

8. *Cercocarpus montanus* Shrubby Rock Outcrop Association (P)

Alderleaf mountain mahogany Shrubby Rock Outcrop Association (P)

This shrubby rock outcrop community is characterized by dominant bedrock outcrops and the consistent presence of alderleaf mountain mahogany (*Cercocarpus montanus*), typically emerging as the dominant species in the subcanopy (0.5–2 m), with an estimated cover of 3–7%, but rarely as low as 1% and as high as 9%. Two-needle pinyon (*Pinus edulis*) and oneseed juniper (*Juniper monosperma*) are common in the 2–5 meter range and, to a lesser extent, in the subcanopy below 2 meters in height, but rarely at more than 1–2% cover. These trees are often stunted due to the exposure of the ridges and the poor water-holding capacity of the soils. They are more common along the crest of the hills. Gray oak (*Quercus grisea*) is an associated species, tending to occur in more shrubby form, not reaching much above 2 meters, and can be co-dominant with alderleaf mountain mahogany (*C. montanus*). Cliff muhly (*Muhlenbergia polycaulis*) and blue grama (*Bouteloua gracilis*) are the two most abundant and consistently occurring perennial grasses, with up to 3% cover, usually restricted to the small pockets of soil amongst the bedrock plains. Engelmann's prickly pear (*Opuntia engelmannii*), Fendler's globemallow (*Sphaeralcea fendleri*), muttongrass (*Poa fendleriana*), ragleaf bahia (*Amauriopsis dissecta* = *Bahia dissecta*), banana yucca (*Yucca baccata*), and Carruth's sagewort (*Artemisia carruthii*) are all common associates, each usually providing less than 1% cover (scattered individuals).

This community occurs along numerous drainages in the southern portion of the project area, south of the Gila River, and is restricted to the exposed mesa tops from 1,800–1,890 meters (5,900–6,200 ft), consisting of bedrock plains and rocky, sandstone-derived, shallow soils. Overall, this community covers 5.8% (60.87 ha/150.41 ac) of the project area and 7.5% (15.79 ha/39.01 ac) of the monument, exclusively in the main unit.

Common species

- *Cercocarpus montanus*
- *Juniper monosperma*
- *Pinus edulis*
- *Quercus grisea*
- *Muhlenbergia polycaulis*

