Written by: Tim Cwalinski, DNR Fisheries, Gaylord

Hardwood Creek is a small stream which begins in Otsego County and flows easterly into Montmorency County and the Black River. It flows for approximately three miles through the Pigeon River Country State Forest. Very little information exists for this small creek. Type 1 fishing regulations apply for this waterbody where trout minimum size is 8 inches in length and gear types are liberal.

In 1997, temperature data was gathered for Hardwood Creek through part of the month of August. Temperature for this period averaged 64F, with a minimum of 54F, and a maximum of 80F. The stream flows primarily through forested ridges until it approached Blue Lakes Road. An undersized culvert at this location pooled a considerable amount of water at this location, creating a significant warming effect. This culvert was replaced around the year 2000. Since then, no fisheries data exists for Hardwood Creek.

Fisheries Division MDNR conducted a brief fish community survey on April 24, 2007. A backpack electrofishing unit with one probe was used to assess the fish community in a reach of Hardwood Creek of approximately 300 feet. This was downstream of Blue Lakes Road about 1/8 of a mile near a pipeline crossing and small wooden bridge. Average width of the clear stream was about 10 feet. Sand was the dominant substrate with some gravel and cobble present. Undercut banks were somewhat common along with large and small woody debris. Maximum depth was about 2 feet. Electrofishing efficiency was considered fair-satisfactory. The stream gradient increases as the stream approaches the Black River, and substrates become larger.

Species collected included brook trout, creek chub, and blacknose dace. A length- and age-frequency for the brook trout is provided in Table 1.

Table 1. Length- and age-frequencies of brook trout collected in Hardwood Creek in 300 feet of stream.

Length (in)	**Number Collected**	**Age (s)**
3	1	I
4	4	I
5	2	I
6	2	II

Recommendations:

Type 1 fishing regulations for this stream are appropriate. Removal of the culvert most likely has reduced water temperature significantly for much of this stream. Substrate though remains dominated by sand, at least for much of the observed reaches. Investigations should be made to determine appropriate brook trout spawning substrates and locations (seepage) in this small creeks watershed. This stream could lend itself well to future habitat enhancement projects (adding spawning substrate, structure) to increase trout densities as well as enhancing its potential as a brook trout nursery stream.