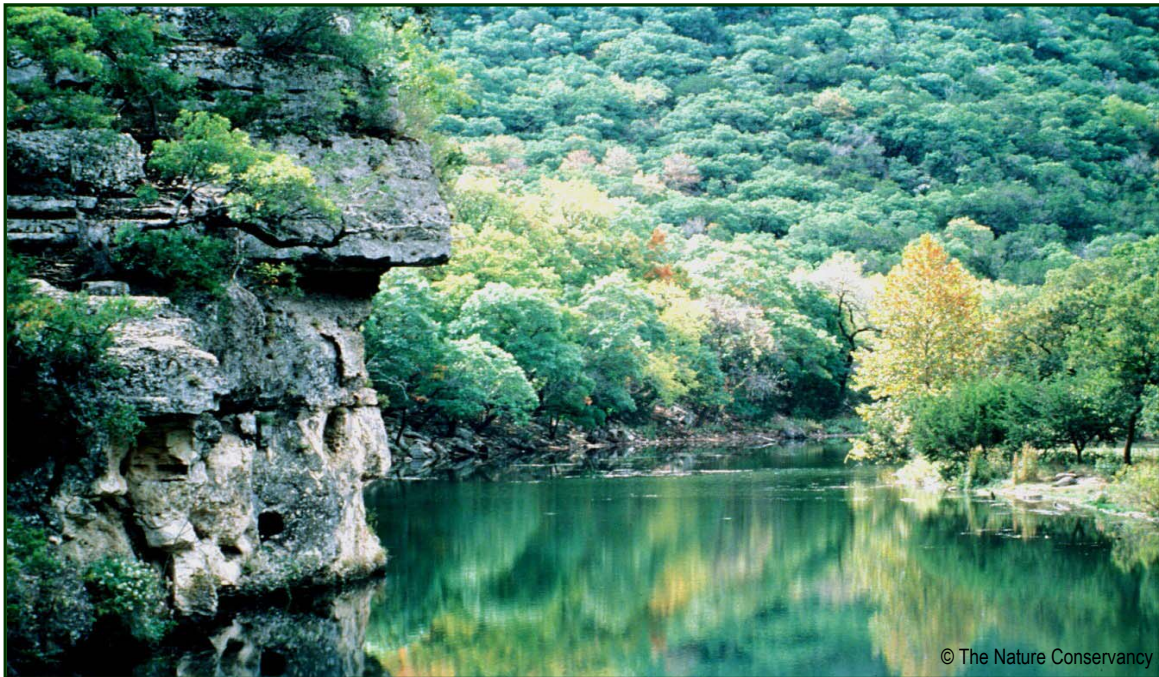


# A Biodiversity and Conservation Assessment of the Edwards Plateau Ecoregion

June 2004



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Edwards Plateau Ecoregional Planning Team, The Nature Conservancy, San Antonio, TX, USA.

## Executive Summary

Ecoregional biodiversity assessment is a global objective of The Nature Conservancy. With these assessments we are developing a global “blueprint” for successfully implementing our conservation vision: To conserve portfolios of functional conservation areas within and across ecoregions. Through this portfolio approach, we will work with partners to conserve the full array of ecological systems and viable native communities and species.

The Edwards Plateau of central Texas includes a variety of well-known Texas features. The terrestrial and aquatic environments found here are home to a rich diversity of plants and animals, many of which occur in this ecoregion and nowhere else on the planet. The Edwards Plateau is truly a unique place, even from a global perspective.

The Edwards Plateau is also one of the fastest developing regions in the United States. The Conservancy recognizes the complexity of this region not only in a biological context but also in a socioeconomic setting. Just as there are unique species of plants and animals within the region, so too are there unique population, economic, cultural, and social attributes. To meet our mission we must frame our conservation action within the acceptable limits of each community in which we work. If the Conservancy is to be successful within the Edwards Plateau, we must facilitate the means by which humans can live productively and sustainably while conserving biological diversity.

For this assessment, we used a coarse filter - fine filter approach to identify areas of biodiversity significance within the ecoregion. Our goal was to capture representative examples of a subset of species, communities, and ecosystems, with the underlying assumption that in doing so we will also

capture examples of the biodiversity associated with those explicitly represented. Our approach emphasizes the identification of large landscapes that are more likely to be able to maintain the critical ecological processes important to ecosystem function.

The resultant portfolio of areas includes 102 terrestrial areas of biodiversity significance and 62 aquatic areas and stream/river segments. Each area represents one or more examples of a species, community, or ecosystem of conservation concern.

Conservation goals in terms of both abundance and distribution have been met for 29 of 275 (11%) species, communities or ecosystems of conservation concern. Data and research gaps were identified for several taxonomic groups and individual targets. We also identified some key and widespread threats to biodiversity in these areas. The most prominent threats include overgrazing, excessive herbivory, altered fire regime, residential/urban development, and fragmentation. Finally, we assessed the current status of biodiversity conservation in the Edwards Plateau by comparing our portfolio to a set of known areas under varying degrees of conservation management. Our results suggest that approximately 4% of the identified terrestrial portfolio and 2% of the aquatic portfolio are already being managed for the conservation of biodiversity.

Areas of biodiversity significance in the portfolios represent places whose collective conservation would help insure that the biological diversity of the Edwards Plateau ecoregion will persist over the long term. The Nature Conservancy, acting alone and through diverse partnerships, will focus its foreseeable future conservation efforts in these areas. These are not areas of land acquisition priorities. Protection of these areas will necessitate a

broad array of conservation actions implemented by private landowners, public natural resource agencies and private conservation organizations. We hope that this assessment will serve as an important resource to guide those cooperative ventures.

**Note:** Most of the data used to develop this assessment and accompanying report can be obtained by contacting The Nature Conservancy, P.O. Box 1440, San Antonio, Texas 78295 or by calling (210) 224-8774.

