

17. (*Prosopis velutina*) / *Vachellia constricta* - *Opuntia engelmannii* Shrubland Association (P)
 (Velvet mesquite) / Whitethorn acacia - Cactus apple Shrubland Association (P)

This shrubland community is characterized by a sparse (<10% cover) canopy (>2 m) of velvet mesquite (*Prosopis velutina*) and a dense (20–30% cover) shrub layer (0.5–2 m) dominated by whitethorn acacia (*Vachellia constricta*) and cactus apple (*Opuntia engelmannii*). Velvet mesquite (*P. velutina*) is a consistent (1.0) component, typically present as small (2 m) shrubby trees with low (~5%) cover. The shrub layer is consistently (1.0) dominated by small (1.5 m) whitethorn acacia (*V. constricta*) that provide an evenly distributed 10–15% cover throughout. Areas of high cover typically occur within and along the numerous minor drainages that cross this community. Overall, cactus apple (*O. engelmannii*) is slightly less common, with a far patchier distribution. Cover for this species ranges from sparse areas with less than 5% cover to dense patches of up to 20%. The field layer (<0.5 m) is characterized by variable cover of 1–10%, most commonly dominated by desert zinnia (*Zinnia acerosa*). When present, this species provides cover less than 5%, but may occasionally reach toward 10%.

Common species

- *Prosopis velutina*
- *Vachellia constricta*
- *Opuntia engelmannii*
- *Zinnia acerosa*

This shrubland community covers about 1% (270 ha/668 ac) of the Rincon Mountain District and is exclusively present in the Rincon Valley, on the alluvial fans east of Hope Camp. It is restricted to very low-angle (<5%), typically south-trending alluvial fans and minor washes at elevations around 960 meters (3,150 ft). The surface cover is characterized by very shallow, well-drained soils that underlie a mix of fine gravel and sandy loam. Biological soil crusts are widespread throughout this community.



