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SERIES: THE TROUT STREAMS OF MICHIGAN

NO. 31 BEAVER CREEK

Leland Anderson, Fisheries Biologist

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Beaver Creek and its tributaries (Lowney, Arsenault, Bill's and Little Beaver Creeks) are located within the Pictured Rocks National Lakeshore in northern Alger County (T48N, R16 and 17W). They originate from springs and seepage (from an escarpment and small cedar swamps) and flow northward through the sand dunes into Lake Superior between Grand Portal and Au Sable Points, draining about 12 square miles (7,600 acres). This system is the main drainage of the eastern portion of the Beaver Basin and lies about eight miles northeast of Melstrand and 18 miles west of Grand Marais. Access to the watershed is via the Beaver Basin Road to the Little Beaver Lake public access site.

Arsenault, Little Beaver, and Bill's Creeks all flow into Little Beaver Lake which then empties into the west end of Beaver Lake. The channel between the two lakes is short but boatable. It has a sand and silt bottom and varies from 15 to 30 feet in width.

Lowney Creek and its tributaries empty directly into the south end of Beaver Lake. Beaver Creek provides the short (about one mile long) connection between Beaver Lake and Lake Superior.

Arsenault Creek is spring fed and originates in a dune type environment about one and a quarter miles west of Little Beaver Lake. This stream is 3 to 10 feet wide and has a maximum depth of 3 feet with beaver ponds that may be somewhat deeper. The surrounding vegetative cover is white birch, oak and spruce in the upland with balsam and tag alder in the bottom lands.

The stream bottom is composed mostly of sand and silt with sparse vegetation. The water color is brown. Principal fish species are small brook trout, sculpins and the non-parasitic American brook lamprey.

Little Beaver Creek originates from escarpment springs and has a moderately steep gradient. The bottom is composed mostly of sand and gravel, except near the mouth where it is sand and silt. This creek is about 2 miles long, varies in width from 2 to 10 feet, and is up to 2 feet deep. Vegetative cover is mixed hardwood in the upland and spruce, balsam and alder in the lowland. The principal fish species are small brook trout, sculpins and dace. The stream is well shaded and littered with logs and debris so cover is considered good.

Bill's Creek is a small, spring fed stream originating from the foot of the escarpment. It has clear water with a maximum depth of 18 inches, varies from 2 to 6 feet wide, and is about half a mile long. A few small brook trout reside in the stream.

Lowney Creek is formed from the East and West Branches and Hemlock and Spring Pond Creeks. They originate from springs in marshy lowland and small cedar swamps at the base of the escarpment. These creeks have flows which vary

from sluggish to moderately rapid and a substrate composed mostly of sand, silt and egg-size gravel. Together, Lowney Creek and its tributaries drain an area in excess of 2,000 acres.

The Lowney Creek watershed supports a dense stand of northern hardwoods, cedar and hemlock, however, the lower portion has been heavily logged. The gradient of the stream system is quite high (the East and West Branches having an average gradient of 50 feet per mile). In spite of this and the fact that the watershed is located in an area where snow accumulations of more than 2 1/2 feet are common, evidence indicates that peak flows are not excessive and that flooding and scouring problems are mild.

The water of the Lowney Creek system is generally clear and colorless with the exception of a few brown stained ponds in the extreme headwaters of the West and Hemlock branches. It is uniformly quite hard and other things being equal, is relatively productive. Beaver ponds and artificially created ponds throughout the watershed have added to the overall productivity of the stream. Water temperatures get progressively colder downstream due to the addition of spring seepage. Water temperatures observed during August at 13 stations vary from 57 to 69°F.

In the East and West Branches, where the gradient is steep, the fish population consists mostly of small brook and rainbow trout, blacknose and red bellied dace, mud minnows, muddlers and brook sticklebacks. From the confluence of these two branches down to Beaver Lake, the stream loses much of its gradient and flows over a bottom of sterile, moving sand. The species present here are brook and rainbow trout, muddlers, blacknosed dace and yellow perch.

There is a small seepage area at the extreme east end of Big Beaver Lake which drains the lowlands adjoining the lake and the Trapper Lake area a half mile to the northeast. There is no visible watercourse between Trapper and Beaver Lake.

Beaver Creek is the stream that takes the accumulated flow of all the tributaries and Beaver Lake to Lake Superior. This stream varies from 15 to 50 feet in width and ranges from 6" to 2 feet in depth. It flows through a sand dune topography but the banks are vegetated with white birch, oak, poplar and white pine on the high ground and tag alder on the water fringe. The bottom is entirely sand except where it flows across gravelly rubble on the Lake Superior beach. Most of the year this portion of stream is denude of fish due to its shallowness and lack of cover. Rainbow trout, salmon, suckers, smelt and possibly menominees use it in their migratory approach to the more productive tributaries.

Beaver Lake has an area of 765 acres, a maximum depth of 39 feet and is considered to be a two-story clear water lake with an ample population of yellow perch, smallmouth bass, rock bass, some northern pike, and brook trout, rainbow trout and splake. (Splake have been stocked periodically since 1969.) Chemically the lake waters indicate low production and this is brought out in slow growth rates of the perch and rock bass. Beaver Lake has an excellent potential for other sporting activities such as swimming, boating and camping; and the surrounding terrain has excellent potential for winter sporting activities.

Little Beaver Lake is about 50 acres in size, has a maximum depth of 32 feet, and is a single story, brown water lake. Weed growth is heavy to the 5 foot contour. Fish production is fair to good for northern pike, smallmouth bass and perch. There is a small campground and access point on the south shore.