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SAGE NOTES

IDAHO NATIVE PLANT SOCIETY NEWSLETTER



VOL. IX NO. 5

JUNE-JULY 1986

JUNE (from Alan Chadwick's Enchanted Garden)

The festival we have developed here at the garden for solstice consists of two parts. One, a quiet, simple ceremony for the members of the garden community, takes place in the late morning, lasting until about noon. Then there is a period for personal reflection and observation, when the gardeners can walk in the garden and think about all that has come to fruition and flower there. Then, in late afternoon, people from the surrounding area are invited to visit, to enjoy entertainments such as music, pantomimed fairy tales, and juggling. After that there is a great meal, with dishes prepared by all the gardeners, and an evening of folk songs, dancing, and socializing. A wonderful feeling grows all day long.

PAHOVE ACTIVITIES CALENDAR

Who is invited on these Pahove field trips? How much do you need to know about plants? Everyone is welcome - you, your friends, your children. We have all ranges of experience in our membership, so all you need is interest. If you've never been on one of our field trips, now is the time when the flowers (and bugs and birds) are out, so we hope you'll join us. And invite a friend!

June 14 Saturday field trip to Craters of the Moon National Monument. Leave from Grants Truck Stop, Hwy 84 (Broadway exit) in Boise, at 8:30. If you wish to join us there, meet at the Monument Visitor Center at noon. Or plan to camp with us Friday night at the Monument group campground, and go on a hike Saturday morning. RSVP to trip leader Steve Caicco at 334-3402 (work) or 344-3148 (home). Bring lots of water and sunscreen, as it will probably be hot.

June 28: Saturday field trip to Ponderosa State Park by McCall. A variety of vegetation types including wetlands, mature forests, and open sagebrush slopes makes this an exciting location. We've reserved the Pavilion at the Park for a picnic after the field trip; bring a dish to pass. Meet at the Perkins Restaurant on State Street and Glenwood at 8:30. RSVP Michelle Stevens at 334-9488 (work) or 344-3148 (home).

- July 12: Idaho Botanical Garden work day. Meet at the Japanese Garden at 9:00 a.m. with your garden tools.
- July 26: Saturday field trip to Mt. Harrison in the Albion Range south of Burley, in search of Castilleja christii, Cymopterus davisii and Machaeranthera laetevirens. See Bob Moseley's article in this issue for more information on the area. Meet at the Grants Truck Stop on Hwy 84 in Boise at 8:00. RSVP Steve Caicco at 334-3402 (work) or 344-3148 (home). Some of us will be camping in the area, and you're welcome to join us.

FROM THE EDITOR

You will probably see some changes this issue, as there is a new editor. The first thing you will probably note is format changes; Joe Duft is a word processor wizard, and it will take a while to live up to his excellent standards. Hopefully we will continue to hear from him in articles in the newsletter; rumour has it he's going to use this next year for travel, global botanizing, and adventure.

It seems appropriate to use this first issue to thank Joe for his efforts on the newsletter and in organizing the Idaho Native Plant Society. Many people have been reminded of things they've forgotten by a phone call from Joe. Thanks from all of us, Joe. We wish you a very good year.

Editorial changes often reflect the interests of the editor. I am by training a wetland ecologist, so there will be a column on wetlands. It also seems relevant to consider a broad perspective when looking at plants. What is the community like where they live? What environmental influences affect the plant community or plant population? I would also like to include articles from the readers on revegetation and restoration, gardening, your favorite plant (for whatever reason), or anything else you're interested in.

This is your newsletter. I would very much like to know what you're interested in. Write or call and tell me any ideas for articles or fieldtrips. Also, we need your help to increase our membership. Bring a friend on a field trip. It would be nice to send out complimentary copies of our newsletter to prospective members; we just need to know names and addresses.

Contact Michelle at 334-9488 (work) or 344-3148 (home).

CRATERS OF THE MOON NATIONAL MONUMENT by Steve Caicco

"An area of about 60 miles in diameter, where nothing meets the eye but a desolate and awful waste, where no grass grows, nor water runs, and where nothing is to be seen but lava." from The Adventures of Captain Bonneville, by Washington Irving (1868).

Craters of the Moon National Monument lies adjacent to the foothills of the Pioneer Mountains along the northern edge of the Snake River Plain. The cinder cones and lava flows within the Monument lie at the northern terminus of a series of fractures known to geologists as The Great Rift. This volcanic feature includes two major lava fields known as the Craters of the Moon Flow and the Wapi Flow. The southern terminus of the rift lies over 50 miles south near Minidoka. Included are more than 1000 square miles of lava.

Contrary to Irving's bleak landscape, the lava flows within the monument abound with plant and animal life. In fact, much of the the National Monument and the Craters of the Moon Wilderness, which surrounds it, is quite densely covered with plant life. This vegetation can be divided into two broad types: a shrub community in which bitterbrush (Purshia tridentata) and mountain big sagebrush (Artemisia tridentata ssp. vaseyana) predominate over a mixture of bunchgrasses and herbaceous plants, and a limber pine (Pinus flexilis) woodland. This is a unique ecological role for limber pine which is commonly found on the drier slopes of the adjacent foothills.

More barren areas do occur, however, but even these are not devoid of plant life. Cinder fields have a unique, though sparse assemblage of bristly cryptantha (Cryptantha interrupta), dwarf and Suksdorf's monkeyflowers (Mimulus nanus and M. suksdorfii), and dwarf buckwheat (Eriogonum ovalifolium var. depressum). The presence of the latter plant is unusual, since it is generally found at much higher elevations. Even the lava flows, which appear to harbor no life at all, on closer inspection can be seen to be covered with a variety of brightly colored lichens.

Also included within the National Monument, but unknown to many, is a lush riparian vegetation with black cottonwood (Populus trichocarpa, quaking aspen (P. tremuloides), chokecherry (Prunus virginiana, mountain alder (Alnus incana), and water birch (Betula glandulosa).

We have reserved the group campground for Friday evening and Saturday. The entrance is on the north side of the highway about 1/4 mile past the turn-off to the visitor's center. As an educational group, we will probably qualify for a waiver of the campground and park entrance fees. Remember to bring boots, sun screen, water bottles, and light-colored clothing.

IDAHO NATURAL AREAS by Bob Moseley

Mount Harrison - Sawtooth National Forest

The Albion Mountains, located in Cassia County, is a narrow massif rising nearly 6000 feet out of the Snake River Plain south of Burley. The highest peak in the northern end of the range is Mount Harrison, which at 9265 feet, commands a spectacular view of southern Idaho and northern Utah. The road from Albion leads to the lookout tower on the very summit of the mountain. Above 8800 feet in elevation, the road emerges from the forest and traverses gently-sloping, subalpine meadows containing a rich assortment of grasses and forbs. These meadows are habitat for two of Idaho's rarest plants, Christ's indian paintbrush (Castilleja christii) and Davis' wavewing (Cymopterus davisii).

Christ's indian paintbrush is endemic to these meadows on Mount Harrison. Extensive searches over the last 20 years in neighboring ranges and peaks of the same range have produced no other populations. John H. Christ was the first to recognize it as an undescribed species while on a collecting trip to the mountain with James Reveal on July 16, 1966. Noel Holmgren named the new species in honor of John Christ, who, in addition to being its first collector, has probably collected more plants in Idaho than any other botanist.

Davis' wavewing is only slightly more widespread than Christ's indian paintbrush. In addition to Mount Harrison, it is known only from the summit of Cache Peak, 10 miles to the south and the highest peak in the Albion Mountains. After 50 years of confusion among plant taxonomists, Ron Hartman, of the Univ. of Wyoming, determined this Cymopterus new to science and published the new name in 1985. He named it in honor of its first collector Dr. Ray J. Davis, for the significant contribution he has made to knowledge of the flora of Idaho.

Although the meadows on top of Mount Harrison have been grazed by cattle and sheep during the last century, a small basin on the southeast side of the mountain remained relatively undisturbed. The Idaho Natural Areas Coordinating Committee has recommended that this area be designated a Research Natural Area (RNA) by the Sawtooth National Forest. The basin is a steep-walled cirque with a vernal pool at the bottom. Most of the area is cliff, boulder, and scree slopes, although stands of sagebrush-grass, subalpine fir and limber pine, and a krummholz forest on the cirque rim add to the habitat diversity. Also, there is evidence that another Idaho rarity, vivid green aster (Machaeranthera laetevirens), may occur in the RNA. This plant, historically known from only a few sites in Idaho and Nevada, has not been seen by Idaho botanists for many years. The flowering period coincides with our field trip and a thorough search of the RNA may produce a rediscovery of this aster.

MORE BOTANICAL PUBLICATIONS by Nancy Shaw

McArthur, E. Durant; Welsh, B.L., compilers. Proceedings: symposium on the biology of Artemisia and Chrysothamnus; 1984 July 9-13; Provo, UT; General Technical Report INT-200. U.S.D.A., Forest Service, Intermountain Research Station, Federal Building, 324 25th Street, Ogden, UT 84401

Third in a series of proceedings of symposia on wildland shrubs, this publication brings together current knowledge of plants belonging to two important genera. Topics addressed by the 54 papers include distribution, systematics, genetics, revegetation and control, animal relationships, ecological relationships, entomology, pathology, and physiology.

McPherson, E.G.; Graves, G.H. Ornamental and shade trees for Utah; A tree guide for Intermountain communities. Utah State University, Cooperative Extension Service; 1984. 144 pp. (Cooperative Extension Service, Extension Bulletin Room, UMC-50B, Utah State Univ., Logan, Utah 84322. \$15.00 mail order, \$10.00 at the window).

Detailed information is provided for 15 native and 85 exotic trees growing in the Intermountain area; they are classified by size, form, and appropriate uses in home and community landscaping. Descriptions provide information on tolerance to Intermountain climatic or microclimatic conditions, plant availability in the area, and characteristics including aesthetics, utility and problems with the species. Maps of Utah campuses pinpoint specimen plants of each species.

FIRST SPRING FIELD TRIP by Cindy Hohenleitner

We began the field trip season on one of the first warm, sunny days of spring at Steck Park near downstream on the Snake River from Weiser. Only the earliest of the spring flowers were in evidence: Brassica campestris, with its many bright yellow flowers, sparkling blue Chorispora tenella, and Balsamorhiza sagittata splashing yellow across the sagebrush steppe foothills. Phlox species, Draba verna, Microsteris gracilis, and Astragalus purshii were also in bloom. These wildland flowers often get dismissed as weeds; the word reflects an opinion. A burst of spring color, regardless of its reputation, is always welcome after a long winter.

MAKING GARDENING MORE FUN by Robert Rodale (excerpted from
Organic Gardening, June 1986)

There are sources of garden satisfaction that exist beneath the surface, deep in the spirit of both the gardeners and the garden. You can see evidence of those hidden garden values if you watch long enough, and are a keen observer. But the happiest gardeners feel the deep, inner pleasures every day. They sense through the enhancement of their spirit a kind of pleasure that is far more stimulating and renewing than the good feeling that comes from satisfying work. In their gardens, they learn to touch the life rhythm of the earth itself, and that renews them.

I feel that regeneration is the word (and the idea) most able to lead us to a more clear understanding of the inner pleasure of gardening. A garden is a place for continual renewal, regrowth, and rebirth. If you look at a garden once, you will not see that. But watch it over the seasons - or for just one season - and the process of regeneration becomes clear.

Just think of the word flower, for example. It mean both a bloom, and the act of blooming. Flower is both a noun and a verb. We watch gardens not only to see flowers, but to see buds become flowers. And in a way, we flower inside as we watch those buds open.

We react in a similar way to the growth of trees and the sprouting of seeds. Our purpose as gardeners is not only to get plants to flourish, but to watch them achieve their potential. We flourish as our plant grow. That realization is the first step into regeneration gardening.

FIELD TRIP TO OOLITIC LIMESTONE SITE by Cindy Hohenleitner and
Roger Rosentreter

The May 3 Pahove field trip went to Mudflat Oolitic Limestone site. The main distinguishing features of the Mudflat site are its unusually high diversity and the presence of numerous uncommon plant species including (Murphy milkvetch, Astragalus camptopus; Federal Category 2; Mulford's milkvetch, Astragalus mulfordae, Federal Category 2; Elmore milkvetch, Astragalus purshii var. ophiogenes, Federal Category 3c; Bristly langloisia, Langloisia punctata; False sunflower, Enceliopsis nudicaulis; and Matted cowpie buckwheat, Eriogonum shockleyi var. shockley.

Most of the Mudflat site is located within the Chalk Hills Formation, a lake bottom deposit of interbedded sands, silts, and volcanic ashes. The Chalk Hills Formation is overlain by beds of coarse sand and oolitic limestone which mark the base of the Glenns Ferry Formation. Oolitic limestones, which are comprised

Oolitic Limestone Site (cont'd)

of "B-B" size spheres of calcium carbonate, form where gently oscillating waves wash the shore. The sands are ancient beaches. The Shoofly oolite, as it is known, crops out along a 30-mile belt from southwest of Murphy to south of Grandview. Silts and ashes deposited in deeper water overlies the oolitic limestone locally, indicating that, about 4 million years ago, the lake was expanding in size.

The variety of substrates provided by the ash, silt, sand, and limestone beds produce physical and chemical differences that result in a unique assemblage of plant species. In addition to those listed above, the following species were seen on the field trip:

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| Abronia mellifera | Gutierrezia sarothrae |
| Allium nevadense | Halogeton glomeratus |
| Amsinckia tessellata | Lepidium perfoliatum |
| Arabis holboellii | Leucocrinum montanum |
| Arenaria franklinii | Lomatium dissectum |
| Artemisia tridentata | Lupinus leucophyllus |
| Atriplex spinosa | Mentzelia albicaulis |
| A. canescens | Mimulus nanus |
| A. confertifolia | Nama densum |
| Brickellia microphylla | Oenothera claviformis |
| Bromus tectorum | O. caespitosa |
| Castilleja angustifolia | Orobanche fasciculata |
| Caulanthus pilosus | Oryzopsis hymenoides |
| Chaenactis douglasii | Penstemon acuminatus |
| Chorispora tenella | Phlox hoodii |
| Chrysothamnus spp. | Purshia tridentata |
| Cleome lutea | Rhus trilobata |
| Coldenia nuttallii | Sarcobatus vermiculatus |
| Cryptantha spp. | Sitanion hystix |
| Descurainia sophia | Sphaeralcea coccinea |
| Delphinium sp. | Stanleya pinnata |
| Elymus cinereus | Tetradymia glabrata |
| Gilia leptomeria | Townsendia florifer |
| Glyptopleura marginata | . . . plus a rattlesnake. |

NEWLY ELECTED OFFICERS

Members at the May meeting, held at Joe Duft's house, elected officers for next year. Their terms will begin in September 1986. Results of the elections were:

- President Roger Rosentreter
- Vice President. Carol Prentice
- Administrative Assistant. Cindy Hohenleitner
- Treasurer Wilma Gluch

EARTH FIRST'S ROUND RIVER RENDEZVOUS

Earth First's Round River Rendezvous (RRR) will be in Idaho this year. Earth First is a progressive, innovative and action-oriented organization that is perceived as being very radical. Long-term solutions to global environmental problems, reduced consumerism and increased recyclability and renewability of resources are central to their philosophy.

The RRR will be held June 30 - July 6 on the North fork of the Big Lost River just over the hill from Sun Valley. For more information write E.F., Box 5871, Tucson, AZ, 85703. The cost of attending the rendezvous is \$21.00. Environmental problems and solutions will be discussed, including values of a healthy flora and how to ensure its survival.

EF also distributes environmentally-oriented literature. A recently issued book is Gathering the Desert, by Gary Paul Nabhan. Alternatives for growing foods in the desert which are naturally adapted to a hot, dry climate, are discussed with the objective of reducing agricultural dependence on high energy and water intensive crops.

LIVING WATERS - ELK CREEK FALLS by Michelle Stevens

In the early spring, a group of friends and I hiked through the snow to Elk Creek Falls in the Palouse east of Moscow. The falls cascaded over tiers of basalt. Early spring wildflowers were blooming yellow and purple on the slopes above the falls. The beauty of the clear water tumbling down the steep canyon made it obvious why this is northern Idaho's most visited waterfall, with over 4500 people visiting the site last year. In the summer, the pools formed by the fall are decorated with swimmers, the fine spray from the falls forming shimmering rainbows over their heads.

An application has been submitted by the Hy-Tech Company to develop the falls for hydroelectric power. Elk Creek Falls has been designated a recreational area by the Clearwater National Forest; the proposed six foot diversion weir, the 20-foot intake structure, the 5,000-foot metal penstock, and the generating plant and impounded lake are all incompatible with recreation.

Besides aesthetics, there are several other problems with the falls. Over 3,000 signatures and 40 letters to the Forest Service indicate that many people love the falls as is. The adjacent community of Elk River voted against the project, despite a royalty offered on the electricity generated. Development of the site would result in an economic loss to the local community, which is attempting to develop a tourist-based economy from a failing timber-based economy.

Elk Creek Falls (cont'd)

Mimulus clivicola, bank monkeyflower, growing in the area around the falls, has been recommended as a Category 2 candidate species to the U.S. Fish and Wildlife Service. Bank monkeyflower is purple, with conspicuous yellow markings in the throat. Considered very rare in Washington and Oregon, there is only one recent siting in the state of Idaho, and that is at Elk Creek Falls. There are only 5 additional historical locations in Idaho, all of which are from the Clearwater Drainage. Before disrupting the only known population in the state, further inventory should be done to assess the distribution and status of this species.

The biggest impact of hydroelectric construction is often access road construction. The access road proposed is on a 60 percent slope on shallow basalt soils with high erosion potential. Revegetation and slope stabilization would be nearly impossible, with resultant runoff, erosion, and mass-wasting fouling the waters of Elk Creek.

Three hydroelectric projects have been proposed on Elk Creek, with cumulative impacts on the watershed. The big question: is there a need for the electricity? Dworshak Reservoir, within 50 miles of Elk Creek Falls, contains a large hydroelectric generating plant which is producing at much less than its potential. Since flow in Elk Creek is not sufficient to generate electricity and maintain a minimum flow during summer months (the peak demand period), establishment of a need for the power generated should be mandatory before such a controversial project is approved.

Idaho has over 300 applications for small hydro-electricity projects, more than any other state in the country. Yet the Federal Energy Regulatory Commission has only denied one permit. The Public Utility Regulatory Policy Act of 1978 made it mandatory for the public utility in the area to buy electricity from these small generators, despite the fact that there is an energy surplus in the Pacific Northwest. We ultimately pay for the environmental damage; we pay more for our energy, and we pay more taxes as the developers get tax write-offs. They call it liquid gold, and every river, stream and waterfall in the state is vulnerable. Elk Creek Falls is just one example of a much bigger problem.

"The one process that will take millions of years to correct is the loss of species diversity by the destruction of natural habitats. This is the folly our descendents are least likely to forgive us." E.O. Wilson, Harvard University

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ABOUT OUR IDAHO NATIVE PLANT SOCIETY

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Red dots beside due dates indicate that your dues have expired. You will receive only two issues after expiration.

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