

#### #4 *Quercus arizonica* / Mixed Shrub / Mixed Perennial Grass Tree Savanna Association (P)

##### Arizona white oak / Mixed Perennial Grass Tree Savanna Association

This tree-savanna community is characterized by a sparse (10%) tree canopy (>2 m) dominated by Arizona white oak (*Quercus arizonica*), a variable mix of subcanopy (0.5–2 m) shrubs, and a moderately dense (35%) matrix of perennial grasses in the field stratum (<0.5 m). Arizona white oak (*Q. arizonica*) provides consistent cover around 10%, but may be lower in areas subjected to recent fire disturbance or on exposed, rocky slopes. Emory oak (*Quercus emoryi*) is an inconsistent and low-cover (3%) associate whose distribution follows a distinct and transitional pattern. The subcanopy stratum (0.5–2 m) is characterized by a low-cover (<10%) mix of shrubs and succulents most commonly dominated by mountain mahogany (*Cercocarpus montanus*), common sotol (*Dasyllirion wheeleri*), and/or beargrass (*Nolina microcarpa*). The field stratum (<0.5 m) is characterized by a moderately dense (35%) and diverse matrix of native perennial grasses dominated by sideoats grama (*Bouteloua curtipendula*), tanglehead (*Heteropogon contortus*), single threeawn (*Aristida schiedeana*), cane bluestem (*Bothriochloa barbinodis*) and bullgrass (*Muhlenbergia emersleyi*).

##### Common species

*Quercus arizonica*  
*Cercocarpus montanus*  
*Dasyllirion wheeleri*  
*Nolina microcarpa*  
*Bouteloua curtipendula*

Overall, this community covers 6.1% (118 ha, 292 ac) of the park, mainly on moderately steep (35–50%) south-to southeast-facing mountain backslopes at 1,750–2,230 meters (5,741–7,644 ft). The primary examples of this community are along the ridgeline near Montezuma Peak, in the northwest corner of the park, and around the Montezuma Canyon Road switchbacks.

