

## July Summary

**Bottom Line:** Monitoring occurred in the CAWS and upper Illinois Waterway upstream and downstream of the Dispersal Barrier in July. NO BIGHEAD OR SILVER CARP were reported captured or observed upstream of the Barrier, nor were any found in new locations downstream of the Barrier.

## Alternate Pathway Surveillance-Urban Pond Monitoring



7/31/13

- Four Asian carp crew members conducted an electrofishing operation at the Humboldt Park Lagoon in Chicago. Five bighead carp were captured, ranging in weight from 48-66 lbs and length from 45-47 inches. An additional 11 grass carp and 21 common carp were netted as well. There is no connection to Lake Michigan from the Humboldt Park Lagoon.

## Fixed and Random Site Sampling Upstream of the Dispersal Barrier

**Site 1:** Lake Calumet

**Site 2:** Little Calumet River

**Site 3:** Chicago Sanitary and Ship Canal near Western Ave. and South Branch Chicago River

**Site 4:** North Branch Chicago River and North Shore Channel

**Site 5:** North Shore Channel

**Area 1:** Lake Calumet Connecting Channel and Calumet River above O'Brien Lock

**Area 2:** Calumet-Sag Channel

**Area 3:** Chicago Sanitary and Ship Canal, Western Ave. to Dispersal Barrier

**Area 4:** North Shore Channel, North Branch Chicago River and Chicago River

- Two crews from the Illinois Department of Natural Resources (IDNR) completed 30 electrofishing runs at the five fixed sites listed above. (7.5 hours total) and 16 runs at randomly selected locations in the four random site areas upstream of the Dispersal Barrier (4 hours total) during the week of July 29.
- A electrofishing crew at site 4 of the North Branch Chicago River collected a Silver arowana *Osteoglossum bicirrhosum* (pictured below) this species is native to South America and generally raised as an aquarium species.



- Two contracted commercial fishing crews and assisting IDNR biologists set 3.1 miles of net (27 sets) at the five fixed sites and 2.2 miles of net (19 sets) at random sites upstream of the Barrier during the week July 9.
- Two contracted commercial fishing crews and assisting IDNR biologists set 3.1 miles of net (27 sets) at the five fixed sites and 2.2 miles of net (19 sets) at random sites upstream of the Barrier during the week July 23.
- No Bighead or Silver Carp were reported captured or seen above the Dispersal Barrier.

#### **Fixed and Random Site Sampling Downstream of the Dispersal Barrier**

**Site A:** Lockport Pool – Lockport Lock and Dam to Electric Barrier

**Site B:** Brandon Road Pool – Brandon Road Lock and Dam to Lockport Lock and Dam

**Site C:** Dresden Island Pool – I-55 Bridge to Brandon Road Lock and Dam

**Site D:** Marseilles Pool – Rt. 47 Bridge (Morris) to Dresden Lock and Dam

- Crews from IDNR, U.S. Army Corps of Engineers (USACE), and U.S. Fish and Wildlife Service (USFWS) completed 32 electrofishing runs at fixed locations (8 hours total) and 32 runs at randomly selected locations (8 hours total) in the Lockport, Brandon Road, Dresden Island, and Marseilles pools downstream of the Barrier during the weeks of July 8 and July 22.
- No Bighead or Silver Carp were reported captured or seen in the Lockport, Brandon Road, or Dresden Island pools. During fixed site electrofishing during the month of July, 7 Silver Carp were captured in the Marseilles pool (near Morris). No Bighead Carp were captured in the Marseilles pool while electrofishing.
- Two contracted commercial fishing crews and assisting IDNR biologists set 3.64 miles of net (32 sets) at the four fixed sites and 3.64 miles of net (32 sets) at random sites within the four pools downstream of the Barrier during the weeks of July 8 and July 22. One Silver Carp and one Bighead Carp were collected at random sites in the Marseilles pool. During fixed site netting in the Marseilles pool, 60 Silver Carp and 21 Bighead Carp were collected.
- Crews from IDNR set and pulled hoop nets (6' diameter) in Lockport, Brandon Road, Dresden Island, and Marseilles pools downstream of the barrier during the week of July 15. No Bighead or Silver Carp were captured.
- IDNR crews set and pulled minnow fyke nets in Lockport, Brandon Road, Dresden Island, and Marseilles pools downstream of the barrier during the week of July 15. No bighead or silver carp were captured in minnow fyke nets.

### **Rock Run Rookery Preserve Lake**

Contracted commercial fishing crews fished the Rock Run Rookery Preserve Lake in Will County by the Will County Forest Preserve. In June contracted fisherman netted two days showing a general decline catches. Below is a quick summary of activities in the Preserve Lake since sampling was initiated in the lake.

Rock Run Summary	
<b>Sets</b>	80
<b>Effort (yds)</b>	49650
<b>Miles of Net</b>	28.2012
<b>Person-Days</b>	107
<b>Bighead</b>	915
<b>Silver</b>	62
<b>Grass carp</b>	3
<b>Total AC removed</b>	980
<b>Total AC lbs removed</b>	23654.4
<b>Tons</b>	9.46176

## **Barrier Defense**

Barrier defense was conducted the weeks of the 3rd and 17<sup>th</sup> during the month of June. The 2013 Barrier Defense commercial fishing resumed the Week of March 11 th. Seventeen barrier defense weeks have been schedule for 2013. Below is a quick summary of the activities for 2013.

<b>QUICK SUMMARY:</b>		
<b>Number of Days Fished</b>	32	days
<b>Number of Net Crews</b>	160	crew-days
<b>Miles of Nets Fished</b>	161.2	Miles
<b>Number of Bighead Carp</b>	7315	Fish
<b>Number of Silver Carp</b>	15908	Fish
<b>Number of Grass Carp</b>	146	Fish
<b>Number of Asian Carp (AC)</b>	23369	Fish
<b>Tons of AC Harvested</b>	138.7	Tons
<b>CPUE: Number of Asian Carp/ 1,000 yards net</b>	82	Fish

## **Fish Behavior Study at the Barrier**

On 7/2 USFWS -Carterville performed SONAR scans of the barrier system before and after barrier generator testing. We also performed a SONAR scan of Lockport Pool.

From 7/15-19 USFWS-Carterville performed our barge-fish interaction evaluations at the barrier by placing tagged fish in various parts of barges as they were traversing the barrier.

From 7/30-8/1 USFWS-Carterville recorded DIDSON footage over the narrow arrays by deploying two DIDSON units off of a boom truck from the western shoreline.

USACE recapture efforts were completed through four hours of shocking upstream and four hours shocking downstream of the dispersal barriers with three 15 minute runs completed between the barriers. Four minnow traps were also set for two nights above and below the demonstration barrier. No marked fish were recaptured during these efforts. Eight common carp over 12" were captured and removed from between the demonstration barrier and barrier IIB. Other species removed from between the barriers include green sunfish, round goby and bluegill.

## **Telemetry Monitoring Project**

From July 22-26, another crew from Southern Illinois University Carbondale (SIUC) collected and downloaded data from our VR2 receivers and HOBO temperature loggers in the Illinois River.

Mobile tracking and stationary receiver downloads were completed on 29 July through 5 August. Data is currently being analyzed but no Asian carp were observed to have moved upstream of the Brandon Rd Lock although several Asian carp approached the downstream side within the Dresden Island pool.

### **Water Gun Development and Testing**

- Completed fish behavioral testing with acoustically tagged silver carp, bighead carp and 4 native fishes in UMESC ponds (July 2013)
- Completed refined pressure mapping of 80 cubic inch guns in UMESC ponds (July 2013)
- Completed field trials at Hanson Material Services test site to evaluate water guns as a deterrent barrier within the connecting chute between the Illinois River and the Hanson Material Services mining pit (July 2013)
- Initiated testing of integrated pest management project to evaluate the water guns operated in conjunction with algal feeding attractants and commercial fishing to reduce fish populations

### **Ontario Ministry of Natural Resources (MNR) – Asian Carp Surveillance Program**

#### Great Lakes Surveillance

- The Lake Erie Management Unit's regular sampling programs are under way including
  - A full Port Officer presence in the commercial fishery
  - Commercial catch sampling program
  - Trawling programs in east and west basins of Lake Erie
  - Seining programs on Lake St. Clair
  - No Asian Carp have been detected through these activities to date.
- MNR eDNA surveillance at 21 sites in Lake Erie as well as taking eight samples from Lake St. Clair and three samples from southern Lake Huron. This completes the field sampling component of the eDNA surveillance (total 141 samples from 79 sites). Sites target suitable habitats identified in the DFO Ecological Risk Assessment on Bigheaded Carps. Analysis to date has not detected Asian carp DNA and analysis of some samples is pending.
- MNR's surveillance activities are being conducted in coordination with the DFO.

### **Alternate Pathway Surveillance in Illinois - Law Enforcement**

- Invasive Species Unit (ISU) initiated and now is involved in a joint investigation with USFWS on commercial fishing and commercial roe harvester violations in Illinois.
- ISU investigated a complaint of an illegal aquaculture facility operating in Region three. The subject was found to be raising several hundred catfish in a modified swimming pool on his property and had raised other aquatic life in the facility in the previous years. The subject did not have an aquaculture permit and appropriate enforcement action was taken. The subject was put in contact with IDNR - Aquaculture permit section to get information on obtaining a permit.