



Monitoring and Response Workgroup (MRWG) Monthly Activities 2020 May Summary

Bottom Line: The international COVID-19 pandemic created a unique set of challenges for members of the Monitoring and Response Workgroup during the start of the 2020 field season. Guidance from the Centers for Disease Control and public health authorities resulted in much of the planned effort in March and April to be cancelled. Some sampling was able to occur prior to the stay at home order issued in March by the governor. Additionally, the United States Army Corporation of Engineers (USACE) continued to operate the electric dispersal barrier in Romeoville, Illinois throughout that time. **NO LIVE BIGHEAD CARP, BLACK CARP, GRASS CARP, or SILVER CARP were found or observed in any new locations immediately downstream or upstream of the Electric Dispersal Barrier.**

Overall Effort Summary

Pool specific results through May 2020 from all effort within the Upper Illinois Waterway. The same time period in 2018 and 2019 for comparison. Additional effort may not be reported due to data processing and actual effort and catch could be higher. Check 2020 interim summary, published at the end of the year, for complete results

Lockport Pool

	2018	2019	2020
Yards of Net Fished	39,200	10,800	14,000
Miles of Net Fished	22.3	6.1	8.0
Hoop Net Nights	8.9	0.0	0.0
Mini Fyke Net Nights	4.9	0.0	0.0
Electrofishing Runs	11	0	0
Electrofishing Time (hrs)	2.8	0.0	0.0
Total Asian Carp (AC)	0	0	0
Tons of AC Harvested	0	0	0

Brandon Road Pool

	2018	2019	2020
Yards of Net Fished	38,200	4,200	14,600
Miles of Net Fished	21.7	2.4	8.3
Hoop Net Nights	7.7	0.0	0.0
Mini Fyke Net Nights	2.8	0.0	0.0
Electrofishing Runs	12	0	0
Electrofishing Time (hrs)	3.0	0.0	0.0
Total Asian Carp (AC)	0	0	0
Tons of AC Harvested	0	0	0

Dresden Island Pool (Including Rock Run Rookery)

	2018	2019	2020
Yards of Net Fished	87,800	28,700	32,800
Miles of Net Fished	49.9	16.3	18.6
Hoop Net Nights	7.6	0.0	0.0
Mini Fyke Net Nights	3.9	0.0	0.0
Pound net night	4	0	0
Electrofishing Runs	56	0	0
Electrofishing Time (hrs)	14.0	0.0	0.0
Bighead Carp	274	15	5
Grass Carp	33	2	1
Silver Carp	641	82	87
Total AC	948	99	93
Asian Carp (AC) from Rock Run Rookery Lake (RR)	99	14	2
AC upstream I-55 (not in RR)	1	0	1
AC downstream I-55	848	85	90
Tons of AC Harvested	7.8	0.8	0.6
AC/1000 yds of gill net	10.8	3.4	2.8

Marseilles Pool

	2018	2019	2020
Yards of Net Fished	83,550	114,600	58,650
Miles of Nets Fished	47.5	65.1	33.3
Pound Net nights	22	26	0
Hoop Net nights	232.6	0.0	0.0
Mini Fyke Net Nights	3.8	0.0	0.0
Electrofishing Runs	45	0	0
Electrofishing Time (hrs)	11.3	0.0	0.0
Bighead Carp	881	374	395
Grass Carp	23	37	1
Silver Carp	23,527	27,668	18,574
Total Asian Carp	24,431	28,079	18,970
Tons of AC Harvested	117.4	155.5	104.5
AC/1000 yds of gill net	276.6	241.5	323.4

Starved Rock Pool

	2018	2019	2020
Yards of Net Fished	49,550	135,910	15,680
Miles of Nets Fished	133100.0	77.2	8.9
Pound Net nights	0	0	0
Hoop Net nights	994.5	0.0	0.0
Mini Fyke Net Nights	0.0	0.0	67.9
Electrofishing Runs	0	0	113
Electrofishing Time (hrs)	0.0	0.0	28.3
Bighead Carp	321	306	6
Grass Carp	486	2125	116
Silver Carp	26,696	73,472	18,724
Total Asian Carp	27,503	75,903	18,846
Tons of AC Harvested	88.2	297.5	52.9
AC/1000 yds of gill net	478.8	558.7	1201.9

Contracted Fishing

- Contract fishing took place in Lockport, Brandon Road, Dresden Island Pool, Marseilles Pool and Starved Rock Pool of the Illinois River Waterway.
- Contracted fisher set and pulled 86,580 yards of gill/trammel net in May
- 67 Bighead Carp, 24 Grass Carp and 13,208 Silver Carp were removed in May
- 198,487 pounds of Asian Carp was removed in May
- 15,032 fish representing 19 species were captured during contracted commercial netting effort in May.

Below is a summary of IDNR removal activities through May 2020. Removal occurs in Starved Rock and Marseilles Pools. For comparison purposes, data from the same time period in 2018 and 2019 are included.

	2018	2019	2020
Number of Days Fished	37	46	15
Number of Net Crew Days	162	274	92
Yards of Net Fished	133,100	250,510	74,330
Miles of Nets Fished	75.6	142.3	42.2
Number of Pound Net Nights	22	26	0
Number of Hoop Net Nights	1218.9	0	0
Number of Bighead Carp	1,476	695	406
Number of Silver Carp	50,864	101,222	37,385
Number of Grass Carp	542	2,191	118
Number of Asian Carp (AC)	52,882	104,108	37,909
Tons of AC Harvested	213.4	453.8	157.4
AC/1000 yds of gill net	359.0	414.0	510.0

Telemetry

United States Geological Services (USGS)

May

There were 17 bigheaded carp (4 Bighead Carp and 13 Silver Carp) detected at the Illinois River above Dresden Island dam near Minooka Illinois during the month of May 2020 (Figure 1.). The maximum number of bigheaded fish detected on one day was 6 and the minimum was 1.

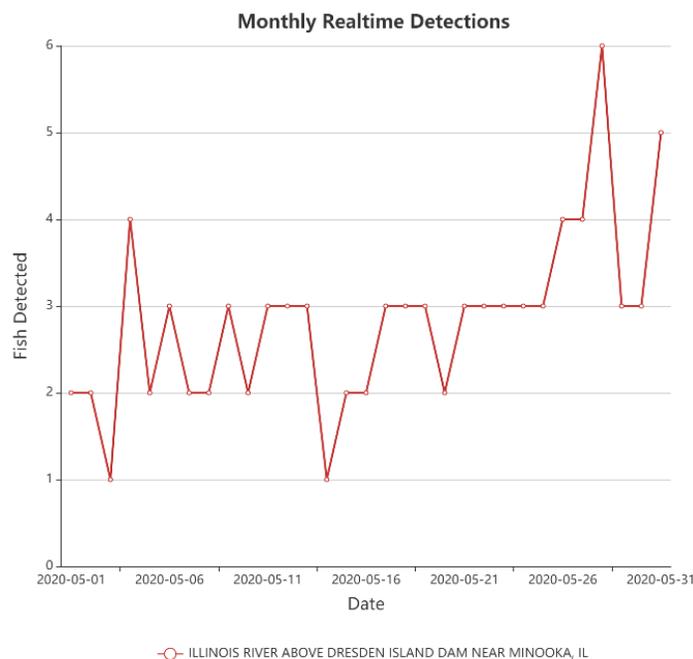


Figure 1. Fish detections for 1 May – 31 May 2020 from telemetry receiver in the Illinois River above Dresden Island dam near Minooka, IL.

DISCLAIMER

These data are preliminary or provisional and are subject to revision. They are being provided to meet the need for timely best science. The data have not received final approval by the U.S. Geological Survey (USGS) and are provided on the condition that neither the USGS nor the U.S. Government shall be held liable for any damages resulting from the authorized or unauthorized use of the data.

Monitoring Bigheaded Carp Movement and Density in the Illinois River

SIU's field sampling was halted in May due to state of Illinois COVID-19 stay-at-home orders. Maintenance occurred on hydroacoustic and telemetry equipment in preparation for June field sampling. Data analysis was also ongoing with Silver Carp telemetry data for the surrogate fish project in collaboration with USACE to determine whether energetic habitat suitability explains Silver Carp movements.

Monitoring of Asian Carp Reproductive Productivity

INHS collected ichthyoplankton samples at 7 main channel sites located in the Brandon Road, Dresden Island, Marseilles, Starved Rock, Peoria, and LaGrange Pools beginning on May 11 and continuing weekly for the remainder of May. Four larval fish samples were collected at each site. Additional samples were collected in Illinois River tributaries to evaluate the potential for Asian carp spawning in these rivers. Despite the Illinois River being above flood stage for much of the month, water temperatures were unseasonably low and did not rise above 18° C until the last week of May. During this week, moderate numbers of Asian carp yolk-sac larvae were observed at sites in the Peoria Pool. Full processing of all ichthyoplankton samples and identification of larval fish and eggs is ongoing. Occurrence of any Asian carp eggs or larvae at other locations, particularly further upstream, will be reported as soon as this information is available. Ichthyoplankton data will be used to evaluate any changes in the reproductive front of Asian carp populations in the Illinois Waterway, identify reproductive hotspots, and quantify the relationship between Asian carp stock abundance and reproductive output.

Zooplankton as Dynamic Assessment Targets for Asian Carp Removal

INHS collected zooplankton and water chemistry samples at 11 main channel and backwater sites located in the Brandon Road, Dresden Island, Marseilles, Starved Rock, Peoria, and LaGrange Pools during the weeks of May 11 and May 25. The collected data will be combined with historical and recent data on Illinois Waterway zooplankton communities to inform management agencies of the ecosystem responses to Asian carp removals and develop dynamic targets for diminishing the ecological impacts of Asian carp.

Barrier Operational and Maintenance Status

Barriers were fully functional throughout the month of May except for planned maintenance at Barrier 2A. From May 4th to May 12th Barrier 2A was shut down for maintenance.

Alternate Pathway Surveillance in Illinois - Law Enforcement

The owner of a Missouri tilapia farm who illegally sold and shipped live tilapia into Illinois without a Restricted Species Transportation permit entered into a deferred prosecution agreement with the Illinois Attorney General's Office. The company had been warned by the Invasive Species Unit that shipping live tilapia into Illinois without a permit was illegal. Afterwards, the company illegally sold and shipped tilapia to the ISU and the USFWS during two separate covert operations which resulted in the execution of a search warrant at the business. The company agreed to pay \$8000 in restitution to the State of Illinois.