

TEXAS Army Corps Lakes Endangered Species Key

Many organisms are listed as Threatened or Endangered in Texas for a variety of reasons. Some live only in a very small habitat that is in danger of being destroyed as an area is developed. Some have had so much of their habitat damaged by our modern way of life that they can't survive in large numbers. Then there are those that have been here for thousands of years but are losing out to organisms introduced since the arrival of Europeans. A few are in danger of becoming extinct because they are over-hunted, over-harvested, or simply killed indiscriminately. Unfortunately several have been completely wiped out, and will most likely never be seen in the wild in Texas again. And then there are the success stories of animals that have been brought to the edge of extinction by the carelessness of people's actions, but are now doing well again because of efforts made to protect them.

What animals in this area are in danger of becoming extinct? Where do they live? What do they eat? Which ones are increasing due to protection, which ones are declining, and what can you do about it?

A Key allows you to figure out what type of organism you are looking at by studying it closely. Following the simple steps below, you will be able to find out more about the Endangered Species living around Corps of Engineers lakes in Central Texas.

- 1) Animal has hair, gives birth to live babies, nurses them with milk. *See MAMMALS section.*
Animal has feathers or scales, mostly lay eggs. Continue to step 2.
- 2) Animals with feathers, 2 wings, 2 legs, beak, endothermic (warm-blooded). *See BIRDS section.*
Animals with scales, 4 legs or 0 legs, exothermic (cold-blooded). *See REPTILES section.*

MAMMALS – Endothermic fur-bearing animals that (in Texas) give birth to live young which they nurse with milk.

- 3) Mammal with wings, uses sonar to find food, nocturnal. *See Rafinesque's Big-eared Bat.*
Mammal with 4 legs. *See 4).*
- 4) Small (less than 1 foot long) mammal with long naked tail, short thick fur. *See 5).*
Large (more than 1 foot long) mammal with furry tail or no visible tail, longer fur. *See 6).*
- 5) Rat often using back legs to hop, mostly eats seeds. *See Texas Kangaroo Rat.*
Rat running on 4 legs, eats variety of food. *See Coues' Rice Rat.*
- 6) Large (more than 4 feet long, 3 feet tall) mammal with no visible tail, shaggy fur, will sleep through winter, eat variety of foods. *See Bears (7).*
Medium (1.5 to 4 feet long) size mammal with long furry tail, carnivores. *See 8).*
- 7) Smaller, forest-dwelling bear that climbs trees. Eats variety of foods, sloping face, flat back. *See Louisiana Black Bear.*
Large, aggressive hunting bear of open areas, mostly carnivorous (eats meat), dish-shaped face, humped shoulders. *See Grizzly Bear.*
- 8) Dog-like forest mammal that hunts in groups. *See Red Wolf.*

Weasel-like mammal that eats Black-tailed Prairie Dogs, lives in burrows on open land. *See Black-footed Ferret.*

BIRDS – Egg-laying feathered animals with 2 wings and legs, a beak.

- 3) Shore birds with wide feet for swimming or wading, often seen on ground near water. *See 4).*
Perching birds with clawed feet, often seen in trees. *See 10).*
- 4) Large (more than 2 feet tall) shore birds. *See 5).*
Small (less than 2 feet tall) shore birds. *See 8).*
- 5) Large shore birds that fly to catch food, with big pouch on beak to catch and hold fish. *See Eastern Brown Pelican.*
Large shore birds that wade to catch food, with long legs, toes, and beaks. *See 6).*
- 6) Large wading birds with pointed beaks. *See Reddish Egret.*
Large wading birds with curved beaks. *See 7).*
- 7) White wading bird with gray neck and face, thick curved beak. *See Wood Stork.*
All brownish wading bird with thin curved beak. *See White-faced Ibis.*



Interior Least Tern at Waco Lake 05/2004.

- 8) Small white bird with black cap that catches fish in flight by diving. *See Interior Least Tern.*
Shore birds that catch food on foot by probing ground with beak. *See 9).*
- 9) Medium (1-2 feet tall) shore birds with long curved beak. *See Eskimo Curlew.*
Small (less than 1 foot tall) shore birds with short straight beaks. *See Piping Plover.*
- 10) Medium (1-2 feet tall) carnivorous (eat meat) birds with thick curved beaks and strong talons for catching and eating prey. *See 11).*
Small (less than 1 foot tall) birds with straight beaks for eating insects or seeds. *See 14.*
- 11) Larger (2-3 feet tall) brown raptor (bird of prey), adult has white head and tail. Often near water, mostly eating fish. *See Bald Eagle.*
Smaller raptors mostly eating birds, insects, or small mammals. *See 12).*
- 12) Black and white raptor with long forked tail, eats insects. *See Swallow-tailed Kite.*

Raptors with wedge-shaped tails, eat birds or small mammals. *See 13).*

13) Medium black raptor with broad wings, adult with white tail bands. Soars high. *See Zone-tailed Hawk.*

Slender raptor with narrow, pointed wings, thin dark tail bands. Captures prey with very fast dives. *See Peregrine Falcon.*

14) Birds with slender pointed beaks to feed on insects. *See 15).*

Small birds with short thick beaks to feed on seeds. *See Bachman's Sparrow.*

15) Birds that peck holes in tree trunks to find insects and make nests. *See Woodpeckers (16).*

Birds that find insects and make nests in leaves and branches of trees. *See 17.*

16) Large (1-2 feet tall), crested black woodpecker with white wing stripes that lives in swampy deciduous forest. *See Ivory-billed Woodpecker.*

Small (less than 1 foot tall) black-and-white-barred woodpecker that lives in Longleaf Pine forest. *See Red-cockaded Woodpecker.*

17) Small bird with black cap, red eye, and thick white mask, that lives in frequently burned Oak shrub areas. *See Black-capped Vireo.*

Small bird with yellow face and thin black mask, that lives in mature Oak-Juniper woods areas. *See Golden-cheeked Warbler.*

REPTILES – Scaly animals living in warmer areas, must shed skin to grow, lay eggs or with live young.

3) Reptiles with legs. *See 4).*

Reptiles with no legs or eyelids, carnivores (eat meat), move by sliding belly scales. *See Snakes (5).*

4) Aquatic reptile with knobby shell, beak, lays eggs, partly webbed feet. *See Cagle's Map Turtle.*

Flat-bodied reptile with tough, spiny skin especially around head, eyelids. *See Texas Horned Lizard.*

5) Venomous snake with rattles, rough skin, wide diamond-shaped head, wide belly scales, retractable fangs, heat-sensing pit on face. *See Timber Rattlesnake.*

Harmless snakes with pointed tail, smooth skin, rounded head, even scales on back and belly, no front fangs or pit. *See 6).*



- 6) Bright green snake found at moist forest edge. *See Smooth Green Snake.*
Snakes of mixed colors. *See 7).*
- 7) Nocturnal (active at night) forest snake with bright red, black and yellow bands that do not circle whole body. *See Scarlet Snake.*
Diurnal (active in day) snakes with mixed blotchy pattern. *See 8).*
- 8) Forest snake with mixed brown and reddish blotches, found in east Texas. *See Louisiana Pine Snake.*
Water snakes with grayish-brown blotches, found in central Texas. *See 9).*
- 9) Aquatic snake found in Brazos River system, Texas. *See Brazos Water Snake.*
Aquatic snake found in Concho and Colorado Rivers, Texas. *See Concho Water Snake.*

List (in order of TPWD listing):	Latin Name	STATUS
<u>Mammals</u>		
Rafinesque's Big-eared Bat	(<i>Corynorhinus rafinesqui</i>)	State Threatened
Texas Kangaroo Rat	(<i>Dipodomys elator</i>)	State Threatened
Coues' Rice Rat	(<i>Oryzomys couesi</i>)	State Threatened
Red Wolf	(<i>Canis rufus</i>)	Federally Endangered
Louisiana Black Bear	(<i>Ursus americanus luteolus</i>)	Federally Threatened
Grizzly Bear	(<i>Ursus arctos</i>)	Federally Threatened
Black-footed Ferret	(<i>Mustela nigripes</i>)	Federally Endangered

For more info, go to Mammals of Texas Online at www.nsrl.ttu.edu.

Birds

Eastern Brown Pelican	(<i>Pelecanus occidentalis</i>)	Federally Threatened
Reddish Egret	(<i>Egretta rufescens</i>)	State Threatened
White-faced Ibis	(<i>Plegadis chihi</i>)	State Threatened
Wood Stork	(<i>Mycteria americana</i>)	State Threatened
Swallow-tailed Kite	(<i>Elanoides forficatus</i>)	State Threatened
Bald Eagle	(<i>Haliaeetus leucocephalus</i>)	State Threatened
Zone-tailed Hawk	(<i>Buteo albicaudatus</i>)	State Threatened
American Peregrine Falcon	(<i>Falco peregrinus anatum</i>)	State Endangered
Arctic Peregrine Falcon	(<i>Falco peregrinus tundrius</i>)	State Threatened
Piping Plover	(<i>Charadrius melodus</i>)	Federally Threatened
Eskimo Curlew	(<i>Numenius borealis</i>)	Federally Endangered
Interior Least Tern	(<i>Sterna antillarum athalassos</i>)	Federally Endangered
Red-cockaded Woodpecker	(<i>Picoides borealis</i>)	Federally Endangered
Golden-cheeked Warbler	(<i>Dendroica chrysoparia</i>)	Federally Endangered
Bachman's Sparrow	(<i>Aimophila aestivalis</i>)	State Threatened

Reptiles

Cagle's Map Turtle	(<i>Graptemys caglei</i>)	State Threatened
Texas Horned Lizard	(<i>Phrynosoma cornutum</i>)	State Threatened

Scarlet Snake	<i>(Cemophora coccinea)</i>	State Threatened
Brazos Water Snake	<i>(Nerodia harteri)</i>	State Threatened
Concho Water Snake	<i>(Nerodia paucimaculata)</i>	Federally Threatened
Smooth Green Snake	<i>(Liochlorophis vernalis)</i>	State Threatened
Louisiana Pine Snake	<i>(Pituophis ruthveni)</i>	State Threatened
Timber Rattlesnake	<i>(Crotalus horridis)</i>	State Threatened

For more info, go to Herps of Texas at www.zo.utexas.edu/research/txherps.

Animals listed as Endangered are in a more serious threat of dying out than those listed as Threatened. Some species may be in danger in Texas, but not in other states, in which case they are State Endangered/Threatened, but not Federally Endangered. Those that are in danger of dying out all over the US are listed by the US Fish and Wildlife Service as Federally Engangered/Threatened. Also, any species listed as Federally Endangered would automatically be State Endangered as well, since their overall condition is more serious. In addition to these species, there are some Endangered Fish, and possibly Invertebrates and Plants, that may be found around Corps lakes in the Fort Worth District of Texas. Invertebrates in particular are not well studied, so many more could be endangered than we realize. For more details, visit the Texas Parks and Wildlife booths or go to www.tpwd.state.tx.us/huntwild/wild/species/;