



EU POLLINATORS INITIATIVE

A review of Member States actions to tackle the decline of wild pollinators

GREECE



STRATEGY



INITIATIVES



Rural



Urban



Private sector



NATIONAL RED LISTS

Threatened species



Available for *some* butterflies [2009]



RAISING AWARENESS



Citizens



Schools children



Farmers & beekeepers

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There is no national pollinator strategy in Greece.

The Laboratory of Biogeography and Ecology of the University of the Aegean has established and maintains the Melissotheque of the Aegean, a database of wild pollinators in Greece with a geographical focus on the Aegean Archipelago. It includes records of more than 1,800 pollinator taxa, mainly wild bees and hoverflies. The laboratory has led over 20 years of intense research on wild pollinators and pollination in the Aegean, and has experience of 35 years of research on pollination and pollinators in Europe (Theodora Petanidou). There are few taxonomical experts in Greece; the lab is training some new taxonomists and collaborating with experts in neighbouring countries.

The Laboratory of Biogeography and Ecology is the only organisation carrying out awareness raising and educational activities about wild pollinators in Greece.



STRATEGIES FOR WILD POLLINATORS OR ANY OTHER SIMILAR PLANS

There is no national pollinator strategy in Greece.



IMPROVING KNOWLEDGE OF POLLINATOR DECLINE, ITS CAUSES AND CONSEQUENCES

RED LISTS ON POLLINATORS AND DATA ON POLLINATOR POPULATIONS

The red list of butterflies published in 2009 (Legakis & Maragou 2009) lists 39 species as threatened (four as critically endangered, 19 as endangered and 16 as vulnerable). Other groups of pollinators are not included in the red list.

The Melissotheque of the Aegean is a database on pollinators of the Aegean islands and other parts of Greece (Mt Olympus, Dadia, and others). It includes over 250,000 records on more than 1800 pollinator taxa (currently 1,455 identified to species level, most of them wild bees and hoverflies) and records of plant-pollinator interactions, with qualitative and quantitative systematically collected data (including ecological, taxonomic, trait, geographical, and climate data). The random, standardized surveying is carried out using pan trapping, net sampling, as well as other methods on 1-ha sites (method follows Westphal et al 2008 and Nielsen et al 2011). The database currently includes systematic surveys of around 25 islands and ad hoc surveys on several others. The Melissotheque also includes a plant-pollinator interaction database consisting of 5566 records (qualitative, with many plant and insect traits included) for one site in the mainland (Athens metropolitan area, Attica) of 30 ha.

All these datasets (data from the Aegean and Attica and the collections from the Aegean islands) are maintained in the [Laboratory of Biogeography & Ecology](#), University of the Aegean, in Mytilene, Lesvos.

The Attica collection (over 10,000 insect specimens) has been donated and kept in the Goulandris Museum of Natural History, in Athens.

The update to the IUCN European Red List of Bees (Rasmont et al, 2017) was substantially based on the data of the *Melissotheque of the Aegean*.

An Atlas of the hoverflies of Greece, with taxonomic keys, is to appear in 2019 (Vujic et al, 2019).

There is an urgent need for a permanent solution to data curation due to lack of resources and capacity for data management at present and in future, and the surveys are carried out without any permanent funding (Theodora Petanidou, personal communication). Unfortunately, due to lack of resources very few of the sites have been surveyed more than once.

POLLINATOR MONITORING SCHEMES

No pollinator monitoring has been carried out in Greece so far, and there is no pollinator monitoring in Natura 2000 sites.

RESEARCH INITIATIVES

The [Laboratory of Biogeography & Ecology](#), University of the Aegean, is the only lab working on pollination and wild pollinators in Greece. The research focus is mainly biodiversity and biogeography of wild pollinators in Greece and the main and particular threats they face with a special geographical focus on the Aegean Archipelago. Apart from research and surveys, the lab has carried out some public awareness activities, whereas there are expectations for more in the near future through projects that are expected to be funded.

During the last 15 years the lab has carried out the following research initiatives (as well as the pollinator surveys and hoverfly atlas and keys mentioned above):

1. Intense research on the diversity of wild bees of Lesvos Island, within the ALARM project (FP6 Program; 2004-2008).
2. Implementation of the project “The Pollinators of the Aegean Archipelago: diversity and threats (Pol-Aegis)” (2012-2015). The project encompassed surveys on ca 25 Aegean islands to study wild bee diversity, interactions with flowering plants. It also explored threats to wild pollinators; in particular the effects of grazing, fires, telephone antennas, intensive bee-keeping, invasive plants. The project was co-financed by the European Social Fund and national funds in the framework of the Programme “Education and Lifelong Learning”.
3. Since 2006, ongoing research of the diversity and distribution of the hoverflies of Greece, in collaboration with the University of Novi Sad (Serbia).
4. Implementation of the project entitled “Mediterranean scent landscapes: The role of volatile organic compounds of plants in structuring plant-pollinator interaction networks” focusing on the role of floral scent and color as pollination interface. The project has been carried out on Lesvos Island

5. LIFE project on restoration and re-cultivation of agricultural terraces, including effects on pollinators.
6. Collaborated in Super-B COST project and currently involved in ConservePlants COST project.

The lab has recently published on the following topics, amongst others:

- Genetics and taxonomy of hoverfly species (genera *Eumerus* and *Merodon* (Diptera: Syrphidae))
- Impact of Mediterranean pine forest fires on pollinators
- Factors shaping bee diversity in the Aegean archipelago (climate, landscape, grazing management etc)

TAXONOMICAL EXPERTS ON POLLINATORS

There are few taxonomical experts, notably Jelle Devalez (expert on almost all bee families of Greece). Two students have developed skills at an introductory level. For Syrphidae the lab collaborates mainly with Ante Vujic (Novi Sad University, Serbia).



INITIATIVES TACKLING THE CAUSES OF POLLINATOR DECLINE

ACTION PLANS ON SPECIES AND HABITATS

None identified.

FARMER AND LANDSCAPE INITIATIVES, AS WELL AS LOCAL LEVEL STRATEGIES

None identified.

MEASURES ON PESTICIDES

None identified.



RAISING AWARENESS, ENGAGING SOCIETY-AT-LARGE AND PROMOTING COLLABORATION

TRAINING AND AWARENESS RAISING CAMPAIGNS

None identified.

EDUCATIONAL CAMPAIGNS AND MATERIALS ON WILD POLLINATORS

The Laboratory of Biogeography and Geology regularly receive schools in the lab on Lesbos, and staff gives talks to Environmental Education Centres in Greece (Theodora Petanidou, personal communication).

CITIZEN ENGAGEMENT CAMPAIGNS

None identified.

PRIVATE SECTOR INITIATIVES FOR WILD POLLINATORS

None identified.

APICULTURE SECTOR INITIATIVES FOR WILD POLLINATORS

None identified.

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Educational materials

None identified.