27. *Parkinsonia microphylla* / *Encelia farinosa - Hibiscus denudatus* Shrubland Association (P)

Yellow paloverde / Brittlebush - Paleface Shrubland Association (P)

Common species

- *Parkinsonia microphylla*
- *Opuntia engelmannii*
- *Encelia farinosa*
- *Hibiscus denudatus*

This shrubland community is characterized by a moderately sparse (<15% cover) canopy (>2 m) dominated by yellow paloverde (*Parkinsonia microphylla*) and a moderately dense (20% cover) field layer (<0.5 m) co-dominated by brittlebush (*Encelia farinosa*) and paleface (*Hibiscus denudatus*). Yellow paloverde (*P. microphylla*) is typically present as small (3 m), tree-like individuals or small, shrubby individuals (<2 m) with average cover of around 10%, including some areas up to 15% and down to a sparse 3%. Ocotillo (*Fouquieria splendens*) is a fairly consistent (0.71) low-cover associate, with cover mainly less than 5%. The subcanopy (0.5–2 m) is characterized by a diverse mix of shrubs and succulents, with cactus apple (*Opuntia engelmannii*) often providing the highest cover. However, this species is an inconsistent associate. In some areas it can provide up to 6% cover; in many others, it is absent. The field layer is consistently dominated by the low subshrubs, brittlebush (*E. farinosa*) and paleface (*H. denudatus*). Brittlebush (*E. farinosa*) is the more consistent of the two, with an average of 10% with some areas up to 20%. Paleface (*H. denudatus*) ranges from a co-dominant or sole dominant, with 5–10% cover, to a common associate, with <5%.

This community is contained within a two-association map class that covers 1% (268 ha/667 ac) of the Rincon Mountain District and is widespread on the hills east of the Camino Loma Alta trailhead. It is often found on low-angle (<25%) rolling hills, typically with a southern aspect, from 970 to 1,070 meters (3,182–3,510 ft). In general, the surface cover is defined by shallow, well-drained soils that underlie a layer of coarse (5–10 cm) gravel and small rocks that are part of the Bisbee geologic group that includes sandstone, shale, and limestone. Within the park, this community is restricted to this geologic group.

Rincon Mountain District, Saguaro National Park