

e) The following agroecosystem services provided by green infrastructure monitored and assessed:

- Natural enemies and parasitoids numbers, that regulate olive pests, were increased. A significant number of predators and parasitoids were found, such as *Psytalia concolor*.
- Edible flora, that includes 50 different species.
- Soil fertility and tree nutrition improvement by increase of organic matter and macronutrient levels.
- Soil nitrogen availability was increased through nitrogen fixation, by 40 legume species.
- The increase of the overall biodiversity, the use of plant covers, and the application of sustainable farming practices leads to the mitigation of climate change, the reduction of gas emissions and adaptation to extreme weather conditions.
- Maintenance and improvement of the agricultural landscape.

f) Development of a certification standard for olive products produced in orchards with green infrastructure.

g) Development of a tourism package that incorporates green infrastructure, oliviculture and biodiversity.

h) Education and dissemination events that provide information among rural stakeholders, policy makers and the public.



**Improvement of green infrastructure in agroecosystems:
Reconnecting natural areas by countering habitat fragmentation**



LIFE+ Nature & Biodiversity. Contract Nr: LIFE16 NAT/GR/000575

Duration: 9/2017 – 6/2024

Coordinator: Dr Emmanouil Kabourakis

@ mail@lifeigic.eu | www.lifeigic.eu | @Lifeigic | @Lifeigic

Beneficiaries:



Hellenic Mediterranean University (HMU) (Coordinator)



Laboratory of Olive and Agroecological Production Systems (EOPS) - HMU



University of Crete - Natural History Museum



Foundation for Research and Technology - Hellas



Hellenic Agricultural Organisation (ELGO) «Demeter»

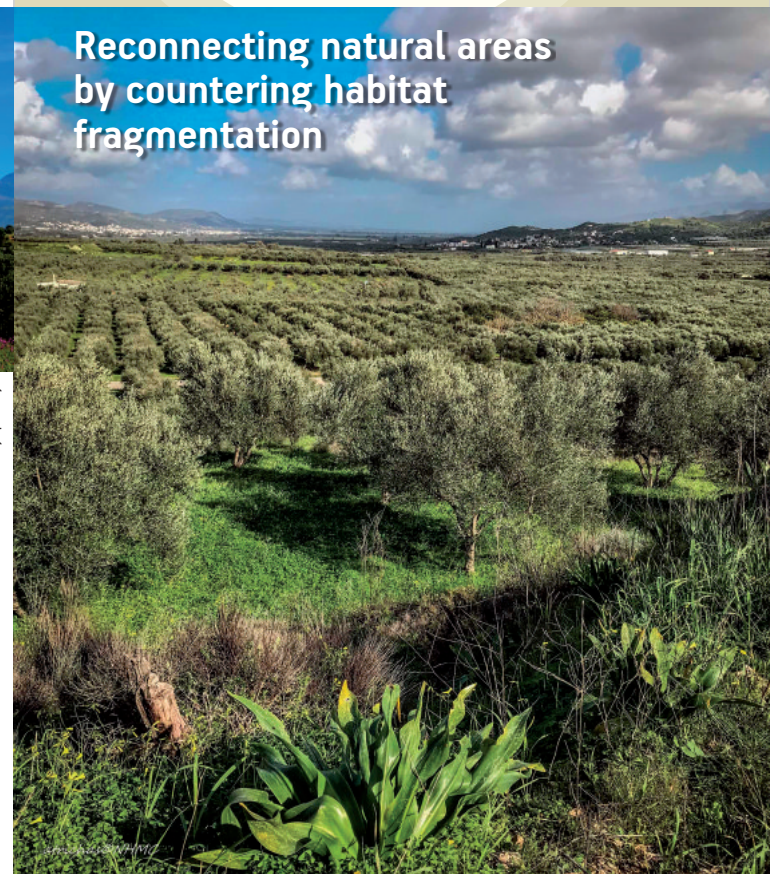
Co-financers:



The project LIFE IGIC - Improvement of Green Infrastructure in agroecosystems: reconnecting natural areas by countering habitat fragmentation - LIFE16 NAT/GR/000575 is being implemented with the contribution of the LIFE Programme of the European Union. Also, the project is being implemented with the contribution of the Green Fund.



**Improvement of green infrastructure in agroecosystems:
Reconnecting natural areas by countering habitat fragmentation**



With the contribution of Green Fund and the LIFE financial instrument of European Union



www.lifeigic.eu

www.lifeigic.eu

THE PROJECT

To **Life IGIC** aims on the development of Green Infrastructure and supporting sustainable farming methods in pilot olive orchards in western Messara plain, South Crete, Greece.

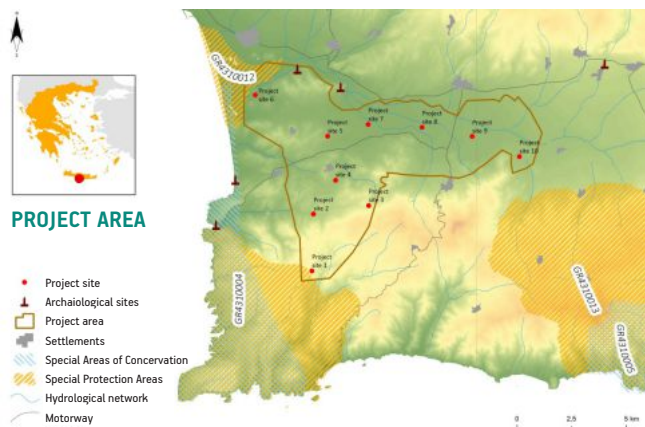
The project area is of great cultural, natural, agricultural, and socio-economic importance.

The project actions are relevant to:

- Biodiversity conservation.
- Enhancement of agroecosystem services

The project focuses on the:

- Development of “Green” or “Ecological” infrastructure and sustainable agricultural practices in oliviculture.
- Development of olive orchards of high biodiversity and natural value (HNV).



AIMS

The main aim of the project is the development of green infrastructure in the pilot olive orchards.

Green infrastructure provides the basis for the provision of:

- Habitats for flora and fauna species,
- High nature value olive orchards,
- Certified quality olive products,
- Sustainable agrotourism development.

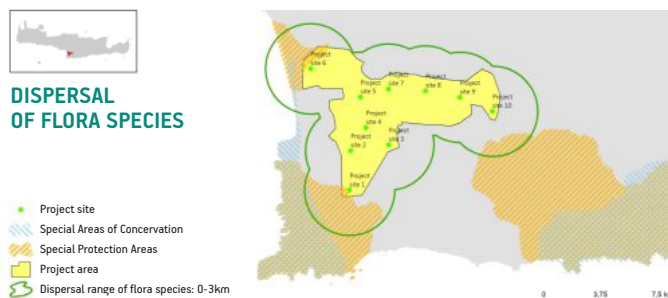
Green infrastructure is comprised by:

- Agroecological - sustainable farming practices in olive orchards such as:

- Rational olive tree canopy management,
- Ecological management of soil and spontaneous vegetation,
- Ecological nutrient management and fertilisers inputs use,
- Ecological pest management and plant protection products use,
- Ecological water management.

- Development of supporting green infrastructure constructions that provide supporting habitats for beneficial organisms.

Green infrastructure contributes to biodiversity conservation in the project area.



RESULTS & DISSEMINATION

In the context of the project the following have been achieved:

- Farming practices which aim to the sustainable management of olive orchards have been designed, developed, and applied.
- A network of green infrastructure (tree plantations, stonepiles, wood piles, water ponds etc.) have been developed in the olive orchards in the project area.

>500 aromatic plants and fruit bearing trees

Stonepiles, woodpiles and water ponds

- The project area was studied and assessed in terms of land use, habitats, and ecosystem status.
- The total number of flora and fauna species in the olive orchards were surveyed. The number of species increased.

During the project in total was found:

- 270 flora species
- 18 gastropod species
- 9 mammal species
- 3 reptile species
- 16 arthropod taxa including a high number of species.

