



Investigation on the dynamics of migration patterns and the abundance of selected bird species against the background of recent Climate Change in Brandenburg (Germany)

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Biomonitoring is a current, more and more intensively applied method for observing the influence of climatic changes on ecosystems. In the past, biomonitoring programmes have mainly focussed on phenological phenomena. Meanwhile faunistic bioindicators have gained in importance, such as birds.

In our investigation observation data of the past 30 years of Brandenburg and Berlin have been analysed for selected bird species (e.g. stock pigeon (*Columba oenas*), red-footed falcon (*Falco vespertinus*), etc.). Different parameters have been used in order to find out about the dynamics of the migration patterns and increasing hibernation habits of common long distance migratory birds and short distance migratory birds. Additionally the data has been investigated concerning the appearance of new thermophile species (e.g. european bee-eater (*Merops apiaster*)), as well as concerning a decreasing abundance and hibernation of typical arctic species (e.g. snow bunting (*Plectrophenax nivalis*)).

In this study we present preliminary results, indicating distinct differences in the sensitivity of urban and rural avifauna populations to environmental effects of recent climatic changes.

This investigation is part of a junior scientist project group at the Humboldt University in Berlin, in cooperation with the public agency for Bird Protection in Brandenburg and the environmental agency of Brandenburg.