



Conference Abstract

Does a suburban reserve host a significant *Carabus* populations? A capture-recapture case study in Budapest, Hungary

Bérces Sándor ‡

‡ Duna-Ipoly National Park, Budapest, Hungary

Corresponding author: Bérces Sándor (bercess@gmail.com)

Received: 04 Sep 2019 | Published: 05 Sep 2019

Citation: Sándor B (2019) Does a suburban reserve host a significant *Carabus* populations? A capture-recapture case study in Budapest, Hungary. ARPHA Conference Abstracts 2: e46305. <https://doi.org/10.3897/aca.2.e46305>

Abstract

A two season capture-recapture study was performed between 2016-2017, focusing on the *Carabus* species living in a suburban park (3 hectare) in Budapest, Hungary. Eighty live-capture, non-baited pitfall traps were used in a 3 x 3 m grid in 4 rows and 20 columns, covering almost totally a forested area of 240 m². Five *Carabus* species were captured, the most numerous were *C. scheidleri*, *C. ullrichii* and *C. coriaceus*. *C. convexus* and *C. intricatus* were captured only a few times. All *Carabus* species were individually marked and released. Population size and survival rate was estimated only for the *C. scheidleri* population using POPAN in order to receive gross population size. In total 491 *C. scheidleri* individuals (251 females and 239 males) were marked. Recapture rate in 2016 and 2017 were 41 and 50 percent for the total population respectively. Estimated population size varied between years, the maximum population size was 680 ± 50 specimen in 2016. In 2017 a population size of 190 ± 16 individuals were estimated. Overwintering of eight *C. scheidleri* and three *C. ullrichii* specimen were observed. Less mobile large bodied forest specialist *Carabus* species living in a relatively small reserve underline the importance of habitat islands in a city.

Keywords

urbanisation, *Carabus scheidleri*, mark-recapture, *Carabus* species, nature reserve, Hungary

Presenting author

Bérces Sándor