John Muir Study Guide Science Lesson Plan Grade One "Habitat"

John Muir developed a love of the natural world at a very early age as recounted in his autobiography the *Story of My Boyhood and Youth*. Beginning with his early years in the coastal village of Dunbar, Scotland, Muir would eventually travel all over the world in his study of wild plants and animals and the natural environments in which they live.

Objective:

Students will be able to:

- explain that different plants and animals live in different kinds of environments.
- describe features of various plants and animals and explain how these help them survive in the places where they live.

California Science Standard, Grade One, Life Sciences:

2a(a). Students know different plants and animals inhabit different kinds of environments and have external features that help them thrive in different kinds of places.

Materials:

John Muir on Habitats Reading Handout (also provided below)

CD, MP3 file, or Tape of the song: "Have to Have a Habitat" by Bill Oliver

Bill Oliver: http://www.mrhabitat.net

Lyrics: http://www.mrhabitat.net/songbook.html#habitat

Purchase MP3 or the album:

http://homepage.mac.com/muirpower/mrhabitat/habitat_single_mp3.html

Crayons, markers, or paints

Blank paper

Encyclopedia, nature books, Internet access

Preparation:

Explain the term *habitat* to the students. Tell them how each animal and plant lives in a particular environment which provides it with all the things it needs to live and grow. Play the song "Habitat" by Bill Oliver and encourage the students to sing along.

Read the following excerpts from *John Muir: The Story of My Boyhood and Youth* to the students.

"When I was a boy in Scotland I was fond of everything that was wild, and all my life I've been growing fonder and fonder of wild places and wild creatures. Fortunately around my native town of Dunbar, by the stormy North Sea, there was no lack of wildness, though most of the land lay in smooth cultivation. With red-blooded playmates, wild as myself, I loved to wander in the fields to hear the birds sing, and along the seashore to gaze and wonder at the shells and seaweed, eels and crabs in the pools among the rocks when the tide was low; and best of all to watch the waves in awful storms thundering on the black headlands and craggy ruins of the old Dunbar Castle when the sea and the sky, the waves and the clouds, were mingled together as one."

"This sudden splash into pure wildness--baptism in Nature's warm heart--how utterly happy it made us! Nature streaming into us, wooingly teaching her wonderful glowing lessons... Here without knowing it we still were at school; every wild lesson a love lesson. Oh, that glorious Wisconsin wilderness! Young hearts, young leaves, flowers, animals, the winds and the streams and the sparkling lake, all wildly, gladly rejoicing together!"

Activity:

Students will create a Zoological and Botanical Garden made up of a variety of species from around the world. Students will chose one favorite animal and one plant species, such as pandas, whales, cactus plants, Sequoia trees, etc. Using Internet links, a

nature picture book, or encyclopedia, students will learn about the plant or animal and answer the following questions.

- What does it look like?
- Where does it live?
- What kind of food does it eat?
- How does it protect itself?
- How does it survive in the summer and winter?
- What other plants and animals live in the same habitat?

Students will then prepare an interpretive sign with a picture they have drawn of the plant and animal with a brief description about them and their habitat to display at the "Garden." Teacher will create a display of the pictures in the classroom.

Extensions:

John Muir always carried a journal with him to record his observations.

At each place he visited he would draw sketches and take notes of the specific plants and animals that lived in each location. Encourage young students to develop a nature journal in which they can record their own observations of the natural world. A guide to making a nature journal can be found at:

http://www.sierraclub.org/education/nature_journal.asp

• Schedule a concert at your school with environmental troubadour, Bill Oliver, "Mr. Habitat!" Visit his website at: www.mrhabitat.net

• Another terrific song about habitats is "What's That, Habitat?" by Remy

Rodden on his album, Think About the Planet:

Think About...Productions P.O. Box 11256
Whitehorse, Yukon Y1A 6N5 CANADA
(867) 333-1105
remyrodden@hotmail.com

Website: http://www.thinkabout.ca/tatp.html

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http://www.sierraclub.org/john_muir_exhibit/lessons/science/