P4 - Lizards in extreme habitat: on islets and rocks

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The importance of islands for biodiversity conservation is well known: each island is a unique ecosystem, often hosting populations characterized by exclusive morphological and/or ecological features. Tiny islands and rocks are particularly extreme ecosystems with few resources in delicate balance but often representing key elements for the survival of endemic species. Here we took in consideration two study systems of the Tyrrhenian Sea, La Maddalena Archipelago (NE Sardinia, Italy) and the islets surrounding Elba Island (Tuscan Archipelago, Italy), selecting only islets with area smaller than one hectare. Sixty-five islets were surveyed from 2011 to 2016: 51 belonging to La Maddalena Archipelago and 15 islets around Elba Island. On La Maddalena Archipelago 16 islets host 1 species (*Euleptes europaea* or *Podarcis tiliguerta*), 11 2-3 species (*Euleptes europaea*, *Tarentola mauritanica*, *Podarcis tiliguerta*, *Chalcides ocellatus*, *Hierophis viridiflavus*). Among the islets around Elba Island, 2 host 1 species (*Euleptes europaea*) and 3 2 species (*Euleptes europaea* and *Podarcis muralis*). Distances of islets hosting herpetofauna from the nearest main island range from few meters to over 2 km. On all these islets reptiles are the only non-flying vertebrates. In particular, *E. europaea* can survive on rocks with few plant individuals and very few arthropods while *Podarcis* require a bit more complex environment.

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