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Bird flu outbreak could head eastward with fall migration

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Eastern U.S. poultry producers are bracing for the potential arrival of a deadly bird flu virus outbreak that farmers in the Midwest have struggled to stop.

The fear is that if the virus isn't already lurking undetected somewhere in the Atlantic Flyway, it could spread there this fall when wild ducks fly south for the winter or fly back north next spring. Eastern poultry producers have had tight biosecurity measures and response plans in place for several years. Now they're preparing for the worst, said Donna Carver, extension veterinarian at North Carolina State University.

"Nobody wants to take any chances with this," she said.

The highly pathogenic H5N2 avian influenza strain has turned up since December in commercial poultry farms, backyard flocks wild birds in the Pacific and Central flyways, but it's done the most damage in the heavily traveled Mississippi Flyway, which roughly follows the Mississippi River, where Minnesota, the country's top turkey producing state, has lost nearly 1.5 million turkeys since early March.

Government scientists theorize that when ducks and other migratory waterfowl from different flyways gather at their northern breeding grounds this summer, they could expose each other to the highly pathogenic H5N2 virus, then carry it back south this fall along several migration routes, perhaps including the Atlantic Flyway. That flyway includes several of the country's top poultry producing states including

Georgia, the Carolinas, Virginia, Delaware and Maryland.

Migratory waterfowl are considered the natural reservoir of avian influenza viruses, and new research shows mallard ducks are most prone to catching H5N2. They don't get sick from it, but they can shed the virus through their droppings or oral secretions. If those viruses then get carried into a poultry barn—such as by being tracked in by a farm worker or by hitchhiking in on equipment, rodents, small birds or insects—the results can be deadly. Midwest and Ontario commercial producers have lost over 2 million birds to the virus since early March—all turkeys except for 200,000 chickens in Wisconsin.

Researchers believe that waterfowl from several flyways congregated last summer to breed in the "Beringian" region in northern Russia and became infected with a number of different H5N8 viruses, then carried slightly different viruses back south last fall into Europe, North America and East Asia, said Hon Ip, a microbiologist with the National Wildlife Health Center, an arm of the U.S. Geological Survey based in Madison, Wisconsin.

"The exact same thing could happen" this fall with the H5N2 virus, he said.

Ip spoke by phone from Athens, Georgia, from a major international symposium on avian influenza that drew around 300 experts from 35 countries who are keenly interested in finding solutions. He said a hot topic was learning why the H5N2 virus may be even better at being spread by wild birds than the less widespread H5N8, and the potential ways it could spread along and between flyways.

U.S. Department of Agriculture scientists told reporters from the symposium that there's still much they don't know about this virus, which didn't turn up in North America until late last year. T.J. Myers, an

administrator with the USDA's Animal and Plant Health Inspection Service, pointed out that around 20 of the 34 confirmed cases in commercial poultry flocks had been detected only in the previous 10 days.

One challenge scientists have in predicting how the virus may spread is that they don't have enough surveillance data from wild birds to prove they're the source yet, said Tom DeLiberto, assistant director of the USDA's National Wildlife Research Center. Only 56 wild birds have tested positive for H5N8, H5N2 and a few similar viruses, and most were in the northwest, he said. Only four or five wild birds have tested positive in the Mississippi Flyway, he said.

While Minnesota produces the most turkeys at 46 million annually, North Carolina is No. 2 in numbers, No. 1 in poundage and No. 3 in total poultry production.

Carver said an industry-wide prevention effort is underway from the West Coast to the East Coast.

"We're going to approach it as if it's going to happen and really try to get our growers and people with backyard birds to take it very seriously," she said