



SAFEGUARD

Safeguarding European
wild pollinators

Bridging science & practice for pollinator-friendly management

25 February 2026

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Funded by
the European Union

The Safeguard project receives funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101003476.

Table of contents

Summary	3
Context	3
Introducing the current policy landscape and key initiatives	4
Safeguard research findings	6
Discussions	7
Protected areas discussion	7
Agriculture and CAP discussion.....	8
Conclusions	9
Annex: Agenda	10

Summary

As part of the Safeguard Horizon Europe Project, this hybrid workshop provided a space for protected area managers, land managers, researchers and policy experts to reflect on turning pollinator research into practical solutions. Discussions focused on semi-natural dry grasslands, calcareous grasslands, and the decline of pollinators in these landscapes. Participants reflected on the current policy landscape and how policy can be leveraged to implement pollinator-friendly management practices in various habitats.

WHO: organised by the Institute for European Environmental Policy (IEEP).

WHEN: 25 February 2026 at Respace, 13:00 to 16:30 CEST.

Number of participants: 22 in-person participants and 15 online participants

Context

Pollinators are essential for biodiversity and to support food production, yet their decline in recent years has been alarming across Europe. In response to this crisis, the European Commission launched the EU Pollinators Initiative in 2018. This initiative, aligned with the EU's Biodiversity Strategy for 2030, aims to reverse the decline of pollinators by 2030.

During this workshop, participants discussed how scientific evidence from the Safeguard project and related initiatives can directly inform the management of semi-natural grasslands for pollinator conservation in and around protected areas. Key insights included: (1) strong scientific consensus that habitat quality, especially flowering plant richness and nesting resources, is the dominant driver of pollinator diversity; (2) landscape structure and connectivity play major roles in supporting vulnerable pollinator species; (3) management actions must balance the needs of different pollinator groups; and (4) the Common Agricultural Policy (CAP) and the EU Nature Restoration Regulation (NRR) offer important, but underused, levers for pollinator-friendly management.

The Safeguard Horizon 2020 project has researched the direct and indirect drivers of pollinator decline in Europe and assessed their environmental, economic and social impacts. Through a comprehensive reassessment of the status and trends of European wild pollinators, the project developed an integrated assessment framework to inform more effective policy management responses. Safeguard research evaluates the effectiveness of multiple interventions across semi-natural, agricultural and urban landscapes, generating evidence on which measures work, where, and under what conditions. The research provides key insights into the types, combinations, and spatial arrangement of interventions best suited to different management objectives,

offering a strong evidence base to support targeted and context-specific pollinator conservation policies.

Introducing the current policy landscape and key initiatives

Evelyn Underwood (Institute for European Environmental Policy) opened the workshop by welcoming the participants and presenting the agenda (see annex 1 for more information). This was followed by a few words about the Safeguard project and the Safe-Hub web platform [policy corner](#), which holds all policy-related material developed during the project.

Three key policy initiatives were presented at the start of the workshop, because each is relevant to protected area management and has been informed by and builds on Safeguard research:

- EU Pollinator Initiative mapping of Key Pollinator Areas and buzz lines
- Implementation of the EU Pollinator Species Action Plans
- PollHab – identifying typical species for EU protected habitats

The EU Pollinators Initiative, as presented by Denis Michez (University of Mons) sets a goal to establish **Key Pollinator Areas (KPAs) and buzz lines** - strategic habitat corridors that connect the Key Pollinator Areas, allowing pollinators to move, disperse, and maintain gene flow between otherwise isolated populations. By reducing habitat fragmentation and supporting climate-driven range shifts, these corridors complement habitat enlargement efforts and are especially valuable when conservation funding is limited. Buzz lines are important for land managers because they help better target management by identifying pollinator priority zones within and around protected areas, guiding habitat restoration, agri-environment measures, and adaptive management under climate change.

- **Further information:** workshop report July 2025 - SETTELE, J., BIALA, K., DEISS, F., MARINI, L., MICHEZ, D. et al. (2025) Conceptual development and implementation of Key Pollinator Areas (KPAs) and Buzz Lines in Europe - Workshop report; 3-4 July 2025, Brussels, Publications Office of the European Union, Luxembourg, <https://data.europa.eu/doi/10.2760/9944082>, JRC144675.
- **Contact:** EU expert group on KPAs and buzz lines - Josef Settele, UFZ, Germany: josef.settele@ufz.de

The **EU Pollinator Species Action Plans**, presented by Grace Bond (IUCN), were published in May 2023 with the aim of conserving Europe's most threatened pollinator species by addressing the drivers of their decline and outlining actions across governance, research, conservation, threat reduction, and public awareness. Since summer 2024, IUCN and partners have been leading a project to implement these plans through young researcher grants, research projects, stakeholder coordination, and knowledge sharing. The success of the plans depends on collaboration across

sectors and scales. They are practical tools for land managers and other stakeholders, offering ready-made guidance, support, and opportunities to contribute through a growing expert network.

- Further information: EU Pollinators Information Hive: Track the EU Pollinators Action Plans. https://green-forum.ec.europa.eu/nature-and-biodiversity/pollinators-hive/track-eu-pollinators-action-plans_en
- Contact: Grace Bond, IUCN grace.bond@iucn.org

Dirk Maes (INBO) presented the PollHab project, which has the objective of identifying and describing **typical pollinator species of Annex I habitats** in all the biogeographical regions of Europe, defining clear criteria to find species that are good indicators of habitat condition. The project will also provide guidance on monitoring techniques and habitat management measures to support their conservation. The project team is holding a series of consultations with national authorities and stakeholders, communicating the steps in the research and soliciting feedback to ensure shared understanding and uptake. These typical species are designed to be recommended indicators of Annex I habitat quality, that member states can choose to survey as part of their Annex I habitat condition assessment, and add to their Article 17 reporting under the Habitats Directive. At the same time, the species lists can be a useful reference for planning the targeted pollinator species monitoring under the EU Pollinator Monitoring Scheme being rolled out under the EU Nature Restoration Regulation.

- Further information: <https://pollhab.com/>
- Contact: <https://pollhab.com/contact/> (sign up to project mailing list)



The policy inputs were followed by short presentations of key Safeguard research findings that are relevant to protected area management.

Safeguard research findings

The Safeguard research included key findings from Gabriella Süle, Corina Bachofner (-Maurer), Anina Knauer, Gabrielle McLaughlin et al., Matthias Albrecht, and Ingolf Steffan-Dewenter. The research findings are summarized in a Safeguard policy brief and in Safeguard research abstracts, all available on the [Safe-Hub](#).



Scientific evidence consistently highlights habitat quality as the most important determinant of pollinator diversity. Findings from the Safeguard field site network show that flower richness and overall plant species diversity strongly predict wild pollinator abundance and richness, while essential nesting resources—such as bare ground, snail shells, veteran trees, and forest edges—are critical for bees, hoverflies, and butterflies. However, summer drought can reduce nectar availability in grasslands by up to 95%, severely limiting food resources even in otherwise high-quality habitats.

At the landscape scale, well-connected grasslands support higher numbers of endangered butterfly species, and features such as high edge density and small field structures enhance bee densities within protected areas. Organic farming in the surrounding landscape matrix also provides measurable benefits to bumblebees and butterfly communities.

Analysis of more than 600 plant–pollinator networks across Europe further shows that greater flower richness strengthens network functioning and pollination service delivery. A small subset of “key plants,” particularly species within Asteraceae, Lamiaceae, and Fabaceae, support disproportionately high numbers of pollinators, and their inclusion in seed mixes and habitat restoration efforts significantly improves the resilience and functionality of pollinator communities.

Research:

- [Biegerl et al., 2025](#)
- Boetzi et al., in preparation
- [Lanuza & Bartomeus, 2025](#)
- [Maurer & Albrecht, 2025](#)
- [Schweiger et al., 2025](#)
- [Süle et al., 2025](#)
- [Leander Oh et al., 2026.](#)

After the presentations, the participants split up into two breakout rooms. One room focused on the CAP and the other on protected areas.

Discussions

In each breakout discussion, participants explored three topics: 1) What does the science tell us? 2) What does this mean for management? 3) How can policy implement these.

Protected areas discussion

The discussion stressed that protected area policy for pollinators needs to move beyond area-based targets and better reflect habitat quality, species-specific needs, and landscape context. Simply designating or potentially overestimating habitat size is insufficient; even small areas (e.g. 0.1 ha) can be valuable if well managed, particularly when pesticide- and herbicide-free and regularly maintained where appropriate, such as patches of calcareous grassland habitat. Participants highlighted the strong scientific case for pesticide-free agriculture, the importance of increasing overall habitat area, and the need to identify pollinator-specific hotspots, as biodiversity hotspots do not automatically align with pollinator priorities.



Management practices should promote heterogeneity rather than applying uniform schemes across entire landscapes, as pollinator groups differ in mobility, disturbance sensitivity, and habitat requirements. While many common practices benefit generalist species, rare and highly specialised species require targeted measures, and some taxa—such as moths—remain underrepresented in research and policy; reliance on honey bees as a baseline overlooks broader pollinator diversity. The value of

sometimes not intervening was also noted, alongside the need for system-based planning and assessment, better understanding of restoration outcomes, and long-term monitoring, including through citizen science, to address knowledge gaps on climate change and extinction processes.

Implementation challenges include inconsistent policy frameworks across Member States, siloed governance, budget constraints, and political prioritisation of other sectors over biodiversity. Although the EU Nature Restoration Regulation and the EU Pollinators Initiative provide concrete goals for halting pollinator decline, guidance can remain general and difficult to translate into cost-effective action on the ground. Overall, the conversation underscored that effective management requires better training, integration of pollinators into restoration planning, true cost accounting of inaction, and coordinated, long-term investment in evidence-based conservation.

Agriculture and CAP discussion

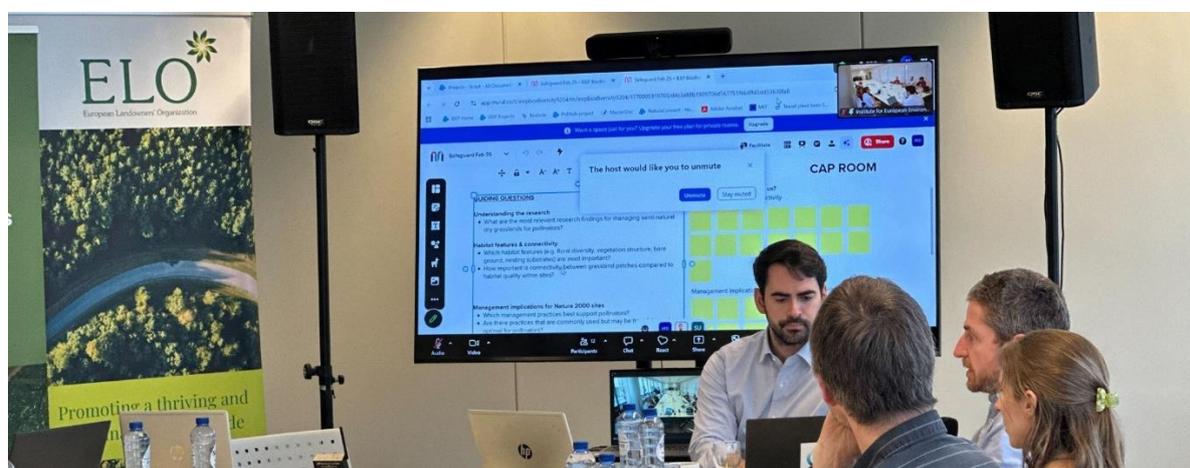
The discussion started from the Safeguard research findings about the key role of a pollinator-friendly agricultural matrix around protected areas and semi-natural habitats for maintaining rich and abundant pollinator communities in the protected habitats. The availability of flower resources and absence of pesticide pressure are key. A pollinator-friendly agricultural matrix has smaller fields or plot sizes and more edges, with more woody features (hedges, trees, tree rows, shrubs) and more field margins or flowering strips. Organic farming or extensive agriculture with low pesticide use is more advantageous. The research also points to the importance of an extensive (low or no pesticide) and varied agricultural management within protected areas.

The discussion focused on four challenges for agriculture related policy, protected areas and pollinators:

- a) How to reward and incentivise habitat restoration on farmland through differentiated payments or support schemes? Both to ensure a diversity of actions and to incentivise continued improvements. There are examples of point-based schemes with multiple options, where farmers can choose what matches best on their farm and apply for higher or bonus payments for more ambitious actions year on year.
- b) How to ensure restored habitats and interventions are in the right places and in the right spatial configuration to get maximum effect for pollinator communities? On farm: this requires methods to work with farmers to locate interventions (e.g. for new habitats) in the right place on farm and to ensure that existing spaces (e.g. 'messy' corners, banks with bare earth or sand, old trees) are kept and valued. An example is the Irish Farming with Nature application, scoring method, and certification (<https://thebrideproject.ie/end-of-project-reports>, video: <https://thebrideproject.ie/farmed-with-nature>).
- c) How to ensure restored habitats and interventions for pollinator communities at the landscape scale? Needs effective ways to get collaboration and cooperation

of all or most farmers in the area, both together and with externals, e.g. the protected area, biologists, NGOs or other partners. This collaboration can then implement a landscape scale planning and design.

- d) How to establish and maintain appropriate agricultural management and restore agricultural landscapes around protected areas – to establish a kind of buffer zone or conservation zone. Protected area managers may have no governance power or resources to work with farmers outside the protected area boundary. On the other hand, protected areas can function as convenors or mediators, and in some member states farmers linked to protected areas can qualify for higher payment rates or targeted support schemes. In theory, it is also possible to use legislation to establish a buffer zone, for example a local or regional ordinance or decree, but there are very few examples of this in Europe now.



Conclusions and next steps

The Safeguard research findings and policy recommendations for protected area managers will be disseminated in the Safeguard policy brief:

- *Strengthening Pollinator Conservation in EU Protected Areas and Natura 2000 sites.* Produced by Auriane Flottes de Pouzols and Evelyn Underwood at IEEP with inputs from Safeguard researchers. It can be found [here](#).

The Safeguard research legacy will be continued and built on in current pollinator projects, including - amongst many - RestPoll, WildPosh, VALOR, BUTTERFLY, PollinERA, Urban Pollinators, NutriB2.

Next steps in the policy initiatives for protected areas (see further information and contacts above):

- The mapping of Key Pollinator Areas and buzz lines will continue, possibly through a new request to the BioAgora network to complete a desk-based

mapping of KPAs and Buzz Lines based on the scope and terms of reference agreed in the workshop in summer 2025.

- The implementation of the EU species action plans will continue in 2026 and 2027, culminating in a policy workshop in the first half of 2027. Protected areas will be engaged in all the plans, but particularly the teasel-plant bees plan best management practices.
- The PollHab lists of typical pollinator species for Annex I habitat condition assessment, and the associated guidance, will be published and promoted at a policy workshop in November 2026.

Annex: Agenda

13:00 -13:10 Introduction to the workshop

Speaker: Evelyn Underwood (Institute for European Environmental Policy)

13:10 – 13:15 EU Pollinator Initiative buzzing areas

Speaker: Denis Michez (Université de Mons)

13:15 – 13:20 EU Pollinator Species Action Plans

Speaker: Grace Bond (IUCN)

13:20 – 13:25 PollHab – typical species for EU protected habitats

Speaker: Dirk Maes (Butterfly Conservation Europe)

13:25 – 13:30 Q&A

Moderator: Evelyn Underwood (Institute for European Environmental Policy)

13:30 – 13:50 Safeguard research findings

Speakers: Gabriella Sule, Corina Bachofner, David Kleijn, Ingolf Steffan (Dewenter)

13:50 – 13:55 Q&A

Moderator: Evelyn Underwood (Institute for European Environmental Policy)

13:55 -14:00 Introduction to the breakout rooms

Speaker: Auriane Flottes de Pouzols (Institute for European Environmental Policy)

14:00 – 14:15 COFFEE BREAK

14:15 – 15:10 Breakout discussions

Topic 1) What does the science tell us?

Topic 2) What does this mean for management?

Topic 3) How can policy implement these

15:10 – 15:20 Safeguard policy brief

Speaker: Auriane Flottes de Pouzols (Institute for European Environmental Policy)

15:20 – 16:10 Wrap-up discussion

Moderator: Evelyn Underwood (Institute for European Environmental Policy)