

## **Chapter 14: Conclusion**

In November 2000, the Governor's Task Force on Conservation published a draft of a report ordered by Governor George W. Bush to assess the health of parks and natural resources in Texas. The task force concluded that wildlife and scenic landscapes in Texas are relatively intact but are potentially threatened due to the state's continued growth (Governor's Task Force on Conservation 2000). While the status of native plant communities was not explicitly considered, the general conclusions of the report apply to vegetation as well. Based on the findings of this thesis, plant communities are certainly among Texas' most threatened resources.

As natural grasslands and forests across Texas have been widely converted to agricultural use, some formerly widespread or even dominant plant communities have been almost eliminated and many others are threatened. There are virtually no preserved grassland sites in South Texas, and only small areas of grassland have been protected in the Blackland Prairies, Cross Timbers, Edwards Plateau, and High Plains. While many examples of woodland and forest are protected in Texas, only a handful of these sites have never been logged or cleared; they are invaluable traces of the past.

Almost every region of the state contains one or more types of vegetation that are both threatened and little protected. These include woodlands along the lower Rio Grande, cienegas and riparian woodlands in the Trans-Pecos, East Texas bogs and longleaf pine upland and wetland savannas, Edwards Plateau canyons, Panhandle playa lakes, and grasslands throughout the state. Examples of these communities in protected areas are likely insufficient to ensure the viability of associated plants and animals. Other habitat types, such as East Texas bottomland forests and tidal marshes, are preserved at a number of sites, but ecologists argue that it is desirable to protect more acreage because of these habitats' importance for wildlife and other values.

Dozens of non-native plant species are naturalized and many have become dominant in “wild” sites, supplanting native species and in some cases even replacing the native ecotype (Chinese tallow-tree and saltcedar are obvious examples). It is virtually impossible in most of the state to find a landscape in which exotic species are not only present, but pervasive.

Perhaps the most widespread features of the vegetation of Texas are impacts of agriculture, which has modified virtually all landscapes. Overgrazing by goats and sheep removed not only the native vegetation, but much of the topsoil and generative capacity of lands in the Edwards Plateau. In parts of the Trans-Pecos, grasslands stubbornly refuse to return to range sites overgrazed a century ago. For almost a century, overutilized rangelands have been invaded by mesquite, prickly pear, live oaks, junipers, and other native species which have regrown in very different habits and habitats than before Anglo-European settlement and are as troublesome for the rancher as any exotic species. This trend is presumably the result of human disturbance, though the roles of grazing, fire suppression, and other factors are not well understood.

Many vegetation types that existed prior to intensive human use are disappearing. Human modification of vegetation has been dramatic in every region of Texas, and with some exceptions (e.g. the planting of rapidly growing non-native or hybrid grasses to reclaim destroyed rangeland) it has been unplanned and even unknowing. While land managers and specialists often make confident claims about the ability to reclaim degraded areas, few efforts to restore natural habitat in Texas have been completely successful.

These comments should not be interpreted as criticisms of traditional land uses of Texas. Ranching and hunting have resulted in great ecological benefit, as well as economic and cultural benefits, for Texas. Paradoxically (given the vast modification of natural vegetation which has occurred), Texas emerges from the twentieth century with much of its wildlife intact. Nor can it be assumed that public ownership is necessary for protecting natural resources, for there are almost certainly more remnants of natural habitat on private lands than public ones. In

fact, the public agencies that are entrusted with conserving natural resources often have done little to help. Public entities have rarely made preserving native vegetation a priority, and the propagation of many non-native species was subsidized by government programs. Public agencies have not taken sufficient steps to protect examples of many native ecosystems, and many "protected" sites are not managed to protect their full species diversity.

Alteration of native vegetation has occurred in every part of Texas and the landscapes we leave to our children are increasingly impoverished. But there are also reasons for optimism. Texans remain very interested in land management and outdoor recreation (Austin American Statesman 2000). Beginning with the establishment of Big Bend National Park in the 1930s, Texans have supported many public and private efforts to preserve lands with natural beauty or wildlife value. As a result, Texas contains a number of parks and wildlife preserves which contain important examples of natural vegetation. Notable examples include Guadalupe Mountains, Big Bend, Big Thicket, and Padre Island national parks; Lower Rio Grande Valley, Matagorda Island, Laguna Atascosa, Little Sandy, and other national wildlife refuges; Upland Island, Indian Mounds, and other U. S. Forest Service areas; Lost Maples, Big Bend Ranch, Monahans Sandhills, Enchanted Rock, Caddo Lake, Sea Rim, Franklin Mountains, Devils River, Chinati Mountains, Palo Duro Canyon, and many other state parks; Gus Engeling, Las Palomas, Matador, Sierra Diablo, and other wildlife management areas; and Clymer Meadow, Roy E. Larsen, Tridens Prairie, Sabal Palm Grove, and other private preserves. The value of these natural areas will increase as the state's population continues to grow rapidly and rural life becomes an ever-smaller component of the state's economy and culture.

My purpose in writing this thesis is to encourage awareness of the impressive diversity of natural landscapes in Texas and to recognize the urgency in protecting examples of each of them. I hope to save others interested in this topic some time and effort by summarizing part of the existing literature and making a few recommendations that may be challenged and improved. Because

of research and conservation efforts in progress, the information in this thesis may quickly become out-of-date, and I welcome any input that can help to improve and correct it. Please contact me via e-mail at: [bezanson@texas.net](mailto:bezanson@texas.net)

We live in a time of rapid economic growth and unprecedented population growth, immigration, and technological change. Today's events carry both opportunities and responsibilities. Many of the most important social actions that we can make in the future may be decisions to counter the negative effects of rapid change by preserving our inherited traditions and resources, both natural and cultural. The same rationale exists for preserving remnants of Texas' landscapes and ecosystems as for preserving historic places and cultural artifacts: to make richer the lives of those who come after us by allowing them to know the land that we knew.