

Added to California Rare Plant Rank 1B.3 of the CNPS Inventory on May 14, 2014

**Rare Plant Status Review: *Grimmia torenii*
Addition to California Rare Plant Rank 1B.3, G2 / S2**

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Background

Grimmia torenii is one of 29 bryophytes that are being added to the CNPS Inventory and CNDDDB based on decisions made at one to three California Bryophyte Working Group (CBWG) meetings held on January 18, 2010, January 28, 2013, and January 30, 2014. The CBWG is a committee of bryology experts that are familiar with the taxonomic, rarity, and/or conservation status of bryophytes in California. If you are interested in joining and/or learning more about this group, please contact the first author at asims@cnps.org or (916) 324-3816.

Grimmia torenii is a moss in the Grimmiaceae that is endemic to the coastal mountains of central California, and was recently described by Hastings (2008). It is diagnostic in having enlarged, whitish perichaetial leaves (Malcolm et al. 2009). *Grimmia torenii* is gametophytically similar to *G. ovalis* and sporophytically similar to *G. tergestina*, but is distinguished from these species in having leaves with papillate-mammillae, and *G. tergestina* is rejected from occurring in North America (Hastings 2008).

Grimmia torenii occurs on boulder and rock walls in sunny openings of forest, chaparral, and woodlands (Malcolm et al. 2009). It is found on calcareous and/or volcanic substrates, and is not expected on granite (CBWG 2013); at an approximate elevation of 325 to 1,160 meters.

Grimmia torenii is known from approximately thirteen occurrences; from Lake, Colusa, Contra Costa, San Mateo, Santa Cruz, and Monterey counties. All of the occurrences are recent (occurrences not 'seen' within the past 20 years are considered historical by the CNDDDB). The three occurrences from Santa Cruz County are all known from Big Basin Redwoods State Park, and the two occurrences from Contra Costa County are known from Mt. Diablo State Park. One to two occurrences from Lake County are in Mendocino National Forest, while another is on Bureau of Land Management lands. The single occurrence from Monterey County is on the Los Padres National Forest, and the single occurrence from San Mateo County is from Butano State Park. The two remaining occurrences in Lake County, as well as single occurrence from Colusa County, have an unknown land ownership.

Possible threats to *G. torenii* include rock quarrying, and rock climbing and other recreational activities; however, an assessment of these possible threats is needed prior to including them in the CNPS Inventory.

Actions

CNPS: Added to 1B.3

CNDDDB: Added to G2 / S2

Draft CNPS Inventory Record

Grimmia torenii Hastings

Toren's grimmia

Grimmiaceae

CRPR 1B.3

Colusa, Contra Costa, Lake, Monterey, San Mateo, Santa Cruz

Partington Ridge (320B) 3612126, Big Basin (408B) 3712222, Clayton (464B) 3712188,

Jericho Valley (532C) 3812274, Whispering Pines (533C) 3812276, Cortina Creek

(546C) 3912212, Upper Lake (549B) 3912228, Lake Pillsbury (565B) 3912248, Elk

Mountain (565C) 3912238

Cismontane woodland, lower montane coniferous forest, chaparral / openings, rocky, boulder and rock walls, carbonate, volcanic; elevation 325 to 1,160 meters.

Moss

Similar to *G. ovalis* and *G. tergestina*. See *The Bryologist* 111(3):463-475 (2008) for original description.

Literature Cited

Hastings, R.I. 2008. *Grimmia torenii* sp. nov. (Grimmiaceae) from California and its separation from *G. ovalis* and *G. tergestina*. *The Bryologist* 3(3): 463-475. (original description)

Malcolm B., N. Malcolm, J. Shevock, and D. Norris. 2009. *California Mosses*. Micro-Optics Press. 430 pp.