

5. *Prosopis velutina* / *Opuntia engelmannii* (*Senegalia greggii* - *Celtis ehrenbergiana*) Wooded Shrubland Association (P)

Velvet mesquite / Cactus apple (Catclaw acacia - Spiny hackberry) Wooded Shrubland Association (P)

This community is characterized by an open (5–15 [25]% cover) lower-canopy stratum (2–5 m) solely dominated by velvet mesquite (*Prosopis velutina*) and a variable ([5] 10–25% cover) subcanopy (0.5–2 m) dominated by cactus apple (*Opuntia engelmannii*) with catclaw acacia (*Senegalia greggii*) and spiny hackberry (*Celtis ehrenbergiana*). Velvet mesquite (*P. velutina*) contributes consistent (1.0) dominance as trees (3 [5] m) providing an average cover of 10%, with some areas up to 20%. Cactus apple (*O. engelmannii*) provides variable cover throughout, ranging from a scant 1% up to a very conspicuous 15%. Spiny hackberry (*C. ehrenbergiana*) and catclaw acacia (*S. greggii*) are consistent (0.70 and 0.88) associate shrubs, with cover rarely surpassing 5% each. On average, the native and non-native grasses provide similar cover, around 6–7%, but dominance can vary greatly across the community. The native-grass component is usually composed of four species: bush muhly (*Muhlenbergia porteri*), spidergrass (*Aristida ter-nipes*), Arizona cottontop (*Digitaria californica*), and streambed bristlegrass (*Setaria leucopila*). The non-native component is solely composed of Lehmann lovegrass (*Eragrostis lehmanniana*).

Common species

- *Prosopis velutina*
- *Opuntia engelmannii*
- *Celtis ehrenbergiana*
- *Senegalia greggii*
- *Eragrostis lehmanniana*

This community is contained within a two-association map class that covers 1.3% (358 ha/884 ac) of the Rincon Mountain District. It is widespread throughout the low-elevation portions of the park, especially east of X9 Ranch, around Hope Camp Trail, and along the upslope margin of the Cactus Forest trail system. It is typically present on low-angle (<15%), upper alluvial fans and toeslopes from 880 to 1,087 meters (2,887–3,566 ft). The surface cover is characterized by shallow, well-drained soil ranging from gravelly loam to skeletal loam and sometimes clay.



