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SCIENTISTS HEAD TO ANTARCTICA TO ASSESS SPREAD OF HIGH PATHOGENICITY AVIAN INFLUENZA

On December 31, 2023, the Antarctic Wildlife Health Network (AWHN) reported the first suspected case of High Pathogenicity Avian Influenza (HPAI) in Antarctica, shortly followed by reports of suspected cases at nearby Esperanza Base, an Argentine research station in Hope Bay, Trinity Peninsula.

On the February 24 this year, the first confirmed case of HPAI had been detected on the Antarctic continent at Primavera Base, an Argentine Research Station, on Primavera Cape, Cierva Cove. Since then, further suspected cases of HPAI have been reported in the region.

In response to recently confirmed and suspected cases, Dr Meagan Dewar, of the SCAR AWHN and Federation University Australia and the AWHN will lead an expedition to the Weddell Sea on board Ocean Expeditions' Australis in collaboration with avian influenza experts and wildlife veterinarians from Erasmus University Medical Center, Friedrich-Loeffler-Institut, the Spanish National Research Council, University of California, Davis, Ibiomar-Cenpat-Conicet.

The expedition, with funding from multiple organizations including the International Association of Antarctica Tour Operators (IAATO; <https://iaato.org/>) and the EU Horizon project Kappa-Flu (<https://kappa-flu.fli.de/de/home>), will focus on the Weddell Sea region, which has been identified as a high-risk region by the AWHN. The team will survey for signs of HPAI in the region and collect samples from healthy and suspected wildlife and aerosol samples for the detection of avian influenza viruses (including HPAI as well as less aggressive virus strains) to improve the understanding of its incursion into Antarctica and its potential impact on wildlife.

Although the current risk of large mortality events in Antarctic wildlife is low due to wildlife beginning to disperse with the end of the breeding season, “understanding the level of incursion of HPAI into the region, the movement of the virus and identification of susceptible species, is important for furthering our knowledge of the virus, and understanding the risks posed to Antarctic wildlife next breeding season” says Dr Dewar.

IAATO Executive Director, Gina Greer said: “IAATO is committed to the purposeful support of research.

“During the last wildlife breeding season, IAATO members worked with the AWHN, providing reports of unusual animal behaviour observed in the Antarctic Peninsula region, with the joint goal of understanding and assessing potential HPAI cases. By funding this expedition, we hope the findings can help the broader Antarctic community as we prepare for the future impact of HPAI in a place we deeply care for.”

Professor Thijs Kuiken, from the Erasmus MC in the Netherlands: “Prior to 2023 HPAI had never occurred on this continent, so it is extremely important to document HPAI events in Antarctic wildlife comprehensively and collect appropriate samples. This will provide confirmation whether HPAI-virus is the primary cause of such events and increase knowledge about which wildlife species may play a role in spreading the virus over large distances and/or in long-term maintenance of the virus in the Antarctic region. The knowledge gained also can be used to build population models that are needed to estimate population recovery following HPAI events.”

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About Federation University Australia

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