

MADREAN UPPER MONTANE CONIFER - OAK FOREST AND WOODLAND

Nature Serve ID: CES305.798

Geology: On Permian limestone in the Guadalupe Mountains. In the Chisos Mountains, this system primarily occurs on Tertiary igneous formations and associated colluvial and alluvial deposits from these formations.

Landform: High mountain slopes and flats and rolling topography at mountain summits of the Guadalupe and Chisos Mountains.

Soils: Victorio-Lorenz-Rock outcrop complex of the Guadalupe Mountains, and Igneous Hill and Mountain soils of the Chisos Mountains.

Parent Description: This system is limited in Texas to the highest mountain areas of the Guadalupe and Chisos Mountains, but is lacking from high elevations of the Davis Mountains. The characteristic dominants of the system are *Pseudotsuga menziesii* (Douglas-fir) and *Pinus strobiformis* (southwestern white pine), though *Pinus ponderosa* (ponderosa pine), *Juniperus* spp. (junipers) and *Pinus cembroides* (Mexican pinyon pine) or *Pinus edulis* (pinyon pine) may also be present to common. Oak species, including *Quercus emoryi* (Emory oak), *Quercus hypoleucooides* (silverleaf oak), *Quercus grisea* (gray oak), and *Quercus gambelii* (Gambel oak) may be present to co-dominant. The shrub and subcanopy is typically sparse and generally dominated by species from the canopy. In some areas, *Quercus gambelii* (Gambel oak) may form dense shrub patches. The herbaceous layer is typically dominated by graminoids, including species such as *Festuca arizonica* (Arizona fescue), *Muhlenbergia pauciflora* (New Mexican muhly), *Piptochaetium fimbriatum* (pinyon ricegrass), *Blepharoneuron tricholepis* (pine dropseed), *Koeleria macrantha* (junegrass), and *Poa fendleriana* (mutton bluegrass).

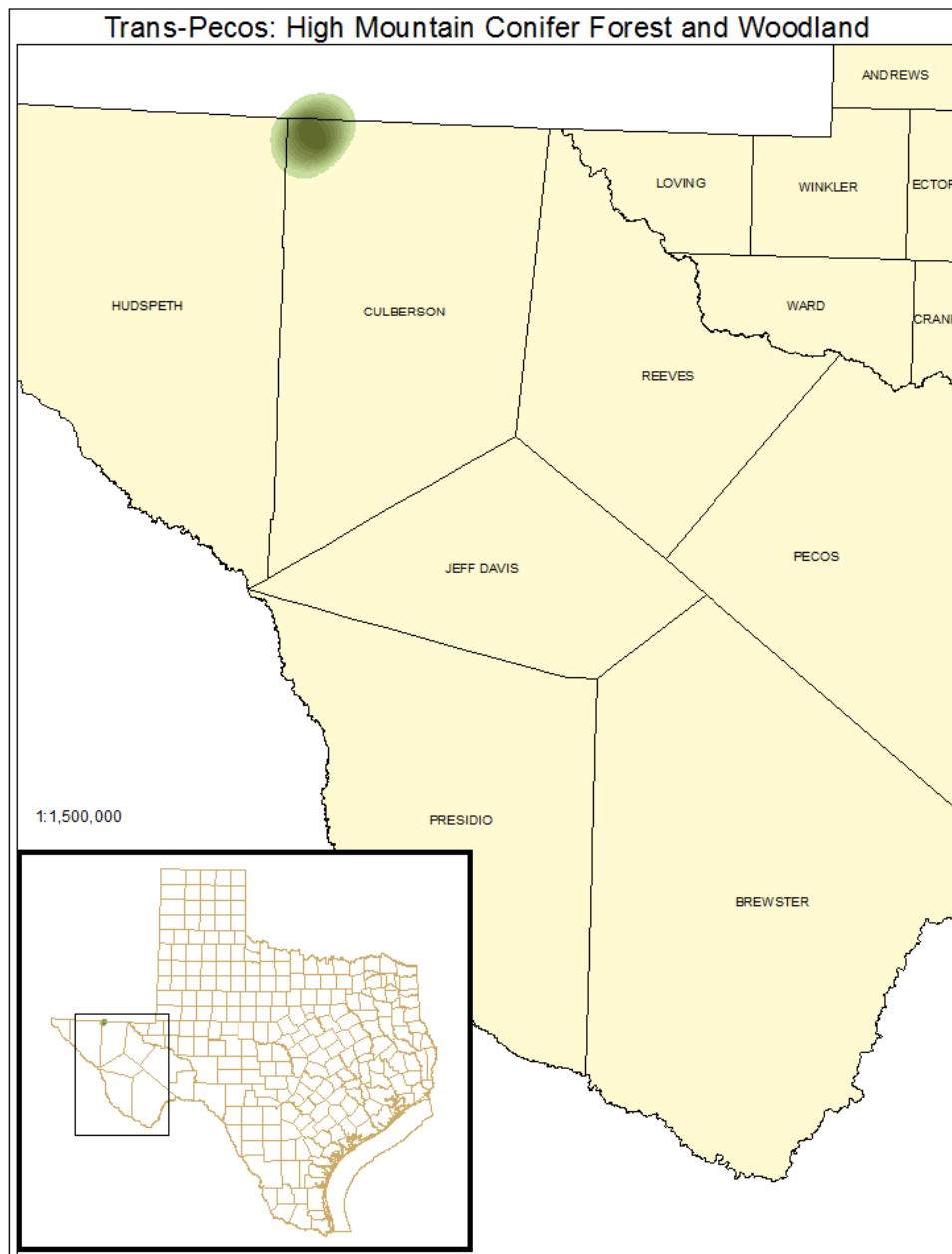
ECOLOGICAL MAPPING SYSTEMS:

TRANS-PECOS: HIGH MOUNTAIN CONIFER FOREST AND WOODLAND

Mapping System ID: 12601

EMS Description: This type is dominated by conifers such as *Pseudotsuga menziesii* (Douglas fir), *Pinus strobiformis* (southwestern white pine), *Pinus ponderosa* (ponderosa pine), *Pinus arizonica* (Arizona pine, in the Chisos Mountains), and/or *Juniperus* spp. (junipers).

Distribution Map:



Example:



Public Land Occurrence:

Big Bend National Park: US National Park Service

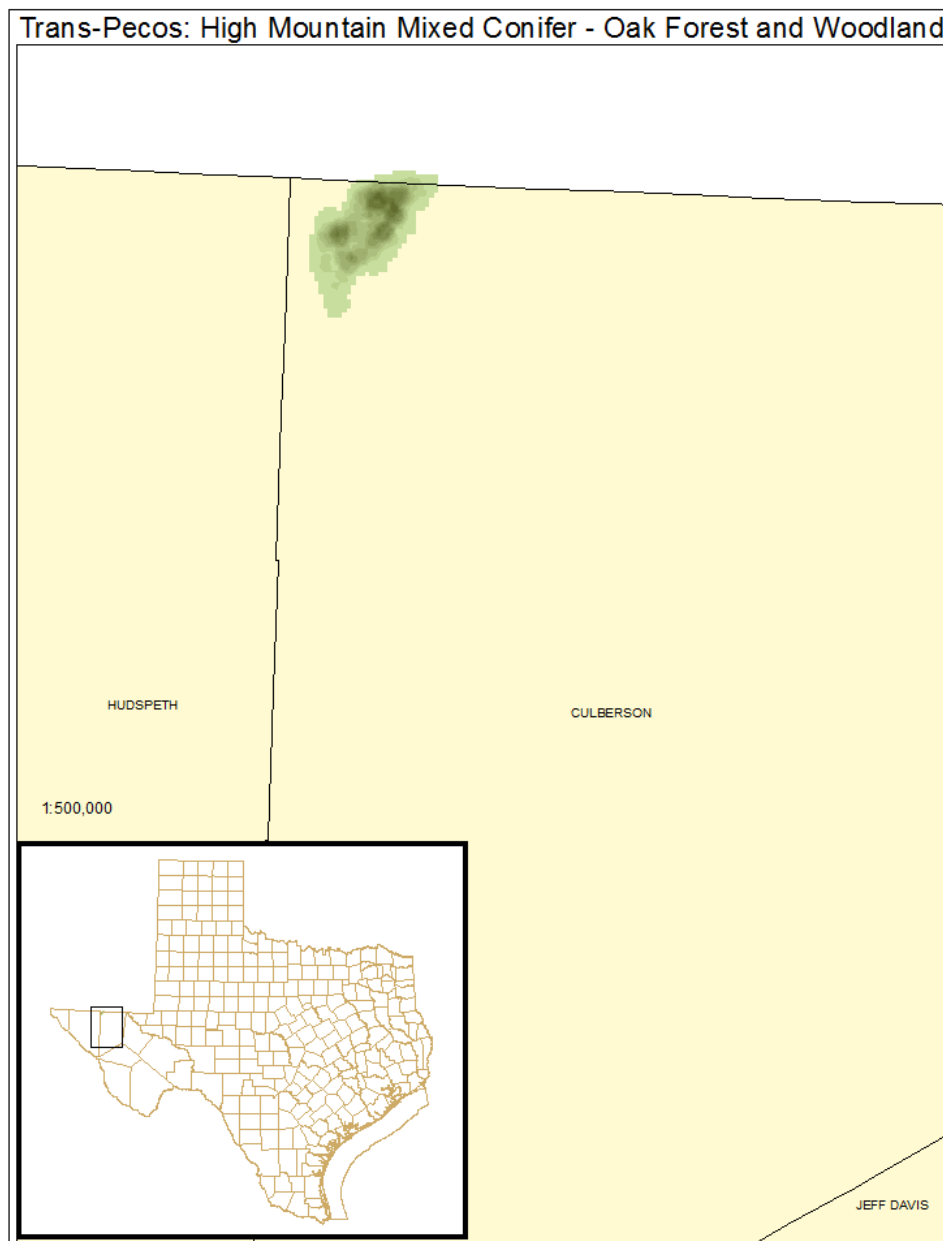
Guadalupe Mountains National Park: US National Park Service

TRANS-PECOS: HIGH MOUNTAIN MIXED CONIFER - OAK FOREST AND WOODLAND

Mapping System ID: 12603

EMS Description: Occurrences are codominated by conifers such as *Pseudotsuga menziesii* (Douglas fir), *Pinus strobiformis* (southwestern white pine), and other pine and juniper species, as well as oak species such as *Quercus emoryi* (Emory oak), *Quercus grisea* (gray oak), *Quercus hypoleucoides* (silverleaf oak), and *Quercus gambelii* (Gambel oak).

Distribution Map:



Example:



Public Land Occurrence:

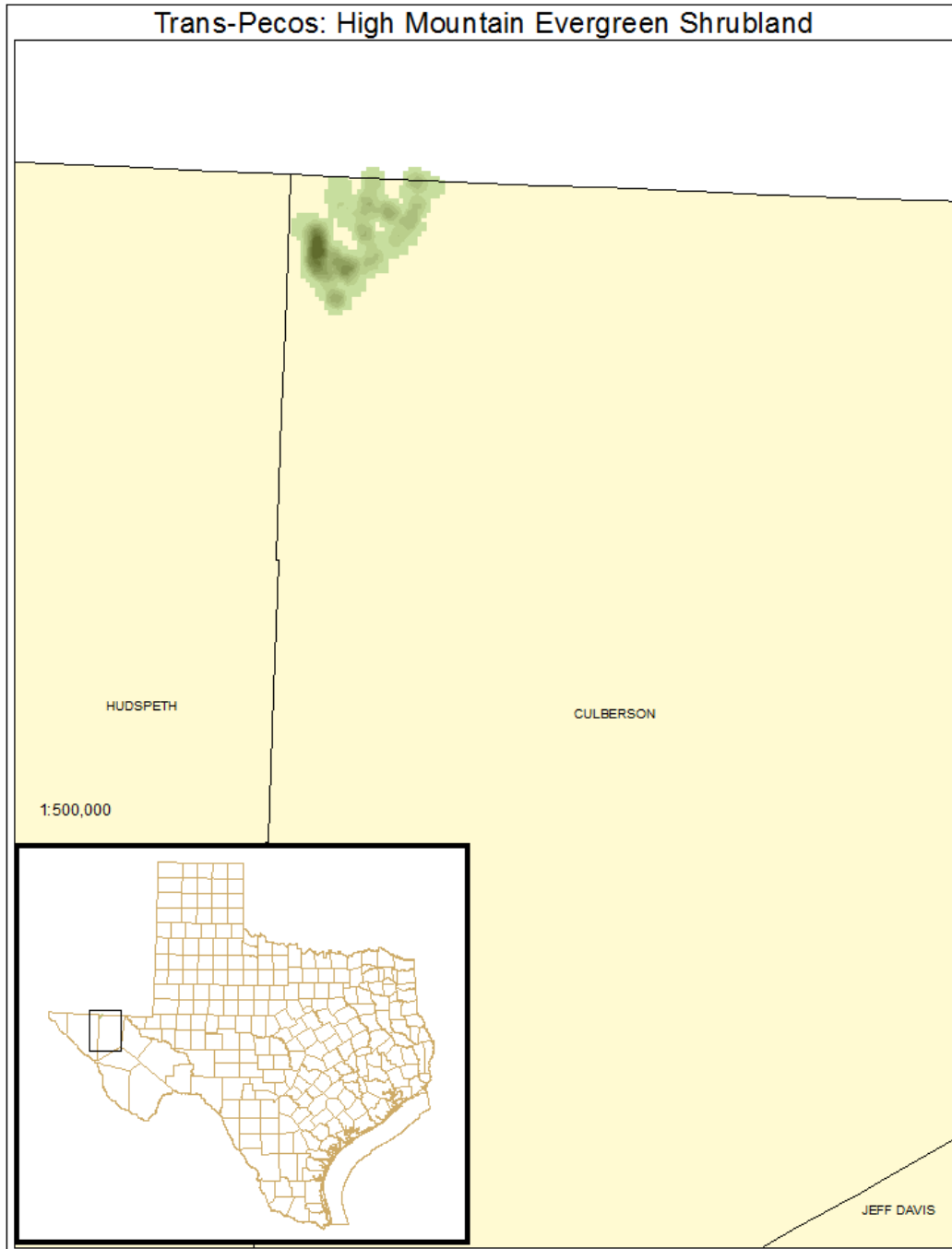
Guadalupe Mountains National Park: US National Park Service

TRANS-PECOS: HIGH MOUNTAIN EVERGREEN SHRUBLAND

Mapping System ID: 12605

EMS Description: Shrublands at high elevations, typically within a matrix of other vegetation types within the system and dominated by young individuals of the canopy species.

Distribution Map:



Example:

Not available at this time.

Public Land Occurrence:

Guadalupe Mountains National Park: US National Park Service