn’t have the vocabulary to explain that I was anxious about going to school, but I did teach myself nature therapy at home as a way of coping.” After an emotionally taxing day at school, Jana would tuck away into one of her many nature spots, lay down and imagine she was melting into the ground. She recalls, “after the ill feelings had soaked into the ground, I had this nice light energy for things like building my trail network or checking the ‘fences’ I’d made to keep the beaver from chewing down ‘my’ trees.” Connecting with nature became much more of a private act in her teens because “what felt right to me just wasn’t the norm in my junior high and later in high school. I had this support in my life that I leaned pretty heavily on, but I didn’t know how to share it.”

In contrast, the grade eight students she taught in the Ecoquest program were encouraged to grow and sustain their personal connection to nature. Whether independently on solo or during group work, the Ecoquest program establishes nature connection as a norm that could openly be talked about. While working with Ecoquest students, Jana made two key observations which would later shape the Snowlandia program: female students hesitated to lead in co-ed groups; and, winter is an underutilized teacher.

**HESITANT LEADERS**

Each fall, when facilitating team-building activities for the new group of ‘Ecoquesters’ Jana and her teaching partner would observe the tendency of male students to confidently step up to lead and the female students often stepping back or paused long enough that someone else took over. Jana could place her younger self in this pattern and recognized the confidence one projects did not necessarily reflect their skills and knowledge. Back40 Wilderness First Aid instructor Rebecca Basset also identifies with this pattern: “As a young woman I always aspired to be “outdoorsy” but didn’t really have the means or confidence to pursue things on my own. Once I started volunteering with Saskatoon Search and Rescue I started to find the link between my profession as a First Aid provider and my passion for the outdoors. Giving young girls the opportunity to get their “boots wet” is an important piece that many girls don’t get until they are much older, if at all.”

Wildernook Fresh Air Learning and SaskOutdoors offered Snowlandia as a single-gender program. The leaders anticipated this would carve out a more patient and understanding social space for young women to practice their leadership skills and view themselves as leaders. During the program Rebecca witnessed the participants confidently
step into leadership positions:

“It’s an amazing feeling to see so many young girls dive into the challenge I put in front of them and to really engage in the first aid activities we planned for them. Throughout the whole afternoon the girls kept busy with their questions, stories, and practicing of skills and all of them walked away a little more confident in themselves! How cool is that?!? It’s such an honour to be a role model in this program!”

WINTER AS TEACHER

The prairie winter offers valuable lessons about preparedness, long-term thinking, and responding to seasonal cues, yet we have a collective habit of shying away from winter. Within Snowlandia Jana wanted to create a sort of winter immersion, where participants would go beyond winter recreation to really getting in tune with how their bodies respond to the winter environment-- to develop strategies and habits that would help them enjoy spending extended periods of time outdoors.

Rebecca explains “From my perspective, one thing that is obvious with all outdoor activities is the importance of preparedness. Back40 wanted to help Snowlandia provide a little piece of that lesson to the girls in this program and to challenge them to solve some simple first aid needs on their own. Kids are so smart and these young ladies proved that they could be creative, resourceful and intuitive when trying to make a ‘hurt friend’ more comfortable and safe. First aid is a lot about intuition and improvisation and more importantly preparedness. These young girls were all given a few items for their personal packs such as a triangle, a silver blanket and some gauze. This will give them a few items they might be able to use if and when the time comes.”

In Saskatoon, one need not travel far to experience the continuous snow cover, reduced daylight and below zero temps needed for winter immersion. In fact, learning in urban naturalized spaces challenges the notion that nature exists outside of cities, while also offering close proximity to warm-up buildings. Snowlandia participant, Siobhan Fichtner-Jack said “ I wanted to try out the program because I love the outdoors and doing outdoorsy things.” She found the program helped her “go outside more, because it’s not just beautiful in the summer/spring.”

SAM GUNN

Why is outdoor education important to you as a woman?

Outdoor Education is important to me as a woman because it allows us to get back to who we are as people and reflect on what we value and how to pursue those values. Its also gratifying to be a role model in an industry that is typically dominated by men- I’ve witnessed the importance of female leadership for young women who are reluctant to participate in outdoor pursuits in a mixed gender setting.

Why do you think it is important doing outdoor education in an urban setting?

By doing outdoor education in an urban setting, we are modeling that you don’t have to travel away from the city to find nature or benefit from the outdoors. We are dispelling the myth that there is a dichotomy between “natural” and “unnatural” spaces, which has been used as a way to maintain systems of oppression. Traveling to “natural” spaces like national parks or wilderness areas often requires a lot of resources and is inaccessible to many people. It is also tied to the notion that wilderness spaces are uninhabited and offer a unique opportunity to cleanse/refresh yourself after spending time in an urban setting. This idea is intertwined with the colonial history of our country (terra nullis), and the erasure of Indigenous people from this land.

What was a highlight for you of the Snowlandia program?

The highlight for me was building fires with the participants. When I was 15 years old, my role model and teacher, Judy McLellan, taught me how to gather materials from the land, and light a fire in frigid temperatures. It was the first time I had seen a woman take responsibility for the fire in an outdoor setting and since then, it has been my favorite outdoor skill to teach. Seeing these young women struggle, and then succeed to light a match was so heart-warming!
What teaching methods or approaches do you find helpful when leading a workshop such as Snowlandia?

Inquiry is the foundation of my outdoor education pedagogy. Starting with questions, and helping students work through trial and error allows participants to interact deeply with the environment and their peers. Part of the magic of outdoor education is working through challenging experiences, and growing from those experiences. Guided reflection at the end of an activity helps solidify the learning from that experience, and then direct that learning to future applications.

Participants Quotations:

“I liked the fact that Snowlandia is an all female group because it means that you have something in common with everyone and that’s a really important factor of being an efficient like group.” –Ella Hagen

“I wanted to try out the program because I love the outdoors and doing outdoorsy things, and I love to travel in the mountains too. Something that has been been challenging for me so far is snowshoeing and going up hills with snowshoes and also the skiing, going up the ski hills because I’ve never done that before” –Siobhan Fichtner-Jack

“When I spend time in nature I feel very happy and calm because I can hear the wind and all the birds tweeting and it’s just really beautiful and I can just sit on the spot and enjoy the nature.” –Anwoluwa Akinbode

“Why I wanted to do Snowlandia is because I wanted to be more active outside and I wanted to do skiing and snowshoeing, yeah.” –Ophelia

“When I was actually leading everyone to like the forest or the bush you call it, and to a place where we all like sit down to listen to the wildlife and observe the sounds around us.” –Faith Uwaechi

What did you find challenging about Snowlandia?

“That sometimes you are outside and you’re cold and can’t change into warmer clothes” –Lila

“The cold. That being said, we live in Canada and we should learn to deal with it”

“Trying to keep my feet warm” –Siobhan

How has Snowlandia helped you?

“It helped me get active in winter and meet new people” sloane

“It made me get stronger” –Sonja

What has Snowlandia taught you?

“How important it is to have some time just to be with nature and think” –Ella Hagen

“Go outside more because it’s not just beautiful in the summer/spring.” –Siobhan

JANA

“Sloane’s experience at Snowlandia was fantastic, thank you. Her retelling each night spoke of learning practical skills, competent engaging female leaders, growing confidence, friendship, fun and hard work. It all made for a very special week :))”

–Shannon Heath (Parent)

SHOUT OUT IN THE LEGISLATURE

“Despite the recent frigid temperatures, the ten participants spent much of their February school break outdoors embracing our Saskatchewan winter... Mr Speaker I ask all members to join me in thanking SaskOutdoors and these experienced outdoor leaders for developing a fun and healthy program for the education and enjoyment of young girls in Saskatoon, thank-you.”

–Danielle Chartier

Saskatoon Riversdale New Democratic Party
PROGRAM DESCRIPTION

Leap on snowshoes, search for life under the snow, develop leadership skills and make outdoorsy friends. SaskOutdoors (a non-profit, environmental and outdoor education organization) and Wildernook (a social purpose business, which uses creative entrepreneurship to engage groups of people on the environmental education sidelines) teamed up to offer winter experiences in a fresh way. Snowlandia is designed for young women ages 10 -12 who crave more outdoor time exploring and creating with friends. It is an exciting opportunity for young women to be active outdoors during the winter break.

THE EXPERIENCE:

Each day features a different winter adventure in Gabriel Dumont Park and Holiday Park’s naturalized spaces. The morning and afternoon learning experiences will focus on practical outdoor skills such as staying warm and dry, first aid, winter travel and building shelter. Although we will begin and end each day bundled up outdoors, participants can expect to spend a couple of cozy low-key, down-time hours indoors around noon eating, reading, crafting and drying out our mitts and neckwarmers! We will also practice a small act of giving back to nature and/or the neighbourhood community each day.

LOCATION:

Tuesday and Wednesday will be based at Gabriel Dumont Park in the Buena Vista neighbourhood with the Queen’s House Retreat and Renewal Centre as our midday lunch and and down-time spot. Thursday and Friday will be based at the former Sanitorium Grounds in the Holiday Park neighbourhood with Abbeyfield House as our midday lunch and and down-time spot. Both locations are selected for their biodiversity as well as access to washrooms and warm-up spaces.
White Buffalo Youth Lodge (WBYL) is a multi-purpose community centre working to improve quality of life and health for children, youth, young adults and their families in Saskatoon’s inner city. It started in 2000 as a partnership between the City of Saskatoon, the Saskatoon Health Authority, Central Urban Metis Federation and the Saskatoon Tribal Council (STC) to provide healthy and positive programming for youth ages 6 and up during a time when these programs were not readily available in the area. The centre was very highly utilized from the start, and this continues today. WBYL indicated that they had 36,000 visits in 2017 - their summer programs can get up to 95 kids per day, their community Christmas dinner served almost 700 people, and their summer carnival gave out 10,000 backpacks filled with school supplies.

Presently, WBYL continues to serve youth, but also supports children, young adults, and families with a variety of programs. WBYL realized that families also required a place for younger children and young adults – and that parents/caregivers needed to be included in programming as well. WBYL Director Heidi Gravelle explains, “We want to provide better outcomes for everyone involved. So we started asking, how do we get mom and dad in here? How do we encourage healthy play, for families to build a meal together, or to create an art project? We’re working on restructuring our programs to meet the needs from conception up to the elderly – the needs of the entire family.”

All programs and services at WBYL have a cultural component based on the teachings of the medicine wheel. Elders are included in most programs to provide teachings and connections to culture. Gravelle and Kim Burnouf, WBYL Program Coordinator, agree that cultural underpinnings are crucial to WBYL. Gravelle shares, “A lot of our youth may not have had an opportunity to grow up in their home community or reserve, so being able to provide those culturally appropriate services helps to build their identity and can even bridge back to their home communities. Making a safe place for people to feel confident in re-establishing or identifying with being First Nations is so important, especially with the amount of racism out there.”

The programs are based on a service-delivery model and meeting outcomes, whether it is keeping kids out of the justice system, providing health services, or housing homeless families. The clientele have a wide range of barriers, so WBYL works as both an advocate and navigator to other programs and services in Saskatoon. Building connections and bridging gaps to external services or agencies is part of what WBYL does.

While most participants are within walking distance, some parents from other parts of the city bring their children across town to find a space where their culture is accepted, valued, and celebrated. WBYL can also act as a bridge for newcomers and settlers to gain awareness and respect of First Nations culture and to facilitate understanding of Indigenous territory. Gravelle and Burnouf emphasize that WBYL programs and services are absolute necessities for the Saskatoon community to meet the Calls to Action from the Truth and Reconciliation Commission (TRC).

WBYL has a gardening program which starts each winter, in the basement. They use a garden site on the east side of Saskatoon, shared with a school yard. Kids in WBYL programs start the plants from seeds, and then transport the seedlings from WBYL to the garden. Care of the garden is shared between WBYL’s after school and summer programs and the harvest goes home with the kids. Burnouf explains, “A huge piece is connecting with nature, understanding that everything is connected and everything is going back to Mother Earth, and giving thanks...You can see from the children in the garden how connected they are. They take the harvest home; they collect bugs. You can see how much they love it.”

One of the current challenges for WBYL is space. They try to never turn anyone away and it is ‘heart-breaking’ if they have to. Gravelle describes, for a thirty-person classroom, “What happens when you have a family of eight? You can only have three families in. But we’re trying to serve 20-30 families in a program. Summer programs can use the parks, but when it rains we can have over 100 kids inside.” For their participants, transportation can be an issue and if WBYL could provide transportation to and from programs, Gravelle believes their reach would grow.

Working towards decolonization for WBYL means breaking down systems that have been imposed by colonialism. Many of these systems don’t work, especially when dealing with very vulnerable children, youth and families. WBYL works to meet their clientele’s needs by building programs and services to connect people to traditional ways and values. The colonial systems of structure, force and law, don’t necessarily work here. Gravelle and Burnouf agree that in order to move towards decolonization, everyone in Canada needs to be educated about Indigenous history, and the present reality of colonial structures.

In summary, Gravelle shares an anecdote, “Our kids won the [baseball] tournament yesterday! Our afterschool club played against Pleasant Hill and Confed, and we won the big trophy. Our kids worked together as a team; they cheered each other on. Our staff went wild cheering the kids on. I’ve never seen our kids so pumped. They were on cloud nine. It’s super awesome. Thinking about that moment, and seeing their excitement I can say that our staff do more than go through the motions of the job description. It’s their second home. It’s the same for our kids. This is their home, their safe place, where they can feel vulnerable. That’s just what White Buffalo is.”

TOWARDS DEcolonization

White Buffalo Youth Lodge

BY ZOE ARNOLD AND ADITI GARG

Fall 2018

OF LAND & LIVING SKIES 35
FOR YOUR PERSONAL AND PROFESSIONAL DEVELOPMENT

PROJECT LEARNING TREE – ENVIRONMENTAL EDUCATION ACTIVITY GUIDE

Charting Diversity. Birds and Worms. Pollution Search. These are some of the 96 hands-on interdisciplinary activities found in Project Learning Tree’s PreK-8 Environmental Education Activity Guide. Topics include forests, wildlife, water, air, energy, waste, climate change, invasive species, community planning, and more. Each activity is tailored to specific grade levels and learning objectives. The materials provide educators the tools they need to bring the environment into their classrooms — and their students into the environment.

FEATURES
- 96 multidisciplinary activities that integrate core discipline areas, including STEM subjects, reading, writing, and social studies
- Background information and science content for teachers
- Supporting features, such as literature connections, technology extensions, differentiated instruction, and student assessment tools
- for Pre-K to grade 8

DAVID SUZUKI FOUNDATION
DAVIDSUZUKI.ORG

One nature. We are nature. All people, and all species. We are interconnected with nature, and with each other. What we do to the planet and its living creatures, we do to ourselves. This is the fundamental truth guiding our work at the David Suzuki Foundation.

Founded in 1990, the David Suzuki Foundation is a national, bilingual non-profit organization headquartered in Vancouver, with offices in Toronto and Montreal. Through evidence-based research, education and policy analysis, we work to conserve and protect the natural environment, and help create a sustainable Canada. We regularly collaborate with non-profit and community organizations, all levels of government, businesses and individuals.

Our mission is to protect the diversity of nature and our quality of life, now and for the future. Our vision is that within a generation, Canadians will act on the understanding that we are all interconnected and interdependent with nature.

Today, our work focuses on three priority areas:

1. ENVIRONMENTAL RIGHTS
   Goal: Establish the legal right for all Canadians to live in a healthy environment.
   
   The right to a healthy environment is the simple yet powerful idea that everyone should be able to breathe fresh air, drink clean water and eat safe food. We believe Canadians should have this right constitutionally protected. That’s why we are pursuing legal protections for environmental rights, and in so doing, taking responsibility as stewards for the natural world on which we depend.

2. CLIMATE SOLUTIONS
   Goal: Accelerate the transition to a low-carbon future.
   
   Climate change threatens the planet’s life support systems. In 2016, ratification of the United Nations’ Paris Agreement — signed by 195 countries, including Canada, and the European Union — was a product of the mounting urgency to act on the defining issue of our time. The agreement requires Canada and other industrialized nations to transition from fossil fuels to 100 per cent renewable energy by 2050. To this end, we
are building a compelling vision of Canada’s renewable energy opportunity throughout the country — with citizens, cities, Indigenous communities and businesses. We will help shift the climate narrative from despair to possibility, and create real opportunities for Canadians to be part of the solution.

3. BIODIVERSITY

Goal: Protect and restore nature.

Human beings — like all biological organisms — depend on clean air, water and soil. We are a part of nature and must live within its limits. Our vision for biodiversity is that Canadians improve the way they interact with the natural environment and become engaged in protecting the creatures and places they love. We also recognize Indigenous peoples as biodiversity stewards in their territories. We work to resolve rights and title issues, and we advance Indigenous governance of their lands and waters.

NATUREWATCH CITIZEN SCIENCE PROGRAMS
NATUREWATCH.CA/

NatureWatch is a community that engages all Canadians in collecting scientific information on nature to understand our changing environment.

Do you like to explore and examine the natural world? Want to be a citizen scientist? Are you interested in joining researchers and nature enthusiasts from across Canada in tracking rapid changes in our natural environment?

NatureWatch is your home page for fun, easy-to-use environmental monitoring programs that encourage you to learn about the environment while gathering the information that scientists need to monitor and protect it. NatureWatch monitoring program are suitable for all levels and interests, designed to develop your scientific observation and data collection skills so that you can actively contribute to scientific understanding of Canada’s environment.

Information you submit to our NatureWatch programs is pooled with information submitted by other participants across Canada, and is used by researchers at several Canadian universities to improve scientific knowledge of changes in Canada’s biodiversity, climate, and the natural environment. Being a NatureWatcher costs nothing, and is a great activity for children, adults, families, groups, and clubs. You choose the places where you go to enjoy nature – your backyard, a neighbourhood park, or a favourite forest, field or pond – and use the NatureWatch website on your smartphone to record the frogs, flowers, worms, or ice conditions you observe there.

Right now, NatureWatch hosts the following nature monitoring programs, with more to come in the future:

- FrogWatch: Learn about Canada’s favourite amphibians while helping researchers and zoos monitor the health of frogs population and frog habitat.
- Ice Watch: Do you live near a pond, lake, or river that freezes over each winter? The dates when ice appears and disappears provide important information about patterns in Canada’s climate. Join our network of citizen scientists who have been tracking changes in winter ice conditions over many years.
- PlantWatch: The blooming times of Canada’s most easily-recognized plant species help scientists to track changing climate trends and their impacts. If you love to garden or have an eye for flowers, please help PlantWatch and its network of volunteer provincial coordinators monitor Canada’s changing natural environment.
- WormWatch: Worms might gross some people out, but at WormWatch, we think worms provide an exciting way to teach kids about the importance of soil and the organisms that live in it. And the kids agree with us. If you’re a teacher, guide or scout leader, or someone with a bunch of kids to amuse on a sunny afternoon, get out your shovel and your smartphone and give WormWatch a try.

URAL ENVIRONMENTAL EDUCATION

This book was written by more than 50 environmental educators in the United States who participated in an online learning community “Urban Environmental Education” in April–December 2014 (online community facilitator and book editor: Alex Russ). This online learning and networking was one of the professional development activities organized by EECapacity, a national EPA-funded environmental education training project conducted by the Cornell University Civic Ecology Lab, the North American Association for Environmental Education (NAAEE), and partner organizations.

The E-book can be downloaded here for free https://naaee.org/eepro/resources/urban-environmental-education
10 YEARS OF ADVENTURE AND LEARNING WITH THE GREENALL OUTDOOR SCHOOL PROGRAM
see page 10 for write up