



EU POLLINATORS INITIATIVE

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

CZECHIA



STRATEGY



INITIATIVES



Rural



Urban



Private sector



NATIONAL RED LISTS
Threatened species



32%

Wild bees (2017)



38%

Butterflies (2017)



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: Czechia. Prepared by IEEP for the European Commission.

Date of completion: 01/12/2019

Acknowledgements: Karel Chobot, Nature Conservation Agency of the Czech Republic

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A national strategy for pollinators is in preparation.

The 2017 Red List of Invertebrates covers all butterfly and moth groups (Lepidoptera), bees, Chrysididae wasps and other wasps (Hymenoptera), and flower visiting beetles (Coleoptera). Hoverflies (Syrphidae) and other fly families were assessed in the 2005 edition of the Red List. Overall, 32% of wild bees, 28% of hoverflies, and 38% of butterflies are threatened. Distributional Grid Atlases of Czech butterflies and longhorn beetles (Cerambycidae), which encompass several genera of pollinators, are available online.

The Entomological Institute of the Czech Academy of Sciences together with Nature Conservation Agency coordinates butterfly monitoring in the Czech Republic.

Research groups include the Czech Academy of Sciences Institute of Entomology and Charles University Department of Ecology Insect Community Ecology Group, collaborating closely with the Institute of Botany, Czech Academy of Sciences.

*The Czech system of species action plans implements robust and detailed measures for several critically endangered species, including the butterfly *Euphydryas maturna*, but its role as a pollinator is not significant.*



STRATEGIES FOR WILD POLLINATORS OR ANY OTHER SIMILAR PLANS

A national strategy for pollinators is in preparation.



IMPROVING KNOWLEDGE OF POLLINATOR DECLINE, ITS CAUSES AND CONSEQUENCES

RED LISTS ON POLLINATORS AND DATA ON POLLINATOR POPULATIONS

In Czechia, the latest Red List of invertebrates (including pollinator groups) was published in 2017 (Hejda et al, 2017). The 2017 Red List assessment covers all butterfly and moth groups (Lepidoptera), bees, Chrysididae wasps and other wasps (Hymenoptera), and many flower visiting beetles (Coleoptera). Hoverflies (Syrphidae) and other fly families were assessed in the 2005 edition of the Red List (Farkač et al, 2005).

There has been a positive trend in the Red List status of pollinator groups. However, there have been methodological changes as the second assessment applied a stricter interpretation of IUCN criteria. In addition, knowledge on pollinators has increased. Wild bees are covered in both assessments, reflecting the growing knowledge of the group.

Current information shows that:

- of a total of 161 butterfly species, 17 (11%) are extinct and 61 (38%) are threatened. There has been a decrease in the number of threatened species since the last assessment in 2005 (70 species).
- of a total of 401 hoverfly species, seven are extinct and 113 species (28%) are threatened (2005 assessment).
- in 2005, 97 wild bee species (out of 584 known species) were regarded as extinct, and 241 (41%) as threatened. In 2017, the number of known species rose to 596, while the number of

extinct species decreased to 86 (due to rediscoveries), and 190 species (32%) were assessed as threatened.

Comprehensive knowledge about distribution is available for several groups of insects, some being important pollinators. Butterflies are particularly targeted in nature conservation, scientific research and public attention activities. A distributional Grid Atlas of Czech butterflies was published in 2002 (Benes & Konvicka 2002). It compiled the results of records gathered from 1995 to 2001, which were compared to previous mapping periods (before 1980, and 1981-94). It found that 57% of the 161 assessed species are either extinct or endangered. The Grid Atlas is available also for longhorn beetles (Cerambycidae), which encompasses several genera of pollinators (Sláma, 1998). The information contained in the Grid Atlas is currently being included in online grid maps of all species present in Czechia on the nature platform ([Portál Informačního systému ochrany přírody](#)). Current information is based on the Species Occurrence Database, managed by the Nature Conservation Agency.

It should be noted that the pollinator species are not a subject of systematic data collection and, thus the knowledge of their distribution and status is limited.

POLLINATOR MONITORING SCHEMES

There is no specific pollinator monitoring scheme in Czechia.

The Entomological Institute of the Czech Academy of Sciences together with Nature Conservation Agency coordinates butterfly monitoring in the Czech Republic.

The Nature Conservation Agency (AOPK CR) runs [monitoring schemes](#) on the species and habitats listed in the Habitats Directive (including 15 butterfly and moth species). Other schemes, such as the protected areas inventories, are aimed at various groups of animals, including flower visiting beetles. All records from monitoring schemes are incorporated into the Species Occurrence Database.

RESEARCH INITIATIVES

Czech Academy of Sciences Institute of Entomology and Charles University Department of Ecology [Insect Community Ecology Group](#) – research on pollination ecology. Collaborate closely with the Institute of Botany, Czech Academy of Sciences. Research from these groups related to European pollinators includes:

- Research on insect ecology associated with post-industrial sites such as brown coal spoil heaps, e.g. habitat-use of the Grayling butterfly *Hipparchia semele*, a European endemic xerothermophilous specialist and one of the most rapidly declining butterflies in Central Europe, inhabiting fly ash deposits.
- Research on pollen limitation in endangered species, e.g. *Dracocephalum austriacum*.
- Flower visitation by hoverflies (Diptera: Syrphidae) in a temperate plant-pollinator network.

TAXONOMICAL EXPERTS ON POLLINATORS

The taxonomical experts on wild bees and pollinator groups were all involved as authors of the Red List (contacts available in Hejda et al, 2017).



INITIATIVES TACKLING THE CAUSES OF POLLINATOR DECLINE

ACTION PLANS ON SPECIES AND HABITATS

There are no specific action plans for pollinator species. The Czech system of species action plans implements measures for several critically endangered species, including the butterfly *Euphydryas maturna* ([Hnědásek osikový](#)), but its role as a pollinator is not significant.

FARMER AND LANDSCAPE INITIATIVES, AS WELL AS LOCAL LEVEL STRATEGIES

Common Agricultural Policy Rural Development Programme

No pollinator-targeted measures identified.

Other farmer and landscape or local level initiatives

None identified.

MEASURES ON PESTICIDES

The Czech national action plan for the sustainable use of pesticides 2018-2022 commits the Ministry of Agriculture in cooperation with the Institute, the State Veterinary Administration, the Bee Research Institute and the Beekeepers Association to undertake several actions by the end of 2019. They include commitments to:

- analyse the extent of use of preparations that are high-risk for pollinators, such as foliar insecticides, insecticidal granules, insecticidal disinfectants and other preparations, and assess the need for accepting further measures to eliminate risks (in relation to the risk of mass poisoning of bees).

- consider amendments to the law applying to certification and use of treated seed and planting stock in agriculture, (and its coherence with the Phytosanitary Act), including standardisation of product labelling.
- consider legislative changes in the laws applying to use of pesticide application technology to protect bees and other non-target wildlife.

Much of the wording is similar to commitments in the previous national action plan, and no evidence was found of what action has been taken so far.



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

TRAINING AND AWARENESS RAISING CAMPAIGNS

None identified.

EDUCATIONAL CAMPAIGNS AND MATERIALS ON WILD POLLINATORS

None identified.

CITIZEN ENGAGEMENT CAMPAIGNS

None identified.

PRIVATE SECTOR INITIATIVES FOR WILD POLLINATORS

None identified.

APICULTURE SECTOR INITIATIVES FOR WILD POLLINATORS

The [Czech Beekeepers Union](#) does not currently actively engage in activities for wild pollinators.

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Educational materials

None identified.