NORTHERN NEVADA

See NVNPS.org for updated meeting details.

April 26 - Earth Day: NNPS will have a booth at Earth Day at Idlewild Park.

May 7: Rancho San Rafael Regional Park Picnic. Come celebrate the Nevada Native Plant Society's 40th Anniversary! Meet at the picnic tables south of the entrance to the Arboretum Loop near the east parking area on San Rafael Drive anytime after 5PM until dusk. Bring a dish or a beverage to share, your own tableware, and a folding chair. NNPS anniversary cake will be served. Yum!

May 9: Peavine Mountain led by Ray Fletcher.

May 25 - Memorial Day: Feather River Sierra County - Join Bill and Nancy Harnach and explore the edges of the Feather River as it passes through Sierra Valley. Meet under the bridge at the intersection of Hwy 70 and Co. Rd. A23 at 10:00AM. Carpooling: In Carson City meet at Save Mart (College & Carson) at 7:50AM. In Reno meet at McDonalds (120 Lemon Drive) at 9:00AM. Both groups leave at 9:15AM via Hwy 395 to Hwy 70 (Quincy turnoff). Take the

Calpine turnoff (Co. Rd. A23) just past the town of Beckwourth. Turn left, cross over the bridge and promptly turn left at the end of the bridge, traveling downhill into the parking lot. **Information**: Bill Harnach at (530) 944-3464 or John Weiser at **johnpweiser@yahoo.com** (775) 331-4485.

May 30 - May Arboretum Plant Sale: 8AM-noon. Additional sale days will be June 1-5, 9AM-2:30PM or until sold out. If you would like to help at the NNPS membership table on Saturday, please email Janel at president@nvnps.org.

June 6: Slaughter House Canyon Trail to Prey Meadows led by Charlene Duncan and Gary Monroe.

June 13: Lemmon Canyon Ranch, Sierra Valley led by Nancy and Bill Harnach. Meet at the intersection of Hwy 49 and Lemon Canyon Road on the east edge of Sierraville (Sierra Hot Springs turnoff). Carpooling: same as May 25th. From Reno take Hwy 395 to Hwy 70 (Quincy turnoff). Turn right on to Hwy 49 and drive south 23 miles toward Sierraville. Information: Bill Harnach at (530) 944-3464 or John Weiser at johnpweiser@yahoo.com (775)331-4485.

June 21: Madora Lake led by Gary Monroe. Bring cash for post trek ice cream parlor visit.

June 27: Carson Pass Trail led by John Weiser, Ray Fletcher, and Gary Monroe.

July 10-13: Penstemon Society Annual Meeting in Chico, CA.

ERIOGONUM SOCIETY

July 24-27: NNPS is co-sponsoring the annual meeting of the Eriogonum Society in July. It is open to NNPS and Eriogonum Society members only.

Details are on the Eriogonum Society website, **eriogonum.org**

SOUTHERN NEVADA

Southern Nevada Meetings are suspended while we search for a new program coordinator. Please contact Cayenne Engel at **cpepper3@gmail.com** to help organize meetings and get our group out in the field again.



Curlleaf rabbitbrush, Chrysothamnus viscidiflorus

REVIEWS

A FIELD GUIDE TO NEVADA SHRUBS

by Barry L. Perryman, 2014. Indigenous Rangeland Management Press, Lander, WY. Paper, ix + 247 pages. (~\$35)

The attractive color covers of this book feature photos of warm and cold desert shrubs. Inside, the author provides a table of contents, brief foreword and preface, followed by treatments of 115 species, subspecies, and varieties. Of these 115 taxa. 113 are shrubs or subshrubs, 112 are found in Nevada, and 109 are native here. Each two-page treatment gives common and scientific names and synonyms, followed by a technical description (erroneously termed a "key" in this book, which contains no identification keys), and a paragraph discussing geographic distribution in Nevada, habitat preferences, and other interesting notes. The author states that "species descriptions generally follow Intermountain Flora..." (citing only vol. 6 of that excellent series), and in many cases the descriptions indeed follow that series nearly verbatim.

On each facing page is a photographic plate showing habitat, habit, and close-up images, headed by the common and family names, plus Asteraceae tribe when applicable. Following the treatments are "Literature Cited" (only two of the 11 references listed actually being cited in the book), then a 10-page glossary of plant descriptive terms. The book concludes with a 4-page index to common and scientific names and synonyms of the taxa

treated. Additional species mentioned within the treatments are not indexed.

To judge the purpose and audience of this book from its title would be misleading. Instead one can glean the following from the Foreword and Preface:

"The value of a field guide such as this ... allows the rangeland manager, producer or casual visitor to recognize and understand the complexity of Nevada's rangelands."

"This knowledge is especially important where livestock and wildlife rely on the same habitats and forage sources."

"This opus attempts to include both woody shrubs and woody sub-shrubs that are important to managing lands in Nevada and the larger Great Basin and Mojave Desert regions."

"It is not an exhaustive list of ... shrubs. However, if the species appears in Natural Resource Conservation Service [NRCS] Technical Guides for Ecological Site Descriptions, an attempt was made to include it..."

All of these statements except the first one appear to be true.

Further clues about intended audience may come from the glossary, which defines numerous plant descriptive terms, while assuming that the reader already knows the meaning of other terms found in the text such as solonetz soils, solonchaks, backslopes, Mount Diablo baseline, inset fan, residuum, etc. Even the glossary definitions invoke technical terms like "pedicellate" [under Raceme], "ligulate" [under Radiate], and "acaulescent" [under Scape] that are not further defined.

Having tried to discover the purpose of this book, and then compared it with the contents, my bottom line is this: If a user wishes to correctly identify about 25% of Nevada shrubs about 90% of the time, with names often reflecting outdated scientific understanding, then this is the tool for you. Readers who want more will not find this book user-friendly, and will need to consult other resources. My hopes that this book might be a long-needed update to Mozingo's (1987) *Shrubs of the Great Basin* (not even cited in the present work) were quickly dispelled. Those interested in further details may read further.

dearly wish I could give this book a better review; at least it would be more fun to write. Certainly the species treatments that escaped error are interesting and informative to the target audience. Unfortunately the author (or at least his publisher) repeated several mistakes from their previous volume on Nevada grasses (Perryman & Skinner 2007, see NNPS Newsletter 34(3):8-9. 2008 for a review) which detract from the book's purpose.

First there is the apparent lack of rigorous editing or external review, at least as evidenced by substantial errors and inconsistencies, including identification errors. Overall the book has the feel of having been hastily assembled for publication, and in that context maybe it is surprising that there are not more lapses in fact or quality. One can guibble with spelling errors, or the several incorrect scientific author citations. (Best just to omit such citations if they are not going to be properly reviewed and edited before publication.) That said, misidentified photographs are really inexcusable in a book where photographs are the focus and main identification tool. For the reader's benefit:

 p. 13 (Chrysothamnus viscidiflorus):
 3 of the 5 photos are of Ericameria bloomeri, a very different species with radiate heads.

- p. 15 (*Ephedra nevadensis*): all of the photos are of *E. viridis*.
- p. 27 (*Stanleya pinnata*): at least 2 of the photos are of S. elata.
- p. 125 (Chrysothamnus viscidiflorus var. puberulus): all of the photos are of Ericameria nauseosa.
- p. 127 (Neokochia americana): all of the photos are of Suaeda torreyana (=S. nigra).
- p. 137 (Sarcobatus baileyi): at least2 of the lower 4 photos are of S.vermiculatus.
- p. 139 (Sarcobatus vermiculatus): the middle right photo is of Lycium andersonii.
- p. 143 (Symphoricarpos longiflorus): at least 3 of the photos are of *S. oreophilus*.
- p. 147 (*Tetradymia glabrata*): the inset and 2 bottom photos are of *T. tetrameres* or another related species.
- p. 227 (Elaeagnus angustifolia): the plate includes 2 photos of opposite-leaved species, possibly Shepherdia argentea and Symphoricarpos oreophilus.

Photographic quality is less consistent than in the 2007 grass volume, and some plates seem to have been scraped together from whatever the author had available (examples: *Eriogonum fasciculatum*, p. 57; *Symphoricarpos "longiflorus*", p. 143). Among the five species of horsebrush (*Tetradymia*) included, apparently not a single image of flowering material was available.



Nevada Mormon tea, Ephedra nevadensis (male)

Next, the organization of the book by broad categories of ecoregion and ecological site (which neither plants nor ecologists tend to follow very loyally) works even less well in this book than in the previous grass volume, and increases the chances that a reader will misidentify (or miss identifying) a plant at hand. Organization along more traditional lines



Pinyon rabbitbrush, *Chrysothamnus viscidiflorus ssp.* puberulus



Gray molly, Kochia Americana

of flower color, leaf arrangement and shape, etc. - in other words, the characteristics of the plants themselves - would have better facilitated correct identification.

For example, if I had just encountered a sample of fernbush (*Chamaebatiaria millefolium*) in the field, I would probably be turning to the "Montane Areas (both cold and warm deserts)" section of this book for help, but I would not find it there. The last place I would look for it is in the "Hot Deserts Areas" of the book, where it is found alongside treatments for species such as desert holly (*Atriplex hymenely-tra*) and desert willow (*Chilopsis linearis*). The author even describes the distribution of fernbush correctly in the text as "...

northern Nevada to the transition area between the cold desert and Mojave...," making its inclusion among warm desert species all the more baffling.

As another example, hopsage and budsage have pretty similar ranges in Nevada, yet while Grayia spinosa is listed appropriately in the "Widespread Throughout Nevada" section, Artemisia spinescens is listed in the "Cold Desert Areas" section (but nevertheless correctly described in the text as



Desert snowberry, Symphoricarpos longiflorus



Smooth horsebrush, Tetradymia glabrata

"geographically widespread in Nevada"). Woe unto the Mojave Desert range manager who ventures onto alluvial fans or silty valley soils and encounters budsage!

Speaking of looking in book sections, the only way to find them is to consult the Table of Contents, as they are otherwise not marked in any way within the text itself - another repeat from 2007.

Adding to the above impediments are frequent errors in range descriptions, such as *Symphoricarpos oreophilus* (mountain snowberry, p. 222) being "geographically limited to northeast Nevada" (actually found in higher mountains throughout the state); and species such as *Menodora spinescens* (spiny menodora, p. 70), *Lepidium fremontii* (desert pepperweed, p. 66), and *Hymenoclea salsola* (white burrobrush, p. 60) being "limited to areas south of the Mt. Diablo baseline"

(each is locally abundant well north of that latitude in Nevada).

Finally, the author is again very inconsistent in his application of scientific names, in some cases intentionally (as stated in the preface) retaining old, comfortable, familiar (but scientifically outdated) plants names, yet in other cases adopting names reflecting the most recent genetic evidence (for example, Neokochia americana for gray molly, formerly Kochia americana). This can only serve to confuse readers and, to the extent outdated names are retained, steepen their learning curve and make the book more difficult to "crosswalk" with other modern references such as Intermountain Flora (Cronquist et al. 1972-1997; Holmgren et al.

2005-2012), The Jepson Manual (Baldwin et al. 2012), Flora of North America (Flora of North America Editorial Committee 1993-), and the USDA Plants Database (USDA & NRCS 2014). It does at least help that the author included synonyms for cross-reference. The author also chooses to ignore (or at least does not cite) more recent treatments of the sagebrushes, such as Cronquist (1994) and Shultz (2009), in favor of references such as Beetle (1960). He does express and justify his own taxonomic views in one instance (Artemisia longiloba, p. 98), which makes it even more important to do so in the context of current research.

The USDA & NRCS (2014) list 452 taxa of shrubs and subshrubs in Nevada, about four times the number included in this book. While the author was fairly explicit about his criteria for which taxa he included, the reader still can't be

expected to "understand the complexity of Nevada's rangelands" without at least including important wetland shrubs such as willows (Salix) and seepwillows (Baccharis), or commonly encountered upland shrubs such as brickellbushes (Brickellia), sulphurflowers (Eriogonum umbellatum), prickly phlox (Linanthus [= Leptodactylon] pungens), and mountain mints (Monardella). Also, numerous common shrubs limited primarily to the Sierra Nevada (Carson Range) portion of Nevada were omitted, perhaps with good reason, but this was never stated. A Nevada resident of Lake Tahoe would be especially disappointed by this book.

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James D. Morefield Photos by the author

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