Saskatoon Public Schools BRIGHTWATER SCIENCE, ENVIRONMENTAL AND INDIGENOUS LEARNING CENTRE

Volume 14 Issue 1 Fall 2016

Learning is *Natural* at Brightwater



Kinnikinik Bearberry Arctostaphylos uvaursi



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Salvation Army Site

Rental Fees

\$12 per student and teacher per night

(\$10 for Community Schools)

\$170 for Day Use only

Parent supervisors and Volunteers no charge

SPS Site

No charge for SPS schools

Contact: Teri Clark Clarkt@spsd.sk.ca

Planning for a Fall 2016 Brightwater Experience

Welcome back everyone! Are you interested in "Celebrating our Diversity" in an innovative way through a Brightwater experience? We can assist your students with learning about the biodiversity of the prairie landscape from both Indigenous and Western perspectives. Brightwater staff are keen to assist high school and middle years student learning by extending curricula through meaningful experiences on the land. Brightwater experiences support learning within a variety of subject areas through engaging hands-on Inquiry approaches that enhance self-discovery through direct experiences with the land. Thanks to the support of our School Board , we are continually working towards providing All our students with the opportunity to experience the wonders of learning at Brightwater at some point in their SPS educational career!

Brightwater has 2 learning sites: The **Salvation Army Beaver Creek Camp** is home to the Middle Years program and the **SPS site** is the base for High School experiences. Learning opportunities range from a half day to 3 day/2 night experiences and the trail system spans a quarter section of land over both sites.

If you are interested in learning more about Brightwater or would like to request an experience, please contact Teri Clark (Brightwater Project Leader) 306-270-6615 or 306-242-3874 clarkt@spsd.sk.ca. I would be delighted to assist you! Visit our website @ http://www.spsd.sk.ca/Schools/brightwater/Pages/default.aspx and click on the "Request an Experience" tab and submit our on-line request form.

Brightwater In-service Information

Difyiitwater in-service information Please consider attending our High School or Middle Years In-services so we might provide you with the valuable time needed to individualize your programming needs with our facilitators, as well as familiarize you with our facilities, sites and resources. Email Teri (clarkt@spsd.sk.ca) to confirm your registration on PD Place. Book your sub through **ADS** code: **PD Central Office Support**, and look for **Brightwater High School** <u>or</u> **Middle Years In-service in the dropdown menu. Refreshments and snacks will be provided!**

> Middle Years In-service Wednesday Sept 7 from 9 to 4 pm for teachers <u>NEW</u> to Brightwater OR from 1pm to 4pm for <u>RETURNING</u> teachers Potash Corp Eco-Science and Indigenous Learning Centre

High School In-service Tuesday Sept 13 from 1-4pm Potash Corp Eco-Science & Indigenous Learning Centre

Pre-Visit Preparation

Pre-visit Inquiry preparation is integral to student success at the Middle Years and High School levels. Inquiry research pre-activities

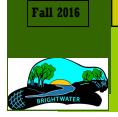
promote deeper connections to the land and outdoor experiences. Providing pre-visit experiences such as online investigations of Brightwater landscape, flora and fauna and Indigenous history help our students value learning from the natural world. Resources, support materials, maps, and links can be found on our website;

http://www.spsd.sk.ca/Schools/brightwater/Pages/default.aspx.

Review learning responsibilities for the day and please ensure students come prepared for learning and dressed appropriately to spend the day outdoors - sun, rain, wind or snow!

Print on 100% recycled paper and uses 100% less trees 23% less energy 41% fewer greenhouse gas emissions 16% less water

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DNL : Pa hin Cree: Kãkwa Porcupine Erethizon dorsatum

Brightwater HIGH SCHOOL Programming

Each year more of our high school teachers are discovering the authentic learning opportunities available to their students at Brightwater. We can engage students in innovative learning on and from the land in Science, Social Studies, Native Studies, Math, History, ELA, Art, Photography, Music and other courses. We are eager to assist you in making Brightwater a part of your educational planning during the 2016-17 school year!

The Brightwater SPS site is the base site for high school teachers and their students. Brightwater is rich in; the history of First Nations, Métis and past cultures, examples of prairie plants and animal interactions, and natural landscapes for your students to explore, study, photograph, draw or write about. The SPS Brightwater site is a logical location for high school teachers seeking to meet curricular outcomes through authentic land-based education and incorporation of Indigenous Knowledge. Brightwater experiences are exemplars of Collegiate Renewal initiatives! **Do you have an idea you would like to share with us? We would be delighted to explore with you meaningful ways to extend your classroom learning!**



Begin with reviewing examples of curriculum based Inquiries and resources available on the Brightwater website. <u>http://www.spsd.sk.ca/Schools/</u> <u>brightwater/programs/secondaryprogram/Pages/default.aspx</u>

Each has the potential for pre-visit research, a variety of data collection methods,

options for "Giving Back", and numerous post experience possibilities for you and your students to design a holistic continuum of relevant Inquiry based learning. Examples include:

*Native Prairie Eco-systems *Native Studies *History *Social Studies *Treaty Education *Math in Nature *Traditional Knowledge of the Land * Nature Inspired Music * Earth and Environmental Sciences *Drama *Ethno-botany *First Nations and Metis Cultural History *Food Forests *Sustainable Use of Prairie *Art in Nature * Active Environmentalism



*Native Plant Uses *Health of Aquatic Ecosystems *Forest Ecology *Natural Landscaping *Foods *Photography *Film *Native Prairie Landscapes *Place and Identity *Green Careers *Sustainable Architecture and Design *Permaculture

Brightwater Traditional Knowledge Keeper and facilitators are available to assist your students with their inquiries. Visit <u>http://www.spsd.sk.ca/Schools/brightwater/Pages/default.aspx</u> for more detailed information, resources, links, and to request an experience. **NOTE: Mentoring** with fellow teachers during their excursions to Brightwater is available for teachers new to Brightwater.



Brightwater works closely with the **FNIM Unit** to provide students with opportunities to engage in authentic experiences with a Traditional Knowledge Keeper. Please contact FNIM Unit directly (683-8310) to arrange a sweat ceremony for your students.

Brightwater also has several Legacy Projects on the go you

may wish to investigate with your students: Indigenous Wellness Garden; Food Forest; Bluebird Nest Box Monitoring; Jack Pine Forest Succession.

Contact Teri (clarkt@spsd.sk.ca 242-3874 or 270-6615) to discuss your ideas or answer your questions. All high school teachers who have planned or would like to learn more about planning a Brightwater experience are invited to meet with the Brightwater staff by attending our fall in-service...

The Brightwater High School Fall In-service is TUESDAY SEPT.13, 2016 from 1-4PM at the PotashCorp Eco-Science and Indigenous learning Centre at the Brightwater SPS site.



The Salvation Army Beaver Creek Camp is the base site for Brightwater Middle Years experiences. MY experiences are often 2 or 3 days in duration. The follow example explains the most popular approach chosen by teachers and considered most effective in connecting students to the land.

The Three Core Strands Of the Brightwater MIDDLE YEARS Multiday Experience Nature Immersion \rightarrow Inquiry Study \rightarrow Leave a Legacy

DAY One: Nature Immersion Day One sessions are typically run by parents or teachers. Rotate 2 or 3 sessions with cabin set up,

snack times and lunch. Dividing students into groups of 10 or less is deal for learning in the outdoor. Examples include: **Nature Awareness Self-Guided Hikes; Initiative Tasks; Nature Photography;** and **S.A.T (Sit And Think) journals.**



DAY Two: Inquiry Study "If a child is to keep alive his [her] inborn sense of wonder, he [she] needs the companionship of at least one adult who can share the joy, excitement and mystery of the world we live in." Rachel Carson <u>The Sense of Wonder</u> (1956)



On Day Two Brightwater facilitators, with the help of your assigned parent volunteer, assist your students with exploring the Ecology of Native Prairie from Western Science and Indigenous perspectives. Plan up to **three 90 minute facilitated sessions in a day**. **Science** facilitators support your student inquiries concerning aquatic/terrestrial animal and plant ecology. **Ethnobotany** facilitators assists students with information about traditional plant uses **Art facilitators** encourage students to artistically express their connections to the natural world. Budget \$1.50/student for the cost of art materials. Parents or teachers also lead sessions such as: **Orienteering/GPS Hike; Wilderness Survival Skills; Solar Studies.**

DAY Three: Leave a Legacy "Treat the earth well. It was not given to you by your parents, it was loaned to you by your children. We do not inherit the Earth from our Ancestors, we borrow it from our Children." Ancient First Peoples' Proverb



Allow your students time to reflect and act upon their responsibility to the natural world by participating in the Indigenous perspectives of "**Giving Back**" to the land and by spending time with an SPS **Traditional Knowledge Keeper from the FNIM Unit.** Session can be delivered in 2 one hour rotations during the morning



of Day 3. Also, SOLO time /SAT Journal/ Poetry along the trails will let inspirations flow onto paper that can be shared later as a Post-Visit classroom activity.

Giving Back activities often involve contributing to the care of the land through; placing wood chips along paths, planting, weeding, collecting seeds or firewood, etc....

After Hours: What to do from 4:00 to 10:00 pm@ Brightwater

Your students will need less structured activities during CHOICE time (4 to 6pm) and the after supper hours. Divide students into groups supervised by an adult ,and participate in building **Birdfeeders** @ a cost of \$6 per feeder. **Journals, Quiet Pursuits** such as Fabric Crayon T-Shirts, Dream Catchers, Board Games, Origami, Sketching, Beading, Role play, **Cooperative games, Drama, Active Games** such as Predator Prey survival game, **Indigenous Games**, perimeter **Night Hike or Astronomy** (For a small fee, contact Ron Waldron for Sky Talks in the evening at rmwaldron@shaw.ca), and end with an **Evening Campfire Sing Along**.





Brightwater Science, Environmental and Indigenous Learning Centre

Brightwater Project Leader: Teri Clark Saskatoon Public School Division 310-21st Street East Saskatoon, Saskatchewan S7K 1M7 Brightwater phones: 242-3874/373-4169 Cell Phone: (306) 270-6615 Email: clarkt@spsd.sk.ca http://www.spsd.sk.ca/Schools/



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Brightwater is an exemplar of **Education for Sustainable Development** and is committed to the **sustainable and responsible use** of the site and facilities.

PotashCorp Eco-Science and Indigenous Learning Centre



Student learning experiences have priority booking of the PotashCorp Eco-Science and Indigenous Learning Center on the SPS land. Our year-round facility can provide space for up to 60 students. Day experiences for middle years classes are accepted 3 weeks prior to the requested date to ensure fair access to the building by high schools.

The exterior and interior design and materials provide numerous opportunities to learn about ecologically sustainable architecture that

reflects Indigenous perspectives, ceremony and Ways of Knowing.

The centre enhances

teacher...

student learning about



More Important Info...

• It is everyone's responsibility to behave in a safe manner while on-site

• Please respect protocol and do not enter or take photos of the Ceremonial grounds

• No alcohol consumption or drugs on site

• Pack a garbage –free lunch and pack out all garbage from the SPS site

• Recycling and composting are are available at the SA site, composting only at the SPS site

• Parents are the main cooks, students assist in the kitchen and perform meal set-up and clean up

• Volunteers are an integral part of the Brightwater program. You will need: one adult for each student cabin each night; two to three adults to cook/clean in the kitchen; adults to supervise facilitated sessions.

• Cabins have washrooms but no showers. One adult chaperon is required in each of the student cabins. **Cabin cleaning is the final day before 9 am**

• Students visit in the playground (with adult supervision) or halls, not in each other's cabins

• Students should have a writing Journal with pencil/ eraser, a pair of slippers or shoes to wear in the cabins



Gear Essentials include a hat, sunscreen, rain gear, proper foot wear and layers of clothing to stay cool or warm and dry!

Safety: Take your school first aid kit to Brightwater. Small first aid kits are available on both sites.

Resources Materials Available at Brightwater

Aquatics /Prairie/ Riparian
Plants and Ethno-botany
Studies, Solar Cooking

- Brightwater Guides.
- On-Site Resource Library of Flora/Fauna and Nature Guides
- Session Material Backpacks for ecology studies
- Microscopes, stereoscopes, 4 GPS units, spotting scope/ tripod, sit upons, dipping nets, telescope, 15 digital cameras, 15 binoculars, hoops,
- Nature Teaching books
- Digital telescope

"Mother Earth"!

one's place in nature from the most knowledgeable

Feedback: We welcome feedback! Samples of your student inquiries booklets, research projects, displays, journal entries, photos, videos, art, or other celebrations provides Brightwater with evidence of the meaningful learning that takes place on the land that we can share with other teachers.

Forms: Permission, Medical, Photo waiver, and Excursion forms should be collected fron students before departing for Brightwater. The contact phone numbers for parents, school, staff and family while at Brightwater are:

Salvation Army site 373-4169 SPS site is 242-3874

Please do not use the Salvation Army site managers phone in the kitchen.



Fall 2016

Brightwater Science, Environmental and Indigenous Learning Centre



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Brightwater Vision, Purpose and Goals

Brightwater Vision

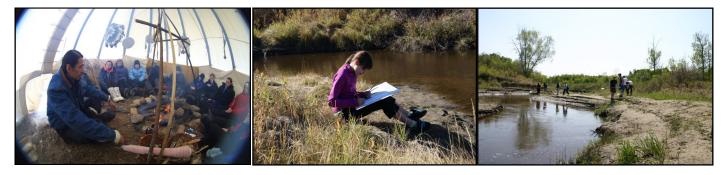
Through Best Place Education, Brightwater offers opportunities for inspiration and discovery with development of a deeper understanding of self within community. Brightwater experiences strive to create sustainable and meaningful connections to the land through instructional programming, hands–on learning and engagement in Indigenous Ways of Knowing. Brightwater enhances learning to meet the provincial curriculum and is premised on holistic experiences within the prairie landscape from Indigenous and Western world views.

Brightwater Purpose

The Brightwater Science and Environmental Centre functions to inform, guide, and move the Saskatoon Public Schools community toward a global ethic of education for sustainable development; environmental, social and economic sustainability. Brightwater programming aligns new curricula to inquiry which provides students with opportunities to build upon their prior knowledge, skills and attitudes towards the land. Brightwater programming and the site reflect place-based 21st Century learning with environmental sustainability.

Brightwater Goals

- To provide all students with opportunities to be appreciative and responsive to nature, wildlife, land, water, air and one's place within the natural world
- To emphasize holistic reflection and self-awareness within the context of nature and ceremonies that honour the spiritual connection to the land of the First Peoples of Saskatchewan
- To encourage the exploration of a wide variety of career paths, including entrepreneurship, through Brightwater experiences as they relate to the environment, economics and social justice
- To demonstrate the collective valuing of sustainable use of natural resources for future generations and to help students understand the impact of human society on the natural environment, and demonstrate active sustainability through ethical resource use from Western and Indigenous perspectives
- To inspire and sustain ecological learning and other connections to the land through a wide variety of curricular experiences and Indigenous ways of knowing nature



Brightwater History

Brightwater Science, Environmental and Indigenous Learning programming and sites resulted from a lease agreement between Saskatoon Public Schools and the Salvation Army Beaver Creek Camp and Saskatchewan Wildlife

Federation. Since 1990, middle years students have participated in 2 night/3 day experiences and high school classes have experienced day visits during the fall, winter and spring. Brightwater is located 15 km south of Saskatoon on Hwy #219. The landscape consists of a sand-based habitat with aspen bluffs and patches of native prairie surrounding a the meandering creek Brightwater Creek near the South Saskatchewan River. With the help of the expertise of specialists, Brightwater continues to provide the time, space and resources needed to heighten student awareness, understanding and appreciation of nature, wildlife, land, air and water. All SPS students and teachers visiting Brightwater have access to the 100 acres of native prairie and creek valley on the Salvation Army land and 60 acres on the adjacent Saskatoon Public Schools land (formerly the Saskatoon Wildlife Federation pheasant farm). On the SPS Brightwater land, a permanent First Nations Ceremonial Grounds was established in 2009. In 2012 the PotashCorp Eco-Science and Indigenous Learning Centre opened it doors to provide an SPS on-site year round learning facility for students and teachers.