

### 35. *Simmondsia chinensis* (Mixed Cacti) Shrubland Association (P)

#### Jojoba (Mixed Cacti) Shrubland Association (P)

This shrubland association is characterized by an open (<5% cover) canopy (>2 m), with a subcanopy (0.5–2 m) dominated by jojoba (*Simmondsia chinensis*) and a variable mix of cacti that include buckhorn cholla (*Cylindropuntia acanthocarpa*), cactus apple (*Opuntia engelmannii*), and tulip pricklypear (*Opuntia phaeacantha*). The canopy stratum is characterized by a low-cover (<5%) mix of short trees and large shrubs. Ocotillo (*Fouquieria splendens*) is a consistent (0.80–0.95) associate that, when present, provides cover of less than 5%. The moderately dense (15–30% cover) subcanopy is characterized by the consistent (1.0) dominance of jojoba (*S. chinensis*), with cover of 3–10 [20]%. This species is a diagnostic component of this community and commonly provides at least half of the total shrub cover in the stratum. The succulent cacti, buckhorn cholla (*C. acanthocarpa*), cactus apple (*O. engelmannii*), and tulip pricklypear (*O. phaeacantha*), are the second most-distinct and characteristic part of this community, providing about half of the shrub cover. The moderately sparse (10% cover) field layer is characterized by a diverse mix of small shrubs, subshrubs, perennial grasses, and spikemoss. Fairyduster (*Calliandra eriophylla*) and slender janusia (*Cottisia gracilis*) are the most consistent (>0.75) associates, each providing an average of 1–2% cover. At the Tucson Mountain District (TMD), the mat-forming Arizona spikemoss (*Selaginella arizonica*) may become a field dominant, especially on steeper, shadier slopes.

#### Common species

- *Fouquieria splendens*
- *Prosopis velutina*
- *Simmondsia chinensis*
- *Opuntia engelmannii*
- *Aloysia wrightii*

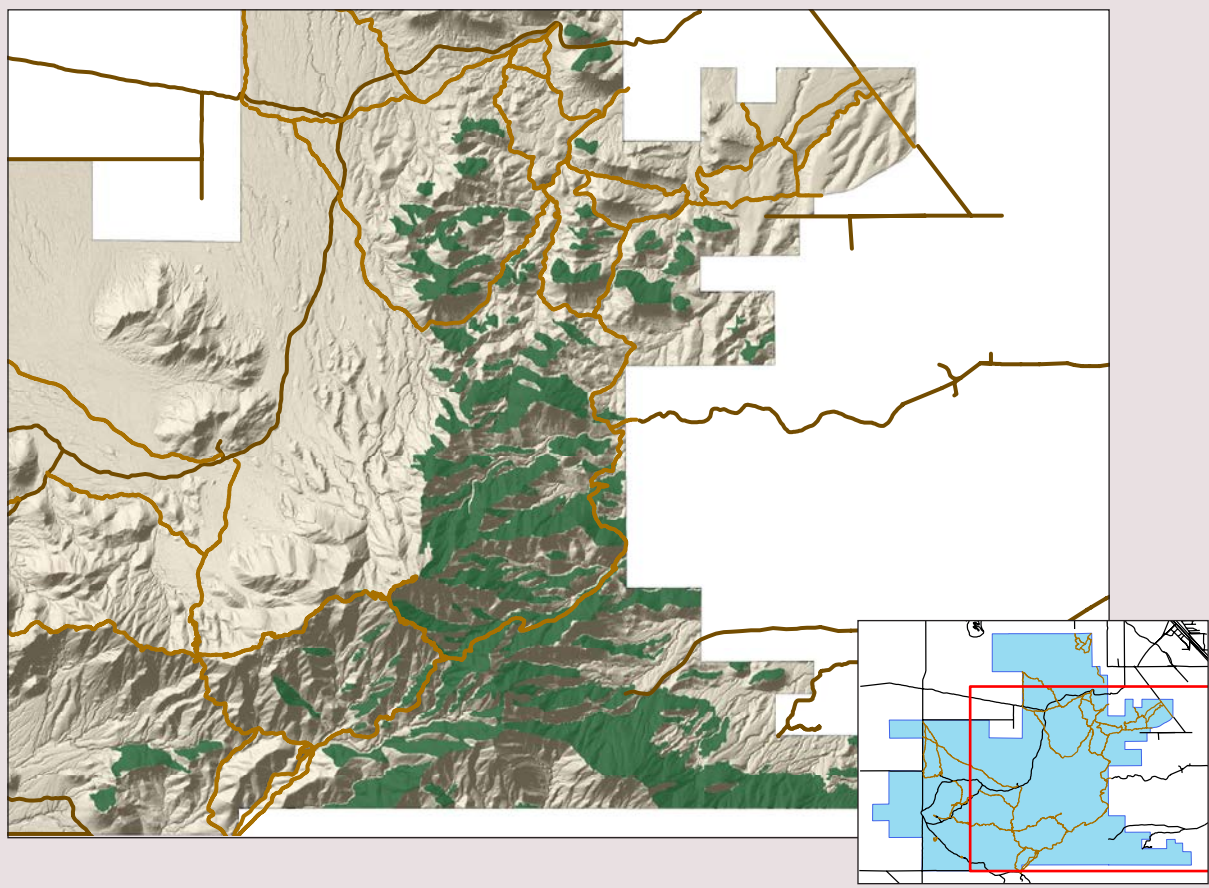
This community covers 9.5% (946 ha/2,337 ac) of the TMD. It is widespread throughout the slopes northeast of Wasson Peak. It is typically found on steep, north-facing backslopes from 890 to 970 meters (2,919–3,182 ft). In general, the surface cover is characterized by shallow, well-drained soils under a dominant layer of coarse gravel. Surface rock and exposed bedrock, primarily composed of gneissic granodiorite, are very common throughout this community.

This association is one of five found in both the TMD and the Rincon Mountain District.





Tucson Mountain District, Saguaro National Park





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This community covers 0.26% (71 ha/175 ac) of the Rincon Mountain District (RMD). At the RMD, it is exclusively found along Douglas Spring trail between the Carrillo and Twin Tank Trail junctions. It is typically found on steep, north-facing backslopes from 890 to 970 meters (2,919–3,182 ft). In general, the surface cover is characterized by shallow, well-drained soils under a dominant layer of coarse gravel. Surface rock and exposed bedrock, primarily composed of gneissic granodiorite, are very common throughout this community.

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