The evolution of the species *Podarcis ehardii* in the Mediterranean region saw the formation of many isolated populations that are still in the process of characterization. Given the differences in habitat, different strategies would be adopted in order to escape predation: from cryptic mimicry to escape. In this project a newly described species, *Podarcis cretensis*, is approached in order to understand how it reacts to a variation in predation pressure during summer (July) and during autumn bird migration (October). Four populations from Crete have been sampled: one on Chrysi islet and three on the main island of Crete (Balos, Elafonisi, Theriso). The experiment was performed during morning and evening activity peaks. The individuals were slowly approached by a walking operator until eliciting a response. Data regarding fleeing distance (FD), approaching distance (AD), refuge type, hiding times, tail condition and age of the individuals were recorded. The results showed that there is a significant overall variation in the distances covered in summer and in October for both AD and FD as well as higher percentage of lizards showing regenerated tails in October compared to July. A significant variation among the four populations is also present for what concern FD and AD. These results show that there is a significant variation in the distances that lizards are willing to cover in the two different periods and in the four populations taken into consideration. This is a clear indication that bird predation has an important effect in shaping the behaviour of island lizards that lack other major predators. The presence of a higher percentage of regenerated tails in populations in October can imply that the sacrifice of the tail is a successful defensive mechanism against bird predation.