

Vliv altitudy na životní strategie a fyziologické nastavení ptáků

Řešitel práce: Marek Brindzák

Vedoucí práce: doc. Mgr. Tomáš Albrecht, Ph.D.

Abstract

The pace-of-life syndrome theory proposed that species with similar life-histories share physiological traits that are more similar than species with different life-histories. Despite the fact that life-histories and physiology are well studied in birds it is still unknown how altitude changes these traits. However, shifts in life-histories across latitudinal gradients, with slow pace characterized by high investment to the future reproduction in tropics and fast pace of life characterized by high to the actual reproduction in temperate, is well known. From this knowledge we can assume how birds solve the trade-off between survival and reproduction based on the environmental conditions. This thesis summarizes effect of altitude on selected life-histories and physiology traits, the findings are compared with latitudinal changes. The first part of thesis is focused on describing latitudinal and altitudinal effect on selected avian life-histories traits. The second part deals with the altitudinal effect on the selected physiological traits in birds. Birds breeding at high altitude exhibit novel pace of life with life-histories similar to a slow pace but with physiology more similar to fast pace.

Key words: altitude, latitude, life-histories, physiology, birds, hormones, clutch size, survival, reproduction