

ERIOGONUM SOCIETY NEWSLETTER

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Winged wild buckwheat, *Pterogonum* (*Eriogonum*) *alatum* var. *alatum*. Four Corners vicinity.

Photo ©Al Schneider, www.swcoloradowildflowers.com

FOURTH ANNUAL CONFERENCE/MEETING
Farmington, NM – In the heart of America's beautiful southwest
Save the date! September 19 – 21, 2013

It is September of 2013; summer's heat is giving way to the cooler temperatures of fall. The skies are the deep bright blue which only seems to occur at this time of year, the high clouds are piled up and white, the Juniper and Piñon (state tree of New Mexico!) are deep green, the Chamisa (*Ericameria nauseosa*) is golden yellow, and the yellow eyed 'Purple Aster' (*Machaeranthera tanacetifolia*) are in their full glory. As we leave town to go on this field trip, the distinctive aroma of roasting green permeated the air, and promised of delicious repasts upon our return to town. The monsoons came this summer (oh, how we hope this is true (!)) and all the fall wildflowers, especially the numerous *Eriogonum* are in full bloom.

All this visual and olfactory poetry, of course, is in reference to the 2013 Annual Meeting of the Eriogonum Society, which will be held in the 'Four Corners Country', based out of Farmington, NM, from September 19 thru 22. Labs and lectures will be at San Juan Community College. Leave time for an optional trip, Monday, 23, Sept, 2013. Even better leave time to visit the 4-corners in depth at their most spectacular time of the year! The formal announcement will come out soon on the www.eriogonum.org website.

Besides great field trips, Dr. James Reveal will lead our labs, with lots of up-to-date taxonomy, and Mike Bowen will give a propagation workshop. Our principle tour guides and leaders will be Kenneth D. Heil, Director and supervising Editor, and Arnold Clifford, Associate Editor and Field Botanist, respectively, of the Bolack San Juan Flora Project.

Ken has been an instructor of Biology at the Dine' College and is professor of Biology and Geology at the San Juan College (SJC), and founder and curator of the herbarium at SJC. Arnold Clifford is an experienced field botanist, charged with tasks such as "field collecting and identification of vascular plants in the 'project area'", and locating and determining new plant species and varieties, especially rare and endangered plants. He is a member of the Dine' tribe (Navajo) and began his botanical education at the knees of his maternal grandmother, Sarah Charley, a tribal elder.

Both Ken and Arnold are experienced plant locators, and enthusiastic teachers of their botanical, ethnologic and geologic expertise. This year's meeting will offer an exceptional opportunity to learn an amazing amount of ethno-botanical information and we will be hard-pressed to not be overcome with knowledge overload.

When I visited with Ken, at the SJC Herbarium, last fall, in preparation for this meeting, we looked through the *Eriogonum* folios, and Ken determined that we ought to be able to see some 21-22 species with ease. Among the *Eriogonum* species we may encounter are; *E.alatum*, *E.arcuratum*, *E.cernuum*, *E. clavellatum*, *E.corymbosum* var. *velutinum*, *Ehookeri*, *E inflatum*, *E. jamesii* var. *jamesii*, *E. leptocladon* var. *ramosissimum*, and many more. In addition to the *Eriogonums*, the San Juan River Basin Floral Area is home to at least 2479 "unique biological entities", 2255 species, 12 hybrid species, 40 subspecies, and 169 varieties. In addition to their leading us on our *Eriogonum* expedition, Ken is a recognized expert on the *Cactaceae*, notably the genera *Sclerocactus* and *Pediocactus*, and Arnold's reputation as a plant finder and interpreter of the Native knowledge and uses of plants is legendary.

Carve out time in your schedule now for this Southwestern floral adventure. It will be worth it! ~Bob Pennington

Clokey's wild buckwheat

Eriogonum heermannii var. *clokeyi*, in the subgenus *Eucycla*, is a rare and rarely photographed shrub of the Spring (Charleston) Mountains and Sheep Range of Clark Co., Nevada, disjunct to limestone mountains around Mercury and in the Hiko Range, Lincoln Co.

Clokey's wild buckwheat is found on limestone gravelly to rocky flats, slopes, and washes, saltbush, blackbrush, or sagebrush communities, pinyon-juniper and montane conifer woodlands at 4,000 – 6,300 feet; it flowers June-September (Reveal 2012). About one-third of all species of *Eriogonum* are uncommon



Eucycla (Eriogonum) heermannii var. *clokeyi*, Clokey's wild buckwheat, Spring Mountains, Nevada

Conservation Status"). It is endemic to Nevada and a State of Nevada "List 2" - "imperiled due to rarity or

to rare in their distribution (Reveal n.d.) so it is not surprising that Clokey's wild buckwheat is designated by the Nevada state office of the Bureau of Land Management (BLM) as a Special Status species, and by the US Forest Service Region 4 as a Sensitive Species (Humboldt-Toiyabe National Forest). Its global rank (G) is a '5,' which is considered "secure," - there are 8 varieties of the species! but its infraspecific taxon rank (T) is '2,' which is considered "imperiled" and at high risk of extinction or elimination due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors ("NatureServe

other demonstrable factors,” and on the Nevada Natural Heritage “tracking list” (“Animal and Plant At-Risk Tracking List”).

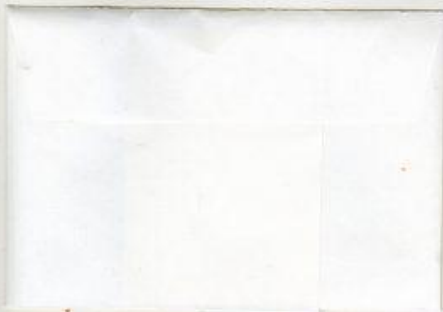
On my way home from the October, 2012, Nevada Rare Plant Meeting in Las Vegas, I drove up Lee Canyon in the Spring Mountains National Recreation Area, about 20 miles north, to check out an occurrence of Clokey’s wild buckwheat. It was very easy to pick out among the shrubs, as most of the flowers had turned a bright rusty brown, with a few white flowers still holding on. No seedlings were



Clokey’s wild buckwheat habitat, October, 2012, Spring Mountains, Clark County, NV
wildflowers in bloom.

noticed, and the plants in the area appeared to have large, mature stems. Geographic and locality distribution are useful characters to distinguish this species, in addition to the inflorescence branches glabrous and racemosely arranged involucre. This particular occurrence is associated with blackbrush (*Coleogyne ramosissima*) and Joshua trees (*Yucca brevifolia*). Other species present included banana yucca (*Yucca baccata*), desert spiny star (*Escobaria* (*Coryphantha*) *vivipara* var. *desertii*), matchweed (*Gutierrezia sarothrae*), fluffgrass (*Dasyochloa pulchella*), Apache plume (*Fallugia paradoxa*), beavertail (*Opuntia basilaris*), globemallow (*Sphaeralcea ambigua*), and a species of milkvetch (*Astragalus*). Although not in large numbers, there were quite a few colorful

I climbed the low hill to the north, and found that the buckwheat did not follow me up there. But the sudden braying of a wild burro on the other side of the hill gave me quite a start. Although there were additional species on the hill, Clokey’s wild buckwheat was absent.



TYPE SPECIMEN
Missouri Botanical Garden (MO)

TROPICOS
Image

Isotype!

Eriogonum heermannii Dur. & Hilg.
var. *clokeyi* Reveal, *Phytologia* 34:437. 1976.
det. J. L. Reveal, U. S. National Herbarium, 1977

HERBARIUM OF
THE NEW YORK BOTANICAL GARDEN
Plants of NEVADA

Eriogonum heermannii Dur. & Hilg.
aff. var. *heermanni*

CLARK CO.: Charleston Mountains, Lee
Canyon, Nevada 52, 7 miles southwest of
US 95 turnoff. T.18 S., R.57 E., Sec.
2. Elevation 5400 ft.

Desert hills with Joshua trees.

Noel H. Holmgren 2990 August 10, 1966
James L. Reveal

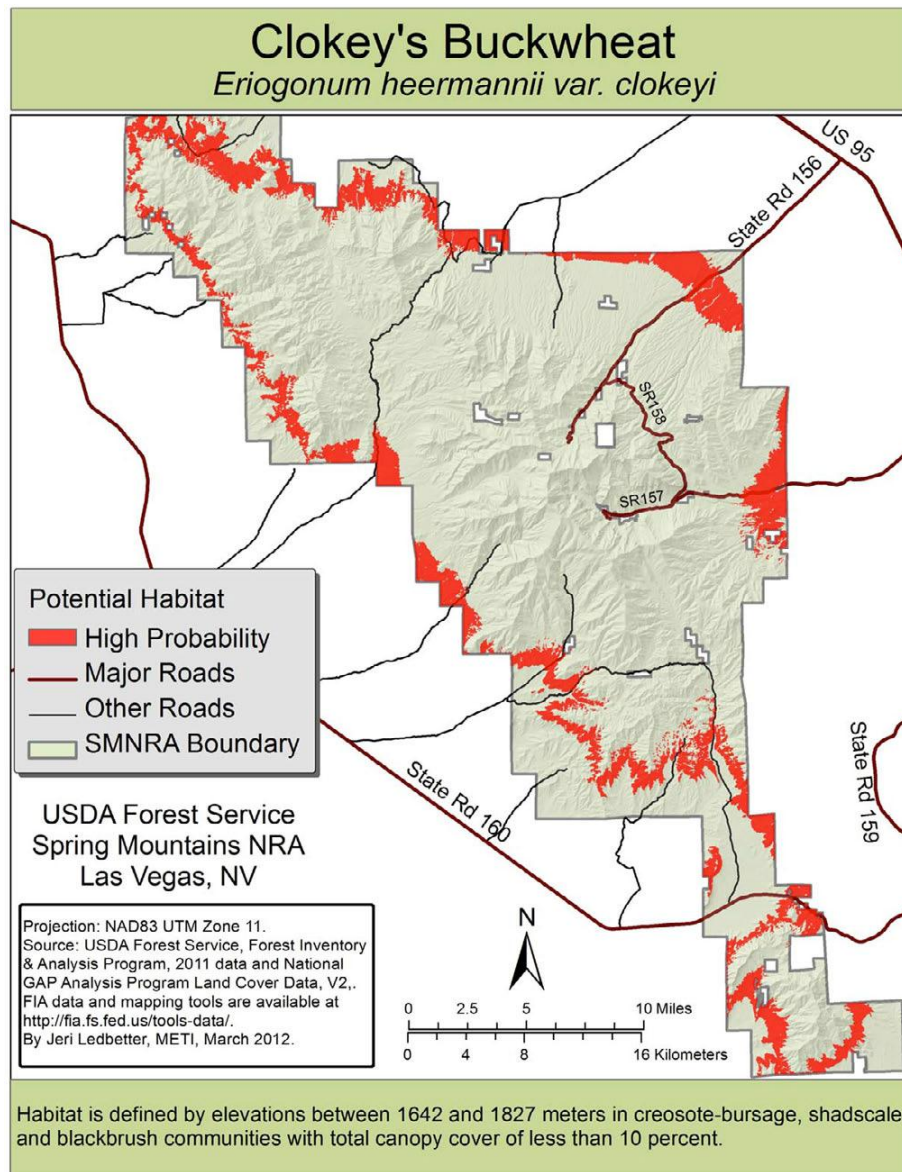
Eriogonum heermannii var. *clokeyi* Isotype, Clark County, NV.

Source: Encyclopedia of Life http://eol.org/data_objects/17516203

An isotype – a duplicate specimen for the holotype -of Clokey’s wild buckwheat, collected in the Spring Mountains in 1966, can be seen on the Encyclopedia of Life webpage, http://eol.org/data_objects/17516203. The species was named for Ira Waddell Clokey, author of *Flora of the Charleston Mountains, Clark County, Nevada* (1951). A man of many interests (“Ira Waddell Clokey.”),

he collected extensively from 1935 to 1942 in the Charleston Mountains (Spring Mountains) of Nevada. His flora of the area was accepted for publication prior to his death and published in 1951. Clokey donated his personal herbarium of over 100,000 specimens to the University Herbarium at the University of California, Berkeley (<http://ucjeps.berkeley.edu/archon/?p=collections/findidngaid&id=10&q=&rootcontentid=164>).

The 2011 Annual Report for the Spring Mountains NRA included a map of modeled habitat for Clokey’s wild buckwheat (see map on this page). At this time, there are no known landscape surveys being conducted for this species.



Clokey’s wild buckwheat modeled habitat, Spring Mountains National Recreation Area. Source: METI 2011.



Spring Mountains, Nevada. US Forest Service photo.

Literature

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The Big One: The reassemble of *Eriogonum* and its related genera

In case you haven’t yet heard (!) and were wondering about the scientific name on the front cover for winged wild buckwheat, the following is taken from Dr. Reveal’s *A Revision of Eriogoneae for North America (Polygonaceae)*¹:

No doubt this and the *Intermountain Flora* treatment will be among the last of the traditional treatments of the group. *Eriogonum* itself is going to be reduced to about 40 species, and the old timers will fuss as they struggle to learn a wealth of new generic names like *Eucyla* and *Pterogonum* to say nothing of a completely new circumscribed *Mucronea* and *Nemacaulis*. For a while it will be difficult and hard to remember in the not too distant future that it is now *Eucycla ovalifolia*, not *Eriogonum ovalifolium*, and *Pterogonum alatum* is the proper name, not *Eriogonum alatum*. It will not take long to make the change. Science, like life, is always a going forward process.

And so it is that this effort is only a step. One will see various unpublished names such as the “War Eagle wild buckwheat” that reminds one that nothing is ever actually finished. The next step will be the big one—the complete reassemble of *Eriogonum* and its related genera. That is for another day. At least, for a moment anyway, here is something that can be used to assign a name to a plant.

¹ Reveal, J. M. 2012. *A Revision of Eriogoneae for North America (Polygonaceae)*. L.H. Bailey Hortorium, Department of Plant Biology, Cornell University, Ithaca, NY. 332 pp.

Submissions to the newsletter

Do you have a favorite *Eriogonum* you would like to write about and submit to the **Eriogonum Society Newsletter**? Or would you like to write an essay on topic you'd like to share? Do you have corrections to a past newsletter, or have a letter to the editor you'd like published? Please send your article to the newsletter editor, whose email address is below.

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Articles for the Newsletter: If you are interested in writing or submitting an article to future newsletters, please notify one of the above contacts. Thank you!

Membership Renewal

The Eriogonum Society has attracted over 100 people who love eriogonums and are interested in learning more about them. A number of our members had a great time at our first annual meeting in Reno, the second one in the White Mountains of California, and the third one at the Malheur Field Station. Our dues include qualification to register for our annual meetings, as well as an on-line newsletter, annual seed exchange and access to the members section of our website.

Dues run on a calendar basis, renewed at the first of each year.

Dues for all except students are \$10. Dues for students are \$5. Life Membership is \$150. In addition, members may pay two years in advance and receive the third year free. Please do not send cash.

You may pay either by check or by PayPal on our website at <http://eriogonum.org>. Make checks payable to Eriogonum Society. Mail a completed form and check to:

Bob Pennington, Membership
1409 Agua Fria, Santa Fe, NM 87505-0907

Please update any current info with new phone numbers or e-mail addresses. Thanks for your enthusiastic support of the Society

Name- _____

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We do not sell, share or distribute member data in any manner.