

## Asian Carp Sampling Summary

A sampling summary for the week of June 18, 2012 is included below. All data presented in this summary are preliminary and subject to revision.

**Bottom Line:** Monitoring occurred in the Illinois Waterway downstream of the Dispersal Barrier and in the upper Des Plaines River downstream from Hofmann Dam. NO BIGHEAD OR SILVER CARP were reported captured or observed in Des Plaines River sampling, nor were any found in new locations downstream of the Barrier. A fish clearing action at the Barrier with conventional gears resulted in the capture and removal of seven common carp >12 inches long from the area between Barrier 1 and 2B. All fish were captured in a surface-to-bottom gill net developed by a MRRWG multiagency gear development group.

### 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 and USACE completed four 15-min electrofishing transects at each downstream fixed site (4.0 hours total). No bighead or silver carp were reported captured or seen at Sites A, B and C nor were any captured at new locations at Site D. Contracted commercial net sampling at downstream fixed sites occurred during the week of June 25 and will be included in the next weekly summary.

### Distribution of Small Asian Carp Study

A crew from the USFWS Carterville Fish and Wildlife Conservation Office completed 18 15-minute electrofishing runs (4.5 hours total) in the Dresden Island and Peoria pools of the Illinois Waterway. No small Asian carp <12 inches long were reported captured 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 15.4 miles of net in the Starved Rock, Marseilles and Dresden Island pools of the upper Illinois Waterway and removed 1,693 bighead carp, 603 silver carp, and 6 grass carp. A cumulative summary of the removal effort to date is shown in the table below.

<b>QUICK SUMMARY THROUGH: 30 June 2012</b>		
<b>Number of Days Fished</b>	32	days
<b>Number of Net Crews</b>	155	crew-days
<b>Miles of Nets Fished</b>	125.4	miles
<b>Number of Bighead Carp</b>	11,654	fish
<b>Number of Silver Carp</b>	11,750	fish
<b>Number of Grass Carp</b>	105	fish
<b>Number of Asian Carp (AC)</b>	23,509	fish
<b>Tons of AC Harvested</b>	159.9	tons
<b>CPUE (N/1,000 Yards of Net)</b>	107	fish

### **Fish Clearing Action at the Barrier**

Crews from IDNR, USFWS, USACE and SIUC with project support from MWRD completed a safe and successful conventional gear fish clearing operation at the Barrier on June 21, 2012. The operation included two electrofishing boats (one surface and one deep-water shocker), two remote sensing boats with split-beam hydroacoustics, side-scan sonar and DIDSON imaging sonar, a gill net boat, and a safety/rescue boat. A stationary surface-to-bottom gill net developed by a MRRWG multiagency gear development group caught most of the large-sized fish targets identified by multiple remote sensing surveys in the barrier area (7 of 10 identified targets >12 inches long captured). All of the captured fish were common carp and all were removed from the waterway. The three remaining targets were characterized as “common carp like” when viewed by side-scan sonar and DIDSON (e.g., fish were close to structure or seeking confined spaces). These fish were observed near the west wall of the canal where cracks and crevices are most abundant. A recommendation has been made that the barrier zone be considered bighead and silver carp free at this time, requiring no further clearing activities until the next maintenance cycle or unplanned barrier outage.

### **Gear Evaluation Study**

Crews from INHS with assistance from a contracted commercial fisher completed a trial evaluation of Lake Michigan style pound (trap) nets in a private Illinois River backwater near Morris. Two nets were fished continually for 9 days and the traps were checked and emptied every 1-3 days. The nets caught a total of 2,513 fish representing 22 species and a bighead x silver carp hybrid. The catch of all Asian carp (bighead, silver, bighead x silver hybrid and grass carp) was 297 fish. A catch summary is included below.

### **Lake Michigan Pound (trap) Net Catch**

<b>Species</b>	<b>Date (June 2012)</b>						<b>Total</b>
	<b>12</b>	<b>13</b>	<b>14</b>	<b>18</b>	<b>19</b>	<b>20</b>	
Smallmouth Buffalo	3	139	42	329	153	126	792
Bigmouth Buffalo	6	87	30	188	98	200	609
Gizzard Shad	23	36	47	26	104	45	281
<b>Bighead Carp</b>	<b>24</b>	<b>15</b>	<b>2</b>	<b>63</b>	<b>97</b>	<b>45</b>	<b>246</b>
Freshwater Drum	2	9	14	125	19	7	176
River Carpsucker		5	13	49	19	18	104
Channel Catfish		6	8	46	12	5	77
White Bass		2	9	16	25	20	72
<b>Silver Carp</b>			<b>1</b>	<b>21</b>	<b>9</b>	<b>6</b>	<b>37</b>
Common Carp	1	1	2	13	6	5	28
White Crappie		4	4	3	6	2	19
Black Buffalo					9	6	15
Skipjack Herring	3	2	4	1	3	1	14
<b>Bighead x Silver Carp Hybrid</b>	<b>1</b>	<b>2</b>			<b>3</b>	<b>7</b>	<b>13</b>
Flathead Catfish			1	8	3		12
Quillback			1		3	1	5
Bluegill			2		1	1	4
Sauger			1		2		3
Yellow Bass					2		2
<b>Grass Carp</b>					<b>1</b>		<b>1</b>
Largemouth Bass						1	1
Shortnose Gar						1	1
Shorthead Redhorse		1					1
<b>All Species</b>	<b>63</b>	<b>309</b>	<b>181</b>	<b>888</b>	<b>575</b>	<b>497</b>	<b>2513</b>

### **eDNA Calibration Project (ECALS)**

Crews from USACE completed follow-up eDNA water sampling for the storm sewer experiment in the South Branch Chicago River near Cermak Road. Samples were filtered by USACE staff at the USEPA lab in Chicago and forwarded to ERDC in Vicksburg, MS for analysis.

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

A crew from SIUC conducted ADCP (acoustic doppler current profiler) surveys in the Mississippi River just below the Illinois River confluence, in the Illinois River just above the confluence, and in the Illinois River near Starved Rock. The scheduled 24-hour hydroacoustics survey at the inlet to an Illinois River backwater near Morris, Illinois was postponed due to equipment malfunctions. This diel survey will be rescheduled at a later date.

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

A crew from the USFWS-La Crosse Fish and Wildlife Conservation Office with assistance from MWRD electrofished at two stations and netted at three stations in the upper Des Plaines River downstream from Hofmann Dam. Electrofishing at the Riverside station was precluded by low water levels. Sampling effort included 3.5 hours of electrofishing and 333 yards of net set. A total of 642 fish representing 23 species were caught and returned to the river. No Asian carp were captured or seen.