

## **Climate change and arrival of spring migrants in different parts of Eurasia**

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A comparative analysis of the long-term trends in the arrival dates of different species of migratory birds in several regions of Eurasia was performed over period of 1970–2000 years. The study had revealed a significant trend towards earlier spring arrival in Finland (53% of 15 species), Courish Spit (60% of 15), Polar Urals (57% of 7), South Urals (8% of 13), North of Lake Baikal (13% of 15) and Kamchatka (33% of 15). Strong correlation between arrival date and spring temperature have been observed in several species in Finland (60% of species), Courish Spit (40%), Polar Urals (86%), South Urals (54%), North of Lake Baikal (60%) and Kamchatka (47%). It was a significant correlation between arrival date and index NAO for several species in Finland (80% of species), Courish Spit (60%), Polar Urals (43%), South of Urals (7%), North of Lake Baikal (60%) and Kamchatka (60%). No significant correlation between arrival date and other weather indexes such as POL, EP/NP have been observed for those regions. The study had confirmed that the most trends towards earlier spring arrival were found in those regions where significant increase of spring temperature was observed. Thus a diversity of the patterns of long-term trends in arrival dates of migratory birds in different regions of Eurasia was correlated with differences of spring temperature changes in those regions.