Fish die-off near Milwaukee signals latest lakes invader may be advancing on Chicago shores

By Michael Hawthorne

Killer virus threatens commercial and sport fishing in Great Lakes

When thousands of bloody, hemorrhaging fish recently turned up on the Lake Michigan shore south of Milwaukee, it confirmed the worst fears of scientists worried that an Ebola-like virus stalking Great Lakes fish would strike closer to Chicago.

The dead fish were round gobies, a small invasive species that many feel is better off dead. But unlike many other diseases that tend to hit one or two types of fish, this viral strain has led to large fish kills involving more than 30 species, including valuable sport fish such as salmon, trout, walleye, muskie, bass and perch.

The infection, called viral hemorrhagic septicemia or VHS, doesn't threaten human health but could be devastating to the $4 billion commercial and sport fishing industry in the Great Lakes.

"It looks like it could be the most serious problem we've dealt with," said Becky Lasee, project leader at a U.S. Fish and Wildlife Service laboratory in La Crosse, Wis., which has been deluged with fish samples collected from around the Great Lakes. "It's different because it affects so many different species."

Last month's goby die-off marks the first time the virus has been found in the southern part of Lake Michigan, and Illinois officials were worried enough that they redoubled their own testing efforts. Results are expected within the next two weeks from samples of dozens of fish recently caught near Waukegan.

Scientists are worried that as the disease continues to spread, infected fish might end up swimming into the Chicago River system, which links the Great Lakes to the Mississippi River and the nation's vast middle section.

It might already be too late. On Wednesday, Ohio officials announced they had discovered the virus in muskie caught in the central part of the state, the first time this strain was found outside the Great Lakes basin.

Like the round goby, viral hemorrhagic septicemia is an invasive species. The virus tends to be more destructive and pervasive here than in the lakes and rivers of Europe where it originated, but it's difficult to predict how it will affect Great Lakes species in the long term.

Some fish can resist the virus, but they can still spread it through urine and other fluids. Those that get sick become listless and ultimately bleed to death.

The VHS virus apparently is hearty enough to survive in the cold waters of the Great Lakes for up to 14 days. It even has been found in frozen bait.

U.S. and Canadian officials have tried to slow its spread by restricting the movement of hatchery fish and live bait among lakes.

"Unfortunately there isn't a get-well-quick pill out there to stop this thing," said Steve Pallo, acting chief of fisheries at the Illinois Department of Natural Resources. "We can only hope enough fish have developed resistance to prevent more of these large die-offs."

Scientists first confirmed the virus in the U.S. during the late 1980s in salmon and trout from the Pacific Northwest. It didn't turn up in the Great Lakes until 2005, when the virus was linked to fish kills in Lake Ontario, Lake Erie and the St. Lawrence Seaway.

On more than a dozen occasions during the following year, hundreds of dead fish suddenly would wash ashore along one of the lakes.

During the spring of 2006, the virus hit freshwater drum in western Lake Erie, then perch and sheepshead in the central part of the lake a few months later. It steadily moved across the lakes, killing muskies in the Detroit River and northern pike in Lake Huron, and infecting smallmouth bass near Green Bay.

The virus appeared to have gone largely dormant during the last year, but Wisconsin officials last week found it in yellow perch from Lake Michigan.

The VHS virus tends to thrive in water between 30 and 60 degrees. Water temperatures in Lake Michigan close to the Illinois shore are hovering near 60 degrees this week. Only Lake Superior, the coldest Great Lake, has avoided the virus so far.

It's unclear how VHS made it across the oceans. The likeliest culprit is the ballast tanks of cargo ships.

Scientists and fishery managers throughout the Great Lakes say the spread of VHS highlights the need for stronger laws regulating how ships handle ballast water.

Congress has been bickering for years about legislation that would require oceangoing ships to disinfect their ballast.

Many experts think there also should be more rigorous screening of imported goods for invasive species.

"This is a wake-up call for the entire region," said Marc Gaden, spokesman for

the Great Lakes Fisheries Commission. "Prevention should be our primary concern, not reaction."