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MICHIGAN DEPARTMENT OF NATURAL RESOURCES

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SERIES: THE TROUT STREAMS OF MICHIGAN

NO. 28 PENDILLS CREEK

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Pendills Creek and its tributaries drain an estimated nine square miles in northcentral Chippewa County. The watershed is located within 10 miles of the former "whistle stop" of Raco on M-28. It can be reached via the Dollar Settlement Road and Lakeshore Drive or USFS Roads 3157 (Rexford Road), 3156 (Avery Grade) and Spur Roads and Grades.

The mainstream heads in shallow Pendills Lake and flows westward through a cedar swamp to the approximate mouth of the Viddian Creek tributary. It then skirts a high ridge as it flows northwestward into Pendills Bay of Lake Superior. Sand dunes covered with spruce, balsam, aspen and white birch lay along its northern margin.

Pendills Lake is fed by sand dune seepage from the northeast (small creek entering east end of Pendills Lake), while Pendills Creek is fed by numerous spring fed streams that flow from the southern escarpment. The steep valleys of the latter are deeply notched into hills covered with maple, beech, aspen and white birch until they reach the mainstream valley which is a wet, spring fed cedar swamp. Tag alders fringe much of the creek edge. Beaver dam floodings inundate many of the smaller tributaries from time to time. Viddian Creek is probably the largest of the main tributaries and because it has a constant flow of clear clean water, much of it is diverted into the Federal hatchery system located at the mouth of Pendills Creek. The West Branch is a small tributary (which also receives waters from the hatchery rearing ponds) and flows into the main stream about 200 feet above the mouth. This Federal hatchery was started in 1948 and presently includes a small rearing station and 8 cement raceways used to rear lake trout for rehabilitation of the Great Lakes.

To get a better understanding of stream character and distance, the following description is offered beginning at the mouth and proceeding upstream. Because of the prevalence of a narrow sand beach, the mouth changes from time to time depending on direction and strength of wind off of Lake Superior.

The West Branch, which receives water from the hatchery enters the mainstream about 200 feet above here and is about 10 to 15 feet wide, and has a maximum depth of 6 feet. The banks are steep and alder fringed, while the surrounding terrain flat and covered with aspen, cherry, white birch and spruce. The bottom is composed of sand, silty sand, and rubble. A cover of logs and debris is good. This creek contains lake, brook, rainbow, and brown trout; coho salmon, white suckers, long nosed dace, mud minnows, sculpins and sticklebacks.

The mainstream of Pendills Creek is sluggish for the first 300 feet above the West Branch, has a width of 20 to 40 feet and a maximum depth of 8 feet with a sand and silty bottom. Some eroded sand banks

occur in this area. From a point 100 feet below Lakeshore Drive, Pendills Creek narrows down to 30 feet and becomes very rapid-flowing over mostly rock and rubble from the vicinity. Above this point three control structures (dams) inundate Pendills Creek up to the vicinity of Viddian Creek. These serve to provide a portion of the water supply to the hatchery, but are fitted with a fish ladder to permit anadromous fish to ascend to the headwaters. However, anadromous fish are not permitted access to Viddian Creek, the hatchery's major water supply. Above this point the average width is 32 feet and maximum depth about 3 feet, with an October flow of 18-33 c.f.s. Water is clear and light brown in color, with water temperatures rarely exceeding 70°F. The bottom is about 70% sand and silty sand, and 30% gravel and rubble. Stream banks are steep and alder fringed. The surrounding country is composed of sand dunes covered with aspen, white birch and spruce. Instream cover is fair consisting of logs, undercut banks and alder overhang. Fish food is abundant in the form of stone, may and caddis flies and crayfish. Fish species found are brook, brown, rainbow, lake trout, coho salmon, white suckers, rock bass, yellow perch, bullheads, burbot, brook and sea lamprey, mottled sculpins, long nosed dace, spot-tail and emerald shiners and brook sticklebacks.

The principal modern day fishery is concentrated from the water control structures downstream to Lake Superior. This stream has had a history of good brook, brown and rainbow fishing, both during the spring rainbow, smelt and sucker runs and the fall salmon and steelhead runs. However, the present Indian fishery in Lake Superior has severely reduced the sport fishery for lake trout, salmon and menominee at the rivermouth and immediately off shore.

From the mouth of the Viddian upstream to Pendills Lake, the stream varies from 20-40 feet wide with a maximum depth of 4 feet. The bottom is mostly sand and silty sand with numerous vegetated sand bars. It flows through a bottom land covered with white cedar, spruce and balsam. The creek has a tag alder fringe.

The principal species of fish in this upper stretch are brook trout and some brown and rainbow trout fingerlings. There are occasionally warmwater species such as perch, rock bass, bullheads, northern pike, suckers and minnows that work down from Pendills Lake. The spring-creek habitat type is most conducive to trout production. Good fishing is provided at times on the beaver ponds in adjoining valleys.

Historically Viddian Creek is reported to have attracted large coaster brook trout which were collected in the fall to provide eggs for rearing at the Soo Hatchery. There is no evidence of a recent run of coaster brook trout, however, anadromous browns make Pendills Creek an annual rendezvous and both rainbow and coho salmon use the gravel riffles below the dam as their spawning grounds in season.

Stocking programs in the past included both legal sized brook and rainbow trout (brook trout from 1945-1965 and rainbow from 1956-1965). The presence of goodly numbers of sport fishes and their apparent reproduction indicates stocking is not necessary.