## 29. *Parkinsonia microphylla / Lycium berlandieri* (Mixed Shrub) Rocky Shrubland Association (P)

## Yellow paloverde / Berlandier's wolfberry (Mixed Shrub) Rocky Shrubland Association (P)

This shrubland community is characterized by an open (5–20% cover) canopy (>2 m) of yellow paloverde (*Parkinsonia microphylla*), with a diverse understory of mixed shrubs and succulents, most commonly dominated by Berlandier's wolfberry (*Lycium berlandieri*). The high rock cover, in the form of large, rounded boulders, creates microclimates of cooler temperatures and protected germination sites where much of the vegetation is located. Yellow paloverde (*P. microphylla*) is present as a short (2 m) tree or tall shrub, with cover of 5–12 [20]%. In general, the most dominant and consistent species in the subcanopy (0.5–2 m)

## **Common species**

- Parkinsonia microphylla
- Lycium berlandieri
- Vachellia constricta
- Celtis ehrenbergiana

is wolfberry (*Lycium* spp.)—mostly Berlandier's wolfberry (*L. berlandieri*), but Arizona desert-thorn (*Lycium exsertum*) and water jacket (*Lycium andersonii*) were also documented. Berlandier's wolfberry (*L. berlandieri*) is a consistent and characteristic component of this community, generally with 2–3% cover. Other noteworthy subcanopy species include catclaw acacia (*Senegalia greggii*), spiny hackberry (*Celtis ehrenbergiana*), whitethorn acacia (*Vachellia constricta*), rough jointfir (*Ephedra aspera*), creosote (*Larrea tridentata*), and staghorn cholla (*Cylindropuntia acanthocarpa*). The field stratum (<0.5 m) is defined by a diverse suite of subshrubs, perennial forbs, and perennial grasses with no consistent dominants or common associates. Arizona spikemoss (*Selaginella arizonica*) is a consistent associate that can provide occasional inclusions of dominance, with cover up to 5%.

This community is contained within a two-association map class that covers 3% (295 ha/729 ac) of the Tucson Mountain District, mainly in the district's northernmost section, north of Picture Rocks Road. It occurs on very rocky north and northeast-facing crests, shoulders, and backslopes of steep mountain slopes. Gradients range from 35% slope upwards to vertical cliff bands dotted with vegetation. Rock and bedrock outcroppings are very common to dominant (35–65%) and can provide the majority of ground cover, leaving little space for plants to take hold.



