

Mississippi Valley Archaeology Center 1725 State Street La Crosse, Wisconsin 54601 Phone: 608-785-6473 Web site: http://www.uwlax.edu/mvac/

The following lessons were created by Philip Zike, a teacher participating in a National Endowment for the Humanities Summer Institute for Teachers entitled Touch the Past: Archaeology of the Upper Mississippi River Region.

Introduction:

High School Biology Students will research how Native Americans in California used plants for medicines, food, fibers, dyes, and other purposes. The research will be an extension of units studied on basic plant biology, nutrition, and body systems.

Activity 1:

Native American Ethnobotany by Daniel E. Moerman, Timber Press, Portland, Oregon, Copyright 1998.

Using this book as a framework for their research the students will identify a Native American tribe and then see how they used a specific plant for medicine for a specific illness or disease. The book is cross-referenced so they can go from the specific tribe to the plant and a detailed description of the plant and its use .This cross-reference also lists the categories of Foods, Fibers and Dyes, and Other Uses for Native American tribes.

Activity 2:

Windows into the Past, Crow Canyon Archaeological Center's Guide for Teachers, edited by M. Elaine Davis and Marjorie R. Connolly, Kendall/Hunt Publishing Company, 2000.

Chapter 8 Plants and People page 55-62

Students take field trips to identify plants and explore ecosystems. The field trips might involve botanical drawings and use of field guides.

The Plants and People Record Activity and The Scavenger hunt Activity will be copied and given to the class.

Extension Research Activities

• Plants Used as Drugs

How do the active agents in plants work in the body and the brain

How does salicylic acid, the active ingredient in aspirin, work?

Compare western allopathic medicine with homeopathic medicine.

Explore the use of plants for ceremonial and religious purposes. (example- The use of tobacco, the use of peyote, etc).

Explore theories of addiction for drugs and alcohol

Explore the area of science and pseudoscience as to regards to claims of the curing effect of medicines used today and in the past.

• Food Extensions

Compare the diet of Native Americans with our diet today.

Identify edible wild plants in your area.

Learn how to cook Native American foods.

Make a dinner using Native American foods.

What is the difference between gardening and agriculture? How does agriculture develop?

How is food genetically engineered? What issues does genetic engineering bring up?

Explore how maple sugar is made.

Grow a garden

Explore the composting process

Explore developing a hydroponic garden

Reference:

American Indian Medicine by Virgil J. Vogel, University of Oklahoma Press, Norman Oklahoma, 1990.

"In presenting the medical practices of the New World, Vogel gives a fine picture of the historical relationship between the native Americans and the newcomers from the Old World." American West.

Most other works have tended to emphasize the shamanistic, magical, or ritualistic practices that Indians used in the curing arts, but in this volume the "practical" and (mostly) pharmacological bases of treatment and cure are studied.

Suggested Field Trips and Botany Activities

Use field guides and identification keys on nature walks.

Visit the botanical gardens in your area. U.C. Botanical Gardens.

Mills College in Oakland has a guided nature walk.

Visit the Garden Center at Menards, Home Depot, WalMart, etc.

Visit the Museum of Natural History in your area. The Oakland Museum of California has an excellent history section on California Native Americans.

Visit a health food store and see what plants are used for various ailments, etc.

Interview grandparents for "folk remedies"