



Wildlife and Habitat Management on Small Acreages in the Cross-Timbers and Prairies Region of Texas

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Introduction

The face of Rural Texas is changing. The size of private farms and ranches has decreased dramatically over the past few decades. Today, 80 percent of Texas' private land holdings are less than 500 acres. Many of these properties are now owned by absentee landowners or are being subdivided for mobile home parks, high dollar "ranchettes", rural housing and industrial developments. Congestion in the cities and metroplexes has increased "urban sprawl." With a strong economy and increased resources, many people are leaving the urban environment to commute to the country for a taste of country life. Land use on these properties is also changing.

Today, many landowners are shifting away from traditional agriculture operations and land uses such as ranching or farming, either for economic reasons or changes in land-use interests. Managing land and habitat for wildlife is gaining in popularity, whether for trophy white-tailed deer, songbirds, or everything in between.

Recent changes in the property tax laws of Texas have also helped increase interest in wildlife and habitat management. Now, wildlife management as a primary land use can be used to maintain agricultural tax valuation on properties with an existing agricultural tax valuation. Proposition 11 was passed in 1995 to amend Article VIII, Section 1-d-1 of the Texas Constitution permitting agricultural appraisal for land used to manage wildlife. Landowners and wildlife have both benefited from this change.

However, wildlife and habitat management on these smaller properties can be challenging. Can you really manage habitat for white-tailed deer on 20 acres? No, but there are things landowners can do to benefit wildlife on almost any size property, especially with a little creative thinking.

What is wildlife and habitat management?

Wildlife have four basic needs; food, water, cover, and space. The arrangement of these

elements is often equally important. Each species of wildlife has its own specific habitat needs for reproduction and survival. If one of these components is missing, that is the **limiting factor** for that species. It is the availability, arrangement, and ratio of these habitat elements on the landscape and influence of proper management that will determine the amount of wildlife (number of species and population of each species) on the property. This is referred to as the **carrying capacity**. Since many wildlife species often share habitat types, most common habitat management practices will benefit a number of wildlife species.

What wildlife species should I specifically manage for?

First, it is important to learn about the ecology of wildlife species found in the area. All wildlife have a minimum size of area they need to live and reproduce. This is their **home range**. Some animals such as small reptiles and amphibians have small home ranges of only a few hundred yards. Others, however, like white-tailed deer or wild turkeys, have home ranges of a square mile or more. Wildlife species to be considered for management are those in which a landowner's property supports and encompasses their habitat and home range or at least a significant part of it.

Second, what species of wildlife are already living on and around the property to be managed and which would benefit most from some type of management. Finally, what type of wildlife management practices would be most economically and environmentally feasible to meet the goals and objectives of the landowner.

Wildlife and habitat management practices for smaller acreages

Fallow Disking: Fallow disking refers to disking the soil in the winter months after the first freeze but prior to the first green up of spring. This promotes the germination and growth of grass, weed and wildflower seeds already present in the soil (called the soil seed bank). Some of these seeds may have been

dormant for years, but with a little disking to expose them (and a little rainfall) they should grow vigorously. These natural weeds and wildflowers are very important to wildlife and are preferred over most introduced “wildlife plants.”

Providing supplemental water: The availability of water year round is extremely important to wildlife and is often a limiting factor on many properties. Most often we think of stock ponds (or “tanks” in Texas) when we think of water sources. However, there are also many other ways to provide water to wildlife that can be equally beneficial. Troughs, windmill overflow basins, wildlife guzzlers, and plastic drums are just a few ways to provide supplemental water for wildlife without excessive costs. It is imperative that these structures be monitored and kept filled for them to be effective.

Census: Annual census of wildlife populations is a valuable tool for monitoring the stability, growth, and health of populations of many wildlife species. Conducting surveys on white-tailed deer populations is an important technique for proper management and harvest in Texas. Other census techniques such as migratory songbird call counts, roadside quail surveys, time area counts for small mammals, and drift fences for reptiles and amphibians are just a few types of survey methods that may be used to estimate populations of other wildlife. Determine the best census technique for the target wildlife species found on the property and keep good records.

Providing supplemental food: Wildlife feeders and food plots are the most common ways to provide supplemental food for wildlife. Feeders, while often providing a good place to observe or harvest animals, usually do not provide a substantial benefit to most wildlife species. They also may increase the threat of predation and spread of diseases. Food plots, planted in native plant species are generally a better option. Native grasses, forbs (weeds) and wildflowers usually provide a better nutritional benefit to most wildlife species. However, wildlife feeders and food plots should always be viewed as **secondary** to proper habitat management.

Brush management: Brush Management or brush “sculpturing”, as it is sometimes referred to, is an important way to improve wildlife habitat. For example, in Texas, Ashe juniper (cedar) and mesquite are invasive species that

require management. Mature juniper, especially on land with a history of overgrazing and lack of natural wildfires, can literally take over the landscape. In and around these cedars it may become an “ecological desert.” They shade out mid and under-story vegetation, reducing the amount of sunlight reaching the ground and restrict the growth of other important plant species. A little work to remove some of this brush to create a “patchy” landscape will greatly benefit many species of wildlife. Remember, some cedar is beneficial because it is evergreen and provides year round cover for many wildlife species. However, it must be kept in balance with other plants and trees. Diversity is the key.

Providing supplemental shelter: Nest boxes and brush piles are two simple yet practical ways to provide shelter and nesting sites to wildlife. Instead of burning all piles of cleared juniper, leave a few piles to create habitat and escape cover for small birds and mammals. Nest boxes for bluebirds and wood ducks are also simple and easy ways to provide valuable nesting habitat. They are easy to build or can be purchased from various sources. They also are a great project for a high school environmental class or local agriculture group. The size of the entrance hole and proper placement of the nest boxes are the two most critical factors to their success. Literature is available on proper construction and management of nest boxes. A system of monitoring and recording their use and success (reproduction) should be established.

Wildlife Cooperatives: On smaller properties where many management practices are not feasible or on properties where landowners do not have enough land to manage for the wildlife they are interested in (i.e. white-tailed deer), wildlife cooperatives are an excellent alternative. Landowners, joined together with common objectives and goals, can manage wildlife habitat on a much larger scale than they could independently. Communication is the key to developing and maintaining effective cooperatives.

There are many other ways to manage wildlife habitat and there is certainly room for some creative thinking on smaller acreages. Contact your local Texas Parks & Wildlife office for information on how to obtain assistance with wildlife habitat management on your property under the **Private Lands and Habitat Program**.