

Societas Europaea Herpetologica – SEH  
Deutsche Gesellschaft für Herpetologie und Terrarienkunde – DGHT

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using known identification characteristics (head scalation, number of dorsal scales, absence/presence of keel on scales, etc.). However, problems arise when the shedding is poorly preserved and consequently the available identification keys can not be used. The aims of this study were (1) to establish a comparative collection of snake sheddings of all 11 native Slovenian snake species, (2) to find new identification characteristics of sheddings to differentiate between these species and finally (3) to make a key for identifying native Slovenian snakes from poorly preserved snake sheddings. Most of the sheddings were collected by members of *Societas herpetologica slovenica* between 1997 and April 2011. The collection contained 348 sheddings of all the native Slovenian snake species. 300 sheddings were collected in the wild in Slovenia (86% of all sheddings), 29 sheddings in the wild in other countries (8%) and 90 sheddings were acquired from terrarium animals with unknown origin (5%). The most represented species was *Hierophis viridiflavus* (90; 25.9%), followed by *Zamenis longissimus* (46; 13.2%), *Coronella austriaca* (41; 11.8%), *Natrix natrix* (41; 11.8%), *Natrix tessellata* (29; 8.3%), *Vipera ammodytes* (25; 7.2%), *Elaphe quatuorlineata* (17; 4.9%), *Telescopus fallax* (9; 2.6%), *Vipera aspis* (3; 0.9%), *Vipera berus* (2; 0.6%) and *Hierophis gemonensis* (1; 0.3%). There were also 44 unidentified sheddings (12.6%). Only 26.7% of all sheddings were almost completely preserved (most parts of the head, body and tail intact). The preliminary results show that there are characteristic differences between sheddings of different species especially in (1) coloration, (2) number, position and size of apical stigmata and (3) shape and micro ornamentation of dorsal scales. These characteristic differences should allow to make the first key for the identification of native Slovenian snake species from shedding fragments and maybe even from sheddings of separate scales. However, it is necessary to first obtain additional sheddings to enlarge the sample size for several species with least sheddings in our collection.

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### Comparative ecophysiological traits of two *Podarcis* wall lizards from NE Iberia

Differences in ecophysiological characteristics may contribute to determine habitat use and geographic range in lacertid lizards, even if a considerable phylogenetic influence has already been demonstrated, especially for thermal traits. Assessing ecophysiology in sympatric species of different origin may be particularly elucidative on the contribution of the different factors involved. Two *Podarcis* species partly overlap in NE Iberian Peninsula: *P. liolepis*, widely distributed in NE Iberia but restricted in SE France; and *P. muralis*, restricted to mountains in Iberia but widespread across the rest of Europe. Two ecophysiological tests were performed with ten adult males and females of both species. In the first one, preferred body temperatures ( $T_p$ ) were measured in photothermal gradient at 10 time intervals. In the second one, the water loss (WI) rates in sealed chambers during 12 hours. Although both species did not differ in overall snout vent length, while males were longer than females in *P. liolepis*, the opposite trend was observed in *P. muralis*. Although (pregnant) females have lower  $T_p$ s, no differences between species were detected. However, *P. muralis* displayed higher WI than *P. liolepis*, in the second half of the experiment. These differences persisted even if corrected for initial body mass. These results suggest that environmental humidity and not temperature, together with

the presence of a congeneric saxicolous species, may be responsible for the restricted range of *P. muralis* in Iberian peninsula.

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## European conservation projects on *Emys*

*Emys orbicularis* is a freshwater turtle species widely distributed in Europe. Natural populations of this species show evidence of decline throughout the species European range. This species is considered “near-threatened” based on IUCN categories and protected through the Habitat Directive and Bern Convention on European wildlife. Numerous conservation projects have been developed independently in different European countries. We here present a summary on the projects for which we collected data up to this point for France, Hungary, Italy, Serbia, Slovenia, Spain and Switzerland. Our data collection indicates that conservation efforts toward the management and protection of *Emys orbicularis* are generally not coordinated across Europe or within each country and mostly occur at a local level involving a single site or one limited area. Furthermore, these conservation projects are not equally distributed across the species range in any country. Most projects are financed by local authorities, with some cases where funding have been provided by private companies, organizations and conservation societies. Data collected so far have identified current LIFE programs involving the protection and monitoring of *Emys* in Italy, France, Slovenia and Spain. However, a search of the European Commission official database of the LIFE program using the keyword “*Emys*” indicates that from the year 2000, 21 LIFE projects took place in distinct European countries, including (beside Italy, France, Slovenia, and Spain) Hungary, Lithuania, and Latvia. Despite the benefits of coordination across Europe, exchange of information, and financial support through the LIFE program, only a few European countries, local park authorities or research institutes currently benefit from these programs. In all countries habitat disturbance and destruction due to the intensification of the agriculture and urbanisation are the primary causes of the decline of this species. Other threats include road and human killing and competition with invasive species. According to our data, ongoing conservation projects on *Emys* focus on the monitoring of the existing populations, habitat restoration - including the construction of corridors to allow migration among fragmented populations and the construction of sites suitable for the reproduction, basking and ecological needs of this species -, reintroduction of genetically compatible individuals, and monitoring of the reproduction and offspring survivorship. Most projects focus only on one of these aspects and a very few projects