

Hide-and-seek in Europe: highly pathogenic avian influenza H5N1

Globig, A.¹, Staubach, C.², Harder, T.¹

¹Friedrich-Loeffler-Institut, Federal Research Institute for Animal Health, Suedufer 10, 17493 Greifswald-Insel Riems, Germany, anja.globig@fli.bund.de

²Friedrich-Loeffler-Institut, Federal Research Institute for Animal Health, Institute of Epidemiology, Wusterhausen, Germany

DOI: 10.5073/jka.2011.432.071

When in winter 2005/2006 the highly pathogenic avian influenza virus (HPAIV) H5N1 of Asian lineage entered Europe for the first time, the public was highly alarmed and 'bird flu' became a number one topic in the media for several weeks. Between February and May 2006 several hundred wild birds were found dead and infected with the highly pathogenic strain in a total of fourteen EU countries (Martinez et al., 2008), and public health concerns were mounting when domestic cats were found to have succumbed to the disease after feeding on infected bird carcasses (Klopfleisch et al., 2007). Several projects were subsequently enrolled in order to explore the source of the virus and the status of infection among apparently healthy wild birds associated with the risk of transmission to and further spread among poultry.

Now, 5 years later, 'bird flu' has almost completely vanished from the public agenda. However, the assumption that 'bird flu' has disappeared is quite contrary to the actual situation: In Africa (Egypt) and vast parts of Asia the HPAI H5N1 virus is still circulating in poultry with occasional spill-over transmissions to wild birds and even humans. The last occurrence of HPAI H5N1 in Europe dates back to March 2010 when poultry was infected in the Romanian Danube Delta. At the same time a common buzzard was affected in Bulgaria indicating, again, an involvement of wild birds (Reid et al., 2011).

The presentation will give an overview on our current knowledge on HPAIV H5N1 in wild birds. The important aspects of AIV ecology in wildlife (monitoring techniques, surveillance, habitat use and migration patterns) will be discussed.

Keywords: highly pathogenic avian influenza H5N1, surveillance, wild birds

References

- Martinez M, Perez AM, De la Torre A, Iglesias I, Munoz MJ 2008 Association between number of wild birds sampled for identification of H5N1 avian influenza virus and incidence of the disease in the European union. *Transboundary and Emerging Diseases* 55: 393-403
- Klopfleisch R, Wolf PU, Uhl W, Gerst S, Harder T, Starick E, Vahlenkamp TW, Mettenleiter TC, Teifke JP 2007 Distribution of lesions and antigen of highly pathogenic avian influenza virus A/swan/Germany/R65/06 (H5N1) in domestic cats after presumptive infection by wild birds. *Veterinary Pathology* 44: 261-268
- Reid SM, Shell WM, Barboi G, Onita I, Turcitu M, Cioranu R, Marinova-Petkova A, Goujgoulova G, Webby RJ, Webster RG, Russell C, Slomka MJ, Hanna A, Banks J, Alton B, Barrass L, Irvine RM, Brown IH 2011 First reported incursion of highly pathogenic notifiable avian influenza A H5N1 viruses from clade 2.3.2 into European poultry. *Transboundary and Emerging Diseases* 58: 76-8