

## SURVEILLANCE OF WILD WATERBIRDS FOR AVIAN INFLUENZA VIRUSES IN LITHUANIA

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**Abstract.** A total of 3720 samples of 24 waterbird species belonging to 5 orders were collected in Lithuania between 2007 and 2011 for the analysis of avian influenza viruses. One hundred eighty seven samples were positive for influenza A viruses or antibodies. All influenza A positive samples were found in the mallard (*Anas platyrhynchos*). The recorded prevalence of influenza A virus in mallards was 7.5%. Among mallards sampled in Lithuania low-pathogenic H7N2, AIVH7 and AIVH5 subtype's viruses prevailed. Other low pathogenic avian influenza subtypes (H1-H4, H6, H8, H9, H10N4 and H12) were also found in mallards, collected in various regions of Lithuania. Therefore in the future active surveillance for avian influenza virus in Lithuania (sampling of apparently healthy wild birds) should give a high priority to the mallard. Following recommendations of the European Commission (EC Directive 2005/94/EC, 2006), certain other species of wildfowl at the higher risk, such as the common pochard (*Aythya ferina*), tufted duck (*Aythya fuligula*) and mute swan (*Cygnus olor*) should be also included into the national monitoring schemes for avian influenza in the countries of the European Union. Passive surveillance (sampling of hunted birds or birds found dead) should pay special attention to the mallard, as well as to the common pochard and tufted duck. Such surveillance scheme should provide an early warning about potential presence of HPAIV virus in the country.

**Keywords:** waterbirds, avian influenza, bird migration, Lithuania.