

Ilieva M., Zehtindjiev P. 2005. *Migratory state: body mass and fat level of some passerine long-distance migrants during autumn migration in north-eastern Bulgaria*. Ring 27, 1: 61-67.

Abstract

Body condition of 3224 migrating birds of Great Reed Warbler (*Acrocephalus arundinaceus*), Sedge Warbler (*A. schoenobaenus*), Willow Warbler (*Phylloscopus trochilus*), Red-backed Shrike (*Lanius collurio*) and Whitethroat (*Sylvia communis*) was studied at Kalimok Station, NE Bulgaria (41°00'N 26°26'E) in the autumns of 1997-2003. The mean values of the fat level and the body mass were calculated for each species and year and were compared with similar data of various parts of the Palaearctic-African Migration System. Distinct variations in the mean values of studied parameters in different years were recorded. The dynamics of the accumulated subcutaneous fat and the body mass during the autumn varied in different species and either increase or decrease of the values during a certain season were registered. Age-determined differences in the studied characteristics were found. The timing of the passage of the first-year and adult birds can influence the dynamics of the mean fat level and the mean body mass. The lack of selective environment in NE Balkan Peninsula allows the passage of conspecific birds in various migratory states. The realisation of their migration adaptations highly depends on environmental conditions during the period of passage.

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