

EDWARDS PLATEAU MESIC CANYON (NOT MAPPED)

Nature Serve ID: CES303.038

Geology: Associated with lower Cretaceous limestones of the Edwards Plateau, often on the Glen Rose or related formations.

Landform: This system occurs on lower slopes (toe slopes) and onto the margins of adjacent valleys of small drainages. Occurrences are generally found in steep canyons where insolation is minimal, or on lower positions on north facing slopes.

Soils: Rich loams, often very rocky, with little soil development. Steep Rocky Ecological Site, in part.

Parent Description: Currently this system is not mapped individually, but will occur as inclusions within mapped Edwards Plateau slope, riparian, or floodplain forests. Its presence at lower slope positions make it transitional between slope and riparian/floodplain systems. This system is largely endemic to the Edwards Plateau ecoregion and occurs on canyon bottoms, mesic lower slopes and steep canyons, primarily in the Southern Balcones Escarpment, but also in the Eastern Balcones Escarpment (also on the Limestone Cutplain). This system also includes areas of cliff faces and lower slopes of boxed canyons occurring as narrow, sometimes long bands in areas often with seeps where moisture is consistently more available than on adjacent slopes. The tree canopy is generally closed. Common components include *Ulmus crassifolia* (cedar elm), *Juglans major* (Arizona walnut), *Quercus buckleyi* (Texas oak), *Quercus laceyi* (Lacey oak), *Prunus serotina* var. *eximia* (escarpment black cherry) (becoming less common to the north), *Fraxinus texensis* (Texas ash) (dominant in the northeastern plateau), *Quercus muehlenbergii* (chinkapin oak), *Tilia americana* (American basswood), and *Acer grandidentatum* (bigtooth maple). Canyon bottoms may have scattered *Quercus macrocarpa* (bur oak). Substrate (limestone) and topographic position (north and east aspects and lower slopes) are the dominant characteristics of this system. Small seepage areas may be identified as the Edwards Plateau Cliff system, and are often dominated by *Adiantum capillus-veneris* (maiden-hair fern), with *Thelypteris ovata* var. *lindheimeri* (Lindheimer's maidenhair) on nearby moist habitats. Fire probably plays little role in the system, while grazing and browsing (by native as well as exotic ungulates) may play an important role in recruitment and understory composition. Adjacent, drier slopes are usually dominated by various *Quercus* species and *Juniperus ashei* (Ashe juniper). Woodlands and forests downslope of occurrences of this system may be well-developed riparian woodlands, small stringers of *Platanus occidentalis* (American sycamore), or this system may occupy the lowest topographic positions along extremely small, rocky drainages.

ECOLOGICAL MAPPING SYSTEMS:

EDWARDS PLATEAU: BIGTOOTH MAPLE MESIC CANYON (NOT MAPPED)

Mapping System ID: not mapped

EMS Description: This vegetation type occupies the most mesic sites and is characterized by the presence of *Acer grandidentatum* (bigtooth maple). *Quercus muehlenbergii* (chinkapin oak) is a common associate, along with *Prunus serotina* var. *eximia* (escarpment black cherry), *Juglans major* (Arizona walnut), and other deciduous species. Overstory is usually a closed canopy. Mesic indicators such as *Aquilegia canadensis* (wild columbine) and *Clematis texensis* (scarlet clematis) may be present. This system is found throughout the range of the system.

EDWARDS PLATEAU: MIXED DECIDUOUS MESIC CANYON (NOT MAPPED)

Mapping System ID: not mapped

EMS Description: Occurrences are somewhat drier than the similar Bigtooth Maple sites, and lack *Acer grandidentatum* (bigtooth maple). Sites are characterized by the presence of a relatively closed canopy of deciduous hardwoods, including *Quercus muehlenbergii* (chinkapin oak), *Q. buckleyi* (Texas oak), *Q. laceyi* (Lacey oak), *Prunus serotina* var. *eximia* (escarpment black cherry), *Juglans major* (Arizona walnut), and *Ulmus rubra* (slippery elm).