

Convention on the Conservation of Migratory Species of Wild Animals



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INSECT DECLINE AND ITS THREATS TO MIGRATORY INSECTIVOROUS ANIMAL POPULATIONS

(Prepared by the Secretariat)

Summary:

This document contains a draft report on the main factors driving the established loss of insect biomass and the cascading effects on migratory insectivorous animal populations. The document aims to contribute to the Scientific Council's mandate on insect decline, as contained in CMS Decision 13.129.

INSECT DECLINE AND ITS THREATS TO MIGRATORY INSECTIVOROUS ANIMAL POPULATIONS

Background

- 1. There is consensus among the scientific community about the dramatic declines of insect biodiversity and biomass in many parts of the world. This is backed up by the IPBES global assessment report on biodiversity and ecosystem services, which also highlights the rapid declines in insect populations and abundance.
- 2. Insect biodiversity plays a vital role in the proper functioning of many of the world's ecosystems and their services. Insects are an essential food resource for numerous vertebrate species that feed on them for rearing their offspring, many of which are migratory species. Insect decline can therefore have a significant impact on a range of migratory insectivorous species, especially bird and bat species.
- 3. However, there are still important gaps in the understanding of the conservation status, population trends and threats to insect species, and the impacts of these on migratory species that rely on them, particularly in some regions. Filling these knowledge gaps and analysing in detail the different drivers of insect decline is important for identifying priority actions that can be taken to address these losses.
- 4. To this end, the Conference of the Parties, at its 13th meeting (COP13, 2020), adopted Resolution 13.6 *Insect Decline and its Threat to Migratory Insectivorous Animal Populations*, which, inter alia, calls upon the Parties to encourage and support scientific research on the impact of insect decline on migratory insectivorous animal populations. The Resolution also calls upon the Parties to promote continued cooperation and collaboration between scientists, professionals, stakeholders and international bodies, whose work is related to insect decline.
- 5. Furthermore, COP13 adopted <u>Decision 13.129 Insect Decline and its Threat to Migratory Insectivorous Animal Populations</u>, which reads as follows:

13.129 Directed to the Scientific Council

The Scientific Council is requested to consider, subject to the availability of resources, in the meetings of its Sessional Committee after the 13th meeting of the Conference of the Parties (COP13), the following topics:

- a) identifying and prioritizing the main factors causing the established loss of insect biomass;
- b) collecting relevant information regarding the current insect decline, and assessing its cascading effects on migratory insectivorous animal species;
- c) developing guidelines for the most urgent or prioritized actions identified;
- d) publishing any such guidelines following circulation to all Parties for approval.

Activities to implement Decision 13.129

6. The 5th meeting of the Sessional Committee of the Scientific Council (ScC-SC5, 2021) took note of the mandate in Decision 13.129 and included insect decline in its Programme of Work for the intersessional period between COP13 and COP14. Activities foreseen included the preparation of a literature review covering items a) and b) of Decision 13.129, to provide a

¹ IPBES (2019) *Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services*. E. S. Brondizio, J. Settele, S. Díaz, and H. T. Ngo (editors). IPBES Secretariat, Bonn, Germany. 1148 pages. https://doi.org/10.5281/zenodo.3831673

basis for further consideration of the topic. The Secretariat sought funding to support the production of the review.

- 7. In April 2023, thanks to voluntary contributions from the Government of Germany and the Government of Australia, the Secretariat commissioned the Leibniz Institute for the Analysis of Biodiversity Change (LIB) to produce a report on the impacts of insect decline on migratory insectivorous animals.
- 8. An advanced draft of the report is contained in Annex 1 of this document. It provides a review of the relevant scientific literature assessing the status of insect decline populations, the main factors driving insect decline, and the direct and indirect impacts of these on migratory insectivorous animal species.
- 9. The report is now subject to review by the Scientific Council to help inform the final version of the report, which will be presented to COP14 for consideration.

Recommended actions

- 10. The Scientific Council is recommended to:
 - a) review the report contained in Annex 1 of this document;
 - b) provide feedback to inform the further development and finalization of the report.