PROJECT FACTSHEET

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MONIPOL

Detecting changes in the populations of essential pollinating insects across Luxembourg using standardised methods.

Inspiration

Pollinating insects such as wild bees, hoverflies, beetles, and countless other insects provide a wide range of benefits to society. However, there is increasing evidence that wild pollinators are declining at global and regional extents in occurrence and diversity, primarily as consequence of human activities. Major gaps remain in our knowledge regarding the status and trends of pollinating insects. Monitoring pollinator decline, its causes and its impacts is one of the aims of several national, European and international initiatives for the conservation and sustainable use of pollinators.

Luxembourg is committed to take action to protect wild pollinators and their habitats, and to develop, facilitate and implement pollinator conservation strategies. To achieve this, data are needed to assess how wild pollinator populations change at the national extent in the long term and are essential to understand the impacts of environmental change.

Innovation

MONIPOL has the ambition to obtain such information by implementing a long-term and large-scale monitoring to ensure obtaining robust population trend data for a range of pollinating insects.

Every year, between April and September, LIST researchers systematically survey pollinating insects in a fixed set of locations across Luxembourg with the help of citizen scientists. These sites were randomly selected to represent the country's environmental conditions. In each location, they use two standardised methods: transect walks and pan-trapping.

In the first case, an observer walks along a 2.5 km fixed path identifying and counting all bumblebees and butterflies that are found. The second method, pan-trapping, consists of catching insects in coloured bowls filled with soapy water, which are placed along the bumblebee transect for 24 hours. All insects caught, from the smallest to the largest, are counted and identified in the laboratory, and kept for further analyses.

Impact

By pushing forward a country-wide pollinator monitoring scheme, the MONIPOL project will generate multiple benefits, such as scientific (e.g., formulating research questions on biodiversity or ecosystem service provision), societal (e.g., food security, protection of species and habitats, education, citizen engagement), policy support (e.g., contributing to national and international conservation policy targets), etc.

Financial Support

Ministère de l'Environnement, du Climat et de la Biodiversité

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