

TAMAULIPAN MIXED DECIDUOUS THORNSCRUB

Nature Serve ID: CES301.983

Geology: Well-represented on the Eocene Claiborne and Jackson Groups and the Pleistocene Beaumont Formation, but also found on various other formations.

Landform: On gently rolling to nearly level sites, sometime interdigitated with calcareous ridges and low lying drainages and bottomlands.

Soils: Clay, Clay Flat, and Clay Loam Ecological Sites are the typical soils for this system, though it may occur on a variety of other tight soils.

Parent Description: This shrubland is differentiated from Tamaulipan Savanna Grassland as it occupies tighter soils, as opposed to the sandier soils of the savanna grassland. The sites are often lower in the landscape compared to nearby savanna grassland or Tamaulipan Calcareous Shrubland, but would be considered uplands as they are distant from bottomland soils and drainages, and are not well-developed woodlands typical of the lowest landscape positions. To a large degree, all of these systems share numerous shrub species, but show subtle differences in relative dominance. However, this system generally occurs as a closed shrubland or low woodland, usually lacking a purely open herbaceous component. Soils are clays, clay loams, and clay flats and are often calcareous or alkaline to varying degrees. Some sites are highly saline, and these sites are occupied by Tamaulipan Saline Shrubland, but transitions between the systems may be subtle. *Prosopis glandulosa* (honey mesquite) is very often a conspicuous component of the canopy, sometimes reaching to 6 m in height. This canopy may be dense, but given the open nature of the canopy of individual *Prosopis glandulosa* (honey mesquite), significant solar radiation reaches the lower strata. *Acacia farnesiana* (huisache), *Celtis ehrenbergiana* (granjeno), *Ebenopsis ebano* (Texas ebony), and *Celtis laevigata* (sugar hackberry) may also be components of the canopy, but *Prosopis glandulosa* (honey mesquite) usually dominates. The overstory canopy may be open with only scattered emergent trees over a dense shrub layer at 1 to 3 m in height. Depending on land use history, the shrub understory may be limited to a few species such as *Opuntia engelmannii* var. *lindheimeri* (Lindheimer pricklypear), *Ziziphus obtusifolia* (lotebush), or *Celtis ehrenbergiana* (granjeno) on relatively recently cleared sites. On more mature sites, a diverse assemblage of species such as *Acacia rigidula* (blackbrush), *Castela erecta* (amargosa), *Malpighia glabra* (Barbados cherry), *Opuntia engelmannii* var. *lindheimeri* (Lindheimer pricklypear), *Cylindropuntia leptocaulis* (tasajillo), *Ziziphus obtusifolia* (lotebush), *Celtis ehrenbergiana* (granjeno), *Lycium berlandieri* (Berlandier wolfberry), *Forestiera angustifolia* (desert olive), *Guaiacum angustifolium* (guayacan), *Diospyros texana* (Texas persimmon), *Amyris texana* (Texas torchwood), *Karwinskia humboldtiana* (coyotillo), *Havardia pallens* (tenaza), *Phaulothamnus spinescens* (snake-eyes), *Schaefferia cuneifolia* (desert yaupon), *Condalia hookeri* (brasil), and *Zanthoxylum fagara* (colima) may occur. *Leucophyllum frutescens* (cenizo) and *Acacia berlandieri* (guajillo) may be present, but occur as scattered individuals as opposed to dominating the aspect of the community as they sometimes do on some shallow-soiled calcareous sites. However, like some shallow-soiled calcareous sites, *Acacia rigidula* (blackbrush) is the aspect dominant of the shrub layer. The herbaceous layer is usually fairly sparse. Currently, the herbaceous layer may actually be dense with the non-native grass *Urochloa maxima* (guineagrass). Other non-native species, such as *Pennisetum ciliare* (buffelgrass), *Cynodon dactylon* (bermudagrass), *Bothriochloa ischaemum* var. *songarica* (King Ranch bluestem), and *Dichanthium annulatum* (Kleberg bluestem), may also be

present to dominant. Native grasses, such as *Bothriochloa laguroides* ssp. *torreyana* (silver bluestem), *Trichloris* spp. (false Rhodes grasses), and *Pappophorum bicolor* (pink pappusgrass), may be present.

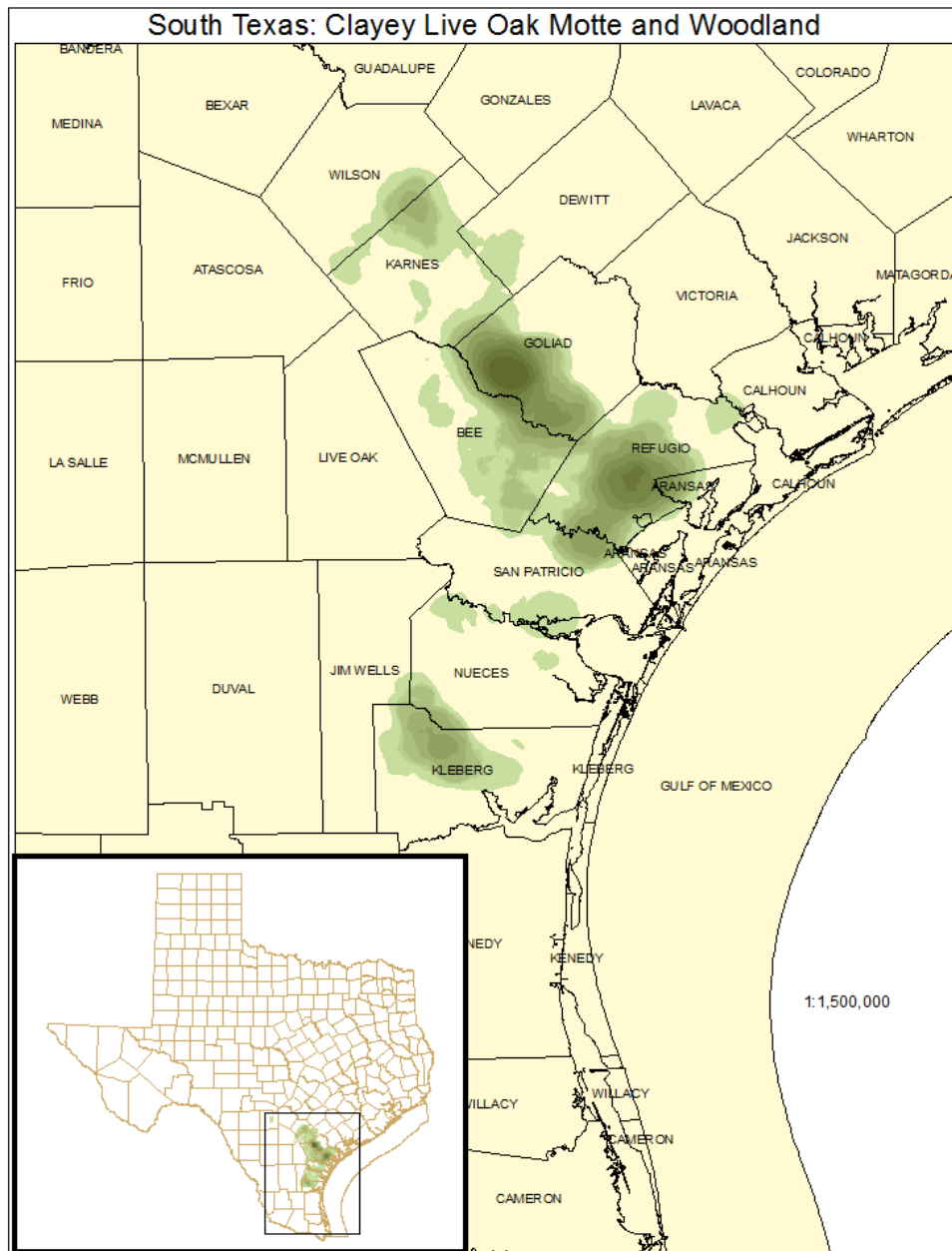
ECOLOGICAL MAPPING SYSTEMS:

SOUTH TEXAS: CLAYEY LIVE OAK MOTTE AND WOODLAND

Mapping System ID: 7002

EMS Description: Sites along the northern edge of the South Texas Plains on clayey substrates where *Quercus fusiformis* (plateau live oak) dominates the overstory. The understory is often dominated by numerous shrub species.

Distribution Map:



Example:

Not available at this time.

Public Land Occurrence:

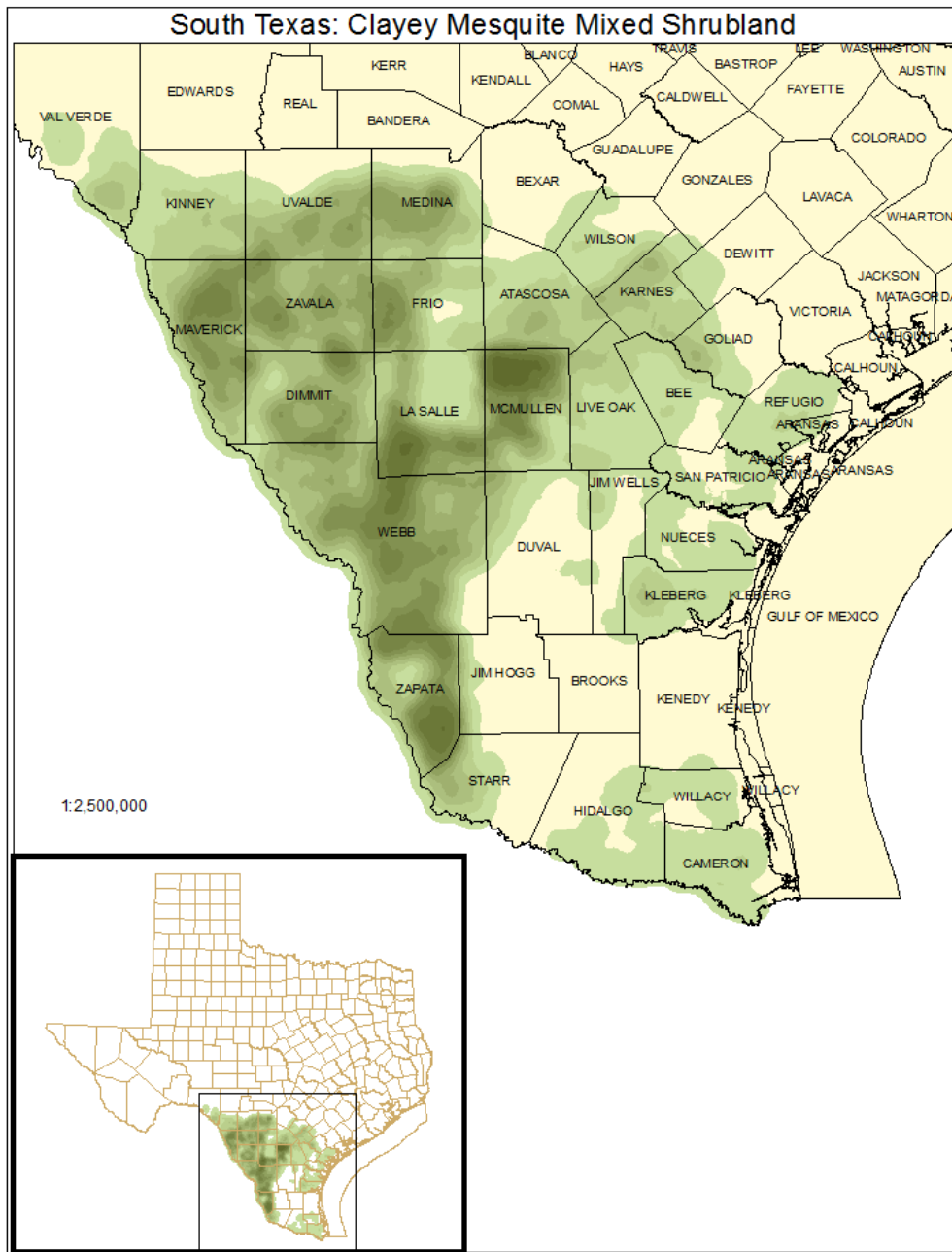
None.

SOUTH TEXAS: CLAYEY MESQUITE MIXED SHRUBLAND

Mapping System ID: 7004

EMS Description: Sites often with a sparse to dense overstory of *Prosopis glandulosa* (honey mesquite). Numerous shrub species occupy the understory, including *Acacia farnesiana* (huisache), *Acacia rigidula* (blackbrush), *Opuntia engelmannii* var. *lindheimeri* (Lindheimer pricklypear), and *Celtis ehrenbergiana* (granjeno).

Distribution Map:



Example:



Public Land Occurrence:

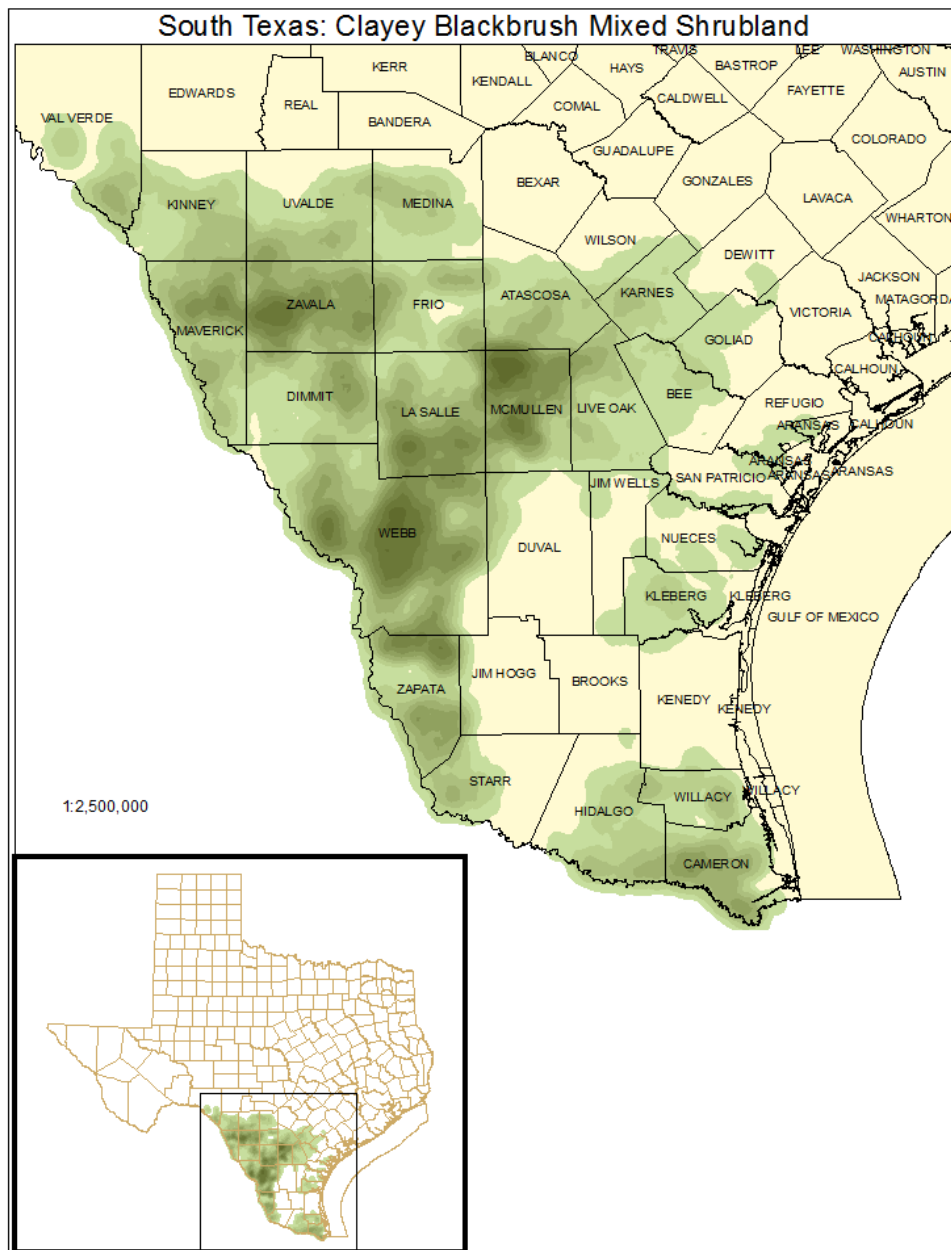
James E. Daughtrey Wildlife Management Area: Texas Parks & Wildlife Department
Lower Rio Grande Valley National Wildlife Refuge-Teniente: US Fish and Wildlife Service
Welder Wildlife Refuge: Welder Wildlife Foundation

SOUTH TEXAS: CLAYEY BLACKBRUSH MIXED SHRUBLAND

Mapping System ID: 7005

EMS Description: Sites are typically dominated by a dense canopy of *Acacia rigidula* (blackbrush), but these sites may have numerous species in the canopy, including *Prosopis glandulosa* (honey mesquite), *Celtis ehrenbergiana* (granjeno), *Condalia hookeri* (brasil), and *Opuntia engelmannii* var. *lindheimeri* (Lindheimer pricklypear). These shrublands may be tall (to 2 or more meters in height) making them resemble dense woodlands.

Distribution Map:



Example:



Public Land Occurrence:

Amistad National Recreation Area: US National Park Service

Chaparral Wildlife Management Area: Texas Parks & Wildlife Department

Falcon State Park: Texas Parks & Wildlife Department

Garner State Park: Texas Parks & Wildlife Department

James E. Daughtrey Wildlife Management Area: Texas Parks & Wildlife Department

Laguna Atascosa National Wildlife Refuge: US Fish and Wildlife Service

Lake Casa Blanca State Park: Texas Parks & Wildlife Department

Lake Corpus Christi State Park: Texas Parks & Wildlife Department

Lower Rio Grande Valley National Wildlife Refuge- Arroyo Morteros Unit: US Fish and Wildlife Service

Lower Rio Grande Valley National Wildlife Refuge- Chapeno Unit: US Fish and Wildlife Service

Lower Rio Grande Valley National Wildlife Refuge- Las Ruinas Unit: US Fish and Wildlife Service

Lower Rio Grande Valley National Wildlife Refuge- Los Negros Creek Unit: US Fish and Wildlife Service

Lower Rio Grande Valley National Wildlife Refuge- Palmview Unit: US Fish and Wildlife Service

Lower Rio Grande Valley National Wildlife Refuge-Boscaje De La Palma: US Fish and Wildlife Service

Lower Rio Grande Valley National Wildlife Refuge-El Jardin: US Fish and Wildlife Service

Lower Rio Grande Valley National Wildlife Refuge-La Coma: US Fish and Wildlife Service

Lower Rio Grande Valley National Wildlife Refuge-Phillips Banco: US Fish and Wildlife Service

Lower Rio Grande Valley National Wildlife Refuge-Resaca Del Rancho Viejo: US Fish and Wildlife Service

Lower Rio Grande Valley National Wildlife Refuge-Willamar: US Fish and Wildlife Service

Palo Alto Battlefield National Historic Site: US National Park Service

Santa Ana National Wildlife Refuge: US Fish and Wildlife Service

