

## **Asian Carp Sampling Summary**

A sampling summary for the week of April 30, 2012 is included below.

**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.

### **Random Site Sampling Upstream of the Dispersal Barrier**

**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

A crew from the IDNR completed 30 15-minute electrofishing runs at five fixed sites and 12 15-minute runs at randomly selected locations in the four random site areas upstream of the Dispersal Barrier. In addition, two contracted commercial fishing crews and assisting IDNR biologists set 3.6 miles of net (24 sets) at the five fixed sites and set 0.7 miles of net (6 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 (12 sets) at the four fixed sites downstream of the Barrier. No Asian carp were captured at Sites A and B, nor were any found in new locations downstream of the Barrier.

### **Additional Netting Downstream of the Dispersal Barrier**

Two contracted commercial fishing crews and assisting IDNR biologists set 0.9 miles of net (6 sets) in Marseilles Pool. No Asian carp were captured in new locations downstream of the Barrier.

### **Upper Des Plaines River Monitoring Project**

A crew from the USFWS-La Crosse Fish and Wildlife Conservation Office with assistance from MWRD and IDNR electrofished and netted at three stations in the upper Des Plaines River downstream from the Hofmann Dam. Sampling included 6 hours of electrofishing and 0.8 miles of net set. No Asian carp were captured or seen.

### **Telemetry Monitoring Project**

Crews from USACE successfully downloaded data from VR4 receivers located in the CSSC near the Dispersal Barrier.

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

A crew from SIUC and a contracted commercial fishing crew with assisting IDNR biologist sampled and tagged bighead and silver carp in a private backwater of the Illinois River near Morris, IL. A total of 9.5 miles of net were deployed over the course of three days and a total of 320 Asian carp (279 bighead carp, 34 silver carp and 7 hybrids) were tagged with \$5 reward jaw tags. The tagging study will assess Asian carp movement patterns, estimate population size of Asian carp in the backwater, and provide an exploitation estimate for carp removed during the Barrier Defense Removal Program.

### **Remote Sensing Transects at the Barrier**

A crew from SIUC with assistance from the USACE and IDNR conducted two remote sensing surveys between the high-field electric array of Barrier 2A and Barrier 1. The surveys occurred within 24 hours of

a power outage at the barrier. Each survey consisted of three transects using a combination of side-looking split-beam hydroacoustics and side-scan sonar that covered an estimated 97.6% of the entire water column. Results indicated that there are a minimum of four fish >12 inches (species unknown) present between Barrier 2A and Barrier 1. These fish could have potentially entered this area from downstream during the 13 minute barrier outage. Although a meeting of MRRWG action agencies determined there is a low probability that these fish are Asian carp, the workgroup will further assess the situation and make recommendations regarding appropriate actions in the near future.

### **Gear Evaluation Study**

One INHS boat and crew sampled with multiple gears in the LaGrange Pool of the Illinois River at Matanza Backwater (River mile ~120) and the Havana area (River mile 119-122). In addition to the standard gears, crews at the Havana site evaluated 4-6' hoop nets (set for two net nights) and surface-to-bottom gill nets (4 sets). The table below shows the gear evaluated and amount of effort at each location.

<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		

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

Crews from INHS and Western Illinois University 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.

<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		