The Pipe Vine

December, 1964

Next Meeting

3 December, 1964, Monday

Board Meeting 6:00 p.m.  General Meeting 7:30 p.m.  Program 8:00 p.m.

The MTL Executive Board will meet at 6:00 p.m. We encourage all board members to attend as we need your ideas and support.

Our Program begins at 8:00 p.m. featuring Dr. Wes Dempsey, Professor of Biology at Chico State University, Chico. Dr. Dempsey points out that some of our local wild plants display a confusing variety in flower and leaf characteristics, part of which is due to environment and part due to genetics. During this presentation, he will sort out these differences using numerous color slides. The topic will be "Wildflower Genetics".

Enloe Conference Hall, Fifth & Magnolia, Chico.

Fieldtrips

Leader: Mary Meyer (893-8999)

8 December, Saturday. Walking Tour of Winter Bloomers. Meet at B.E.C corner 7th & Cherry St. Easy walk of 4 miles to see 15 winter blooming plants of the Foothill Woodland. Tour begins at 10:00 a.m. and ends at 3:00 p.m.

Notes & Comments

Members are encouraged to conduct fieldtrips that will be of value and interest to other members. Come on and show what you know! Those interested in leading a fieldtrip should contact Fieldtrip Leader, Wes Dempsey at (893-6362 or 342-2293).
Featured Flora

QUAKING ASPEN (Populus tremuloides)
by Wes Dempsey

Early French trappers, so the tale is told in aspen county, believed that this
tree was named for the cross of Calvary—and the leaves haven’t stopped trembling
since.

These colorful forests decorate our colder North American highlands in a most
spectacular fashion from Mexico to Alaska and from the Atlantic to the Pacific.
With the approach of short days in the autumn (really it is the long nights
that do the actual triggering), shades of gold, yellow and even crimson blanket
the land. As the snow melts, spring brings a pink cast to the young, contorted
twigs and the whole forest projects a reddish-brown glow. The nearly round
leaves are bright green on top and silvery beneath; their flat petioles offer
little resistance to air movement and the slightest breeze sets them shimmering
in the most gratifying manner. The entire performance is sufficient to render
the observer speechless.

A whole forest may trace its single ancestry to a single seedling which ger-
minated in a sunny soil opening left by a retreating glacier ten thousand years
ago. Sprouts shoot up from the widely spreading, but shallow roots which form
a closely-spaced, interconnected assemblage. The "forest" is thus a remarkable
cluster of hundreds of stems belonging to only a single plant having a massive
root system covering a huge acreage. This organism achieves a remarkable im-
mortality: while individual shoots of the "clone" may die after 50 to 200 years,
new sprouts constantly surface and roots endlessly grow in all directions.

In each clone genetically distinct, the process of flowering, leafing-out, leaf
color formation, and leaf drop have different dates of initiation. Thus each
forest operates in a distinct unit in response to it's own genetic clock. The
mosaic of colors in the spring and fall hence give a clue to the individual
identity and extent of each clone.

See those scars high on the trunk? A bear has scratched its signature there.
A series of short scars may mark where a cub has scrambled upward in leaping-
clasping lunges. Elk and beaver also leave their toothy imprints for the
bark is their favorite food.

Peer closely between the chalky, even-sized trunks and you may see the forest
sheltering a shade-tolerant conifer such as a fir or lodgepole pine. These
uninvited guests grow rapidly in this protected environment for the aspen has
enriched the soil immensely. A fungus called Actinomyces, in the aspen roots
has the desirable ability to convert nitrogen gas into protein. Over the
centuries the happy marriage has resulted in the formation of a rich, black soil.
The sheltered and well-fed firs and pines prove to be unwelcome guests, how-
ever, for they soon overshadow the aspens, which need bright sunlight to grow.
A new kind of forest now takes its place in the landscape and the white skeletons
of aspens disappear to the black earth.

GENTIAN (Gentiana spp.) A Bitter Tonic
by Mimi Plant

The Gentians (Gentiana spp.) of the GENTIANACEAE family are an extensive group
of plants numbering around 180 species. In the state of California there are
a dozen species according to Munz. Most species are found in elevations of above
4,000 feet in wet meadows. Some of the native species located in the nearby Sierra Nevadas are, Sierra Gentian (G. holopetala), Hikers Gentian (G. simplex), Pelwort (G. amarella), Explorer's Gentian (G. calycosa) and Alpine Gentian, (G. Newberryi).

Tincture of Gentian root is used specifically as a bitter tonic in states of chronic exhaustion, weakness, general debility and loss of appetite. It is considered to be one of the greatest strengtheners and toners of the human body.

The chemical constituents of the dried roots contain gentiin and gentianiarin, both bitter glucosides, together with gentianic acid and gentiopicrin (another bitter glucoside), dextrose, levulose, sucrose, and gentianose (a crystallizable, fermentable sugar).

This plant naturally grows in the mountains where there is an abundance of oxygen uncontaminated by civilization and its fumes. The very life of Gentian (Gentiana spp.) depends upon fresh oxygen and it stores vast quantities of condensed oxygen in its roots. This may seem a reversal of the natural process of a plant absorbing carbon dioxide and releasing oxygen, but owing to the abundance of oxygen found in its natural habitat and its ability to store it, oxygen predominates while carbon dioxide is at a low ebb. The high oxygen content gives it a bitter principle which acts as an exhilarating tonic. The tonic effects are also dependant upon its content of organic potassium, sodium and iron.

Combined with plants that are rich in iron, tincture of Gentian becomes an herbal iron tonic. By enabling more iron and oxygen to be carried and released to the cells and tissues it increases hemoglobin in anemias and counteracts general weakness in the human condition.

In the Eighteenth Century, Gentian was drunk as an apertif before dinner to stimulate the appetite and aid digestion. Gentian (Gentian spp.) is the chief ingredient in Agnostura Bitters and even today a knowledgable bartender will pour a few drops of bitters on a lime to ease the discomfort of his customers hangover.

According to Sue Taylor's "Syllabus for the Medicinal and Edible Native Plants of Butte County" CSUS, 1977, there are nearly 250 weeds in Butte County almost all of which have medicinal, edible or other uses. She points out that these plants have been overlooked as a source of free food and simple healing medicine and that any herb book will describe the most common and useful species.

The plants mentioned herein are not to be used in the place of a physician/healer without proper guidance, nor is experimentation with these plants encouraged. This is better left to Herbalists and Pharmacognasts.

Reference material for this article:

* "Syllabus for the Medicinal and Edible Native Plants of Butte Co, California". 1977. Taylor. CSUS.
Members are encouraged to submit articles to the Pipevine. All articles, presentations, and fieldtrips must be submitted to the Herbarium, Chico State University, Chico to the attention of the Newsletter Editor or mailed to the same by the 15th of each month for the following issue.

The Mt. Lassen Chapter of the California Native Plant Society

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