

### 31. *Parkinsonia microphylla* / *Parthenium incanum* Shrubland Association (P)

#### Yellow paloverde / Mariola Shrubland Association (P)

This shrubland community is characterized by a sparse (<10% cover) canopy (>2 m) dominated by yellow paloverde (*Parkinsonia microphylla*) and a moderately dense (20–30% cover) field layer (<0.5 m) solely dominated by mariola (*Parthenium incanum*). Yellow paloverde (*P. microphylla*) is a consistent (1.0) dominant, typically present as small (3 m), tree-like individuals or large (<2 m), shrubby individuals with variable cover of 5–20%. The subcanopy (0.5–2 m) is characterized by a low-cover mix of shrubs and succulents, without any consistent dominants or common associates. Cactus apple (*Opuntia engelmannii*) is an inconsistent (0.60), variable associate; it provides occasional inclusions of dominance, with around 5% cover, or can be absent. The field layer is consistently (1.0) dominated by a moderately dense (15–25% cover) layer of mariola (*P. incanum*). Brittlebush (*Encelia farinosa*), woody crinklemat (*Tiquilia canescens*), paleface (*Hibiscus denudatus*), and rough menodora (*Menodora scabra*) are all low-cover but conspicuous associates.

#### Common species

- *Parkinsonia microphylla*
- *Opuntia engelmannii*
- *Parthenium incanum*

This community is contained within a two-association map class that covers 0.4% (113 ha/279 ac) of the Rincon Mountain District and is widespread on the hills east of the Camino Loma Alta trailhead. It is found exclusively on steep (30–50%), north-facing backslopes from 925 to 1,045 meters (3,030–3,428 ft). The surface cover is defined by shallow, well-drained soils underlying 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.



