

September Summary

Bottom Line: Monitoring occurred in the CAWS and upper Illinois Waterway upstream and downstream of the Dispersal Barrier in September. 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.

Due to the Federal Government Shutdown some reports are absent and may be included in an update later this month or in the October Summary.

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

- One crew from the USFWS completed 30 15-minute electrofishing runs at five fixed sites (7.5 hours total) and 16 15-minute runs at randomly selected locations within the four random areas upstream of the Dispersal Barrier (4 hours total) during the week of September 23.
- Two contracted commercial fishing crews and assisting IDNR biologists set 2.8 miles of net (25 sets) at the five fixed sites and 2.2 miles of net (19 sets) at random sites upstream of the Barrier during the week September 3.
- 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 September 16.
- **No Bighead or Silver Carp were reported captured or seen upstream of 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 September 3 and September 16.

- No Bighead or Silver Carp were reported captured or seen during electrofishing in the Lockport, Brandon Road, or Dresden Island pools. During fixed and random electrofishing in the month of September, 43 Silver Carp were captured at fixed sites and 2 Silver Carp were captured at random sites in the Marseilles pool. 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 September 3 and September 16.
- No Bighead or Silver Carp were reported captured or seen during commercial netting in the Lockport, Brandon Road, or Dresden Island pools. Eleven Silver Carp and 1 Bighead Carp were collected at fixed sites in the Marseilles pool near Morris. During random site netting in the Marseilles pool, 1 Bighead Carp was collected downstream of Seneca, IL.
- 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 September 23. 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 September 23. 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 September contracted fisherman netted one day collecting 45 Bighead Carp and one Silver carp. Below is a quick summary of activities in the Preserve Lake since sampling was initiated in the lake November 2, 2012.

Rock Run Summary	
Sets	92
Effort (yds)	57850
Miles of Net	32.8588
Person-Days	119
Bighead	1022
Silver	63
Grass carp	3
Total AC removed	1088
Total AC lbs removed	26259.6
Tons	13.1298

Barrier Defense

Barrier defense was conducted the weeks of the September 3rd and 10Th .Below is a quick summary of the activities for 2013 with 6 sampling weeks remaining.

QUICK SUMMARY:		
Number of Days Fished	48	days
Number of Net Crews	240	crew-days
Miles of Nets Fished	246.6	Miles
Number of Bighead Carp	9976	Fish
Number of Silver Carp	24022	Fish
Number of Grass Carp	165	Fish
Number of Asian Carp (AC)	34163	Fish
Tons of AC Harvested	198.6	Tons
CPUE: Number of Asian Carp/ 1,000 yards net	79	Fish

Gear Comparison

The INHS evaluated relative efficiency of traditional (gill nets, electrofishing, mini-fyke nets, beach seines, trammel nets, small hoop nets) and new gears (surface-to-bottom gill nets and large hoop nets) at 10 sites during September 2 – October 3, 2013. This completes the fall sampling period for the gear comparison study. Across all gear types (traditional and new gears), no Asian carp were captured or observed at either Western Ave. (RM 320-321) or at O'Brien Lock and Dam (RM 319-322) in the CAWS. At I-55 (RM 277-280) in the Dresden Pool, we captured one bighead carp. At Material Services Pit (RM 262-265), we captured 3 silver carp. At Ottawa (RM 239-242), we captured 6 bighead carp and 28 silver carp. At Henry (RM 189-197), we captured 17 bighead carp and 161 silver carp. At Peoria Lock and Dam (RM 155-157.5), we captured 4 bighead carp, 118 silver carp, and 1 hybrid Asian carp. At Havana (RM 119-122), we captured 7 bighead carp and 269 silver carp. At Matanzas Lake (RM 115-117), we captured 13 bighead carp and 152 silver carp. At Lily Lake (RM 83-84), we captured 16 bighead carp and 40 silver carp. No age-0 Asian carp were captured or observed at any site.

Larval fish and Productivity Sampling

INHS sampling for productivity and larval fish occurred bi-weekly during September. Processing of water chemistry and zooplankton samples is ongoing. Twenty-two zooplankton samples and forty-two larval fish pushes (13 sites) were conducted each week during the weeks of September 2-6, September 16-20, and September 30-October 4 throughout the Illinois Waterway. All larval fish samples from sites in and upstream of the Peoria Pool have been processed and identified for August and September. No Asian carp eggs or larval Asian carp were found in August or September samples from the CAWS, Brandon Road Pool, or any other sites in the Illinois Waterway upstream of the LaGrange Pool. Very few larval fish of any species were observed in these samples due to many fish species having concluded spawning

activities. Samples from the LaGrange Pool are still being processed and prepared for identification and enumeration.

Telemetry Monitoring Project

Preliminary receiver analysis was completed from August through September 2013 with the following results. No tags were detected upstream of the barriers. No tags were detected at the dispersal barriers out of six tags detected in the lower Lockport pool. Furthest upstream detection in the Lower Lockport pool occurred within the HMS slip about 1 mile south of the barriers. Only one tag was detected within the Brandon Rd pool at the Lockport Lock. This tag belongs to a common carp released within lower Lockport.

In the Dresden Island pool, only two common carp were detected approaching the Brandon Rd lock. Nine Asian carp (6 Bighead, 2 Silver, 1 Hybrid) were detected within the Rock Run Rookery (RRR) of which four actively moved in and out. One additional Bighead was detected just outside of RRR totaling 10 of 25 Asian carp tagged to return to this area. Three more of these fish (2 Bighead and 1 Silver) were detected exclusively below Big Basin Marina at the Dresden Island Lock. This brings our detection rate to just over 50% (13/25).

The Marseilles pool detections were concentrated at the HMS slip, mid-pool. One bighead detected at RRR was also observed to pass into this pool and continue all the way down to the Marseilles Lock. Six other AC were detected at the HMS only which was near their capture and release point in 2012 (4 Bighead and 2 Silver).

SIUC detections were also observed and that data is being sent to the PI for analysis.

From 23-27 September, two researchers checked on the 38 active VR2 receivers and HOBO temperature loggers that are in the Illinois River and associated tributaries and backwaters. One new receiver was redeployed in a former location, and batteries were changed on about half of the receivers. Initial data "clean-up" and analysis of movement data has been completed and is being summarized.

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

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
- Gill net programs in the eastern and western basins of Lake Erie
- No Asian Carp have been detected through these activities to date.

2013 eDNA surveillance testing for grass, bighead and silver carps is complete for water samples collected May-July at surveillance sites in Lake Erie, Lake St. Clair and southern Lake Huron (total 79 sites). No Asian carps DNA was detected in any of the samples. Sites targeted habitats suitable for Asian carps that were identified in the DFO Ecological Risk Assessment.

Evaluating Asian Carp Detection Techniques with Sonar

Researchers began the annual hydroacoustic and side-scan mobile surveys on the Alton pool of the Illinois River September 2-4 until an equipment failure caused the work to be temporarily postponed. The equipment has since been repaired and surveys are scheduled to continue beginning in October.