



Biodiversity in Forests of Exceptional Conservation Value (FECV)

Texas SFI Implementation Committee
Updated: January 23, 2023

Topic Outline

- Species
 - Habitat
 - Distribution
 - Threats
 - Mitigation Recommendations
- Ecosystems
 - Common Names
 - Habitat
 - Distribution
 - Threats
 - Mitigation Recommendations



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Forest of Exceptional Conservation Value: Species Assessment



Blackbelted Crayfish (*Procambarus nigrocinctus*)

- Habitat
 - Freshwater
 - Moderate sized creeks
 - Found among rocks
- Distribution
 - Texas
 - Neches River basin
- Threats
 - Changes to water quality (low water quality)
- Mitigation Recommendations
 - Best Management Practices provisions



Texas Screwstem (*Bartonia texana*)

- Habitat
 - Wooded streams, bogs, and creek bottoms
 - Forested wetlands & baygall shrub thickets
- Distribution
 - Texas & Louisiana
- Threats
 - Changes to hydrology (poor streamside management)
 - Logging & fire suppression
- Mitigation Recommendations
 - Best Management Practices provisions



Texas Emerald (*Somatochlora margarita*)

- Habitat
 - Semi-open loblolly pine forests
 - Small, clear-water, forest streams
- Distribution
 - Texas & Louisiana
- Threats
 - Habitat degradation (poor streamside management)
- Mitigation Recommendations
 - Best Management Practices provisions



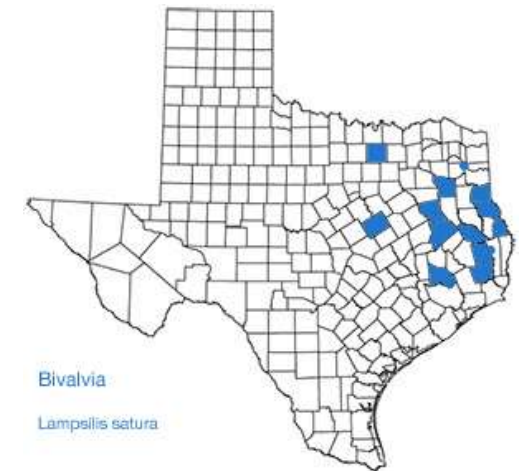
Louisiana Pigtoe (*Pleurobema riddellii*)

- Habitat
 - Freshwater
 - Moderate-sized rivers
- Distribution
 - Texas, Arkansas, Louisiana
- Threats
 - Poor water quality reducing habitat suitability
- Mitigation Recommendations
 - Best Management Practices provisions



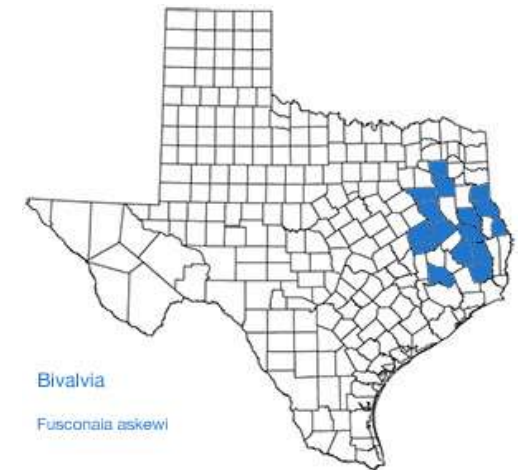
Sandbank Pocketbook (*Lampsilis satura*)

- Habitat
 - Freshwater
 - Large rivers
 - Sandy, gravelly substrates
- Distribution
 - Texas
 - San Jacinto, Trinity, & Lower Neches Rivers
- Threats
 - Cutting timber near riparian areas
 - Removal of sand or gravel areas
 - Human modification to nature
- Mitigation Recommendations
 - Best Management Practices provisions



Texas Pigtoe (*Fusconaia askewi*)

- Habitat
 - Freshwater
 - Medium to large rivers
 - Mud mixed shallow water
- Distribution
 - Texas
 - Sabine, Neches, Trinity, & San Jacinto Rivers
- Threats
 - Habitat loss causing erosion, siltation, or turbidity
- Mitigation Recommendations
 - Best Management Practices provisions



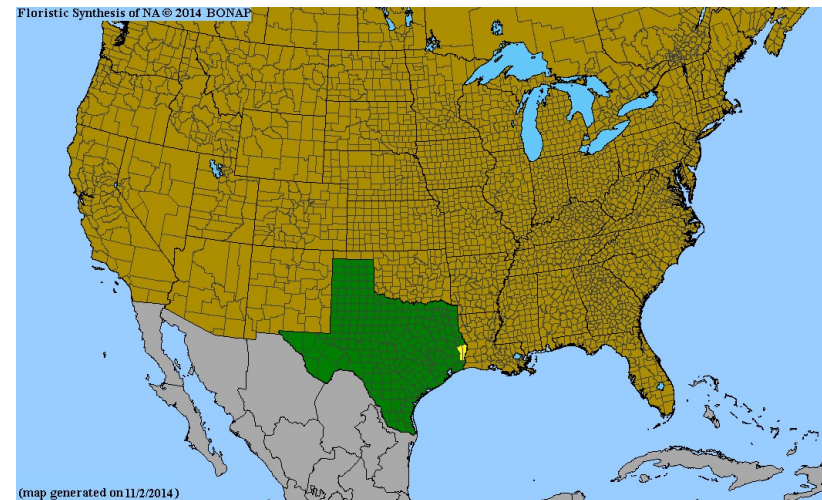
Louisiana Pine Snake (*Pituophis ruthveni*)

- Habitat
 - Mixed conifer savanna
 - Sandy, well drained soils with substantial grass stocking
- Distribution
 - Texas & Louisiana
- Threats
 - Intensive silviculture
 - Reduction in fire frequency
 - Reduction in the microhabitat needed
- Mitigation Recommendations
 - Restore fire across landscape



Nodding Yucca (*Yucca cernua*)

- Habitat
 - Disturbed habitats (e.g. roadsides)
- Distribution
 - Texas
 - Newton & Jasper Counties
- Threats
 - Unknown
- Mitigation Recommendations
 - Very little known - species review and study needed



Texas Golden Gladecress (*Leavenworthia texana*)

- Habitat
 - Vernally wet glades with shallow soils
- Distribution
 - Texas
 - Nacogdoches area
- Threats
 - Habitat conversion
 - Herbicide application
- Mitigation Recommendations
 - Weches Geologic Formation in San Augustine County
 - Avoid glauconite rock outcroppings



Forest of Exceptional Conservation Value: **Ecosystem Assessment**



West Gulf Coast Longleaf Pine Ecosystems

Texas & Louisiana

- Common Name
 - West Gulf Coastal Plain Fire-Infrequent Xeric Longleaf Pine Sandhill Woodland
 - Western Upland Longleaf Pine Forest (Stream Terrace Sandy Woodland Type)
 - West Gulf Coastal Plain Calcareous Clay Longleaf Pine Glade
 - Texas Upper West Gulf Coastal Plain Longleaf Pine Woodland
 - West Gulf Coastal Plain Xeric Longleaf Pine Sandhill
 - Xeric Longleaf Pine Woodland
 - Dry-Mesic Loamy Longleaf Pine Woodland
 - Wet-Mesic Longleaf Pine Open Woodland
 - West Gulf Coastal Plain Fire-Infrequent Mixed Longleaf Pine Woodland
 - West Gulf Coastal Plain Subxeric Longleaf Pine Sandhill
 - West Gulf Coastal Plain Clayey Longleaf Pine Forest
 - West Gulf Coastal Plain Clayey Longleaf Pine Woodland (Dry Type)
 - West Gulf Coastal Plain Clayey Longleaf Pine Woodland (Moist Type)
 - West Gulf Coastal Plain Mesic Upland Longleaf Pine Woodland
 - West Gulf Coastal Plain Dry-Mesic Upland Longleaf Pine Woodland
 - Western Upland Longleaf Pine Forest (Messer Pimple Mound Type)
 - Western Wet Longleaf Pine Savanna (Prairie Terraces Acidic Silt Loam Type)
- Threats
 - Lack of fire
 - Conversion to other pine or land use types
- Mitigation Recommendations
 - Encourage prescribed fire
 - Encourage replanting Longleaf Pine (*Pinus palustris*)



Questions?

Additional Resources:



<https://explorer.natureserve.org/Search>



<https://www.texasforestry.org/programs/initiative>



<https://tpwd.texas.gov/gis/rtest/>