



Cover: Three month old siblings of the American alligator (*Alligator mississippiensis*) raised under chronic hypoxia (12% O₂ – left), normoxia (21% O₂) and hyperoxia (30% O₂ – right). Owerkowitz, Eley and Hicks (pp. 1237–1247) compared growth and metabolism of alligators under O₂ levels encountered during the 550 million years of vertebrate history. Chronic hypoxia constrained embryonic and hatchling growth, but hyperoxia enhanced growth and resting metabolism of hatchlings. Differences in alligator growth trajectories and metabolic rates under hypoxia, normoxia and hyperoxia suggest that reconstructions of the physiology of extinct vertebrates should take into account the prevalent atmospheric O₂ conditions. Photo by Tomasz Owerkowitz.

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► **Brzęk, P., Kohl, K., Caviedes-Vidal, E. and Karasov, W. H.** Developmental adjustments of house sparrow (*Passer domesticus*) nestlings to diet composition. 1284-1293

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