

Museums & Sustainability

**The Environment:
Where Would We
Be Without It?**

**Humboldt Museum
Presents "Old-Fashioned
Sustainability"**

**WDM Showcases
Alternative Energy**

**Fort Battleford: A
Sustainability Leader**



Museums Association of Saskatchewan





Message *from* MAS

The Museums Association of Saskatchewan (MAS) is a non-profit, collective organization with more than 400 members, including 200 member museums and galleries. MAS is governed by an elected Board of Directors that develops policy and provides direction for programs and services to benefit all Saskatchewan museums.

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Cover Photo

Cover photo by Nicole Turner. Campers from the Ecology Camp for Kids summer day camp investigate the creatures that live in the swamp at Pike Lake.

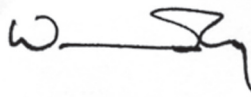
A year has passed since the last Museums and Sustainability publication. Some things haven't changed: the same set of social, environmental, and economic concerns faces us and demands solutions. But some things have changed: the past year has seen more museums looking for sustainable solutions for themselves and their communities.

In this issue, we look at how museums are embracing environmental sustainability. As Dr. Glenn Sutter points out in his essay, the environment is only one facet of a sustainable society. Often, environmental problems are a symptom of an unhealthy society, culture, or economy. To find lasting solutions, we have to address all aspects of the problem.

The museums featured in this issue have discovered this for themselves. The problems are environmental, but the solutions are complex. They're social solutions: people have to work together to make it happen. They're economic solutions: people have to come up with ways to pay for their projects – or even better, ways for the projects to pay for themselves. They're also cultural solutions: by showing that people value and are working toward a sustainable future, these projects all help develop a culture of sustainability.

These museums, and many others, are doing great work. We're presenting them because we're proud to be part of a museum community that values sustainability, and takes its environmental responsibilities seriously. But we're also presenting them here because they've inspired us, and we hope they'll inspire you, too.

So take time to think, and then take action. What can your museum do to build a sustainable community? Together, Saskatchewan's museums can help lead the way to a sustainable future.



Wendy Fitch, MAS Executive Director



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Photo Courtesy of the
Government of Saskatchewan

Message *from the* Honourable Bill Hutchinson

Minister of Tourism, Parks, Culture & Sport

The Government of Saskatchewan recognizes that museums are important places. They help us understand how our communities, our province and our world are connected. They teach us about our past and our ever-changing present.

As residents of Saskatchewan, we enjoy an enviable quality of life and, at the same time, we want to ensure that our children have the same advantage. Museums and other cultural institutions can help us understand how our actions today affect people tomorrow.

On behalf of the Government of Saskatchewan and the Ministry of Tourism, Parks, Culture and Sport, I want to thank the Museums Association of Saskatchewan for its commitment to promoting heritage, culture and sustainability. Your work helps ensure that our legacy will be one that Saskatchewan's future generations are proud of.

Bill Hutchinson

The Honourable Bill Hutchinson, Minister of Tourism, Parks, Culture and Sport



Ministry of
Tourism, Parks,
Culture and Sport





Photo Courtesy of
Canadian Heritage

Message

from the

Honourable James Moore

Minister of Canadian Heritage and Official Languages

Museums play an essential role in preserving Canada's heritage. They allow Canadians and visitors from around the world to discover this country's history, culture, arts, technology, and values. In so doing, they open a window on Canadian society in all its richness and diversity.

Our Government knows how important arts, culture, and heritage are in ensuring the growth of our communities and our economy. This is why we are proud to support the Museums Association of Saskatchewan, which helps promote museum activity in the province.

On behalf of Prime Minister Stephen Harper and the Government of Canada, I would like to congratulate the Museums Association of Saskatchewan, which helps ensure that Canadians have access to our cultural heritage, now and in the future.

The Honourable James Moore, Minister of Canadian Heritage and Official Languages



Canadian
Heritage

Patrimoine
canadien



Winner!



**Runner
Up**

Environment *in* Focus

The Environment in Focus Photo Challenge was designed to raise awareness and public engagement about environmental sustainability. We asked shutterbugs from around the province to send us pictures that show how people can live in harmony with the natural world.

The results astounded us. The photos look stunning, and we were amazed at their diversity. Whether through sustainable energy, wildlife rehabilitation, or ecological education, many people in Saskatchewan and around the world are working to make their way of life more environmentally sustainable. These images are a testament to those efforts.

Congratulations to our winners, and thanks to all who entered and helped make this contest such a success. 🌱

Top left: Centennial Wind Power Facility, southeast of Swift Current Saskatchewan, is a Saskatchewan-grown example of sustainable energy. Photo by Ruth Bitner.

Bottom left: A shepherd in Rabbat, Algeria, depends on a sustainable relationship with the land for his livelihood. Photo by Taouba Khelifa.

Bottom right: A Regina student gets first-hand knowledge of how plants grow. Photo by Wybo Ottenbreit-Born.



Photo by Alan Porter



Photo by Ruth Bitner



Photo by Liberty Brears

**Runner
Up**





The Environment

Where Would We Be Without It?

by Dr. Glenn Sutter, Royal Saskatchewan Museum

People have always altered their surroundings by tilling land, cutting trees, damming waterways, building settlements and fighting wars. For thousands of years, our impacts were local and regional because of low populations and limited technologies.

Things started to change in the last part of the 18th century with the Industrial Revolution. As coal, oil and then electricity became widely available, our populations rose, our technologies became more powerful, and the pace and scope of our activities increased. By the end of the 1900s, human activities were having clear, global impacts.

Today we face a sobering list of issues: climate change, species at risk, air and water pollution, shrinking forests, spreading deserts, urban sprawl, eroded soil and mountains of garbage.

These are just some of the environmental problems caused by how and where we live, how we feed ourselves, how we move around, and our voracious appetite for energy and stuff.

Sustainability is partly about how we affect the environment – the world around us – as we try to meet our individual and collective needs.

To learn more about ecological footprints or to calculate yours, check out the Life Sciences Gallery at:

www.royalsaskmuseum.ca

We depend completely on the environment – and the conditions and resources it provides. This can be hard to appreciate, given our technologies and ingenuity, but it only takes a moment to realize that water doesn't come from a tap (or a bottle!), any more than electricity comes from a plug, or food from a store.

Ultimately, we rely on the Earth for our survival and we always will. That's why the environment is the biggest circle in our sustainability model, and why social, economic, and cultural aspects are nested within it (see Fig. 1).

Focusing on environmental issues can be an effective way to stimulate awareness and actions aimed at sustainability. Despite their complexity (and driving forces that may be invisible or hard appreciate) environmental problems are often associated with relationships and indicators that are clear and tangible. It is easy to appreciate how cars and factories cause air pollution, how better insulation saves energy, or how recycling can mean smaller landfills. The connections are obvious in each case and the impacts are measurable.

One of the more compelling environmental indicators is the ecological footprint, a measure developed by Canadian researchers Bill Rees and Mathis Wackernagel that is now used by teachers, planners and governments around the world. Footprint calculators like the one developed by the RSM (see box) are based on the amount of land and water needed to absorb our wastes and provide us with the things we use – wherever that land or water may be.

Ecological footprints are often used in sustainability work, for several reasons. First, they show the size of our impacts in spatial terms, translating a range of activities into a common unit (acres or hectares) that people can relate to.

Second, they provide a baseline that can be tracked and compared to other populations to highlight disparities. They also let us highlight the amount of arable land and

fresh water in a given region, to identify surpluses and deficits. Footprint estimates can be used to show what would happen if people made different decisions about what they buy, where they live, and how they get around.


This sort of feedback can highlight the importance of individual and collective choices, fostering a sense of empowerment and ideas for action.

Finally, footprints can be calculated for a range of spatial scales – from the global population and individual countries, all the way down to specific neighbourhoods, buildings and individuals. This feature is especially important for educational activities, where the goal is to help people see how the environmental dimensions of sustainability affect them on a personal level.

But sustainability is not just about the environment. In fact, environmental issues are often the symptoms of deeper problems that reflect how we organize ourselves as communities and organizations (our societies), how we generate and distribute wealth (our economies), and how we live as individuals and groups (our cultures). These other dimensions quickly become apparent when environmental issues are examined in detail. Consider water quality as an example. While bad water may be seen as an environmental problem, the

underlying issues may have to do with settlement patterns, economic activities or consumer choices that shape the land.

In the end, it doesn't really matter how we label the problems we face. For museums that want to get involved in sustainability work, issues that are considered 'environmental' can provide good access points for visitors, stakeholders, and the institution itself.

They can also be important reminders of the larger challenge in front of us: living sustainably in a limited globalized world with more than seven billion other people. 

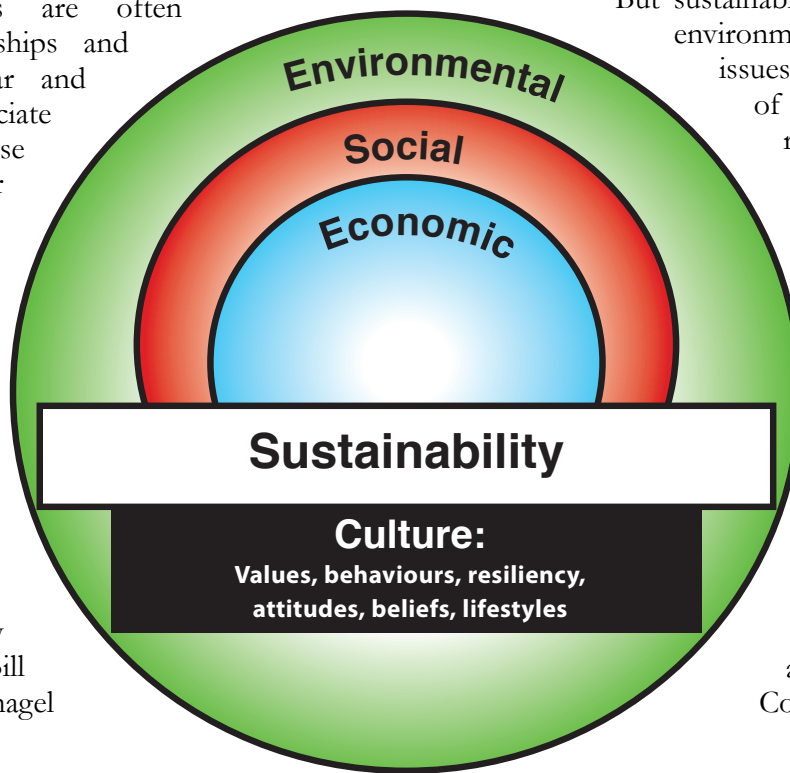


Fig. 1. A sustainability model that shows how the economy and society are nested within the environment and rest on a foundation of culture. Developed by Douglas Worts.



Joan Champ and Brian Newman with a new exhibit under development
- a replica of the U of S Engineering Straw Gas car from 1917-18.

Capturing wind and imagination

WDM uses wind power to showcase alternative energy's past, present and future

On a windy day, visitors to Saskatoon's Western Development Museum can see alternative energy at work.

In front of the museum, three 15-metre wind turbines capture energy as well as considerable attention from passers-by. Inside the building, an interactive display features information and hands-on learning about wind power – a real-time light display even shows the approximate energy generated by the turbines.

This is all part of *Winds of Change*, an exhibit created to generate power (four kilowatts at peak) and serve as a demonstration site and educational resource.

"We wanted to present not only the past, but also the present and future possibilities of wind power in Saskatchewan," explains WDM Exhibits Coordinator Brian Newman.

The display features written and multimedia information, lots of buttons and wheels to turn, and even some examples of how turbine blades have evolved over time. Viewers can learn about the history of rural turbines (or windmills) in the early and mid 1900s, and then examine models and videos showing the construction and workings of today's large-scale wind farms.

Winds of Change was developed as a result of earlier strategic planning at WDM with Robert Janes as facilitator. Janes is former director of Calgary's Glenbow Museum and the author of numerous books and papers looking at the role of museums in our society.

The sessions led WDM's board and staff to not only consider a "greener" museum, but also to look at all aspects of sustainability and the museum's role as a cultural institution, says Executive Director Joan Champ.

"This is now part of our strategic plan – sustainability, not just our own, but also our role in promoting sustainability and being a relevant and engaged cultural institution," Champ says.

As a result, *Winds of Change* was born as an idea and in 2009 the turbines were installed. WDM looked to RAUM Energy, a Saskatchewan company known for developing and manufacturing wind turbines used in farm and ranch settings.

WDM Saskatoon's turbines don't generate enough electricity for the entire facility, just as wind power can never fully meet Saskatchewan's electrical needs. A section of *Winds of Change*, titled *Destination Conservation*, is about conveying the message that reducing our energy use is an important component of sustainability,

and the message is repeated in WDM's school-based programming around wind power and sustainability.

WDM is also taking this message to heart by moving toward lower resource consumption in all its museum locations – Saskatoon, North Battleford, Moose Jaw and Yorkton.

“For the last five years, if not more, we’ve been putting a lot of things in place. And it’s obviously to our benefit because we save money doing it. We’re a consumer – as a museum, we have buildings that require more energy than usual, with a lot of lights and environmental controls,” Newman says.

WDM has taken steps that include super-insulating roofs and building walls, replacing boilers with more efficient designs, and using capacitors, variable-speed HVAC motors and other technical solutions to efficiently meet peak demands. Motion sensors on washroom fixtures and exhibit lighting provide savings and avoid unnecessary usage.

Many lights have been changed to fluorescent or LED designs. All new WDM exhibits use LED lighting, and existing displays are being converted as time and funds allow.

Looking ahead, Champ says WDM will be doing much more.

“We have a new five-year strategic plan, which our board just approved in December. One of the museum’s goals is to reduce our own ecological footprint and become a provincial demonstration site to showcase energy efficiency.”

“The WDM plans to continue to collaborate with Saskatchewan’s research and development community to enhance people’s understanding of environmental sustainability. The Museum can provide artifacts from its collection and exhibit stories that serve as examples of predecessors of contemporary environmental technologies,” says Champ.

In other words, sustainability will be an important part of WDM’s future in not only telling Saskatchewan’s story, but also capturing our imagination and helping us all look ahead.

“We wanted to present not only the past, but also the present and future possibilities of wind power in Saskatchewan.”



Old-fashioned sustainability

Humboldt & District Museum connects past with present day issues

Sustainability has deep roots in Saskatchewan.

Doing more with less was a way of life for many early residents. Around the time Saskatchewan became a province in 1905, many people grew or raised their own food, built their own homes and sewed their own clothes.

Sheer necessity made early residents think about living sustainably, says Jennifer Hoesgen, director of the Humboldt and District Museum & Gallery.

To tell this story (and help make its collection relevant to community life today), the Humboldt Museum created an exhibit called *Old-Fashioned Sustainability – The Historic Re-Use of Everyday Items*.

“It’s an old-fashioned viewpoint on the contemporary issue of sustainability. Our early residents did these things because they were necessary for survival,” Hoesgen explains.

Old-Fashioned Sustainability was a temporary exhibit in 2010 and included an educational component with schools. A key message: resources weren’t easily available and people treated them as precious.

Some items from the Humboldt exhibit include a 1916 desk made from packing boxes, a floor mat made of bailer twine and a quilt made from suit remnants.

“It’s amazing how inventive and creative people could be,” Hoesgen says.

“

*It’s about how we, as a museum,
fit into the community.* ”

Old Fashioned Sustainability is just one example of how Humboldt's city-owned museum is thinking proactively about all aspects of sustainability.

The museum's main building, a 1912 Post Office, was recently renovated and received several high-efficiency furnaces. Another structure, a 1920s bank building, will receive HVAC upgrades and also be redeveloped into a community centre for arts, culture and heritage.

The museum is also guiding the restoration of an 80-acre parcel of historic land a few kilometres west of the city. This parcel of farmland has significant value: it is the site of the original 1878 Humboldt Telegraph Station, and a military camp used in the 1885 Resistance.

Hoesgen says the land is still under production but will eventually be returned to grassland, and upcoming plans will likely include walking trails and interpretive signage or displays.

"It's a challenge – how do you put 80 acres back to grassland and develop it to tell these stories. So we're looking at sustainable development at the site," she says.

The land itself was purchased with funds raised in the community by a small group of volunteers. In 2009, they gave it to the City of Humboldt to hold in public trust. As the city's cultural arm, the museum is leading the redevelopment project.

In fact, Humboldt's museum can be considered a leader in showing how cultural institutions can evolve from their past role of simply collecting and preserving items.

The best example is the Humboldt Heritage Values Project in 2010.

The museum's mandate (from the city's heritage policy) includes building municipal capacity to serve the community's heritage needs. To achieve this goal, the city and museum recognized they had to engage the community in a discussion about heritage and culture.

A working group (eventually called the Humboldt Heritage Advisory Committee) brought together individuals from the municipality, museum and community. The committee surveyed and interviewed residents, and then held a series of five public workshops at the museum. The goal was

to find out what people value about their heritage, says Hoesgen, and not simply generate a list of important buildings or landmarks.

Once it heard what the community had to say, the committee shared and affirmed its results through a

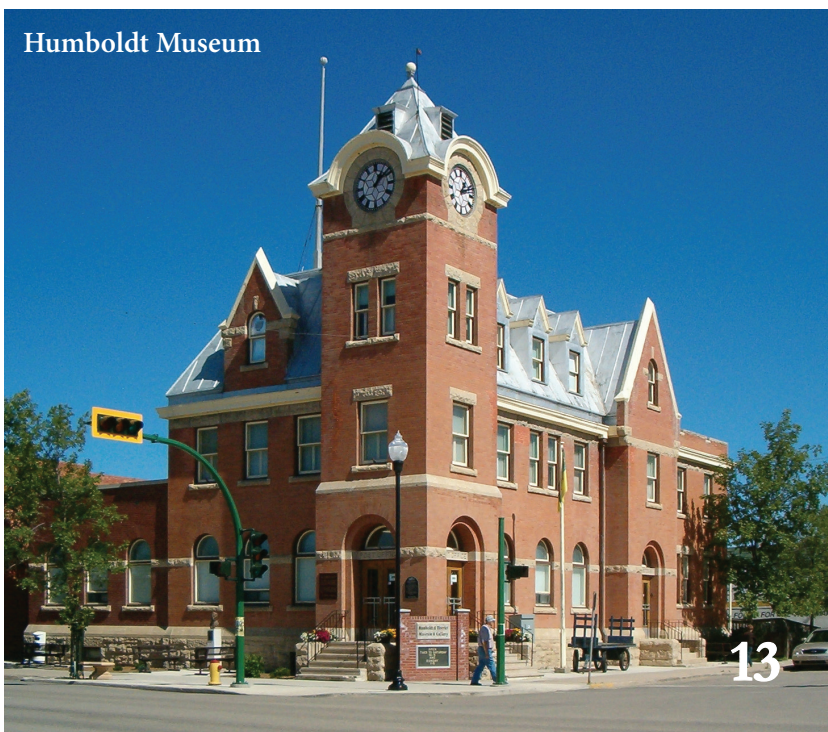
series of town hall meetings. The final step was presenting the information to council as an important guide to the growing city's development.

"I think if you look back at our history as a museum, we started in 1982 as a regular collection-based museum – preserving "stuff" before it leaves the community. I can't say when the light bulb went on, but we've evolved and really grown," Hoesgen says.

"It's about how we, as a museum, fit into the community. Not simply reflecting the community of the past, but becoming a locally-embedded problem-solver in the community today."



Humboldt
Telegraph
Station



Humboldt Museum



Saskatchewan's first Biosphere Reserve

Redberry Lake a learning site for sustainable development

Many people think of birds when they think of Redberry Lake.

As a federal migratory bird sanctuary, this saline lake near Hafford is an important place for our feathered friends. One of the lake's islands is even home to a large colony of nesting pelicans, famous for their trips into Saskatoon to catch fish at the weir on the South Saskatchewan River.

But the lake and its surrounding area hold much more, says John Kindrachuk, executive director of the Redberry Lake Biosphere Reserve.

"This is an ecosystem, there is a lake and watershed area with birds and plants and animals and also people," Kindrachuk says.

"So we're not just only concerned with sustainability of the lake, but also the landscape and the people that live here – retaining their culture and values and living a sustainable lifestyle."

With the number of tourists and new residents on the rise, and recent exploration activity for oil, gas and potash, Kindrachuk says sustainable development is an important concern.

"We're not some lobby group trying to stop tourism or development. We're trying to be that vehicle that guides development so it is sustainable and benefits everyone," he notes.

In 2000, Redberry Lake was designated a Biosphere Reserve by the United Nations Educational, Scientific and Cultural Organization (UNESCO). It is the first such reserve in Saskatchewan and one of only 15 in Canada. Worldwide, there are 529 reserves.

Biosphere Reserves are sites that "promote sustainable development based on local community efforts and sound science," according to UNESCO.

Redberry Lake's application for reserve status was a grassroots effort by local community members and municipalities. Its early roots were in the Redberry Pelican Project, a non-profit society that built and operates the Stuart Houston Ecology Centre. This is a research, education and interpretation centre that also maintains a network of nature trails and a unique video monitoring system for sensitive nesting sites.

Future plans for the non-profit reserve include securing long-term core funding. Currently, there is some federal support but when five years of provincial funding ran out last year, it was not renewed. There is some project funding through partnerships, including the University of Saskatchewan's School of Environment and Sustainability.


The reserve also plans to do more policy work through its memberships and partnerships with other groups and governing bodies. 



Photo Courtesy of Rachel Turnquist, RLBR



Friends of the grasslands

Val Marie museum looks to future

Southern Saskatchewan holds one of the nation's few remaining areas of natural prairie grassland. Here, you'll find Saskatchewan as it existed before agriculture: the rich flora and fauna of the mixed-grass prairie ecosystem.

Grasslands National Park, near the Canada-US border, is dedicated to preserving nearly 1,000 square kilometres of this precious natural resource. And nearby, in the village of Val Marie (pop. 137), volunteers have created a museum and gallery showcasing the area's natural and human history.

"Our little museum has traditionally centred on both the cultural and economic, or agricultural history of the area, and the fact we're a friends group for the national park," explains Catherine Macaulay, a volunteer board member with Prairie Wind & Silver Sage (PWSS) Friends of Grasslands National Park.

For a volunteer organization with limited seasonal staffing, PWSS is an impressive operation. Every May to October, PWSS operates an Internet cafe, museum, art gallery and gift store. Its location is a 1927 brick schoolhouse, one of two historic buildings in the village (the old grain elevator being the second).


PWSS is also an organization that is looking ahead, and one possible development could be the ecomuseum approach. An ecomuseum is a definable region where people work

together to celebrate their communities, landscapes and ways of life. The prefix 'eco' (for ecology or the 'study of home') refers to the fact that such heritage is expressed where it exists.

One early step, in March 2012, was a presentation by Dr. Glenn Sutter, well-known for sustainability work in Saskatchewan's museum community and a proponent of the ecomuseum concept. Sutter is Curator of Human Ecology at the Royal Saskatchewan Museum.

"We're exploring the ecomuseum concept and our options for the future. We had significant changes on our board last year, so the timing couldn't have been better – we're excited about this concept," Macaulay says.

"Our exhibits in the past have been mainly static, and the ecomuseum concept is a way to think about providing more opportunity for interaction and input from visitors and viewers."

Currently, there are more than 300 ecomuseums around the world, including 50 in Italy, a handful in southeast Asia and Quebec, and one billed as "Canada's largest" in Alberta. Some focus on tourism, while others are more about community engagement. Some provide a showcase for local arts and crafts; others reflect local industries and skills. Some online examples of ecotourism include www.kalynacountry.com and <http://content.skane.com/en/node/5049>. 

Fort Battleford's
Scott Whiting,
Site Manager (left)
and Jeff Platten,
Asset Support
Technician (right)



Leading the Way

*Renewable energy and building upgrades
make Fort Battleford a sustainability leader*

First impressions can be deceiving. A good example is the wind turbine at Fort Battleford National Historic Site.

A small generator, it nonetheless rises above surrounding buildings and trees. It sends a clear message: Fort Battleford is serious about alternative energy and environmental sustainability.

But the site has many other features that reduce its reliance on traditional energy. The turbine, which isn't even functional due to needed repairs, is just the tip of the iceberg at Fort Battleford. There's a lot more going on – once you look a little closer.

"It's fair to say, of all our energy-related initiatives, the only one that's been problematic is the wind turbine," says Scott Whiting, site manager at Fort Battleford.

In 2005, the federally-funded site began a series of upgrades to reduce its reliance on traditional energy. Two new buildings (one still under construction) and a historic building have been outfitted with some truly impressive green and sustainable building technologies.

The place to begin is Fort Battleford's new Visitor Centre, which also houses the site's administrative offices. Built in 2005/06, the centre is almost completely self sustaining.

Its solar panels can produce 10 kilowatts per hour of electricity (the average home uses about 1 kilowatt per hour). Its geothermal system consists of 12 wells with sealed tubes plunging 137 metres under the ground. In winter, the system uses a compressor to draw heat and in summer, the process is reversed for cooling. The 721-square-metre building is well insulated, and also designed for efficient use of natural light. Even water

usage is minimized with waterless urinals and sensors on fixtures.

A short walk from the centre and you're in another building – and another era. Barracks Five is one of the site's original buildings and stands where it was built in 1886.

Now an interpretive exhibit, Barracks Five takes visitors back in time to show how the Fort's inhabitants lived. But a careful eye might notice the presence of LED lighting and well-hidden ductwork for the building's geothermal system.

"It's made a huge difference. What it used to cost for January and February alone, two months of gas heat, is roughly equivalent now to the annual heating and cooling costs," Whiting says of the 357-square-metre building.

Like any museum or historic site, you might also see maintenance personnel around the place. Follow an electric (not gas) utility vehicle and it will lead eventually to a brand new maintenance building. Nearly complete but with the interior still unfinished, it makes an interesting study of what goes into an energy efficient building.


"These are really bright, so you can't look directly at them without a diffuser," says Jeff Platten, the site's asset support technician, as he shows a canister light holding high-powered LEDs.

The maintenance building will use these LEDs, and also bring in sunlight with light tubes. The building features energy-efficient heating and cooling, and is well-insulated to further boost its efficiency rating.

Overseeing the upgrades, both Platten and Whiting say they've been inspired to implement similar ideas in their own homes. The say visitors also display a keen interest in learning more about Fort Battleford's upgrades and alternative energy systems.

To provide further education, the site hosts a day workshop for school children. *Climate Change and Renewable Energy* provides hands-on learning about wind, solar and geothermal energy production.

As for the malfunctioning wind turbine, Whiting says replacement parts (and expertise) haven't been easy to find since the Canadian manufacturer closed shop. But he's confident the 50-kilowatt-per-hour system will be functional in a matter of months.

In the meantime, the rest of the site's upgrades are doing their job – making Fort Battleford a true leader in environmental sustainability. 





Inspired by the Land

The Allen Sapp Gallery Healing Garden aims to restore land and shape a sustainable culture

The Allen Sapp Gallery Healing Garden is a place for community healing, artistic creation, and ecological and cultural understanding. Its pathways create the shape of the medicine wheel and a spiral leads the way to the sharing circle at the centre of the garden. Each of the four directions of the medicine wheel has a large garden bed where a wide variety of native and medicinal plants, from Saskatoon berries to Sweetgrass, will grow.

Since taking root in October 2011, the garden has become a community space that takes an experiential approach to learning. Located on the grounds of the Gallery in downtown North Battleford, Saskatchewan, the garden was envisioned by former Director Dean Bauche as an extension of the exhibit *Inspired by the Land*. The exhibit

focused on Saskatchewan artists whose work draws inspiration from their environment and gives expression to their hopes, dreams and visions of the land.

The garden is built on three pillars: permaculture principles, indigenous traditional knowledge, and arts education. A vision committee made up of diverse community members, including teachers, First Nations elders, artists, and permaculturalists, supports it.

“The Healing Garden is nurturing a sense of community,” says Kjelti Anderson, the project’s coordinator. “We are taking a restorative approach, using permaculture design to create a state of balanced biodiversity in an urban environment. At the same time, we are honouring traditional First Nations knowledge for its historical significance and truly valuing the place it has in shaping a sustainable culture for our society’s future.”

The Garden opened with an evening of teachings about First Nations ceremonial protocols, followed by a community gathering where food was shared, permaculture principles were explored, and the groundwork was laid.

Over the fall and winter, students from local schools learned about human habitat in ecosystems, made Parfleche pouches to carry seeds and plants, and learned about healing plants with Daphie Pooyak. In the winter, artist Lyndon Tootoosis joined with community members to raise a tipi in the central sharing circle. Local artist, Oriol Dancer, created prayer flags with community members to adorn the tipi.

There are many exciting plans for the future. Establishing the garden further involves integrating permaculture practices such as digging a passive water harvesting swale, encouraging a healthy soil food web and creating microclimates, and establishing thriving plant communities. Gallery staff will continue to develop engaging educational programs and workshops for local students and community members. This spring, the focus will be on establishing 25 species of native medicinal plants. Creative workshops to design fences, borders, and an

arbour in the garden will also be undertaken. Work with First Nations elders will continue to be an integral part of all activities at the garden.

The Healing Garden would not be possible without the generous support of its partners: The City of North Battleford, SaskEnergy, The Walmart Evergreen Fund, TD Friends of the Environment Foundation, Living Sky School Division, and The Native Plant Society of Saskatchewan. 🌿



Photo Courtesy of the Allen Sapp Gallery



Photo Courtesy of the Allen Sapp Gallery



The design for the Rемаi Art Gallery of Saskatchewan is a creation of KPMB Architects in association with Winnipeg-based Smith Carter Architects and Engineers Incorporated.

Sustainable by design

New Rемаi Art Gallery embodies sustainability and cultural vitality

Imagine a brand new flagship facility – a cultural centre that incorporates not only the latest in green building technologies, but also embodies a community’s desire for sustainable living.

This is the new Rемаi Art Gallery of Saskatchewan – or rather, will be.

This \$84-million facility is expected to break ground in 2013 and open in 2015. Overlooking the South Saskatchewan River, it will be a vibrant “people place” that brings vitality to Saskatoon’s downtown, says Project Manager Jeanna South.

The gallery’s design, which has already received prestigious awards for excellence, is clearly focused on sustainability and reduced energy consumption. The four-story, 125,000-square-foot gallery will be built to LEED Silver specifications, with 50 percent lower energy consumption compared to international gallery standards.

“When discussing the gallery in broader terms, even before we looked at environmental sustainability, there were other things to consider,” South says.

“So, things like social sustainability, looking outside the boundaries of just the gallery. And economic sustainability for the city and gallery, these all had to be considered.”

This focus on all aspects of sustainability comes from the city’s new Strategic Plan, approved earlier this year. The plan was developed with considerable input from the community during last year’s Saskatoon Speaks public forums, and addresses issues that include crime rates, urban sprawl and energy consumption.

“In Saskatoon Speaks, we heard people were looking for places to gather, that were identifiably theirs. Places to hold events. They also spoke about preserving the city’s natural assets, such as the river valley,” South says.

“LEED standards and a reduced carbon footprint are certainly important. But this is also about contributing to a viable neighbourhood and to the broader system,” she says.

As a result, planners and architects took a hard look at social implications: creating a gathering place that will enhance the neighbourhood and city, complete with well-connected transit sites and plenty of bicycle racks.

The new gallery will more than triple the space available for temporary and collection-related exhibitions, and include a community gallery, studio classrooms, a film and lecture theatre, meeting rooms, and spaces for receptions and other public events. There will be ample storage for the growing permanent collection, now numbering 7,000 works. The building will meet rigorous modern gallery standards, making it possible to host national and international touring exhibitions previously unavailable to the city.

The Rемаi Gallery of Saskatchewan is the successor to the historic Mendel Art Gallery, which served the city since 1964. The new gallery is funded by all three levels of government, a fundraising campaign and an unprecedented \$30-million donation from the Frank and Ellen Rемаi Foundation.



Superheroes of Sustainability

Saskatchewan Science Centre

Everyone can be a superhero when it comes to sustainability – simply by helping protect the environment and using resources wisely.

This is the message behind *Superheroes of Sustainability*, a stage show at the Saskatchewan Science Centre (SSC) in Regina. The show looks at the superpowers our planet provides (fire, earth, air and water), and teaches fun and valuable lessons about solar and wind power.

Superheroes can be seen weekly at the SSC and daily during Earth Month. The show also travels to special events such as the Canadian Western Agribition.

“The Saskatchewan Science Centre provides numerous opportunities for youth to learn about how they can live in a sustainable way, and have respect for the environment and its ecosystems,” says Education Manager Julie Fisowich.

But this is no traditional classroom, Fisowich is quick to note.

At the SSC, it’s all about “hands-on fun with science and technology” – and it’s not just gravity, space and atoms. Many of the centre’s exhibits focus on topics relevant to the environment and sustainability.

For example, visitors can play a video game reminiscent of the 80s arcade hit *Frogger*. You must manoeuvre a frog around toxic areas, predators and even roads to reach a safe breeding location.

The game is part of the *Wild! Saskatchewan* exhibit, which offers numerous hands-on and multimedia experiences. Visitors learn about Saskatchewan’s eco-regions, topography and diverse life, and how they all need to work in concert with each other. *Wild! Saskatchewan* teaches about the conservation and protection of our world, and how we can help.

Other permanent and temporary exhibits teach lessons about sustainable agriculture, alternative energy and resource conservation. You can even walk a maze to learn how a water drop travels a watershed.

As the SSC notes in its promotional materials, it just happens to be located in a historic brick building where coal once burned to provide Regina’s electricity. Today, as the Science Centre, it provides fuel for imagination and is a vital part of Saskatchewan’s path toward a sustainable future. 🌱



Glossary

Aboriginal is the term used by the Federal government in the Canadian Constitution to define and identify the unique contribution of First Nations, Métis and Inuit people to Canada.

Climate Change occurs when long-term weather patterns are altered - for example, through human activity. Global warming is one measure of climate change, and is a rise in the average global temperature.

David Suzuki Foundation

Community Engagement is another term for participation. “[I]t implies a sense of ownership, commitment, and excitement. (...) Participation creates a feeling of belonging and shared ownership, but if it is not well organized, it can backfire and cause problems (...) Being thoughtful and inclusive requires we make the best use of people’s time and skills when they agree to work on a project.”

Common Weal Community Arts, *Artists and Community Collaboration: A Toolkit for Community Projects*.

Cultural vitality refers to the ability of communities to describe and discuss their values, and that those values and goals help determine the shape society takes. A community with a high level of cultural vitality would allow people to choose ways to express what matters to them, and would make sure that institutions and policies reflect those values.

See Jon Hawkes (2001), *The Fourth Pillar of Sustainability: Culture’s essential role in public planning*, Melbourne:

Common Ground Publishing Pty Ltd.

Order at <http://www.culturaldevelopment.net/downloads/FourthPillarOrderForm.pdf>.

Culture is the collection of beliefs and norms that affect how we relate to each other both within our own communities and beyond. Communities usually possess many different cultures beyond different ethnic groups. For example, there are business, religious, and sports cultures.

Museums Association of Saskatchewan, *Standards for Saskatchewan Museums*.

An **Ecomuseum** is a dynamic way in which communities preserve, interpret, and manage their heritage for a sustainable development. An Ecomuseum is based on a community agreement.

European Network of Ecomuseums: Declaration of Intent of the Long Net Workshop, Trento (Italy), May 2004

An **ecological footprint** is a tool that measures the area of land and water required to produce the natural resources consumed by the human population. It helps to measure sustainability at the global, national or individual level.

Environment Canada

Glossary

An **ecosystem** is made up of living things—plants, animals and microorganisms—interacting with each other and with the environment that they live in, which includes things like water, soil, and climate.

The **environment** is everything surrounding an organism or group of organisms. It can refer to the physical conditions that affect and influence the growth, development, and survival of organisms, or to the social and cultural conditions affecting the nature of an individual or community.

Adapted from the *American Heritage Dictionary*

Green: Concerned with or supporting environmentalism. Or: tending to preserve environmental quality (as by being recyclable, biodegradable, or nonpolluting).

Merriam Webster Dictionary

Heritage refers to something transmitted by or acquired from a predecessor. Or: something possessed as a result of one's natural situation or birth.

Merriam Webster Dictionary

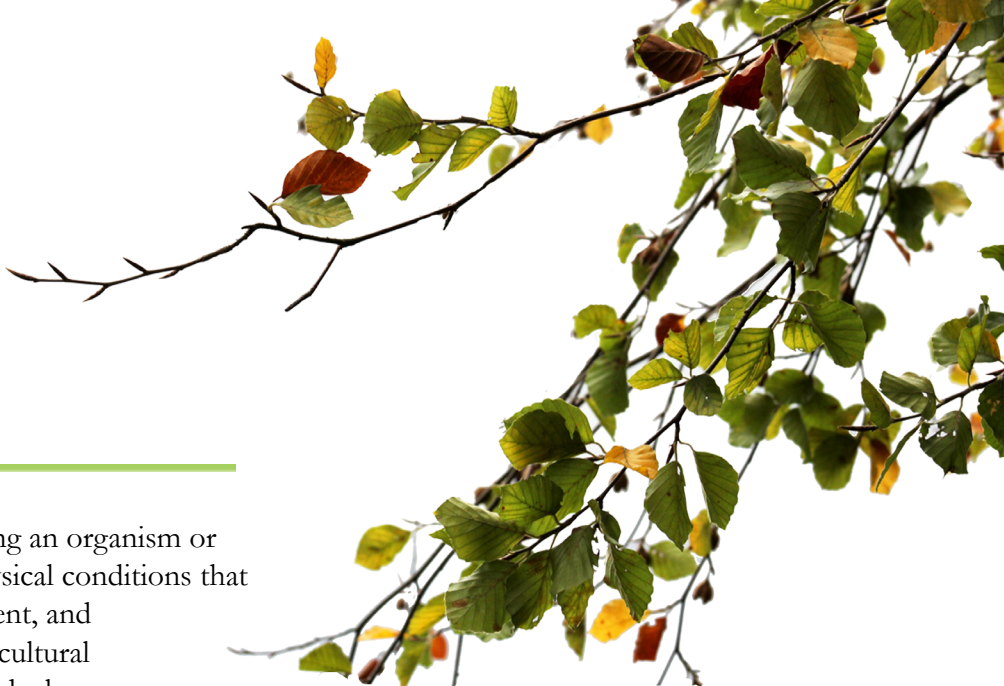
A **museum** is a non-profit making institution in the service of society and its development, and open to the public, which acquires, conserves, researches, communicates, and exhibits, for the purposes of study, education, and enjoyment, material evidence of people and their environment.

Museums Association of Saskatchewan, *Standards for Saskatchewan Museums*.

Renewable Energy is natural energy which does not have a limited supply. Renewable energy can be used again and again, and will never run out. It includes energy sources like solar, wind, hydro, and geothermal.

Source: <http://www.clean-energy-ideas.com>

Sustainability is a challenging concept and arguably the most significant issue facing humanity today. It requires that people live in ways that do not compromise the well being of future generations. This involves thinking, planning and acting in ways that foster ecosystem health, economic development, cultural vitality, and social justice. At the same time, it involves respecting the limitations, vitality and interdependence of economic, social and environmental systems.



Resource List

Sustainability for Museums

A Sustainable Development Guide for Canada's Museums (Canadian Museums Association 2010) offers the basics of sustainable development and ideas about how to incorporate practices into all areas of the museum. Join the online forum to participate in discussions, add your photos, and make sustainability pledges for your museum.

http://www.museums.ca/Sustainable_Development/?n=30

Museums and Sustainability (Museums Association of Saskatchewan 2011) is the first publication in a series promoting a holistic approach to sustainability for museums. It features essays, stories about Saskatchewan museums, the Critical Assessment Framework, a glossary and list of resources, and more.

Available on the MAS website and from the MAS office.



Museums and Sustainability: Guidelines for Policy and Practice in Museums and Galleries (Museums Australia 2003) is a guide to best practices in sustainability. It discusses how to promote sustainability in museum operations, collections management, education programs, procurement, and environmental aspects (e.g. waste and energy management).

http://www.museumsaustralia.org.au/site/whatwedo_policies.php

Standards for Saskatchewan Museums (Museums Association of Saskatchewan 2010) is the foundational document for museums in Saskatchewan. The Standards are voluntary guidelines offering relevant, practical information about best practices in all facets of museum operations.

Available from the MAS office.

Sustainability and Museums: Your chance to make a difference (Museums Association UK 2008) discusses the principles and practices of economic, environmental, and social sustainability. Check the website for a wealth of resources and print out *The Sustainability Checklist* – a set of relevant questions for any size of museum.

<http://www.museumsassociation.org/sustainability/sustainability-report>



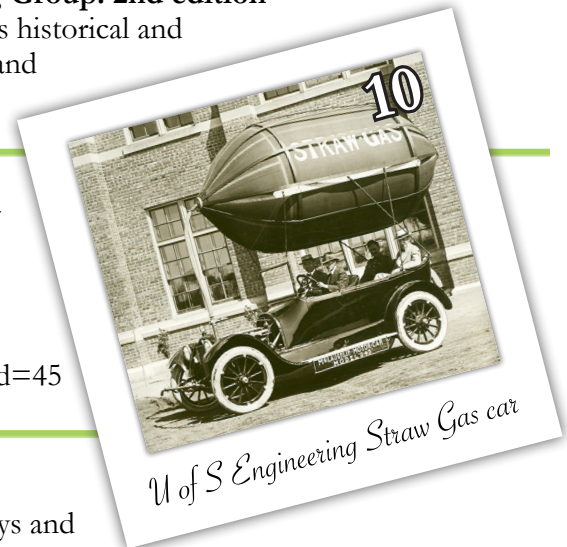
Resource List

Books & Articles

Ecomuseums: A Sense of Place. Continuum International Publishing Group. 2nd edition (Peter Davis 2011) An international examination of eco-museums; explores historical and philosophical background, definitions, models, characteristics, case studies, and evaluation methods.

“Fostering a Culture of Sustainability” *Museums and Social Issues* 1(2):151-72 (Doug Worts 2006) This article looks at how museums can understand and assess cultural needs, and how re-examining values and practices would allow museums to help foster a culture of sustainability.

http://douglasworts.org/?page_id=45



Greener Museums: Sustainability, Society, and Public Engagement. London: Museum-ID (Gregory Chamberlain 2011) A collection of essays and case studies that highlights work in the UK and globally and challenges museums to take a leadership role towards environmental sustainability.

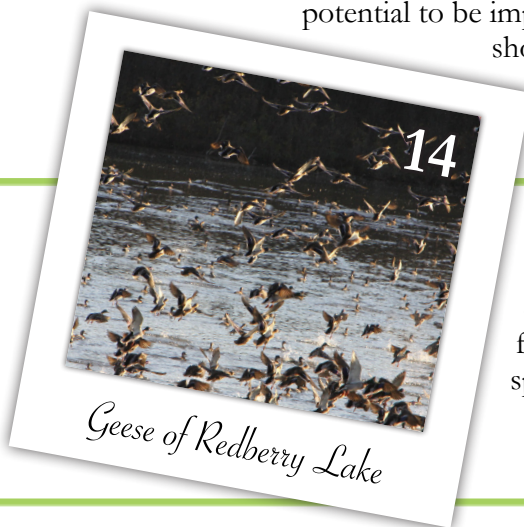
<http://www.museum-id.com/books.asp>

Museums in a troubled world: Renewal, Irrelevance, or Collapse? (Robert Janes 2009) Museums have potential to be important social institutions, but that potential is not being realized. Examples show how a focus on values and community engagement will help museums become more responsible, sustainable, and successful.

Available from the MAS Resource Library.

Sustainable Preservation: Greening Existing Buildings. New York: Wiley Books on Sustainable Design (Jean Carroon 2010) Offers a wide perspective on preserving current buildings while making them more environmentally friendly. Includes goals, case studies, tools, guidelines and processes, and offers specific ways of conserving resources.

<http://www.wiley.com/WileyCDA/WileyTitle/productCd-0470169117.html>



Sustainable Museums: Strategies for the 21st Century. London: Museums, Etc. (Rachel Madan 2011) Focused on resilience and relevance, this book offers a method for becoming a sustainability-focused museum that begins with visioning, team building, audits, plans and policies, evaluation, communication, and dealing with obstacles. Includes case studies.

<http://museumsetc.com/products/sustainable-museums>

The Green Museum: A Primer on Environmental Practice. Altamira Press. (Elizabeth Wylie and Sarah Brophy 2008) This book is a comprehensive look at key issues and considerations museums examine when beginning the ‘green transition.’ Includes general ideas for attaining funds..

Resource List

Funds, Grants & Subsidies

Always check eligibility criteria. Carefully review the information provided. Call the appropriate office to find out more. This is not a comprehensive list – keep checking the MAS website and let us know when you find a new program.

Aviva Community Fund

Sponsored by Aviva Insurance, winning projects must have a positive impact on the community while being community-supported and broker-supported. Individuals vote on projects posted on the website and successful semi-finalists go forward to a panel of judges who evaluate projects based on specific criteria (e.g. impact, longevity and sustainability, and originality).

<http://www.avivacommunityfund.org/about/aboutthecompetition>



Canadian Environmental Grantmakers' Network (CEGN) is not a granting agency, but a website that provides a list of members - organizations that focus on environmental grants. It also provides a list of resources for grantseekers.

<http://www.cegn.org/English/membership/listOfMembers.html> <http://www.cegn.org/english/home/main.html>

Catherine Donnelly Foundation supports charitable organizations who demonstrate innovative and creative ways of responding to community needs. Current areas of focus for the environment are ecojustice and environmental defense.

<http://www.catherinedonnellyfoundation.org/about.html>
<http://www.catherinedonnellyfoundation.org/eco.html>

Community Foundations of Canada exists on a national and regional level and focuses on issues relating to community vitality. Each Community Foundation provides funding and information to local organizations focused on local issues. There are five Saskatchewan regions represented: South Saskatchewan, Saskatoon, Prince Albert, Friends & Family, and Battlefords and District.

<http://www.cfc-fcc.ca/about-cfs/find-a-community.cfm?id=4>

Government of Saskatchewan: Go Green Saskatchewan website includes the Go Green Fund, programs, resources and up-to-date information all areas of sustainability in Saskatchewan. **Go Green funding programs:** Commercial Boiler Program, Commercial Geothermal Rebate Program, HVAC Program, Municipal Ice Rink Program, Solar and Wind-Powered Water Pump Grant, Parking Lot Controller Program, and Saskatchewan Renewable Diesel Program.

Commercial Boiler Program – Financial incentives offered to install or update to an approved natural gas condensing or near-condensing boiler and high-efficiency circulating pump.

<http://www.saskenergy.com/business/commercialboiler.asp>

Commercial HVAC Program – Financial incentive offered to install/replace high-efficiency natural gas furnaces, boilers, and rooftop units in commercial retrofit applications. The program is targeted towards small- to medium-sized commercial buildings.

<http://www.saskenergy.com/business/hvac.asp>

Available until November 30, 2013. Provincially-funded buildings such as hospitals, schools, government departments, and Crown Corporations are not eligible.

Resource List

Green Municipal Fund. Partner with your municipality and engage in a plan, study, or project around brownfields, energy, transportation, waste and/or water. Ongoing applications accepted.

<http://www.fcm.ca/home/programs/green-municipal-fund/about-the-program.htm>

The Green Source Funding Database is Environment Canada's searchable database that provides information and links to local, regional, national, and corporate funding opportunities related to environment.

<http://www.ec.gc.ca/financement-funding/default.asp?lang=En&n=768DAFB1-1>



Saskatchewan Credit Union – Sponsorships

Contact your local credit union to inquire about sponsorship and funding possibilities.

<http://www.saskcu.com/pages/sponsorships.aspx>

SaskPower funds activities, projects, and programs with an emphasis on education, environment, and community involvement. Apply for corporate sponsorship and promotional items.

<http://www.saskpower.com/community/>

Potash Community Investment Application provides corporate grants, matching gifts, and in-kind donations that support the goals and values of the company.

http://www.potashcorp.com/about/sustainability/community_investment/

TD Friends of the Environment Fund provides funding for projects with an environmental focus. Check the website for current priorities, more information, and to find a local chapter in your area: Regina, Saskatoon, Parkland, and Moose Jaw/Swift Current.

<http://www.fef.td.com/community.jsp>
<http://www.fef.td.com/funding.jsp>

Thank You

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Museums Making a Difference

Saskatchewan's museums are making impressive efforts toward promoting environmental sustainability. *Museums and Sustainability: The Environment* gathers some of their stories.

Inside, you'll discover

- The Western Development Museum presenting the past, present and future of alternative energy
- The Humboldt and District Museum's "Old-Fashioned Sustainability" exhibit
- Fort Battleford's renewable energy and building upgrades
- The winners of our Environment in Focus Photo Challenge

And many more great articles and case studies.

Whether it's through renewable energy use, public education programs, or establishing biosphere reserves, many of Saskatchewan's people—and museums—are leading the way. This publication will show you how.



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