

Free climbing turtle, *Emys orbicularis* (Linnaeus, 1758) – vertical obstacles as a limitation for movement

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Abstract

Rigid shell of turtles restricts their mobility, although magnitude of these restrictions is not completely understood. Surprisingly, we witnessed a European Pond Turtle climbing a vertical obstacle in the field.

Keywords: Locomotion, European Pond Turtle, Climbing

The torso of turtles is enclosed in a rigid shell which restricts the individual's mobility, e.g. self-righting when overturned, releasing itself when stuck in vegetation, climbing and descending (GOLUBOVIĆ ET AL., 2013, 2014, CURRYLOW ET AL., 2015). For example, an inclination over 50° – 60° seems to be an obstacle that is almost impassable for turtles (snapping turtles – MUEGEL & CLAUSSEN, 1994; box turtles – FINKLER & CLAUSSEN, 1997).

We witnessed the climbing of an adult female *Emys orbicularis* (Linnaeus, 1758) (shell length 161 mm, mass 690 g) on the inner side of a car wheel (Fig. 1). Observations of turtles climbing up vertical obstacles were only occasionally reported (WILLBERN, 1982, ENGELMAN, 2006). Although highly limited, climbing ability might be crucial for habitat use, searching for basking spots and nesting areas. Additionally, if unable to cross a vertical obstacle, turtles can suffer overheating or

vehicle collision (e.g. when crossing a railroad – KORNILEV ET AL., 2006).



Figure 1. Climbing European Pond Turtle (*E. orbicularis*), photographed during field survey near Mlava River in July 2015. Photo: Ana Golubović.

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Slobodno penjanje i kornjača *Emys orbicularis* (Linnaeus, 1758) – vertikalna prepreka kao ograničenje za kretanje

Sažetak

Čvrst oklop ograničava pokretljivost kornjača, mada nije poznato u kojoj meri. Na terenu smo imali neočekivanu priliku da posmatramo barsku kornjaču kako se penje na vertikalnu prepreku.

Ključbe riječi: kretanje, barska kornjača, penjanje