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Biological Status of Subcarpathian Settlers in the First Half of the 20th Century**Oskar Nowak, Janusz Piontek and Joanna Kozłowska***Department of Human Evolutionary Biology, Institute of Anthropology, Adam Mickiewicz University, Umultowska 89, 61-614 Poznań, Poland
E-mail: oskarn@amu.edu.pl***KEYWORDS** Crow's Index. Natural Selection. Secular Changes

ABSTRACT The purpose of the paper is (a) to present the characteristics describing opportunity for natural selection in the population of the Subcarpathian settlers in the first half of the 20th century and (b) to assess the secular trend in body height in this immigrant group living in isolation from the surrounding Slavic population. The research material comes from the historical data stored in the archives of the Institute of Anthropology in Poznań. Examination records refer to 229 males and 233 females and contain anthropometric measurements and biodemo-graphic information. The subjects were analyzed in five cohorts. The index of opportunity for natural selection was calculated using Crow's formula (1958). The cohort analysis revealed a fairly high fluctuation and high Im values. A strong secular trend in body height manifested as an increase of the mean height between the extreme cohorts, was observed in women. In male cohorts we noted fluctuations in the mean height, however, no directional trend was observed. No correlation was demonstrated between the number of siblings that had died in the studied families and the mean body height in the cohorts. This result corroborates the thesis that the reproductive potential and growth potential of a population are realized independently and are determined by different sets of modifying factors.