13. (*Parkinsonia microphylla*) / *Larrea tridentata* - Mixed Cacti / *Ambrosia deltoidea* Shrubland Association (P)

(Yellow paloverde) / Creosote - Mixed Cacti / Triangle bur ragweed Shrubland Association (P)

This community is characterized by an open (<10% cover) canopy (>2 m) of yellow paloverde (*Parkinsonia microphylla*), a variable (5–20% cover) subcanopy (0.5–2 m) dominated by creosote and a diverse suite of succulents, and a sparse (<5% cover) field stratum (<0.5 m) dominated by triangle bur ragweed (*Ambrosia deltoidea*). Yellow paloverde (*P. microphylla*) grows as a short (3 m) tree contributing cover that typically ranges from 2% to 5%, with occasional dense inclusions up to 10%. Saguaro (*Carnegiea gigantea*) is present as a low-density associate in all examples of this community, with a median of seven individuals per classification plot. Creosote (*L. tridentata*) is the most dominant species,

Common species

- Parkinsonia microphylla
- Larrea tridentata
- Cylindropuntia fulgida
- Opuntia engelmannii
- Ambrosia deltoidea

providing consistent (1.0) cover that typically ranges from 3% to 10%, with some dense inclusions up to 20%. When combined, cactus species are the next most-common group of subcanopy species, with average cover approaching 5%. In order from most to least frequent, these species include chain-fruit cholla (*Cylindropuntia fulgida*), buckhorn cholla (*Cylindropuntia acanthocarpa*), and cactus apple (*Opuntia engelmannii*). Triangle bur ragweed (*A. deltoidea*) is a consistent (1.0) dominant in the field stratum, contributing with cover ranging from 3% to 6%.

This community covers 12% (1,222 ha/3,020 ac) of the Tucson Mountain District, mainly along the west and northwestern boundaries. It typically occurs on very gravelly alluvial fans and low hillslopes in the district's lowest elevations. Elevation ranges up to 878 meters (2,880 ft). The geology of this association is generally a mix of old and new alluvium, though igneous inclusions underlay some hillslope examples.





