

Ginter M., Rosińska K., Remisiewicz M. 2005. *Variation in the extent of greater coverts moult in Robins (Erithacus rubecula) migrating in autumn through the Polish Baltic coast*. Ring 27, 2: 177-187.

Abstract

Intra-seasonal variation in the number of unmoulted coverts in immature Robins caught during 2001-2003 autumn migrations was studied at two ringing stations (Mierzeja Wiślana and Bukowo-Kopań) located at the Polish Baltic coast. To determine the number of unmoulted greater wing coverts we counted immature-type coverts with light spots at tips. In the analyses data on the number of spotted coverts from ca 11 000 migrating individuals were used. We analysed the number of spotted coverts in each season and at each ringing station separately. Based on migration dynamics we distinguished migration waves and the number of spotted coverts were compared among the waves. Trends of seasonal changes in mean values of this parameter were assessed. To explain these tendencies, percentage distributions of wing spots for each wave were presented, with distinguished three categories: 0-3 (low), 4-5 (medium) and 6-8 (high) number of spotted coverts. Next, we compared distribution of this parameter among waves by Kruskal-Wallis and post-hoc Dunn's tests.

Late waves generally differed in the distributions of spotted coverts' number from the earlier ones in all seasons and at all stations. Our results showed the same tendencies within a season in all cases: the mean number of unmoulted coverts fluctuated in September, but starting from the end of this month and in October the trend was clearly increasing. This was due to changes in frequencies of Robins assigned to the distinguished categories - in September birds with medium number of spotted coverts constituted over 50% of all migrants, while in late September and/or October waves individuals with high number of spotted coverts predominated. Both in 2002 and 2003, the moment of the shift in this domination from birds with medium to those with high number of unmoulted coverts was synchronised between the two stations.

These intra-seasonal differences in moult advancement can be explained by two overlapping phenomena - subsequent migration over the Baltic coast of populations with different moult characteristics and by less advanced moult of birds from later broods. Correspondence of the observed trends in moult advancement with literature data on migration timing of Robins of different breeding origin and winter quarters indicates that the populational differences play an important role in the observed variation.

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