

2004 Baseline Survey of **Buckskin School Branch**

Jordan and Skinner Creeks Watershed (SP02), Sugar/Pecatonica Basin

Green County

WBIC 897300

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Buckskin School Branch originates in a farm pond and flows 6 miles southward to where it joins Bushnell Creek to form Skinner Creek. The stream currently supports a warm water forage fishery, but is thought to have the potential to hold brown trout. It is degraded by agricultural nonpoint source pollution and streambank erosion and is on the state's 303(d) list of impaired waters.

On August 30, 2004, a baseline survey was conducted upstream from County Highway J. A 190 meter stretch was shocked with a 240 volt stream shocker with 2 probes. An attempt was made to collect all fish species in order to determine and Index of Biotic Integrity (IBI). A habitat and macroinvertebrate evaluation was conducted at this site, but those results are not available at this time. A qualitative habitat evaluation ("Ball" habitat) was also conducted looking downstream from CTH J and upstream from Buckskin Road.

Upstream from CTH J, Buckskin School Branch averaged 3.36 meters wide and averaged about 0.4 meters deep. Flow was measured at 4.76 ft³/second (0.135 m³/second). The water temperature was 56°F. This section flowed through a pasture, but was surrounded by a 10 meter buffer. Stream bank height varied between 0 – 1 meter with mostly stable grasses, but a few raw areas. Upstream and downstream of this site were areas of heavy pasture and with many raw and degrading banks. The bottom varied between gravel and rubble/cobble areas and heavy silt areas up to 0.5 meters deep.

The following species were collected:

Species	Number
Creek Chub	83
White Sucker	33
Southern Redbelly Dace	132
Common Shiner	24
Central Stoneroller	96
Brook Stickleback	59
Fantail Darter	45
Johnny Darter	6
Brassy Minnow	16

The warm-water IBI for this section of stream was 22 (poor).

Summary

Buckskin School Branch is a highly degraded resource because of heavy pasturing along the stream corridor. It currently holds only a handful of warmwater forage species and two coolwater indicator species. It should be noted that this survey was conducted near the end of a cool, wet summer. Although this stream is thought to have the potential to be a Class II trout stream, habitat is a major limiting factor. Qualitative habitat evaluations from other sections of stream above and below this site showed "poor" indices also.

Management Recommendations

Employ agricultural best management practices in the watershed to mitigate nonpoint source pollution. CREP sign up should be encouraged. Explore funding sources for implementation of NR151. Slope and stabilize stream banks along the length of the stream.

Deploy temperature monitors to reevaluate the potential of the stream to determine if the stream can support a Class II (brown) trout fishery or whether a warm water forage fishery is more realistic.