# MONITORING AND RESPONSE WORK GROUP
# MONTHLY ACTIVITY UPDATES
## DECEMBER 2025

# CONTRACTED COMMERCIAL FISHING BELOW THE ELECTRIC DISPERSAL BARRIER

IDNR

## Introduction

Contracted Commercial Fishing Below the EDBS uses contracted commercial fishers to reduce invasive carp abundance and monitor for changes in range in the Des Plaines River and upper Illinois River downstream of the EDBS. By decreasing invasive carp abundance, we anticipate reduced migration pressure towards the barrier, lessening the chances of invasive carp gaining access to upstream waters in the CAWS and Lake Michigan. Monitoring for upstream expansion of invasive carp should help identify changes in the leading edge, distribution, and relative abundance of invasive carp in the IWW. The "leading edge" is the furthest upstream location where multiple Bighead Carp or Silver Carp have been captured with conventional sampling gears during a single trip or where individuals of either species have been caught in repeated sampling trips to a specific site. Trends in catch data over time may also contribute to understanding invasive carp population abundance and movement between and among pools of the IWW.

| **Dresden Island** | **December 2025** |
|---|---|
| Yards of Net | 0 |
| Bighead Carp | 0 |
| Grass Carp | 0 |
| Silver Carp | 0 |
| Invasive Carp Caught | 0 |
| Invasive Carp Dresden Above I55 | 0 |
| Invasive Carp Dresden Below I55 | 0 |
| Invasive Carp Rock Run | 0 |
| IC/1000 yards | 0 |

| **Marseilles** | **December 2025** |
|---|---|
| Yards of Net | 0 |
| Bighead Carp | 0 |
| Grass Carp | 0 |
| Silver Carp | 0 |
| Invasive Carp Caught | 0 |
| IC/1000 yards | 0 |

| Marseilles | December 2025 |
|---|---|
| Invasive Carp Pounds | 0 |

| Starved Rock | December 2025 |
|---|---|
| Yards of net | 17,800 |
| Bighead Carp | 2 |
| Grass Carp | 61 |
| Silver Carp | 10,373 |
| Invasive Carp Caught | 10,436 |
| IC/1000 yards | 586 |
| Invasive Carp Pounds | 60,918 |

# BARRIER MAINTENANCE AND FISH SUPPRESSION

IL DNR, USACE

## Introduction

U.S. Army Corps of Engineers (USACE) operates three electric dispersal barriers (Barrier 1, Barrier 2A, and Barrier 2B) for aquatic invasive species in the Chicago Sanitary and Ship Canal (CSSC), collectively referred to as the EDBS. USACE has operated electric barriers in the CSSC since 2002. Over the years, several operational and procedural improvements have been implemented to improve the effectiveness and continuously deliver an uninterrupted flow of electricity to the water to deter fish. USACE fisheries team conducts biweekly electrofishing monitoring for invasive carp in Lockport and Brandon Road Pools.

## December 2025 Highlights

The agency did not submit an update for December 2025.

# SUMMARY EVALUATION OF BIO-ACOUSTIC FISH FENCE DETERRENT

USFWS, USGS

## Introduction

This project will test the effectiveness of a Bio-Acoustic Fish Fence (BAFF) at deterring Silver Carp and Grass Carp from crossing the BAFF and from crossing through the Barkley Lock on the Cumberland River, KY. This sound, bubble, and light deterrent is designed to have a greater effect on invasive carp than on native species. This deterrent could be part of a multi-deterrent approach to prevent movement through a lock chamber where the lock is the only option for fish to move upstream (e.g., Brandon Road Lock and Dam) or in combination with a yet to be developed deterrent that slows passage through dam gates during open river while the BAFF deters fish from passing via the lock chamber (e.g., Starved Rock Lock and Dam).

## December 2025 Highlights

The agencies did not submit a response for the December monthly report.

# INVASIVE CARP ENHANCED CONTRACT FISHING REMOVAL PROGRAM

ILDNR

## Introduction

In September 2019, the Enhanced Contract Fishing Program was initiated in the Peoria Pool of the Illinois River. In 2022, the area was expanded to include the LaGrange and Alton pools. The program offers Illinois-licensed commercial fishers $.10 per pound for invasive carp caught in any of these pools and sold to fish processors or other buyers for at least $.07 per pound. To date, a total of 70 fishers have entered into contracts to catch invasive carp from these pools, with 38 currently under contract. From inception through December 2025, 32,553,307 pounds of invasive carp have been caught among all three pools. Of these total catches, 2.59% are Bighead, 88.00% are Silver, and 9.41% are Grass carp.

## December 2025 Highlights

The table below summarizes the total pounds of invasive carp caught through enhanced contract fishing.

| YEAR | Total Lbs.** | Bighead | Silver | Grass |
|---|---|---|---|---|
| **2019 *** | **518,132** | **24,813** | **310,297** | **183,022** |
| **2020** | **2,882,724** | **176,195** | **1,980,175** | **726,355** |
| **2021** | **3,345,973** | **209,526** | **2,517,416** | **619,031** |
| **2022** | **5,249,161** | **200,396** | **4,615,097** | **433,669** |
| **2023** | **8,410,107** | **95,532** | **8,024,643** | **289,932** |
| **2024** | **6,336,449** | **90,865** | **5,821,067** | **424,517** |
| **2025** | - | - | - | - |
| ***January*** | 87,108 | 0 | 72,025 | 15,083 |
| ***February*** | 479,791 | 0 | 415,750 | 64,041 |
| ***March*** | 657,157 | 2,228 | 606,351 | 48,578 |
| ***April*** | 684,091 | 7,809 | 632,634 | 43,648 |
| ***May*** | 864,539 | 10,480 | 837,906 | 16,153 |
| ***June*** | 387,079 | 5,608 | 357,547 | 23,924 |
| ***July*** | 432,323 | 2,130 | 388,310 | 41,883 |
| ***August*** | 592,344 | 8,561 | 512,564 | 71,219 |
| ***September*** | 567,664 | 6,314 | 536,199 | 25,151 |
| ***October*** | 419,736 | 1,534 | 395,402 | 22,800 |

| YEAR | Total Lbs.** | Bighead | Silver | Grass |
|---|---|---|---|---|
| ***November*** | 257,751 | 1,921 | 255,830 | 0 |
| ***December*** | 324,780 | 0 | 324780 | 0 |
| **2025 Subtotal** | **5,485,983** | **46,585** | **5,054,199** | **385,199** |
| **GRAND TOTALS** | **32,553,307** | **843,910** | **28,647,674** | **3,061,723** |

* September 2019 program inception.

** No Black carp reported as these are reported through the Black Carp Bounty Program.

# INVASIVE CARP CONTRACTED FACILITATION PROGRAM

ILDNR

## Introduction

In July 2025, the Contracted Facilitation Program was initiated in the three pools of the Illinois River where the Enhanced Contract Fishing Program currently operates – the Peoria, LaGrange, and Alton pools. The program's goal is to help reduce the cost of transporting invasive carp caught in the three pools to processing facilities. The program offers Illinois fish processors and other buyers $0.05 per pound to purchase invasive carp caught in the three pools from commercial fishers. To date, four processors have entered into contracts to buy under the program. A total of 2,453,826 pounds of invasive carp have been caught. Of these total catches, 8.58% are Bighead, 85.82% are Silver, and 5.61% are Grass carp.

## December 2025 Highlights

The table below summarizes the total pounds of invasive carp caught through Contracted Facilitation Program.

| YEAR | Total Lbs.** | Bighead | Silver | Grass |
|---|---|---|---|---|
| **2025 Part Year** | - | - | - | - |
| ***July**** | 442,392 | 2,130 | 415,749 | 24,513 |
| ***August*** | 561,249 | 7,836 | 499,735 | 53,678 |
| ***September*** | 571,160 | 6,314 | 530,015 | 34,831 |
| ***October*** | 436,728 | 2,650 | 409,561 | 24,517 |
| ***November*** | 252,702 | 1,921 | 250,781 | 0 |
| ***December*** | 189,595 | 189,595 | 0 | 0 |
| **2025 Part Year Subtotal** | **2,453,826** | **210,446** | **2,105,841** | **137,539** |
| **GRAND TOTALS** | **2,453,826** | **210,446** | **2,105,841** | **137,539** |

* July 2025 program inception.

** No Black carp reported as these are reported through the Black Carp Bounty Program.

# USFWS ILLINOIS WATERWAY HYDROACOUSTICS

USFWS

## Introduction

The purpose of USFWS hydroacoustic monitoring in the upper Illinois Waterway (IWW) is to enhance invasive carp management by reporting spatial and temporal patterns of fish abundance. Having a greater understanding of the temporally varying abundances and spatial distributions of fishes in the vicinity of the electric dispersal barrier system (EDBS) is important to barrier management as it allows operational and maintenance decisions to be made while considering potential risk factors. These surveys will provide abundance estimates of fish targets ≥12 inches, as well as geospatial distribution, and fish target depth information which will also assist commercial fishers in targeting areas with high abundances of large fish targets. When hydroacoustic estimates of length and depth of targets is paired with corresponding telemetric data, managers can make inferences about possible fish species and implement further management decisions. Hydroacoustic surveys conducted at the EDBS may produce targets that are detected across replicate surveys and may identify the same target. USFWS hydroacoustic barrier surveys are conducted monthly, and pool scans are conducted annually in the fall. Additional barrier and pool scans can be conducted upon request. Further details regarding the methods of data collection and use of hydroacoustic data can be provided upon request.

## December 2025 Highlights

The results of the mobile hydroacoustic fish surveys are presented below:

- Hydroacoustic barrier scan on December 9th, 2025, identified six targets within and just below the EDBS.
- Figure 1 shows the average targets detected across all three replicate surveys.
- No hydroacoustic pool scans were completed in the month of December.

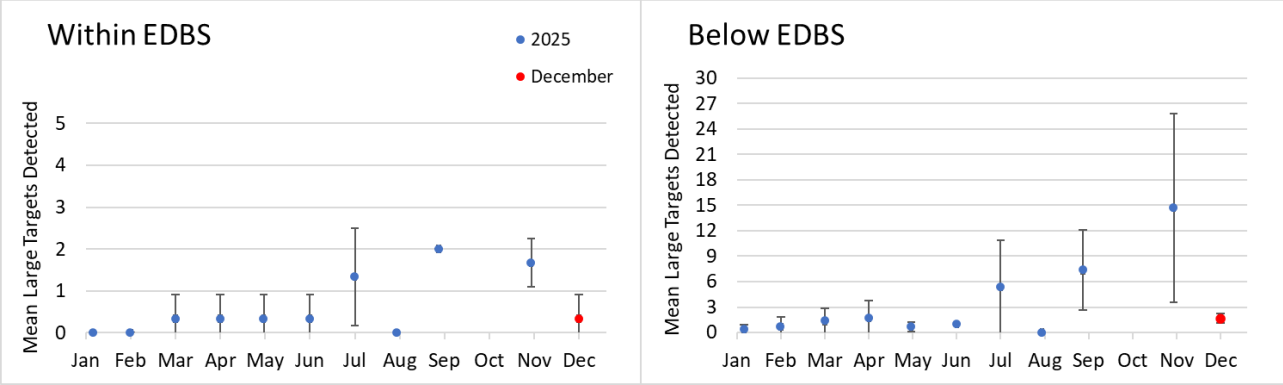


*Figure 1. Comparison of the mean and standard deviation for three replicate surveys from the current mobile surveys with previous surveys from 2025.*

# SUPPORT FOR EARLY DETECTION OF INVASIVE CARP IN THE UPPER ILLINOIS WATERWAY

USFWS Wilmington

## Introduction

The purpose of U.S. Fish and Wildlife Service (USFWS) Wilmington Substation's early detection monitoring (EDM) is to detect juvenile and adult invasive carp (Bighead, Silver, Black, and Grass Carp) at the invasion front. A combination of traditional boat electrofishing, electrified dozer trawling, mini-fyke netting, and gill netting are used in main-channel border, side-channel, and backwater habitats in the Marseilles, Dresden Island, Brandon Road, and Lockport Pools of the upper Illinois Waterway (IWW), and lower Kankakee River. Rarefaction analysis is performed annually to ensure an extremely high probability that sampling efforts are detecting any changes in invasive carp population status. The application of fishing gears across pools and habitats, utilizing fixed and random sites, is assessed annually based on the results of this analysis. The USFWS Great Lakes EDM Program is an adaptive management tool focused on invasive species detection.

## December 2025 Highlights

Agency stated there were no updated for the Dec. 2025 report.

# MONITORING INVASIVE CARP REPRODUCTION IN THE ILLINOIS WATERWAY

INHS

## Introduction

This project monitors for invasive carp reproduction in the IWW and major tributaries (Kankakee, Fox, Vermilion, Mackinaw, Spoon, and Sangamon rivers). Ichthyoplankton sampling will be conducted to assess the extent, timing, and magnitude of invasive carp reproduction in the IWW, monitor for Black Carp reproduction, and quantify relationships between invasive carp adult abundance, reproductive output, and recruitment. Samples will be collected from late April through October, with more frequent sampling effort during periods when temperature and flow conditions are considered optimal for invasive carp spawning.

## October - December 2025 Highlights

INHS completed monitoring for invasive carp reproduction during the last week of September. During October – December, identification of collected eggs and larvae was completed, with data QA/QC ongoing. Invasive carp eggs were identified in samples as far upstream as the Marseilles Pool, whereas invasive carp larvae were identified in and downstream of the upper Peoria Pool in 2025. No evidence of invasive carp reproduction was identified upstream of the Dresden Island L&D during 2025. Analysis of data collected during 2025 is ongoing and results will be reported as soon as they are available.

# DECEMBER SUMMARY OF THE TELEMETRY SUPPORT FOR THE SEICARP MODEL

USFWS

## Introduction

This project provides support for the inter-agency telemetry array deployed in the Illinois River basin. The 2025 plan of work for USFWS placed 150 acoustic transmitters in Silver Carp and Bighead Carp across the Peoria, Starved Rock, and Marseilles Pools. Forty-five of these tags were implanted in bigheaded carps in Marseilles Pool to support detection efforts by agency partners outside USFWS. USFWS maintained 18 receivers across the Peoria and Starved Rock Pools in 2024. In 2025, two additional receivers were added to Starved Rock Pool. The data gained from the additional tagged fish and additional receivers will improve the accuracy of MRWG modeling work, allowing improved estimates of current levels of exploitation and bolstering estimates of large-scale pool-to-pool movement. The receiver names and locations in the telemetry array are listed in table 1 and figure 1.

## December 2025 Highlights

- USFWS recovered their receivers from the telemetry array from December 1st-3rd for the end of the 2025 field season. The data on receivers covered periods from September 9th to December 3rd. The data was added to the USFWS telemetry database and United States Geological Survey's Riverine Acoustic Fish Tracking (RAFT) database on December 12th.
- Sixteen of the 20 receivers could be recovered due to ice preventing retrieval and download. The remaining four receivers in Peoria pool will be retrieved and downloaded when conditions on the river improve.
- A total of detections 444,394 were recorded from 112 unique transmitters. Fifty-four transmitters were recorded on a single receiver while 14 transmitters were only recorded once on a single receiver. Five transmitters were detected moving only upstream from their origin of detection. Fifteen transmitters were detected moving only downstream from their origin. Three transmitters ended their transmission upstream of their origin and 10 ended their transmission downstream of their origin. Eleven transmitters returned to their origin at the end of their transmission.

*Table 1. Receiver deployments and summary of detections from March-July. "US" denotes "upstream", "DS" denotes "downstream", "MC" denotes "main channel", and "RM" denotes "river mile". River mile is denoted for the Fox River receivers in relation to their longitudinal location along the Illinois River. Receiver number references its location in the map in figure 1. Note that Station Numbers 1-4 are blank due to them not being recovered due to ice conditions.*

| Station Number | Receiver ID | Receiver Number | Unique Tags | Number of Detections |
|---|---|---|---|---|
| 1 | RM164.8 Lower Peoria_Lake_Point_River Left | 489204 | - | - |
| 2 | RM166.6 Peoria Lake Narrows | 489205 | - | - |
| 3 | RM173 Upper Peoria Lake_River Right | 137065 | - | - |
| 4 | RM173 Upper Peoria Lake_River Left | 489207 | - | - |
| 5 | RM182.4 US Chilli Bridge_Peninsula | 489206 | 3 | 337 |
| 6 | RM188.1 DS Lacon_MC Sawyer Slough | 137064 | 13 | 11,014 |
| 7 | RM194.8 US Upper Henry Island | 489208 | 3 | 12,306 |
| 8 | RM199.1 Senachwine Lake Peninsula | 489209 | 5 | 24,362 |
| 9 | RM202.7 Lower Twin Sisters Island | 489211 | 4 | 22,359 |
| 10 | RM211 MC Near Depue Lake Channel | 137066 | 3 | 24,516 |
| 11 | RM216 US of Clark Island | 489039 | 1 | 112 |
| 12 | RM219.8 US Spring Valley River Left | 491941 | 9 | 21,668 |
| 13 | RM223 Peru US Route 251 Bridge | 489037 | 3 | 26,797 |
| 14 | RM233.9 Lone Point Delbridge Side Channel | 489212 | 16 | 33,550 |
| 15 | RM235.1 MC Sheehan Island | 490949 | 41 | 71,957 |
| 16 | RM238.5 Hitt-Mayo Straight | 489040 | 33 | 52,537 |
| 17 | RM241 Bulls Island MC Abandoned Harbor | 490950 | 9 | 37,236 |
| 18 | RM243 US of Heritage Harbor River Left | 491939 | 15 | 79,350 |
| 19 | RM239.8 Fox River-US Illinois River Confluence | 491940 | 0 | 0 |
| 20 | RM241 Fox River-US Rt.6 Bridge | 129787 | 18 | 26,293 |
| - | - | **Totals** | 158 | **444,394** |

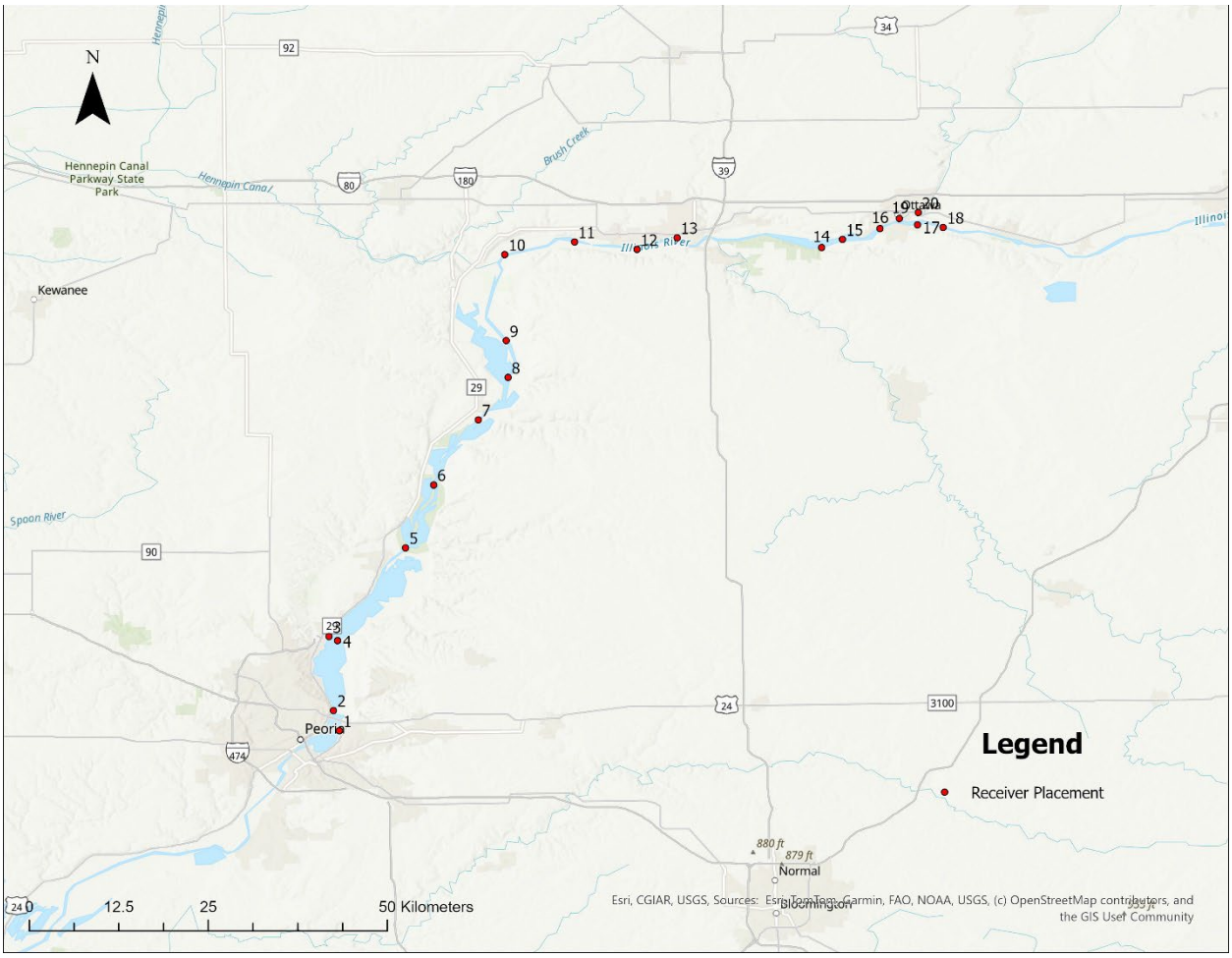


*Figure 1. USFWS Wilmington receiver placements in Peoria and Starved Rock Pools. The numbers reference the receiver's name and location in table 1.*

# TELEMETRY MONITORING PLAN

USACE

## Introduction

The telemetry monitoring plan includes tagging fish with individually coded ultrasonic transmitters in the Upper IWW. The acoustic network is comprised of stationary receivers supplemented (when necessary) by a mobile hydrophone unit to collect information from acoustic transmitters (tags) implanted into Bighead Carp, Silver Carp, and surrogate species. Acoustic receiver coverage within the Upper IWW primarily focuses on the EDBS, with secondary coverage surrounding lock and dams and emigration routes, such as tributaries and backwater areas. As of 2025, USACE operates 41 receivers between the confluence of the Cal-Sag and CSSC and the Dresden Island Lock and Dam.

## December 2025 Highlights

The agency did not provide an update for December 2025.

# ALTERNATE PATHWAY SURVEILLANCE IN ILLINOIS – LAW ENFORCEMENT

IL DNR

## Introduction

This project enforces laws enacted to prevent the expansion and/or introduction of aquatic invasive species (AIS) within the waters of the State of Illinois and jurisdictions throughout the Great Lakes basin. The IL DNR Invasive Species Unit (ISU) specializes in closely regulating water-related industries that are likely to be a source of future introductions or expansion of AIS into state waters. Industries include sport and commercial fishing, aquaculture, fish transportation, bait, pet, aquarium, fish stocking, and live food markets.

## December 2025 Highlights

ISU investigated a complaint of an ethnic grocery store in Chicago's Chinatown illegally advertising and selling live Asian swamp eels. Asian swamp eels are air-breathing fish native to Southeast Asia. They thrive in muddy, stagnant waters and can survive out of water for lengthy periods. Asian swamp eels are on the IDNR injurious species list which prohibits the possession, purchase, sale, or transportation of them alive. The eels disrupt ecosystems by preying on native species and outcompeting local wildlife. The investigation led to the confiscation of 33 pounds of live Asian swamp eels from the Chicago store valued at approximately $400. Additional evidence seized during the investigation included communication records, bank records, shipping documents, and invoices. The out-of-state wholesaler who sold and transported the eels into Illinois faces felony state charges and federal charges under the Lacey Act for falsely labeling the shipment as live Dungeness crabs. ISU communicated with the United States Fish and Wildlife Service and state DNR law enforcement investigators in the importer's state and learned state officials are currently investigating the same wholesaler for similar but separate offenses.

# INVASIVE CARP POPULATION MODELING TO SUPPORT AN ADAPTIVE MANAGEMENT FRAMEWORK

USGS, USFWS

## Introduction

This project will develop objective, data-driven models to inform decisions concerning invasive carp control efforts in the Illinois River. This project supports ongoing modeling efforts to provide recommendations about the magnitude and spatial allocation of fishing effort and deterrent barriers to reduce the risk of Silver Carp and Bighead Carp introduction and establishment in the Great Lakes.

## December 2025 Highlights

The modeling work group is in the process of publishing two manuscripts. The first describes the results of an occupancy model designed to inform the level of sampling effort necessary to detect silver carp in the upper Illinois River using different gear types. This study aims to optimize detection methods for silver carp, thereby aiding in their management and control. This manuscript is currently undergoing revision following peer review.

The second manuscript focuses on understanding how including a connection to the Mississippi River impacts the effectiveness of potential management actions using the SEICarP model. This work aims to evaluate the influence of the Mississippi River on the spread and control of invasive carp. This manuscript has been sent to the USGS UMECS Center Director for approval before being submitted for peer review.

Lastly, the modeling work group is continuing its rarefaction analysis of community data from the upper Illinois River to examine the potential for this analysis to help inform EDM sampling.

# INVASIVE CARP STOCK ASSESSMENT IN THE ILLINOIS RIVER

IL DNR

## December 2025 Highlights

The agency did not submit a response for the December monthly report.

# BLACK CARP BOUNTY PROGRAM

ILDNR

## Introduction

In 2015, the Black Carp Bounty Program was created to increase the number of black carp specimens made available for research to provide improved information on the status and characteristics of these carp in the Mississippi River and its tributaries. Knowledge of black carp geographic distribution, population characteristics, and diet are needed to inform development of management strategies to control black carp abundance, impacts, and further range expansion.

Nearly all black carp detected in the Mississippi River and tributaries are caught and reported by commercial fishers, largely due to the difficulty in sampling black carp in large rivers and limited agency and university sampling efforts focused on this species. The Black Carp Bounty Program was created to provide a reward of $100 per fish to provide incentive for commercial fishers to target black carp in the wild, report any black carp that they catch to agency biologists, and donate the fish for black carp research.

## December 2025 Highlights

The table below summarizes the total number of Black carps caught since transition of the program from Southern Illinois University to IDNR to Tetra Tech.

| Month | # of Fish |
|---|---|
| **2023 *** | 11 |
| **2024** | 116 |
| **2025** | - |
| ***January*** | 10 |
| ***February*** | 6 |
| ***March*** | 4 |
| ***April*** | 9 |
| ***May*** | 20 |
| ***June*** | 15 |
| ***July*** | 21 |
| ***August*** | 16 |
| ***September*** | 11 |
| ***October*** | 15 |
| ***November*** | 8 |
| ***December*** | 32 |
| **2025 Total** | 167 |
| **GRAND TOTALS** | **294** |

* Records start July 1, 2023.

# ENHANCED DETECTION OF BLACK CARP IN THE LOWER ILLINOIS RIVER

IL DNR/INHS-IRBS

## Introduction

Exotic black carp *Mylopharyngodon piceus* have invaded the Illinois River system and have been recently captured in the Alton, La Grange, and Peoria reaches of the lower Illinois River. Currently, the invasion of black carp is represented by only a few reported individuals and little is known about the size of the population or potential scope of ecosystem changes that may result from the invasion. The Illinois Department of Natural Resources (IDNR) has been closely monitoring the range expansion of black carp up the Illinois River, despite limited catches reported to date.

Critical to any inferences made about the range expansion of black carp is better knowledge of their population levels in invaded reaches. The limited number of black carp reported have been from incidental commercial fishermen catches while targeting other species (e.g., bighead carp, silver carp, common carp, grass carp, buffalo spp., catfish spp.). These captures and associated data (e.g., length, weight, age, diet, otolith microchemistry.) are valuable, but the limited number of reported individuals makes it difficult to assess their prevalence/establishment in the lower Illinois River. More robust estimates of the current population level are essential to management and potential control of black carp in the Illinois River.

## December 2025 Highlights

We concluded our 2025 sampling efforts on the Alton Reach of the Illinois River on October 24. We completed 195 total sampling sites with each site consisting of a small (2ft diameter) and a large (4ft diameter) hoop net set side-by-side parallel to the shoreline. All associated data has been entered and checked for completeness.