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## SERIES: THE TROUT STREAMS OF MICHIGAN

## NO. 19 HALFADAY CREEK

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Halfaday Creek is a small, spring fed stream in Chippewa County tributary to Lake Superior east of Tahquamenon Bay. It is about 12 miles northeast of the Village of Strongs and can be reached via a hard surface road (U.S.F.S. 3159 and Lakeshore Drive).

This stream has been well known for its spring and fall steelhead runs, fall salmon runs, and a fair population of brook trout in the headwaters. Suckers and smelt run the Halfaday in the spring while menominee and salmon can be caught at its mouth during the spring and fall. The mouth is bordered by U.S. Forest lands but much of the lower mainstream and West Branch watersheds are on private property. The headwaters of the mainstream are also on Forest Service lands.

The mainstream heads up at the edge of the Rexton sand plains and flows northward through a relatively steep valley in gentle rolling hills covered with hardwoods (maple, elm, white birch, and aspen). Here the main soil type is sand with some clay outcropping. There is some abandoned farm land on the plateau above Lake Superior. The terrain near the mouth is flat and sandy and is covered with soft maple, oak, aspen, and white birch.

A profile of the mainstream indicates the width varies from 3 feet in the headwaters to 20 feet at the mouth, and the depth ranges from 4 to 36 inches. The water is clear and colorless but may become turbid after a heavy rain or during the spring runoff. There is evidence of beaver dams in the headwaters. Water levels may rise to three feet above normal during the spring thaw causing some bank erosion, especially in the lower half mile. Instream cover is abundant in the form of logs and "downed" timber, undercut banks and alder overhang. Instream soil types are mainly sand, silty sand, clay, gravel, and rubble. During late May, the current and stream flow in the mainstream are rapid and average 1 cfs in the headwaters; are rapid and average 3.2 cfs a mile downstream; are rapid and average 10 cfs two miles downstream; and are moderately rapid and average 19 cfs near the mouth. Bottom types in these areas are 30% gravel and rubble (headwaters); 45% gravel and rubble and 5% clay (one mile downstream); 10% gravel and rubble (two miles downstream); and are only 5% rubble and 95% silty sand just above the mouth. The pick-up of volume indicates numerous spring inlets, a quality indicative of a good trout stream. Natural food consisted of earthworms, insect larvae and slimy sculpins. Spawning grounds are most abundant in the upper middle reaches where gravel and rubble are most prevalent. Numerous steelhead were noted spawning here in the spring of 1967.

The West Branch heads up in sand plain escarpment near USFS Road 3156 and dips down into an old beaver meadow, now inundated by the waters of Cryderman's Trout Pond Dam. The surrounding high ground is vegetated with northern hardwood, spruce and balsam. The lower ridges are comprised of birch, poplar and balsam and alder fringes the low river banks. The current velocity is moderately rapid and flows average 1.6 cfs during late May. Stream soils are 80% silty sand and 20% gravel and rubble. The water is clear and colorless and temperatures rarely reach 70°. Instream cover is good, insect life moderately abundant, and small brook trout and slimy muddlers are the predominate fish species present.

The mid section of the West Branch is rapid and flows at 2 cfs in late May. The bottom is 85% silty sand with 15% gravel and rubble (there are some good gravel runs). Width varies from 2 to 5 feet, and depth from 2 to 15 inches. Cover is fair and consists of fallen brush, logs and undercut banks. There are a number of large springs feeding this area. Stream banks are steep and covered with spruce, aspen and white birch, while tag alder is heavy in the bottoms. This section contains small brook, rainbow and coho fingerlings. Caddisflies, mayflies and stoneflies are the main form of fish food.

The lower section of the West Branch averages about 11 feet in width and 6 to 24" in depth. The velocity is moderately rapid and volume is about 7.0 cfs. The bottom is 80% silty sand, 20% gravel, rubble and clay. Instream cover is fair and consists primarily of fallen brush, logs and a heavy fringe of tag alder. Stream banks are steep and the surrounding country is open farm land with scattered wood lots of aspen and white birch. The principal fish species found here are small brook trout, immature rainbow trout, and fingerling coho salmon. Slimy sculpin are abundant and american brook lamprey are also present. This portion gets roilly during the spring runoff or after a heavy rain. The leaching out of cattle offal adds to its productivity. Fish food consist of stone, may and caddisflies and midge larvae.

Prior to 1954 Halfaday Creek was stocked with legal sized brook trout and a supplemental planting of rainbow trout was made from 1958-1960. Recent surveys of species present indicate there are adequate stocks of brook trout, rainbow trout and coho salmon to sustain the present fishery.