Ecology South

July 2012

Printed Saturday, July 14, 2012

DNA of Asian carp found in Lake Erie

Presence of actual fish remains unclear

BLADE STAFF AND NEWS SERVICES

SOUTH BEND, Ind. Genetic material from Asian carp has been discovered in Lake

Erie water samples collected nearly a year ago, officials said Friday.

Researchers with the University of Notre Dame, Central Michigan University, and

The Nature Conservancy detected DNA from the invasive fish this week when

examining more than 400 samples taken in 2011.

It's the first time DNA from bighead and silver carp has turned up in Lake Erie,

although three bighead were caught there between 1995 and 2000.

Scientists are uncertain about whether carp DNA signals the presence of actual

fish, but the findings are unsettling because experts have described Lake Erie

as the lake that could suffer the biggest harm from an Asian carp incursion.

The DNA could be from other sources, such as feces from fish-eating birds.

Chris Jerde, a Notre Dame biologist and member of the team that discovered the

DNA, said the most likely explanation is that live Asian carp have reached the

lake, although their numbers and how they got in remain unknown.

"The number of alternative explanations is dropping precipitously," he said.

"It's still not a game-over situation. We don't know how many fish there may be

at this point. But the alarm bell has been sounded."

Four positive hits for bighead carp were found in samples from Sandusky Bay â€”

less than three miles from where the live bigheads were caught years ago.

Two hits for silver carp turned up in water from northern Maumee Bay in

Michigan.

The samples that tested positive were among 2,000 that Mr. Jerde and his

colleagues took from Lakes Michigan, Erie, and Superior in August last year as

part of a broader search for invasive species.

They have been processing the samples since then and found no Asian carp DNA

until this week, Mr. Jerde said.

"This is a sobering indicator," said Marc Gaden, spokesman for Great Lakes

Fishery Commission in Ann Arbor. "There should be no reason for Asian carp DNA

to be in Lake Erie. This is an early warning."

Officials with Ohio, Michigan, and the U.S. Fish and Wildlife Service will plan

more water sampling next week.

Although the smallest of the Great Lakes by volume, Lake Erie has the most

abundant fish population, thanks to its relatively warm temperatures and

plentiful food supply.

Asian carp have moved steadily northward in the Mississippi River and its

tributaries since escaping from Southern fish farms and sewage lagoons in the

1970s. They gobble huge amounts of plankton, a crucial nutrient for many fish.

An electric fish barrier near Chicago is meant to keep Asian carp out of the

Great Lakes.

More than 130 samples taken beyond that barrier in the waterways south of Lake

Michigan in the past three years have tested positive for Asian carp.

But despite intensive searches â€” the latest of which took place this week â€” just

one live bighead and no silver carp have been found there.

"It underscores the need to cut off Asian carp from the Great Lakes," said

Jordan Lubetkin, a spokesman for the National Wildlife Federation's Great Lakes

Regional Center, also based in Ann Arbor. "You need to build a physical barrier

to sever the connection. We are urging the government to take this a little more

seriously."

Scientists with the U.S. Geological Survey reported in January that the Maumee

River is a highly suitable area for Asian carp to spawn.

The Sandusky River was described as moderately suitable.

Congress recently gave the U.S. Army Corps of Engineers an 18-month deadline to

complete a study of how to prevent species invasions into the Great Lakes.