

Brightwater Science and Environmental Centre High School Ethnobotany/Archaeology Program

The term ethnobotany was first coined in 1895 by the U.S. Botanist, Harshberger. Ethnobotany combines the study of cultures (ethno), the study of plants (botany) and how cultures use plants to reproduce their existence. How cultures come to use plants is to a large extent influenced by cultural values and environmental factors. Many early cultures used plants for subsistence, medically, or to make into tools or art. In many respects, these uses still predominate but have become more intensive. Domestication of plants by most cultures has led to food surplus and technological advances, arguably creating the foundation for contemporary society.

At the Brightwater Science and Environmental Centre (Brightwater), students are exposed to a hands-on experience of ethnobotany. The 1.5 hour session focuses largely on the early Plains cultures and how their knowledge of plants enabled them to survive successfully for thousands of years in the harsh environment of central Saskatchewan. The guided tour (approximately 1 hour) follows trails that traverse a quarter section of the sandy grassland landscape and creek valley. Students are shown several examples of native plants and their traditional uses are discussed in terms of medical uses of certain shrubs, how to make rope out of common weedy plants, how to make nutritious teas out of local forbs and how people were able to transport embers over long distances in a common fungus to maintain an easily accessible source of fire. Near the end of the session, students are shown the surrounding agricultural landscape and a discussion is pursued that encourages students to critically debate the possible impacts of intensive farming approaches on native plants species.

The session is connected to the archaeology of the local Plains people, who used available resources, including plants, wildlife, clay and stone, for survival with minimal impact. Brightwater, an area historically inhabited by the Whitecap First Nation, is known to have several archaeological sites. It is thought that it may have likely provided an ideal oasis for Plains people due to its sheltered creek valley, bountiful flora and fauna, and at least one year-round open fresh spring.

Facilitation of the archaeology portion may also include discussion and/or on-site demonstration of how to obtain a permit, find a potential site, document finding using data collection, photos, maps (Google Earth) and GPS positioning, and submitting an official report. If possible students may participate in a site “walk over” to look for surface artefacts. An opportunity to use the atlatl spear thrower used to hunt mammoth during pre-historic time, is often included in the program.

The session provides integration of many key aspects of several Saskatchewan curricula, in particular science and social studies with attention to Indigenous Knowledge of Nature. Students are also introduced to careers in fields such as archaeology, environmental consulting or academia.

WEB SITE & RELATED LINKS TO VISIT:

<http://www.education.gov.sk.ca/>

<https://www.edonline.sk.ca/webapps/moe-curriculum-BBLEARN/index.jsp?lang=en>

<http://www.accessexcellence.org/RC/Ethnobotany/index.html>

<http://www.fortlewis.edu/anthro/ethnobotany/ethno2.htm>

<http://www.npss.sk.ca/>

The Royal Saskatchewan website

www.saskmuseums.org

www.cyr.gov.sk.ca/heritage

www.saskheritage.com

www.saskarchsoc.ca

www.wanuskewin.com

www.sasktourism.com

www.canadianarchaeology.com

www.civilization.ca

www.museums.ca