

## FishPass Monthly Update



Dear partners and stakeholders:

On behalf of the FishPass team, I am pleased to provide the April 2021 update. Please distribute the update as you see fit.

### *Engineering Design / Construction:*

- While on-site work remains on hold pending results of the ongoing legal process, the prime contractor, Spence Brothers Construction, has continued to prepare and submit contract submittals for review by the U.S. Army Corps of Engineers and AECOM (Designer of Record).

### *Research*

- Reid Swanson, Erin McCann, and Drs. Dan Zielinski and Nick Johnson used Dual Frequency Identification Sonar (DIDSON) to determine that annual migrations of suckers *Catostomus* spp. into the Boardman (Ottaway) River are influenced by temperature, time of day, water level and flow rate. The recently published article is freely available at the Journal of Great Lakes Research:  
<https://www.sciencedirect.com/science/article/pii/S0380133021000873>.

### *Assessment:*

- Staff from the Grand Traverse Band of Chippewa and Ottawa Indians (GTB) and Great Lakes Fishery Commission completed four electrofishing surveys in the lower Boardman River (below Union St. Dam) on 5, 7, 8, and 12 April 2021. The primary intention of the April surveys was to implant acoustic telemetry tags in white sucker *Catostomus commersonii* and longnose sucker *Catostomus catostomus* (suckers is namebin in Anishinaabemowin) for an ongoing research project looking at connectivity between Boardman River, Grand Traverse Bay, and Lake Michigan. This project aims to implant 40 acoustic tags in white sucker, longnose sucker, rainbow trout *Oncorhynchus mykiss*, smallmouth bass *Micropterus dolomieu*, and Lake trout *Salvelinus namaycush* to study their seasonal movements and habitat use. In addition to implanting acoustic tags, the team also collected genetic, isotope, and age samples from a subset of the fish captured – these samples will be used to collect data for population assessments and to support ongoing research projects. Genetics tell biologists about population structure above and below the dam. Isotopes show feeding relationships among fish and organisms in the food web and can indicate where an animal derives its nourishment. A summary of the survey results is given in Table 1. It should be noted that due to the focus on tag implantation, not all fish available in the river were captured and sampled.

The project team noted a high number of rainbow trout (a.k.a. steelhead) present during the spring migration this year that are under represented in the number of fishes handled by the crew.

- On 6 May 2021 a reproductively mature female lake sturgeon (Nme) *Acipenser fulvescens* measuring 5'7" with a girth of 2'5" was captured during a FishPass Electrofishing survey (Figure 1). She was captured underneath the Union St. Bridge just downstream of the dam. The fish was measured, sampled for genetics, and implanted with a tag to monitor its departure and potential future return to the Boardman River. The fish was released in excellent condition.



**Figure 1.** A Lake sturgeon *Acipenser fulvescens* captured in the Boardman River on 6 May 2021 during an electrofishing survey conducted by the Grand Traverse Band of Chippewa and Ottawa Indians and Great Lakes Fishery Commission (GLFC). The fish is being held by Assessment Biologist Reid Swanson (GLFC). Photo credit Robbie Dezelski (FishPass Intern, Northwestern Michigan College).

- Researchers from Cornell University installed research equipment to begin to understand the background nutrient levels in the Boardman River. Researchers also sampled migratory fish for nutrient content in the lower Boardman River. This year will serve as pilot year for this group of researchers whose objectives are to understand the nutrient limitation in the Boardman ecosystem and the potential nutrient subsidies that can be provided from passing native migratory fish upstream at FishPass.

**Table 1.** Summary of electrofishing surveys conducted on 5, 7, 8, and 12 April 2021 including the number of fish sampled (n), the number of Passive Integrated Transponders (PIT) tags implanted into sampled fish, the number of acoustic tags (AT) implanted to date in Boardman river fishes (i.e. including fall implants), the number of genetic, isotope, and age samples collected, and the average length and weight of fish sampled in the surveys.

Species	n	PIT	AT	Genetic	Isotope	Age	Ave. Length (in)	Ave. Weight (lbs.)
Atlantic salmon	1	0	0	0	0	0	-	-
brown trout	13	8	0	0	0	7	15.9	2.0
common white sucker	156	134	41	40	11	44	18.0	2.6
lake trout	1	1	25	25	0	1	27.1	6.9
longnose sucker	80	73	40	40	6	40	17.4	2.4
Northern pike	2	2	0	0	0	2	35.5	10.5
rainbow trout	42	37	40	39	5	22	22.0	3.6
smallmouth bass	6	5	4	4	0	4	12.8	2.1
walleye	28	14	0	0	8	15	22.1	6.2

*Upcoming:*

- GTB and GLFC staff will conduct the standardized electrofishing survey in the lower Boardman River the first week of May 2021.

*In the News:*

- Judge Rules Against City In FishPass Lawsuit; Either Appeal Or Public Vote Likely To Follow (The Ticker, 30 April 2021): <https://www.traverseticker.com/news/judge-rules-against-city-in-fishpass-lawsuit-either-appeal-or-public-vote-likely-to-follow/>
- Judge: FishPass isn't park use (Record Eagle, 30 April 2021): [https://www.record-eagle.com/news/local\\_news/judge-fishpass-isnt-park-use/article\\_6bcab18e-a911-11eb-ad21-17689e504be8.html](https://www.record-eagle.com/news/local_news/judge-fishpass-isnt-park-use/article_6bcab18e-a911-11eb-ad21-17689e504be8.html)
- Judge: Traverse City needs voter approval for FishPass river project (Bridge Michigan, 29 April 2021): <https://www.bridgemi.com/michigan-environment-watch/judge-traverse-city-needs-voter-approval-fishpass-river-project>
- Power rules against city in FishPass case (Record Eagle, 29 April 2021): [https://www.record-eagle.com/news/local\\_news/power-rules-against-city-in-fishpass-case/article\\_452d78e6-a8f7-11eb-8727-274624a198dd.html](https://www.record-eagle.com/news/local_news/power-rules-against-city-in-fishpass-case/article_452d78e6-a8f7-11eb-8727-274624a198dd.html)

- Judge Ruling Coming On Whether To Dismiss FishPass Lawsuit (The Ticker, 22 April 2021): <https://www.traverseticker.com/news/judge-ruling-coming-on-whether-to-dismiss-fishpass-lawsuit/>
- No ruling on FishPass lawsuit (Record Eagle, 22 April 2021): [https://www.record-eagle.com/news/local\\_news/no-ruling-on-fishpass-lawsuit/article\\_07e1ea50-a2c4-11eb-bce5-83dee0db6fb2.html](https://www.record-eagle.com/news/local_news/no-ruling-on-fishpass-lawsuit/article_07e1ea50-a2c4-11eb-bce5-83dee0db6fb2.html)
- Judge lets Great Lakes Fishery Commission join FishPass suit (Record Eagle, 09 April 2021): [https://www.record-eagle.com/news/local\\_news/judge-lets-great-lakes-fishery-commission-join-fishpass-suit/article\\_6024223c-97de-11eb-ba78-eb030f157a30.html](https://www.record-eagle.com/news/local_news/judge-lets-great-lakes-fishery-commission-join-fishpass-suit/article_6024223c-97de-11eb-ba78-eb030f157a30.html)
- Great Lakes Fishery Commission granted formal intervention into FishPass court case (UpNorthLive, 08 April 2021): <https://upnorthlive.com/news/local/great-lakes-fishery-commission-granted-formal-intervention-into-fishpass-court-case>
- FishPass Update: A New Party in the Lawsuit and a Change from the City (9&10 News, 07 April 2021): <https://www.9and10news.com/2021/04/07/fishpass-update-a-new-party-in-the-lawsuit-and-a-change-from-the-city/>
- GLFC wants in on FishPass lawsuit (Record Eagle, 04 April 2021): [https://www.record-eagle.com/news/local\\_news/glfc-wants-in-on-fishpass-lawsuit/article\\_27dd0e20-93c4-11eb-8606-c3c44b68c9f1.html](https://www.record-eagle.com/news/local_news/glfc-wants-in-on-fishpass-lawsuit/article_27dd0e20-93c4-11eb-8606-c3c44b68c9f1.html)



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