ESTIMATION OF THE AUTUMN MIGRATION PATTERN OF PASSERINES WITHIN THE SE EUROPEAN FLYWAY BY ORIENTATION CAGE TESTS

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ABSTRACT

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The general migration pattern of passerines can be estimated using a variety of methods. A number of partial analyses based on ringing data, usually limited to a few species, have been published. A very few continent-scale presentations have been offered, as extremely long periods of ringing activity are necessary for passerines. This is especially true for areas where the recovery rate is very low, including vast areas of north-eastern and eastern Europe and the Middle East/Africa. Similarly, radar and moon-watching studies are of limited value for drawing migration patterns within wider areas. Radar studies require good coverage by the radar systems, while weather radar distribution density and the level of evaluation are very uneven. Modern logger and satellite tracking are more applicable to non-passerines, and as yet enable detailed study only of limited numbers of individuals, and not population studies. At the end of the 20th century, a very simple tool was introduced for field studies on the preferred headings of individual birds caught for ringing, i.e. the use of flat orientation cages. This method was introduced as a standard within the SEEN (SE European Bird Migration Network) in 1995. This study presents a preliminary large-scale evaluation of the data collected within this project. The database used contains more than 43,000 orientation tests performed at 45 ringing sites. The area covered stretches from the northern part of western Russia to southern Egypt and from Italy and Poland to Siberia and Armenia. Eight streams of migration are identified within this area, creating a fairly complicated pattern of avian movements.

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