

68. *Pinus discolor* / *Muhlenbergia emersleyi* Woodland Association

Border pinyon / Bullgrass Woodland Association

This woodland community is characterized by an open (10–30 [40]%) cover) canopy (>2 m) dominated by border pinyon (*Pinus discolor*) and a mix of Emory oak (*Quercus emoryi*) and/or Arizona white oak (*Quercus arizonica*), with noteworthy alligator juniper (*Juniperus deppeana*), a subcanopy (0.5–2 m) of pointleaf manzanita (*Arctostaphylos pungens*), and a field stratum (<0.5 m) of bullgrass (*Muhlenbergia emersleyi*). The overall formation of the community ranges from dense woodlands, often in proximity to drainages or on more sheltered slopes, to sparsely wooded openings dominated by perennial grasses and/or bedrock slabs.

In general, Arizona white oak (*Q. arizonica*) is most common at higher elevations and/or in more sheltered locations, especially within included drainages. Emory oak (*Q. emoryi*) is most common in the lower-elevation examples and on exposed slopes. Other documented species include Mexican blue oak (*Quercus oblongifolia*), Toumey oak (*Quercus toumeyii*), velvet mesquite (*Prosopis velutina*), beargrass (*Nolina microcarpa*), Wright's silktassel (*Garrya wrightii*), catclaw mimosa (*Mimosa aculeaticarpa*), yucca (*Yucca madrensis*), Schott's century plant (*Agave schottii*), Texas bluestem (*Schizachyrium cirratum*), single threeawn (*Aristida schiedeana*), and tanglehead (*Heteropogon contortus*).

This community covers 13% (3,472 ha/8,572 ac) of the Rincon Mountain District and is primarily located on the slopes of Tanque Verde Ridge, just west of the Grass Shack campground. It is typically found on south-trending backslopes of variable grade (10–50%) from 1,580 to 1,940 meters (5,180–6,364 ft). The soils typically range from shallow to deep, well-drained skeletal loam underlying a variable mix of gravel, bare soil, and litter with patches of exposed bedrock slabs. Bedrock outcrops are common throughout this community and are typically composed of gneissic quartz monzonite.

Common species

- *Pinus discolor*
- *Quercus emoryi*
- *Quercus arizonica*
- *Arctostaphylos pungens*
- *Muhlenbergia emersleyi*



