



## Texas Trillium

*Arlington, Texas Ecological Services Field Office*

### Texas Trillium

*Trillium texanum*

#### Description

Texas trillium belongs to the *Liliaceae* (lily) family and are rhizomatous herbs with unbranched stems. Trillium plants produce no true leaves or stems aboveground. Texas trillium has solitary white to pale pink flowers on a short stalk, situated above three bracteal leaves. It is the only trillium species in Texas with numerous stomata (specialized cells which open and close to regulate gas and water movement into/out of the plant) on upper and lower surfaces of its bracts.



*Trillium pusillum* var. *texanum* - (Photo Credit- Jason Singhurst)

#### Distribution

Texas trillium occurs across thirteen counties in East Texas and into northwestern Louisiana (Caddo Parish). In Texas, twenty sites have been recorded across at least 6,000 square miles.

#### Life History

Texas trillium flowers from March to early mid-April and is typically found in forested wetland habitats. Texas trillium spends most of the year as underground stems (rhizomes) and is only reproductive for a few months.

Longevity is unknown, but one study showed that white trillium (*Trillium grandiflorum*) lives at least 30 years based on estimates calculated from the number of constrictions on rhizomes.

#### Habitat

Texas trillium habitat is characterized by a shaded, forest understory. It flowers before full leaf-out of over story species and before being overtopped by other herbaceous species. Texas trillium is found in the ecotone between riparian baygall and sandy pine or oak uplands in the shaded edge and at the heads of deep sand springs and seepages. The most commonly recorded associated species among all Texas trillium include swamp blackgum (*Nyssa biflora*), sweetbay magnolia (*Magnolia virginiana*), sweetgum (*Liquidambar styraciflua*), bald cypress (*Taxodium distichum*), royal fern (*Osmunda regalis*), cinnamon fern (*O. cinnamomea*), netted chain

fern (*Woodwardia areolata*), and green rein orchid (*Platanthera clavellata*).

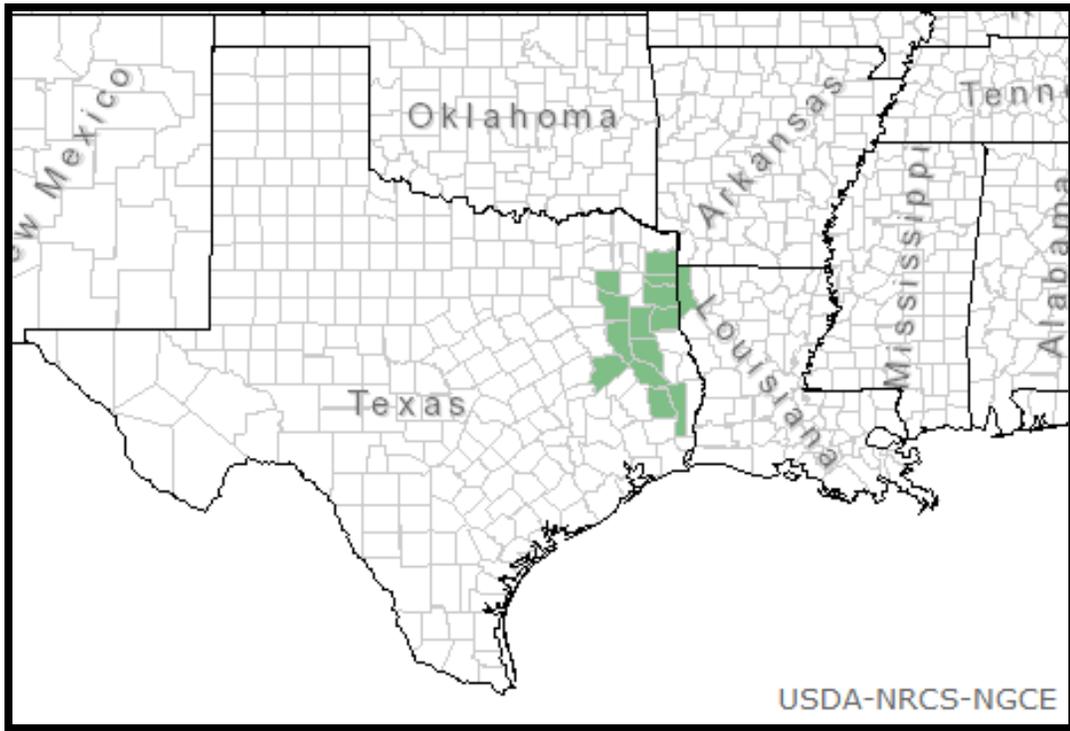
#### Conservation

Although not listed as endangered or threatened by the State of Texas, Texas trillium is ranked as a G2 (imperiled) by NatureServe and is ranked as a Sensitive Species by the United States Forest Service. The species is also listed on Texas Parks and Wildlife Department's 2010 List of the Rare Plants of Texas and as a Species of Greatest Conservation Need in the Texas Parks and Wildlife Department (TPWD) State Conservation Action Plan.

#### For Further Information:

U.S Fish and Wildlife Service  
Ecological Services Field Office  
2005 NE Green Oaks Blvd., Suite 140  
Arlington, Texas 76006

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Counties with native *Trillium texanum*  
 (Photo Credit: U.S. Department of Agriculture Natural Resources Conservation Service)  
<https://plants.usda.gov/core/profile?symbol=TRTE3>

## References

- Freeman, J. 1970. *Trillium*. In Manual of the vascular plants of Texas. Correll, D.S. and M.C. Johnston (eds.). Texas Research Foundation, Renner, Texas.
- Hanzawa, F., and S. Kalisz. 1993. The relationship between age, size, and reproduction in *Trillium grandiflorum* (Liliaceae). *American Journal of Botany* 80(4): 405-410
- Louisiana Wildlife and Fisheries. Rare plants of Louisiana. *Trillium texanum*. Web: [https://www.wlf.louisiana.gov/assets/Resources/Publications/Rare\\_Plant\\_Species\\_Fact\\_Sheets/Monocotyledons/texas\\_trillium\\_fact\\_sheet.pdf](https://www.wlf.louisiana.gov/assets/Resources/Publications/Rare_Plant_Species_Fact_Sheets/Monocotyledons/texas_trillium_fact_sheet.pdf)  
 Accessed 11/30/2020
- Philipps, T. 2020. Plant of the week. Texas Wakerobin (*Trillium texanum*). U.S. Forest Service. Web: [https://www.fs.fed.us/wildflowers/plant-of-the-week/trillium\\_texanum.shtml](https://www.fs.fed.us/wildflowers/plant-of-the-week/trillium_texanum.shtml)  
 Accessed 12/01/2020
- Strong, A. and P. Williamson. 2015. Data synthesis and species assessments to aid in determining future candidate or listed status for plants from the USFWS lawsuit settlements. Section 6 Final Report: E-146: 169-184
- Tiller, A. 2002. Texas Trillium. *Parkscape*. Summer, 2002: 7. Archived in Texas Natural Diversity Database, Texas Parks and Wildlife Department, Austin.
- Thomas, R., and C. Allen. 1993. Atlas of the vascular flora of Louisiana. Volume I: Ferns & Fern Allies, Conifers & Monocotyledons. Louisiana Department of Wildlife and Fisheries Natural Heritage Program, Baton Rouge, LA.