

1. *Parkinsonia microphylla* / *Opuntia* spp. - *Ambrosia salsola* / *Muhlenbergia porteri* Shrubland Association (P)

Yellow paloverde / Pricklypear species - Burrobush / Bush muhly Shrubland Association (P)

This association is characterized by an open (<10% cover) canopy (>2 m) of yellow paloverde (*Parkinsonia microphylla*), a subcanopy (0.5–2 m) dominated by sandy wash-loving burrobush (*Ambrosia salsola*) and pricklypear (*Opuntia* spp.), and a field stratum (<0.5 m) dominated by bush muhly (*Muhlenbergia porteri*). Yellow paloverde (*P. microphylla*) presents as relatively large (3–4 m), mature trees with cover ranging from 3% to 6%. Occasionally, desert ironwood (*Olneya tesota*) can appear with cover equal to or (rarely) surpassing that of yellow paloverde (*P. microphylla*). Burrobush (*A. salsola*) is a consistent (1.0) dominant that provides cover ranging from 3% to 10%. The consistency and dominance of this species is diagnostic of this community. Combined cactus apple (*Opuntia engelmannii*) and tulip pricklypear (*Opuntia phaeacantha*) provide cover similar to that of burrobush (*A. salsola*). These species form large, round individual clumps spaced widely apart. The field layer is quite sparse in this association, with bushy muhly (*M. porteri*) as the sole dominant with consistent (1.0) cover of around 2%. Other noteworthy field components include pinkflower hedgehog cactus (*Echinocereus fasciculatus*), spidergrass (*Aristida ternipes*), purple threeawn (*Aristida purpurea*), and slender janusia (*Cottisia gracilis*).

Common species

- *Parkinsonia microphylla*
- *Ambrosia salsola*
- *Opuntia engelmannii*
- *Opuntia phaeacantha*
- *Muhlenbergia porteri*

This community covers 3% (328 ha/791 ac) of the Tucson Mountain District and is found along a major drainage/alluvial-fan system running northwest from the Wasson Peak area. Elevation ranges from approximately 700 to 968 meters (2,300–3,175 ft), with most areas occurring above 760 meters (2,500 ft) within this range. Old and new alluvial-gravel dominance is characteristic of these generally north–northwest-trending flats.



