

The Ecology and Conservation of California's Maritime Chaparral

Proposed Definition of Maritime Chaparral



The "Woolly leaf manzanita series" as described by Sawyer and Keeler-Wolf (Sawyer & Keeler-Wolf 1995), best describes many areas of maritime chaparral:

"forms of woolly leaf manzanita dominant or important shrub with one or more rare ceanothus or manzanita in canopy; black sage, California buckwheat, California coffeeberry, California sagebrush, chamise, coyote brush, poison oak, and/ or toyon may be present. Emergent birch leaf mountain-mahogany, and /or coast live oak may be present. Shrubs < 3 m; canopy continuous. Ground layer sparse."

However, there are several areas of maritime chaparral not dominated or even partially occupied by woolly leaf manzanita. The following manzanita species dominate large areas of maritime chaparral and qualify for designation as unique series in future updated versions of the Sawyer and Keeler-Wolf text:

- *Arctostaphylos andersonii*
- *A. canescens*
- *A. crustacea*
- *A. edmundsii*
- *A. glutinosa*
- *A. hookeri* *hearstiorum*
- *A. hookeri* *hookeri*
- *A. montaraensis*

- *A. montereyensis*
- *A. morroensis*
- *A. nummularia sensitiva*
- *A. ohlone* pro. sp.
- *A. pajaroensis*
- *A. pumila*
- *A. purissima*
- *A. silvicola*
- *A. tomentosa* (all subspecies and forms)
- *Ceanothus cuneatus* var. *rigidus*
- *Ceanothus hearstiorum*
- *Ceanothus maritimus*
- *Ceanothus cuneatus* var. *fascicularis*
- *Ceanothus gloriosus* var. *gloriosus*
- *Ceanothus gloriosus* var. *exaltatus*
- *Ceanothus gloriosus* var. *porrectus*

This new description combines, among other things, the following previous definitions:

Chaparral on ancient sand deposits at Ft. Ord, Nipomo, Vandenberg, Morro Bay (Griffin 1978).

Northern Maritime Chaparral, Central Maritime Chaparral, Southern Maritime Chaparral: “within the zone of summer fog incursion” (Holland 1986).

Ecologically, maritime chaparral is separated from interior chaparral by having greater exposure to summer fog, humidity, and mild temperatures moderating drought pressures and, potentially leading to adaptations to different disturbance regimes (less frequent fire).

It is important to recognize that, imposing inappropriate disturbance regimes can result in maritime chaparral being replaced by other community types. Inappropriately frequent or out of season fire or some types of land clearing can convert maritime chaparral to grassland or species-poor coastal scrub (Stylinski & Allen 1999, Odion & Tyler 2002). Infrequent disturbance or

invasion of non-native species can temporarily change maritime chaparral to woodland or coastal scrub communities, but in such cases, seed bank remains awaiting fire or clearing (Van Dyke & Holl 2001). Delineation of maritime chaparral, therefore, should include analysis of historical air photos to determine prior extent of the community.

References

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Sawyer, J. O., and T. Keeler-Wolf 1995. A Manual of California Vegetation. California Native Plant Society, Sacramento, CA, USA.

Stylinski, C. D., and E. B. Allen. 1999. Lack of native species recovery following severe exotic disturbance in southern Californian shrublands. Journal of Applied Ecology 36:544-554.

Van Dyke, E., and K. D. Holl. 2001. Maritime chaparral community transition in the absence of fire. Madroño 48:221-229.

If you would like to dispute or clarify this definition, please contact [Grey Hayes](#). Grey also appreciates hearing who has found this definition valuable: a quick email to him stating how this definition was helpful would very valuable.