Questions & Answers: EU Pollinators Initiative

Why do we need a European initiative on pollinators?

Pollination is one of the key processes in nature which enables the reproduction of plants. In Europe, around four in five wild flower and crop species depend, at least to some extent, on animals for pollination. However, pollinators have seriously declined in occurrence and diversity in Europe, with many of them being threatened with extinction. This puts at risk ecosystem functioning, and consequently human wellbeing which depends on them.

The impact of pollinators is particularly visible in food production. Up to almost EUR 15 billion of the EU's annual agricultural output is directly attributed to insect pollinators. For many crops the contribution of pollinators can amount to half of the market value of produce. Moreover, by supporting crop diversity they underpin a wide array of sources of vital nutrients which is indispensable for a healthy diet.

There are already a range of existing measures under several EU policies that are beneficial to pollinators, in particular under environment and health policies (in particular the Birds and Habitats Directives and the EU legislation on pesticides), as well as under the common agricultural policy, cohesion policy and research and innovation policy. Despite these measures, the decline of pollinators has continued. Various assessments showed the need for a more coordinated EU action to address the problem through an integrated approach involving different sectors and policies. This will mobilize all relevant stakeholders and improve the effectiveness of existing, at the moment often fragmented, efforts.

The EU Pollinators Initiative will improve knowledge on pollinators and facilitate its dissemination and use across sectors. It will also strengthen collaboration between scientists, policy makers, businesses and the general public. This will support better targeted and more impactful actions for tackling the causes of pollinator decline.

What are pollinators?

Pollinators are animals that provide pollination – the transfer of pollen (male gametes) between the male and female parts of flowers – which enables reproduction of plants. In Europe pollinators are mainly insects, in particular bees and hoverflies, but also butterflies, moths, some beetles and other fly insects. Bees are the most prolific pollinators. There are almost 2 000 wild bee species in the EU. The most well-known bee species is the western honeybee (*Apis mellifera*), a domesticated species that is managed by beekeepers for the production of honey and other beehive products.

Although many insect species are pollinators, it has long been considered

that honeybees provide the majority of crop pollination. With increasing knowledge, this view has now changed. Honeybees are important pollinators, but they supplement rather than substitute wild pollinators. While it has become evident that wild pollinators play a vital role in crop pollination, the main focus should be on the diversity of pollinator communities. Both wild and domesticated bee species play an important role in our food security.

Why is the diversity of pollinators important?

Various plants have different pollination requirements and high diversity of pollinators ensures that the demand is effectively met. Pollinator species differ in their environmental adaptation so to ensure their diversity is to ensure pollination under varying conditions.

Species richness and abundance of pollinators underpin effective and stable crop pollination across time and space, and in this way ensures enhanced quantity and quality of crop yields. Diversity ensures that plants will be pollinated even in cases where certain species fail to perform. It enables resilience to the ever-changing environment and acts as a buffer in case of unforeseen or uncertain major changes, especially in the context of climate change.

Wild plants in particular depend on wild pollinators and their diversity due to many specific plant-pollinator relations which have developed through co-evolution. The survival of a plant in such instances depends completely on one or a few pollinator species.

Why does the initiative focus on wild pollinators?

The EU already has in place dedicated actions for domesticated pollinators by supporting bee health and apiculture. These efforts tackle issues exclusive to honeybees (veterinary issues, beekeeping practices etc.). But the large majority of pollinators are wild species. By focusing on them, the EU Pollinators Initiative addresses challenges common to all pollinators. As such it will provide fundamental contribution to the health of honeybees as well, and will complement existing EU support to bee health and apiculture.

What is the magnitude of pollinator decline? How will it be monitored?

While the current evidence clearly demonstrates an alarming decline of pollinators and warrants immediate action, the full magnitude of the problem is not yet known due to significant knowledge gaps. The best data is available for bees and butterflies, showing that one out of ten species in both groups is threatened with extinction in Europe. One in three bee and butterfly species have a declining population which indicates negative future trend. However, for more than half of the bee species there is not enough data to assess their status or trends. For insect pollinators other than bees and butterflies, the data is insufficient to provide information on the status and trends at EU level. However, there is ample evidence for their regional and local declines.

In order to understand the full extent of the problem, long-term monitoring of pollinators is needed. By establishing an EU level monitoring process for pollinators, the initiative will ensure the collection of data necessary to assess the status and trends of pollinators. This will give us the full picture of the problem, and provide information on how it develops and how successful the mitigation actions have been.

What are the main causes of pollinator decline?

The current scientific knowledge suggests that there is no one single driver of pollinator decline. The milestone report on pollinators issued by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) names land-use change, intensive agricultural management and pesticide use, environmental pollution, invasive alien species, pathogens and climate change as the main threats to pollinators. These often work in combination resulting in synergetic effects that exert strong pressure on pollinators.

How will the initiative address the impact of pesticides on pollinators?

The EU Pollinators Initiative will strengthen the current risk assessment of pesticides on pollinators with an aim to ensure that authorized substances do not pose threat to pollinators. Where harmful impacts on pollinators are demonstrated, legal measures will be taken to restrict or prohibit the use of such substances. Furthermore, the initiative will promote the uptake of pollinator-specific targets and measures in national action plans on the sustainable use of pesticides in order to reduce potential impacts of approved pesticides on pollinators. The EU has already one of the strictest regulatory systems in the world concerning the approval of pesticides. The Commission already further strengthened the data requirements for the submission of the dossiers, reviewed together with the European Food Safety Authority (EFSA) concerning the impact of pesticides on bees, and the EU has recently banned the outdoor use of three pesticides known as neonicotinoids that have been proven to be harmful for both honeybees and wild bees.

What is the international community doing about the problem and how will the initiative contribute to it?

In 2000, the Conference of Parties (COP) to the Convention on Biological Diversity (CBD) established an international initiative for the conservation and sustainable use of pollinators (the International Pollinator Initiative). The Food and Agriculture Organization (FAO) facilitates and coordinates the initiative. At the CBD COP in 2016, the Dutch government launched the Coalition of the Willing on Pollinators – a group of countries that already have or plan to develop a pollinator strategy.

The EU Pollinators Initiative aims to strengthen the support for conservation actions under the International Pollinators Initiative and foster international collaboration through the Coalition of the Willing on Pollinators. In this way the EU will take a more active role in global conservation efforts for pollinators.