
The California Native Plant Society (CNPS) is an organization of amateurs and professionals dedicated to the preservation of California’s native flora. The CNPS has provided leadership in inventorying and evaluating the status of the rare and endangered plants of the state and in educating the public about the importance of native species. As knowledge of the threats to the state’s plant life has increased, there has been a growing awareness at various levels in the CNPS that more than individual native taxa are in danger. Many of the plant communities of the state are threatened with obliteration or irreversible modification.

In 1991 a CNPS committee was established to inventory and evaluate the plant communities of California with goals of (1) establishing a consistent, quantifiable classification of all communities of the state, and (2) making possible legal protection of rare communities by recognizing their uniqueness and threats to their existence. This is an ambitious undertaking. California’s vegetation is remarkably diverse and variable in physical characteristics and species composition, reflecting the state's ecological diversity and complex history. In the view of committee members, the several previously proposed systems of classification for the state’s vegetation had shortcomings and conflicts, and none consistently recognized communities at the level of detail that the CNPS committee considered desirable.

The CNPS committee determined that the appropriate classification should be based on floristically based assemblages termed series (groups of associations, recognized from field analysis of one or more stands). The system is an essentially non-hierarchical classification with only low-level groupings recognized. There is no ranking of communities above the series. Some communities are treated as “habitats” or as “unique stands,” rather than being grouped into associations or series. The CNPS system includes communities composed of native species, introduced species (a very significant part of the California flora), and various mixtures.

A Manual of California Vegetation is the product of the committee’s efforts. It is a work in progress that is, unfortunately, somewhat overtitled. Perhaps a more realistic title should be “A Preliminary Inventory of Some California Plant Communities” which would indicate that much work is left to do. At this point the Manual is incomplete. Only associations for which the desired level of detail was available to the committee are listed. As a result, many known associations are not listed or must be shoehorned into one of those listed in the Manual.

Because much of the state’s vegetation has never been subjected to the level of scrutiny needed for the CNPS classification system, the gaps are many and glaring. During spring trips with our field botany class V. L. Holland and I tried out the CNPS system. Unfortunately it was impossible to place many familiar associations with any described in the Manual. Because much of the state’s vegetation has never been subjected to the level of scrutiny needed for the CNPS classification system, the gaps are many and glaring. During spring trips with our field botany class V. L. Holland and I tried out the CNPS system. Unfortunately it was impossible to place many familiar associations with any described in the Manual. The committee plans future editions to fill gaps in coverage of this volume. I suspect that an adequately thorough treatment of the state's vegetation will require several volumes.

There are practical problems beyond incompleteness in applying the CNPS classification scheme. I am not convinced that the floristically based assemblages recognized in the CNPS treatment are the most practical entities for describing California’s vegetation, especially when divorced from a higher level classification. Communities often do not align themselves into neat associations. Within a particular chaparral or grassland stand, for instance, it is very common to see species composition and dominance subtly shifting from site to site in response to local variation in
The only cross-references of common names to scientific names are in the individual series descriptions, and even these work only one way. A user who knows the scientific name for a plant but not the corresponding common name is out of luck. The use of common names is idiosyncratic. One would think that if the key couplet “Grasses dominant” leads to series dominated by various genera of grasses, then the couplet “Sedges dominant” would lead to communities dominated by *Scirpus* and *Eleocharis*. Not so! In the CNPS system “sedge” applies only to *Carex*.

It would be very premature for any governmental entity to adopt the published CNPS community classification as a standard at this time. V. L. Holland and I encountered this problem when the San Luis Obispo County government adopted a community classification proposed by R. F. Holland (1986) for use in planning documents and environmental reports. Repeatedly we have observed that communities encountered in the field do not correspond to published descriptions. We prefer to use a more general term like riparian woodland and then describe specifically what we observe on site rather than attempt to fit what we see into an incomplete community classification. Because much of California is privately owned, it may never be possible to obtain sufficient data for communities on non-public lands to be included in the CNPS scheme. These, unfortunately, are some of the communities most in need of protection, and often we do not become aware of them until a development is being planned. I recommend that the committee consider a more pragmatic classification system that allows the associations actually observed in the field to be described and placed into a hierarchy. A framework should exist for the placement of local, unusual, rare, and sensitive communities that have not been described in the Manual.

**LITERATURE CITED**


Ericameria linearifolia, for instance, is “narrowleaf goldenbush” in the *Manual of California Vegetation* and “interior goldenbush” in the *Jepson Manual*. Users familiar with alternate traditions of common names (e.g., wolfberry vs. box-thorn for species of *Lycium*) are left out.

Topographic patterns and other variables. Along a riparian corridor site-specific variation in community composition often is striking over a very short distance.

Coverage of communities is uneven. Some series are recognized at a very fine level, whereas others are very coarsely defined. Descriptions of Foothill Needlegrass Series, Nodding Needlegrass Series, and Purple Needlegrass Series are nearly identical, differing only in the dominant species of *Nassella*. Add a species of oak, and all of them would merge. However, the Woollyleaf Manzanita Series is a conglomeration of plant assemblages so different that several of them do not even contain *Arctostaphylos tomentosa* (woollyleaf manzanita)! From personal field experience, I can attest that this series is a dustbin that includes very dissimilar communities with differing physiognomies, species compositions, and ecological settings. It includes several of the rare associations that I would hope the CNPS committee seeks to preserve.

The book is difficult to use. To determine the series to which a community is to be assigned one must use a tediously constructed taxonomic key. It is the kind of key that taxonomists hate, organized by the pick ’em off one at a time style that we teach our introductory students to eschew. Other than reading through all the series descriptions, a user is stuck with the key as the only way to find a community. Although the series are arranged in the book in three groups (series dominated respectively by herbs, shrubs, and trees), within these groups they are in alphabetic order. Thus, the Catclaw Acacia Series, a desert community, falls between the Canyon Live Oak Shrub Series and the Chamise Series, both types of chaparral. Communities with much in common may be widely separated by the alphabet. The gaps in the CNPS system become obvious when one uses the key. I ran into dead ends with many of the communities I attempted to key.

Throughout the book one must be fully versed in common names. Blue blossom, chaparral whitethorn, deerbrush, and tobacco brush are all species of *Ceanothus*. Some common names seem unique to this work and are not in accord with those used in the *Jepson Manual* (Hickman 1993). *Ericameria linearifolia*, for instance, is “narrowleaf goldenbush” in the *Manual of California Vegetation* and “interior goldenbush” in the *Jepson Manual*. Users familiar with alternate traditions of common names (e.g., wolfberry vs. box-thorn for species of *Lycium*) are left out.

The only cross-references of common names to scientific names are in the individual series descriptions, and even these work only one way. A user who knows the scientific name for a plant but not the corresponding common name is out of luck. The use of common names is idiosyncratic. One would think that if the key couplet “Grasses dominant” leads to series dominated by various genera of grasses, then the couplet “Sedges dominant” would lead to communities dominated by *Scirpus* and *Eleocharis*. Not so! In the CNPS system “sedge” applies only to *Carex*.

It would be very premature for any governmental entity to adopt the published CNPS community classification as a standard at this time. V. L. Holland and I encountered this problem when the San Luis Obispo County government adopted a community classification proposed by R. F. Holland (1986) for use in planning documents and environmental reports. Repeatedly we have observed that communities encountered in the field do not correspond to published descriptions. We prefer to use a more general term like riparian woodland and then describe specifically what we observe on site rather than attempt to fit what we see into an incomplete community classification. Because much of California is privately owned, it may never be possible to obtain sufficient data for communities on non-public lands to be included in the CNPS scheme. These, unfortunately, are some of the communities most in need of protection, and often we do not become aware of them until a development is being planned. I recommend that the committee consider a more pragmatic classification system that allows the associations actually observed in the field to be described and placed into a hierarchy. A framework should exist for the placement of local, unusual, rare, and sensitive communities that have not been described in the Manual.


Ericameria linearifolia, for instance, is “narrowleaf goldenbush” in the *Manual of California Vegetation* and “interior goldenbush” in the *Jepson Manual*. Users familiar with alternate traditions of common names (e.g., wolfberry vs. box-thorn for species of *Lycium*) are left out.