

#5 (*Larrea tridentata*) / *Parthenium incanum* Shrubland Association (P)

(Creosote bush) / Mariola Shrubland Association (P)

This shrubland association is characterized by a field stratum (<0.5 m) dominated by mariola (*Parthenium incanum*) and one common associate, creosote bush (*Larrea tridentata*), in the subcanopy stratum (0.5–2 m). Vegetation cover is sparse overall, averaging only 17% across all species, with mariola (*P. incanum*) contributing an average of 9%. Cover for this species is variable, ranging from 3 to 18%, but it is the most consistently dominant species within this association. Creosote bush (*L. tridentata*) is a patchy common associate in the subcanopy, with cover ranging from completely absent to dominant, with values up to 8%. The subcanopy is not very diverse and contains only a few other noteworthy, low-cover associates, including catclaw acacia (*Senegalia greggii*), Arizona juniper (*Juniperus arizonica*), red barberry (*Berberis haematocarpa*), and velvet mesquite (*Prosopis velutina*). These species provide very patchy cover across the community, generally around 1%, but may be locally abundant in scattered locations. Other noteworthy species in the field stratum include ratany (*Krameria erecta*), featherplume (*Dalea formosa*), woody crinklemat (*Tiquilia canescens*), slim tridens (*Tridens muticus*), New Mexico feathergrass (*Hesperostipa neomexicana*), and purple threeawn (*Aristida purpurea*).

Common species

- *Parthenium incanum*
- *Larrea tridentata*
- *Krameria erecta*
- *Juniperus arizonica*
- *Senegalia greggii*

This shrubland occurs on generally south to southwest-facing summits, backslopes, and shoulders of mesas. This shrubland community covers 8% (25 ha/62 ac) of the Castle unit and 15% (16 ha/40 ac) of the Well unit. The soils are characterized as calcareous sedimentary, typically limestone. Ground cover is dominated by a mix of angular gravel and rock, with occasional patches of exposed bedrock.

