

6. (*Carnegiea gigantea*) / *Parkinsonia microphylla* / *Larrea tridentata* - *Opuntia engelmannii* (*Vachellia constricta*) / *Krameria bicolor* Wooded Shrubland Association (P)

(Saguaro) / Yellow paloverde / Creosote - Cactus apple (Whitethorn acacia) / White ratany Wooded Shrubland Association (P)

This community is characterized by a very open (<5% cover) canopy of yellow paloverde (*Parkinsonia microphylla*), a subcanopy co-dominated by whitethorn acacia (*Vachellia constricta*) and creosote (*Larrea tridentata*), and a field stratum (<0.5 m) dominated by white ratany (*Krameria bicolor*). The type is notable due to the almost complete absence of triangle bur ragweed (*Ambrosia deltoidea*) and brittlebush (*Encelia farinosa*), two species that tend to dominate communities sharing similar habitat. Yellow paloverde (*P. microphylla*) averages 3% cover, growing mostly as small trees up to four meters in height. Saguaro (*Carnegiea gigantea*) is a consistent (1.0) associate, with average cover of around 1%.

Ocotillo (*Fouquieria splendens*) is a patchy (0.67), low-cover (<1%) associate. Whitethorn acacia (*V. constricta*) and creosote (*L. tridentata*) are very consistent (1.0) subcanopy dominants, with average cover of around 5% and 2%, respectively. Buckhorn cholla (*Cylindropuntia acanthocarpa*) is a consistent (1.0), low-cover (1%) associate. White ratany (*K. bicolor*) is a consistent (1.0) dominant, with cover ranging from 1% to 3%. Other noteworthy field species include Christmas cholla (*Cylindropuntia leptocaulis*), pencil cholla (*Cylindropuntia arbuscula*), pinkflower hedgehog cactus (*Echinocereus fasciculatus*), candy barrelcactus (*Ferocactus wislizeni*), American threefold (*Trixis californica*), rough menodora (*Menodora scabra*), whitestem paperflower (*Psilostrophe cooperi*), and desert senna (*Senna covesii*).

This community covers 0.5% (55 ha/136 ac) of the Tucson Mountain District in two small locations, one south of Picture Rocks Road, near the Mule Deer Trail, and the other along the eastern boundary near Veterans Trail. It spans a low-angle (<15%) and broad semi-alluvial section of rolling hills from 700 to 945 meters (2,300–3,100 ft). These hills are often bisected by shallow drainages and low-height interfluves. The surface cover is dominated by a layer of fine gravel, with scattered rocks throughout.

Common species

- *Carnegiea gigantea*
- *Parkinsonia microphylla*
- *Larrea tridentata*
- *Vachellia constricta*
- *Krameria bicolor*



