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

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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

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