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BIRD MIGRATORY MOVEMENTS AND THEIR POSSIBLE IMPACT ON AVIAN INFLUENZA AND WEST NILE DISEASE SPREADING

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ABSTRACT

Birds, as mobile organisms, do not know about political borders. Moving from north to south and vice versa, each year birds undertake exhausting seasonal migrations, that are worthy of admiration. During migration, birds are using energy reserves stored in the form of fat deposits that are used as fuel. For many species continuous flying is impossible, so they need to renew their energy before continuing their journey. There are several methods used in the study of bird migration their migratory routes, but the mostly used is ringing, a basic scientific method. The ringing is based on individual bird marking, with an aluminium leg ring. Recoveries of ringed birds provide numerous data such as the beginning and ending of migration, migration routes, length of migration, productivity, survival or mortality rate. Birds are also good indicators for monitoring changes in the environment induced by human activities and they give us insight into the speed of species adaptation in response to new climate change. Tracking of marked bird individuals, through space and time, help us to understand the ways of spread and transmission of various diseases. In this sense Ringing schemes are an important tool for studying the characteristics and monitoring of zoonotic epidemics.

Key words: bird migration, ringing, recoveries, monitoring, diseases transmission