1.10.1 Beech Creek

Beech Creek begins in eastern Tyler County and flows southerly into Hardin County where it joins Village Creek about seven miles northeast of Kountze. The Beech Creek drainage basin is 98 square kilometers (38 square miles) in size and is within the Neches River Basin (Bayer et al 2002). The creek is spring-fed and contains clear, cool water and white sand bars (Belisle 1974). The northern portion of the creek has high sloping banks lined with beech and magnolia trees and is characteristic of a temperate blackwater creek, while the southern portion of Beech Creek more closely resembles a blackwater cypress-tupelo slough (Gunter 1993). The substrate in the southern reach is comprised primarily of silt and sand with decaying organic matter (Bayer et al 1992) and instream cover is provided by overhanging vegetation, woody debris, and roots and knees of cypress trees (Figure 19). Bayer et al (1992) collected 25 fish species (Appendix C), including several species intolerant of degradation, from Beech Creek in southeast Tyler County where the stream channel braided through an extensive wooded swamp. The large number of intolerant species present indicates Beech Creek remains relatively undisturbed. Freshwater mussels collected further attest to the relatively undisturbed nature of Beech Creek as mussels are good indicators of water quality and are often the first organisms to decline during adverse conditions (Howells et al 1996). Bordelon and Harrel (2004) reported collecting eight species of freshwater mussels from Beech Creek between August 2001 and November 2002. The ecologically significant segment is from the confluence with Village Creek in Hardin County upstream to the headwaters in east Tyler County.

- **Riparian conservation area** fringed by the 5,089-acre Beech Creek Unit of the Big Thicket National Preserve in east Tyler County.
- **High water quality/exceptional aquatic life/high aesthetic value-** identified as a South Central Plains ecoregion reference stream for diversity of benthic macroinvertebrates (Bayer et al 1992).



Figure 18. Beech Creek north of Gore Store Road/FM 3063 in Hardin County (8/15/01).

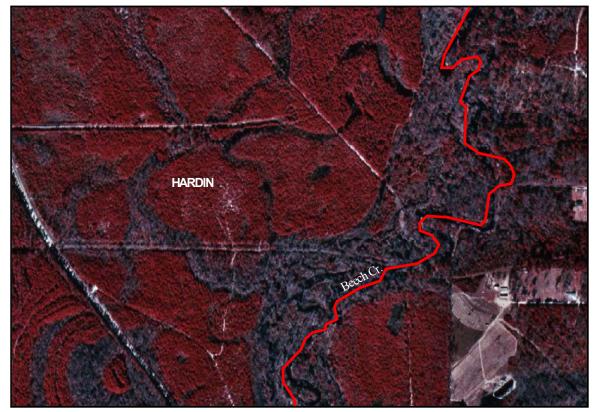


Figure 19. Beech Creek at FM 3063/Gore Store Road, Hardin County. Source: Fred DOQ, 1m CIR (TNRIS, 1995-1997).