

#2 *Platanus wrightii* - *Fraxinus velutina* Riparian Forest Association

Arizona sycamore - Velvet ash Riparian Forest Association

This riparian woodland community is characterized by a tall tree canopy co-dominated by Arizona sycamore (*P. wrightii*) and Arizona ash (*F. velutina*). Average cover of canopy species is around 53%, with values ranging from 25% to 91%. Arizona sycamore, a large (15-m) riparian tree, provides variable cover, averaging to 18% and ranging up to 63% across both units. Cover of Arizona ash (*F. velutina*), a shorter-statured (6-m) and later successional tree, is closer to 12%, with values ranging up to 63%. On a large scale, both species provide consistent cover throughout the community. However, when examined locally they can be quite patchy, with either one becoming the sole dominant or being completely absent. A mix of widespread but inconsistent riparian trees intermingle throughout this community, including Arizona alder (*Alnus oblongifolia*), cottonwood (*Populus fremontii*), and Goodding's willow (*Salix gooddingii*). Emory's baccharis (*Baccharis emoryi*) and false indigo bush (*Amorpha fruticosa*) often form dense thickets along the edge of the watercourse, but provide little cover across the community as a whole. Cover of herbaceous species is highly variable, averaging 30% across the community and ranging from a few percent up to 90%. A mix of annual, non-native grasses, such as ripgut brome (*Bromus diandrus*), cheatgrass (*Bromus tectorum*), and red brome (*Bromus rubens*) usually dominate this stratum.

Common species

- *Platanus wrightii*
- *Fraxinus velutina*
- *Alnus oblongifolia*
- *Populus fremontii*
- *Bromus diandrus*
- *Bromus tectorum*

This riparian woodland is found on the low-gradient (1%) floodplains of Beaver Creek and the adjacent alluvial terraces at both units of the monument. This community covers 12% (36 ha/90 ac) of the Castle unit and 20% (19 ha/49 ac) of the Well unit. The surface cover is often composed of a sandy alluvial soil with various cobble sizes, ranging from larger boulders immediately adjacent to and in the creek, to moderately sized rocks and fine gravel on the upper alluvial terraces.

