SEP 9 1981

LIGHT & POWER DEPT.

ON TRAVERSE CITY, MICH

WHAT ARE THE FISH POPULATIONS AND ANGLER USE RIVER?

The attached list of fish species reported from the various sections of the Boardman River was compiled from MDNR, Univ. of Michigan Museum of Zoology, and U.S. Fish and Wildlife records. It is a conservative list and undoubtably could be expanded with more sampling. The seemingly sparce fish community between Sabin and Boardman dams is the result of sampling bias, and does not necessarily reflect low fish species diversity in this reach.

The MDNR has recently completed sampling of Boardman Lake. A good population of walleyes now exists there, although the lake is not heavily fished. This is probably due to 1) the only recent establishment of the walleye population, 2) the lack of easy boat and shoreline access, and 3) the traditional emphasis on the Grand Traverse Bay and upper Boardman River fisheries.

The most recent MDNR survey of upstream (above Brown Bridge dam) was done in September-October 1976. The sampling found mostly brown trout, with only a few brook trout present.

A detailed survey of the upper Boardman River was done by Wooer, a graduate student at C.M.U. in 1974. He found 1746 brown trout per river mile, 349 being fish over 10 inches. The Boardman River was found to be not as productive as the Pere Marquette or the AuSable, but still rates as a fine brown trout stream.

The only angler survey conducted on the Bordman River was also done by Wooer in 1975. On the upper Boardman River he found the brown trout catch rate to be 1.1 legal fish per hour, a very high figure when compared to other streams in Michigan. No other angler surveys have been conducted on the Boardman River.

The following are my personal observations of the Boardman River fishery, and are not based on any scientific survey or sampling:

The lower Boardman River is open to Grand Traverse Bay and many fish species come into the river to feed or spawn. These species include rainbow smelt, white suckers, carp, coho and chinook salmon, and steelhead trout. There is a resident population of smallmouth bass, rock bass, and minnows.

The fall sport fishery for Pacific salmon is the most visible, but the lower Boardman is fished year around for a variety of species. Though not important to the tourist economy, a large number of children fish the river, and this aspect of the fishery is a community benefit that should not be overlooked.

The spring white sucker run is fished by children and adults, and though overshadowed by the more popular sport species,

BOARDMAN RIVER FISH COMMUNITY, PAGE 2

suckers might be considered for passage over the proposed Union Street fish ladder.

The potential for a greatly increased river sport fishery exists with the planting of additional anadromous fi hes in the lower river and additional access provided by the boardwalk.

Above Union Street, particularly in Boardman Lake, the fishery is probably under_used. A small boat fishery on Boardman Lake based on walleye, perch, pike, and sunfishes could be developed in the future.

The fishery above Boardman dam is based on resident brown trout. This is a well known area to fly fishermen.

Very little scientific data ia available on fish populations on the Boardman River below Brown Bridge dam, with the exception of Boardman Lake. The angler use of the river is almost completely undocumented. I suggest that prior to implementation of the hydro project and as part of a fishery management plan, a season-long angler survey be conducted. This survey can be designed to document before and after changes in river use, and tie any future environmental changes with angler use.

Thomas M. Kelly 8 September 1981

Fisheries Limnology Resource Planning September 2, 1981

FISH SPECIES REPORTED FROM THE BOARDMAN RIVER

•	Species	Below Union St.	Union to Sabin	Sabin to Boardman	Boardman to Brown Brid	o Above ge Brown Br.
1.	Am. brook lamprey	x	x		x	x
	Chestnet lamprey ,					
3.		X				
	Brook trout				x	X
5.	Lake trout	p x	x	x	x	X
	Brown trout (e) Rainbow/Steelhead (e)		x	x	x	X
	Atlantic salmon (e)	p			,	
	Pink salmon (e)	p				
	Coho salmon (e)	x		\	x	
11.	Chinook salmon (e)	x				
	Rainbow smelt (e)	х				
	Alewife (e)	x				
	Central mudminnow		X			
	Carp (e)	х				x
	N. redbelly dace Finescale dace	x	x			X
	Blacknose dace	x	x			X
	Golden shiner	1	1			X
	Creek chub	x				x
	Pearl dace					x
	Bluntnose minnow	x				
23.	Blacknose shiner	x				
	Common shiner	х			x	x
	Sand shiner	X				
	Mimic shiner		_	7.5	_	x
	White sucker	x	X X	x	x	X
20.	Northern pike Brown bullhead		x	^		x
	Yellow bullhead	x	^			
	Banded killifish					X
	Brook stickleback				x	X
	Ninespine sticklebac	x x				
	Bluegill		x			
35.	Pumpkinseed		X			
36.	Green sunfish					X
37•	Rock bass	x	X			X
38.	Large mouth bass Small mouth bass	-	X X			
.39 • 40 •	Yellow perch	X	x	x		w.*
41.	Walleye	p	x			•
42.		x	x			
43.	Iowa darter	x				
44.	Mottled sculp in				x	
45.	Slimy sculpin	x			x	X

x-reported occurrence p-potential or possible occurrence (e)-exotic species

MEMO TO: William Strom, Roger Slykhouse

FROM: Tom Kelly Jom

SUBJECT: Lamprey barrier at proposed Union Street fish ladder

DATE: 8 Sept. 1981

I have done some checking with U.S. Fish and Wildlife Service and MDNR staff regarding the potential for sea lamprey passage at the proposed Union Street fish ladder. The concensus of opinion is that a one foot rise at each ladder step(as proposed) combined with a projecting metal lip will prevent upstream lamprey movement.



