

### 36. *Simmondsia chinensis* / *Encelia farinosa* Shrubland Association (P)

#### Jojoba / Brittlebush Shrubland Association (P)

This shrubland association is characterized by a very open (<5% cover) canopy (>2 m), a variable (5–25% cover) subcanopy layer (0.5–2 m) dominated by jojoba (*Simmondsia chinensis*), and a variable (5–30% cover) field layer (<0.5 m) dominated by brittlebush (*Encelia farinosa*). Ocotillo (*Fouquieria splendens*) is a very consistent (~0.9) associate, providing 1–2% cover. The cover and consistency of yellow paloverde (*Parinsonia microphylla*) and velvet mesquite (*Prosopis velutina*) depend on the district. The subcanopy stratum is defined by the dominance of jojoba (*S. chinensis*). This species is a diagnostic component of this community, typically providing cover of less than 10%. In the Tucson Mountain District (TMD), it averages 3%. Cactus apple (*Opuntia engelmannii*) is very uncommon (0.2) at the TMD, where it is typically outcompeted by the similar tulip pricklypear (*Opuntia phaeacantha*). The field stratum is characterized by the dominance of brittlebush (*E. farinosa*), which is the most consistent (1.0) and highest-cover species in this community. Other noteworthy species include slender janusia (*Cottisia gracilis*), fairyduster (*Calliandra eriophylla*), sangre de cristo (*Jatropha cardiophylla*), spidergrass (*Aristida ternipes*), and rough menodora (*Menodora scabra*).

#### Common species

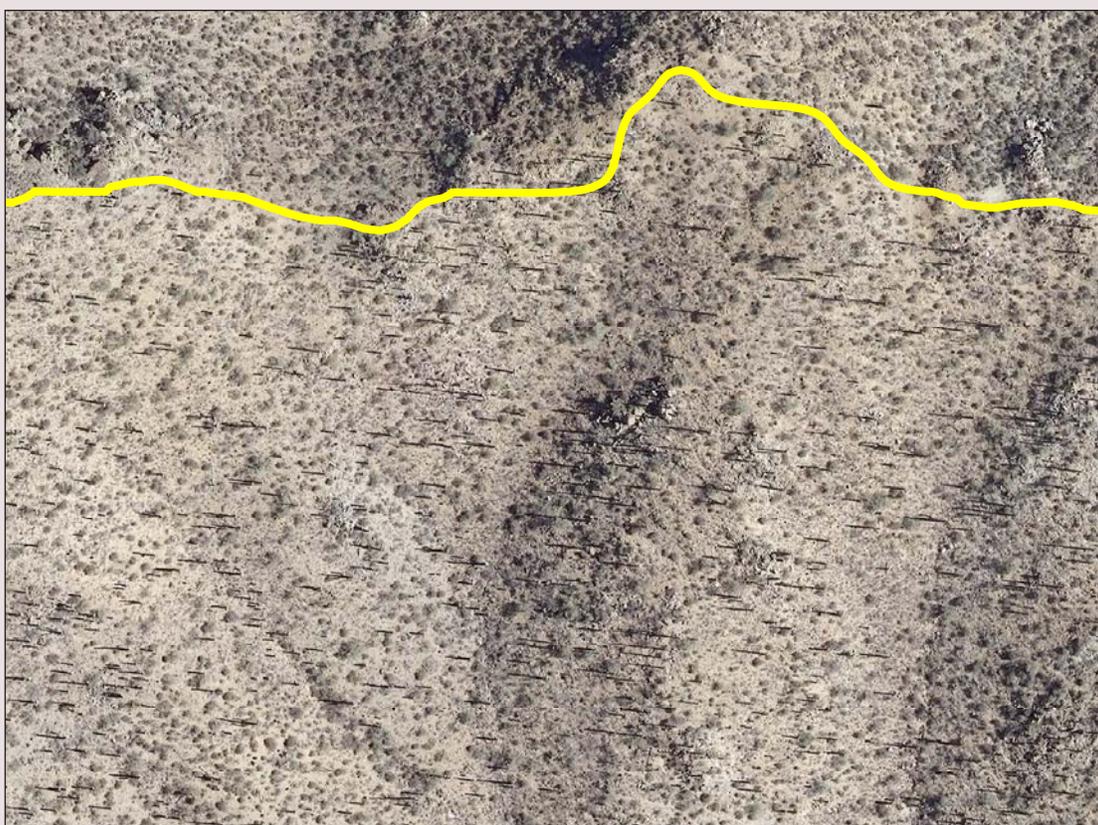
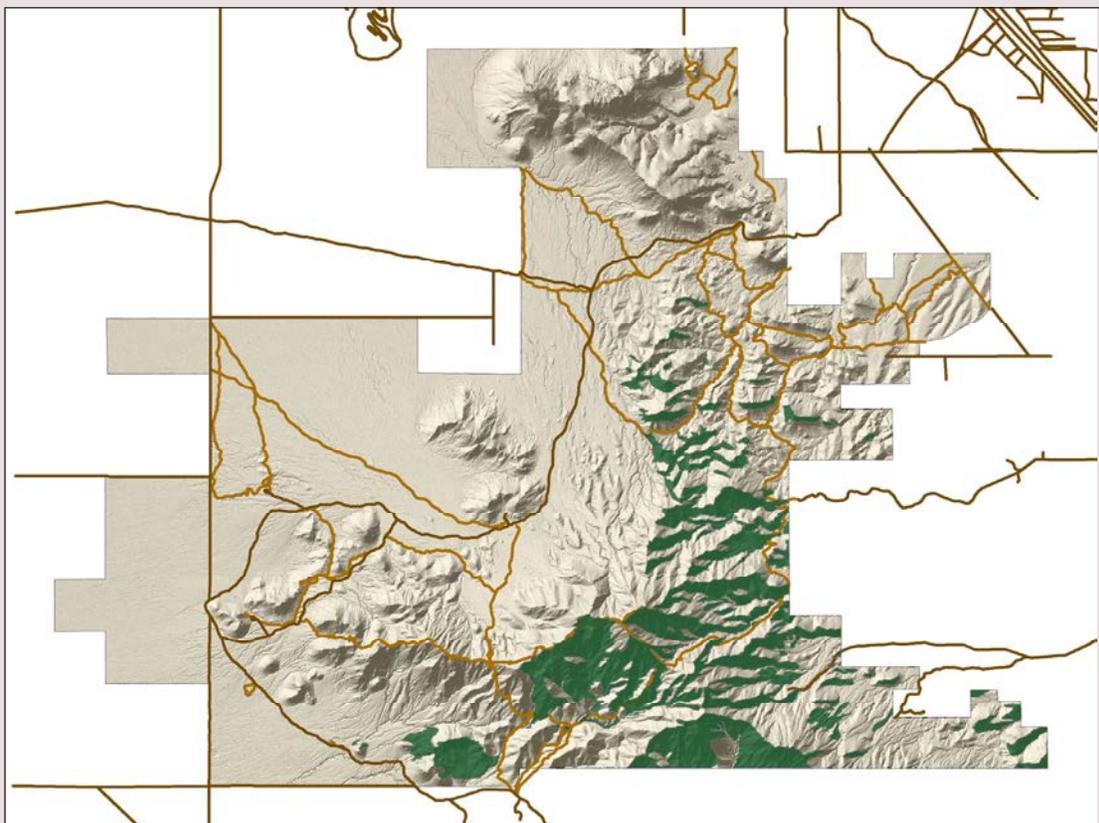
- *Simmondsia chinensis*
- *Opuntia engelmannii*
- *Encelia farinosa*

This shrubland covers 9.7% (972 ha/2,402 ac) of the TMD. It is widespread across the slopes to the east of Wasson Peak. This community is exclusively present on exposed, south-facing slopes of varying grade (5–40%) from 870 to 1,045 meters (2,854–3,428 ft).

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



Tucson Mountain District, Saguaro National Park



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This shrubland covers 0.5% (146 ha/360 ac) of the RMD, occurring near the southeast corner of the Cactus Forest Loop Road and along the Douglas Spring trail as it switchbacks upslope. This community is exclusively present on exposed, south-facing slopes of varying grade (5–40%) from 870 to 1,045 meters (2,854–3,428 ft).

This association is one of five found in both the RMD and the Tucson Mountain District.

#### Common species

- *Simmondsia chinensis*
- *Opuntia engelmannii*
- *Encelia farinosa*



Rincon Mountain District, Saguaro National Park

