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SERIES: THE TROUT STREAMS OF MICHIGAN

NO. 9 THE FOX RIVER

William H. Gruhn, Fisheries Biologist

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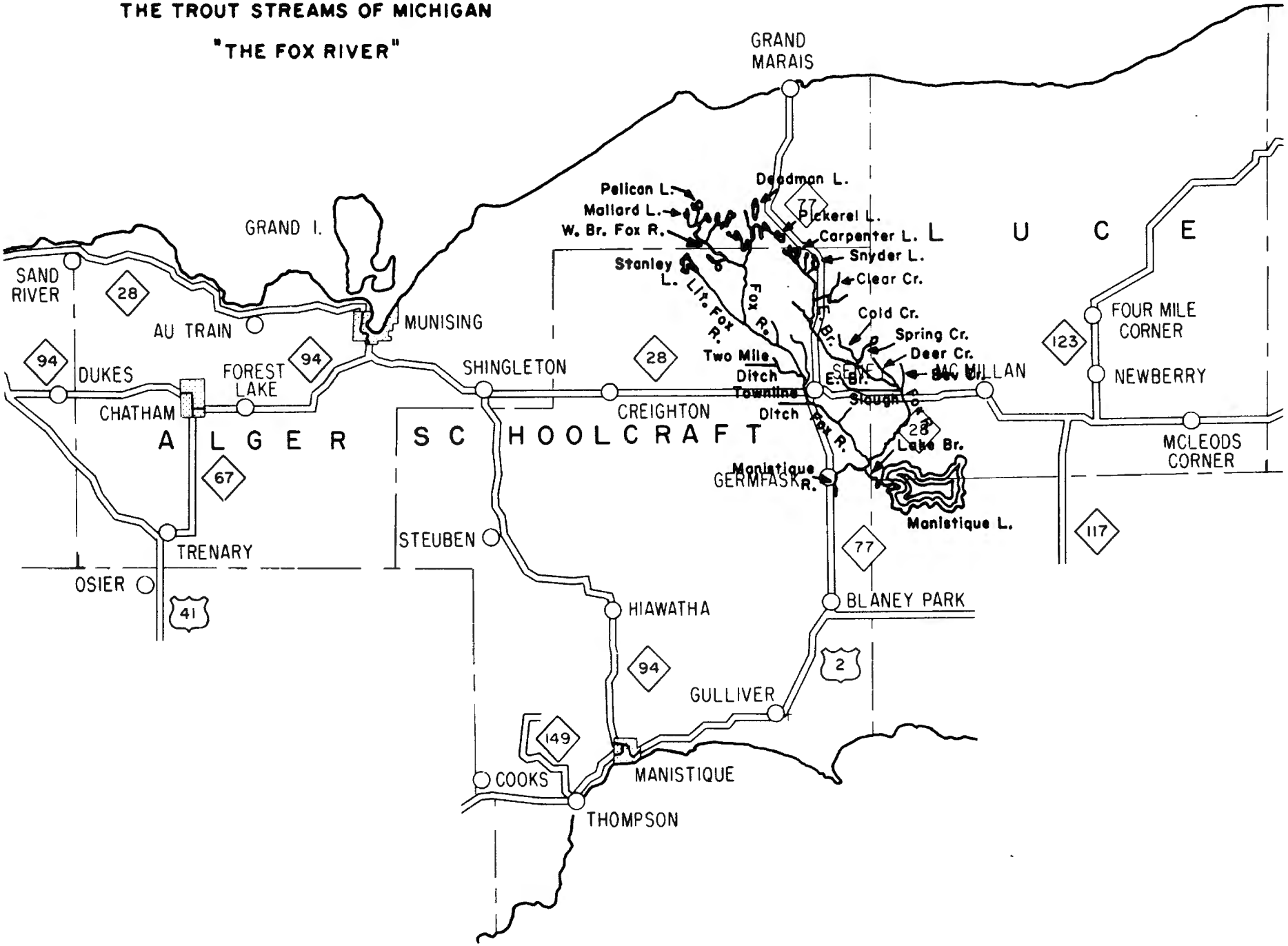

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The Fox River is a picturesque upper peninsula stream with its headwaters located in Alger and northern Schoolcraft Counties. It flows generally southeasterly thru flat sand plains and lowland swamps to its confluence with the lake branch of the Manistique River, these form the Manistique River.

This system has enjoyed a colorful history, being widely used to transport logs downstream to mills located in Seney on the Fox River, and Manistique on the Manistique River. Seney was a wooly, wide open logging town that supported several river operation saw mills between 1880 and 1900. Logs were also floated to Manistique via the Fox-Manistique River route, another exciting logging town boasting several mills. They, too, were largely river operations. It is interesting to note that much of the lumber used to rebuild Chicago after the fire came from the area around Seney and Kingston. It was shipped from the south shore of Lake Michigan near Manistique and Thompson.

The locations and, in most instances, remains of eight old logging dams can still be found on the Upper Fox River and its branches - East Branch, West Branch, and Little Fox River. These dams stored water that was later released to facilitate the movement of logs over shallow winding or rapid stretches of stream. These dams will be pointed out as they are encountered along the river.

Seney was also a railroad hub with many grades radiating to the outlying logging operations. Large volumes of timber and lumber were hauled out to mills or market by rail.

The Fox River watershed encompasses approximately 270 square miles. It has an average discharge of about 180 c.f.s. at its mouth, and the water temperature rarely exceeds 68^{0}F.

Roughly, 80 percent of the adjacent lands are under public ownership providing many recreational opportunities in the area. A number of public roads cross the river and its tributaries, including: M-28 crossing the East Branch Fox River, east of Seney; M-28 crossing the Fox River at Seney; County Road P498 crossing the Fox River, east of Germfask; M-77 crossing the East Branch Fox River, north of Seney; Taylor Dam Road crossing both the Little Fox River and West Branch Fox River, north of Seney; and Stanley Lake Road crossing the Little Fox River, north of Seney. In addition to these, the Fox River Road follows the Fox and Little Fox Rivers for some 14 miles; and Taylor Dam Road follows the Fox River for another five miles providing additional access along these two rivers. M-77, north of Seney, follows the East Branch Fox River for some six miles providing ample access to this stream.

There are four campgrounds located on this river system; 1) the East Branch Fox River Forest Campground located at the old Fox River Rearing Station along M-77 just 8.5 miles north of Seney; 2) the Seney Municipal Campground located on the Fox River just three-quarters of a mile northwest of Seney on the Fox River Road; 3) the Fox River Forest Campground situated on the Fox River just 4.5 miles northwest of Seney, again, on the Fox River Road; and 4) the Stanley Lake Forest Campground on Stanley Lake Flooding, Little Fox River, just 13 miles northwest of Seney and 1.5 miles from the Fox River Road. All four campgrounds provide good rustic camping facilities and access to the Fox River system.

The Upper Fox

The Fox River originates in a semi-open marsh a quarter mile west of Deadman Lake in T48N R14W Section 21. It flows south thru Casey Lake to its confluence with its west branch. The surrounding land is typically light sandy loam covered with lowland hardwoods, plus scattered swamp conifers. The stream bank is lined with a tag alder thicket.

The stream here is small with moderate to rapid flow and sand/silt bottom plus enough scattered gravel to provide adequate brook trout spawning habitat. Fishing pressure is light and success is fair, for brook trout under 11 inches. There are also scattered yellow perch, rock bass, burbot, creek chubs, longnose dace, johny darters, and eastern brook lamprey present. The primary trout foods available include muddlers (C. bairdii) and stone fly larvae.

There are remains of one old logging dam in the northeast quarter of the northeast quarter of Section Four. It is located about a half mile below Moose Lake outlet. It provided water to float logs thru this section, which is characterized by shallow swift rapids.

Several lakes drain into the Fox River in this area. The Fox courses through Casey Lake (22 acres), Hemlock (35 acres) Deerfoot (42 acres), Centerline (9 acres), and Moose (51 acres) Lakes enter via Moose Lake outlet; Pickerel (16 acres), Second (30 acres), Clay Pit (40 acres), and Porky (10 acres) Lakes enter via Pickerel Lake outlet and Dark Lake (12 acres) has its own outlet. All are small, shallow, clear water lakes that contain small populations of northern pike and yellow perch and are surrounded by private ownership. One exception is Dark Lake, which, as its name implies, is dark brown in color and is reported to contain no fish.

The headwaters of the West Branch Fox River are a semi-open marsh, Mallard Lake and Beaver Pond in eastern Alger County, T48N R15W Sections 22 and 23. This is flat sand plains country with the open Kingston Plains to the west and upland hardwood plains to the east. The river bottom is narrow and covered with lowland hardwoods and conifers.

This river has a maximum width of about 30 feet, depth of 6 feet, is light brown in color, and flows in a series of riffles and pools. The bottom is a sand/clay combination with very little gravel; however, there is enough gravel here and in Spring Creek to sustain a good brook trout population. Other fish present include: burbot, muddler (C. bairdii), and eastern brook lamprey. It receives light pressure with good success.

There is only one old dam site on the west branch, that being Taylor Dam site. It is located just south of the north section line in Section 8, T47N R14W. This dam made it possible to float logs down to the main river.

There are four tributaries to this stream: Pelican, Loon, Grass, and Spring Creeks. All are classified second quality warmwater tributaries; and all are very similar to the west branch, except Spring Creek. It is classified second quality trout water and provides good spawning and nursery habitat for brook trout.

Several lakes drain to the west branch: Pelican, Pickerel, and Alger Lake by Pelican Creek; Loon Lake by Loon Creek; Sand, Traingle, and Grass Lakes by Grass Creek; and Spring and Sucker Lakes by Spring Creek. These lakes are small, shallow, clear water lakes containing small populations of yellow perch and northern pike. Access is poor resulting in little fishing pressure.

From here the Fox River flows south thru some four and a half miles of flat sand plains, covered with grass and scattered red pine plantations to its confluence with the Little Fox River. The river bottom consists of sand and sandy loam. This sandy loam was the original soil in this area prior to the fires in the early 1900's. They are covered with lowland hardwoods and conifers, while the stream edge is lined with dense tag alders.

The stream here is about 30 feet wide and the maximum depth is approximately 4 feet. The water is clear, light brown, and flows along in a series of slicks and riffles over a bottom of sand and silt (85%) plus gravel. Cover in this area is fair and there is sufficient spawning habitat for brook trout to maintain a healthy population. The dominant game species is brook trout; course fish are burbot, and white suckers and forage is sculpins (C. bairdii). There are also occasional yellow perch, northern pike, rock bass, brown bullheads, an assortment of minnows, plus eastern brook lamprey inhabiting this stream. Food organisms include sculpins, caddis, mayfly larvae, sucker fry, and lamprey ammocetes.

Fishing pressure in this area is light but success is good. The fish taken commonly run up to 12 inches with 16 inch fish being taken frequently. Access is excellent with only a few forties along the stream under private ownership.

There is one tributary in this area located in the middle of Section 16 of T47N R14W. It relieves a large spring (spring pond) of two acres that is stocked and managed for brook trout.

The Little Fox

Eight miles northwest of Seney the Fox is joined by the Little Fox River. This ten mile long stream originates from springs above Stanley Lake and flows southeast thru flat, sandy grass plains; dotted with aspens and white birch, plus scattered red and jack pine plantations. Along the east side of the stream there are occasional hollows of the original sandy loam covered with swamp conifers. The river bottom is this same soil upon which grows an assortment of lowland hardwood. A dense thicket of alder borders the stream.

The Little Fox is a clear water stream ranging from 8 to 25 feet wide and up to 4 feet deep. Its bottom is 70% sand/silt and 30% gravel. The water is light brown and flows in series of slicks and riffles. The cover is good, having been supplemented by stream improvement structures. The stream supports a good brook trout population. Other species include white suckers, burbot, brown bullheads, creek chubs, dace, shiners, sculpins (C. bairdii), and eastern brook lamprey. The most abundant natural food organisms are mayfly, caddis larvae and sculpins.

All of the adjacent lands are public but a dense growth of tag alder over the stream limited fishing. It is hoped a brush removal project, carried out in the summer of 1972, will remedy this situation.

There are four dam sites along the Little Fox River: 1) Stanley Lake Dam across the outlet of Stanley Lake was used as a logging reservoir control structure. It has been replaced to maintain the Little Fox River Flooding for waterfowl and is upstream slightly from the original location; 2) a second dam was located about one mile below the above dam, T47N R15W, Section 14. It was used to facilitate the movement of logs thru a large flat marsh area. This dam has been removed and only a road over the stream remains at that location. The old impoundment site now looks like a large aged beaver meadow; 3) the remains of a third dam can be found in the northwest quarter of Section 19, T47N R14W. This dam was also used to store water to move logs down to the Fox River. The remaining debris provides good trout cover; and 4) a final dam was located in the extreme northwest quarter of Section 31, T47N R14W, and, as with the previous dams, was used by loggers as a water storage device. The remains of this structure also provide good trout cover.

The Lower Fox

The Fox River from the mouth of the Little Fox River traverses eight sections of flat grassy sand plains with scattered red, jack, and

white pine stands, plus a few aspen and white birch to reach Seney. The bottomland is the original sandy loam with lowland conifers and a tag alder shintangle along the streams edge. Here one will find hollows of sand-loam supporting swamp conifers east of the river.

The river in this segment is 30 to 40 feet wide and flows in a series of slicks and pools, with occasional riffles. It has a light brown color. The bottom composition is 80% sand, 5% silt, and 15% gravel below the Little Fox River, but becomes 98% sand/silt, and 2% gravel just above Seney. Cover is good, and includes: deep pools, dead falls, log jams, overhanging brush, and stream improvement structures. Natural food is abundant, consisting of mayflies, stoneflies, and caddis flies; sculpins, sucker fry, and lamprey ammocetes.

The game fish here is brook trout; the course fish are white suckers, burbot, and eastern brook lamprey; while the forage fish are long-nose dace, bluntnose minnows, creek chubs, and sculpins (C. bairdii).

This portion of the stream receives moderate fishing pressure with good success. Fish range in size from legal to 2.5 pounds. The most popular means of fishing is wading; but floating is also productive.

There are three tributaries entering the Fox River above Seney: Hudson Creek, Two Mile Ditch, and Granden Creek. Hudson and Granden Creeks are classified as second quality trout tributaries and are physically very similar to the Fox River. No survey work has been done on these two streams. Two Mile Ditch normally flows into Clark Ditch, but there is an old stream bed that functions as an overflow during spring run off.

There is an abrupt change in the river below Seney. The topography between Seney and the Manistique River is made up of low flat cat-tail bog and black spruce - tamarack swamp with scattered sand ridges of red and jack pine and loamy sand ridges of aspen and swamp hardwoods. The river bottom is still sandy loam covered with lowland hardwoods and alder thickets.

The river has now become a long glassy slick splitting only briefly to form the spreads in Section 4, T45N R13W, and then converging to flow leisurely to its confluence with the Manistique River. The area above the spreads is about 40 feet wide, 2 to 6 feet deep, and has a sand/silt bottom. The spreads are made of several broad shallow channels while the river below is broad and deep flowing over compacted sand and hard pan.

The water is clear and brown, but, because of depth and overhead shade, it appears dark brown to black. Instream cover consists of an abundance of windfalls, log jams, undercut banks, overhanging

brush and deep pools. Because of the bottom type, very little, if any, good brook trout spawning habitat is available. The river is classified second quality warmwater mainstream below Dead Creek in the middle of Section 10, T45N R13W. Food is in moderate supply consisting of sculpins, sucker fry, mayfly and caddis nymphs and lamprey ammocetes.

Access to the river is very poor, due to the swampy conditions, thus, fishing pressure is light but success is good for those willing to trudge thru the swamp and cattails. Of particular interest is fishing in the spreads. Fishermen park along M-77, just a half mile south of Seney, and walk into the river. Some very nice catches of 8-14 inch brook trout are taken with an occasional fish up to 18 inches.

Two tributaries enter below M-28. Both, Dead Creek and Townline Ditch, are small dark water streams (draining low swampy areas) and classified as second quality warmwater habitat. They should resemble the river very closely in physical characteristics, except much smaller.

The East Branch of the Fox

The East Branch of the Fox River empties into the Fox River about a mile above its mouth. While the East Branch is a tributary, it is nearly equal in watershed, discharge, and length to the Fox River, and it is even more popular as a trout stream. Its watershed makes up 37% of the entire system.

The East Branch begins in a series of small spring lakes in Section 1 (T47N R14W) and 6 (T47N R13W). Only two of these lakes are named. They are Carpenter Lake and the "Reservoir". The river flows about 6.5 miles to the M-77 crossing. The land in the first two sections is flat sandy loam with northern hardwood cover. The remainder of the course is through sand plains with scattered stands of jack and red pine plus aspen and white birch. The river bottom is sandy loam with swamp conifers and a thicket of tag alder along the stream.

The stream in this area is from 10 to 30 feet wide, has a maximum depth of 8 feet, and the bottom is sand (80%), gravel/rubble (19%), and silt (1%). The water is clear and nearly colorless flowing along in a series of riffles and slicks until it meets Clear Creek. From there, it flows in a series of slicks and pools. It is classified second quality trout tributary until its confluence with Haymeadow Creek and then top quality trout. Available cover is made up largely of stream improvement structures, deep holes, and overhanging tag alder. There is sufficient gravel to provide good spawning habitat. There is a variety of food organisms in this area. They are muddlers, lamprey ammocetes, crayfish, stonefly, caddis, and mayfly nymphs, and other forage fish.

Brook trout are the predominant fish, but one will also find an occasional brown trout, yellow perch, white sucker, and burbot. Forage fish include muddlers (C. bairdii), longnose dace, mudminnows, and brook stickleback.

Haymeadow, Snyder, Clear, and Camp Seven Creeks empty into the East Branch in this segment. All are second quality trout tributaries - small, shallow, clear water, sand bottom streams. All four receive light fishing pressure, producing only fair catches of small brook trout (less than 10 inches in length).

There are several small lakes and ponds associated with this stream:

The "Reservoir" is the site of an old logging dam, T47N R13W, Section 6. A pond that once covered about 60 acres now resembles an old beaver meadow; and brook trout, which once produced an exciting fishery, are now confined to the deeper holes of the newly cut stream channel.

A 47 acre lake, Carpenter Lake, in Section 6 is just a couple hundred yards north of the "Reservoir". It is less than 20 feet deep, the water is light brown in color and supports a small population of northern pike and yellow perch. The lake is completely encompassed by private land; however, the few people that do fish it take some fair catches of perch and pike.

Haymeadow Pond is a 4 acre shallow (4-5 ft.), clear spring pond at the head of Haymeadow Creek. It contains a small population of brook trout and produces some nice catches at times. It is located in Section 32, T48N R13W, Alger County.

In Sections 4, 5, 8, and 9 of T47N R13W lies Snyder Lake, a 63 acre body of water, the largest drained by the East Branch. As with the rest of these lakes, it is shallow, clear, and contains yellow perch and northern pike. There are several large boiling springs in the north central part of the lake that keep it clear and cool. Fishing pressure is light and success fair.

On the East Branch Fox River Forest Campground is Kings Pond, a five acre impoundment that was once used as a rearing pond by the state. This pond has a series of boiling springs at its head that supply it with cold clear water, making it ideal for trout production. It is presently managed as a brook trout pond and produces some nice catches of 8-12 inch fish.

Clear Creek Pond is located in Section 15, T47N R13W on the headwaters of Clear Creek and at the site of an old beaver dam. It covers about three acres, is about 12 feet deep, cool and clear. It, also, is managed for brook trout and is a popular fishing spot.

The East Branch changes abruptly below M-77. Just below the bridge it flows from a grassy sand plain into a sandy loam cattail bog. The stream below the bridge is a series of slicks and pools but in the spreads it splits briefly into several broad shallow sandy channels, which unite at the mouth of Cold Creek. The stream then continues down to M-28 a distance roughly 14 miles. The bottom is sandy with a few scattered gravel areas. The water is very light brown and the land is about 50% privately owned.

Here is a strong population of brook trout and a few brown trout. There are also yellow perch, burbot, white suckers, eastern brook lamprey, and the usual assortment of minnows. Cover is good, consisting of improvement structures, log jams, undercuts and deep holes.

Fishing pressure in this area is moderate, probably the heaviest in this system, and excellent catches of brook trout up to two pounds, and an occasional brown trout are taken. The best fishing is obtained by parking on the west side of the M-28 bridge, motoring a small boat upstream to the spreads and then fishing the holes and undercuts back down to the Soo Line Railroad bridge. Minnows, worms, spinners, lures, and flies are all used.

Cold Creek, Spring Creek - a tributary to Cold Creek - Deer Creek, Bev Creek, and East Branch Slough all enter the river in this segment. Cold and Spring Creek are top quality trout and the remainder are second quality trout tributaries. All provide spawning and nursery habitat for brook trout. Fishing, except for beaver dams, is restricted to their mouths while fishing the East Branch. The Slough appears (from aerial photos) to be an old channel of the East Branch.

From M-28 downstream to its mouth at the Fox River the East Branch flows through a muck cattail bog with patches of high sandy loam covered with spruce and balsam. The stream bottom is sand and hardpan.

The water is darker brown here and the river has slowed to glassy smooth. Good cover is available in deep holes and under log jams and tag alder overhangs. The river from the Soo Line Railroad above M-28 to its mouth is classified second quality warmwater, containing northern pike, yellow perch, burbot, white suckers, and assorted minnows.

Fishing pressure is very light producing only a few pike and perch. Because of the nature of the river and associated swampy bog, fishermen and hunters shun this area.

Prior to 1964 when legal fish were being stocked, the entire Fox system was stocked with legal brook trout. Every tributary with a road to it plus many of the small lakes and ponds were stocked. However, because surveys of so many of these streams indicated large

populations of small fish when the "put and take" fishery was discontinued, all of these waters were dropped from the stocking schedule. Presently, natural reproduction is more than sufficient to maintain good populations of brook trout. Today only Kings Pond, Clear Creek Pond, Spring Pond, Spring Creek Pond, and Coot Creek are being stocked. They are under single species management for brook trout and stocked annually with yearlings.

Extensive stream improvement work was done from 1947 to 1953, by Arthur Feldhauser and crew under the old Lake and Stream Improvement Program. Work was done on the Fox River from the Schoolcraft County line down to Section 12, T46N R14W, from 1949 to 1953 and repair of these structures was done 1951, '52, '53. Structures were installed in the East Branch between 1947 and 1953 from the mouth of Haymeadow Creek down to the "spreads". On the West Branch this work was done in 1951 and 1952 from the Green Creek mouth downstream to its mouth at the Fox River. And the Little Fox River was done from 1951 to 1953 between the meadows above Driggs Lake Road (Section 13 T47N R15W) and its mouth. Earlier work was done by the Civil Conservation Corps., in the middle and late 1930's.

The list of activities included placement of wing deflectors, log deflectors, digger logs, stump covers, sodded log covers, plus rip-rapping, seeding or sodding banks, planting willows, and constructing brush mat bank covers. Most of these structures are in surprisingly good condition after 20 years.

A new stream improvement program was initiated in 1972. Work began on the Little Fox River above the "Spring" in May 1972, and is scheduled for completion prior to June 1973, down to its mouth. Work is scheduled to begin on the East Branch, just below the campground, during 1973-74, and it will be terminated at the mouth of Camp Seven Creek.

The work here will include tag alder removal - to facilitate better fishing and improve bank cover - placement of new structures, replacement of old structures, and repair (camouflaging) of sound existing structures. All work will be done to improve trout habitat, to look more natural and to be more aesthetically pleasing.