Iyiniw Maskikiy (Cree)

T'at'ú Nónishe Bë?á Dëkadádánilni hi (Dëne) Nature's Hidden Gifts

Morris Brizinski

Valley View School Beauval, SK, Canada

A unit in the series:

Rekindling Traditions: Cross-Cultural Science & Technology Units



Series Editor

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CURRICULUM CONNECTION

Grades 6-11: plants

OVERVIEW

An Aboriginal perspective on Mother Earth and the value of respect for her plants is established early in the unit. Local knowledge is given validity. Scientific ideas about how plants work (from the point of view of Western science) are introduced as useful stories. Throughout the unit, the students' efforts go into producing a "published" book about the uses of plants found around Beauval. Duration: about 20 classes.

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REKINDLING TRADITIONS PROJECT TEAM

TEACHERS:

Gloria Belcourt Minahik Waskahigan School, Pinehouse Lake

Unit: Wild Rice

Morris Brizinski Valley View School, Beauval

Unit: Nature's Hidden Gifts

David Gold Rossignol School, Île-à-la-Crosse

Unit: Snowshoes

Keith Lemaigre La Loche Community School, La Loche

Unit: Trapping

Shaun Nagy La Loche Community School, La Loche

Unit: *The Night Sky*

Earl Stobbe Timber Bay School, Timber Bay

Unit: Survival in Our Land











FACILITATOR / COORDINATOR:

Glen Aikenhead College of Education, University of Saskatchewan

ELDERS:

Henry Sanderson La Ronge

Ann Lafleur Beauval

Alec Campbell Beauval

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PURPOSE

This unit is designed to enrich the knowledge about local plants for both students and community members. The approach taken is to have community members tell their story of how plants have played a part in their past and present lives. In this way we hope to continue the *respect* people have for Mother Earth and all the gifts she has provided and continues to provide.

In the past almost all families had an intimate understanding of the power that plants had to better their lives. Today, there are known keepers of knowledge regarding medicinal plants. However, the number of people practising herbal medicine is declining rapidly. This unit is an effort to revitalize an interest in plants for more than just lumber and paper. It attempts to touch the spiritual nature that plants played in peoples' lives not so very long ago.



GOALS

- 1. People from all cultures respect and appreciate Nature's gifts.
- 2. All life forms, no matter how small, are considered important and significant.
- 3. By respecting plants, we are protecting Mother Earth.
- 4. Plants have homes and communities just like animals and people.
- 5. Plants have power to heal. Plants help animals and people survive.
- 6. Plants are a part of the spirit world and people can connect to the spirit world through plants.
- 7. Aboriginal science helps us understand how plants grow and develop.
- 8. Western science helps us understand how plants grow and develop.
- 9. We can learn about plants from each other.
- 10. Get students to interact with their environment and their community.
- 11. Introduce students to career possibilities related to science and engineering.

OBJECTIVES

1. Students will:

- a. appreciate that people have used plants for various purposes for a long period of time.
- b. visualize interrelationships between plants, animals, and people.
- c. identify 2 classification systems Aboriginal and Western Science and place plants into either classification system.
- d. produce a book on plant usage around the community.

2. Students will be able to:

- a. retell the creation story of Sweet Grass.
- b. record usage of a wide variety of plants.
- c. classify plant usage into medicine, technology, and food.
- d. list 25 plants and their uses.
- e. identify 25 plants in their habitat.
- f. describe how plants have special adaptations and change seasonally.
- g. define the terms habitat and community

BACKGROUND INFORMATION

Beauval is located in north western Saskatchewan. People living here are primarily Métis (Cree and French ancestry). However across the Beaver River from Beauval lives a community of Dëne speakers. Approximately 1300 people live in the Beauval region. Historically, people lived from the land trapping, fishing, or lumbering, or people worked in the regional Residential School (BIEC). Presently most people are employed in government services (schools, highways, offices, RCMP), resources (fishing, lumbering, and mining), or self-employed.

The Cree words to describe this unit are *Iyiniw Maskikiy* (literally "Indian medicine") which gives special attention to the medical aspects to plants. In Dëne, the title is *T'at'ii Nónishe Bë7á Dëkadádánilni hi* (literally "using plants for health and healing"). You should accumulate other indigenous words and expressions to incorporate into your lessons and into student assessments (learning them yourself as you go along). The validity of the community's Aboriginal knowledge and students' cultural identity is underscored by the non-trivial use of their language.

Primary Resources

Foster, S. and Duke, J. (1990). *A Field Guide to Medicinal Plants*. Houghton and Mifflin. (ISBN 0-395-46722-5).

Johnson, D., Kershaw, L. MacKinnon A. and Pojar, J. (eds.). (1995) *Plants of the Western Boreal Forest and Aspen Parkland*. Edmonton, AB. (206, 10426-81 Ave.): Lone Pine Publishing. (ISBN 1-55105-068-7).

Leighton, Anna. (1986). *A Guide to 20 Plants and Their Uses by the Cree*. Publisher: Lac La Ronge Indian Band. PO Box 480, La Ronge, S0J 1L0. Phone: 306-425-2183

S.F.I.N. *Practising the Law of Circular Interaction*. Saskatchewan Indian Culture Centre, 120-33 Street East, Saskatoon, S7K 0S2.

Internet Resources

Most helpful: http://www.herbanspice.com/silversage/index.html

http://egregore.com

Others: http://www.bodywise.org/ingredients/whitewillowbark.html

http://www.kcweb.com/herb/herbmain.html

http://www.botanical.com/botanical/mgmh/t/tamara03.html http://www.geocities.com/Baja/Canyon/2609/calamus.html

http://bewell.healthgate.com/vit/herb30.asp http://www.lachendepaus.nl/sweetflag.html

Other Useful Resources

Szczawinski, A. and Turner, N.:

(1978) Edible Garden Weeds of Canada. (ISBN 0-660-00026-1).

(1980). Wild Green Vegetables of Canada. (ISBN 0-660-10342-7).

(1988). Edible Wild Fruits and Nuts of Canada. (ISBN 0-88902-751-X)

Original publisher: National Museum of Natural Sciences, Ottawa.

Order from: Fitzhenry and Whiteside, Markham, ON, L3R 4T8.

Swerdlow, J.L. (2000). Nature's Medicine. *National Geographic*, 197(April), 98-117.

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I would also like to thank Northern Lights School Division, and particularly Bruce Decoux who asked me to participate in this project; Glen Aikenhead for his spiritual insights into what is valuable knowledge; and my 'cohorts in crime,' David Gold, Shaun Nagy, Gloria Belcourt, Earl Stobbe, and Keith Lemaigre, for providing a stimulating environment to grow in.

Some of the photographs were kindly loaned to the project by Bente Huntley, Prince Albert. These are identified in the unit. Other photographs came from the students, from the *Rekindling Traditions* project, and from the public domain.

Lesson 1: Introduction (Introduction)

Timing

45 minutes: 4 mini-lessons:

1. What are plants? 2. The value of respect. 3. Set up notebooks. 4. Organize students into groups.

Goals

- 1. Respect for Mother Earth
- 2. All life forms are important and significant.

Objectives

- 1. Students will inquire into what gifts Nature has to offer.
- 2. Students will appreciate that we don't need to know everything to respect what Nature has to offer us.
- 3. Students will appreciate that the final outcome of the unit (a "published" book) is a worthwhile project.

Aboriginal Values to be Conveyed

respect, humility

Instructional Strategies

inquiry method, elicitation of preconceptions

Lesson Outline

- Ask students about the Unit's title what's a hidden gift? (5 minutes)
 As a class, make a web around "riches" associated with plants.
 Discuss ways people show respect and disrespect. (5 minutes)
 Set up student notebook: table of contents, page number, and title. (10 minutes)
- 5. List titles and goals for the Unit. Discuss each goal orally:
 - a. Nature's Treasures
 - b. Understanding the Power of Plants
 - c. Uses for Plants
 - d. Parts of Plants
- 6. Organize students into groups of 4, an arrangement for the rest of the unit. Specify your expectations generally and with respect to the next lesson specifically. (15 minutes)

CELs / Subject Integration: Language Arts, Social Studies, Native Studies

Resources

books produced by previous classes books on plants

Teacher Notes

• Prepare students for the rose hip collection activity in Lesson 2.

Lesson 2: *The Ultimate Taste Test* (Introduction)

Timing

two 45 min classes (2 separate days) plus after school time for rose hip jelly production

Goals

- 1. We can learn about plants from each other.
- 2. All plants are a part of a spirit world, and we can connect to our spirit world through plants.
- 3. Create parent interest in the unit

Objectives

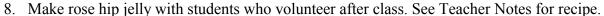
- 1. Students will collect plants, giving Mother Earth an appropriate offering.
- 2. Students will compare rose hip and herbal teas.
- 3. Students will appreciate a small sample of what plants have to offer us.
- 4. Students will make rose hip jelly.



rose hips

Lesson Outline

- 1. Collect rose hips and leaves, by groups.
- 2. Make sure students have a plant offering.
- 3. Make sure students do not waste any part of the plant or disrespect the plants.
- 4. Have students collect about 1/2 bag.
- 5. Bring back to the classroom, dry and use next day.
- 6. Bring in samples of herbal tea. Have students make their own rose hip tea, and compare the teas for taste. See Teacher Notes for.
- 7. Make a chart to show the results of the taste test.





rose hips

Aboriginal Values to be Conveyed humility

Instructional Strategies investigation, comparison



preparing rose hip tea

CELs / Subject Integration: personal and social values and skills, Language Arts, Math, Outdoor Ed.

Resources

samples of herbal tea hot plate for boiling water pots sample cups from dental office gift tobacco for the picked plant (if appropriate) ingredients for the rose hip jelly (see recipe in Teacher Notes) many small glass jars to hold the rose hip jelly

Teacher's Notes

- Send notes to parents asking about any allergies to plants.
- NOTE: do *not* eat the seeds of the rose hips since they can irritate the bowels.
- Dissect the bud to show jagged edge of seed.
- Many students become motivated about making rose hip jelly. Use a large number of small jars so that there are enough for gifts for parents and other people in the community who help with the unit. The jelly creates interest from most parents; a key to student achievement.
- Rose hip tea recipe:

1 tea bag1 tablespoon dried rose hips3-4 whole clovessugar or honey to taste1 cup boiling water

- 1. Steep tea bag, rose hips and cloves in boiling water for 5 minutes.
- 2. Remove rose hips and cloves. Reheat if desired.
- 3. Sweeten to taste.

• Rose hip jelly recipe:

3 packages pectin crystals

1 quart ripe rose hips

½ cup lemon juice

2 quarts water

4 cups sugar

- 1. Simmer rose hips in water until soft.
- 2. Crush to mash and strain through a jelly bag. This should make about 4 cups of rose hip juice.
- 3. Add to this rose hip juice, lemon juice and pectin crystals.
- 4. Heat and stir until mixture comes to a hard boil.
- 5. Stir sugar in at once.
- 6. Bring to a full rolling boil and boil for 1 minute, stirring constantly.
- 7. Remove jelly from heat and skim off foam with a metal spoon.
- 8. Pour into hot sterilized jars.

Lesson 3: Respecting Mother Nature (Introduction)

Timing

45 min

Recommended for older students (grades 9-11).



Goals

- 1. Students will show respect and awe for Mother Nature.
- 2. Students will show respect to each other.

Objective

Students will acknowledge that people from all cultures respect and appreciate Mother Earth's gifts.

Aboriginal Values to be Conveyed

respect; all life forms are interrelated

Instructional Strategies

interactive with audio visual

Lesson Outline

- 1. View video and have students write down questions in their notes about nature's gifts, related to the video.
- 2. Discuss answers orally.
- 3. Have students write answers in their notes.

CELs / Subject Integration: personal and social values and skills, communication, critical and creative thinking, Language Arts, Native Studies

Resources

video # 3, "All Life Forms are Inter-Related," from Practising the Laws of Circular Interaction

Teacher Notes

- Get video and TV ready.
- Due to the video's abstract language and length (30 minutes), it is not recommended for grades 6 to 8.

Lesson 4: *The Circle of Life* (Introduction)

Timing

2 classes – science and Arts Education – 45 min each

Goals

- 1. Plants are an integral part of nature.
- 2. The more we know about plants the more we know about nature.

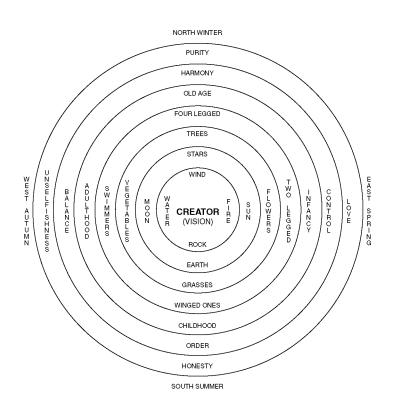
Objectives

- 1. Students will identify sacred and meaningful symbols and colours.
- 2. Students will construct a mobile using the shapes and colours discussed in class.

Aboriginal Values to be Conveyed thankfulness

Instructional Strategies

group work, co-operative learning



Sacred Circle (Appendix A)

Lesson Outline

- 1. Play the song "Circle of Life" from Disney's *The Lion King*.
- 2. Discuss the meaning of the lyrics. Photocopy and paste lyrics in students' notes.
- 3. a. Discuss the sacred circle of life and its meaning. (An example is in Appendix A.)
 - b. Discuss the symbol 4 and the symbolic nature of colours. (This will vary from community to community.)
 - c. How can sacred circles be applied to forces, solar system, plants, animals, human development, stability, emotions, seasons?
- 4. In groups, get students to make a mobile hanger using "net" shapes from Addison-Wesley's *MathQuest* series.

CELs / Subject Integration: Math, Language Arts, Music, Art, Native Studies.

Resources

- 1. tape/CD *The Lion King*, as well as words from p. 49 in *The Lion King*: Elton John & Tim Rice (1994). Hal Leonard Corp., Milwaukee. ISBN 0-7935-3416-X
- 2. a "Circle of Life" chart showing 4 zones (see Appendix A)
- 3. math nets for a pyramid, cube, circle, cone: Addison-Wesley's (1988) *MathQuest 6* line masters.

Teacher Notes

- Get all materials the day before, e.g. *The Lion King*.
- Photocopy nets unit 2 or 4 Math module

• Here's an extension idea for interested students. The "Circle of Life" essay program, sponsored by the American Indian Science & Engineering Society (AISES), invites 14-18 year-olds to write a short essay that expresses the moral, ethical, and spiritual values by which a person lives. The best of these are published in each issue of *Winds of Change*, the AISES quarterly journal. These essays make excellent reading. Information can be found at: http://www.aises.org

Lesson 5: Plant Homes (Introduction)

Timing

One afternoon: science for 45-60 min, Arts Education for 45 min.

Goals

- 1. Plants have homes and communities, like people.
- 2. Plants' homes are connected to animals' homes and people's homes.

Objectives

1. Students will define the terms "habitat" and "community" as:

Habitat: - home where plants live. A habitat needs food, water, and sunlight.

Community: - where plants, animals, and people call their home.

2. Students will express what they visualize as interrelationships between plants and animals, and between plants and people.

Scientific Values to be Conveyed

respect for the environment, organize information by classifying it

Instructional Strategy

group work, outdoor observation and participation



making Labrador tea



exploring a habitat



Lesson Outline

- 1. Divide class in groups of 4.
- 2. Walk students to an interesting habitat near the school (e.g. to a river's edge).
- 3. Define "community" in terms of what your students see.
- 4. Have each person in each group pick an example of a tree, shrub, flower, and grass.
- 5. Discuss similarities and differences of their chosen plants in the habitat.
- 6. Discuss respect for plants.
- 7. Preserve plants by pressing them in a book.
- 8. Show them the picture of a marsh and have them colour it.

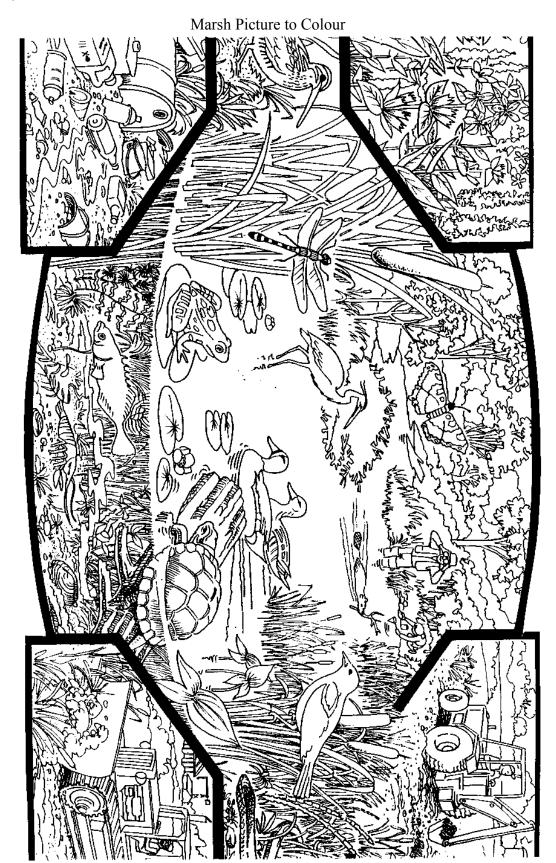
CELs / Subject Integration: Language Arts, Art, Outdoor Education, Math

Resources

assistant to help with outdoors portion of the lesson marsh picture to colour (see next page) from an NAWMP Wetlands poster available through: Publications, Canadian Wildlife Services, Environment Canada, Ottawa, ON, K1A OH3 1-800-668-6767

Teacher Notes

• Clear the field trip with the school's administration.



With permission from North American Waterfowl Management Plan, Hull, Québec

Lesson 6: Going on Line (Introduction)

Timing

45 min (and possibly 2 computer classes)

Goals

- 1. Plants are studied and appreciated world wide.
- 2. We can learn from each other.

Objectives

- 1. Students will be able to access web site to view unit outline.
- 2. Students will be able to establish web contact with another school regarding plant study.

Scientific Values to be Conveyed

technology is a vital part of science

Instructional Strategy

experiential learning

Lesson Outline

- 1. Access internet site.
- 2. Open file on "Nature's Treasure Box."
- 3. Open e-mail to another school site.

CELs / Subject Integration: communication, computer literacy, Language Arts.

Resources

Most helpful: http://www.herbanspice.com/silversage/index.html

http://egregore.com

Others: http://www.bodywise.org/ingredients/whitewillowbark.html

http://www.kcweb.com/herb/herbmain.html

http://www.botanical.com/botanical/mgmh/t/tamara03.html http://www.geocities.com/Baja/Canyon/2609/calamus.html

http://bewell.healthgate.com/vit/herb30.asp http://www.lachendepaus.nl/sweetflag.html

Teacher Notes

- Access site and chain of commands before lesson.
- Set up e-mail with other school or other people.

Lesson 7: "The Indian Way" (Understanding the Power Plants)

Timing

45 min science class, plus 45 min Arts Education class

Goals

- 1. Plants have power to heal.
- 2. Plants help animals and people survive.
- 3. In Aboriginal cultures, plants are connected to the spiritual world, and plants can help people connect to the spiritual world. Students are expected to understand this relationship, but not necessarily believe it. The Unit supports the family's spirituality. It does not indoctrinate any one view of spirituality.

Objectives

- 1. Students will understand that people have used plants for various purposes for a long period of time.
- 2. Students will become familiar with the fact that all cultures appreciate the gift of plants to our well being.

Aboriginal Values to be Conveyed

the spiritual world is a part of our physical world

Instructional Strategy

guided reading, guided imagery

Lesson Outline

- 1. Handout 2-page reading "The Indian Way". This is found on the next few pages.
- 2. Read it orally.
- 3. Place reading questions in students' notebooks to be answered.
- 4. Show examples of Aboriginal artists' drawings or paintings of animal and plant spirits. Get students to sketch a plant with a spiritual being inside it.

CELs / Subject Integration: Literature, Language Arts, Art

Resources

handout: "The Indian Way" (attached).

Teacher's Notes

- Staple handout to students' notes.
- Get pictures by Aboriginal artists showing animal and plant spirits.
- Compose reading questions to pin point the ideas you want students to address.

The Indian Way

Indians are gifted in many ways. They live very close to Mother Nature and know what she offers them. They know how generous Mother Nature is, and that we, as living beings, are her children. On the earth there are forests which contain medicines in the wonderful rich soil to doctor the sick. The barks, roots and leaves of plants, when brewed, make powerful medicines. There are the many berries that are necessary to our health. There is also the sun which provides the most essential gift of all – light and warmth. For all these gifts, the Indian is grateful.

In the native cultures of our land, the Indian herbalists (Medicine man or Medicine woman as they are commonly known) were highly respected. The medicine man or woman was gifted and knew just what to expect when the medicines were used. These gifts were handed down from forefathers who were great people of knowledge in their time. It was not the roots and herbs alone that cured; faith and the belief in each plant, as well as the knowledge of its use, were very important.

When treating the very sick, it was through a belief in remedies and spiritual help that the medicine man would cure the patient. A wise medicine man would not interfere with nature's way, for example, by preventing pregnancy, or winning one's love through the use of herbs. Those that used remedies for such things would be punished for the rest of their lives with sickness, blindness and feebleness.

Medicine men and women, with their many herbs and burning incense, prayed to the Great Spirit for help and guidance at a time of crisis. Once in a while a great gathering of medicine men and women was held. At this time they prayed, smoked, danced, and gave thanks. First, a tipi was set up. To the tipi they brought their many crafts, and all their herbs, roots, barks, leaves, and stems that were used in doctoring their sick. These were all wrapped separately and laid on the tipi floor. No one entered the tipi except the wise medicine men and women who were participating. Others were allowed to join later, but only after the rituals were completed.

The medicine men and women had a full season to replenish their stock, beginning in June and ending in late September. Plants bloom in different months, and it is only after the blooms are mature that the roots are ripe. In some cases the whole plant was collected for use – flowers, leaves, stems, and roots. Early blooming plants were closely watched where they appeared and were picked first. If they were not picked, the location was marked and they were then gathered when the plants became dormant in the fall. Tree buds and black poplar pods were picked as soon as they appeared in the spring. The fresh tips of willows were picked when they were five inches in length; only the new growth was picked and dried. The roots of all berry shrubs and bushes were taken only when dormant.

A prayer was uttered to the Great Spirit before digging the roots of a plant. Tobacco was always left in place if roots were taken, and was supposedly smoked by the forest spirits.

The inner bark of the red willow was dried and used for tobacco. It was gathered after the willow was dormant. Another item that was smoked was the bear berry plant which grows in coniferous areas among the moss cranberries. The leaves of the bear berry, which give a fragrant odour, are tough and leathery and were gathered, dried, and mixed with the bark of the red willow for use in the tobacco. Many a chief smoked the Pipe of Peace using these tobaccos.

The most important medicinal berry was the rose hip. It could be found almost anywhere and was used as a tea. People drank it daily as a preventative against colds.

A large kettle was always on hand for the purpose of preparing these remedies. It was placed on the stove and filled with boiling water to within an inch from the top. Then the herbs were added and a prayer was said, standing with bowed head in silence. This is one of the prayers:

Oh Great Spirit of the heavens, I beg of you and Mother Earth and her great gifts, this remedy will do good for those who have come to me for help, always being ever so thankful.

In the Cree language, this prayer might be written like this:

Nohtawenan, kechi kesikohk ka ayayan, ki mawimostatin asumena, mena kikawenaw ekwa omuskekema. Muskeke ta meyo totakot awa ka ahkosit. Hiy, Hiy, kinanaskomitin, Pitane ekosi teyehki.

After the prayer, a cover was placed tightly on the kettle and the potion was left to steep until it was cool. When roots and twigs were used they were gently boiled for five or ten minutes according to the thickness of the roots. They were then covered and allowed to steep until cool.



preparing bannock

Lesson 8: *Plant Stories Around Beauval* (Understanding The Power of Plants)

Timing

45 min

Goals

- 1. Plants have the power to heal.
- 2. Plants have the power to help animals and people survive.

Objectives

- 1. Students will list 4 plants and their uses.
- 2. Students will write a story about a plant, told to them by someone at home.

Aboriginal Values to be Conveyed

listening to elders respectfully

Instructional Strategies

guided reading

Lesson Outline

- 1. Hand out 4 plant stories to students (attached on the next several pages).
- 2. Students will read the stories.
- 3. Have students take the stories home for their parents to read. (Ask students if they want to give their parents homework!)
- 4. Have students collect a similar story from someone in their family.

CELs / Subject Integration: critical and creative thinking, communication, Language Arts, Health, Social Studies, Native Studies

Resources

Plants of the Western Boreal Forest & Aspen Parkland

5 readings (attached) – plant stories from:

Jim Lafleur's father, Marianne Morin, Angie Mihalicz

Linda Lafleur's mother, Bill Dinsdale,

Each story was given to us with permission to use it in this unit. The stories printed here were rechecked with the people to ensure the stories' accuracy.

Teacher Notes

- Follow-up the handout (plant stories, attached), with telephone call to each parent.
- Appropriately publicize the stories in the community. This will increase interest in what students are learning at school, and will express respect for the community's Aboriginal knowledge. Students' self-identity as an Aboriginal person is usually nurtured by a public display of respect. The Elders involved also benefit from the community's positive reaction.

"Plant Stories Around Beauval" – Jim Lafleur's Father

Jim Lafleur remembers this childhood story:

In the winter time, his brother was collecting furs on the trap line. He was chopping firewood for their cabin when he accidentally cut into his foot. He was miles away from medical help, but fortunately his father was with him and he knew exactly what to do. He gathered the inner bark from the south side of a Tamarack tree and boiled it. The juice was cooled and poured over the wound. The juice is an "antiseptic" – it kills bacteria. The bark was placed on the cut and used as a bandage. Mr. Lafleur's foot healed quickly and only a slight scar remained.



Jim Lafleur

Cree: wâkinâgan

Dëne: nidhe

English: tamarack or larch





Latin: Larix laricina



General Description:

- the only evergreen tree that loses its needles in the fall
- 'needles' turn a brilliant yellow in the fall





Habitat: Found in bogs or muskeg or wet mineral soils.





Uses:

- 1. inner bark stripped and uses as a poultice to treat wounds, earaches, burns, boils and frostbite.
- 2. gum chewed to soothe sore throats and heal deep cuts.
- 3. needles used to make a vitamin C tea.
 - **NB**: always use tea in moderation, some people can be allergic to needles.
- 4. needles, roots, bark tea treated sore muscles, arthritis, diabetes.
- 5. roots used to sew birch bark containers and canoes together.
- 6. rotted wood is used to smoke fish.

Resource:

Plants of the Western Boreal Forest & Aspen Parkland

"Plant Stories Around Beauval" - Linda Lafleur's Mother

Linda Lafleur remembers a story regarding healing plants.

When Linda was a child, she had developed a rash that would not go away. Her mother tried something that her own mother had shown her. She gathered some moss and Labrador tea leaves and put them on the rash. It wasn't long before the rash was gone. Linda's mother wasn't exactly sure of the moss she used, but it could have been one of the peat (Sphagnum) moss. In the old days, several types of mosses were used as pampers" before paper and cloth diapers became popular.

Cree: askiya English: peat moss Latin: Sphagnum girgensohnii, or

Dëne: nochuzë S. fuscum, or S. capillifolium

General Description:

low lying moss that forms a "mat" on the forest floor

Habitat:

found in bogs or muskegs and black spruce forest edges

Uses:

- 1. making baby diapers
- 2. treating skin problems such as eczema, psoriasis, and acne
- 3. preventing infection in cuts and wounds



peat moss

Cree: timaskik English: Labrador tea Latin: Ledum groenlandicum

Dëne: nagodhë

General Description:

small shrug (30-80 cm) with evergreen leaves and white flowers

Habitat: common in most muskegs, and moist soils in boreal forest

Uses:

- 1. Vitamin C tea
- 2. leaves chewed or tea brewed for stomach flu and diarrhoea
- 3. leaves dried and dusted on buns
- 4. mixed with "rat root" to stop pneumonia

Resources:

Plants of the Western Boreal Forest & Aspen Parkland



Labrador tea in bloom
photo courtesy of Bente Huntley

"Plant Stories Around Beauval" - Marianne Morin

Marianne Morin remembers collecting birch sap in the spring:

The trees were "tapped", and the sap collected in a large pail. The sap was then boiled in a large open fire. A large amount of sap was needed to make a cupful of syrup. The syrup was then used as a sweetener. Marianne remembers cooking jack fish and birch syrup to make a delicious tasting supper.





Cree: waskwây English: white birch Latin: Betula papyrifera

Dëne: k'i

General Description:

Loses its jagged edge leaves in the fall. The bark peels in paper length strips and varies in colour from white to copper.

Habitat:

Likes moist but well drained soil; usually forms a stand.

Uses:

- 1. bark used to make containers, canoes, moose callers, torch
- 2. wood used to make paddles, canoe ribs, carrying boards, bows, drums, axe handles
- 3. rotted spruce and birch used to tan hides a red colour
- 4. sap (k'i tuë, in Dëne) used to make syrup, also used to make beer, wine, pop

"Plant Stories Around Beauval" - Bill Dinsdale

Bill Dinsdale remembers collecting maple sap back in Ontario:

When he compared maple sap with birch sap, he found maple sap sweeter and more concentrated. Eighty litres of birch sap made one litre of syrup, while you only need forty litres of maple sap to make one litre of syrup. There are some maple trees (Manitoba maple) in Beauval, however they are not native to the area.

Resource: Plants of the Western Boreal Forest & Aspen Parkland



Bill Dinsdale



Manitoba Maple tree

"Plant Stories Around Beauval" – Angie Mihalicz

Angie Mihalicz remembers her grandma showing her how to pick mint leaves:

They were used to make a herbal tea. The plant was picked in the fall in full sunlight with only the leaves and stem taken. They were dried and used as a herbal tea, which tasted good, and as a medicine to soothe sore throats.

Cree: amiskowihkask English: wild mint Latin: Mentha arvensis

Dëne: tthų tsënë



Angie Mihalicz

General Description:

strong mint smell, the stem has 4 sides, has clusters of purple flowers near the top





Habitat:

Mint usually grows along stream banks, wet meadows and in clearings.



Uses:

- 1. tea used to prevent bad breath
- 2. tea used for coughs, chest infections
- 3. flowers from mint and yarrow were mixed for a mouth wash where infection had set in
- 4. tea used to relieve upset stomachs, headaches or fever

Resource:

Plants of the Western Boreal Forest & Aspen Parkland

Lesson 9: *The Legend of Sweet Grass* (Understanding the Power of Plants)

Timing

45 min in science, 45 min in Arts Education

Goal

Understand a spiritual nature of all living things.

Objectives

- 1. Students will be able to retell the creation story of sweet grass.
- 2. Students will understand, but not necessarily believe, an important aspect to Aboriginal spirituality.

Aboriginal Values to be Conveyed

the spiritual world is a part of our physical world



a bundle of sweet grass before being lit

Instructional Strategies

active listening

Lesson Outline

- 1. A guest speaker tells the story of sweet grass.
- 2. Students will draw a picture that illustrates the story of Mother Earth and sweet grass.

CELs / Subject Integration: critical and creative thinking, personal and social values and skills, Language Arts, Art, Native Studies

Resources

story teller gift for story teller

Teacher's Notes

- Phone a week ahead of time to arrange time for guest speaker to come in.
- Be sensitive to the Christian values of students who strongly embrace those values. The topic of Aboriginal spirituality in this lesson can be handled sensitively by letting students know that you are not wanting them to change what they believe, but you are expecting them to understand what other people believe. This mutual understanding is one aspect of showing respect for others. Thus, some Aboriginal students' self-identities will be enhanced if their family believes in Aboriginal spirituality, but not to the detriment of other students in your class whose self-identities revolve around other beliefs.

Lesson 10: Plant Stories from Around the Community (Understanding the Power of Plants)

Timing

1-2 lessons, depending on how successful students have been.

Goals

- 1. We can learn about plants both in school and at home.
- 2. All life forms, no matter how small, are considered important and significant.

Objective

Student will begin to produce a book on plant usage around the community.

Aboriginal Values to be Conveyed

humility, protocol of gift giving

Instructional Strategies

active listening, project participation, interviewing

Lesson Outline

- 1. Students list plants on the board they are familiar with, and list how the plants have been used.
- 2. Prepare students to collect plant stories from around Beauval:
 - Have students interview parents, grandparents, aunts, uncles, or Elders.
 - Discuss interviewing techniques and how to takes notes.
 - Discuss that a gift is necessary for Elders (e.g. tobacco perhaps, or rose hip jelly), and that they should promise the person a copy of the class plant book when it is finished.
 - Get students to take pictures of the story tellers (if acceptable by the story teller), and if possible, a picture of the plant.
 - Get students to read their story to their parents before bringing it to school.

CELs / Subject Integration: communication, Language Arts, Native Studies

Resources

gift of tobacco (if appropriate) or alternative gifts, such as a small jar of rose hip jelly recyclable camera tape recorder and tapes

Teacher's Notes

- Lessons on preparing students to interview Elders are found in the units *The Night Sky* (Lesson 1) and *Snowshoes* (Lesson 3).
- Have gifts on hand for the students to give to an Elder (if interviewed).
- Phone parents to encourage them to help their child with this assignment.
- Photographs will be used in a student's book.
- When processing film, invest in double copies of prints (one set for the booklet, and one set for other purposes such as gifts).

Lesson 11: *Sweeter Than Roses* (Understanding the Power of Plants)

Timing

45 min science class, other classes (e.g. Language Arts, Art) are possible as well

Goals

- 1. All life forms, not matter how small, are considered important and significant.
- 2. Seasonal changes of plants affect animals and people.

Objectives

- 1. Students will list many varieties to the rose family.
- 2. Students will remember the rose family's special adaptations and seasonal changes.
- 3. Students will remember that rose hips are important starvation food for animals.

Aboriginal Values to be Conveyed

there are four seasons to the circle of the year, humility

Instructional Strategies

Socratic lecture, note taking

Lesson Outline

- 1. Draw web on board of what students know about the rose family. Distinguish between the everyday use of "rose" and the scientific use of "rose." (Each of those two cultures uses the word differently.
- 2. Discuss classification in the culture of Western science:
 - What is a rose? Some plants that do not look like an everyday garden rose are classified by scientists as belonging to the rose family (i.e. these plants look like a *scientific* rose). Plants in the scientific rose family tend to have strong medicinal value. The two classification schemes (Aboriginal and Western science) converge here. They both put these plants into one category, for two different reasons.
 - List several plants in the scientific rose family: roses, strawberries, raspberries, silver weed, etc.
- 3. Note parts of the plant and special adaptations.
- 4. Note habitat characteristics.
- 5. Note uses of the plant.
- 6. Follow up activities:
 - a. (Language Arts) Students write a story "Lost in the Forest."
 - b. (Arts Education) Students decorate the border with pressed leaves gathered from the outings.

CELs / Subject Integration: Language Arts, Art

Resources

Paper bags to hold pressed leaves. Plants of the Western Boreal Forest & Aspen Parkland

Teacher Notes

Lesson 12: A Guide to 20 Plants and Their Uses (Understanding the Power of Plants)

Timing

1-2 science classes

Goals

- 1. We can learn about plants from each other.
- 2. Plants have the power to heal; they help animals and people survive.

Objectives

- 1. Students will classify plant usage into: medicine, technology, and food.
- 2. Students will record the usage of a wide variety of plants.
- 3. Students will recall that traditional uses of plants go back to the beginning of human history.

Aboriginal Values to be Conveyed

everything on Mother Earth is related (we are all related)

Instructional Strategies

group work

Lesson Outline

- 1. Divide the class into groups of 4. Assign each group a different section to Anna Leighton's book.
- 2. Have them make a chart, and fill it out, based on their assigned section.

	name of plant	technology	food	medicine	other
1					
2					
20					

- 3. Record the results on the board, and get students to record these results in their notes.
- 4. (Optional) Students make a crossword puzzle (2 to a group).

Resources

A Guide to 20 Plants and Their Uses by the Cree, by Anna Leighton, available from (cost \$7.00): Lac La Ronge Indian Band, PO Box 480, La Ronge, S0J 1L0. Phone: 306-425-2183 Suggested pages to use in this lesson: pages 4-35, and 41-52.

Computer software for making crossword puzzles (optional)

Teacher's Notes

• Photocopy enough pages from Anna Leighton's book, the day before the lesson presentation.

Lesson 13: *Visiting the Web Site* (Understanding the Power of Plants)

Timing

Over several days.

Goal

We can learn from each other.

Objectives

- 1. Students will record diversity of web sites.
- 2. Students will ask questions regarding their plant projects.
- 3. Students will make a web site for the project.

Scientific Values to be Conveyed

computer technology improves communication

Instructional Strategies

experiential

Lesson Outline

- 1. Ask what a bookmark is, and how to use it.
- 2. Bookmark several web sites.
- 3. Students type in their own reports on their own web site.

CELs / Subject Integration: computer literacy, Language Arts

Resources

computer teacher computer access internet sites:

most helpful: http://www.herbanspice.com/silversage/index.html

http://egregore.com

others: http://www.bodywise.org/ingredients/whitewillowbark.html

http://www.kcweb.com/herb/herbmain.html

http://www.botanical.com/botanical/mgmh/t/tamara03.html http://www.geocities.com/Baja/Canyon/2609/calamus.html

http://bewell.healthgate.com/vit/herb30.asp http://www.lachendepaus.nl/sweetflag.html

Teacher Notes

• Co-ordinate teachers to help with setting up web site.

Lesson 14: *Plant Groups* (Knowing Plant Basics – Parts of a Plant)

Timing

1-2 classes

Goals

- 1. Plants can be grouped according to their similarities and differences.
- 2. Different cultures classify plants differently.

Objective

Students will identify and use 2 classification systems – Aboriginal and Western.

Values to be Conveyed

We construct an interpretation of our natural world – classifications are a part of that construction. Our constructions will be different, depending on the cultural images we draw upon.

Instructional Strategy

teacher directed, independent, group work

Lesson Outline

- 1. Refer back to the Circle of Life (Appendix A) to present Aboriginal classification system trees, shrubs, flowers, and grasses. Refer to the Western scientific approach which adds mosses, lichens and mushrooms; and separates aquatic plants from grasses.
- 2. Define:

```
tree -2 types - leaf and evergreen
shrub - large and small
flowers - flowers and seed bearing
grasses - aquatic and land
```

3. Give students a list of 30 plants and have them place each plant in an appropriate category twice: once using the Aboriginal classification system, and once using the Western science system.

CELs / Subject Integration: critical and creative thinking, Native Studies

Resources

"Circle of Life" chart for students (Appendix A) 6 sets of 30 plant fact sheets (one for each group) Field Guide to Edible Wild Plants, Plants of the Western Boreal Forest & Aspen Parkland

Teacher Notes

• Photocopy resources the day before this lesson.

Lesson 15: *Give Me a Home Where the Deer and the Antelope Play* (Knowing Plant Basics – Parts of a Plant)

Timing

2-3 classes

Goals

- 1. All life forms, no matter how small, are considered important and significant.
- 2. Plants have homes and communities just like animals and people.
- 3. Plants can be grouped according to their similarities and differences.



bunch berries

Objectives

- 1. Students will be able to identify basic parts of plants, and define their habitat.
- 2. Students will be able to list uses of individual plants.

Scientific Values to be Conveyed

we construct an interpretation of our natural world – classifications are a part of that construction

Lesson Outline

1. For each plant group (trees, shrubs, flowers, grasses) draw the basic shape and list parts that can be expected to find; for example:

roots - tap, running, fibrous stem/trunk - base, inner bark, centre

leaves - edge shape, veins; or needle varieties

- 2. Define habitat space, food, water, and shelter;
 - Give examples for a variety of adaptations using a cross-section of the river valley.
- 3. Are all plants useful to people?

Discuss poisonous plants around Beauval.

Relate story of students who ate a poisonous plant.

Should we get rid of poisonous plants?

CELs / Subject Integration:

Resources

Medicinal Uses of Plants, Plants of the Western Boreal Forest & Aspen Parkland

Teacher Notes

• Have examples of garden plants that are poisonous; e.g. potato leaves and green peelings.

Lesson 16: Plant Identification

(Knowing Plant Basics – Knowledge from Western Science)

Timing

Two or three 45 min classes (includes 2 field trips)

Goals

- 1. Seasonal changes of plants affect both animals and people.
- 2. We can learn about plants from each other.

Objective

Students will be able to identify 25 plants in their habitat.

Scientific Values to be Conveyed

classification relies on careful observations and finding patterns

Instructional Strategies

experiential, group work

Lesson Outline

- 1. Have each group pick a category of plant they want to identify (e.g. tree, shrubs, flower, grass).
- 2. Have each person in the group pick their own plant and become a "plant expert."
- 3. Go out to the valley and find your plant with your group members. Remember how to treat your plant; bring back a sample of your plant and press it into a book.
- 4. Laminate the pressed plants.
- 5. Have each student do a presentation about their plants. After the presentations, expect each student to identify all 25 of them.
- 6. Return to the habitat and have a contest to see which group can find the most plants (e.g. on the ski trails). Winners get to drink herbal tea anytime in class (within a given period of time).



bunch berries



jack pine

Resources

extra supervisor to go outside laminator

Teacher Notes

• Get prizes for best groups (boxes of herbal tea, or a \$1 gift coupon from the canteen).

Lesson 17: Writing a Book

Timing

2-3 classes (rough to final draft), plus 2-3 computer classes

Goal

All goals set at the beginning of the unit should be revisited and incorporated in their book.

Objective

The class will compose a plant book for Beauval.

Values to be Conveyed

knowledge should be shared with others

Lesson Outline

- 1. Students will write the plant stories collected from around the community.
- 2. Students will gather information from their fact sheet about their plant.
- 3. All students will fill in a rough outline. First see appendix B, and then type it up.
- 4. Students will design a cover, and each student will autograph the final copy.
- 5. Each student will give a completed book to adults who shared their plant stories.
- 6. Students will take book home to parents and to storytellers.

CELs / Subject Integration: communication, Language Arts

Resources

Fact sheet from "Edible Wild Plants"

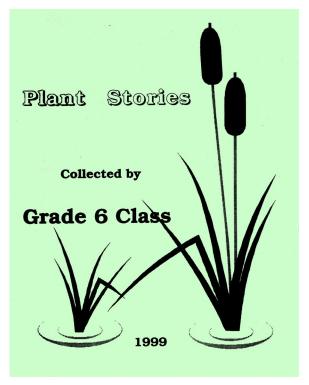
Plants of the Western Boreal Forest & Aspen

Parkland

Appendix B – an example of one class's book

Teacher Notes

- Book computer room after school to complete project.
- Get students working toward this lesson throughout the unit. Have students help each other with the typing.



Appendix B

Lesson 18: Evaluation

Timing

1-2 science/computer classes

Goal

We can learn about plants from each other.

Objectives

- 1. Students will be able to identify at least 100 % of the plants studied from plant pressings.
- 2. Students will be able to identify at least 80% of the plants studied in the outdoors.

Values to be Conveyed

accuracy is crucial

Instructional Strategies

memory recall, experiential, group work

Lesson Outline

- 1. Make sure each student has a copy of the plant identification book that everyone contributed to.
- 2. Get student to reread their plant stories that were given by the Elders.
- 3. In groups of 4, have students quiz each other to practise plant identification. Have stronger group members help the weaker ones with the identification activities and assignments.
- 4. Final text. Students individually rotate through 25 plant stations and identify the plant at each station.

Resources

samples of the 25 plants

Teacher Notes

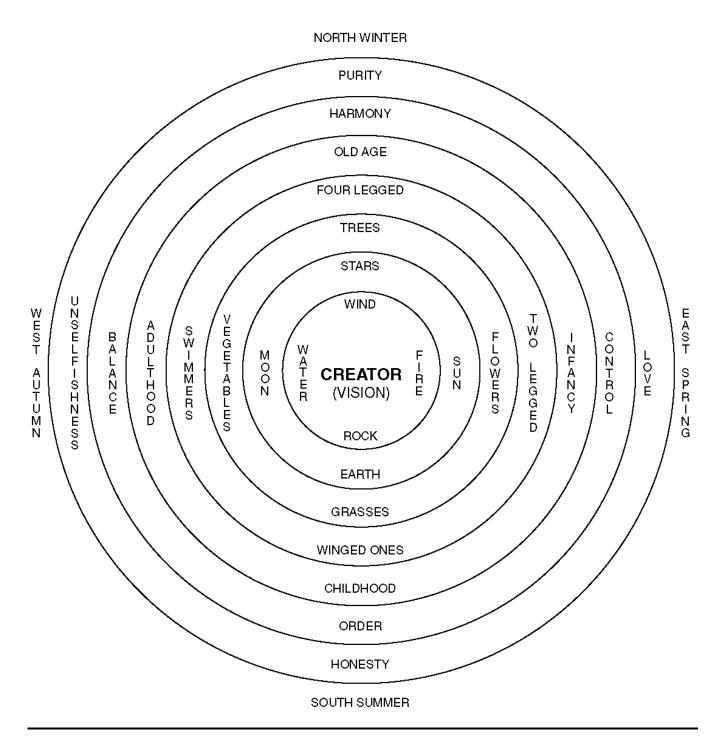
• Weaker students will need volunteers to help them finish the practice session of this lesson.



Appendix A

Circle of Life

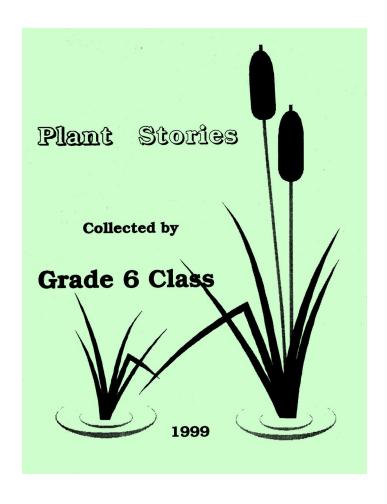
CIRCLE OF LIFE



With permission: Saskatoon Tribal Council, ASIMAKANISEEKAN ASKIY RESERVE # 102A, Saskatoon, SK.

Appendix B

Beauval Elders' Plant Stories and Selected Student Reports on Plants



Each story from an Elder was given to us with permission to use it in this unit. The stories printed here were rechecked with the people to ensure the story's accuracy.

Elders' Plant Stories Collected by Students

Labrador Tea

A long time ago my mooshum, Robert Bouvier, had a rash on his hand. It would not go away. He was told to try to put some Labrador tea on it. He gathered the plant in the muskeg, boiled it, and put it on his hand after it cooled. The rash went away. by Roberta Bouvier



Labrador tea in the spring photo courtesy of Bente Huntley



Labrador tea habitat photo courtesy of Bente Huntley



Labrador tea in bloom photo courtesy of Bente Huntley



Labrador tea in seed photo courtesy of Bente Huntley



Labrador tea in the winter photo courtesy of Bente Huntley

Labrador Tea and Spruce

Labrador tea is used for many reasons. It is a medicine plant. Along time ago the people used that plant for many kinds of sicknesses. They would go find it in the muskegs and bring it home. They would then tie a thread around the stems, and boil it for a few hours. They would save the juice in jars to use when needed.

Spruce gum was used to cure toothaches. Back then they couldn't go to a dentist.

by Donny Alcrow

Rat Root

As a young girl, Simonne Laliberte used to visit an elder by the nickname of Bebcanoe. She recalled that during one of her visits, she was coughing a lot and her throat was very sore. This old lady looked under her pillow and handed her a piece of root. She told Simonne that she was to chew on this root and her cough would go away. The root tasted very bitter, but not wanting to offend the elder, Simonne kept chewing on it. She recalled that when she swallowed the juice, it comforted her sore throat and relieved her cough. What she used was called rat root. It is known as "sweet flag."

by Jayme Aubichon

Aloe Vera

It is also known as a medical plant. It does not grow wild around here. My mom's friend, Millie, grows the plant in her house. She uses the plant for burns, cuts, hair and scalp care, scrapes, and stings by insects. She just breaks a part of the leaf off and presses it on the sore part of the body.

by Maria Aubichon

Silver Weed

My kukom, Adele Morin, had a bad cramp in her leg. My grandpa, Harry Morin, told my kukom about silver weed. He told her it can cure the cramp in less than two minutes. Adele said that she would try it. In one-half hour Harry gathered a bag of silver weed. When he got back he boiled the plants down and made tea out of it. She drank the tea and in 10 minutes she felt a lot better.

by Joshua Laliberte

Plant Stories from My Grandma, Angie Mihalicz

Yarrow: It is called a medicine cupboard because it can clean your blood and other things. When the flowers are white, pick them. But you must pick it in sunlight because that's when it produces medicine. Dry it and put it in a cool place. When dry, put a flower in boiling water. Purify the air by burning it.

Cranberry: Very high in vitamins. Helps clean your body to help stop infection in bladder and kidneys. They are like a multivitamin. Long ago they used them for soap and candles.

Blueberry: It you eat half a cup of blueberries everyday, it will help stop infections.

by Jordan Mihalicz

Muskrat Food (Jack Pine)

My great grandfather, Anthanise Iron, would go get muskrat food to help heal sores. He would help his children if they had sores. He would put it on the sores. In about 3 seconds it would be gone with just only a little scar if there was a cut. It stings a lot, but it will help. My great grand father was a great help. (Jack pine is the muskrat food in the insides of it.)

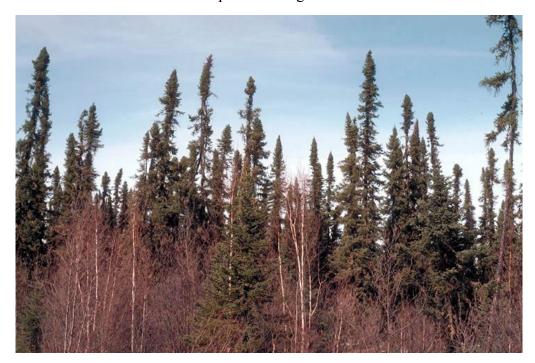
by Leanne Iron



jack pine

Poplar and Spruce Trees

In the old days we would peel the bark off the poplar trees in the spring time when the sap was in the trucks. We would use the sap for cooking and a snack.



spruce trees

Another thing was collecting spruce gum for medical purposes. When a person had a cut or would, the gum was used for the cut. We would melt the gum and place it over the wound and bandage it. It acted as an antiseptic.

by Peter Malbeuf

Poplar Trees





Two years ago, my family and I went on a walk. While we were walking, I stumbled upon a wasp's nest, and I got stung by two wasps. It hurt so bad I started to cry. My dad took some leaves from a poplar tree and chewed them up. He placed them on my wound. It didn't hurt and it didn't even swell.

By Billie Jo Malbeuf



Iyiniw Maskikiy Appendix B



white spruce

White Spruce

A long time ago my dad said when they had toothaches they would cut down spruce trees and take the gum off the spruce tree and eat it. The grandparents would go in the bush to look for a spruce tree. When they found one, they would cut a piece of the tree, and take the gum. The person with the toothache would then chew on this and later the pain would be gone.

by Barry Morin

Cranberry

My mom used to drink cranberry juice when she was a little girl. My grandma Philomin always made cranberry pie for all my mom's brothers and sisters. My dad uses cranberries for his kidneys and my grandpa drinks cranberry juice for his sore throats. I go picking cranberries with my mom and dad in the summertime and we eat them and cook them or save them for Christmas.

by Keziah Wuttunee



cranberries
photo courtesy of Bente Huntley

Selected Reports on Plants

Blueberry - Marion Morin

General Description:

It is a low shrub 10-50 cm tall, often forms dense colonies.

Leaves:

Thin, soft, hairy, elliptic to lance shaped, 1-4 cm long; edges smooth.

Flowers:

Single or in small clusters at branch tips, greenish white or pinkish, cylinder bells, 3-5 cm long; appear in late May or June.

Fruit:

Blueberries, 4-8 mm across, with pale blue bloom, sweet.

Where Found:

Gravely sandy soil in open forests (usually coniferous stands) and common across boreal forest, north and west to southern NWT and north eastern BC.

- 1. Blueberries: for winter storage by cooking them in lard and allowing the fat to solidify, or by drying them in the sun or in birch bark baskets or gunny sacks over a low fire.
- 2. Blueberry plant: the Cree used the blueberry plant to treat cancer.
- 3. Roots: the Chipewan used the roots to make a medical tea for headaches.
- 4. Leafy stems: the woods Cree used the leafy stems in women medicine tea to prevent miscarriage.
- 5. Stems: tea made by boiling the stems was said to prevent pregnancy.



picking blueberries in September



Elders say that the first frost gives the berries a sweeter taste.



blueberry habitat
photo courtesy of Bente Huntley



blueberries close up
photo courtesy of Bente Huntley



blueberry in bloom
photo courtesy of Bente Huntley



blueberries ready to pick
photo courtesy of Bente Huntley

Chokecheery - Barry Morin

General Description:

Shrub or tree, 1-6 m tall; bark smooth, reddish brown to grey-brown, becomes dark with age, does not peel readily.



chokecherry habitat
photo courtesy of Bente Huntley



chokecherries ready to pick photo courtesy of Bente Huntley

Leaves:

Thin, elliptic, 2-10 cm long, sharp-pointed to rounded at the tip. Blunt at base; bright green, edges have fine, sharp teeth.

Flowers:

White flowers bloom in the spring, bottlebrush-like clusters (5-15 cm long) at ends of branches; flowers are white, 10-12 mm across; appear in May to June.

Fruit:

Shiny, red, purple, or clack cherries, about 8 mm across, edible but sour tasting.

Where Found:

Woods, clearings, hillsides, and river terraces; found throughout the north country.

- 1. Berries are used to make jellies, syrups, sauces, and wine.
- 2. Bark used to treat coughs, colds, and clear sore throats.
- 3. Warning! All parts of the plant except the berry contain cyanide.

Evening Primrose – Leanne Iron

Page 9

General Description:

Biennial from stout tap root in first year. Second year stem erect, stiff, 0.5-1.5 m tall, often branching grayish or sometimes with reddish hairs.

Leaves:

Alternate, ascending, lance-shaped to oblong, 2-15 cm long.

Flowers:

In spikes at stem tips; large, bright yellow, open in evenings; buds erect sepals united at first, ultimately separate and bent back; petals 12-25 mm long.

Fruit:

Erect hairy capsules 2-3 cm long.

Where Found:

On lighter soils in dry open areas; often quite weedy; most common in prairie and park lands, extends into southern boreal forest of prairie provinces along some major river valleys. It is an introduced plant.

- 1. Roots crushed to heal bruises or sores.
- 2. Flower could cause heart attacks.
- 3. Oil useful for treating diabetes.

Poplar – Billie Jo Malbeuf

General Description:

Small to medium size deciduous tree, up to 20 m tall (sometimes to 30 m tall); usually forms stands by sending up suckers, from extensive shallow roots systems; buds not resinous or fragrant; bark greenish white, becomes blackish and rough around lower trunk and around bases.

Leaves:

Oval to nearly circular; rounded to square cut at base; sharp pointed tips 3-7.5 cm long; edges finely rounded toothed; leaf stalks flattened, allowing leaves to tremble in the slightest breeze.

Flowers:

In dropping catkins, appear in early spring before leaves; sexes on separate trees; make flowers with 5-12 stamens.

Fruit:

Capsules 3-5 mm long; seeds tiny, with tuff of soft hairs.

Where Found:

Dry ridges to rich moist sites; grows best in well drained, moist, loamy soils, common and wide spread across the northern region.

- 1. Sap ointment to cure sores
- 2. Inner bark can be used for food
- 3. Bark can be used as bandage
- 4. Leaves chew to heal stings







Pincherry – Jordan Mihalicz

General Description:

Small shrub, about 1 to 5 meters.

Leaves:

Small leaves, oval shape with small teeth, 3 to 10 cm long.

Flowers:

In big clusters, white.

Fruit:

Bright red berries, very sour, has a little seed.

Where Found:

They are found in forest clearings and riverbanks. They can also be found on hillsides.

Uses:

Warning! The bark, leaves, wood, and seeds contain a poisonous chemical and therefore they cause cyanide poisoning. Just a little bit of mashed up leaves or a few strips of bark can kill flies and mosquitoes at a distance.

- 1. The pincherries can be cooked and strained to make jelly, jam, wine, and other things.
- 2. The inner bark can be used as a medicine to cure sore eyes.

