

SEH Grants in Herpetology for 2019



Conservation – Grantee for 2019:

Michele Chiacchio (*UFZ-Helmholtz Centre for Environmental Research – Germany*)

Impacts of winter tourism on montane herpetological communities of Europe

Montane/alpine areas are threatened by the combined effects of land-use and climate change, resulting in the loss of high-altitude natural and historical habitats. Among the sources of landscape modification, ski resorts construction is one of the most intensive and durable. However, studies on the effects of ski resorts on vertebrate biodiversity are rare, particularly those focusing on reptiles and amphibians. Nevertheless, these species show a high level of specialisation as well as playing a fundamental role in these ecosystems. In the proposed study we aim at analysing the impacts of ski resorts on montane herpetofauna by comparing body condition, occupancy, and species diversity between ski resorts and outdoor areas. Moreover, we will compare the different microclimates available to assess the potential thermal impact of ski-runs management on the habitat quality and to predict the thermal suitability under different climate warming scenarios. Data collection will be conducted in Paneveggio-Pale di San Martino Nature Park (Italy) where we conducted a preliminary season during summer 2018. We will sample on both ski-runs and natural/man-made meadows used for traditional activities such as grazing.

