



Boreal Medicine and More

Age range: 12 to 16 (Intermediate)

Time: 45 to 75 minutes,
depending on age

Subjects: Science, Geography,
World Issues, Language and
Reading Comprehension

Resources: *Lost in the Boreal* (page 18)
worksheet.

Learning Outcomes

Students will investigate boreal non-timber forest products (NTFP) that hold economic, social, spiritual and historical significance by hunting through the fact sheets and answering questions. A discussion and paragraph summary will follow.

Backgrounder

Print copies of the 8-page fact sheet *Our Life, Medicine Path: Non-Timber Forest Products of the Boreal* (2005) published by the Taiga Rescue Network, <http://www.taigarecue.org/_v3/files/pdf/102.pdf>. This includes an excellent overview of the role of NTFPs in sustainable forest management, a critical look at some of the most pressing issues concerning the development and marketing of NTFPs, and highlights of the ethno-botanical properties of several boreal species. (You may decide not to copy pages 2 and 8.)

For a detailed Canadian perspective entitled *Non-Timber Forest Products and Sustainable Development in the Boreal Forest* visit <http://www.nrcan-rncan.gc.ca/cfs-scf/national/what-quoi/sof/sof05/special04_e.html> (in *Special Articles* see *The State of Canada's Forests 2004/2005* by Natural Resources Canada).



Hook: Treasures of the Forest

Like all forests, the boreal contains a wide variety of living things that have been used by Aboriginal people and European immigrants for income, food and medicine, and social, cultural and spiritual purposes.

Invite two students to the chalkboard or flip chart to act as recorders. As a class, brainstorm all the useful resources that the forest produces, besides timber. Consider the categories of food, medicine, transportation, art supplies and dyes, and natural species used for social and spiritual needs. Encourage students with strong ties to the land to explain how these various species are used in their family and culture.

Procedure

- 1** Divide students into groups and give each group one or two copies of the *Our Life, Medicine Path* fact sheets. Provide each student with a copy of the *Lost in the Boreal* (page 18) worksheet and read it as a class.
- 2** Have groups read through the fact sheets and answer the questions on the *Lost in the Boreal* (page 18) worksheet.
- 3** As a wrap-up, have students share their comments with the rest of the class or write a paragraph describing:
 - What did they learn about the way the boreal forest can meet physical, economic, social and cultural needs? What surprised them or interested them the most?
 - How do they think people around the world discovered the uses of various NTFPs (e.g., accident, trial-and-error, deduction)?
 - What are some NTFPs that are commonly harvested (e.g., berries, mushrooms, peat)?
 - What is involved in sustainable harvesting practices of NTFPs (see page 7 of *Our Life, Medicine Path*) and how are these similar to sustainable forestry practices? Why are these practices so important to a secure and fruitful way of life, now and in the future? (If we harvest too much of our renewable resources on an on-going basis, and/or do not make sure to replenish the resource, we will no longer be able to benefit from the resource and future generations will do without.)

Extensions

Using collage, have students make a poster, wallet card or small guidebook of non-timber resources in the boreal. Be sure to include information on how to harvest these products in a sustainable manner (see page 7 of *Our Life, Medicine Path*).

Have students research recipes for making antiseptics from blueberry leaves or pine. Be sure they try them out at home.

Have students compare the effectiveness of insect repellent made from the juice of Labrador tea leaves against commercial repellents.

Answers

Lost in the Boreal (page 18)

(Page number indicates relevant reading in *Our Life, Medicine Path*)

1. Bearberry (page 4).
2. Scots pine (*Pinus sylvestrus*) (page 6).
3. Blueberry/bilberry; fruit (page 5).
4. Birch page (page 4).
5. Sphagnum peat moss (page 6).
6. Mushroom; yes (page 3).
7. Labrador tea (page 5).
8. Bearberry (page 4).
9. Sphagnum peat moss (page 6).
10. Labrador tea (page 5).





Lost in the Boreal

Unbelievable but true! While camping with a few friends in the boreal forest, you have become lost. Fortunately it is summer and you are surrounded by the natural resources of the forest. But which species are useful and for what? More good luck: one of you has thought to pack a copy of *Our Life, Medicine Path: Non-Timber Forest Products of the Boreal*. Now you have the information you need to care for yourselves until you are rescued!

1. It's very hot and you have been hiking through the forest. You and your friends have developed some nasty rashes. What is the name of the boreal bush whose leaves can be used to make a salve that will soothe your rash?
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2. Supplies are running low and everyone is getting hungry. You have managed to snare a few snowshoe hare and voles, which you'd like to eat on sandwiches. List the species of tree with inner bark that can be ground into flour for making bread.
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3. One of your friends (not you, of course) has developed hemorrhoids. What species can help him seek relief, and what part of the plant is needed?
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4. After having your backpacks stolen by a wild animal you decide to make baskets for gathering food and medicinal plants. What part of which species can be used to make baskets? (Hint: You can also make temporary shelters using this material!)
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5. Ouch! You have cut yourself on a rock. Which species used by soldiers in World War I would you pick to dress your wound?
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6. If you were in the Arkhangelsk region of Russia's boreal, what other common food besides berries could you eat? Is this food also available in the Canadian boreal forest?
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7. The bugs are driving you crazy! a) Which plant carries leaves that can be used to create a tincture for killing mosquitoes, lice and fleas?
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b) Describe the plant for your friends so that they can recognize it.
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8. One of your friends has kidney disease. Which plant should this person steer clear of?
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9. Someone in the group has had a flare-up of a skin condition known as eczema. What plant do you require and what must you do with it to procure a treatment?
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10. Your group has been in the bush so long that you are developing scurvy (a softening of the gums and cartilage due to Vitamin C deficiency). To solve your problem, which leaves should you harvest to make herbal tea?
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