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AUTUMN MIGRATION OF THE WOOD PIGEON, *COLUMBA PALUMBUS*, AT EASTERN PART OF THE POLISH BALTIC COAST

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ABSTRACT

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The Wood Pigeon, *Columba palumbus*, is a common diurnal migrant across most of the Europe. The visual observations were carried out during autumn work of the Operation Baltic ringing stations, mainly at Mierzeja Wiślana (54°21'N, 19°19'E) parallely to the ringing of birds. Observations of passing birds were performed 15 minutes per every hour from sunrise to sunset. The autumn observation period was long enough to cover whole pigeons migration at the southern coast of Baltic (14 Aug. – 11 Nov.). Altogether 119,019 Wood Pigeons were observed within 20 seasons of observations. The goals of this work is (1) to describe the course of the Wood Pigeon autumn migration at the Polish Baltic coast as to numbers in long-term aspect and the seasonality of migration, (2) to propose further development in the study on wave structure of the bird passage. The main analysis of this work - description of the seasonal dynamics of migration - was carried out with modified and widened method used for that kind of analysis in earlier publications. In the present paper the wave structure is described by the estimated border days between supposed waves taking under consideration different properties of the passage dynamics. Here are used three groups of parameters: (1) total numbers of birds observed daily during several years, inter-year variability (as *SD* between year number values), and the coefficient of variation (*V*), (2) number of migration peaks that occurred in that date within years of the study (there were used two classes of peaks – *High Peaks* and *Peaks*), (3) numbers of birds passing during recognized peak days. All estimations were done independently of others and only finally summarized using common ranking scheme. Such step by step procedure make estimation more and more reliable. Very high agreement between estimations based on three groups of parameters suggests strongly that the proposed estimation procedure is effective enough.

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