











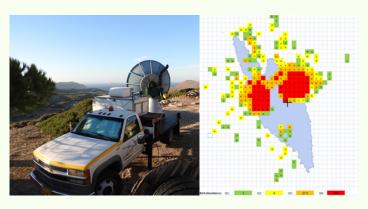


The Project LIFE-Nature (ElClimA) for the protection of Eleonora's Falcon against the impacts of climate change

4th year of implementation

Improving knowledge and taking action for Eleonora's falcon

In the framework of the LIFE EIClimA project actions for the adaptation of Eleonora's falcon to the upcoming climate change are being carried out, including activities aiming at the improvement of knowledge about the species ecology, as well as the improvement of its nesting sites.



Bird movement monitoring with the use of weather radar. Bird abundance based on naval radar recordings. Copyright NCC.

For a whole week monitoring of autumn migration took place at Antikythira island, as well as Eleonora's falcons movements with the use of radar. The naval radar of the NCC and the weather radar of the National Observatory of Athens scanned the sky of Antikythira monitoring the bird movements.















The journey of Plagara. Copyright University of Patras.

For the second consecutive year Plagara, a female Eleonora's falcon tagged with GPS logger, returned to Antikythira, while during the pre-breeding period she travelled up to Bosporus in search of food. After her return to Antikythira where she breeds, she conducted daily trips to Peloponnese to feed.



 ${\it Barley cultivation}.$ Copyright N.Tsiopelas/HOS-BirdLife Greece.

The creation of the refueling "oases" for migrating passerines at Antikythira has been completed and now 0.5 hectares of traditional varieties are cultivated, while 105 fruit trees have been planted. A difficult task, mainly due to the isolation and size of the island.



Installation of artificial nests at Dionysades islets.

Eleonora's falcon nestling in artificial nest.

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The installation of artificial nests continued at Dionysades islets, Antikythira and islets of Tilos. In total, over 1.000 nests have been installed on areas where Eleonora's falcons nest, namely at Makares and Dionysades islet complexes, Antikythira island, as well as on the islets of Skyros and Tilos.

In 2018 in one of the colonies of Crete, where rat eradication and installation of artificial nests took place, the number of nesting couples has doubled compared to 2017 and most active nests are artificial.















Comparison of the islands' state in 2016 and 2017.

Copyright NCC.

The rat-eradication efforts at Dionysades islets were fruitful, as Prasonisi Island (meaning Green Island in Greek) has turned green again. It's up to those who use them to stay that way now.



Project participation in scientific conference.

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The dissemination of the project results to the scientific community was continued comprising of the presentation of the toxicological analyses' findings at 3 scientific conferences, as well as know-how exchange with experts through the participation of the project team to an international workshop on the eradication of invasive species at Milan.



"Eleonora's falcons", messengers for the climate at Koufonisia. Copyright E. Panoriou/HOS-BirdLife Greece.

The visits of the environmental education team to schools of the project areas have been completed, with the visit to Kythera and Mikres Kyklades. In total, more than 1.500 students of 7 areas of the Aegean have participated in educational activities.













Discovering the project areas



Makares, Mikres Kyklades. Copyright NCC.

The LIFE project is implemented in 7 different areas of the Aegean Sea. One of those is Mikres Kyklades, a complex of mainly hilly islands between the islands of Naxos and Amorgos, hosting 160 pairs of Eleonora's falcons.

Stories from the field



Field work on the islets of Skyros. Copyright Ch.Kassara/UoP.

"The knowledge we have gathered to date regarding the habits of Eleonora's falcon during its occurrence at the breeding grounds and specifically in our country is truly priceless. Using modern techniques in animal tracking, besides the exciting journey of migration from Greece to Madagascar and back, during the past three years we have been monitoring the movements of female falcons in the mainland with the aim of identifying important foraging areas, pinpointing current pressures, predicting future threats and, ultimately, prescribing adequate conservation measures for the species."

Christina Kassara, University of Patras.





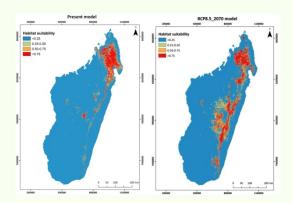








Climate change and biodiversity



Habitat suitability according to current environmental conditions and future climate scenarios, Kassara et al., 2017.

The project team in collaboration with 14 researchers from reputed institutions produced a species-wide habitat suitability map at Eleonora's falcon main wintering area, Madagascar, under current and foreseen future environmental conditions. According to the study's results the spatial distribution of the species at the complex of islands of Madagascar is expected to shift due to climate change and human-induced interventions in the area.

Eleonora's falcon Factsheet



Passerines at the "storehouse" of an Eleonora's Falcon pair. Copyright M.Tzali/NCC.

The breeding period of the Eleonora's Falcon in the Mediterranean Sea coincides with the autumn migration of passerines. The species, although insectivorous, has adapted in taking advantage of this massive bird movement that is favored by the etesian winds blowing during August, by changing its diet. As "a stitch in time saves nine", Eleonora's falcon creates close to its nest a "storehouse" where it keeps a small number of game to consume during the difficult days of no wind. Indeed, in Morocco it has been observed that they imprison passerines alive in fissures of rocks in order to keep their prey "fresh".













You can help!

- If you find yourself on an uninhabited islet keep in mind a few simple tips*.
- If you are a farmer, protect your harvest, contributing also to the protection of the environment through the application of simple methods*.
- If you are a teacher or parent, play with kids teaching them about Eleonora's falcon and its life on the islets of the Aegean Sea utilizing the environmental education kits "Feathered messengers for the climate" and "The Eleonora's falcon takes us on a voyage in the Aegean"* (both in Greek).
- * This informational material was developed in the frame of LIFE projects implemented in the past in the Aegean Sea for the Eleonora's falcon and Seabirds.

"The project is implemented by the University of Patras, in cooperation with the Hellenic Ornithological Society and the environmental consulting company NCC, with the contribution of the financial instrument LIFE + of the European Union and the Green Fund"





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