

## #9 *Quercus emoryi* / Mixed Shrub Intermittently Flooded Tree Savanna Association (P)

### Emory oak / Mixed Shrub Intermittently Flooded Tree Savanna Association

This intermittently flooded tree savanna community is characterized by a moderately sparse canopy (<20%) dominated by Emory oak (*Quercus emoryi*) with a diverse mix of shrubs and grasses in the understory. Emory oak (*Q. emoryi*) is typically present as a large tree with heights ranging from 6 to 10 meters [to 12 m], but is occasionally present as a small (2 m), shrub-like tree. This species provides an average of 13% cover across the community, with values ranging from a scant 3% up to 20% in some locations. The subcanopy stratum (0.5–2 m) is characterized by an inconsistent, low-cover (<10%) mix of shrubs and succulents with no consistently dominant species or common associates across the community. Local dominance is

most commonly provided by desert willow (*Chilopsis linearis*), catclaw mimosa (*Mimosa aculeaticarpa*), velvet mesquite (*Prosopis velutina*), desertbroom (*Baccharis sarothroides*), and mulefat (*Baccharis salicifolia*). The field stratum (<0.5 m) is characterized by a dense (40%), diverse matrix of perennial grasses with scattered subshrubs and forbs. Overall, dominance is solely associated with Lehmann lovegrass (*Eragrostis lehmanniana*), with average cover around 12% with areas ranging up to 20%. This species is associated with the adjacent non-native grassland.

Overall, this community covers 2.4% (46 ha, 114 ac) of the park, mainly on low-angle (<15%), south- to south-east-flowing drainages and steeper, adjacent slopes at 1,500 meters (4,921 ft). The primary example of this community is the eastern portion of Montezuma Canyon Wash, where it cuts through the alluvial fan in the south-eastern portion of the park.

#### Common species

*Quercus emoryi*

*Chilopsis linearis*

*Mimosa aculeaticarpa*

*Prosopis velutina*

*Baccharis sarothroides*

