



Friends of the Herbarium

Biological Sciences Herbarium

California State University, Chico

Newsletter

Vol. 3 No. 3

February 1998

DISTINGUISHED SERVICE AWARD

LOWELL AHART was the recipient of the 1997 Distinguished Service Award given by the Friends of the Biological Sciences Herbarium at the Annual Meeting on 18 October.

Lowell has been a rancher in the Honcut area for much of his life. In the mid 1950s he took Plant Taxonomy from Dr. Marge Anthony at CSU, Chico, and went on to develop into an excellent field botanist. He began preparing exceptionally fine herbarium specimens, which he deposited in the Chico State University Biological Sciences Herbarium, with duplicates going to several other herbaria, including that of the California Academy of Sciences (CAS). These specimens came to attention of the late John Thomas Howell, who was working at CAS, and who was much impressed with both the specimens and with Lowell's expertise in the field. Eventually, primarily because of Lowell's contributions, John Howell willed his library to our herbarium.

In due course Lowell teamed up with Dr. Vern Oswald and made invaluable contributions to our knowledge of the Butte County flora via his collaboration on the development of the *Manual of the Vascular Plants of Butte County, California*, now sold by the California Native Plant Society.

Lowell has charitably provided many other deeply appreciated contributions, in addition to those enhancing our knowledge of the local flora (and several other floras – such as that of Lassen National Park). For example, without any fanfare he quietly, for several months, picked up batches of unmounted specimens backlogged in the Herbarium and, at

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MESSAGE FROM THE BOARD

Our biggest news is that the Department of Biological Sciences at CSU, Chico is moving forward with the plan to hire a Plant Systematist professor. Several good candidates applied, and interviews should take place in March and early April. It is anticipated that four of the candidates will be giving seminars on campus. Two tentative dates for these seminars are March 13th and April 10th. Meet-the-candidate sessions will also be taking place. Please call the Department office at 530/898-5356 for the final schedule if you would like to attend. The candidate selected for this position will also serve as the Director of the Herbarium.

Dr. Robert Schlising and Lawrence Janeway, and the rest of the Board of Friends of the

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Friends of the Herbarium

The **Friends of the Biological Sciences Herbarium**, California State University, Chico, was formed to help maintain the high quality of work that has been known to be associated with the herbarium. The primary purpose of the group is to provide community support for the herbarium. This includes raising funds for items that are not covered under the University budget. Scientific and academic pursuits are the focus of the group. The Friends also offers low cost workshops and classes on various botanical topics.

The Friends of the Biological Sciences Herbarium operates under auspices of the California State University, Chico, and enjoys non-profit status and has access to the use of University classrooms and equipment.

Memberships are renewed on May 1 of each year.

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Newsletter

Volume 3 Number 3

The Newsletter is published three times a year by the **Friends of the Biological Sciences Herbarium**, California State University, Chico. Subscription is free with membership. Submissions on herbarium related topics are welcome.

Continued from page 1 Message from the Board

Herbarium developed a remodel plan for the herbarium expansion area (room 129) last October. This remodel plan was requested by the College of Natural Sciences to help in planning a larger series of remodeling efforts in Holt Hall. We have not received any word on the subject since the plan was submitted.

Dr. Kingsley Stern is teaching the Plant Taxonomy course at CSU, Chico this spring. Samantha Mackey, a graduate student (and Jim Jokerst Field Botany Scholarship recipient last year), is teaching the laboratory portion of the class. Dr. Stern reports that there are more than 20 students enrolled.

Although not specific to the herbarium, the College of Natural Sciences is creating a new Environmental Analysis Program which could benefit the herbarium. The program will support, coordinate, and assist a wide variety of research, contractual, educational, and service projects in environmental and ecological sciences within the College of Natural Sciences. The College is looking for a coordinator (with a scientific background) for the program. Duties will include managing projects, developing sources of funding, managing budgets, and acting as a liaison to projects outside of the college. For more information regarding the program, or details of the position, you can contact Roger Lederer, Dean of Natural Sciences, at 530/898-6121.

As always, the Board is grateful for your support of the Biological Sciences Herbarium. RF



ASPIRING BOARD MEMBERS CALL NOW!

The seven member Board of Directors for the Friends of the Biological Sciences Herbarium is elected by mail-in ballot each year. The Board holds meetings on an irregular basis throughout the year as the need arises. Common agenda items at these meetings include: workshops, the newsletter, the Jim Jokerst Field Botany Award, special events (e.g. the Annual Meeting), and most importantly, ways to improve the herbarium! The duties of the seven different members of the Board vary, based on the time (and travel) constraints and interests of the individuals. We encourage folks from areas remote from Chico to consider serving on the Board, too. If you would like to be considered for election to the Board of Directors, please contact a Board member or call the herbarium at CSU, Chico and leave a message (530/898-5381). You must notify us by March 25th in order for your name to appear on the ballot.

RF

Continued from page 1

Award

his own expense, mounted them for cataloging and insertion into the Herbarium collections. Lowell continues to mount all specimens coming into the Herbarium. He has also made possible the teaching of the plant taxonomy course during the period that the state did not provide funds to hire a full time faculty plant taxonomist.

All who learn even part of what Lowell Ahart has done are most grateful to him for his contributions and applaud his richly deserved Distinguished Service Award. KS

**WORKSHOPS
SPONSORED BY THE
FRIENDS OF THE BIOLOGICAL SCIENCES HERBARIUM
CALIFORNIA STATE UNIVERSITY, CHICO**

MORE KEYING CAREX. 28 February 1998, Saturday.

INTRODUCTION TO FERNS. 14 March 1998, Saturday.

BOTANICAL ILLUSTRATION. 28 March 1998, Saturday.

INTRODUCTION TO PLANT IDENTIFICATION. 18 April 1998, Saturday.

WILDLAND FIRE BEHAVIOR. 9 May 1998, Saturday.

INTRODUCTION TO KEYING GRASSES. 13 June 1998, Saturday.

INTRODUCTION TO KEYING THE SUNFLOWERS (ASTERACEAE). 26 September 1998, Saturday.

TO REGISTER FOR WORKSHOPS:

Please make checks payable to:
"Friends of the Biological Sciences Herbarium"

and mail to:
Friends of the Biological Sciences Herbarium
California State University, Chico
95929-0515

MORE KEYING CAREX. 28 February 1998, Saturday.

A continuation ("Part 2") of the popular workshop "Introduction to Keying *Carex*," this workshop is also led by Lawrence Janeway. This workshop will start where "Introduction to Keying *Carex*" ended. It will involve keying only the first 2 or 3 samples together, as a refresher, and the rest of the day with participants keying other bulk collections of *Carex* at their own pace. Bulk collections of a number of species of *Carex*, not seen in the "Introduction to Keying *Carex*" workshops, will be available for keying by all members of the class working together, each person with their own specimen. Again, herbarium labels will be provided for those participants who would like to take home their sample material for later reference. Please bring forceps, dissecting needle, 6" millimeter ruler, and a copy of *The Jepson Manual*. The workshop will meet from 9:00 am to 5:00 pm in Holt Hall, Room 129, at CSU, Chico. The class is limited to 16 participants; the fee is \$25 for members of Friends of the Herbarium and \$35 for non-members. Please register ahead of time. For more information about workshop content, please contact Lawrence Janeway by e-mail at lpjaneway@compuserve.com or by phone-mail at 530/899-7434. For information about registration or directions, please call the Herbarium at 530/898-5381.

INTRODUCTION TO FERNS. 14 March 1998, Saturday.

Dr. Kingsley Stern, Emeritus Professor of Botany at CSU, Chico, will conduct this one day class on ferns. This workshop will lead participants through the fern keys in *The Jepson Manual*, using (mostly) live local ferns. Please bring forceps, dissecting needles, and a ruler, along with a copy of *The Jepson Manual* (or Vern Oswald's *Manual of the Vascular Plants of Butte County, California*). The workshop will meet from 9:00 am to 5:00 pm in Room 129 of Holt Hall, on the CSU, Chico campus. The class is limited to 20 participants. The fee is \$25.00 for members of Friends of the Herbarium and \$35.00 for non-members. Please register ahead of time. For more information about the workshop or about registration, please call the Herbarium at 530/898-5381.

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Continued from page 3 Workshops

BOTANICAL ILLUSTRATION. 28 March 1998, Saturday.

Local illustrator, Judy McCrary, will lead this one day workshop on botanical illustration. The workshop will concentrate on pencil and ink, although other media may be explored depending on the interest of the participants. Please bring an HB pencil and ink pens, nibs, and black ink. If you prefer, these and other basic materials, including paper, will be available for purchase at the class. Class will meet from 10:00 am to 4:00 pm in Holt Hall Room 129 at CSU, Chico. Class size is limited to 15 participants; older children are welcome to register. Registration for the class is \$25.00 for members of Friends of the Herbarium and \$35.00 for non-members. Please register in advance. For more information about course content, please contact Judy McCrary at 530/589-1418. For information about registration or directions, please call the Herbarium at 530/898-5381.

INTRODUCTION TO PLANT IDENTIFICATION. 18 April 1998, Saturday.

With over 11% of the total plant biodiversity in North America (north of Mexico) represented, Butte County is a botanists playground! Come and learn about plant identification and the Butte County flora with John Dittes, local botanist and consultant with Jones and Stokes Associates. In this one-day introduction to plant identification, participants will be introduced to keying plants using *The Jepson Manual*. John will provide fresh material of local plants for the class to key together as a group and as individuals. Beginners, as well as those wishing to brush up on their skills, are invited. Please bring forceps (tweezers), dissecting needle, and a 6" millimeter ruler. You are also invited to bring any plants you may have been wondering about. If possible, also bring a copy of *The Jepson Manual* (we have several copies to loan to those who need them); we can direct you to sources for *The Jepson Manual* if you contact us ahead of time. The workshop will meet on Saturday from 9:00 am to 5:00 pm in Holt Hall, Room 129, at CSU, Chico. The class is limited to 20 participants; the fee is \$25.00 for members of Friends of the Herbarium and \$35.00 for non-members. Please register in advance. For more information about workshop content, please contact John Dittes at 530/895-0349 or at 105544.467@compuserve.com. For information about registration or directions, please call the Herbarium at 530/898-5381.

WILDLAND FIRE BEHAVIOR. 9 May 1998, Saturday.

The behavior of wildland fire underlies its ecological effects and is the key factor in successful fire management efforts. The rate of fire spread and fire intensity are controlled by the fuel itself, the terrain, and the weather. We will examine in the classroom how these important elements of the fire environment influence fire behavior. On the afternoon field trip we will observe the relevant characteristics of wildland fuels, terrain, and weather, and their variations. Be prepared for car-pooling and light hiking. Jim Bishop, of the California Department of Forestry and Fire Protection, a National Fire Behavior instructor, will conduct the workshop. Class is limited to 18 participants, and will meet from 9:00 am to 5:00 pm in Holt Hall Room 129, at CSU, Chico. The fee is \$25.00 for members of Friends of the Herbarium and \$35.00 for non-members. Please register in advance. For more information about workshop content, please contact Jim Bishop at 530/538-6761. For information about registration or directions, please call the Herbarium at 530/898-5381.

INTRODUCTION TO KEYING GRASSES. 13 June 1998, Saturday.

Trying to identify an unknown grass with any taxonomic key can be intimidating before you understand the special terminology and the nuances of the key you are using. This workshop will immerse you in *The Jepson Manual* key to the Poaceae. The workshop is geared for both beginners and pros. The class will work through 3 to 4 species per hour, mostly as a group, and everyone with their own specimen and microscope. We're gonna have some fun! Please bring forceps, dissecting needle, 6" millimeter ruler, and a copy of *The Jepson Manual*. The workshop will meet from 9:00 am to 5:00 pm in Holt Hall, Room 129, at CSU, Chico. The class is limited to 20 participants. The fee is \$25.00 for members of the Friends of the Herbarium, and \$35.00 for non-members. Please register at least 10 days in advance. For more information about workshop content, contact Tom Griggs at 530/527-0494, or at tgriggs@tnc.org. For information about registration or directions, please call Joyce Lacey at 530/343-2010.

INTRO TO KEYING THE SUNFLOWERS (ASTERACEAE). 26 September 1998, Saturday.

With over 1,300 genera and 21,000 species recorded, the sunflower family (Asteraceae) is the largest plant family

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in the world, and with over 207 genera represented, it is also the largest family in California. Come and learn the taxonomy of this remarkably diverse group with John Dittes, local botanist and consultant with Jones and Stokes Associates. John will lead this one-day workshop during which participants will key as a group and individually, using *The Jepson Manual*. John will provide fresh specimens from Butte, Tehama, Plumas, Lassen, and Sierra Counties. Beginners, as well as those wishing to brush up on their skills, are invited. Please bring forceps (tweezers), dissecting needle, and a 6" millimeter ruler. You are also invited to bring any plants you may have been wondering about. If possible, also bring a copy of *The Jepson Manual* (we have several copies to loan to those who need them); we can direct you to sources for *The Jepson Manual* if you contact us ahead of time. The workshop will meet on Saturday from 9:00 am to 5:00 pm in Holt Hall, Room 129, at CSU, Chico. The class is limited to 20 participants; the fee is \$25.00 for members of Friends of the Herbarium and \$35.00 for non-members. Please register in advance. For more information about workshop content, please contact John Dittes at 530/895-0349 or at 105544.467@compuserve.com. For information about registration or directions, please call the Herbarium at 530/898-5381.

Deadline for the Spring 1998 Jim Jokerst Field Botany Awards Deadline 20 March

The Friends of the Biological Sciences Herbarium is now accepting applications for the Spring 1998 Jim Jokerst Field Botany Awards. Two grants of \$250 each are being offered. These grants are available to sophomores, juniors, seniors, and graduate students enrolled at CSU, Chico and help fund field work conducted as Independent Study projects. If you would like more details about the awards, an information sheet and application form is available at the Department of Biological Sciences office in room 279. Applications for the Spring 1998 awards are due by 20 March. LJ



Friends of the Arboretum

Last summer, at the urging of Dr. Margery Anthony, the Friends of the Biological Sciences Herbarium extended an invitation to members of the former Friends of the Arboretum to join us, inasmuch as many of our goals and interests overlap. The

former Friends of the Arboretum were offered space in the newsletter and our full cooperation in promoting the Arboretum. A letter was sent to as many of the former Friends of the Arboretum members as could be located. Thus far we have received only one response expressing interest, but the invitation remains open.

KS



Campus Riparian Restoration

The stretch of Big Chico Creek passing through the CSU, Chico campus is bounded for an average of 62 feet on either side by a strip of riparian vegetation. Although ornamentals have been planted in a few parts, the general policy has been to leave the riparian strip "natural." Unfortunately overspray from lawn irrigation and the abundant seeds from nearby ornamentals have resulted in invasion by exotic plants to the point where they dominate the area. These exotic plants may be pretty and may even provide some needs of some animals. However, native communities evolved together so native plants naturally support a far

greater variety of native animals. With your help we can weed out exotics and replant natives to make our campus a biologically more interesting place.

Help is needed with the physical labor of digging out and replanting, and to collect seeds and/or propagate native riparian plants; we even accept donations to help purchase plants.

We plan to work every Wednesday afternoon from 1:00 pm to 4:00 pm. Meeting Place: the Riparian Area near Butte Hall.

Who Are We? We are sort of an *ad hoc* group made up of members of the CSU, Chico Arboretum Club, Omicron Theta Epsilon, Big Chico Creek Watershed Alliance, California Native Plant Society, and other interested folks.

Contacts: Paul Maslin (Biology Dept.) 530/898-5757
Mike Lennox (Arboretum Club) 530/343-2873

Thanks for the help, Paul



One Day in the Life of a Plant Collector by Lowell Ahart

In 1996, it was suggested that I come to Chico on alumni day at the University and demonstrate mounting plants. I said, "No," but the suggestion remained with me. So in 1997 when the Friends of the Herbarium asked that I demonstrate mounting herbarium specimens I said, "Yes." This was to be part of a workshop sponsored by the Friends of the Herbarium. Dr. Kingsley Stern would give a presentation about the herbarium while I would talk about collecting and mounting plants.

On October 18, 1997, a Saturday, I went to Chico and met Jan Monelo in room 129 in Holt Hall on the University campus. Jan was arranging flowers she had obtained from Rob Schlising's garden. The numerous flower arrangements made the room very attractive. Thirteen people showed up for the workshop. Dr. Stern spoke on the herbarium, which is a plant library. He started teaching plant taxonomy at CSU, Chico in 1963 and at that time there were about 2900 plant specimens in two cabinets. Under his direction the herbarium grew and today contains almost 70,000 specimens. Dr. Stern told of how requests are made for borrowing some of the specimens so they can be studied and how they come back with annotation labels. This makes the collections more valuable. Usually the specimens are returned within a year, but there are exceptions. He told of the medical people

asking his advice on a young man who was hallucinating from ingesting jimson weed seeds. Another time officers of the law came and wished identification of plant material they had obtained from someone they had stopped. Therefore a herbarium has many uses. We

were given handouts explaining how to prepare a proper herbarium label. Dr. Stern then went through a sample label explaining each part.

I passed out information on where to get herbarium supplies and instructions on preparing herbarium specimens. I explained each step from herbarium press to completed mounted herbarium specimens.

At the end of the Friends of the Herbarium annual meeting, I was presented with their Distinguished Service Award. The award was a very fine painting of Beautiful Sulfur-flower, which is *Eriogonum umbellatum* var. *speciosum*. This was most appropriate for I had spent a good part of the late summer and fall collecting the plant for James Reveal, an authority on the genus *Eriogonum* I would like to thank Judy McCrary for the making the painting, Dr. Stern for a most kind introduction, and Friends of the Herbarium for their thoughtfulness. Also, I ap-

preciated being treated to dinner by the Friends of the Herbarium and the halibut dinner was very tasty.

Thank you!!



Eriogonum umbellatum var. *speciosum*. Artwork by Judy McCrary (in color), part of the Distinguished Service Award presented to Lowell Ahart by the Friends of the Biological Sciences Herbarium

Read about the Herbarium and the Friends of the Herbarium on the web:
<http://www.csuchico.edu/biol/Herb/index.html>

A NEW SUBSPECIES DESCRIBED FOR BUTTE COUNTY!

Two years ago a new subspecies of *Lewisia kelloggii* K. Brandegee was described: ssp. *hutchisonii* Dempster (Madrono 43: 415-416, 1996; and see the article reproduced below). This new subspecies was reported from one location, in Sierra County about 9 miles north of Downieville.

I checked the herbarium here at CSU, Chico and found three specimens of *Lewisia kelloggii*: one from Butte County ("saddle between Coon Hollow and Chips Creek" Janeway & Schlising 3047, 22 July 1988) and two from Sierra County near the type locality ("on the north side of Henness Pass Road, at Keystone Gap" Ahart 7446, 1 July 1994 and "in

the center of the Pacific Crest Trail, on Bunker Hill Ridge" Ahart 7467, 7 July 1994). These three specimens fit the description of ssp. *hutchisonii* in the leaf length and petal length characters (petal length is, as described, considerably longer than in ssp. *kelloggii*), but flower color was noted on the herbarium labels as white rather than pink as reported for ssp. *hutchisonii*.

So I wrote to Dr. Dempster, at the Jepson Herbarium at UC Berkeley, to see if she would look at these specimens and make a determination. She promptly replied (twice), writing that due to her age (91 at the time!), she had to decline to study

the specimens. However, Dr. Dempster commented that "the petal size is very important" and that "we can ignore the petal color as being less important than the petal size." Therefore I feel confident in calling these three specimens *Lewisia kelloggii* ssp. *hutchisonii*.

Thus, the species reported in the Butte County flora (Vernon Oswald, 1994. *Manual of the Vascular Plants of Butte County, California.*) as simply *Lewisia kelloggii*, which is based on the single collection from Butte County noted above (Janeway & Schlising 3047), may now be called *Lewisia kelloggii* ssp. *hutchisonii*!

LJ

A NEW SUBSPECIES OF *LEWISIA* (PORTULACACEAE) IN CALIFORNIA

LAURAMAY T. DEMPSTER
Jepson Herbarium, University of California, Berkeley, CA 94720

ABSTRACT

A new subspecies of *Lewisia kelloggii* K. Brandegee is described: ssp. *hutchisonii* from Sierra Co., California.

There are two species of *Lewisia* that appear to have a 4-parted calyx, consisting, in fact, of two sepals and two similar bracts closely beneath them. One is *Lewisia brachycalyx* Engelm. ex Gray of the southwestern United States, the other *L. kelloggii* K. Brandegee, which occurs in the Sierra Nevada of California, from Plumas Co. south to Mariposa Co., and also in Elmore Co, Idaho.

In July, 1982, on a bare slate ridge in Sierra Co., Paul Hutchison collected a *Lewisia* similar to *L. kelloggii*, but much larger in all respects, somewhat less fleshy, and pink flowered. Paul and I attempted to recollect this plant in July, 1989, but found that it had produced leaves and flower buds and then dried without developing further. The plants are apparently dependent on melted snow from the knoll a little above, and this year the runoff had been insufficient to result in flowering. Enough photosynthesis probably occurred, however, before the flower buds were formed, to enable the plants to survive perhaps several dry winters. The following description is made from dried material:

Lewisia kelloggii K. Brandegee ssp. *hutchisonii* Dempster, ssp. nov.—TYPE: USA, California, Sierra Co., Saddleback Mountain, about 9 miles north of Downieville, July, 1982, P. C. Hutchison 8105 (holotype JEPS). West of the summit on north-facing slope, slate ridge at 1800 m.

Subspecies a typo magnitudine majore floribusque roscis differt: folia 4–10 cm longa; sepala 11–14 mm longa; bracteae 7.5–10 mm longae; petala 25–30 mm longa.

Only the type collection is known. I have seen no intermediates.

Madroño, Vol. 43, No. 3, pp. 415–416, 1996

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FIG. 1. Leaf and flowering stem, from Hutchison 8105.

KEY TO SUBSPECIES

1. Leaves 2–6 cm long; petals 10 mm long, white, off-white or pinkish ssp. *kelloggii*

1. Leaves 4–10 cm long; petals 25–30 mm long, pink ssp. *hutchisonii*

(Received 2 Jan 1995, accepted 3 July 1995)

Article from *Madroño, A West American Journal of Botany* describing the new subspecies of *Lewisia kelloggii* discussed above as also occurring in Butte County. Reproduced here at about half size. Used by permission of the publisher.

Yes! I would like to join!

____ Student\$5.00
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____ Lifetime\$1,000.00
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