A portion of the Blackland Prairie Ecological Region of Texas extends into the eastern portions of Denton, Hill and McLennan Counties of Northcentral Texas. The region is underlain by Upper Cretaceous marine chalks, marls, limestones, and shales which gave rise to the development of the characteristic black, calcareous, alkaline, heavy clay soils. Early settlers were drawn to this region by these productive soils, gentle topography, and luxuriant native grasslands. Although historically a region of tall-grass prairies, today much of the land is devoted to cropland and other agricultural enterprises. Cotton, corn, milo, and wheat are grown throughout the region. Livestock grazing is also an important land use. Few remnant native prairie sites remain. Urban expansion into this ecological region is also increasing as the space for wildlife and wildlife habitat decreases.

Watersheds and riparian zones of the Brazos and Trinity River and their tributaries bisect the region and in these areas, habitat for a variety of wildlife species occurs. Upland wildlife species including small game animals, songbirds, waterfowl and shore birds, and a limited population of white-tailed deer use available habitat. Woody vegetation including mesquite, hackberry, elm, osage orange, and other woody species grow along fence lines and field borders providing habitat for wildlife. Other habitat for wildlife may occurs on steep or sloping terrains not subject to cultivation where communities containing species such as eastern red cedar, Ashe juniper, cedar elm, Texas persimmon, elbowbush, deciduous holly, live oak, and other woody species occur.