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WHOOPING CRANE DEATHS CAUSED BY MOSQUITO-BORNE VIRUS

Eastern equine encephalitis, a virus spread by an uncommon species of mosquito, is responsible for the deaths of seven endangered whooping cranes at the Patuxent Wildlife Research Center, the Interior Department's U.S. Fish and Wildlife Service announced today.

The virus, called a "togavirus" because of its distinctive, envelope-like structure, was transmitted to the birds by the Culiseta melanura mosquito, a species that is not known to bite humans. It is not the variety of mosquito that transmits the disease to horses and other mammals.

Biologists do not know what brought this mosquito in contact with the whooping cranes, which are kept outdoors, but they believe the onset of cold weather will kill any remaining mosquitoes this season. They have ended their strict quarantine of the crane area at the Laurel, Maryland, wildlife facility because they have determined the virus is not contagious and cannot be spread from bird to bird. Access to the 32-member captive flock of the snowy white cranes continues to be limited however, until it is certain all of the remaining birds are well.

The recent deaths are the first time that the encephalitis virus has been documented among whooping cranes. Although Eastern encephalitis typically attacks the brain and central nervous system in mammals, birds exhibit few symptoms and investigators in the Patuxent outbreak noted liver damage as the most common effect in many of the dead cranes. Of the seven birds that died

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since mid-September, four succumbed rapidly overnight without any clinical signs of the illness being observed. The remaining three cranes appeared droopy and immobile during the onset of the illness. Despite veterinary care, each died within 4 to 8 hours after first displaying these symptoms.

The remaining captive whooping cranes appear healthy, according to Patuxent biologists. Nine Patuxent sandhill cranes, non-endangered cousins of the whoopers, have been innoculated with a vaccine used to prevent encephalitis in humans, and have experienced no adverse side-effects. Vaccinations of whooping cranes thought to have been exposed to the virus may follow as a preventive measure.

The Culiseta melanura mosquito breeds primarily in dark, swampy bottomland beneath tree roots where water accumulates. Despite its proximity to the Patuxent River, the 4,700-acre research center has been surveyed and is not believed to contain likely habitat for this mosquito. Area mosquito surveys will continue at Patuxent next spring.

Identification of the virus and the host mosquito was a joint effort by Patuxent, the Service's National Wildlife Health Laboratory, the Department of Agriculture's National Veterinary Services Laboratory, the Department of Health and Human Services' Center for Disease Control, the U.S. Army's Fort Detrick in Maryland, the Maryland Department of Agriculture, and the University of Maryland.