



2019 Artikel article



Autor / Author:

SIMON J. OBERHOFER, 9495 Triesen, Liechtenstein. E-Mail: simonoberhofer97@gmail.com STEVEN J. R. ALLAIN, Essex, CM7 9UX, UK

Zitat / Citation:

OBERHOFER, S.J. & S.J.R. ALLAIN (2019): Autumn activity in an introduced population of *Podarcis muralis* ssp. in Liechtenstein. – L@CERTIDAE (Eidechsen online), 2019 [7]: 54–57.

©CERTIDAE 2019 № 7



Autumn activity in an introduced population of *Podarcis muralis* ssp. in Liechtenstein

SIMON OBERHOFER & STEVEN J. R. ALLAIN, December 2019

Abstract

While many reptile species are predicted to be threatened by the rising temperatures caused by the ongoing climate change we're facing in the Anthropocene, certain genera have found these conditions to be advantageous. Some of these cases are represented by the genus *Podarcis*, a group of small and agile lizards, mainly native to Europe and northern Africa. 25 species are recognized and some of them have found their home far outside of their native range. We would like to give a small insight at an introduced population of the common wall lizard (*Podarcis muralis*) and their interesting pre-winter activity in the principality of Liechtenstein.

Zusammenfassung

Während für viele Reptilienarten prognostiziert wird, dass sie durch die steigenden Temperaturen, die durch den anhaltenden Klimawandel im Anthropozän verursacht werden, bedroht sind, haben sich diese Bedingungen für einige Gattungen als vorteilhaft herausgestellt. Einige dieser Fälle sind von der Gattung *Podarcis* bekannt, einer Gruppe kleiner und lebhafter Eidechsen, die hauptsächlich in Europa und Nordafrika heimisch sind. Es wurden 25 Arten beschrieben, wovon einige weit außerhalb ihres natürlichen Verbreitungsgebiets eine neue Heimat gefunden haben. Wir möchten einen kleinen Einblick in eine eingeführte Population der Mauereidechse (*Podarcis muralis*) und deren interessante vorwinterliche Aktivität im Fürstentum Liechtenstein geben.

Introduction

Winter activity in populations of *Podarcis muralis* inhabiting Liechtenstein has been well documented before (KÜHNIS & SCHMOCKER 2008). While not being native to the small country, the species has found itself at home in various habitats and in many parts of the country (KÜHNIS 2006). Balzers is a small village in the south of Liechtenstein. Its exposition to the south makes it an ideal environment for thermophilic fauna and flora with the first official records of *P. muralis* in Balzers dating back to the summer of 2008 (KÜHNIS & NIEDERKLOPFER 2010). Meanwhile, the population at the Castle Hill has grown to at least several hundred individuals. The inhabited area is characterized by vineyards, drywalls and bushy meadows, creating perfect habitat for the lizards.

Methods and Results

During November of 2019, the site was visited three times in order to observe the animals during their prewinter behaviour. The following times and dates were chosen:



Fig 1. Habitat of the Common Wall Lizards.

Date Time	Temperature in °C / Weather	Number of individuals observed
21.11.2019 / 12.00 – 14.00pm	Approx. 9 °C / sunny & calm wind	<50
24.11.2019 / 13.30 – 15.30pm	Approx. 4 °C / cloud cover & windy	2
26.11.2019 / 13.30 – 15.30pm	Approx. 9 °C / sunny & windy	<30

During days one (21st November) and three (26th November), several dozen individuals belonging to all classes of age were observed. When the sky slowly started to cover with clouds on day one, most animals retreated back into the walls right away. Between 13:30 and 14:00pm, very few individuals were observed. This same behaviour was also observed during day three. During day two (24th November) with lower temperatures, light cloud cover and a cold wind all saw a reduced activity in the lizards down to a minimum. During a time span of two hours, just two lone juveniles were seen.

Discussion

All individuals observed within these three days had a very dull and dusty appearance which is likely caused by the lizards spending a lot of time inside the walls at this time of the year. Individuals were barely ever seen further than a meter away from the next hole, presumably staying close to cover in the event of a predator entering the area. Activity was only observed on the lower walls of the hill, the upper part surrounding the castle was likely already too cold to sustain activity. The areas where activity levels are high during the summer were checked but these areas were deserted, again showing evidence that the P. muralis were preparing for the coming winter. The behaviour observed by the lizards is contrary to the warm summer months, where cloud cover often leads to more acitivity observed by the authors. Despite the small sample size, there is evidence to suggest that *P. muralis* is still active in this small population late into the autumn. Future work will continue to document the lizard's behaviour and activity patterns throughout the winter to determine whether or not they are taking advantage of warmer days throughout the season.



Fig 2. Common Wall Lizard (Podarcis muralis), male



Fig 3. Common Wall Lizard (Podarcis muralis)

References

KÜHNIS, J. (2006): Die Reptilien des Fürstentums Liechtenstein. – Amt für Wald, Natur und Landschaft, Band 23.

KÜHNIS, J.B. & P. NIEDERKLOPFER (2010): Jahresbericht der Arbeitsgruppe für Amphibien und Reptilienschutz für die Jahre 2008 und 2009. – Berichte der Botanisch-zoologischen Gesellschaft Liechtenstein, **35**, 109–112.

KÜHNIS, J. B. & H. SCHMOCKER (2008): Zur Situation der Mauereidechse (*Podarcis muralis*) im Fürstentum Liechtenstein und im schweizerischen Alpenrheintal. – Zeitschrift für Feldherpetologie, **15**, 43–49.

©CERTIDAE 2019 № 7