NORTHERN NEVADA NATIVE PLANT SOCIETY Rare Plant Committee Meeting

NEVADA RARE PLANT WORKSHOP

2 April 1998, Carson City

1998 MEETING NOTES

http://heritage.nv.gov/notes98.htm

The following notes were compiled by Carrie Carreño, Janet Bair, and Jim Morefield during the 1998 Nevada Rare Plant Workshop. Please notify Jim Morefield (775-684-2902, jdmore [at] heritage [dot] nv [dot] gov, 901 S Stewart Street, suite 5002, Carson City, NV 89701-5245) of any needed additions or corrections. Changes to the original version are shown in bold face.

Welcome and Introductions: The 1998 Nevada Rare Plant Workshop convened in Carson City on Thursday, 2 April 1998, just after 9:00 am, in the Nevada Department of Conservation and Natural Resources conference room. The meeting was co-sponsored by the Northern Nevada Native Plant Society (NNNPS) and the Nevada Natural Heritage Program (NVNHP), and was chaired by Jim Morefield. After resolving plans for lunch, introductions proceeded around the room. In attendance were: Glenn Clemmer, Carrie Carreño, Deborah Mattie (NVNHP); Steve Anderson, John Brack, Teresa Prendusi, Lisa Sims, Jenny Scanland (U.S. Forest Service); Janet Bair (U.S. Fish and Wildlife Service); Wendy Broadhead; Barbara Ertter (University of California, Berkeley); Dan Greytak, Johnny Jones (Nevada Division of Forestry); Gayle Marrs-Smith, Tim Rash, Gary Schoolcraft, John Anderson (Bureau of Land Management); Jan Nachlinger (The Nature Conservancy); Wes Niles (University of Nevada, Las Vegas); Kent Ostler (Bechtel Nevada); Jim Purrell (Hawthorne Ammunition Depot); Jody Sawasaki (Nevada Department of Transportation); Frank Smith (Western Ecological Services); Larry Taylor (NNNPS); Elizabeth Powell (National Park Service, Lake Mead NRA); and Steve Matson (California Native Plant Society, Lake Tahoe Chapter).

Program Updates

- U.S. Fish and Wildlife Service: Janet Bair discussed the possibility that de-listing may be warranted for several Ash Meadows species (*Centaurium namophilum*, *Enceliopsis nudicaulis* var. *corrugata*, *Grindelia fraxino-pratensis*, and *Ivesia kingii* var. *eremica*), and provided updates on various conservation activities involving the Spring Mountains, *Polyctenium williamsiae*, *Castilleja salsuginosa*, *Eriogonum argophyllum* (in cooperation with the Nevada Division of Forestry), *Arctomecon californica*, and *Rorippa subumbellata*. These are currently among the USFWS's priority species for conservation activities and agreements.
- Bureau of Land Management: Gayle Marrs-Smith discussed current survey and conservation activities involving *Arctomecon californica* and *Penstemon albomarginatus*. Tim Rash discussed development of a monitoring strategy for 8 sensitive plant species on Bridge Mountain in the Red Rock Canyon National Conservation Area.
- U.S. Forest Service: Teresa Prendusi announced that the USFS has a new criteria-based budget, 30% of threatened/endangered money will go to develop and implement conservation strategies and conservation agreements, with funding levels based on the number already completed. The Region 4 sensitive species list is being revised; the draft criteria of plants ranked G1-3, T1-3, S1-2 yields 520 species on list for NV, Idaho, Wyoming, and eastern CA; the list will be further revised and cut. The USFS is beginning to address conservation, permitting, and intellectual property-rights issues involved with the increasing demand for bioprospecting activities (collection of bulk plant materials for medical, herbal, bioengineering, and landscaping uses) on forest lands; these activities are placing pressure on some species; permits have been requested by the New York Botanical Garden, Merck Pharmaceuticals, etc.; permit requests will be handled at the national level. Region-4 forests will be developing Forest Plan amendments over the next few years; this is an opportunity to provide input on

- rare plants. The USFS is pursuing renewal of Memoranda of Understanding with Natural Heritage Programs to make occurrence data available to the USFS in ArcView or other formats.
- U.S. Forest Service: Steve Anderson and colleagues have developed new survey data over the past several years for 9 sensitive species in the northeastern Nevada forests. Jim Whelan has also been active on the Ely Ranger District, and Steve is working to get his occurrence data into his GIS system. Steve showed us a GIS plot of sensitive species occurrences in the Independence and Jarbidge mountains, and highlighted the importance of the good working relationship between the USFS and Independence Mining Co.
- U.S. Forest Service: Lisa Sims (Bridgeport Ranger District) has surveyed 15 new populations of *Astragalus oophorus lavinii* in CA and NV, also 1 new population of *Streptanthus oliganthus*. About 1.5 mi² of *Cusickiella quadricostata* habitat are being affected by the Borealis mine on the other side of Lucky Strike Pass; some tailings have already been dumped. Several populations of *Polyctenium williamsiae* are being monitored on USFS lands; there has been some horse use; fencing may be an option.
- U.S. Forest Service: John Brack (Tonopah Ranger District) noted that *Frasera pahutensis* has been removed from their sensitive species list because many new, large, and well-protected populations have been found. *Astragalus toquimanus* is a sensitive species, and is currently a priority for field surveys. The proposed Bald Mountain Wash Research Natural Area, soon to be designated, contains both species. John conveyed some field survey data and specimens of both species to Jim Morefield.
- Hawthorne Army Ammunition Depot: Jim Purrell noted that a 5 year Natural Resource plan for the 145,000 acre Depot is out for review. Jim also wonders if *Penstemon arenarius* may be present on the Depot, and expressed the need for more surveys on their lands. No one had any additional information.
- Nevada Division of Forestry: Dan Greytak activities involving Arctomecon californica permitting and
 conservation, development of the state Seed Bank and policies on revegetation practices, and the issue
 of invasive weeds competing with sensitive plant species.
- Nevada Natural Heritage Program: Jim Morefield announced that a rare plant atlas for Nevada, to be produced using ArcView, was under way with funding support from the U.S. Fish and Wildlife Service. A new edition of the booklet *Endangered, Threatened, and Sensitive Plants of Nevada* is also under way. There are possibilities for publishing one or both in conjunction with NNNPS as issues of their journal *Mentzelia*. The NVNHP also recently completed their biennial scorecard, a review and ranking of the highest priority conservation sites in Nevada, which will soon be published in final form (Teresa Prendusi requested a copy). Data from the participants in this meeting contributed greatly to the accuracy and completeness of the scorecard.
- University and Jepson Herbaria, University of California, Berkeley: Barbara Ertter is chair of the Rare Plant Scientific Advisory Committee of the California Native Plant Society; she is setting up 6 regional rare plant advisory groups of 3-4 members each. Work is under way on a new Desert Manual, a flora of the California deserts based on treatments in the Jepson Manual. An external review of the University Herbarium is under way, led by Peter Raven of the Missouri Botanical Garden.

Review and Status of Selected Species (in alphabetic order):

Arabis ophira: Original population is on Ophir Summit in the Toiyabe Range; 1997 surveys documented 13 known populations totaling about 200 individuals, ranging from south of Ophir summit north to Toiyabe Dome. The species probably is naturally rare; most populations are remote, some along trail access, on rock outcrops; visible population size fluctuates from year to year; 1/3 of populations vulnerable to recreation, 1/3 are in designated wilderness; threat from global warming because species occurs between 9900-10500 ft. on crest of Toiyabe Range. John Brack requested copies of the recent survey data; he will examine the more vulnerable populations and submit a proposal for USFS funding. Since there is one occurrence on private land, a conservation agreement or strategy should be proposed. CONSENSUS: withdraw recommendation for State listing; change NNNPS status from Threatened to Watch.

Asplenium resiliens: found in south fork of Pine Creek, Red Rock Canyon (NCA); rare in NV, otherwise common in southeast U.S. No NV status; NO CHANGE.

Astragalus diversifolius: There is a single collection from NV (White Pine Co, private land); the species is more common in ID and UT, including the Challis Ranger District. CONSENSUS: add to NNNPS Watch List.

Astragalus oophorus var. clokeyanus: The Nature Conservancy is monitoring the largest population in the Spring Mountains. Many new populations (and range extensions) recently found on the Nevada Test Site and Nellis AFR. CONSENSUS: withdraw recommendation for State listing; change NNNPS status from Threatened to Watch; recommend removal from federal Candidate status.

Astragalus pulsiferae var. pulsiferae: Rare in CA, somewhat more common in NV in central and southern Washoe County. CONSENSUS: add to NNNPS Watch List.

Astragalus pulsiferae var. suksdorfii: Known from a single collection in NV, in the Granite Range south of Leadville on the Winnemucca BLM district, and about 40 more locations in CA and WA. CONSENSUS: add to NNNPS Watch List.

Astragalus toquimanus: John Brack knows of 15 locations, suspects it is more widespread, will do more surveys. NO CHANGE.

Cirsium virginense: Not abundant, it has restricted habitat, alkaline springs. Found at Blue Point Spring in Clark Co., and also UT, AZ. Wes Niles collected it at 4 different springs in Clark Co, thinks there is a taxonomic question, will send collection info to Heritage. This is a former C2 (missed on NV list). Species accepted in Intermountain Flora treatment. CONSENSUS: add to NNNPS Watch List.

Claytonia umbellata: Being tracked in CA and OR. No status in NV, found in 6 counties. NO CHANGE.

Draba cusickii var. *pedicellata*: Known from 15+ collections in Elko, Eureka, Nye, White Pine counties. This is a high elevation species. No status in NV. NO CHANGE.

Erigeron cavernensis: Lumped with *E. uncialis* var. *uncialis* in Intermountain Flora. Still of concern to USFWS in CA due to mining impacts. Wes Niles has collection records. NO CHANGE.

Erigeron latus: Recently found to be much more abundant in Idaho. CONSENSUS: recommend elimination of sensitive status for Forest Service, BLM, and USFWS.

Eriogonum corymbosum var. *aureum*: Found in southern NV, UT, AZ on gypsum. Taxonomic question raised in the Utah Flora. Almost extirpated from Las Vegas Valley, once common in valley, found with *Arctomecon*. Also on Gold Butte, and Bitter Spring. NV plants are disjunct, could be genetically distinct. Gayle and Wes will provide data to NVNHP, who will start tracking the taxon. CONSENSUS: add to NNNPS Watch List.

Eriogonum heermannii var. *clokeyi*: 8 NV occurrences in Clark and Nye Co, at base of Spring Mountains, on BLM, FS, NTS, DNWR, Nellis. Needs more survey and assessment of threats. Potential impacts from recreation. Occurs on walls of washes. Red Rock sites not of concern. Should it be included in Spring Mountains conservation agreement? CONSENSUS: add to NNNPS watch list.

Eriogonum sp. undescribed- Found on diatomaceous bentonite soils proposed to be mined. BLM funded study will survey for this species and *E. anemophilum*. American colloid has contacted FS about mining similar soils on their lands. CONSENSUS: Add to NNNPS Threatened List; recommend for BLM sensitive status; recommendation for State listing contingent on further survey results.

Frasera pahutensis: John Brack found 2 new populations with about 1 million individuals, will do more

survey work this summer. Bald Mountain Wash RNA will protect 1 population. CONSENSUS: maintain on NNNPS Watch List; eliminate USFWS and BLM Sensitive status.

Glossopetalon pungens var. pungens: A distribution map was handed out showing distribution at south end of Sheep Mountains and north end of Spring Mountains. Overlaps with var. glabrum in Sheep Mountains; taxonomic distinctness has been questioned; Jepson Manual lumps the varieties. Tim Rash has data for 3 additional populations. CONSENSUS: maintain varieties; add to NNNPS Watch List; recommend for Forest Service Sensitive status.

Lepidium davisii: primarily found in southeast OR and southwest ID, 293 extant sites. 1 population in northwest Elko County. 180 x 90 mile range, 6 distinct areas. Habitat unique, vernal lake/playa that dries hard. G3S3 based on limited distribution, unique habitat and potential for disturbance. CONSENSUS: add to NNNPS Watch List; recommend for BLM Sensitive status contingent on ID BLM retaining as sensitive.

Lepidium montanum var. nevadense: Ranked T1S1, found in northern Humboldt County and adjacent OR, habitat marginal dune skirt (stabilized). No NV Status; NO CHANGE; to be reconsidered later.

Loeflingia squarrosa var. artemisiarum: Caryophyllaceae, small inconspicuous annual. On CA BLM sensitive list because of rarity in CA. Rare in NV?; known mainly from valleys along western edge of state. Jepson Manual habitat sand dunes and sandy flats, range eastern CA to OR and WY; too widespread for NVNHP to track yet. No NV status; NO CHANGE.

Penstemon bicolor- Do the 2 color forms occur together? A distribution map was handed out showing ssp. *bicolor* predominantly in the west, ssp. *roseus* predominantly in the east, broad area of overlap. Many sites of ssp. *bicolor* on W edge of urban expansion; ssp. *bicolor* tends to be at higher elevations, ssp. *roseus* at lower elevations. Wes Niles will supply specimen records to NVNHP. Paul Wolf working on the genetics. DNA comparison of 2 morphs, crossing study. Possibility of Clark County funding? Jepson Manual treatment lumps the varieties; should they still be recognized? NO CHANGE.

Penstemon rhizomatosus: Soon to be described; found in the Schell Creek Range on scree slopes, 5 sites within 10 miles, 2 in proposed RNAs, 1 on Cave Mountain. CONSENSUS: add to NNNPS Watch List; recommend for Forest Service sensitive status.

Penstemon tiehmii: Soon to be described; found at the north end of Shoshone Range on Mount Lewis, 3 sites within 3 miles. Active electronic site on mountain. CONSENSUS: add to NNNPS Watch List; recommend for BLM Sensitive list.

Phacelia sp. 1 (undescribed): Confused until recently with *P. parishii*; recognized during recent surveys; confined to upland habitats mostly on Nevada Test Site and Nellis AFR lands in southern NV. CONSENSUS: add to NNNPS Watch list; recommend for BLM Sensitive list.

Phacelia sp. 2 (undescribed): Frank Smith noted that Duane Atwood had recognized this as a species distinct from *P. minutiflora* in UT; known from about 4 sites in UT, 10 in AZ, 5 in NV on Nellis AFR and DNWR lands. CONSENSUS: add to NNNPS Watch list; recommend for BLM Sensitive list.

Phacelia hastata var. charlestonensis: Taxonomic questions about variety; common at higher elevations in Spring Mountains, Icebox Canyon, Bridge Mountain (Red Rock NCA), fairly inaccessible sites in RRNCA. Might also be in Sheep Range or in Clark Mountains (CA). No NV status; NO CHANGE.

Phacelia minutissima- before 1995 only 3 locations in NV, also known from ID, OR, WA. Steve Anderson and Independence Mining Co. have now compiled 45-50 occurrences for NV, mostly in Independence and Jarbidge mountains. Found in riparian areas, seasonally wet drainages, with Mule's ear and Veratrum (indicating ephemeral moisture), disturbed areas, cow trails, along roads. CONSENSUS: Change NNNPS

status from Threatened to Watch; withdraw recommendation for State listing; maintain as Forest Service sensitive species.

Poa abbreviata ssp. *marshii*: rare but widely distributed in CA, NV, ID at high elevations; inconspicuous and difficult to identify; may be more common. Currently Forest Service sensitive; NO CHANGE.

Polyctenium fremontii var. *bisulcatum*: Recently found at 2 sites in northern Washoe County during surveys for *P. williamsiae*, otherwise known only from type location in OR. Habitat is vulnerable; taxonomic validity has not yet been investigated. NVNHP will send records to Gary Schoolcraft. CONSENSUS: add to NNNPS Watch List; recommend for CA BLM Sensitive list.

Stenotus lanuginosus: Rare in CA, rare in NV according to Kartesz; also occurs in WA, OR, ID, MT. No NV status; NO CHANGE.

Stipa (*Achnatherum*) sp. undescribed: Frank Smith indicates it is from middle fork of Salmon River in central ID, fairly abundant in ID, 1 location in NV, Belted Range. To be published in Madroño; closely related to *Oryzopsis micrantha*; found on rock outcrops.

Other Business

It was discussed that meeting notes should be taken and distributed each year. Perhaps someone not involved in the process could be a dedicated note-taker.

The group agreed that the Workshop should be held annually from this point forward, and should meet at least every third year in southern Nevada. If the meeting is to be held in the northern portion of the state, it will be on the first Thursday in April; if the meeting is to be held in the southern portion of the state, it will be on the first Tuesday in April. Next year's meeting will be held in Las Vegas on Tuesday, 6 April 1999. Johnny Jones volunteered to arrange facilities for next year's meeting. Jim Morefield will continue to be responsible for the agenda and preparation of the working plant list.