

Northwest native plant identification and their uses

by Richard Marx
Staff Writer

Webster defines ethnobotany as "the plant lore of a race or people: the systematic study of such lore." This is largely what the Northwest Plant Identification and Uses class is about. Taught by botany and biology instructor Bob Misley, the class meets on Thursday afternoons.

First of all, this course will serve to introduce students to wild plants of the Pacific Northwest region, especially those species of Western Oregon. A brief study will be made on plant taxonomy (classification) including Linnaeus and the binomial nomenclature upon which all organisms are presently classified.

"Students will also be bringing in leaf and flower specimens for identification during class," said Misley.

"Here, they will learn how to use the keying system of the botanical texts. Also, we will be using several different books, notable of which is the Handbook of Northwest Flowering Plants by Helen Gilkey. This will serve as a good introduction to field of botany," Misley stated. "Besides plant identification, we will observe which plants are truly wild or native to the region and which ones are alien or non-native. These latter have either escaped from cultivation or have come in as stowaways, usually in the form of seeds, with some other materials."

Botanical terminology will be learned through another book, How to Identify Plants by H.D. Harrington. "This book's purpose is specifically to help the neophyte botanist or gardener to acquaint himself with the technical terms. Most botany texts also have a glossary of terms in the back to help one with any unfamiliar words," Misley commented.

A brief history of botany will be covered with a special emphasis on Linnaeus and the binomial nomenclature. Misley explained, "the term 'binomial' refers to each plant and animal having a two-part name for scientific classification. Think of it as like a person's



Trillium ovatum can be seen in the Native Garden, in the Pauling Courtyard, and other locations on campus. This is one of two species of trillium that is native to the Willamette Valley.

Photo by Scott Johnson

first and last name. The last name refers to the person's family while the first name refers to the individual person. Only in the Graeco-Latin, the first and last names are reversed. Take the common dandelion, which is classified as Taraxacum officinale. Taraxacum is the group or dandelion genus, while officinale refers to the species or individual kind of dandelion. It would be like my name Bob Misley, only in reverse--Misley, Bob."

The Pauling Courtyard was planned to specifically be a home for a collection of plant species native to Oregon. "Each week that we meet, the students will keep records of the various plants observed in the garden. The students will each keep a journal in which they will take notes of plants observed both in the garden and out in the field. There are several habitats in this native garden, including a marsh, dry, and moist shaded areas (for plants of various types of woodland habitat) and a dry-land rock garden for those found east of the Cascade divide

and southwestern Oregon," Misley added.

"The class will also be taking several field trips where we will be searching out wild plants in their natural environments. Included in this is the Camassia Native Plant Preserve and the woods behind the CCC campus," Misley said.

Each student will be required to identify a specific number of plants each week. On the first week, only one plant is needed and then with each additional week will be added an extra to the number. In other words, two plants for the second week, three for the third week and so on.

Also, the student is to have his own collection of plant specimens, including examples of different leaf and floral structural types. Misley emphatically stated that "this collection is to be only of individual leaves and flowers, not entire plants!"

This is so as not to damage or destroy plants as many are now becoming increasingly rare due to development, overgrazing and/or

indiscriminate collecting. There will be supervision to prevent any rare species being collected or the collecting of plants, such as trilliums, which are unable to renew their damaged parts.

"However, the major emphasis of this class is not only to teach students wild plant identification, but also to show the significance that many of these plants had for the local native American cultures," said Misley.

"The student will realize that here we have not only a pretty wild flower or tree, but also the plant in question was most likely of a very practical use to a tribe. Perhaps the plant was even necessary for the tribe's physical and/or cultural survival," Misley said.

Included in this study will be a brief examination of Oregon Indian tribes and their territories. Along with this will be some of the plants that were of major use to them. Also, the students will include on their identification cards such information as native American names and possible uses by

the tribes. One of the textbooks, Ethnobotany of Western Washington by Erna Gunther, deals with these uses.

"Although this book deals with the tribes of western Washington, the plant uses are essentially the same as for the Willamette Valley Indians," said Misley.

"As this is a hands on class, we will also learn first hand on how the Indians, and pioneers as well, derived dyes from plant materials. The students will each be assigned a specific plant from which a certain dye was obtained. Plant materials used will only be from extremely common and/or weedy varieties. Included will be horsetail rush, blackberry roots, and alder bark. White woolen yarn will be immersed into the resultant dyes, and people will be able to see how well the preparations really work."

The students also may work on optional projects as planned with agreement from their instructor. Many of these projects include photography and plant sketching.

"Some may even work on helping in working on the CCC biology department's herbarium collection. This is a collection of pressed and mounted plant specimens filed and catalogued according to their families," said Misley.

Along with uses, Misley will discuss briefly some of the biochemistry that makes up plant compositions. Covered here will be some of the various compounds relating to medicinal and herbal properties.

"Although this will be a class with much work, it will be a fun class. Occasionally, we have visitors drop by who have previously taken this class. They comment on how much they have learned and how much they enjoyed the class. This shows how much influence that a course such as this has had on people. It also reveals an expansion of one's awareness of the plant life around him and how really important plant life as a whole is to mankind," Misley said.

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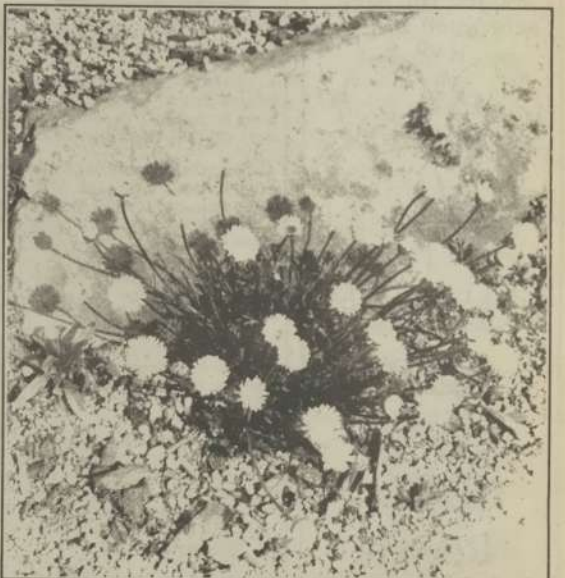
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Castilleja hispida, a species of Indian paintbrush, has been successfully raised from seed in the Native Garden.

Photo by Scott Johnson



Erigeron compositus, the mountain fleabeane daisy, feels right at home in the rock garden at Pauling Courtyard.

Photo by Scott Johnson

