



**Individual Species Accounts for Select Species in Forest Guardians'
Petition to List All Critically Imperiled or Imperiled Species in the Southwest
United States as Threatened or Endangered Under the Endangered Species Act
June 2007**

• ***Yucca necopina* (Brazos River Yucca)**

Kingdom - Plantae
Phylum - Anthophyta
Class - Monocotyledoneae
Order - Liliales
Family - Agavaceae
Genus - Yucca

The Brazos River Yucca is a small shrub restricted in location to Hood and Tarrant counties in Texas. It thrives in sandy soil or grasslands in areas that receive sun or partial sun. One such area is the Brazos River drainage. It has white to greenish white blooms in the spring. Threats to the Brazos River Yucca include pasture improvement and water impoundment. Another potential threat to the Brazos River Yucca is the expansion of urban sprawl from surrounding large cities such as Dallas and Ft. Worth. More generally, yucca are harmed by livestock grazing, as cattle grazing on the yucca's blooms make it impossible for the yucca moth to pollinate and drastically reduce the reproduction of yucca plants. If not halted this could result in the extinction of the yucca moth as well as lead to yucca reproduction problems.

Source: NatureServe (www.natureserve.org).

Photo online at: <http://aggie-horticulture.tamu.edu/ornamentals/nativeshrubs/yuccanecop.htm>. Permission may be required to use this photo.

• ***Yucca cernua* (Nodding Yucca)**

Kingdom - Plantae
Phylum - Anthophyta
Class - Monocotyledoneae
Order - Liliales
Family - Agavaceae
Genus - Yucca

The Nodding Yucca is endemic to seven locations in Texas including west central Newton County and eastern Jasper County. It grows in acid clays in open or partially shaded upland sites on the margins of pine hardwood forests. The Nodding Yucca has large leaves that grow erect and branches that tend to droop as they lengthen. Generally, yucca can be harmed by livestock grazing. Cattle grazing on the yucca's blooms make it impossible for the yucca moth to pollinate and drastically reduce the reproduction of yucca plants. Cattle prefer the yucca flower to others due to its high protein content and moisture retention. Fire and cutting by ranchers also threatens yucca plants.

Sources:

- NatureServe (www.natureserve.org)
- The Nature Conservancy
(<http://www.nature.org/wherewework/northamerica/states/texas/files/g3taxaabstracts720047.pdf>)

• ***Opuntia densispina* (Big Bend Prickly-Pear)**

(Synonym: *Opuntia schottii*, *Opuntia densispina*)

Kingdom - Plantae
Phylum - Anthophyta
Class - Dicotyledoneae
Order - Caryophyllales
Family - Cactaceae
Genus - Opuntia

The prickly pear is a low succulent cactus that grows in Texas and Mexico mainly in the Chihuahuan Desert. It has round/flattened green stems and produces waxy looking flowers. Threats to the prickly pear include erosion, trampling by people, and collection for transplantation in private gardens. The Prickly pear can also fall prey to cattle grazing.

Source: NatureServe (www.natureserve.org)

• ***Aspidoscelis arizonae* (Arizona Striped Whiptail)**



[Photo credit: Erik Enderson]

Kingdom -	Animalia
Phylum -	Craniata
Class -	Reptilia
Order -	Squamata
Family -	Teiidae
Genus -	Aspidoscelis

The Arizona Striped Whiptail is slim and small measuring up to 72mm and is brown or dark reddish brown with light yellow stripes on the body and a bright blue tail. It has a long thin tail and pointed snout with a pale blue face, underside, and feet helping to distinguish it from other whiptails located in Arizona. The Arizona Striped Whiptail has small, granular rectangular body scales that are larger on the tail than the body. It is located in grasslands, low valleys and sandy flatlands of Graham and Cochise County Arizona. The Arizona Striped Whiptail is active and often seen basking in mid morning sun. In winter and late fall it hibernates to avoid the cold months. It feeds on small lizards, insects and spiders. The major threat facing the Arizona striped whiptail is habitat depletion through urban and agricultural development and overgrazing of cattle.

Sources:

- NatureServe (www.natureserve.org)
- Arizona Department of Game & Fish
(http://www.azgfd.gov/w_c/edits/documents/Aspiariz.d.pdf)

• ***Quercus acerifolia* (Maple leaf Oak)**

[Photo credit: Arkansas Natural Heritage Commission.]

Kingdom -	Plantae
Phylum -	Anthophyta
Class -	Dicotyledoneae
Order -	Fagales
Family -	Fagaceae
Genus -	Quercus



The maple leaf oak can be found in the Magazine Mountains and the Ouachita Mountains in Arkansas. It can survive in the open woods, cliff edges, and rocky plateau edges in these mountain ranges. It is only known to exist in four sites in the entire world with only a few hundred individuals remaining. Mining of the land is one threat to the maple leaf oak since it can alter groundwater patterns and divert water away from the trees.

Sources:

- NatureServe (www.natureserve.org)
- Arkansas Natural Heritage Commission (http://www.naturalheritage.com/program/rare-species/federally-listed/plant-profiles/maple_leaved_oak.asp)
- “The End of an Era” by Kelli Whitlock in *Perspectives: Research, Scholarship, and Creative Activity at Ohio University*, Winter 1997 (<http://news.research.ohiou.edu/perspectives/archives/9702/trees.htm>)

• ***Quercus robusta* (Robust Oak)**

Kingdom - Plantae
Phylum - Anthophyta
Class - Dicotyledoneae
Order - Fagales
Family - Fagaceae
Genus – Quercus

The Robust Oak is a deciduous tree with brown or black bark and lives in the bottoms of moist wooded canyon bottoms in the Chisos Mountains located in Brewster County, Texas. Its leaf blades are oval or elliptical in shape with the widest portion in the middle measuring approximately 20-55mm. The robust oak produces biennial acorns. Much of the Robust Oak’s habitat is in Big Bend National Park, and habitat disturbance as a result of tourism is a threat.

Source: Flora of North America, C. H. Muller, Torreyia. 34: 119. 1934 (www.efloras.org).

• ***Stallingsia maculosus* (Manfreda Giant-Skipper)**

Kingdom – Animalia
Phylum – Mandibulata
Class – Insecta
Order – Lepidoptera
Family – Hesperiiidae
Genus – Stallingsia

The Manfreda Giant-skipper’s wings have cream and black veins on the tips. The upper sides of the wings are brown-black with some oval shaped cream spots. The undersides of the wings are brown-black with touches of gray on the edges. It has a wing span of 1

$\frac{3}{4}$ - 2 inches. The Manfreda Giant-skipper makes its home in subtropical thorn forests and pine forests in south Texas and northern Mexico. Its habitat range is limited by the availability and location of its larval host plant the Texas tuberose. Development is the largest threat to the Manfreda Giant-Skipper coupled with the availability of the Texas tuberose. There are less than 20 viable metapopulations in the United States and Mexico with a majority of sites located in Mexico.

Sources:

- NatureServe (www.natureserve.org)
- Xerces Society for Invertebrate Conservation (http://www.xerces.org/Pollinator_Red_List/Leps/Stallingsia_maculosus.pdf)
- Butterflies and Moths of North America (<http://www.butterfliesandmoths.org/species?l=2193>).

• ***Quadrula aurea* (Golden Orb)**

Kingdom - Animalia
Phylum - Mollusca
Class - Bivalvia
Order - Unionoida
Family - Unionidae
Genus – Quadrula

The Golden Orb is a mussel with an external shell consisting of orange and yellow with green rays. The Golden Orb lives in flowing freshwater rivers in Texas with sand and cobble riverbeds. It is currently limited to five rivers in Texas including the Guadalupe River and the San Marcos River. The limited location of the golden orb makes it susceptible to devastation in the event of a severe storm or violent flooding. Land and water degradation have had a devastating impact on the decline in Golden Orb population in Texas.

Source: NatureServe (www.natureserve.org)

• ***Macrhybopsis tetranema* (Arkansas River Speckled Chub)**

Kingdom - Animalia
Phylum - Craniata
Class - Actinopterygii
Order – Cypriniformes
Family - Cyprinidae
Genus - Macrhybopsis

The Arkansas River Speckled Chub is native to the Arkansas River in Oklahoma, Kansas, Texas, New Mexico, and Colorado. Dewatering of streams and low water dams have substantially decreased and fragmented the natural habitat and made recolonization

upstream difficult. It currently exists in only two rivers and has disappeared from about 90% of its traditional locations. The Arkansas River Speckled Chub can currently be found only in portions of the Ninnescah River and the Arkansas River. The American Fisheries Society has given the Arkansas River Speckled Chub a status of 'special concern'. The major threats facing this animal are depletions of groundwater and water diversions. Loss of water in its habitat from agricultural and municipal pumping can create insufficient water flow for the Arkansas River Speckled Chub to survive. It is also sensitive to increases in pollution and the resulting decrease in water quality.

Sources:

- NatureServe (www.natureserve.org)
- Kansas Division of Wildlife and Parks (www.kdwp.state.ks.us/news/content/download/7506/37523/file/Arkansas%20River%20Speckled%20Chub.pdf).

• ***Geomys streckeri* (Strecker's Pocket Gopher)**

Kingdom – Animalia
Phylum – Craniata
Class – Mammalia
Order – Rodentia
Family – Geomyidae
Genus – Geomys

The Strecker's Pocket Gopher is extremely vulnerable to habitat alteration. It exists only in Dimmit and Zavala Counties in southern Texas. It makes its home in fluvial deposits along watercourses in these counties. The sensitivity of the Strecker's Pocket Gopher to habitat alteration makes any alteration to its habitat threatening to it especially loss of habitat or changes in the habitat due to agriculture or development. Pocket gophers can play especially important ecological roles in the habitats where they exist.

Sources:

- NatureServe (www.natureserve.org)
- David J. Schmidly. 2004. *The Mammals of Texas*. University of Texas Press. Pp. 343-344.
- General information on pocket gophers from IUCN (<http://www.iucnredlist.org/>).

• *Quercus graciliformis* (Slender Oak)



Photo online at: <http://aggie-horticulture.tamu.edu/ornamentals/natives/quercusgraciliformis.htm>. Permission may be required to use this photo.

Kingdom – Plantae
Phylum – Anthophyta
Class – Dicotyledoneae
Order – Fagales
Family – Fagaceae
Genus - Quercus

The Slender Oak was named for its delicate branches that are small in diameter and have an arched shape. It is found only in the Chisos Mountains in Brewster County, Texas and northern Mexico in an area of less than 65 square km mainly on canyon floors that have high water tables. A large portion of where the slender oak is located is Big Bend National Park. The Slender Oak can grow to 30 feet high and thrives in sun or partial sun. In the spring it can produce acorns. Major threats facing the Slender Oak are habitat loss and degradation. This plant is sensitive to groundwater extraction and tourism disturbances. Tourist activity and drought are harmful to the slender oak.

Sources:

- NatureServe (www.natureserve.org)
- IUCN (<http://www.iucnredlist.org/search/details.php/30954/all>)
- Texas Native Plant Society (<http://aggie-horticulture.tamu.edu/ornamentals/natives/quercusgraciliformis.htm>).

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