

Asian Carp Sampling Summary

A sampling summary for the week of September 10, 2012 is included below. All data presented in this summary are preliminary and subject to revision.

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

eDNA Monitoring Project

A crew from USFWS – La Crosse Fish and Wildlife Conservation Office obtained 60 water samples for eDNA analysis from the North Shore Channel and another 60 samples from the Chicago Lock-Bubbly Creek station on Tuesday, September 11. Samples were filtered at the USEPA lab in Chicago and forwarded to ERDC in Vicksburg, MS for analysis. Results of eDNA analysis will be reported on the USACE web site listed below as they become available. Special thanks to “the Canadian guy” David Marson for assisting with eDNA sampling.

<http://www.lrc.usace.army.mil/Missions/CivilWorksProjects/ANSPortal/eDNA.aspx>

Fixed and Random Site Sampling Upstream of the Dispersal Barrier

Site 1: Lake Calumet	Area 1: Lake Calumet Connecting Channel and Calumet River above O’Brien Lock
Site 2: Little Calumet River	Area 2: Calumet-Sag Channel
Site 3: Chicago Sanitary and Ship Canal near Western Ave. and South Branch Chicago River	Area 3: Chicago Sanitary and Ship Canal, Western Ave. to Dispersal Barrier
Site 4: North Branch Chicago River and North Shore Channel	Area 4: North Shore Channel, North Branch Chicago River and Chicago River
Site 5: North Shore Channel	

A crew from the USFWS – La Crosse FWCO completed 30 15-minute electrofishing runs at five fixed sites (7.5 hours total) and 10 15-minute runs at randomly selected locations in the four random site areas upstream of the Dispersal Barrier (2.5 hours total). In addition, two contracted commercial fishing crews and assisting IDNR biologists set 3.1 miles of net (27 sets) at the five fixed sites and 2.1 miles of net (19 sets) at random sites upstream of the Barrier. No bighead or silver carp were reported captured or seen above the Barrier.

Fixed Sites 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 the IDNR completed four 15-min electrofishing transects at each downstream fixed site (4.0 hours total). No bighead or silver carp were captured at Sites A and B, nor were any captured at new locations at Sites C and D. Contracted commercial net sampling at downstream fixed sites will occur during the week of September 17.

Additional Netting Downstream of the Dispersal Barrier

Two contracted commercial fishing crews and assisting IDNR biologists set 0.9 miles of net in Brandon Road Pool 5-10 miles downstream from the Dispersal Barrier. No Asian carp were captured or observed during this sampling.

Fish Behavior Study at the Barrier

Crews from USFWS-Carterville FWCO, with assistance from USACE and IDNR completed DIDSON surveys at 80 sites in the CSSC within and near the Barrier for a total of 800 minutes (13.3 hours) of DIDSON footage.

Barrier Defense Asian Carp Removal Project

Dresden Island Pool: 10-24 miles downstream from Dispersal Barrier

Marseilles Pool: 24-51 miles downstream from Dispersal Barrier

Starved Rock Pool: 51-65 miles downstream from Dispersal Barrier.

Contracted commercial fishers and assisting IDNR biologists set 16.5 miles of net in the Starved Rock, Marseilles and Dresden Island pools of the upper Illinois Waterway and removed 603 bighead carp, 1510 silver carp, and 30 grass carp. A cumulative summary of the 2012 removal effort to date is shown in the table below.

QUICK SUMMARY THROUGH: 10 September 2012		
Number of Days Fished	44	days
Number of Net Crews	215	crew-days
Miles of Nets Fished	179.6	miles
Number of Bighead Carp	14,563	fish
Number of Silver Carp	14,765	fish
Number of Grass Carp	151	fish
Number of Asian Carp (AC)	29,479	fish
Tons of AC Harvested	196.6	tons
CPUE (N/1,000 Yards of Net)	93	fish

Distribution of Small Asian Carp Study

A crew from the USFWS-Carterville FWCO sampled for young Asian carp with mini-fyke nets and trap nets in the Dresden Island Pool of the upper Illinois Waterway. Mini-fykes were fished for a total of 18 net-nights and trap nets were fished for a total of 4 net-nights. No small Asian carp <12 inches long have been captured to date.

Telemetry Monitoring Project

A crew from USACE completed mobile tracking from Bubbly Creek to Dresden Island Lock and Dam and downloaded VR2 receivers from the telemetry fixed-station receiver network. Preliminary analysis indicated that no tagged fish crossed the Dispersal Barrier in the upstream or downstream direction. In addition, mobile tracking showed that all tagged bighead carp from the Dresden Island Pool were located in the lower pool near and within the mouth of the Kankakee River.

Monitoring Asian Carp Population Metrics and Control Efforts

A crew from SIUC continued to evaluate hydroacoustics target strength and air bladder volumetric measurements with bighead and silver carp at an on-campus facility. Another crew worked in the Starved Rock Pool of the Illinois River conducting ADCP (acoustic doppler current profiler) surveys, and with assistance from IDNR, implanting acoustic telemetry tags in 52 silver and bighead carp.

Gear Evaluation Study

A crew from INHS completed the fall trial for the large pound (trap) net evaluation at a private Illinois River backwater near Morris, Illinois. The nets were checked and emptied at regular intervals (2-3 times per week for about 2 weeks) and captured fish were measured and weighed. A preliminary data summary for the fall trial is in preparation and additional trials will occur next spring.

The two pound nets set at the entrance to Lake Calumet in the CAWS were pulled the week of September 3. One net was vandalized and the other had become so fouled with zebra mussels that it was no longer fishing properly. The Lake Calumet nets are being dried out, cleaned and repaired. Current plans are to reset the nets at the entrance to Lake Calumet in early October.

Gear Evaluation (continued)

Additional crews from INHS sampled with multiple gears in the Peoria Pool near Henry and the Starved Rock Pool near Ottawa. Gears and effort are shown in the table below. Results will be forthcoming after data have been entered into a database, checked for accuracy and analyzed.

Gear/Method	Effort	Gear/Method	Effort
DC electrofishing	6 x 15-min. runs	Mini-fyke net	8 net-nights
Trammel net w/ pounding	4 sets	Small mesh purse seine	4 hauls
Small mesh gill net-sinking	4 x 4-hr. sets	Large mesh purse seine	4 hauls
Small mesh gill net-floating	4 x 4-hr. sets	Beach seine	4 hauls
Large mesh gill net-sinking	4 x 4-hr. sets	Cast Net	4 throws
Small mesh hoop net	8 net-nights	Midwater trawl	4 x 5 min. tows
Large mesh hoop net	8 net-nights	Hydroacoustics	15 min. runs
Trap net	8 net-nights		