

The status of natural wildlife habitats around the world is precarious. “Important wildlife habitat is rapidly lost or fragmented in the course of urban development, oil and gas exploration and extraction, and the conversion of land to agricultural uses. Some of the damage to wildlife is visibly the result of humans encroaching on wildlife habitat” (Humane Society of the United States, 2009). Rapid increases in housing and business developments, in addition to rural community growth, have disturbed or destroyed numerous wildlife habitats hindering the chances of survival for much of the natural wildlife in the surrounding areas.

In Bexar, Bandera, Comal, and Kendall counties, there is an increased potential for disturbing natural wildlife habitats due to rapid growth in the population. The four-county area is experiencing higher growth rates than other counties in Texas (Texas Department of State Health Services [TDSHS], 2009). The rapid growth in these four counties includes housing and business developments that are disturbing the natural areas that have historically accommodated a variety of wildlife.

Likewise, the extreme weather conditions that often affect South Central Texas, including floods and droughts, place animals at additional risk for harm. Data suggests that climate change will have a negative effect on Texas wildlife if efforts for conservation are not met. Scientists from many parts of the world believe that climate change will have a cataclysmic effect on wildlife in the years to come. Already in Texas, above average temperature is changing the migratory patterns of some species. It is possible

to see an influx of invasive species that could potentially damage the state’s native wildlife population, leaving them to compete for natural resources (National Wildlife Federation [NWF], 2009). Together, these factors reveal the need for preserving wildlife and their natural habitats.

History of Wildlife Preservation in the USA

The wildlife preservation initiative was started by President Theodore Roosevelt who established the first wildlife refuge on Pelican Island in 1903. Located in Florida, it serves mainly to protect various types of birds (U.S. Fish and Wildlife Service [FWS], 2009b).

70 years later, President Richard Nixon signed the Endangered Species Act acknowledging the need for the preservation of wildlife and their environments:

- Requires federal agencies to ensure actions do not jeopardize the continued existence of any endangered or threatened species
- Prohibits destruction or adverse modifications of critical habitat (National Park Service [NPS], n.d.)

Efforts to preserve animals and their environments continue. With the establishment of Rocky Flats (Colorado) as a National Wildlife Refuge in July 2007, the total number of national wildlife refuges rose to 548. The total acreage for the National Wildlife Refuge System as of September 2008 was 96,546,018 acres (FWS, n.d.a).

In Texas there are:

- 18 Wildlife Refuges
- Over 450,000 acres
- Majority located along the Gulf of Mexico (FWS, n.d.b)

Texas Parks and Wildlife

In 1963 the Texas Parks and Wildlife Department (TPWD) was established as a consolidation of several conservation/preservation agencies (parks, fish, and game). In 1983 the Texas legislature passed the Wildlife Conservation Act giving TPWD authority for managing fish and wildlife resources in all Texas counties. TPWD currently consists of 10 departments including state parks, coastal and inland fisheries, resource protection, and wildlife (Bengston, Blankenship, & Bonds, n.d.).

The Current State of Wildlife Preservation in Texas

As of 2009, the U.S. Fish and Wildlife Service listed 1,361 native species of the United States as endangered or threatened (FWS, 2009a). Of these 1,361, there are currently 66 animal and 28 plant species that are in danger of becoming extinct in the state of Texas. Specifically, 38 of the 94 endangered species are found in Bexar, Comal, Kendall and Bandera counties (FWS, 2009c).

Over the years the state of Texas has developed programs to make sure that native species are protected. In 1973 the Texas Legislature allowed Texas Parks and Wildlife to create a list of animals considered at risk for extinction. The department split them into two lists:

- *Endangered* – the Executive Director of the Texas Parks and Wildlife Department has deemed these animals as “threatened with statewide extinction”
- *Threatened* – species that could become endangered in the future
- Some endangered species in the four counties are the same species and others only pertain to that county, but the breakdown is as follows:

Bandera

- ◆1 Amphibian
- ◆6 Birds
- ◆3 Mammals
- ◆1 Plant
- ◆1 Reptile

Bexar

- ◆2 Amphibians
- ◆6 Arachnids
- ◆10 Birds
- ◆4 Reptiles
- ◆2 Fish
- ◆3 Insects
- ◆3 Mammals

Comal

- ◆2 Amphibians
- ◆7 Birds
- ◆1 Crustacean
- ◆1 Fish
- ◆2 Insects
- ◆1 Mammal
- ◆2 Reptiles

Kendall

- ◆2 Amphibians
- ◆8 Birds
- ◆3 Mammals
- ◆2 Reptiles

(TPWD, 2009)

There are no National Wildlife Refuges in San Antonio or the surrounding areas despite the U.S. Fish and Wildlife Service’s recognition of the great numbers of endangered species living in the area. Likewise, the Bureau of Land Management only has subsurface acreage (federally owned oil, natural gas, and minerals) in Texas (Bureau of Land Management, 2008), so the perilous situation of wildlife preservation is strained even more.

There are however, many non-government organized wildlife conservation efforts and refuges in the state, including Bat Conservation International, Inc. (2009), The Cibolo Nature Center (2006), The Nature Conservancy (2009), and the San Antonio Zoo (2009) that are not only committed to conservation, but also provide related education.

Wildlife Management Areas (WMAs)

Texas has established other departments in their efforts to help and better understand wildlife. For this purpose the department created the Wildlife Management Areas which are operated by the Wildlife Division of TPWD. These areas were established as sites to perform research on wildlife populations and habitat, conduct education on resource management, and provide a variety of outdoor recreation activities. There are currently 51 WMAs encompassing 756,464 acres. These areas are established to represent habitats and wildlife populations typical of each ecological region of Texas. With the exception of driving tours and special education events,

WMAs require special permits for visitors (TPWD, 2007d).

Wildlife Rehabilitation

Wildlife rehabilitation centers care for injured, ill, and orphaned animals with the objective of returning the healed creature back to its native habitat (National Wildlife Rehabilitators Association, n.d.). Approximately 77 Texas counties have wildlife rehabilitation centers. Bexar County is host to five rehabilitation organizations including Wildlife Rescue and Rehabilitation and Last Chance Forever – The Bird of Prey Conservancy (TPWD, 2008).

Orphaned and injured animals are a very common occurrence in the spring and summer seasons. Records indicate that many ill, orphaned and injured animals are in this condition because of human intervention. Things like cars, trains, mowers and high line wires can be responsible for the animal's suffering. Many times birds are thought to be abandoned, but the mother is most likely practicing a defense mechanism called "hiding." Mother birds hide as to not attract prey to her young. Although people mean well, too often they take the young from its parent making it difficult for the young animal to readjust to the wild (TPWD, 2007b).

The need for rehabilitation centers is crucial because of the special skills and knowledge needed to care for these animals. Rehabilitators must be able to administer basic first aid and physical therapy. The ultimate goal for these organizations is to release the fully rehabilitated animal back into the wild. Rehabilitators try to keep human contact to a minimum when helping wildlife. It is widely believed that animals must maintain their fear of humans for the purpose of survival. Animals that cannot be released into the wild are euthanized humanely, or they are sent to education facilities if the

animal is still functional, but considered at risk in the wild (National Wildlife Rehabilitators Association, n.d.).

All rehabilitators must be licensed by TPWD to house and treat the animals that they receive (TPWD, 2007c). Rehabilitators generally work out of their home and many of them volunteer their time. What make these centers and their volunteers so special is that there is no Federal or State funding for their facilities. Texas Parks and Wildlife may permit them to house the animals through special licensing, but all veterinary, caging and food costs are the responsibility of the rehabilitator (TPWD, 2007a).

In order to release an animal back into the wild the following guidelines and criteria apply:

- Wildlife cannot be released in an area where they can become a nuisance or a depredation threat.
- Wildlife may not be released into fenced or enclosed spaces. They should be able to escape in the event that they face a predator.
- If it is difficult to find somewhere to release the wildlife, it is possible to release them onto TPWD property with special permission from the department.
- The release of animals on private property is also a possibility, but one must have written permission from the landowner, lessee, or operator in charge of the land.

(TPWD, 2007c)

In the end, the health and livelihood of all wildlife species depends on the preservation of natural habitats and nature reserves. Wildlife preservation not only benefits wildlife species and local and regional environments, it also provides numerous individuals with a source of entertainment and education.

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