

Monitoring and Response Workgroup (MRWG) Monthly Activities

2020 December Summary

<u>Bottom Line:</u> The international COVID-19 pandemic created a unique set of challenges for members of the Monitoring and Response Workgroup during the 2020 field season. Guidance from the Centers for Disease Control and public health authorities resulted in much of planned effort in March and April to be cancelled. Sampling was able to occur prior to the stay at home order issued in March by the governor of Illinois. Additionally, the United States Army Corporation of Engineers (USACE) continued to operate the electric dispersal barrier in Romeoville, Illinois throughout that time. Sampling began again in May following strict COVID safety protocols including limiting the number of people on a boat, maintaining social distancing, masking wearing, and daily equipment disinfecting. 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 Summary

Pool specific results through December 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

Effort	2018	2019	2020
Yards of Net Fished	77,100	59,400	47,800
Miles of Net Fished	43.8	33.7	27.2
Hoop Net Nights	56.8	163.8	156.2
Mini Fyke Net Nights	28.9	22.2	20.8
Electrofishing Runs	169	69	77
Electrofishing Time (hrs)	42.3	17.3	19.3
Total Asian Carp (AC)	0	0	0
Tons of AC Harvested	0	0	0

Brandon Road Pool

Effort	2018	2019	2020
Yards of Net Fished	77,500	54,000	52,000
Miles of Net Fished	44.0	30.7	29.5
Hoop Net Nights	55.0	156.8	158.6
Mini Fyke Net Nights	26.6	33.1	20.7
Electrofishing Runs	156	63	68
Electrofishing Time (hrs)	39.0	15.8	0.0
Total Asian Carp (AC)	1*	0	0
Tons of AC Harvested	0	0	0

^{*}indicates grass carp

Dresden Island Pool (Including Rock Run Rookery)

Effort	2018	2019	2020
Yards of Net Fished	230,400	164,650	106,600
Miles of Net Fished	130.9	93.6	60.6
Hoop Net Nights	52.2	76.3	162.5
Mini Fyke Net Nights	27.6	66.2	68.1
Pound net night	8	2	0
Electrofishing Runs	210	73	80
Electrofishing Time (hrs)	52.5	18.3	20.0
Bighead Carp	398	45	22
Grass Carp	53	8	3
Silver Carp	1235	274	140
Total AC	1686	327	165
Asian Carp (AC) from Rock Run Rookery Lake (RR)	126	49	21
AC upstream I-55 (not in RR)	9*	8*	2*
AC downstream I-55	1551	270	142
Tons of AC Harvested	16.2	2.7	1.2
AC/1000 yds of gill net	7.2	2.0	1.5

Marseilles Pool

Effort	2018	2019	2020
Yards of Net Fished	152,300	220,010	203,370
Miles of Nets Fished	86.5	125.0	115.6
Pound Net nights	22	26	0
Hoop Net nights	278.6	132.7	154.9
Mini Fyke Net Nights	28.9	64.2	68.2
Electrofishing Runs	156	93	75
Electrofishing Time (hrs)	39.0	23.3	18.8
Bighead Carp	1,399	1,586	1,414
Grass Carp	44	84	31
Silver Carp	32,569	44,002	34,077
Total Asian Carp	34,012	45,672	35,522
Tons of AC Harvested	163.3	257.3	195.5
AC/1000 yds of gill net	213.4	190.1	174.7

Starved Rock Pool

Effort	2018	2019	2020
Yards of Net Fished	246,700	388,015	278,480
Miles of Nets Fished	140.2	220.5	158.2
Pound Net nights	0	0	0
Hoop Net nights	994.5	158.1	168.7
Mini Fyke Net Nights	0.0	60.0	69.6
Electrofishing Runs	0	107	1000
Electrofishing Time (hrs)	0.0	26.8	250.0
Bighead Carp	1,645	2,157	2,257
Grass Carp	1406	2830	1,054
Silver Carp	117,052	163,017	125,855
Total Asian Carp	120,103	168,004	129,166
Tons of AC Harvested	389.8	571.3	422.3
AC/1000 yds of gill net	469.0	431.5	463.8

Contracted Fishing Below the Electric Dispersal Barrier

- Contract fishing took place in Lockport Pool, Brandon Road Pool, Dresden Island Pool,
 Marseilles Pool, and Starved Rock Pool of the Illinois River Waterway during December
- Contracted fisher set and pulled 43,200 yards of gill/trammel net in December
- 54 Bighead Carp, 190 Grass Carp, and 11,913 Silver Carp were removed in December
- 174,800 pounds of Asian Carp was removed in December
- 15,404 fish representing 17 species were captured during contracted commercial netting effort in December

Below is a summary of all Illinois Department of Natural Resources (IDNR) contracted fishing activities through December 2020. For comparison purposes, data from the same time period in 2018 and 2019 are included.

Effort	2018	2019	2020
Number of Days Fished	157	170	119
Number of Net Crew Days	628	728	596
Yards of Net Fished	784,000	886,075	688,250
Miles of Nets Fished	445.5	503.5	391.0
Number of Pound Net Nights	22	26	0
Number of Hoop Net Nights	1218.9	0	0.0
Number of Bighead Carp	3,443	3,788	3,693
Number of Silver Carp	150,856	207,293	160,072
Number of Grass Carp	1,504	2,922	1,088
Number of Asian Carp (AC)	155,803	214,003	164,853
Tons of AC Harvested	568.8	836.2	618.9
AC/1000 yds of gill net	189.0	236.2	239.3

Multiple Agency Monitoring of the Illinois River Waterway

- Sample collected are still being processed
- Covid safety measures slowing lab processing of preserved samples delaying reporting
- More detailed results will be provided in the annual interim summary report
- Large Bighead Carp and Silver Carp (>120 mm) were detected as far up river as RM 263
- Small Silver Carp (<120 mm) were captured as far up river as RM 183

Enhanced Contract Fishing

In September 2019, the Enhanced Contract Fishing Program was initiated in the Peoria Pool. The program offers Illinois-licensed commercial fishermen \$.10 per pound for Asian carp caught in the Peoria Pool and sold to fish processors or other buyers for at least \$.07 per pound. To date, 26 fishermen have entered into contracts to catch Asian carp from this pool. From inception through the remainder of calendar year 2019, 518,132 pounds of Asian carp were caught in the Peoria Pool, and to date in 2020 an additional 2,795,481 pounds have been caught for a total of 3,313,613 pounds. Of these total catches, 6.11% are Bighead, 67.15% are Silver and 26.74% are Grass carp. **No Black carp have been reported.**

Figure 1. Table of Enhanced Contract Fishing – Peoria Pool from inception, September 2019 through December 2020. By receipt date, not catch date.

Year	Total Lbs.	Bighead carp	Silver carp	Grass carp**
2019 *	518,132	24,813	310,297	183,022
December 2020	410,643	4,288	345,267	61,088
2020 (Jan thru Dec)	2,795,481	177,666	1,914,828	702,987
GRAND TOTALS	3,313,613	202,479	2,225,125	886,009

^{*}September 2019 program inception.

Monitoring Bigheaded Carp Movement and Density in the Illinois River

Telemetry data that was downloaded from stationary receivers in Dresden Island to Alton pools in November was processed for QA/QC. Acoustic telemetry data were also being analyzed for the surrogate fish project (a collaboration with USACE) to compare movement and habitat use between common carp and silver carp. Data processing and analysis were also ongoing for hydroacoustic data collected in October from Dresden Island to Alton pools as part of a long-term assessment of Asian carp densities.

Barrier Operational and Maintenance Status

During the month of December several maintenance outages occurred. The Demo Barrier was off the entire month of December for annual maintenance and controls replacement. IIB was off at the start of December and reenergized on 11 December 2020 but tuned off on 15 December for approximately 9 hours to allow contractors to conduct an inspection in preparation for the controls replacement. IIA was on during the entire month of December. The barriers were set at the following parameters during the month of December when they were on:

Demo-Off

IIB- Narrow (34 Hz, 2.3 ms, 2000 V = 2.3 V/in) & wide (34 Hz, 2.3 ms, 800 V= \sim 1.0 V/in) arrays operational

IIA - Narrow (34 Hz, 2.3 ms, 2000 V = 2.3 V/in) & wide (34 Hz, 2.3 ms, 800 V= \sim 1.0 V/in) arrays operational

<u> Alternate Pathway Surveillance in Illinois - Law Enforcement</u>

ISU provided clarification to law enforcement personnel on the legality of importing and using Willow cats (Tadpole Madtom / Noturus gyrinus) as bait. ISU investigated a complaint of Illinois protected aquatic life being illegally advertised and sold on the Internet. The seller was identified and specific information how and where the species were taken was determined. The case is ongoing and involves other state agencies. ISU conducted angler compliance checks prioritizing on invasive species enforcement. ISU conducted a commercial inspection of a retail minnow licensee in McHenry county. There were no violations or record keeping deficiencies. ISU responded to an inquiry from a Great Lakes Law Enforcement committee member concerning Illinois' regulations on sport fishing guides on the Great Lakes. ISU provided a law enforcement

^{**}No black carp reported.

perspective on current efforts to create outreach materials for Illinois boaters and fishermen. ISU completed training courses on digital forensics, the dark web and social media investigations.