

Text summarising the final outcomes of the project for Esplora's Website.

## Establishing Ecological Corridors for Fauna Species by BirdLife Malta

The project shed light on the movements and habits of two common fauna species of which we still know very little - the Mediterranean Chameleon and the Vagrant Hedgehog.

Small, lightweight tags were placed on the selected fauna species so that BirdLife representatives could track the movement of such species on a regular basis.



The active involvement of Prof. Louis F. Cassar, a professor at the Institute of Earth Systezms at the University of Malta, and Dr Adam Gauci, a Lecturer within the Faculty of Geosciences was indispensable in this project since they led the radio tagging process and trainedBirdLife representatives on how to effectively use such devices throughout the duration of the project. All the research work carried out was only initiated once the necessary Environement Resources Authority permitting was obtained.

The information recorded from the tags is expected to continue and it is deemed essential since it provides a deeper understanding of such species' preferred habitats, potential threats (such as predators and adverse weather conditions), preferred periods of activity and preferred feeding foraging grounds.

The results collected so far have reverted mainly around the Meditteranean Chameleon since spotting and locating the Algerian Hedgehog entails additional commitments and efforts considering that this animal forages for food at night. The data results established so far indicated that:

- In 30 days, one Meditteranean Chameleon specimen at Simar Nature Reserve covered an area of approximately 81m<sup>2</sup>, with the maximum distance between endpoints being around 18m impressive for such a small animal. The specimen was recorded on a variety of trees and shrubs, including Olive, Holm Oak, Tamarisk, Lentisk, African Tea tree, Golden Samphire and Aleppo Pine.
- Two specimens of the Meditteranean Chameleon at Għadira Nature Reserve were monitored for around 20 days. They moved over an area of about 170m<sup>2</sup> with the maximum distance between endpoints being 23m and 15m respectively. Most of the time, the specimens were found on Tamarisk, but also Lentisk, African Tea tree and Golden Samphire.



 Interestingly, the behaviour of both specimens was different between nature reserves in that, whilst the Għadira specimens were very calm and quiet, the specimens at Simar were quite hostile, with faster movements and resting in hardto-approach spots. The aggressive and avoidant behaviour of the Simar Chameleons could possibly be caused by an increasing number of feral cats in the Xemxija Bay area.



This theory is further supported by the different height recordings of the Meditteranean Chameleon's location, and this despite similar habitat and flora in both research areas. As shown in the graphical representation below, at Għadira, the specimens were found at an average height of 0.3–0.4m from the ground, while those at Simar were at an average height of 1.2m. The latter indicates that the specimen residing in Simar locates itself furthest from the ground to avoid falling prey.



Based on such results, it can be concluded that data findings can potentially be used in the planning stages of future nature areas, public gardens and afforestation projects. This is because the results obtained provide valuable tips so that what follows will ensure that a fitting habitat can be designed for the benefit of the iconic species in mention.

The legacy of this project will also be beneficial for the general public who have a small garden in their homes. This is because public members can approach BirdLife and adapt their gardens so that they become potential habitats for these lovely creatures.