

LENNOX WOODS PRESERVE, EXECUTIVE SUMMARY

Lennox Woods, a 366 acre preserve donated to The Nature Conservancy by Martha, David and Bagby Lennox, features outstanding examples of two relatively undisturbed old-growth forest types, mesic upland shortleaf pine-oak forest and bottomland hardwood forest. Located at the convergence of two ecoregions in Red River County, Texas, Lennox Woods possesses an unusually diverse flora, with nearly 230 vascular plant species documented to date. The preserve is also home to several plants of restricted occurrence, including the Southern lady's slipper orchid (*Cypripedium kentuckiense*), hooked buttercup (*Ranunculus recurvatus*), Willdenow's sedge (*Carex wildenovii*), and the rare Arkansas meadow-rue (*Thalictrum arkansanum*). Pecan Bayou, the largest undammed watershed in northern Texas, runs through the heart of the preserve. The remnant old growth forests, the rich flora and fauna and the natural hydrological regime of Pecan Bayou all testify to the overall health of the ecosystem at Lennox Woods.

The conservation planning team identified four conservation targets within the Lennox Woods Site: old growth bottomland hardwood forest, old growth shortleaf pine-oak forest, Arkansas meadow-rue, and Southern lady's slipper orchid. Some of the key threats to these elements include alteration of the natural hydrological regime, fire suppression, clearcutting, feral hogs, and small population size. Fortunately, recent (1999) surveys by Conservancy biologists revealed the existence of further old growth bottomland hardwood forests on properties upstream of the Lennox Woods Preserve, including large populations of Arkansas meadow-rue.

The goal of the Lennox Woods Site Conservation Plan is to protect not only those elements within the existing preserve boundaries, but to extend the envelope of protection to the upper reaches of Pecan Bayou, thereby protecting important elements and hydrologic processes necessary to the survival of the system. Many components of the plant and animal communities are highly dependent on the natural, periodic flooding regime. The preservation of a forested matrix around the preserve is also critical for both the maintenance of the hydrological regime as well as the floral and faunal diversity. For these reasons, the full site boundary has been defined as congruent with the boundaries of the Pecan Bayou watershed, thereby defining the Pecan Bayou Megasite. The Lennox Woods site is contained within this boundary, and defines the area surrounding the preserve in which most conservation activities will be concentrated.

Strategies to abate threats and achieve conservation goals at the Lennox Woods site include the acquisition of key tracts of land surrounding the preserve, both to serve as buffer and to increase the extent of protection for the bottomland hardwood forests and Arkansas meadow-rue. In addition, other remnants of shortleaf pine-oak forest in the area, if any, will be identified and restoration efforts undertaken to rejoin these fragments into one, contiguous stand. TNC will work with private landowners and timber companies to promote sustainable harvest of trees and demonstrate prescribed burning as a management tool. Alternative methods of land protection, such as conservation easements, will be pursued. TNC will work in cooperation with private landowners and partner agencies to control the feral hog population in Pecan Bayou. Public education and outreach will be a key factor in all conservation efforts. The plan calls for a preserve steward or forester dedicated to the Lennox Woods site, as well as a part-time outreach coordinator. The first step in accomplishing these objectives will be the successful identification and acquisition of financial support for the initiatives outlined in the full plan.

