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SERIES: THE TROUT STREAMS OF MICHIGAN

NO. 18 THE WHITEFISH RIVER

Jerome H. Peterson, Fisheries Biologist

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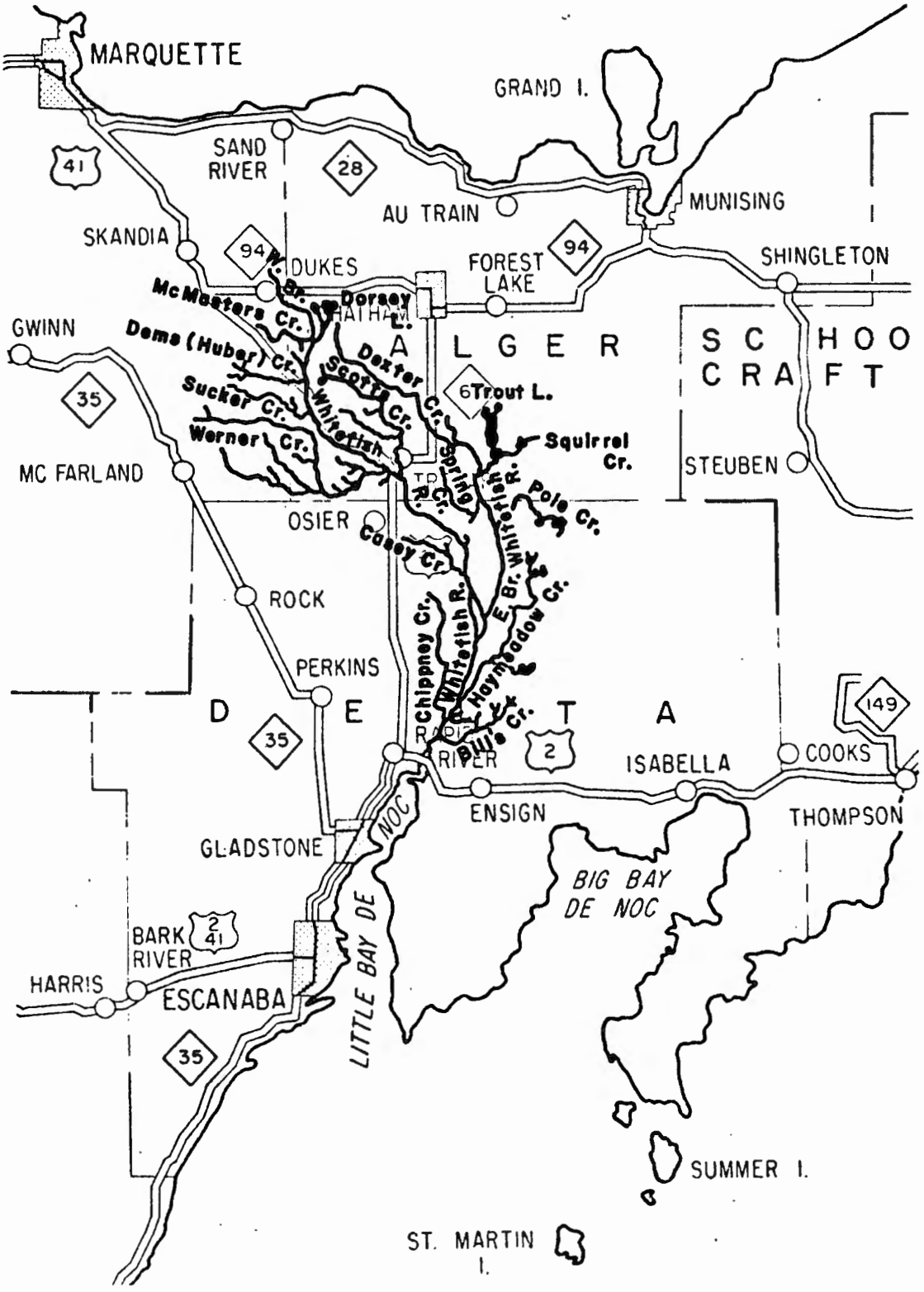
"THE WHITEFISH RIVER"



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INTRODUCTION

The Whitefish River of Marquette, Alger, and Delta Counties is one of the larger river systems of the central Upper Peninsula. It drains an area of 300 square miles.

The east branch and mainstream of the Whitefish River flow southward through an expansive valley which was carved by a glacial stream that once flowed from Lake Superior's Au Train Bay to Little Bay de Noc on Lake Michigan. Final retreat of the glacier and "tilting" of the land mass opened the St. Mary's River system and closed this "outlet" of Lake Superior via the Whitefish Valley.

The east branch of this river system begins with multiple springs in central Alger County only thirteen miles south of Lake Superior. The west branch of the Whitefish River commences with a series of spring-fed tributaries in west-central Marquette County and drains southeasterly through the "Trenary Tillplain." Both branches unite in extreme north-central Delta County to form the mainstream which in turn flows south and empties into Upper Little Bay de Noc.

The Whitefish River valley and its natural waterway were used for centuries by the No Kay Indians enroute between Lake Superior and Michigan. Etiene Brule was the first white man to visit the northern Green Bay area in 1619. At that time, a "periodic encampment" of No Kay Indians or the French version "Noquet" Indians, lived in the vicinity of the Whitefish River mouth. Traditional history recounts that Chip-pa-ny, the leader of the No Kay Indians in the 1830's was responsible for naming the river. In the late 1800's white settlers in the area of the lower Whitefish recount "tremendous" runs of whitefish out of Little Bay de Noc and up the river to spawn.

The "excavated" nature of the valley was first recorded in 1851, and it wasn't long before the white man had grand designs for the area. The concept of a shorter route from Lake Superior to Lake Michigan via a canal for Great Lakes shipping began to gel in 1871. The canal plan then lost support and remained dormant until the late 1880's when the community of Gladstone on Little Bay de Noc began to push again for its development. The grand plan that would cut some 350-700 miles in shipping distance and millions in cost was scrapped in the 1890's because of competition between ports and location of steel centers. Detroit, Cleveland, and Lake Erie steel interests in 1890 were not eager to see iron ore go to Chicago or Milwaukee ports. The old idea of a canal down the Whitefish valley reaches the news media in the Great Lakes area from time to time even now.

The East Branch Of The Whitefish

High groundwater levels in north-central Alger County give rise to multiple springs. Prior to the influence of man in the area there existed a very unique natural phenomena. Mud Lake, a natural spring-fed body of water was found on the "divide" between the Lakes Superior and Michigan watersheds, some eight miles south of Au Train Bay. Water exited the lake on the north to Lake Superior and on the south to Lake Michigan.

The creation of the Au Train Basin Dam on the Au Train River necessitated the construction of a large dike on the south side of Mud Lake to prevent the backed up water from flowing south into Lake Michigan.

The multiple springs in the area south of this dike now form the headwaters of the East Branch of the Whitefish. The largest of these is called Trout Lake. It has a surface acreage of 42 and an average depth of only 3.5 feet. A five-foot dam, spillway, and dike were built on the outlet during the logging days to aid in "rafting logs" downstream. Natural succession and man-caused erosion at the turn of the century have contributed large quantitites of flocculent organic material to the lake.

The water quality of these headwater springs is excellent; being moderately hard, slightly alkaline, abundantly supplied with oxygen, and quite cold. About 21 cubic feet per second exit Trout Lake to begin the East Branch. The water is unstained and very stable in flow.

A 100-125 foot bluff buttresses the east side of the river valley. In sharp contrast, the landscape rises gently on the west side of the river. The entire East Branch watershed is vegetated by northern hardwood, scattered white pine and hemlock, and lowland species. The soil is chiefly of sand with limestone bedrock and cobble outcrops being especially common on the west side.

The East Branch of the Whitefish flows through land chiefly under the control and ownership of the United States Forest Service. Considerable private timber company land and small individual ownerships also exist.

The major recreational uses of the East Branch are canoeing and sport fishing. The stream is canoeable from the headwaters at Trout Lake and canoeing is quite popular during the summer months. Access to the lake is gained via U.S.F.S. Road 2273. The stream below Trout Lake is as much as 100 feet wide with holes to 4 feet deep. There are numerous riffles and minor rapids, but no actual waterfalls exist on this branch nor are there any log jams or necessary portages. Limestone bedrock, rubble, and cobble comprise the stream's bottom.

The stream flows in a southerly direction through Alger and Delta Counties for a distance of about ten to eleven miles, until the "Buckeye Grade" or U.S.F.S. 2236 is reached. This is an old railroad grade heavily used during the logging days at the turn of the century. It is a day's leisurely canoe and fishing trip from Trout Lake. The scenery is tremendous, some fast water exists, and good brook trout fishing is available. Another

three miles or so of quite fast water is found until the East Branch merges with the West Branch to form the Mainstream. There are no developed camp sites along this branch of the Whitefish, but natural facilities are more than adequate.

Mosquitoes, blackflies, no-see-ums, and deer flies are a problem from the middle of May through the 4th of July. Canoeists, fishermen, and others venturing upon or near this stream are advised to bring plenty of bug dope.

There are 5 tributaries to the East Branch of the Whitefish River. Dexter Creek is the first of these that enters from the west and is the largest and most important. About 15 miles in length, it joins the East Branch two miles below Trout Lake. It is fed by numerous springs along its length. Riffles and pools alternate in an almost ideal sequence. Reproduction of brook trout is good, and some steelhead and lake run brown trout use the stream for spawning. The Dexter probably contributes some trout recruitment to the East Branch. Of note, but of lesser importance as one proceeds downstream, are the Squirrel, Unnamed, Spring, and Pole Creeks. The former three are small with sandy substrates. Brook trout reproduction is minimal, making little contribution to the East Branch and providing little sport fishing in the streams themselves. Pole Creek drains several warmwater lakes and is marginal for trout. Fish collections reveal the presence of rockbass, yellow perch, and only a few brook trout.

The Trout Lake complex and the East Branch of the Whitefish are quite cold, and the water is of high quality. Brook trout are native to the watershed, and considerable natural reproduction occurs in Trout Lake and the associated springs area. Even so, brook trout were planted in the Trout Lake area from 1936 through 1968. Rainbows were introduced in the mid 1960's but have since been discontinued. Introductions of brown trout began in 1970 with fair to good results. Occasional adult coho salmon have been noted in the upper part of the East Branch and Trout Lake area.

Northern pike, white suckers, panfish, and bullheads occur in scattered number throughout the stream but are most common in Trout Lake. It is suspected these species entered Trout Lake soon after the old logging dam and spillway washed out some 50 years ago. "Old timers" in the area associate the presence of these fish in the upper East Branch and Trout Lake with a declining salmonid fishery. Consideration is now being given to installing a fish passage barrier on the outlet of Trout Lake to prevent this ingress and egress of non-trout species.

Sea lamprey regularly ascend the East Branch and tributaries, and control of this fish began with an electrical barrier but is now dependent on periodic chemical treatment with a lampricide.

Access by the public is limited, and this adds a definite "quality" to the river. Only one private hunting camp is found alongside the whole stream. County Road 509 and U.S.F.S. Road 2234 parallel the river on the east at a distance of one-half to two miles. A couple of trail or logging roads head toward the river but can only be traversed on foot.

The entire East Branch is fishable with flies, artificial lures, or live bait. Flies are most popular in the late spring and early summer, while artificials or live bait seem to work better in mid-summer to early fall. All things considered, fishing is fair to good throughout the East Branch.

The West Branch Of The Whitefish

This branch of the Whitefish system commences as lowland drainage in extreme southeast Marquette County near the village of Dukes. Within a few miles a series of small tributary streams - McMasters, Dems, and Sucker Creeks - unite with the West Branch to form a fairly good-sized stream. A general south to southeasterly direction is followed through Alger and Delta Counties before union with the East Branch. Six miles of stream exist in Marquette County, 35-40 miles in Alger County, and 15 miles in Delta County.

The upper part West Branch in Marquette and Alger Counties flows through lowland swamp and upland forest land and is somewhat inaccessible. In Alger County the river parallels U.S. 41 and is reasonably accessible via bridges, campgrounds, and Public Access Sites. The river courses through some farmland in south-central Alger County, but in general, the land is not cleared to the stream. The lower river in Delta County flows through land under the control of the United States Forest Service, private timber companies, or individual ownerships. Access is fair to poor. Between the villages of Kiva and Trenary and the "Buckeye Grade" the State has leases or bank easements on 11 forties on the mainstream in addition to many more on tributaries. Private hunting or fishing camps are common along its entire length reflecting the popularity of the area for deer and upland game and trout fishing.

The West Branch has 8 tributaries. All are designated trout waters except a small portion of Dorsey Lake outlet. All have natural reproduction of brook trout and to a lesser degree, steelhead and brown trout. Scotts, Werner, Dems or Huber, and the Casey are good brook trout producers and are believed to contribute significantly to the West Branch's trout population.

The West Branch of the Whitefish in Alger and Delta Counties is a series of pools and riffles over a limestone bedrock, rubble, gravel, and cobble bottom. A falls of 3-4' exists in Section 10, T44N, R22W and is a barrier to upstream fish movement. The deep pool below the falls provides good steelhead fishing each spring. An attractive State Forest Campground is also found here. U.S. 41 crosses the river about one mile south of the village of Trenary. For the next couple of miles the stream's gradient is considerable, and riffles and rapids common. A lamprey barrier is proposed for this area. The West Branch slows down considerably in Delta County and depths to several feet are common. Casey Creek enters a short way above the "Buckeye Grade" or U.S.F.S. Road 2236. It was in the vicinity of the Casey Creek mouth that a logging dam existed nearly one hundred years ago. Proceeding below U.S.F.S. Road 2236, one encounters one of the more locally well-known rapids on the Whitefish system known as Flynns Rapids. It extends for perhaps one-half mile. Quite good brook trout and steelhead angling exists below Flynns Rapids, the lower end of which has a sharp bend known as "Deadman's Curve." A high water channel known as the Little West Branch begins here and has considerable flow in the spring and fall. The Little West Branch flows south for several miles and rejoins the stream a mile or so below the junction of the East and West Branches. Several high quality springs enter the Little West and

contribute fish to both the West Branch and Mainstream. Beyond "Deadman's Curve" it is but a couple miles of alternating short pools and riffles to the union with the East Branch.

Most of the West Branch is canoeable and quite popular in May and June or September and October. Best put-in point is the Public Access Site above the village of Kiva in Alger County. A small portage is necessary around the falls. Log jams, deadheads, and boulders are occasional above Trenary. Canoeists are advised to avoid this stream during the low flows of midsummer or one may do more walking than riding. Limestone bedrock is quite common in Alger and Delta Counties, and nary a canoe can make the trip without some of the "paint" coming off the bottom. It will take approximately two days to complete a leisurely fishing float trip from the Public Access Site north of Kiva in Alger County to the Buckeye Grade in Delta County.

Brook trout are native to the system and intensely sought after by the angler. This fish was planted annually from 1951 through 1965. Introductions were discontinued because tributary streams provided adequate natural reproduction. Recent increases in steelhead and brown trout runs are apparently due in part to natural reproduction and large plants in Little Bay de Noc.

The water quality of the West Branch and tributaries is quite good. It is slightly alkaline, moderately hard, and abundantly supplied with oxygen. Midsummer stream temperatures for the most part are below 72°F, but extremes in the upper 70's have been recorded. Midsummer flows are about 35 cubic feet per second on the lower part of the stream. Considerable annual fluctuation in flow occurs. Summer temperatures occasionally limit salmonids. Tributaries are cold enough, however, to sustain mainstream trout temporarily.

Assorted species of minnows, white suckers, and some warmwater fish like rockbass and smallmouth bass occur in pools on the West Branch. The West and East Branches of the Whitefish unite in Section 1, T42N, R21W, to form the Mainstream.

The Mainstream Of The Whitefish

This section of stream averages 100 feet in width in the upper reaches but widens to several hundred feet near the mouth. It is a series of long rapids or riffles and deep pools over a limestone bedrock or cobble bottom. The first major riffle is found about one-half mile below the East and West Branches and is known as Johnson's Rapids. Then comes Blacks' Rapids about a half mile above the mouth of the Haymeadow Creek. Hales' Rapids, a quarter mile above the mouth of the Chippney Creek is quite popular in May and June with trout fishermen. The Flowing Well Rapids is found about one quarter mile above the mouth of Bills' Creek and along with Bills' Creek Rapids is becoming popular for steelhead and browns in the fall. The lowermost riffle is also called Johnson's Rapids and is found about a half stream-mile above U.S. Highway 2.

The mainstream is classified as second class trout water with a number of good trout-producing tributaries entering along its length. The stream is large enough and provides an environment suitable for trout but natural trout reproduction from the mainstream is limited because of the lack of suitable spawning conditions, competition, and predation. Fish collections in the late 1950's and early 1960's showed considerable numbers of warm-water fish like burbot and suckers. Haymeadow and Chippney Creeks produce considerable numbers of brook trout and lesser numbers of rainbows and browns. Angling pressure on these tributaries is probably sufficient to take any surplus that would normally provide recruitment for the mainstream. Bills' and Bergman Creeks have some trout but they contribute little to the mainstream.

Spring steelhead and fall brown trout runs increased on Chippney, Haymeadow and Bills' Creeks during the late 1960's and early 1970's. Small numbers of coho and chinook salmon also ascend these streams in the fall. Natural reproduction of these species occurs and is best in the Chippney and Haymeadow Creeks.

Legal size brook trout were planted at several locations on the mainstream from 1951 through 1964 averaging some 550 fish per season. Results were discouraging, and the plants discontinued.

The Whitefish supported substantial runs of spawning walleye in the 1950's and early 1960's, and a popular sport fishery. Records indicate walleye moved all the way up to Flynns Rapids on the West Branch. In 1954, an electrical lamprey barrier was installed on the mainstream of the Whitefish about one-half mile below the mouth of Bills' Creek and was operation annually between April and August through 1960 when it was removed in favor of chemical treatment. Perhaps coincidentally, walleye spawning runs declined dramatically during this time period. Many "local" anglers implicate the operation of the lamprey barrier with the demise of the walleyes in Little Bay de Noc. It should be borne in mind though that walleye populations did not rebound in the years immediately after the removal of the electrical barrier. Anyway, small numbers of adult walleyes still ascend the Whitefish and utilize the gravels of Blacks', Hales', Bills' Creeks and Johnson's Rapids. The amount of recruitment from this spawning is unknown.

In June, a run of white bass moves out of Little Bay de Noc and up the Whitefish River to the vicinity of the lower Johnson's Rapids. A small popular sport fishery exists here for a few weeks. The magnitude of the run and size of the catch is unknown.

Small runs of white suckers and northern pike ascend the lower Whitefish each spring to spawn. Suckers use gravelly areas and the northerns use the weedy bays and sloughs along the mainstream.

In an attempt to enhance the sport fishery for Little Bay de Noc, coho salmon were planted in Haymeadow Creek from 1968 through 1972. Both Oregon-Washington and Alaskan strains were introduced. Substantial returns to the mainstream Whitefish, Haymeadow, and Bills' Creek were experienced in 1969, 1970 and 1971. In fact, large surpluses arose

causing harvest and disposal problems. An open-water fishery in Little Bay de Noc was hoped for but never realized. Due to controversy arising over snagging and the failure of an open-water fishery to develop, planting was discontinued in 1972. Some natural reproduction of coho salmon continues in the tributaries, but it is of a magnitude that will probably not result in a significant run of adults.

The lower two miles of stream is slow, and depths to 6-8 feet are common. Grassy islands, bays, and sloughs occur. The mouth consists of a series of braided channels and islands quite intensely used by waterfowl in the spring and fall and by the waterfowl hunter in the fall.

The entire mainstream is a good canoeing stream in the spring and fall. Low water levels in late summer, however, make for poor canoeing. The rapids throughout this stretch make the trip interesting, and one does not have to be an expert to navigate them. The mainstream flows southwesterly through very scenic hardwood ridges and brooding coniferous swamps.

The United States Forest Service owns considerable frontage on the mainstream. Also of note are the fishing and hunting camps evident along both sides of the stream. Usually the camps are found at or near rapids or fast water and often account for the names given to the individual rapids.

Access for the public is limited to putting in on either the west or east branches of the Whitefish off the Buckeye Grade (U.S.F.S. 2236) or at the mouth near the U.S. 2 bridge. It is a good day's canoe trip to the mouth from either branch on the Buckeye Grade.

During the logging days an adequate supply of water for "rafting" logs down river was essential. To accomplish this, logging dams were built on the upper part of the Haymeadow and Bills' Creeks and the lower portion of the mainstream Whitefish, about five miles above the mouth. This lower dam was also the site for a lumber and power generating mill. Pine logs are still inbedded in the stream bottom of the lower Whitefish.

This portion of stream serves as an important "highway" for snowmobiling in the winter time. Safaris on their way to Munising, private camps, or points unknown can be seen day or night on the river. River ice, always treacherous, should never be trusted above the union of the East and West Branches.