

Bulletin of the
**NATIVE PLANT SOCIETY
OF OREGON**

Dedicated to the enjoyment, conservation, and study
of Oregon's native vegetation

VOLUME 24 NUMBER 11

NOVEMBER 1991

ISSN 0884-599

OUR 30TH ANNIVERSARY YEAR

IMPORTANT NOTE TO FIELD TRIP PARTICIPANTS

Field trips take place rain or shine, so proper dress and footwear are essential. Trips may be strenuous and/or hazardous. Please contact the trip leader for information about difficulty, mileage, and terrain. Participation is at your own risk. Bring water and lunch. All NPSO activities are open to the public at no charge (other than carpool mileage), and friends, newcomers and visitors are always welcome.

Notice to field trip chairs and leaders: The Forest Service and other Federal agencies have set policies limiting group size in wilderness areas to 12. The reason for this is to limit the human impact on these fragile areas. Each group using wilderness must be no larger than 12.

Blue Mountain

4 Nov., Mon.

MEETING. 7:30pm in Room 130, Morrow Hall, Blue Mountain Community College. Program to be announced.

Corvallis

11 Nov., Mon.

MEETING. 7:30pm in the Herbarium Library (Rm. 4083) Cordley Hall, OSU. Tom Kaye will talk on the "Reproductive Ecology of Bradshaw's *lomatum*".

Emerald

13 Nov., Wed.

MEETING. 7:30 pm in the Library, Kennedy Middle School, 2200 Bailey Hill Road, Eugene. Peter Zika will show slides and speak on: "Changes in the Alpine Flora of New England in the last 100 years." For more information, call Jenny Dimling, 343-3242. Note: This meeting has been moved from Monday to Wednesday because of the Veteran's Day Holiday.

16 Nov., Sat.

FIELD TRIP: Cheshire Mayrsohn will lead a mushrooming trip to the coast. Bring lunch, raingear, boots, basket and knife. Leave from South Eugene High School parking lot, corner of 19th and Patterson at 9:30am. For more information, call Cheshire (689-8189).

14 Dec., Sat.

FIELD TRIP: Rhoda Love will lead a winter tree and shrub ID walk at Mt. Pisgah Arboretum. Each participant will receive a revised winter twig key. Bring hand lens, pocket knife and ruler. Lunch and drink optional, as this trip will end around noon. Leave from South Eugene High School parking lot, corner of 19th and Patterson at 10am. For more information, call Rhoda (345-6241).

9 Dec., Mon.

HOLIDAY SOCIAL. 7:30 pm at Rhoda Love's house, 393 FulVue Drive, Eugene. (Take South Willamette St., then Crest Drive, turn left a block above Wayne Morse Ranch Park.) Holiday Party with snack potluck and potpourri of members' slides. Bring a snack and 10-15 of your favorite slides of 1991. For more information, call Rhoda Love at 345-6241.

High Desert

For information, call Bill Hopkins (388-7434).

Mid-Columbia

6 Nov., Wed.

MEETING. 7:30pm at the Mosier School. Nancy Lankford, the Pacific Yew Coordinator for the US Forest Service, will give us a comprehensive overview of the Pacific yew, including its characteristics, historical use, marketing and conservation efforts.

4 Dec., Wed.

MEETING. 7:30pm at the Mosier School. Keith Chamberlain will present a slide show featuring the botanical highlights of his travels over the past year.

North Coast

26 Nov., Tue.

MEETING. 7pm at the Tillamook People's Utility District offices, Carl Rawe Meeting Room, 1115 Pacific, Tillamook. Al Krampert will continue his presentation on plant morphology. For more info. call Jim Winslow (842-2246) after 5pm.

FIELD TRIP: Call Jim Winslow (842-2246) after 5pm for information.

Portland

12 Nov., Tue.

MEETING. 7pm at First United Methodist Church, 1838 SW Jefferson St., Portland. Roger Yerke will talk on ferns.

Siskiyou

14 Nov., Thurs.

MEETING. "The Ashland Greenway Project" will be the subject of a presentation by Karen Smith. We will discuss native plants and plant communities in the proposed greenway. 7:30pm in Room 171 of the Science Building at Southern Oregon State College. The public is invited. For information, call David Kennedy (535-6383).

Umpqua Valley

14 Nov., Thurs.

MEETING. View John Burks' collection of gymnosperm cones. 7pm in Rm. 310 of the Douglas County Courthouse, Roseburg.

16 Nov., Sat.

FIELD TRIP. Gymnosperms and their habitats. Carpool from the BLM parking lot, 777 Garden Valley Rd., Roseburg at 9am.

Willamette Valley

18 Nov., Mon.

MEETING. 7pm at First United Methodist Church, Room 225, 600 State St., Salem. Our speaker this month is Dr. Susan Kephart, a Professor of Biology at Willamette University. Her slide presentation will address "Biodiversity--a Focus on the Tropics". For more info., call Kathy Connelly (393-1834).

16 Dec., Mon.

MEETING. 7pm at First United Methodist Church, Room 225, 600 State St., Salem. Wilbur Bluhm, a local native plant authority, will give a slide presentation on "Native Rhododendrons and their companion plants". For more info., call Kathy Connelly (393-1834).

William Cusick

For information, contact Paula Brooks (523-7564).

WELCOMING OUR NEW MEMBERS....

We have 19 new members to report as of October 3rd!

Corvallis Chapter	Joe Mailander Julie Summers
Emerald Chapter	Alex Kelly Molly Widmer Neils Christainsen
High Desert Chapter	Nancy London Richard W. Mayberry
North Coast Chapter	Jean P. Gammon
Portland Chapter	Arlan J. Madsen Fred Small Karen Sims Margaret Steere
Siskiyou Chapter	Alice Whited & Harvey Martin Alison Arnold Fred & Annick Flaxman
Willamette Valley Chapter	Don Renfro Douglas Malcolm Chadwick Ila M. Lemons

GRAZING: ISSUE OF THE 90'S

"The NPSO does not have a grazing policy. There has been some discussion of developing one. I'd like to hear from NPSO members on this issue...Let me know what you think."

With this call for an open discussion on cattle, grazing and range issues, Stu Garrett two months ago unleashed a flurry of letters and the exchange of many viewpoints on what has over the past couple of years become the most talked-about subject of concern for our society and for many others involved with management of our lands. There have been more references to cows, cattle, grazing and related issues in the *Bulletin* over the past year than on any other subject. Though no official policy has been established by the NPSO, there has been no shortage of activism on the part of some of its members in opposition to grazing. A review of articles from the *NPSO Bulletin* on grazing will bring up many interesting bits of information and history. See the sidebar on page 129 for a listing from the past year and a half.

Opinions about grazing fall into four general categories, each of which has some merit and which are held by a variety of people. The four positions can be summarized as follows:

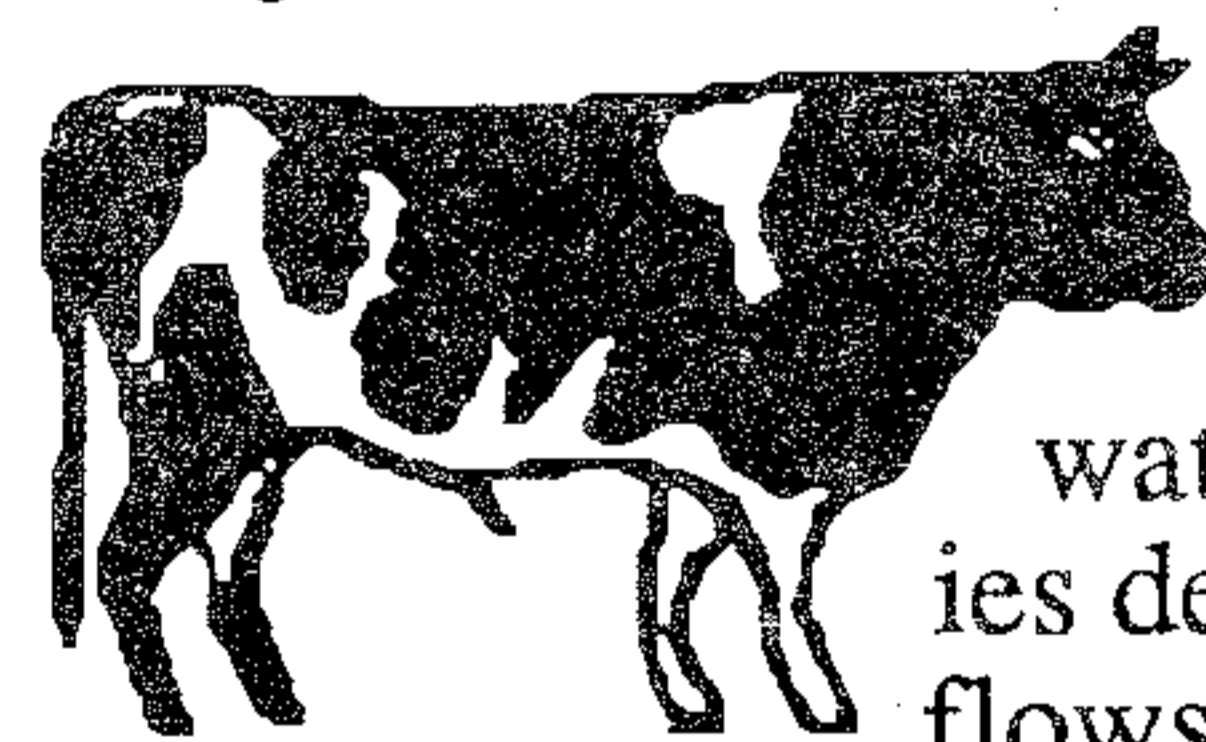
- 1) 'Overgrazing is the problem, and less grazing, combined perhaps with proper timing and other techniques will solve the problem.' This is the position held by some government agencies and ranchers, and a few conservationists.
- 2) 'Wise grazing can actually be beneficial in some ways.' This is the position of the followers of Holistic Resource Management, as well as some others who by observation have concluded not all cattle grazing is bad.
- 3) 'Cattle are not native so they should be excluded from [usually] public lands.' Any exotic species, plant or animal, upsets the natural balance, so should be banned for this reason alone.
- 4) 'Meat production is unnecessary, wasteful and damaging, and should be stopped.' This vegetarian viewpoint is backed by some interesting statistics and facts but runs counter to the habitual carnivorousness of many people.

The following excerpts are taken from the many letters received by the NPSO. These excerpts will help illuminate the ideas behind the four positions just mentioned. For reasons of space and clarity the entire letters are not being reproduced, but are quoted to concentrate on the opinions being expressed.

"...we should appraise the multiple impacts of domestic livestock grazing on native ecosystems..."

How can NPSO be an advocate of native ecosystems and yet not object to dominance of these ecosystems by a non-native herbivore?

...Probably no ecological factor has been, and continues to be, more destructive to native biodiversity than *Bos taurus*....Heavy grazing reduces bunchgrass cover, in turn preventing natural fires and favoring invasion of shrubs and junipers into what once were grasslands. Cattle erode hillslopes and riparian areas, filling streams...and lowering the water table through channel down-cutting. Water diversions and wells for stock tanks and hayfields reduce precious water supplies further. Fisheries decline from reduced (stream) flows and silt... Fences built to exclude livestock from riparian areas inhibit movements of pronghorn and other native animals. Cattle compete... for forage and water with native herbivores. The list goes on and on.



Some pseudo-ecologists claim that proper grazing practices benefit native vegetation. Most of these apologists for the livestock industry are followers of Holistic Resource Management guru Alan Savory. But Savory has no credibility in the scientific community. To my knowledge (and I've checked), none of his claims have been verified through reliable scientific methods....This is not to say that grazing cannot be used as a management tool in some specific circumstances. But native ungulates and other herbivores, combined with prescribed fire and other techniques, are generally far preferable to cows....

The ecosystem is an integrated unit. If we cherish native communities, we must consider the animal component as well as the plants, for trophic levels interact. We should seek to eliminate cows as urgently as we seek to eliminate any other non-native weed from our public lands.

--Reed F. Noss, Ph.D.
Ecologist and Conservation
Biologist, Corvallis

RECENT ARTICLES ON GRAZING ISSUES IN THE NPSO BULLETIN

"Cattle Grazing in Rooster Rock State Park: A Treasure Abused" Russ Jolley, July 1990 (23:7) p. 78.

"Report on Our Field Trip to Rooster Rock State Park Wetlands" Russ Jolley, September 1990 (23:9) p. 101.

Several articles were grouped together in October 1990 (23:10) on this subject.

"The Power of Small Things" Marla Loe, November 1990 (23:11) p. 123.

"Treating Pinyon-Juniper Woodlands" Bryan Boyce, November 1990 (23:11) p. 124.

"The Eastside Conservation Report" Stu Garrett, December 1990 (23:12) p. 128.

"No Moo at Mount Pisgah Too?" Tom Pringle, January 1991 (24:1) p. 3.

"Cows: Just a Bad Memory At Hart Mountain" Tom Pringle, June 1991 (24:6) p. 76.

"...(Rangelands) need more protection from overgrazing."

I am responding as a NPSO member and a seasonal TES botanist to your request for input on grazing issues. Its good to see the NPSO moving towards developing a grazing policy.

I have three areas of concern:

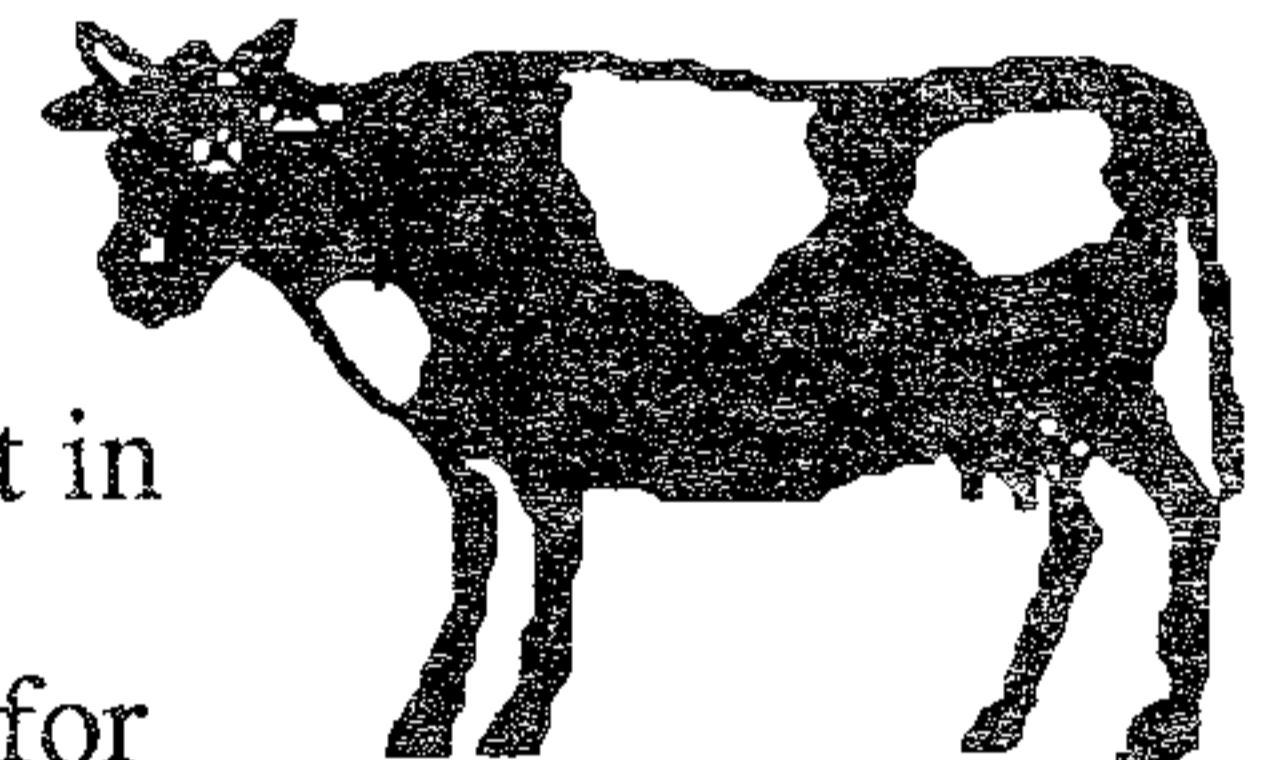
- 1) Riparian areas need more protection....this summer I saw creeks where cattle were totally excluded except for narrow, fenced corridors where they could get to the water for drinking. Protected watercourses harbor a more diverse flora and supposedly flow more strongly through the year than those that are heavily grazed.
- 2) Upland areas need more protection from overgrazing. Many allotments look OK, but others are badly abused....
- 3) Cattle grazing in wilderness areas should be phased out. It seems that the recreational opportunities available in wilderness are becoming more prized. It is doubtful that the benefits of grazing in wilderness can outweigh the benefits of recreation use....

One way that the NPSO can influence grazing policy on USFS lands is to get involved in the environmental assessments that the USFS is starting to do on allotments. These EAs are (supposedly) done at the time of the periodic "re-permitting" for each allotment.

--Nick Otting
Corvallis Chapter

"...it is no coincidence that all remaining populations...have been grazed for decades..."

....I've been studying the Western lily in northwest California for many years, and have watched the effects of seasonal grazing on maintenance of habitat. I suspect it is no coincidence that all remaining populations in California have been grazed for decades...yet grazing clearly is a chronic stress, reducing reproductive success on the short term. So it is a strange mix, yet apparently necessary for survival in coastal prairie/scrub habitat in our area, in absence of fire. However, I've been trying for years to get the FS to take grazing off the botanical areas and research natural areas in our region. Certainly monitoring and selective use of grazing where justified are key elements. Yet, baseline conditions and justification cannot be determined without withdrawal of grazing---something the land managers have a hard time understanding.



--Dave Limper
California Native Plant Society

“Blanket opposition to livestock grazing...is not balanced; nor is it ecological.”

The following is excerpted from Stephen W. Edwards' article "Overgrazing, Undergrazing and Grazing", first published in Bayleaf, Newsletter of the East Bay chapter of the California Native Plant Society, July 1991.

...CNPS has become an influential statewide organization because its positions are generally well researched and balanced. Blanket opposition to livestock grazing...is not balanced; nor is it ecological. Many CNPS members are aware...of the half-century of research (e.g. at UC Davis and UC Berkeley) demonstrating the beneficial effects of grazing for native perennial bunchgrass recruitment, and for biodiversity (most recently, John Menke showed that a pulse of spring grazing by sheep promoted purple needlegrass (*Stipa pulchra*) at Jepson Prairie).

Sadly, many people who want grazing removed altogether have been unable, or unwilling, to distinguish between grazing, overgrazing and undergrazing. It is not reasonable to look across a fence into an overgrazed pasture on a productive soil, then compare that pasture with the rocky roadcut outside the fence. Rocky roadcuts preserve native biodiversity because competition from exotic annual grasses is reduced there. Graze the property properly---with the right number of livestock, for the right amount of time, and the roadcut biodiversity will spread throughout the pasture...Undergraze the pasture, or rest it entirely, and it will become a biological desert. In contrast to grazed productive pasture vs. rocky roadcut, it is reasonable to compare grazed pasture with adjacent ungrazed terrain of comparable slope aspect and soil depth. In these cases the richer grassland is usually on the grazed (even overgrazed) side of the fence.

Everyone can point to special grassland habitats where absence of grazing is not conspicuously injurious, and where native biodiversity persists despite livestock exclusion. There is a long list of special sites of this kind---for example, on many serpentine terrains. However, even in such special places, observation shows that some grazing will improve the native condition in most cases.... Grazing was removed from Tilden Park in 1934. The result has been wholesale loss of grassland to coyote brush encroachment, and biodiversity-desertification of most of the remaining grassland---which now consists of three to four foot tall exotic grasses, sickeningly interwoven with masses of mustard and poison hemlock....

...it is good for CNPS to seek change where valuable native plant habitat is being overgrazed. Overgrazing destroys native biodiversity. But experience has shown that it can be disastrous to remove grazing altogether, swinging immediately from the trauma of overgrazing to the trauma of over-rest. That is what occurred when Pt. Reyes staff excluded cattle from their main colony of *Alopecurus aequalis sonomensis*: the population of this endangered grass nearly disappeared in one season.

I urge all CNPS members to consider carefully the grazing issue. It can be quite an enjoyable pastime to scrutinize both sides of pasture fences...to see what's happening on grazed vs. ungrazed sides. One quickly discovers that most of the great wildflower displays in lowland California are, and always have been, grazed by large ungulates. The vast sheets of flowers are kept in good shape by livestock, just as they were by huge herds of thousand of elk, prehistorically, and up until 10,000 years ago, by two kinds of *Bison*, two other species of large grazing bovids; horses; elk; and grazing mammoths (see *The Four Seasons*, vol. 8, #4, 1990 for a detailed discussion). Grazing is the origin of the California native grasslands; apart from large grazing animals our native flora is unintelligible. Overgrazing destroys it. On productive soils, so does undergrazing. Overgrazing depletes native plants and their seed reserves; undergrazing (on productive soils) allows exotic annuals to grow obscenely rank, literally smothering relict natives. To follow overgrazing on productive sites with grazing exclusion is a recipe for disaster. Even on unproductive sites, it is generally better to modify and carefully to monitor grazing, rather than to remove it altogether....

"As an organization concerned about extinction of native species, NPSO should take a position of phasing all livestock off of all public land."

"Although I missed Stu Garrett's Hatfield Ranch field trip, I had met the Hatfields at a conference two years ago where I saw slides of their livestock management system. While I feel that what the Hatfields are doing is a small step in the right direction and I applaud them for their efforts to bring other ranchers along, I feel that NPSO should be courageous enough to delve into root causes and tackle on a systemic basis causes leading to extinction of native species.

The facts below about our cattle/meat-based diet in the US excerpted largely from Diet For a New America by John Robbins lead me to a different conclusion from Dr. Garrett's. Fifty-six percent of all agricultural land in the US is used to produce beef. Of the 4,000,000 acres of US cropland lost each year to soil erosion 85% is directly associated with livestock raising. 260,000,000 of US forests have been cleared to create cropland to produce a meat-centered diet...Livestock production uses half of all water used for all purposes in the US. The water needed to produce one pound of meat is 2500 gallons while an equal quantity of wheat takes only 25 gallons. Water...is heavily subsidized...if US taxpayers ceased subsidizing the meat industry's use of water, of pound of protein from beefsteak would cost \$89.00. Energy experts estimate that an additional 6,000 megawatts of electricity would be available from the Northwest's power plants if water from our rivers were not diverted to grow livestock feed and produce meat. (This is double the total amount of energy currently generated by all the Northwest's nuclear power facilities combined.) Thirty-three percent of raw materials consumed in the US for all purposes are used to produce our current meat-centered diet, while only 2% of all raw materials consumed are needed to produce a fully vegetarian diet....

As an organization concerned about extinction of native species, **NPSO should take a position of phasing all livestock off of all public land.** This should be a first step in phasing livestock off of ALL our land---a process that will take a long-term educational process and require a substantial

change in the American lifestyle. I hope our members will help lead the way and support the desired public policy with their own lifestyles.

---Mary Vogel

GRANT PROPOSALS REQUESTED

The Native Plant Society of Oregon continues to sponsor small research grants. The objectives of the program are: 1) to stimulate basic field research into the biology and distribution of Oregon's native and naturalized flora, particularly in the more remote areas of the state, and 2) to promote native plant conservation through better understanding of Oregon's flora and vegetation and the factors affecting their survival. In addition, the Leighton Ho Field Botany Award will be a matching grant for a cooperative project with The Nature Conservancy. Information on TNC's research needs can be obtained from Cathy MacDonald, Director of Stewardship, 1205 NW 25th, Portland, OR 97210. Telephone: (503) 228-9561.

Those interested in applying for funding can obtain the program policy and guidelines from Dan Luoma, Research Grants Committee Chair, 2912 N.W. Arthur Ave., Corvallis, OR 97330. Research proposals are due by March 1, 1991.

---Dan Luoma

OUR RARE & ENDANGERED PLANT FUND

The R & E Fund was founded many years ago to provide support for our rare and endangered species work. This Fund now operates as a separate entity and stands apart from our general fund. It will continue to support projects related to rare, threatened or endangered plants and disbursements will be controlled by the Board. A new approach will be tried in the allocation of contributions to this fund. This method is perhaps best referred to as the "50-50" rule. One-half of all donations to this Fund will go into a capital account to accrue interest for future projects. The other fifty per cent will be available for projects that year. Any unused monies will revert into the capital account. The same strategy will control what happens to the interest from the capital part of the Fund. This will allow us to support projects while building a source for stable and ongoing funding in the future.

---Stu Garrett, Eastside Conservation Chair

**FORMER PORTLAND
CHAPTER PRESIDENT
STANLEY G. JEWETT JR. DIES**

Prominent entomologist, fisheries scientist and native plants nurseryman Stanley G. Jewett Jr. passed away from progressive supranuclear palsy September 1st at the age of 74. Portland Chapter NPSO President in 1985-86, he also had served on the boards of the Oregon Chapter of the Nature Conservancy and the Portland Chapter of the American Rhododendron Society. He had been chief biologist with the Columbia River Basin region of the National Marine Fisheries Service for 26 years until his retirement in 1972. In this position he supported designing hydroelectric projects to preserve fish runs in the Columbia and its tributaries. After his retirement He started a nursery specializing in native plant species, which he ran for 15 years.

He was an internationally known expert on stoneflies worldwide. He served as a research associate in systematic entomology at Oregon State University and held a similar position with a Florida institution. He was a consultant in the development of the Insect Zoo at Washington Park.

His family suggests remembrances be contributions to the Nature Conservancy.



Campanula scouleri
Bluebells of Scotland
Drawn by Herm Fitz

**CONTRIBUTIONS TO
THE NPSO BULLETIN**

Your Native Plant Society *Bulletin* has brought you many interesting articles, all of them provided by members and other native plant oriented parties. Through the *Bulletin* you've had the opportunity to learn about recent botanical research projects, the origins and derivations of plant names, rare and endangered plants and efforts to conserve them. Other recent articles included a history of the beginnings of the society, the preservation of Oregon's redwoods, and there is a continuing spate of articles concerned with grazing and its effects, including much of this issue.

The *Bulletin* is as always in need of informational and educational articles about our native plant interests, as well as news to keep our membership informed of activities of the chapters and the state organization. Also, artwork, photographs and other graphics are needed, especially works which will fit needed dimensions.

It would benefit the membership if those who are responsible for NPSO activities would occasionally send in reports about how things went on field trips or other activities, especially the finding of unusual plants, or especially good talks, conservation actions, or anything else that may be of interest to the membership. Articles about native plants, their environment, ecology, nomenclature, or preservation all are useful. The search for plants in the wilds often can yield interesting articles. Histories of plants, plant hunting, or the NPSO are useful.

Hand-written, typed, and printed materials are all welcome. Contributions can be in almost any readable form. Camera-ready articles are usually reentered. Uniformity of type and formatting is now achieved within the Society's computer. Because computers allow very quick format and style changes, contributions on computer disks can be in any form and still require only a few moments to change into the *Bulletin* format. Contact your editor for details about sending in computer disks, or for any other information about the *Bulletin*.

Special materials, such as plant keys or advertisements, can follow any appropriate single or double column format. Full- or partial-page free-standing camera-ready submissions can follow any clear format.

