# **Asian Carp Sampling Summary**

A sampling summary for the week of August 6, 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 the USFWS – Carterville Fish and Wildlife Conservation Office obtained 57 water samples for eDNA analysis from the Chicago Lock-Bubbly Creek sampling station on Monday, August 6. Logistical problems prevented sampling at the North Shore Channel this week. 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.armv.mil/Missions/CivilWorksProjects/ANSPortal/eDNA.aspx

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

Site 1: Lake Calumet Connecting Channel and Site 2: Little Calumet River Calumet River Calumet River

Site 3: Chicago Sanitary and Ship Canal near Area 2: Calumet-Sag Channel

Western Ave. and South Branch Chicago River
Site 4: North Branch Chicago River and
North Shore Channel

Area 3: Chicago Sanitary and Ship Canal,
Western Ave. to Dispersal Barrier
Area 4: North Shore Channel, North Branch

Site 5: North Shore Channel Chicago River and Chicago River

A crew from the USFWS – Carterville FWCO completed 30 15-minute electrofishing runs at five fixed sites (7.5 hours total) and 10 15-minutes 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 0.8 miles of net (7 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

Contracted commercial fishers and assisting IDNR biologists set 1.8 miles of net (16 sets) at the four fixed sites downstream of the Barrier. No bighead or silver carp were captured at Sites A and B, nor were any captured at new locations at Sites C and D. Downstream fixed sites will be sampled with electrofishing gear during the week of August 13.

## 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.

## **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 18.7 miles of net in the Starved Rock, Marseilles and Dresden Island pools of the upper Illinois Waterway and removed 833 bighead carp, 905 silver carp, and 15 grass carp. A cumulative summary of the removal effort to date is shown in the table below.

QUICK SUMMARY THROUGH: 15 August 2012			
Number of Days Fished	40	days	
Number of Net Crews	195	crew-days	
Miles of Nets Fished	163.1	miles	
Number of Bighead Carp	13,960	fish	
Number of Silver Carp	13,207	fish	
Number of Grass Carp	121	fish	
Number of Asian Carp (AC)	27,288	fish	
Tons of AC Harvested	183.7	tons	
CPUE (N/1,000 Yards of Net)	95	fish	

# **Telemetry Monitoring Project**

Crews from USACE continued data downloads of VR4 receivers located at the Barrier in the CSSC near Romeoville.

#### Distribution of Small Asian Carp Study

A crew from the USFWS Carterville FWCO completed 30 15-minute electrofishing runs in the Dresden Island and Marseilles pools of the upper Illinois Waterway (7.5 hours total). No small Asian carp <12 inches long were reported captured during this sampling.

# Monitoring Asian Carp Population Metrics and Control Efforts

Two crews from SIUC completed standardized sampling in the Alton Reach, LaGrange Pool and Peoria Pool of the Illinois River. Sampling included electrofishing and netting at up to four paired main channel and backwater sites within each reach/pool. Information will be used to inform acoustic estimates of abundance, determine size distribution and biomass of Asian carp relative to native fishes, and examine how Asian carp demographics are responding to increased harvest.

# **Gear Evaluation Study**

The MRRWG has determined that the two pound nets set at the entrance to Lake Calumet will remain in place for an extended period of time to increase the chance of capturing any Asian carp that may be present in the area. While checking and emptying the nets, a crew from INHS discovered that one of the nets was vandalized. This damaged net had to be removed for repairs and will be reset as soon as possible (likely later this month). The other net continues to sample fish and is being checked and emptied at regular intervals (every 2-3 days). All captured fish were measured, weighed and released in the direction that they were traveling (i.e., into or out of the lake). No Asian carp have been captured in the Lake Calumet pound nets to date.

# 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.

Pool and Station	River Mile	Pool and Station	River Mile
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		