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Abstract

In the study we have examined the relation between the European macrosynoptic weather situation and the number of birds captured a day at four Hungarian ringing stations during the autumn migration. Along the research we examined the data of 32 809 individuals of 8 species using different migration strategies. Using the daily capture data at the four stations we constructed the migration diagrams for each year. We chose the migration peak days within ten-day periods and examined how these peak days or their preceding days are distributed over Péczy's macrosynoptic weather situations. Comparing the 8 bird species no significant difference in distribution of the peak days over the macrosynoptic weather situations was found (ANOVA: $F_{7,376} = 1.81$, $p = 0.084$). 85% of the migration peak days for all the species were connected with anticyclones, 10% with meridional cyclone / cold front situation and 5% with other cyclonic ones. The most frequent weather situation on the migration peak days was central anticyclone, which occurred in 61 cases.

J. Gyurácz, G. Horváth, Department of Zoology, Berzsenyi College, Szombathely, P. O. Box 170, H-9701, Hungary; T. Csörgő, Department of General Zoology, Faculty of Science, Eötvös University, Budapest, Pázmány P., H-1088, Hungary; L. Bank, S. Palkó BirdLife Hungary, Pécs, Siklósi 22, H-7622, Hungary

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