

13920

Tamaulipan Calcareous Thornscrub

BpS Model/Description Version: Aug. 2020

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Modelers		Reviewers	
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None	None	None	None

Vegetation Type

Shrubland

Map Zones

36

Geographic Range

Occurs from Starr County north and to the vicinity of Goliad County and westward in a band along the Rio Grande, including Zapata, Webb and Maverick counties, Texas.

Biophysical Site Description

Shrublands generally occur on thin-soiled calcareous substrates on upland sites, including on caliche of the Goliad formation and calcareous gravels.

Vegetation Description

Texas barometer bush (*Leucophyllum frutescens*), guajillo (*Acacia berlandieri*), blackbrush acacia (*A. rigidula*), Texas kidneywood (*Eysenhardtia texana*), goatbush (*Castela erecta*), whitebrush (*Aloysia gratissima*), shrubby blue sage (*Salvia ballotiflora*) and Texas lignum-vitae (*Guajacum angustifolium*) may dominate the system. Other shrubs include Mexican oregano (*Lippia graveolens*), Texas torchwood (*Amyris texana*), crown of thorns (*Koeberlinia spinosa*), Don Quixote's lace (*Yucca treculeana*), leatherstem (*Jatropha dioica*), pepperbush (*Croton humilis*), wild crapemyrtle (*Malpighia glabra*) and hairy wedelia (*Wedelia hispida*). A sparse overstory canopy composed of mesquite (*Prosopis glandulosa*), sometimes with Texas paloverde (*Parkinsonia texana*), anacahuita (*Cordia boissieri*) and Texas ebony (*Ebenopsis ebano*) to the south. Cacti present include Christmas cactus (*Opuntia leptocaulis*), cactus apple (*O. engelmannii*), horse crippler (*Echinocactus texensis*) and pitaya (*Echinocereus enneacanthus*). In the understory, woody crinklemat (*Tiquilia canescens*) may frequently occur. Some geographic variation occurs within this system with species such as mescal bean (*Sophora secundiflora*) frequent on the northern part of the range and barreta (*Helietta parvifolia*), heartleaf rosemallow (*Hibiscus martianus*), anacahuita (*Cordia boissieri*), Gregg's saddlebush (*Mortonia greggii*) and shrubby bullseye (*Gochnatia hypoleuca*) occurring on southern areas.

BpS Dominant and Indicator Species

Symbol	Scientific Name	Common Name
LEFR3	<i>Leucophyllum frutescens</i>	Texas barometer bush
ACBE	<i>Acacia berlandieri</i>	Guajillo
PRGL2	<i>Prosopis glandulosa</i>	Honey mesquite
ACRI	<i>Acacia rigidula</i>	Blackbrush acacia

Disturbance Description

No known disturbance would cause marked changes, although drought is included in the VDDT model as a maintenance event and may result in a minor reduction in the shrub canopy cover.

Severity	Avg FI	Percent of All Fires	Min FI	Max FI
Replacement				
Moderate (Mixed)				
Low (Surface)				
All Fires				

Scale Description

Adjacency or Identification Concerns

Issues or Problems

Native Uncharacteristic Conditions

Comments

Succession Classes

Mapping Rules

[illegible]

Succession class letters A-E are described in the Succession Class Description section. Some classes use a leafform distinction where a qualifier is added to the class letter: Brdl (broadleaf), Con (conifer), or Mix (mixed conifer and broadleaf). UN refers to uncharacteristic native or a combination of height and cover that would not be expected under the reference condition. NP refers to not possible or a combination of height and cover which is not physiologically possible for the species in the BpS.

Description

Class A 100 Early Development 1 - Closed

Indicator Species

Symbol	Scientific Name	Common Name	Canopy Position
LEFR3	Leucophyllum frutescens	Texas barometer bush	Upper
ACBE	Acacia berlandieri	Guajillo	Upper
PRGL2	Prosopis glandulosa	Honey mesquite	Upper
ACRI	Acacia rigidula	Blackbrush acacia	Upper

Description

Dense shrubland, generally 40-90% cover with sparse cover from emergent overstory species. Little disturbance affects this shrubland BpS. Low fine fuel loadings make fire spread in this BpS minimal except under extreme windy and dry conditions when fire may spread into it from surrounding sites. Species are drought resistant. However, this BpS occurs in large patch to matrix scale and marginal fires likely spread little into the interior portions of occurrences.

Maximum Tree Size Class

None

Model Parameters

Deterministic Transitions

From Class	Begins at (yr)	Succeeds to	After (years)
Early1:CLS	0	Early1:CLS	999

Probabilistic Transitions

Disturbance Type	Disturbance occurs In	Moves vegetation to	Disturbance Probability	Return Interval (yrs)	Reset Age to New Class Start Age After Disturbance?	Years Since Last Disturbance
Wind or Weather or Stress	Early1:CLS	Early1:CLS	0.02	50	No	0

References

NatureServe. 2007. International Ecological Classification Standard: Terrestrial Ecological Classifications. NatureServe Central Databases. Arlington, VA, U.S.A. Data current as of 10 February 2007.