

A Fisheries Survey of the Dowagiac River, July 1988 and 1989

Jay K. Wesley and Joan E. Duffy¹

*Michigan Department of Natural Resources
Southern Lake Michigan Management Unit
621 N. 10th Street
Plainwell, Michigan 49080*

Abstract.—A fishery survey of the Dowagiac River was conducted by the Michigan Department of Natural Resources, Fisheries Division in July 1988 and 1989. Rotenone was used to collect fish at six unimpounded sites on the mainstem of the river. Some physical and biological conditions of the riverine environment were also noted. High groundwater inputs keep the Dowagiac River stable both in terms of flow and temperature. Presence of indicator species such as brown trout and mottled sculpin confirmed that the Dowagiac River is a coldwater system.

A total of 8,800 fish representing 36 species were collected. At least four species of game fish were found at every station, while seven game fish species were found at one station. Almost 68% of the fish captured were small forage fish. White suckers were the most numerous species collected by weight (45.3%) and comprised 18.7% of the catch by number. Game fish catch by weight and number was 12.1% and 4.9%, respectively. Brown trout were the most numerous game fish by both total weight (6.2%) and number (1.5%). Standing crop estimates for all fish combined ranged from 48-402 pounds per acre, and averaged 148 pounds per acre.

The upper and middle Dowagiac River do not offer a variety of game fish species, but instead a unique opportunity for trout anglers. The lower river contains potamodromous steelhead, chinook salmon and coho salmon, as well as resident brown trout and smallmouth bass. The fishery could be improved by habitat (meander) restoration within portions of the middle and lower river. Allowing fish passage at Pucker Street Dam would also improve the fishery by giving potamodromous fish access to more spawning areas within the river.

¹ Deceased