

Kelseya uniflora

KELSEYA

Newsletter

of the

Montana Native Plant Society

Winter, 1989

Vol 2, Number 2



TIMBERLINE: WHAT, WHERE, WHO AND WHY

- Sue Trull

WHO'S WHO AT TIMBERLINE

Alpine Larch

Larix lyallii

Needles 4-angled in cross-section, 2.5-3cm, stiff, short-pointed, pale blue-green turning yellow in autumn, then falling; borne crowded in a cluster on short spur twigs, as well as scattered singly along leader twigs (current year's growth).



Engelmann spruce

Picea engelmannii

Needles 4-angled in cross-section, 1.5-2.5cm long, stiff, sharp-pointed, dark green to blue-green; borne singly on peglike persistent bases, divergent on all sides of the twigs.



(continued on page seven)

One of the common native plant growth phenomena in Montana is the timberline. Properly speaking, there are two of these barriers to the spread of trees: a lower, drought-induced timberline and an upper, abrupt or transitional, timberline. It is this upper boundary which the word connotes for most of us, and which is considered here.

Worldwide, timberline occurs at varying elevations, from over 13,000' in the tropics to near sea level in Alaska. Timberline varies with other factors than latitude, including continentality - timberlines are higher on more inland mountains; aspect - sunny slopes have higher timberlines; and topography - valley heads and passes have lower timberlines while ridges may have higher timberlines than the surrounding mountainsides. Timberline also varies with the species involved, with the occurrence of natural disturbances such as avalanches, volcanic eruptions, gales, fires, insects or disease, and with the activities of man. Despite these local exigencies, the location of timberline correlates well with the 10-degree-Centigrade July isotherm, or summer warmth: if the mean July temperature does not equal or exceed 10° C, trees cannot long survive.

There have been many theories attempting to explain timberline, based on cold, shortness of growing season, or harshness of environmental conditions. The actual explanation seems to be a combination of these. Apparently the limited growing season prevents both adequate development of cuticle and abscission scars, and complete lignification of shoots and terminal buds, necessary to resist the desiccation of winter. The short season at high elevations may also not provide sufficient time for ripening, i.e. an increase in cell solutes and a decrease in cellular free water that allows plant protoplasm to tolerate drying. The hardiest conifers are thought to need at least two months without hard frosts in order to ripen. Less hardy species like spruce may need three months.

In the northern temperate zone, conifers are the dominant timberline species; in the southern hemisphere and tropics, deciduous trees and tree ferns may form the boundary. These plants exhibit morphological adaptations that help them to survive. For example, the typical triangular shape of evergreens easily sheds snow. Alpine larch, *Larix lyallii*, which may be the hardiest species of all, has flexible branches which spring back after snow loads and bare twigs in winter that are less easily broken by the weight of snow.

Harsh conditions further shape the tree population at timberline. Snow creep may induce "butt sweep" in trees, where the

(continued on page seven)

FROM THE PRESIDENT ...

Here's to 1989, may we take more time to appreciate and work for the tremendous resources of our planet.



On October 22, 1988, your Board of Directors met in Helena for hours and hours. The highlights follow. Treasurer John Pierce let us know that there is \$1,600 in the bank. Our total income since inception has been \$3,568: \$3.100 from dues and \$468 in donations.

We'd like to have next summer's field trips organized by mid-March, so they can be included in the Spring 1989 KELSEYA. Jan Nixon will coordinate this. Send her a list of places you would like to visit and don't be shy about volunteering to lead a trip to an area of your interest! A final list will be available by mid-May which can be posted in likely places (schools, public libraries), and given to Chambers of Commerce, etc, to help publicize our trips.

Regarding the question of advocacy for our Society, we decided the answer was in our Bylaws. The purpose of our group is stated as follows:

"...the preservation, conservation and study of the native plants and plant communities of Montana and the education of the public to the values of the native flora and its habitat."

We defined "advocacy" as education on both sides of conservation issues. We agreed that

it was appropriate for a member to testify on specific issues, as long as the testimony dealt with facts and did not urge or recommend a particular course of action.

The present slate of officers was voted in last spring for a two-year term. We decided it would be better to stagger the terms, to provide greater continuity. With the flip of a coin, the terms of President and Treasurer will be up for election this coming spring. The current terms of Vice President and Secretary will run to spring of 1990. See information elsewhere in this issue about nominees and balloting.

To gain a broader representation of our membership, we added two Directors-at-Large to the Board, to be chosen from areas that do not have organized chapters. We welcome Penny Latham, Troy, representing Western Montana, and Blaine Mooers, Sidney, representing Eastern Montana.

The plant lists assembled from field trips are a valuable resource. Steve Harvey is developing a database from these lists, and we'll eventually have an index of areas that have plant lists available (watch upcoming issues of KELSEYA) for your use when planning outings, etc.



PUT THIS DATE ON YOUR CALENDAR NOW!

Our second annual Spring Meeting is tentatively set for **May 14 in Helena**. Full details will be in the Spring issue of KELSEYA, which will be out in April.

If you have ideas or help to offer, Steve Shelly (442-8567, P O Box 9082, Helena, MT, 59604) would love to hear from you.



KELSEYA

KELSEYA is the newsletter of the Montana Native Plant Society, published quarterly. We welcome your articles, clippings, field trip reports, meeting notices, book reviews, cartoons or drawings - almost anything, in fact that relates to our native plants or the Society.

Drawings should be done in black ink with a fine-point pen. If you send clippings, please note the source, volume/issue and date. We especially need short (one to three paragraph) items which can be tucked in anywhere.

Deadline for the Spring issue is MARCH 17; newsletters will be mailed the first week in April. Send all material to: Jan Nixon, P O Box 992, Bozeman, MT, 59771-0992.

KELSEYA, Winter 1989

BOARD OF DIRECTORS

PRESIDENT - Kathy Ahlenslager
Missoula 542-0522

VICE-PRESIDENT - Shelly Bruce
Bozeman 587-3400

SECRETARY - Wayne Phillips
Great Falls 453-0648

TREASURER - John Pierce
Missoula 542-2640

NEWSLETTER EDITOR - Jan Nixon
Bozeman 586-6532

DIRECTORS-AT-LARGE:
Eastern Montana - Blaine Mooers Sidney

Western Montana - Penny Latham Troy

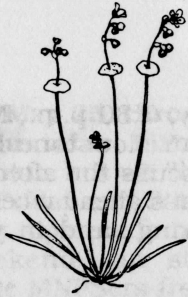
CHAPTER REPRESENTATIVES:
Clark Fork Chapter - Roxa French
Stevensville 777-3510

Flathead Chapter - Anne Morley
Swan Lake 886-2242

Valley of the Flowers Chapter - Jan Nixon
Bozeman 586-6532

Page Two

PROFILE: MONTANA'S NATIVE PLANTS



Miner's Lettuce

Montia [Claytonia] perfoliata

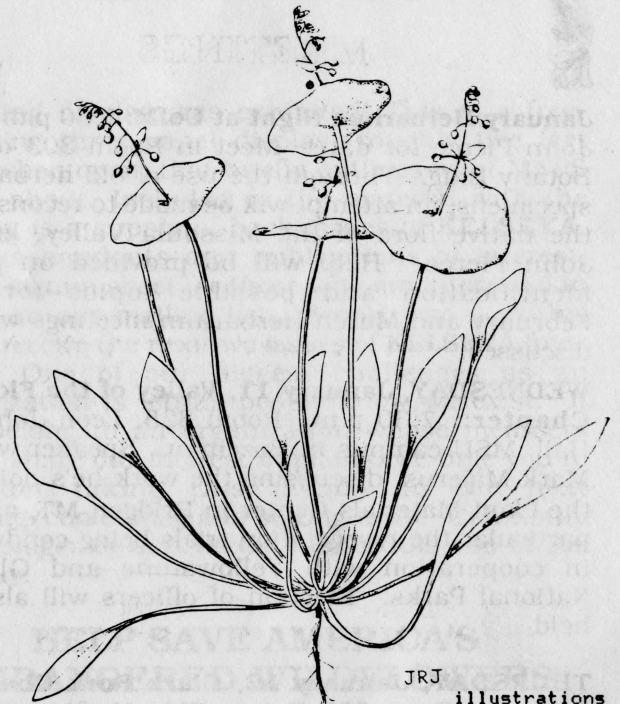
Portulacaceae - Purslane Family



Miner's lettuce is an extremely variable species depending on where it grows, but it can always be recognized by the little disk or "saucer" of leaves found just under the flower cluster. Plants that grow in shady, moist places are green in color, up to 20" tall and have long slender leaves growing upright from the base of the plant. Those that grow in sandy soils in exposed areas are often reddish in color, only a few inches tall, and have short spoon-shaped leaves arranged in a rosette around the base. These sometimes start to bloom when they are only an inch tall, early in the spring while there is still moisture in the sand.

Flowers are pink or white and less than a quarter-inch across, but the "saucer" of leaves below them gives the appearance of a tiny nosegay. Each flower eventually turns into a seed-pod containing three shiny black seeds which are forcefully shot out when ripe. These remain in the soil and germinate the following spring.

The name "miner's lettuce" was given because old-time miners in the West used these as a source of fresh salad greens or pot-herbs which taste much like spinach. As these plants are



illustrations
reprinted from C.L. Hitchcock
et al, VASCULAR PLANTS OF
THE PACIFIC NORTHWEST

native to much of the West in a great variety of habitats and are very abundant in places, they were often used by both Indians and pioneers for food. *Montia perfoliata* was also introduced into Western Europe, where it is grown in herb-gardens and has become a common escapee.

- Reprinted from DOUGLASIA,
Newsletter of the Washington Native
Plant Society, Spring 1988

WILDFLOWER SEEDS - ECONOMICAL AND SATISFYING

Vivid wildflowers, adapted to a wide range of locations, are outstanding additions to home landscapes. To encourage gardeners to grow more native plants from seeds or spores, the New England Wild Flower Society offers for sale more than 150 varieties of wildflowers and ferns in its 1989 Seed List.

Included in the list are natives for woodland, wetland and meadow gardens. Early blooming wildflowers add color to spring shade gardens while many of the sun-loving varieties are vibrant splashes in summer borders.

All requests for the 1989 Seed List must be received by March 1; seed sales close March 15. Requests will be filled in the order received. The Seed List is an adjunct of the Society's world-wide distribution effort.

Send a self-addressed #10 (business size) 45-cent stamped envelope to: Seeds, New England

KELSEYA, Winter 1989

Wild Flower Society, Garden in the Woods,
Hemenway Rd, Framingham, MA, 01701. No
requests for lists will be honored without the
stamped envelope.



WE'RE GETTING TALKED ABOUT!

The "West of the Divide" section of the publication **Columbiana** carried a nice writeup on MNPS in its Summer '88 issue. Freelance writer Julie Hoffman talked to a number of MNPS members in the Missoula area, went on a field trip or two and visited some local gardens which make use of natives in landscaping. Her article includes a sidebar "Don't Dig First and Think Later!" which emphasizes some of the ethics of collecting natives. If your local library does not carry this magazine, ask them to get it for you.

Page Three

MEETINGS

January Herbarium Night at UofM: 7:30 p.m., call John Pierce for date. Meet in Room 303 of the Botany Bldg. Through the use of old herbarium specimens, an attempt will be made to reconstruct the native flora of the Missoula Valley, led by John Pierce. Help will be provided on plant identification and possible topics for the February and March Herbarium meetings will be discussed.

WEDNESDAY, January 11, Valley of the Flowers Chapter: 7:30 p.m., Room 325, Leon Johnson Hall, MSU campus in Bozeman. Speaker will be Mark Majerus, discussing the work he's doing at the Plant Materials Center in Bridger, MT, and in particular the revegetation trials being conducted in cooperation with Yellowstone and Glacier National Parks. Election of officers will also be held.

THURSDAY, January 12, Clark Fork Chapter: 7:30 p.m., Room 307, Botany Bldg, U of M campus, Missoula. Sheila Morrison, a photographer from Missoula, will present a slide show entitled "Wildflowers of the Lee Metcalf National Wildlife Refuge."

WEDNESDAY, January 18, Flathead Chapter: 7 p.m., Montana Power Meeting Room, Meridian St in Kalispell. Business meeting followed by a program featuring Maria Ash with an exciting slide show on her summer's adventures while researching her wildflower book.

February Herbarium Night, UofM Herbarium, date to be announced: Botany Bldg, Room 303, 7:30 p.m. Call Kathy Ahlenslager for details, 542-0522.

THURSDAY, February 2, Helena Chapter Organizational Meeting: 7:30 p.m. in the large conference room of the Lewis & Clark Public Library, 120 S. Last Chance Gulch. Featured speaker will be Wayne Phillips, from the Lewis & Clark National Forest, with a slide presentation, "The Orchids of Montana." A business meeting will be held afterward to discuss chapter establishment.

THURSDAY, February 9, Clark Fork Chapter: 7:30 p.m., Room 307, Botany Bldg, U of M campus, Missoula. Keith Boggs, Plant Ecologist at the Western Agricultural Experiment Station, Corvallis, will present "Ecology and Biological Control of Spotted Knapweed."

MONDAY, February 13, Valley of the Flowers Chapter: this is our annual joint meeting with the

Page Four

Sacajawea Audubon Society, 7:30 p.m., Museum of the Rockies, Bozeman. Yellowstone National Park's Don Despain will discuss the aftermath of last summer's fires and what's ahead when things start to green up next spring...and in years to come.

WEDNESDAY, February 15, Flathead Chapter: 7 p.m., Montana Power Meeting Room, Meridian St in Kalispell. Business meeting followed by a program.

March Herbarium Night, UofM Herbarium: Call Kathy Ahlenslager or John Pierce for date.

WEDNESDAY, March 8, Valley of the Flowers Chapter: 7:30 p.m., Room 325, Leon Johnson Hall, MSU campus in Bozeman. Dr John Rumely, professor emeritus of Botany and former curator of the MSU Herbarium, will present Part One of "Recognizing Montana's Natives in Winter." Part Two will be a hands-on session on March 11; see FIELD TRIPS for details.

THURSDAY, March 9, Clark Fork Chapter: 7:30 p.m., Room 307, Botany Bldg, U of M campus in Missoula. Dr Steve Cooper, a forest ecologist from Missoula, will present "Forest Habitat Types: What Are They and How Are They Used?"



FIELD TRIPS

SATURDAY, February 18, Clark Fork Chapter: Winter Botany Field Trip. Peter Stickney from the Intermountain Forest Sciences Laboratory in Missoula will lead a walk up the Clark Fork River, guiding participants in the identification of plants in winter condition. Meet at 12:45 p.m. in front of the University Bookstore. Wear warm clothes! Bring a hand lens and a copy of **Winter Field Key to the Native Shrubs of Montana**, if you have them.

SATURDAY, March 11, Valley of the Flowers Chapter: Part Two of "Recognizing Montana's Natives in Winter," led by Dr John Rumely. Meet at 10 a.m. in Whitehall, near the big bell in the long park on Main St. We'll work our way east and up, learning winter-condition plants in a variety of habitats.

Hope all of you MNPS members in Butte, Whitehall, Ennis and Dillon will join us, even if you can't make it to Part One (See MEETINGS, March 8). Bring a hand lens, notebook and lunch. We'll be done around 4 p.m.

(continued on next page)

KELSEYA, Winter 1989

FRIDAY, May 25, through MONDAY, May 28, Big Horn Mountains: Plans for this trip are tentative at this point, but we'll set up a rendezvous point for both Friday and Saturday, so that those of you who can't squeeze four days out of the Memorial Day weekend can still make the trip. We encourage MNPSers from anywhere in the state - or other interested folks - to join Steve Harvey in examining one of the most botanically-interesting areas in Montana. Correct collection procedures will be demonstrated also, for those of you who need to brush up your skills.



ANNOUNCEMENTS

THE SOCIETY FOR ECOLOGICAL RESTORATION AND MANAGEMENT

The newly-organized Society for Ecological Restoration and Management will hold its first Annual Meeting on January 16-20 in Oakland, CA.

The conference will bring together researchers and managers who deal with the restoration of native ecosystems to discuss recent advances in the discipline and to present the results of current research and projects.

Topics covered in the various sessions will include habitat creation, community and ecosystem restoration, vegetation establishment, plant and animal reintroductions, planning and design, collecting of material, site stabilization, hydrology, irrigation, administration, and many other legal, political, social and philosophical matters pertaining to the challenge of ecological restoration.

Several MNPS members are planning to attend, and we hope to have a report in a future issue of **KELSEYA**.

For additional information, contact:

Donald Falk, Center for Plant Conservation, Jamaica Plain, MA, (617)524-6988.

Bill Halvorson, National Park Service, Ventura CA. (805) 644-8157.

John Rieger, California Department of Transportation, San Diego, CA, (619) 237-6754.

THIS IS A TEST....

What do the Montana Academy of Science, State Association of Nurserymen, Greater Yellowstone Coalition, State Association of Foresters, Montana Wilderness Association and Gallatin County Weed Day all have in common?

These organizations all held meetings or conferences this past year at which our MNPS

KELSEYA, Winter 1989

traveling display was exhibited! This is a free-standing three-panel display, roughly five feet wide when open, that briefly outlines what MNPS is all about. Included in the material with the display is a supply of back issues of **KELSEYA**, various handouts and publications of interest, and a signup sheet for those who are interested in being on our mailing list. People who sign this sheet receive the next two issues of **KELSEYA** free.

One of our biggest challenges as an organization is letting people know we exist. If you belong to an organization whose members might share our interest in plants, we urge you to consider taking this display to the next meeting/conference and setting it up. Call Kathy Ahlenslager or Jan Nixon to schedule use of the display.

HELP SAVE AMERICA'S ENDANGERED WILDFLOWERS

Many of America's most treasured wildflowers are threatened with extinction. In fact, experts estimate that one-tenth of the taxa native to the United States is in jeopardy. In Hawaii, forty or even fifty per cent of the native plants - all of which exist nowhere else in the world - share this status. About 240 plants in this country are extinct or feared extinct; another 450 are found only in dangerously small populations.

Help save our endangered wildflowers by purchasing the American Horticultural Society's 1989 ENDANGERED WILDFLOWERS Calendar. Funds raised from sales are used to support conservation projects, including the Society's Wildflower Rediscovery Award project.

Proceeds from sales of the calendar will enable AHS (a national, non-profit organization for gardeners) to award up to \$250 to non-profit organizations whose members first provide confidential information specifying the location of any plant thought by conservation authorities to be extinct. Individuals who make these discoveries will also be eligible for rewards of up to \$100. For a list of plants thought to be extinct, please send a stamped (45 cents) self-addressed business size envelope to: Wildflower Rediscovery Project, American Horticultural Society, P O Box 0105, Mount Vernon, VA 22121.

The attractive wall calendar (8.5 x 23 inches when open) features beautiful color photographs of endangered plants from all over the United States. Each photograph is accompanied by a discussion of the taxon and the factors which cause it to be threatened. Calendars are \$6.95 each. Order from the AHS address given above.

(continued on page six)



RECIPES for the EDIBLE WILD

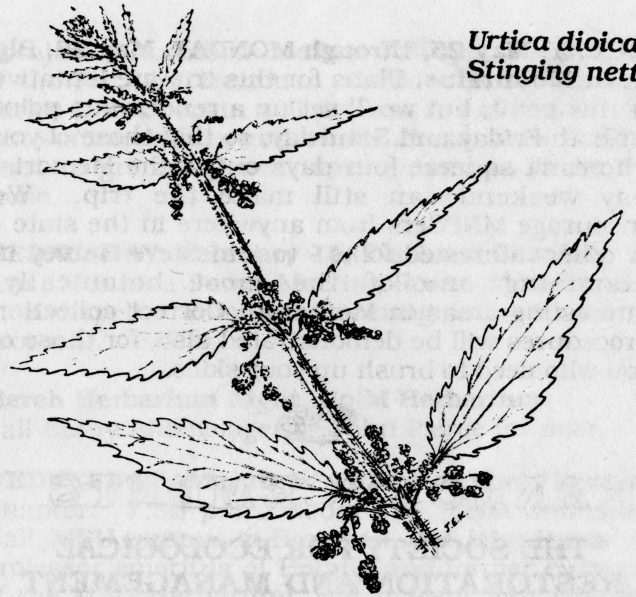
NETTLES...BETTER THAN SPINACH EVER THOUGHT OF BEING!

For a tasty cooked green, you can't beat *Urtica dioica*! This widespread, "weedy" denizen of waste ground, farmyards and riparian areas has something of a bad reputation from its ability to raise painful welts on unwary arms or legs that come in contact with the plant. But the stinging hairs dissolve in boiling water, leaving only the flavorsome, vitamin-packed greens.

Look for a tall, strongly-growing plant with square stems and opposite, sharply-toothed leaves, both generously covered with crystalline, stinging hairs. Cascades of small, inconspicuous greenish flowers hang from the axils of the leaves.

Pick only the young upper leaves; older ones are tough. Plants cut back by midsummer will produce a new crop of tender leaves quickly. And as an early-spring green, small rosettes of reddish-tinged leaves can be spotted almost as soon as the snowpack melts away, budding from the the vigorous rootstock..

Leaves can be steamed or boiled in a small amount of water. Don't overcook! And don't discard the cooking water - it's full of vitamins and can be used as a tea.



Urtica dioica
Stinging nettle

illustration
reprinted from D.R. Kirk,
WILD EDIBLE PLANTS OF THE
WESTERN UNITED STATES

ANNOUNCEMENTS, continued

STALKING THE WILY KELSEYA

Kelseya uniflora, the emblem of MNPS, has probably not been seen by many members of the Society. On April 17, 1988, I found *Kelseya* within easy walking distance of a road northeast of Helena, following directions supplied by Kathy Ahlenslager from the specimens in the U of M Herbarium.

Most of the plants observed had finished blooming, but a few were accessible and in full bloom at the time.

Directions to the 'find' are: from Helena take State Highway 280 northeast past the Helena airport 19.5 miles to York, MT; turn left at York on the old Figure-8 route about 8 miles to Nelson, MT; turn left a quarter-mile to Hunter's Gulch and then right up the gulch to a campsite at road end, about half a mile. After an easy hike of about a mile along Hunter's Creek into the Gates of the Mountains Wilderness, the trail turns left to climb out of the canyon. On the opposite side of the canyon (the right side facing upstream) a knife-edged limestone outcrop projects out of the mountainside about 100 feet high, running vertically from the very top of the mountain to the bottom of the canyon. This outcrop meets the creek about 200 yards above the bend in the trail. Mats of *Kelseya*, growing from cracks in the

limestone, liberally speckle the outcrop from top to bottom of the mountain, an estimated elevation change of 1,000 to 1,500 feet.

- Dee Strickler



LEGISLATIVE ACTION

As we go to press, it's too early to know exactly what bills may be introduced in the State Legislature that will be of concern to MNPS members. However, the Montana Environmental Information Center has recapped the information on one topic which many of us are interested in - forest practices - and MEIC's Meg Nelson has passed along the information to KELSEYA.

The 1987 Legislature asked for an interim study after it failed to pass the Forest Practices Act introduced by Rep. Ben Cohen (D-Whitefish). The Environmental Quality Council (EQC) recently completed its final report on the interim study, with comments focused on two specific areas: forest practices and watershed effects.

If you're interested in obtaining more information on EQC's report and the forest practices issue, write Montana Environmental Information Center, P O Box 1184, Helena, MT 59624.

TIMBERLINE, continued from page one

lower trunk runs parallel to the ground before curving upwards. Wind and ice cause flagging and krummholz - "elfin wood" - formation. In especially severe conditions trees may exist only as cushions, since any projection above the protective snow layer does not survive. In some areas, just below tree limit, ribbon forest/snow glade complexes occur, perpendicular to the prevailing winds. Snow accumulation in the lee of trees prevents seedling growth so that strips of forest alternate with wet meadows.

In fact, there's a tradeoff between the protection against drying and ice-scouring afforded by snowpack and the potential for increased damage from snow molds. There is some evidence that Engelmann spruce (*Picea engelmannii*) and subalpine fir (*Abies lasiocarpa*) at timberline contain higher concentrations of peroxidase enzymes than their lower-elevation counterparts. These enzymes are believed to help avoid infections by fungi encouraged by prolonged coverage by snowpack.

Clearly, timberline is a complicated and fascinating phenomenon. This winter you may observe the freezing and desiccating conditions which seem to be most responsible, as well as the individual tree responses to these conditions.

Sources/further reading:

- Arno, S.F., and R.P. Hammerly. 1984. **Timberline**, The Mountaineers, Seattle, 304 pp.
- Billings, W.D. 1969. Vegetational patterns near alpine timberline as affected by fire-snowdrift interactions. *Vegetatio* 19:192-207.
- Grant, M.C., and J.B. Mitton. 1977. Genetic differentiation in growth forms of Englemann spruce and subalpine fir at tree line. *Arctic and Alpine Research* 9(3): 259-263.
- Ives, J.D., and R.G. Barry (eds.) 1974. **Arctic and Alpine Environments**, Methuen, Great Britain, 999 pp.
- Tranquillini, W. 1979. **Physiological Ecology of the Alpine Timberline**, Springer-Verlag, New York, 137 pp.
- Wardle, P. 1974. Alpine Timberlines. IN: Ives and Barry (eds.), pp 371-402.

WHO'S WHO AT TIMBERLINE

Subalpine fir

Abies lasiocarpa

Needles flattened in cross-section, 2-4.5cm long, dark green with whitish lines on both surfaces; borne singly at right angles to the twigs, crowded, in two rows.



Whitebark pine

Pinus albicaulis

Needles 4-7cm long, stiff, short-pointed and dull green with faint white lines; borne in bundles of five.



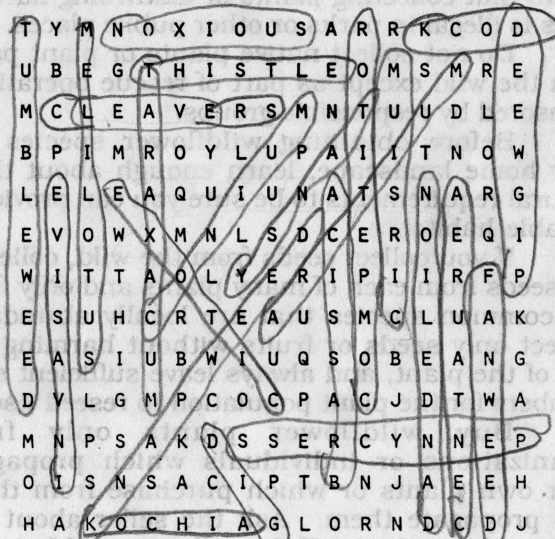
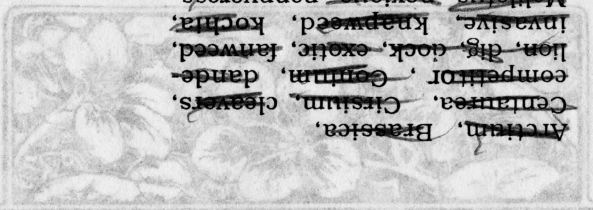
illustrations
reprinted from T.S. Elias, THE
COMPLETE TREES OF NORTH AMERICA

WORD SEARCH

See how many words you can find in this month's puzzle that relate to WEEDS. Included are common names, scientific names and terms used to describe weeds...or what you do to them.

Words to look for are:

~~Arctium, Bristle, Centaurea, Cirsium, cleavers,~~
~~compeltor, Centum, dande,~~
~~lion, dog, xotic, fatweed,~~
~~invasive, knapweed, Kochia,~~
~~Methus, noxious, pennywort,~~
~~pigweed, pull, tansy, Taraxacum,~~
~~thistle, tumbleweed,~~



A NOTE ABOUT OUR MASTHEAD:

This month's masthead features two drawings of our "mascot", *Kelseyia uniflora*, by Jean Pfeiffer of Missoula. Next issue will also feature a *Kelseyia* design, by Anne Morley. You'll have a chance to vote on your favorite at the Spring Meeting.

Richard Prodgers
2715 Ottawa
Butte, MT 59701

2/89

(c) Copyright 1989
Montana Native
Plant Society

WILDLLOWER CONSERVATION GUIDELINES

-Reprinted from **THE COLUMBINE, Operation Wildflower Newsletter of the National Council of State Garden Clubs**

Let all your acts reflect your respect for wild plants (including herbs, shrubs and trees) as integral parts of natural landscapes. Remember that every time you pick a flower or disturb a patch of wildflowers, your action affects the natural world, and that the cumulative effect of many people can be particularly harmful.

When photographing wildflowers or inspecting them closely, take care not to disturb the surrounding vegetation. Trampling can damage nearby seedlings or roots.

Report unlawful collection of plants to proper authorities and, when necessary, remind others that collecting plants or disturbing natural areas is illegal in parks or other public places.

Do not collect native plants or plant parts from the wild except as part of rescue operations sponsored by responsible groups.

Before obtaining wildflower species for your home landscape, learn enough about their cultural requirements to be sure you can provide a suitable habitat.

If you collect seeds from the wild, collect a few seeds from each of many plants and only from the common species that are locally abundant. Collect only seeds or fruits without harming the rest of the plant, and always leave sufficient seed numbers for the plant population to reseed itself.

Buy wildflower plants only from organizations or individuals which propagate their own plants or which purchase from those who propagate them. Ask the seller about the origins of the plants. If the seller is unable to tell you a plant's origin, don't purchase it. Lists of

nurseries which state they sell only nursery propagated plants are offered by such organizations as the New England Wild Flower Society.

Buy wildflower seeds only from companies that collect responsibly. Lists of responsible seed suppliers are also available from such organizations as the New England Wild Flower Society.

Encourage the use of native and naturalized plants and seeds in home and public landscapes. Avoid species from other areas that might become invasive and crowd out your state's most desirable species.

If you pick wildflowers, dried seed stalks or greens for home decoration, use only common species which are abundant at the site. Leave enough flowers or seeds to allow the population to reseed itself. Avoid picking herbaceous perennials such as lady-slippers, jack-in-the-pulpits or gentians that need to retain their vegetative parts to store energy for next year's development. Avoid cutting slow-growing plants such as running cedar or partridgeberry for Christmas wreaths or other decorations.

If you learn that an area is scheduled for development, notify your Wildflower Preservation Society so that there is an opportunity to discuss with the developer a compatible development alternative or to conduct a rescue operation. Botanical gardens may provide a better habitat over a home garden for a number of rescued plants.



Collection Name:

Collection Number:

Series Number:

Box Number:

Folder Number:

Archives and Special Collections, Mansfield Library
The University of Montana