

2019 January through March Summary

Bottom Line: Multiple agencies participated in monitoring Asian Carp (Bighead Carp, Black Carp, Grass Carp, and Silver Carp) in the upper Illinois Waterway downstream of the Electric Dispersal Barrier during January through March. **NO LIVE BIGHEAD CARP, BLACK CARP, GRASS CARP, or SILVER CARP were found in any new locations immediately downstream of the Electric Dispersal Barrier.** Much monitoring and removal effort was **POSTPONED DUE TO WEATHER and FLOODING**. Caution should be applied when comparing results among years within a pool.

Fixed, Random, and Targeted Site Sampling Downstream of the Electric Dispersal Barrier

Electrofishing:

- Fixed and random electrofishing sampling was postponed and redirected towards removal due to weather.

Commercial Netting:

- Fixed and targeted commercial netting sampling was postponed and redirected towards removal due to weather.

Unified Fishing Method (UFM) – Dresden Island Pool

- The Dresden Unified Fishing Method was postponed twice and completely canceled with effort being redirected towards removal due to weather and flooding.

Sampling results by pool below the electric dispersal barrier through March 2019, along with the same time period in 2017 and 2018 for comparison (Caution should be applied as much monitoring and removal efforts were postponed due to weather and flooding):

Lockport Pool

	2017	2018	2019
Yards of Net Fished	5,600	22,400	0
Miles of Net Fished	3.2	12.7	0.0
Hoop Net Nights	0.0	0.0	0.0
Mini Fyke Net Nights	0.0	0.0	0.0
Electrofishing Runs	0	32	0
Electrofishing Time (hrs)	0.0	8.0	0.0
Total Asian Carp (AC)	0	0	0
Tons of AC Harvested	0	0	0

Brandon Road Pool

	2017	2018	2019
Yards of Net Fished	5,700	18,400	0
Miles of Net Fished	3.2	10.5	0.0
Hoop Net Nights	0.0	0.0	0.0
Mini Fyke Net Nights	0.0	0.0	0.0
Electrofishing Runs	0	24	0
Electrofishing Time (hrs)	0.0	6.0	0.0
Total Asian Carp (AC)	0	0	0
Tons of AC Harvested	0	0	0

Dresden Island Pool

	2017	2018	2019
Yards of Net Fished	4,900	31,800	0
Miles of Net Fished	2.8	18.1	0.0
Hoop Net Nights	0.0	0.0	0.0
Mini Fyke Net Nights	0.0	0.0	0.0
Electrofishing Runs	0	11	0
Electrofishing Time (hrs)	0.0	2.8	0.0
Asian Carp (AC) upstream I-55	0	0	0
AC downstream I-55	4	324	0
Bighead Carp	4	113	0
Silver Carp	0	193	0
Grass Carp	0	18	0
Total AC	4	324	0
Tons of AC Harvested	0.0	2.4	0.0
AC/1000 yds of gill net	0.8	10.2	0

Rock Run Rookery

	2017	2018	2019
Yards of Net Fished	3,500	13,600	0
Miles of Net Fished	2.0	7.7	0.0
Pound Net nights	0	4	0
Bighead Carp	11	23	0
Silver Carp	5	47	0
Grass Carp	0	1	0
Total Asian Carp (AC)	16	70	0
Tons of AC Harvested	0.2	0.5	0.0
AC/1000 yds of gill net	4.6	5.2	0

Asian Carp Removal Project

Removal took place specifically in Marseilles Pool and Starved Rock Pool of the Illinois River. Below is a summary of all Illinois Department of Natural Resources (IDNR) removal activities from January through March 2019, including 2 weeks of contracted fishing and one UFM. For comparison purposes, data from the same time period during 2017 and 2018 are included.

Overall

	2017	2018	2019
Number of Days Fished	5	5	15
Number of Net Crew Days	35	35	77
Yards of Net Fished	54,430	24,500	88,210
Miles of Nets Fished	30.9	13.9	50.1
Number of Pound Net Nights	35	22	26
Number of Hoop Net Nights	0.0	0.0	0.0
Number of Bighead Carp	337	185	169
Number of Silver Carp	20,133	10,003	41,691
Number of Grass Carp	27	1	578
Number of Asian Carp (AC)	20,497	10,189	42,438
Tons of AC Harvested	74.8	51.0	162.9
AC/1000 yds of gill net	362.8	368.0	477.5

Marseilles Pool

	2017	2018	2019
Yards of Net Fished	39,630	24,300	44,550
Miles of Nets Fished	22.5	13.8	25.3
Pound Net nights	46	22	26
Hoop Net nights	0.0	0.0	0.0
Mini Fyke Net Nights	0.0	0.0	0.0
Electrofishing Runs	1	12	120
Electrofishing Time (hrs)	0.3	3.0	30.0
Bighead Carp	115	185	147
Silver Carp	10,184	9,928	17,034
Grass Carp	8	2	21
Total Asian Carp	10,307	10,115	17,202
Tons of AC Harvested	38.0	47.8	90.3
AC/1000 yds of gill net	241.2	367.9	379.0

Starved Rock Pool

	2017	2018	2019
Yards of Net Fished	14,800	200	43,660
Miles of Nets Fished	8.4	0.1	24.8
Hoop Net nights	0.0	0.0	0.0
Bighead Carp	222	0	22
Silver Carp	9,949	75	24,657
Grass Carp	19	0	557
Total Asian Carp	10,190	75	25,236
Tons of AC Harvested	36.5	0.3	72.5
AC/1000 yds of gill net	688.5	375.0	578.0

Unified Fishing Method – East Pit:

The 2019 UFM in the East Pit was postponed twice due to weather and flooding but occurred on 3/25/2019 through 3/29/2019. 21.7 miles of gill/trammel net and 10 pound net nights captured 15,705 Silver Carp, 113 Bighead Carp, and 4 Grass Carp (Figure 1). Those 15,822 Asian Carp resulted in an estimated 167,800 pounds (83.9 tons) of Asian Carp being removed from the East Pit during that week long UFM. Hydroacoustic surveys indicated Silver Carp and Bighead Carp densities decreased significantly following the UFM in the East Pit (Figure 2).

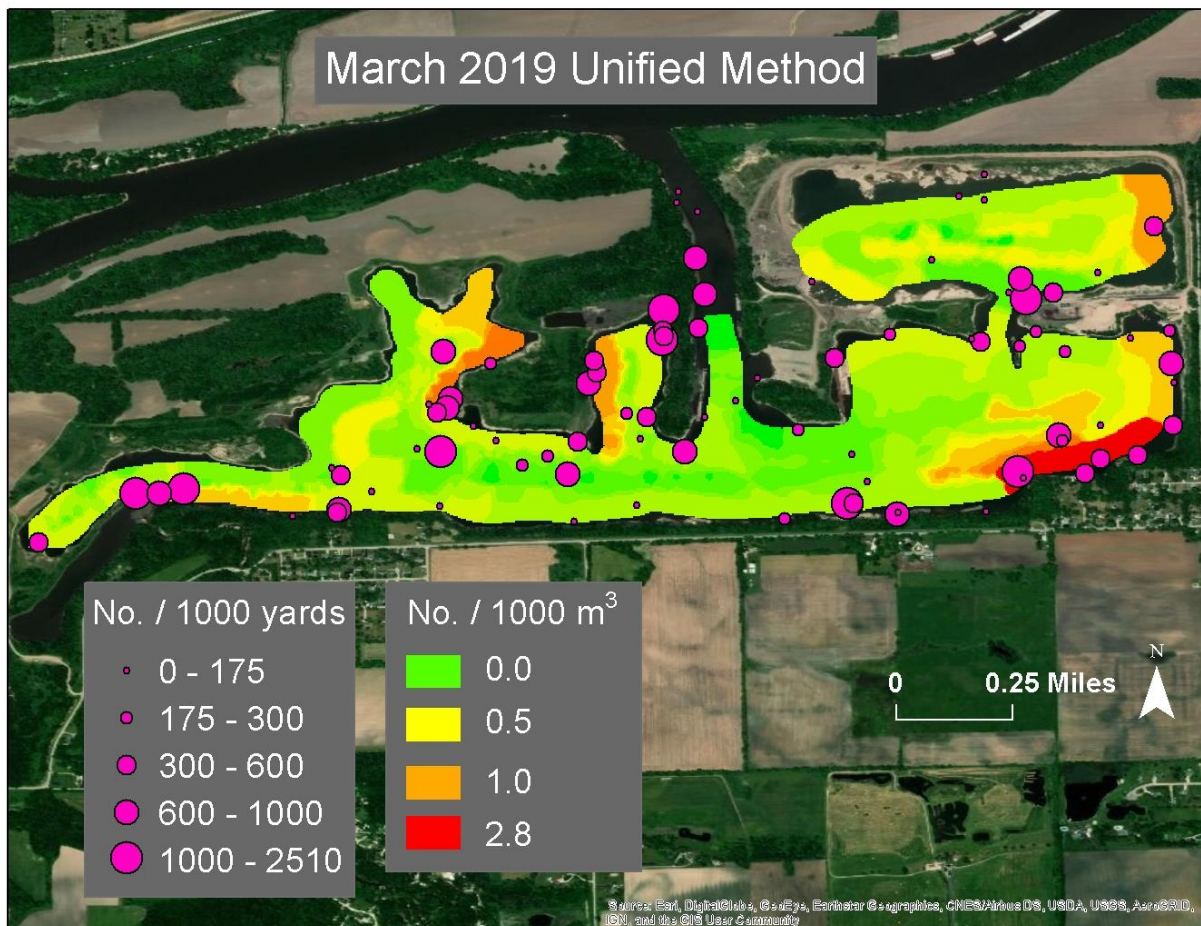


Figure 1. Asian carp (Silver Carp and Bighead Carp combined) density distributions from hydroacoustic surveys conducted in the HMS East pit backwaters of Marseilles Pool on 3/21/19 prior to unified method harvest. Scaled points associated to Asian Carp harvested by contract fishermen during the unified method from 3/25/19 to 3/29/19 are overlaid. Low catches (small dots) of Asian Carp in areas in the immediate proximity of large catches (large dots) likely indicate depletion of Asian carp as those small dots were duplicate samples collected the day following high catch.

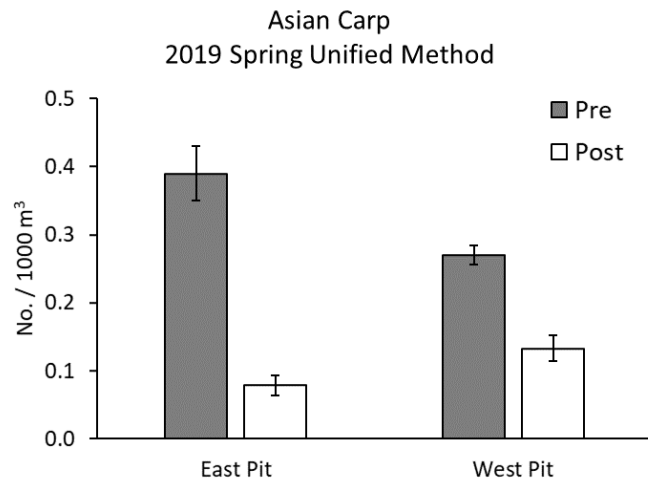


Figure 2. Mean (SE) densities of Asian Carp (Bighead Carp and Silver Carp combined) from hydroacoustic surveys conducted before and after unified method harvest in the HMS East backwaters of the Marseilles Pool.

By comparison, the 2018 UFM in the East Pit occurred one week later from 4/3/2018 through 4/6/2018. 14.2 miles of gill/trammel net captured 9,346 Silver Carp and 315 Bighead Carp during the 2018 UFM in the East Pit. Those 9,661 Asian carp resulted in an estimated 104,936 pounds (52.5 tons) of biomass being removed and a significant reduction in densities of Asian Carp from the East Pit (Figure 3).

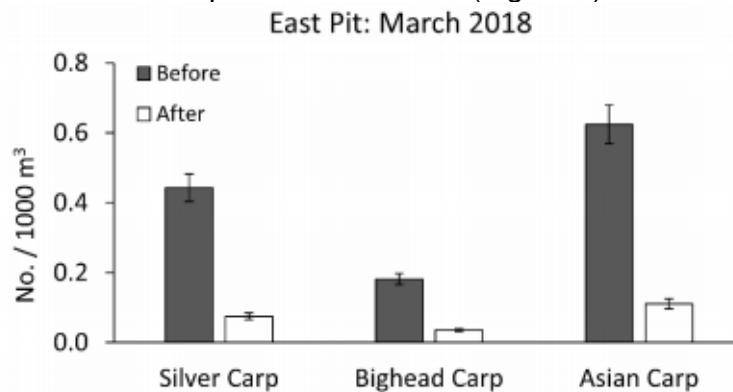


Figure 3. Mean (SE) densities of Asian Carp (Asian Carp: Silver Carp and Bighead Carp combined) from hydroacoustic surveys conducted before and after unified method harvest in the HMS East and West pit backwaters of the Marseilles Pool 2018.

Hydroacoustic Fish Surveys at the Electric Dispersal Barrier System

The U.S. Fish and Wildlife Service conducted three mobile hydroacoustic fish surveys at the Electric Dispersal Barrier System (EDBS) during March 2019. Surveys were completed on March 1, March 12, and March 27, 2019 to monitor for the presence and distribution of large fishes greater than 12 inches (30.5 cm) total length near the EDBS. The purpose of these hydroacoustic surveys is to aide in assessing the risk of fish detected near the EDBS being either Bighead or Silver Carp prior to or during barrier operational changes and/or maintenance. Hydroacoustic surveys covered the area between Hanson Material Services Corporation (HMSC) docking slip, approximately 1.3 km below the Romeo Road Bridge, to the upstream side of the Demonstration Barrier (0.6 km above Romeo Road Bridge). For reporting purposes, Romeo Road Bridge is treated as the dividing line between the areas referred to as “within the EDBS” and “downstream of the EDBS.”

Preliminary Results:

March 1, 2019: No large fish targets were detected within the EDBS. A single large fish target was detected approximately 1 km downstream of the EDBS near the HMSC docking slip.

March 12, 2019: No large fish targets were detected within or downstream of the EDBS.

March 27, 2019: Two large fish targets were detected within the EDBS between Barrier IIA and Barrier IIB. A single large fish target was also detected approximately 1 km downstream of the EDBS near the HMSC docking slip. The Monitoring and Response Workgroup was notified and a follow up hydroacoustic barrier survey was conducted on April 1, 2019, during which no large fish targets were detected within the EDBS, and two large fish targets were detected downstream of the EDBS at 0.9 and 1.2 km, respectively.

Monitoring Bigheaded Carp Movement and Density in the Illinois River

Southern Illinois University conducted hydroacoustic sampling during March 2019 in the HMS East and West pits and in Dresden Island Pool to determine bigheaded carp spatial distributions and densities prior to Unified Method harvests. Hydroacoustic sampling will be conducted in April 2019 to assess potential changes in bigheaded carp densities following harvest.

Alternate Pathway Surveillance in Illinois - Law Enforcement

The Illinois Department of Natural Resources Invasive Species Unit (ISU) investigated a complaint of an Illinois resident advertising freshwater oysters for sale on Facebook marketplace. ISU determined the oysters were not alive and there were no violations of the law. ISU contacted a New Mexico tilapia dealer that was selling and shipping thousands of live Tilapia to Illinois customers through same day mail delivery services. The owner was informed of the restricted species transportation permit and non-resident aquatic life

dealer's license requirements and was brought into compliance. ISU obtained a list of all Illinois customer who purchased tilapia from the dealer and will conduct follow-up investigations to ensure they are being raised at permitted aquaculture facilities. ISU attended the Aquatic Resources Task Force meeting in Missouri and the Office of Law Enforcement In-Service training in East Peoria. ISU participated in the development and planning of an upcoming commercial fishing enforcement workshop for Conservation Police Officers.