Zoophysiology Seminar at Aarhus University

The extreme overwintering physiology of the painted turtle, the most anoxia-tolerant tetrapod

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Our work is centered on understanding the molecular and physiological basis of extreme anoxia tolerance in painted turtles, a common North American pond turtle that can survive complete oxygen deprivation for more than 170 days at 3°C. This ability enables adults to overwinter in ice-locked marshes and bogs in the most northern portions of its geographic range. Our experimental approaches are diverse, natural-history driven, and focus on the functions of the cardiovascular, nervous, and skeletal systems, acid-base regulation, and metabolism. We exploit the natural variation of anoxia-tolerance that exists across development in this species in order to understand the requirements of this extreme physiological phenotype.

Friday, April 29th, 13.00
Zoophysiology Seminar Room (1131-127)