



EU POLLINATORS INITIATIVE

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

ROMANIA



STRATEGY



INITIATIVES



Rural



Urban



Private sector



NATIONAL RED LISTS

Threatened species



Available for butterflies and moths (2003)



RAISING AWARENESS



Citizens



Schools children



Farmers & beekeepers

This document has been drafted by IEEP within the framework of the contract No 07.0202/2018/795538/SER/ENV.D.2 “Technical support related to the implementation of the EU Pollinators Initiative”. The information set out in this document is not comprehensive and does not necessarily reflect the official opinion of the Commission, or IEEP. The Commission does not guarantee the accuracy of the data included in this document. Neither the Commission nor IEEP or any person acting on the Commission’s behalf, including any authors or contributors of the notes themselves, may be held responsible for the use which may be made of the information contained therein. Reproduction is authorised provided the source is acknowledged.

This document shall be cited as:

IEEP. 2019. Member States initiatives to support wild pollinators populations: Romania. Prepared by IEEP for the European Commission.

Date of completion: 01/12/2019

Acknowledgments: Dr. Bogdan Tomozii, Ion Borcea Natural Science Museum Complex, Dr. Demetra Rakosy, German Centre for Integrative Biodiversity Research (iDiv), Prof. Dr. Laszlo Rakosy, Babeş-Bolyai University, Razvan Popa, Technical Director, Fundatia ADEPT

CONTENTS

<i>Strategies for wild pollinators or any other similar plans</i>	4
<i>Improving knowledge of pollinator decline, its causes and consequences</i>	4
<i>Initiatives tackling the causes of pollinator decline</i>	6
<i>Raising awareness, engaging society-at-large and promoting collaboration</i>	9
<i>References</i>	10

Romania does not currently have any national or local pollinator strategies, though the WWF and other NGOs have called for the urgent development of a national strategy for wild pollinators.

Information on wild bee occurrence and distribution in Romania is being published at the moment (Bees of Romania and Atlas Hymenoptera), and there is published information on Lepidoptera species occurrence and distribution. A checklist of Syrphidae is available. However, there are no red lists of Hymenoptera or Diptera in Romania and no abundance information or monitoring. A red list of Lepidoptera is available and is currently being updated. A butterfly monitoring scheme is established, though it currently lacks enough volunteers to expand. A handful of research projects focus on plant and pollinator communities in grasslands and landscapes, but there is a dire need for national funding of projects aimed specifically at assessing the state of various pollinator groups in Romania and for developing and implementing conservation strategies.

NGOs are leading awareness raising and educational actions with schools and local populations focused on hay meadows and other semi-natural grasslands, and their butterfly fauna. This includes a pilot results-based agri-environment scheme for hay meadows. A research collaboration between Germany and Romania is holding summer schools on plant-pollinator interactions for students, and researchers are developing partnerships with national museums and schools.



STRATEGIES FOR WILD POLLINATORS OR ANY OTHER SIMILAR PLANS

At present Romania only has a [national strategy for the beekeeping sector](#) (honeybee *Apis mellifera*). There is no national strategy aimed specifically at wild pollinators, nor it is clear whether such a strategy is being prepared, although the WWF and other NGOs have called for the urgent development of a national strategy for wild pollinators (WWF Romania 2018).



IMPROVING KNOWLEDGE OF POLLINATOR DECLINE, ITS CAUSES AND CONSEQUENCES

RED LISTS ON POLLINATORS AND DATA ON POLLINATOR POPULATIONS

There are no red lists of Hymenoptera or Diptera in Romania, and no data on pollinator abundance in these groups.

[Bees of Romania](#) (Hymenoptera - Apoidea, genus *Anthophila*) is an online resource published in 2010 (Tomozii 2017). The website provides a checklist of over 700 bee species recorded on the territory of Romania (beginning from the mid-19th century) as well as potential species based on records in nearby countries. The website provides a list of references for each of the listed species and photos of some species. The author also plans to produce species distribution maps¹. The [Atlas Hymenoptera website](#) contains additional information of the occurrence of bee species in Romania (incorporating part of the information available from the [STACCATO project](#)).

The online checklist for the [Syrphidae of Romania](#) lists 486 species, based on a publication from 2005 (Stanescu et al 2005).

¹ Personal communication, Bogdan Tomozii, Ion Borcea Natural Science Museum Complex, January 2018

A red list of the Romanian Lepidoptera (butterflies and macromoths) is available since 2003 (Rákosy et al, 2003). Another, updated, list of Romanian Lepidoptera is in preparation. According to the European Red List of Butterflies, Romania hosts 41% of all butterfly species in Europe and 6% of them are considered threatened at the European level (IUCN, 2013). A distributional checklist of the Lepidoptera of Romania is already in print (Rákosy et al 2019). There are also two publications (including also information on species distribution) covering species portraits of the Noctuids and butterflies of Romania (Rákosy, 1996; Rákosy, 2013). The website of the [Lepidopterological Society Romania \(LSR\)](#) provides updates on various related publications and projects, and free access to studies published in the Entomological Information Bulletin and Entomologica Romanica.

POLLINATOR MONITORING SCHEMES

Butterfly monitoring in Romania began in 2012. Butterfly occurrence and abundance are monitored by volunteers on fixed transects using the same method as is already used in other European countries. The [Lepidopterological Society Romania \(LSR\)](#) (with the support of Butterfly Conservation Europe) coordinates the scheme. The Butterfly Conservation Europe [manual on butterfly monitoring](#) has been translated into Romanian. The scheme is growing (and in 2015, 17 transects were monitored²), but the lack of enough volunteers is currently a huge impediment in the success of this initiative.

No other monitoring initiatives for wild pollinators are available.

In general, citizen science is still in the beginning in Romania and there is little Romanian citizen generated data on the Global Biodiversity Information Facility and iNaturalist platforms³.

RESEARCH INITIATIVES

There are several ongoing research projects in Romania, focusing on assessing plant-pollinator interactions (Hymenoptera, Diptera and Lepidoptera) across various environmental and anthropogenic gradients.

The leading research group at Babes-Bolyai University, Department of Taxonomy and Ecology (research group of Prof. Dr. László Rákosy, including Dr. Iulia Muntean) researches the structure of plant-pollinator communities in traditionally managed meadows across different environmental gradients. A current project is comparing plant-pollinator communities in abandoned and intensively grazed grasslands. This research in the framework of the [STACCATO project](#) provides insights into how plant-pollinator communities in grasslands respond to changes in management practices (abandonment vs. grazing). The German research groups Helmholtz Centre of Environmental Research and the German Centre for Integrative Biodiversity Research are important partners and co-funders of this research.

² Personal communication, Prof. Dr. Laszlo Rakosy, Babeş-Bolyai University

³ Personal communication, Dr Bogdan Tomozii, Ion Borcea Natural Science Museum Complex

However, there is an urgent need for national funding of projects aimed specifically at assessing the state of various pollinator groups in Romania and for developing and implementing conservation strategies.

TAXONOMICAL EXPERTS ON POLLINATORS

There are few experts on Hymenoptera and Diptera (Syrphids) in Romania, and they are not well connected. There are no national training opportunities for bee and syrphid fly identification except for the basic skills that students at the Romanian university biology faculties can obtain. Summer schools organized by researchers in Germany in co-operation with national partners have been held with the aim of providing some basic training. There is a need for more such initiatives.

The [Lepidopterological Society Romania \(LSR\)](#) coordinates the biodiversity studies for Lepidoptera in Romania. The Faculty of Biology, Babes-Bolyai University Cluj-Napoca, offers taxonomical training opportunities (mainly for Lepidoptera) for students at the bachelor, masters and PhD level. In the last years over 10 experts in Lepidoptera have been trained here.



INITIATIVES TACKLING THE CAUSES OF POLLINATOR DECLINE

ACTION PLANS ON SPECIES AND HABITATS

There is no national level action plan for wild pollinator species. Regional species plans are available for certain protected species (*Maculinea* butterflies and others)⁴.

FARMER AND LANDSCAPE INITIATIVES, AS WELL AS LOCAL LEVEL STRATEGIES

Common Agricultural Policy Rural Development Programme

Agri-environment support for maintaining species-rich meadows and pastures in Romania: pollinators are not mentioned specifically in the [National Rural Development Plan 2014-2020 for Romania](#), but the plan highlights the importance of agri-environment schemes (M10), afforestation (M8) and Forest-

⁴ Personal communication, Dr Bogdan Tomozii, Ion Borcea Natural Science Museum Complex

Environment-Climate agreements for the “maintenance and development of insect populations”. There are five agri-environment sub-measures (packages) offering support for biodiversity-friendly grassland management practices. One is targeted specifically at pollinators:

- Package 6 – Grasslands important for butterflies (*Maculinea* sp.) - targets around 23,000 ha of permanent grasslands important for butterflies (*Maculinea* sp.) with payments for the maintenance of traditional management practices.

The other packages are not targeted at pollinators, but all promote the maintenance of traditional grassland management practices and/or prohibit the use of pesticides and are thereby potentially of direct benefit for pollinators:

- Package 1 – High Nature Value (HNV) grasslands
- Package 2 – Traditional agricultural practices - offered in combination with Package 1 to maintain traditional hay-making practices
- Package 3 – Grasslands important for birds
- Package 9 - Agricultural land important as feeding area for the Lesser Spotted Eagle (*Aquila pomarina*) – notably sub-package 9.2 (permanent grasslands)
- Package 10 – Habitats for common bird species associated with arable land requires 30% of arable land to be left uncultivated (including the prohibition of pesticide use) every year, including 10% which is left fallow for at least 4 years and 20% which is rotational fallow. This has obvious benefits for pollinators, although it is not targeted specifically at them.

Additionally, there are two sub-measures for organic farming (M11) which are targeted at the conversion to organic farming (Package 6.2) and maintenance of certified organic management of permanent pastures (Package 6.1).

NGO landscape or local level initiatives

Initiatives for pollinator conservation on Natura 2000 sites are led by NGOs:

- The NGO Fundatia Adept aims to maintain hay meadows and pastures in Romania’s extensive High Nature Value (HNV) farmed landscape in the Târnava Mare and Pogány Havas regions. Activities have been launched to encourage and enable small-scale farmers to sign up to the agri-environment schemes described above and to improve the economic and social sustainability of their HNV farming systems. Fundatia Adept led a [pilot Agri-Environment Scheme for the Târnava Mare and Pogány Havas Regions](#) testing the suitability and practicality of results-based agri-environment schemes to maintain a broad range of species and habitats.
- The [Lepidopterological Society Romania \(LSR\)](#), led by Prof. Dr. László Rákósy, has managed the “Dealurile Clujului de Est” Natura 2000 site for butterflies and moths. LSR initiated the designation of the site in 2009 for ten Lepidoptera species (*Leptidea morsei*, *Lycaena dispar*, *Maculinea nausithous*, *Maculinea teleius*, *Nymphalis vaualbum*, *Pseudophilotes bavius*, *Eriogaster catax*, *Callimorpha quadripunctaria*, *Paracossulus (Catopta) thrips*, *Cucullia mixta*) (as well as other habitats and species), and then developed and implemented the site management plan. The site of 24,405 ha contains a mosaic of continental steppe and dacian

(Transylvanian) grassland and forest habitats maintained by extensive grazing. The LSR led initiatives to regulate grazing - both to reduce the pressure of overgrazing on invertebrates and to clear scrub and reinstate grazing on abandoned areas. The LSR studied the population size and dynamics of the *Maculinea* butterflies and assessed the effects of grazing on butterfly diversity. The society was granted the custody of the Natura 2000 site in 2014 and administrated the site until 2018, when the government revoked the custodianship of all NGOs.

MEASURES ON PESTICIDES

Romania issued several derogations to the EU restrictions on the use of neonicotinoids, to allow farmers to continue to use imidacloprid-treated seeds of oilseed rape, with the argument that flea beetles were causing too much economic damage. After the [assessment conducted by European Food Safety Authority \(EFSA\)](#) which found that the alternatives to these substances would have been available for about one third of the products, the European Commission has ruled that these 'unjustified' derogations are no longer allowed ([measures adopted on 3 February 2019](#)).

The revised National Action Plan for the Sustainable Use of Pesticides (Government Decision 135/2019) includes an objective to reduce the impact of pesticides on pollinating insects⁵. The proposed actions under this objective are to:

- draw up recommendations on the foliar application of pesticides with a view to reducing the impact on bees
- organise annual workshops in collaboration with beekeepers' associations
- monitor the use of deflectors on vacuum-based pneumatic seed drills which are mandatory when sowing pesticide treated seeds

The plan repeats the intention, which was already included in the previous plan⁶, to establish multifunctional protection areas on farmland, designed to maintain the environmental balance and contribute to biodiversity preservation, including pollinating insects, in which pesticide use is minimised. These areas may include field margins, sown flowering strips, buffer strips, and other farmland landscape features. The plan includes a measure to train professional users in the management of multifunctional protection zones and to monitor compliance with requirements in multifunctional protection zones. No information was available on what progress has been made with this measure.

⁵ Decision No 135 of 12 March 2019 approving the National Action Plan on reducing risks associated with the use of plant protection products. Official Gazette of Romania 2019.

⁶ Approved by Article 12(3) of Government Emergency Order No 34/2012, approved by Law No 63/2013



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

TRAINING AND AWARENESS RAISING CAMPAIGNS

[Lepidopterological Society Romania](#) has been involved in awareness raising activities associated with the Natura 2000 site "Dealurile Clujului de Est" in Cluj county, Romania. For example, several informative panels were set up, illustrating and providing information about the fauna and flora of the region. They designed and distributed fliers, maps and booklets to raise awareness of the protected Lepidoptera and other species, illustrating the ecotouristic value of the region and drawing attention to some of the core species from the EU Habitats Directive (e.g. Rákósy et al 2018). In addition, it engaged in raising awareness activities for the conservation of Eastern Eggar *Eriogaster catax*, an IUCN Data Deficient Species.

EDUCATIONAL CAMPAIGNS AND MATERIALS ON WILD POLLINATORS

The Helmholtz Centre for Environmental Research Leipzig, Germany (in collaboration with the German Centre for Integrative Biodiversity Research and the Martin Luther University Leipzig, Germany) conducted a summer school on plant-pollinator interactions in Romania in 2017 and [several projects](#) are currently ongoing. The summer school and the research projects brought together instructors and students from Germany and Romania and this resulted in a common publication (Bennett et al 2018) (with more manuscripts being currently in development). Other projects that will involve cooperation with national museums and schools are being developed.

[Lepidopterological Society Romania](#) (SLR) has conducted educational courses for schools located in and around the Natura 2000 site Dealurile Clujului Est. Since 20 September 2019, SLR is implementing a [project "Ecological education and ecotouristic guide on a Natura 2000 Site Dealurile Clujului Est"](#), which includes courses of ecology, thematic excursions for the pupils from six communes within this area (Apahida, Bonțida, Borșa, Dăbâca, Jucu and Vultureni), an awareness seminar for the decision-makers from the mentioned communes, as well as two publications on Natura 2000 site Dealurile Clujului de Est. This project is funded by the National Programme for Rural Development in Romania.

CITIZEN ENGAGEMENT CAMPAIGNS

SLR has been holding a [public contest “The Insect of the year”](#) for the last 3 years, which aims at raising public awareness about the importance of entomofauna for the environment and human society.

SLR also managed to convince the decision makers to name the brand of the micro-region located to the north of the municipality of Cluj-Napoca (Someş-Transilvan area) after the symbolic butterfly species. The area of the Natura 2000 site Dealurile Clujului de Est is the only place which has all four emblematic species of blue butterflies belonging to the genus *Maculinea*. The chosen brand is called "[The Land of the Blue Butterfly](#)".

PRIVATE SECTOR INITIATIVES FOR WILD POLLINATORS

None identified.

APICULTURE SECTOR INITIATIVES FOR WILD POLLINATORS

[ROMAPIS](#), the federation of beekeeping associations in Romania, initiated [legal proceedings](#) against the Ministry of Agriculture and Rural Development (MADR) in 2018 for issuing temporary authorizations for the use of neonicotinoids for treatment of seeds. It previously organized an [online petition](#) to stop bee poisoning with neonicotinoids and sent an open letter to MADR regarding the [temporary authorizations](#) for neonicotinoid-treated rapeseed in 2016, in which ROMAPIS refers to application of concrete measures to protect bees but also the other pollinators. ROMAPIS also took part in the [Bee Coalition in 2017](#) to demand a complete ban of neonicotinoids in the EU.

REFERENCES

Bennett, J M, Thompson, A, Goia, I, Feldmann, R, Ştefan, V, Bogdan, A, Rákosy, D, Beloiu, M, Biro, I-B, Bluemel, S, Filip, M, Madaj, A-M, Martin, A, Passonneau, S, Kalisch, D P, Scherer, G and Knight, T M (2018) A review of European studies on pollination networks and pollen limitation, and a case study designed to fill in a gap. *AoB PLANTS* No 10 (6).

Craioveanu, Cristina, Rákosy, László (2017) Butterfly communities in semi-natural grasslands: short- and long-term effects of management practices in Transylvania, Romania. Presentation. Available at: <http://www.lepidoptera.ro/english.htm>

IUCN (2013) IUCN Red List: Romania’s biodiversity at risk: factsheet. <https://www.iucn.org/fr/regions/mediterranee/fiches-techniques>

MUNTEAN, I., SITAR, C., CRAIOVEANU, C., RÁKOSY, L. (2015) The effect of traditional land use of diurnal lepidoptera from Nature 2000 site "Dealurile Clujului Est". STUDIA UNIVERSITATIS BABEȘ-BOLYAI BIOLOGIA, LX, 1, 2015, pp 95-106.

Rákósy L. (1996) Die Noctuiden Rumäniens (Lepidoptera Noctuidae). Stapfia 46, pp 1 - 648.

Rákósy L., Goia M., Kovacs S. (2003). Verzeichnis der Schmetterlinge Rumäniens. Societatea Lepidopterologica Romana. Cluj. 446 pg

Rákósy L. (2013) Fluturii diurni din România. Cunoaștere, protecție, conservare. Pp 1 – 352.

Rákósy L. (2017) Indicator butterfly and moths of the High Nature Value dry grasslands of Transylvania. Booklet. Available at: <https://fundatia-adept.org/books-brochures/>

Rákósy, L., Andrei Crișan and Cristina Craioveanu (2018) Beneficiile naturii în situl Natura 2000 "Dealurile Clujului de Est" / The Benefits of Nature in the Natura 2000 Site "Eastern Cluj Hills". Editura Pensoft. https://www.researchgate.net/publication/324496263_Beneficiile_naturii_in_situl_Natura_2000_Dealurile_Clujului_de_Est_The_Benefits_of_Nature_in_the_Natura_2000_Site_Eastern_Cluj_Hills

Rákósy et al. (2019) A Distributional Checklist of the Lepidoptera of Romania. (in press).

STANESCU, CARMEN, CORNELIU PARVU (2005) Syrphids (Diptera: Syrphidae) of Romania. Checklist, phenology, distribution, Trav. Mus. Nat. His. Nat. Gr. Antipa 2005, Vol. 48: 177 - 202

Tomozii, Bogdan (2017) Bees of Romania. Available at <http://www.beesofromania.ro/>

WWF Romania (2018) Pozitia WWF privind conservarea polenizatorilor. Letter to Ministerul Mediului Directia Biodiversitate and Ministerul Agriculturii. Press release 4 June 2018. Available at: http://d2ouvy59p0dg6k.cloudfront.net/downloads/pozitia_wwf_privind_conservarea_polenizatorilor_4_iunie_2018.pdf

Educational materials

None identified.