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ROCKY SHELTERS FOR LIZARD: A WAY TO PRESERVE AGRICULTURAL BIODIVERSITY

Savvas ZOTOS¹, Elena EROTOKRITOU², Athanasia MANDOULAKI³, Lefkios SERGIDES⁴, Marina XENOPHONTOS², Menelaos STAVRINIDES³ and Ioannis VOGIATZAKIS¹

Open University of Cyprus, 33 Yianni Kranidioti Avenue, 2252, Nicosia, Cyprus, Email: <u>savvas.zotos@ouc.ac.cy</u>
Department of Environment, Ministry of Agriculture, Rural Development and Environment, 20-22, 28th
Octovriou Avenue, 2414, Nicosia, Cyprus

3. Cyprus University of Technology, Arch. Kyprianos 30, 3036, Limassol, Cyprus

4. Terra Cypria, the Cyprus Conservation Foundation, Corner of A. Andreou, Koumandarias, General Mitella Street, 3602, Limassol, Cyprus

The current work is part of AgroLIFE project that aims to implement sustainable agriculture practices and conservation actions in High Nature Value farmlands (HNVfs) of Cyprus. AgroLIFE is focused on two traditional crops, carob groves in Anogyra region and vineyards in Commandaria regions, where four fields from each crop type are subject to sustainable agriculture practices (diversified fields) and numerous rocky shelters were created on the margin areas. The overall aim of the study was to evaluate the impact of rocky shelters (stonewalls, rock piles and hibernacula) on reptile conservation and the increase of reptile biodiversity in agricultural areas. For achieving this we monitored once a month (from March to June 2016), 12 fields of each cultivation type (carob groves and vineyards). The fields were separated into groups of four depending on the cultivation practices applied (Conventional, Diversified, Abandoned). Three line transects were monitored in each field (two in the margins and one in the centre) and the number of lizard species present was recorded. Species diversity in each transect line was calculated using the Shannon-Weiner diversity index. One-way and two-way ANOVA was used to assess the impact of rocky shelter type (new, well preserved, medium preserved, absent), transect position within the field (margins, centre) and cultivation practice, on lizards diversity. Preliminary results indicate a highly dependency between species diversity and shelter quality independent of the cultivation type. Areas with newly constructed rocky shelters along with field margins present higher numbers of lacertid species (mainly Ophisops elegans and Phoenicolacera troodica) and higher diversity than areas with less preserved shelters such as the centre of the fields. Results also indicate that cultivation practice is less important for reptile conservation than the quality of shelters in the field's margins.