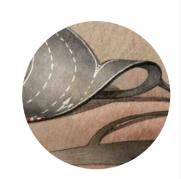
Endangered pollinators?

There are several plausible **causes** that could explain a **possible decline on** both wild and domestic **pollinators**. Most of these drivers affect biodiversity in general and, more specifically, the abundance and diversity of pollinators. Although they have been studied in isolation, they rarely act separately in nature.



land use changes

Human beings are the species that most greatly disturb their surrounding environment. Consequences of many of our activities are usually **habitat loss or** habitat fragmentation, which unevenly affect across the pollinator taxa. In many cases, this involves negative effects on their populations (nesting areas are reduced, food sources eliminated, and so on) although there are certain species that can benefit by being close to us.





introduction of exotic species

The introduction (by humans) of alien plant and animals may cause serious disruption in ecosystems. Competing for space, resources or even pollinators (in the case of plants) may lead to the disappearance of native fauna and flora. To this we must add the problems caused by the proliferation of pathogens, often related to the introduction of alien species.



chemicals

Probably the greatest threat to pollinators. Currently, human beings make use of many lab synthesised chemicals for many different purposes. **Most of these chemical substances do not appear in nature** and in many cases **their effects are unknown**. Even in cases where their effects have been studied, **we know the effect of each substance in isolation but not the interaction between the used chemicals**, something much more difficult to predict and that can have very serious consequences.

$global\ environmental\ change$

Scientific data indicate that global **warming** is real and there are evidences pointing to **our activities helping to accelerate the process**. It has been found that the temperature increase may cause many species to **reproduce earlier in the season**, but... **what would happen if the life cycles of plants** and pollinators fail to adjust?

genetically modified crops

Genetically modifying plants in a laboratory trying to get a particular feature, such as higher production, resistance to certain pathogens, etc, is becoming an increasingly common practice. But... what effects do those artificial transgenic products have on pollinators?

what can we do?

We could start by:

- Being aware of the important role pollinators play in nature, appreciate and respect them.
- Reducing the use of chemicals, limiting their use to cases when they are absolutely necessary and selecting environmentally friendly products.
- Respecting the natural distribution of species, both plants and animals, avoiding introductions of aliens into ecosystems.
- **Using native plant species** in parks and gardens, hedges, ecosystem restoration projects, etc.
- Promoting research and into plant pollination.















