

DESCRIPTIONS OF FEDERALLY LISTED AND STATE LISTED SPECIES FOR THE PROJECT AREA

Black Spotted Newt (*Notophthalmus meridionali*)

The black spotted newt is an aquatic amphibian listed as threatened by the State of Texas. The geographic range of the black spotted newt is in the Gulf Coastal Plain south of the San Antonio River. Habitat of the black spotted newt is a semi-arid area with limited rainfall; however, the newt requires wet or intermittently wet areas, such as arroyos, canals, ditches, or in dry periods, under logs, rocks, and shallow depressions (TPWD 2002).

American Peregrine Falcon (*Falco Peregrinus anatum*)

The American peregrine falcon is listed by the TPWD as endangered. The USFWS recently delisted the falcon as endangered (TPWD 2003a). Geographic distribution of the migratory falcon in Texas is mostly in the rugged canyons in western regions of the state, predominately along the Rio Grande. As of 1997, nearly half the falcons lived on the Mexico side of the Rio Grande (TPWD 2003b). The falcon nests on cliffs in the Trans-Pecos of west Texas, where it lays three to four eggs in April and migrates to the Texas coast. The American peregrine falcon prefers meadows, mudflats, beaches, marshes, and lakes where avian prey species are abundant. The falcon feeds on a variety of birds, including blackbirds, jays, swifts, doves, shorebirds, and songbirds (TPWD 2003b).

Arctic Peregrine Falcon (*Falco peregrinus tundrius*)

The Arctic peregrine falcon is listed by TPWD (2002) as threatened. USFWS delisted the Arctic peregrine falcon as threatened. The Arctic peregrine falcon nests in the arctic islands and tundra regions of Alaska, Canada, and Greenland, and passes through Texas twice a year during migration to its wintering areas in South America (TPWD 2003a). The falcon stops in Texas to feed before continuing its migration. The Arctic peregrine prefers meadows, mudflats, beaches, marshes, and lakes where avian prey species are abundant. The falcon feeds on a variety of birds, including blackbirds, jays, swifts, doves, shorebirds, and songbirds (TPWD 2003b).

Tropical Parula (*Parula pitiayma*)

The tropical parula is a small bird listed by TPWD (2002) as threatened. Distribution of the bird is from southern Texas (Kenedy, Hidalgo, Willacy, and Brooks Counties) and northern Mexico south to South America. The bird is considered non-migratory, although the northern populations, including South Texas populations, are partially migratory. Winter records north and east of breeding grounds may show postbreeding dispersal northward and eastward along Texas coast and the birds that winter in the Lower Rio Grande Valley may be either migrants from Kenedy County, residents, or dispersants from large populations in Mexico.

The breeding habitat of the tropical parula in the Lower Rio Grande Valley of South Texas is found in mixed deciduous riparian forest in closed or partially closed-canopy dominated by cedar elm (*Ulmus crassifolia*), sugar hackberry (*Celtis laevigata*), Texas ebony (*Pithecellobium Ebanum*), and Mexican ash (*Fraxinus berlandieriana*) (Brush 999). Masses of epiphytic growth, such as Spanish moss (*Tillandsia usneoides*) and ball moss (*Tillandsia baileyi*) are needed to support breeding, since the nests are built into the moss. The habitat in this area is often thick woods near edges of lagoons or dry riverbeds. The non-breeding habitat of the bird is similar to the breeding habitat. In the winter in South Texas, the birds may live in well-wooded residential areas with tall trees or riparian forests lacking epiphytes. They breed from April to May.

Jaguarundi (*Herpailurus yaguarondi*)

The Jaguarundi is listed as endangered by the USFWS and TPWD. The Jaguarundi is a small, slender-bodied, long-tailed, unspotted, weasel-like cat whose habitat is one of the dense, thorny thickets of southern Texas where cacti, mesquite, cat claw, granjeno, and other spine-studded vegetation are plentiful and access to water is necessary. They sleep and give birth to their young in dens formed from tree hollows, dense shrub, or treefalls. In Texas, the range of the Jaguarundi extends from the South Texas Brush Country and Lower Rio Grande Valley (NatureServe 2003; TPWD 2003d; Texas Tech University 1997). Loss of the dense brush habitat due to clearing is the main reason for the species loss. Jaguarundis have a life span of 16 to 22 years and may have one to two litters of two per year (TPWD 2003d). Their diet consists predominately of birds, reptiles, and small mammals such as rats, mice, and rabbits, and they occasionally may consume fishes and fruit (NatureServe 2003).

Ocelot (*Leopardus pardalis*)

The ocelot is listed by USFWS and TPWD as endangered. The ocelot is a medium-sized, spotted cat with a moderately long tail similar in size to a bobcat. Historical records show that the bobcat distribution once ranged throughout south Texas, the southern Edwards Plateau, and along the Coastal Plain; however today the bobcat is now limited to several isolated patches of suitable habitat in three or four counties in the South Texas Brush Country and Lower Rio Grande Valley (NatureServe 2003b; TPWD 2003e). Habitat requirements of the ocelot are dense, thorny, low brush such as spiny hackberry, lotebush, and blackbrush. Loss of the dense brush habitat due to clearing is the main reason for the species loss. Ocelots live within a home range of about 1 to 4 square miles. Ocelots hunt by night and spend the day resting in thick brush. They feed on a variety of small mammals, birds, reptiles, amphibians, and fish. The den of the ocelot is in caves in rocky bluffs, tree hollows, or the densest part of a thorny thicket. The young are born in the fall and the mother stays with the young in the day and hunt at night (NatureServe 2003).

Black striped snake (*Coniophanes imperialis*)

The black striped snake is listed as threatened by the TPWD. The black striped snake is a mildly venomous snake 12 to 18 inches in length and has alternating black and brown stripes. The snake prefers loose, sandy soil habitats that contain masses of rotting cacti and other scattered debris (Bockstanz 2000). The snake may also be found in the cracks in soils that form when soils dry out quickly. The black striped snake burrows into the soil by day and forages at night on small vertebrates such as frogs, lizards, mice, and smaller snakes. The range distribution of the snake in Texas is far south Texas (Bockstanz 2000; TPWD 2003f; Texas Tech University 1997).

Indigo Snake (*Drymarchon corais*)

The indigo snake is listed as threatened by the TPWD. The indigo snake is 60 to 80 inches in length and has shiny, translucent black or blue-black body with reddish-orange sides at the head. Habitat of the indigo snake is moist riparian breaks in the thorn brush woodlands and mesquite savannah of the coastal plains near ponds and rivers, and may also be seen in grassy plains or on coastal sandhills. The range of the snake is south Texas. Diet of the snake is small mammals, birds, frogs, lizards, snakes, and other vertebrates that are small enough to swallow (Bockstanz 2000).

Speckled Racer (*Drymobius margaritiferus*)

The speckled snake is listed as threatened by the TPWD. The snake is 30 to 40 inches in length and has a streamlined black body with a greenish cast and dart-shaped yellow spots in the central area of each black scale. The habitat of the speckled racer is dense thickets and palm groves with ample plant debris close to a water source. The range of the snake in Texas is limited to far south Texas. The speckled racer is a diurnal forager and its diet consists primarily of frogs and toads (Bockstanz 2000).

Texas Ayenia (*Ayenia limitaris*)

The Texas ayenia was listed in 1994 by the USFWS as endangered and TPWD as endangered. The plant once occurred throughout Cameron and Hidalgo Counties in south Texas and in Mexico; however, due to clearing of habitat, only one small population of about 20 individuals exist today in Hidalgo County (TPWD 2003). Texas ayenia is a thornless medium sized shrub 2 to 3 feet tall. The leaves are 1 to 2 inches long, simple and have toothed margins. The flowers are small, clustered with five green, pink, or cream-colored petals, and the fruit is a small, round capsule with short prickles. Found on terraces and floodplains, the Texas ayenia may be dependent on flooding for nutrient deposition and seed dispersal. The habitat of the Texas ayenia is dense, moist riparian woodland with thick canopy cover. The population in Hidalgo County occurs on nearly level sandy clay loam soils of the Hidalgo series. Plants that grow alongside the Texas ayenia include mesquite, granjeno, lotebush, and snake-eyes. The plant community was once an extensive thicket in the Rio Grande delta; however, today it covers less than 5 percent of its original acreage (TPWD 2003).

- Bockstanz, Lori M. and David C. Cannatella. 2000. Herps of Texas.
<http://www.zo.utexas.edu/research/txherps/>.
- Brush, T. 1998. Recent nesting and current status of Red-billed Pigeon along the lower Rio Grande in southern Texas. *Bulletin of the Texas Ornithological Society* 31(1):22-26.
- NatureServe. 2003. NatureServe Explorer: An online encyclopedia of life Jaguarundi, *Herpailurus yaguarondi*. Version 1.8. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: July 8, 2003).
- NatureServe. 2003. NatureServe Explorer: An online encyclopedia of life Ocelot *Leopardus pardalis*. Version 1.8. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: July 8, 2003).
- NatureServe. 2003. NatureServe Explorer: An online encyclopedia of life Indigo Snake *Drymarchon corais*. Version 1.8. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: July 8, 2003).
- NatureServe. 2003. NatureServe Explorer: An online encyclopedia of life Black striped snake *Coniophanes imperialis*. Version 1.8. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: July 8, 2003).
- Texas Parks and Wildlife Department. 2002. Annotated List of Rare Species for Hidalgo County, Last revised August 2002.
- Texas Parks and Wildlife Department. 2003a. Peregrine Falcon
<http://www.tpwd.state.tx.us/nature/endang/birds/peregrin.htm>
- Texas Parks and Wildlife Department. 2003b. The American Peregrine Falcon in Western Texas and Adjacent Northern Mexico.
http://www.tpwd.state.tx.us/hunt/research/wildlife_research_highlights/1997/falcooper.htm
- Texas Parks and Wildlife Department. 2003c Arctic Peregrine Falcon.
<http://www.tpwd.state.tx.us/nature/endang/birds/peregrin.htm>
- Texas Parks and Wildlife Department. 2003d.
Jaguarundi <http://www.tpwd.state.tx.us/nature/endang/animals/jag.htm>
- Texas Parks and Wildlife Department. 2003e. Ocelot.
<http://www.tpwd.state.tx.us/nature/endang/animals/ocelot.htm>
- Texas Parks and Wildlife Department. 2003f. Black striped snake.
<http://www.zo.utexas.edu/research/txherps/snakes/coniophanes.imperialis.html>
- Texas Parks and Wildlife Department. 2003g. Indigo Snake. Texas Parks and Wildlife Department. 2003f. Black striped snake.
- Texas Parks and Wildlife Department. Endangered Resources Branch. Texas Ayenia: *Ayenia limitaris*. http://www.tpwd.state.tx.us/publications/wildlife_habitat/pdf_docs/tx_ayenia_t_e.pdf
- Texas Tech University 1997. Mammals of Texas Online Edition.
<http://www.nsr.ttu.edu/tmot1/Default.htm>