

## Asian Carp Sampling Summary

A sampling summary for the week of October 1, 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 – Columbia Fish and Wildlife Conservation Office obtained 57 water samples for eDNA analysis from the North Shore Channel and another 57 samples from the Chicago Lock-Bubbly Creek station on Tuesday, October 2. 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.

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

The crew from Columbia FWCO obtained an additional 57 water samples from Lake Calumet on Thursday, October 4 in support of the eDNA transition between USACE and USFWS. Samples were filtered by USFWS staff at the USEPA lab in Chicago and forwarded the Fish Health Center in La Crosse for processing.

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

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

A crew from the USFWS – Columbia 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.

### 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.

### Asian Carp Monitoring in Small Ponds

Crews from IDNR electrofished and netted in Chicago area urban fishing ponds to sample for any bighead carp that may have been unintentionally stocked as contaminants in shipments of channel catfish made during the late 1990s and early 2000s. Sampling occurred in Columbus Park, McKinley Park, Sherman Park, Auburn Park, Marquette Park and Douglas Park lagoons. No bighead or silver carp were captured or seen in any of the ponds sampled this week. Additional Chicago Park District and Cook County Forest Preserve District ponds will be sampled the week of October 8.

### **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 Marseilles Pool of the upper Illinois Waterway. Mini-fykes were fished for a total of 23 net-nights and trap nets were fished for a total of 8 net-nights. No small Asian carp <12 inches long have been captured to date.

### **Telemetry Monitoring Project**

A crew from USACE captured and implanted acoustic transmitters in 15 small fish (green sunfish and pumpkinseed ranging in length from 3.6-5.2 inches) sampled from the Lockport Pool. The fish were released above and below active Barrier IIB in the first round of a repeat barrier efficacy experiment. All fishes were observed to swim away freely and dive toward the canal bottom immediately. Movement data will be downloaded from stationary VR4 receivers located near the barrier and summarized in a report after analysis is completed.

### **Monitoring Asian Carp Population Metrics and Control Efforts**

A crew from SIUC completed down- and side-looking hydroacoustics surveys within the main channel and associated backwaters in the Starved Rock Pool of the Illinois River, and began surveys in the Peoria Pool. Survey data will be used to quantify abundance, size distribution and biomass of Asian carp and other fishes in the river.

### **Larval Fish, Zooplankton, and Productivity Monitoring**

Two crews from INHS completed sampling for fish eggs and larvae, zooplankton, and phytoplankton productivity at the stations listed in the table below. Effort included four 5-minute tows for fish eggs and larvae with a 0.5-meter diameter ichthyoplankton push net, filtering 100 L of water for zooplankton, and taking water samples with an integrated tube sampler for productivity estimates. Samples are currently being processed.

<b>Pool and Station</b>	<b>River Mile</b>	<b>Pool and Station</b>	<b>River Mile</b>
CAWS		Peoria Pool	
Lake Calumet	327	Hennepin	~207-208
Little Calumet River	322	Henry/Lacon	189-197
Western Avenue	~320-321	Chillicothe	~178-180
Calumet-Sag Channel	~319	Upper Peoria Lake	~170-175
Worth Street	~311	LaGrange Pool	
Brandon Road Pool		Peoria Dam Tailwater	155-157.7
Lockport Tailwater	~289-291	Havana	119-122
Des Plaines River/CSSC confluence	~290	Bath Chute	107-113
Dresden Island Pool		Fredrick Main Channel	~97-98
Treats Island/I-55	277-279.5	Treadway Lake Backwater	~93.5
Marseilles Pool		Lilly Lake Backwater	83-84
Morris	262-265	Lilly Lake Main Channel	83-84
Starved Rock			
Ottawa	239.5-241.5		

### **Gear Evaluation Study**

A crew from INHS sampled with multiple gears in the LaGrange Pool of the Illinois River at Lilly Lake Backwater (River mile 83-84) and downstream from the Peoria L&D (River mile 154 – 157.5). In addition to the standard gears, 6-foot diameter hoop nets (set for two net nights) and surface to bottom gill nets (two sets) were evaluated at the Peoria site. Gears and effort are shown in the table below. Results will become available after data have been entered into a database, checked for accuracy and analyzed.

**Gear Evaluation Study (continued)**

<b>Gear/Method</b>	<b>Effort</b>	<b>Gear/Method</b>	<b>Effort</b>
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		