

Surveillance in wild birds

During the summer and fall of 2005, the HPAI H5N1 virus quickly spread from South-East Asia to Siberia, then to Eastern and Western Europe. Two non-exclusive hypotheses might explain this phenomena: the trade of bird products (live animals, eggs, meat...), or the local and long-distance transmission by bird migrations. For the latter, many water birds breed in Eurasia and winter in the sub-Saharan regions of Africa. In African wetlands, these birds are in close contact with a variety of Afro-tropical water bird species but the transmission risk between Eurasia and Africa is poorly understood. A survey was funded and implemented by the FAO in early 2006 to investigate the carriage of H5N1 or other HPAI virus strains in wild-bird populations wintering in Africa. Field activities were coordinated by CIRAD and Wetlands International. Sampling sites were selected among bird-wintering areas of major interest (see map). Other sites were added following H5N1 outbreaks in Egypt, Niger and Burkina Faso. Most field operations were conducted between January and March 2006 in collaboration with international conservation and research organisations, NGOs, hunting associations, and safari operators. The target bird species were selected from families previously identified as AI reservoirs (ducks, waders, gulls, etc.). About 5,000 samples were collected in 13 countries: cloacal swabs (birds shot and provided by hunters, netted birds) and fresh droppings at roosting areas. Most were shipped to Istituto Zooprofilattico Sperimentale delle Venezie (Italy), a FAO/OIE reference laboratories for AI.



No HPAI virus was detected, nor was any evidence of the circulation of H5N1 viruses in wild birds, including in countries that had experienced recent outbreaks. This result should be interpreted cautiously due to the small size of the sample compared to the millions of water birds in the target population. It is coherent with the absence of H5N1 virus

reported by surveillance programmes in European countries, and with the very low prevalence of H5N1 virus reported so far in healthy wild bird populations in China. A new wildlife survey is implemented by the FAO in Eastern Europe, the Middle East and Africa during the boreal winter of 2006-2007 to bring new evidence for the role - or the lack of a role - of wild birds in the dissemination of HPAI viruses. The first results are expected in November 2006.