

1.10.9 Village Creek

Village Creek rises near the Alabama-Coushatta Indian Reservation in southern Tyler County and flows through Hardin County in a southeasterly direction 69 miles to the confluence with the Neches River. Village Creek is a relatively free-flowing, low gradient stream that meanders its way through cypress swamps and pine and hardwood forests. Dominant streamside vegetation observed includes bald cypress (*Taxodium distichum*), river birch (*Betula nigra*), water tupelo (*Nyssa aquatica*), and water tolerant oaks (*Quercus* sp.) that shade much of the creek and provide abundant instream cover in the form of leaf litter and woody debris. The streambed is composed primarily of sand with pockets of leaf litter accumulating adjacent to the channel and in backwater cypress sloughs (Moriarty and Winemiller 1997, Bordelon and Harrel 2004). The relatively narrow channel is lined with white sandbars in some sections and steep banks cut by floodwaters in other stretches. Because of its outstanding scenic qualities, lack of impoundments, and pristine characteristics, Village Creek is a popular flat-water canoe stream (Belisle and Josselet 1974, Nolen and Narramore 2000). Rizzo et al. (2000) monitored water quality in six drainage basins of the Big Thicket National Preserve between 1996 and 1999 and found Village Creek to be among those with the best water quality (i.e. low nutrients, low chlorophyll a, no hypoxia). Biological collections from Village Creek also indicate water quality is excellent. Bordelon and Harrel (2004) collected 17 species of freshwater mussels from Village Creek, three species of which are considered of “special concern” by the American Fisheries Society (Williams et al. 1993) and seven species are considered to be uncommon or rare. Fish collections from Village Creek have yielded between 44 and 48 species (Moriarty and Winemiller 1997, Moring 2003), including numerous species intolerant of degradation (Appendix C). Moring (2003) collected 190 taxa of benthic macroinvertebrates, including 157 aquatic insect taxa, from three locations on Village Creek. The excellent water quality and high diversity of aquatic life observed reflect the relatively undisturbed nature of Village Creek. The ecologically significant stream segment is from the confluence with the Neches River in Hardin County upstream to Lake Kimble Dam in Hardin County (TCEQ classified stream segment 0608).

- **Biological function-** Texas Natural Rivers System nominee for outstandingly remarkable fish and wildlife values (NPS 1995).
- **Riparian conservation area-** fringed by the Village Creek Corridor Unit of the Big Thicket National Preserve, and the 1,003-acre Village Creek State Park.
- **High water quality/exceptional aquatic life/high aesthetic value-** ranked as the #1 scenic river in East Texas (NPS 1995). Exceptional aquatic life based on fish community metrics (i.e. has a species composition, diversity, and functional organization comparable to the natural habitat of the region) (Moriarty and Winemiller 1997, Moring 2003) and diversity of benthic macroinvertebrates (Moring 2003) and freshwater mussels (Bordelon and Harrel 2004).
- **Threatened or endangered species/unique communities-** Unique, exemplary, and unusually extensive natural aquatic community (NPS 1995). Significant due to presence of the alligator snapping turtle (*Macrolemys temminckii*) (SOC/St.T) (Rudolph et al 2002).



Figure 32. Village Creek at Village Creek State Park in Hardin County (8/14/01).



Figure 33. Village Creek at Village Creek State Park in Hardin County (8/14/01).