









EU POLLINATORS INITIATIVE

A review of Member States actions to tackle the decline of wild pollinators




STRATEGY
 


INITIATIVES
  
Rural *Urban* *Private sector*


NATIONAL RED LISTS
Threatened species
 
33%
Wild bees (2019)


RAISING AWARENESS
  
Citizens *Schools children* *Farmers & beekeepers*

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A cross-border pollinator action plan published in June 2019 under the SAPOLL project provides a comprehensive long-term strategy (2019-2029) to improve the status of wild pollinators in the whole of Belgium and the north of France. The 35 actions will be implemented over 10 years. Discussions have been held on a national pollinator strategy for Belgium.

In Wallonia, 47 species of wild bee are legally protected.

Public investment in recent years has significantly improved the knowledge base on wild pollinators in Belgium and threats and pressures impacting on their survival. The Belgian Red List for wild bees in all three regions (published in 2019) shows that nearly 33% of species are threatened. Nonetheless large knowledge- and monitoring gaps remain, which is reflected in the central place of knowledge and knowledge exchange in the 2019 SAPOLL pollinator action plan.

A scoping study carried out to inform the SAPOLL pollinator action plan found hundreds of pollinator initiatives in Belgium at different levels, many of which were fully or partly dedicated to awareness raising. For example, the Flemish government department of Environment, Nature & Energy has organised the 'Week of the Bee' targeting both wild and domestic bees every year since 2015. The Wallonia government Plan Maya promotes actions for citizens, regions (communes) and beekeepers since 2011.

Two large EU funded projects are creating pollinator habitat on farms and on public land.



STRATEGIES FOR WILD POLLINATORS OR ANY OTHER SIMILAR PLANS

Belgian experts are currently discussing plans for a national pollinator strategy, using as a basis the SAPOLL cross-border action plan.

Cross-border action plan for wild pollinators in Belgium and the north of France 2019-2029

Stakeholders in the Flemish, Walloon and the North of France regions published in June 2019 a cross-border action plan for wild pollinators that covers the entire Belgian territory, with support of the SAPOLL Interreg project (Folschweiller et al 2019). The plan received financial support from the Flemish and Walloon authorities, but it has not been adopted in Belgium as an official policy strategy. The plan consists of 35 actions which will be implemented over 10 year period (2019-2029) and which are subdivided under three key objectives: 1) To improve knowledge; 2) To share knowledge increase awareness and 3) To help pollinators through concrete actions in the field. The table provides an overview of the 35 foreseen actions in the plan.

Table: Actions in the 2019 cross-border action plan for wild pollinators in Belgium and the North of France

Main theme	Sub-theme	#	Action
Knowledge improvement	Research	1	Improve basic knowledge (taxonomy, ecology, biogeography) of the wild pollinators species in the region
		2	Research on the status of wild pollinator populations
		3	Research on the factors driving the decline in wild pollinators
		4	Research on the effect of agricultural practice on wild pollinators
		5	Research on the effect of domesticated pollinators and their keeping on wild pollinators
	Monitoring	6	Assessment of the value of pollinating ecosystem services
		7	Organise a large-scale standardized monitoring system to feed into wild pollinator databases
		8	Management and linking up of wild pollinator databases and associated taxonomic reference systems
		9	Monitoring of exotic and invasive pollinators
Knowledge exchange and awareness-raising	Awareness-raising and encouragement to action	10	Awareness-raising on wild pollinators
		11	Improve general knowledge of flowering plant species of particular importance to pollinating insects
		12	Encourage private citizens to take action in their own garden, their habitat
		13	Actions in relation to citizen science

		14	Awareness raising with and information provision for green space managers
		15	Awareness raising with and information provision for the beekeeping sector
		16	Awareness raising with and information provision for the agricultural sector
	Spreading knowledge and best-practice	17	Integrate a module on wild pollinators in relevant curricula of future professionals
		18	Develop and disseminate technical information for land managers
	Mobilize monitoring networks	19	Develop and disseminate identification keys and -tools
20		Improve, accelerate and strengthen knowledge exchange between stakeholders	
Help pollinators through concrete action	Large-scale systemic changes in practice	21	Encourage alternatives to chemical products
		22	Encouraging the development of native seed- and plant networks
		23	Roll out a management calendar for pollinating insects
		24	Improve regulation to account for wild pollinators, for example through adopting lists of protected species, regulate thistle management and use of pesticides
		25	Introduce inspection and regulation in the trade in wild pollinators
	Management changes in specific areas	26	Integrate the conservation of wild pollinating insects in agricultural management
		27	Integrate the conservation of wild pollinating insects in forest management
		28	Integrate the conservation of wild pollinating insects in mining site management
		29	Integrate the conservation of wild pollinating insects in the management of linear infrastructure
		30	Integrate the conservation of wild pollinating insects in the management of natural areas
		31	Integrate the conservation of wild pollinating insects in the management of private green spaces
		32	Integrate the conservation of wild pollinating insects in the management of public green spaces
		33	Improve coordination between wild pollinator action within specific regions and sectors
	Encouraging best-practice through pilot projects	34	Set up and promote pilot projects as role models for wild pollinators
		35	Monitor and evaluate the pilot projects

The Wallonia region nature conservation law (Loi de la Conservation de la Nature 1973) provides [legal protection](#) for 47 species or groups of wild bee.

Wallonia Plan Maya

The Wallonia regional government launched [Plan Maya](#) in 2011 with the aim of protecting both honeybees and wild bees and other flower visiting insects. The plan includes actions for citizens, regions (communes) and beekeepers.

Federal bee plan

The [Belgian Federal Bee Plan](#) (2017-2019) includes several key areas directly relevant to wild pollinators:

- Prevent risks associated with the introduction of invasive species or the commercial exchange of bees
- Review the fight against thistles considered harmful to agricultural activities
- Raise awareness of pollinating insects and encourage campaigns in their favour
- Strengthen national stakeholder consultation and national policy coherence

A Belgian Pollinators Working Group has been set up, made up of scientific experts, civil society organisations, government administrations, universities and associations, to provide the government with expertise on national, European or international research and policy on bees and ecosystem services provided by pollinators¹. Its mission has been extended from honeybees to all pollinators.



IMPROVING KNOWLEDGE OF POLLINATOR DECLINE, ITS CAUSES AND CONSEQUENCES

RED LISTS ON POLLINATORS AND DATA ON POLLINATOR POPULATIONS

The recently published [Belgian Red list of bees](#) shows that 32.8% (i.e. 113 species) are considered threatened in Belgium (Drossart et al 2019). Considering the Near Threatened (i.e. 26 species; 6.8%) and Regionally Extinct (i.e. 45 species; 11.8%) bees, the study shows that more than half (i.e. 53.3%) of the assessed species (i.e. 184 species) are (nearly) threatened or extinct in Belgium. A further 42.3% of bees (i.e. 161 species) are considered as Least Concern.

The 2019 cross-border wild pollinator plan published under the SAPOLL project provides an overview of key sources of population evidence on wild bees, hoverflies and (day-active) butterflies in northern France and Belgium (Folschweiller et al 2019). A national check list of bees for Belgium was published by the Atlas Hymenoptera team in 2017 (Rasmont et al 2017). The [Atlas Hymenoptera](#) is a biogeographic data base of Hymenoptera in Western Europe, compiled by researchers in Belgium, France, Spain, and Turkey, and maintained by a university research group in Belgium. It contains

¹ Groupe de Travail Abeilles coordinated by the Institut Royal des Sciences Naturelles de Belgique

species accounts, illustrations, bibliography and distribution maps for over 100 genera at the European and global scales.

The Brussels region is funding an [atlas of wild bees in Brussels](#) – a project to map the distribution, abundance, population trends and ecology of the more than 200 wild bee species in the region by 2020. The 'Atlas of Wild Bees of the Brussels-Capital Region', created together with the Université Libre de Bruxelles, the Royal Belgian Institute for Natural Sciences and the NGOs Natagora and Natuurpunt, will contain a regional database, a red list of vulnerable species (for future legal protection), a monitoring list (for long term surveillance), and a "plants of special interest" list (for vulnerable mono- or oligolectic species).

Red lists of butterflies were published for Flanders in 2012, with 59% of species assessed as threatened (Maes et al 2012, SAPOLL 2019), and for Wallonia in 2008, with 51% of species assessed as threatened (Fichefet et al 2008, SAPOLL 2019). Belgium has already lost many butterfly species. In Flanders, 19 of the 64 indigenous butterfly species went extinct in the 20th century and half of the remaining species are now threatened (Maes et al 2001). The Brussels Atlas of Butterflies published in 2009 (Beckers et al 2009) identified 46 native species, of which 18 have gone extinct in the region. Of the 28 species still present in the region in 2009, 46% are rare to very rare.

POLLINATOR MONITORING SCHEMES

The Wallonia region [butterfly monitoring programme](#) has been surveying since 1990, coordinated by the butterfly [working group Lycaena](#).

The Flemish region has a [butterfly monitoring network](#) since 1991, coordinated by the Flemish government's Institute for Nature and Forest Research (INBO). The Belgium grassland butterfly index is published every two years (national indices for each species based on count data, latest publication shows trend 1991-2011).

INBO is coordinating an [explorative study](#) on possible cost-effective methods to improve region-wide monitoring for bees, with financial support from the Flemish ministry for Environment, Nature & Energy.

The NGO Natuurpunt and its wild bee and wasp working group [Aculea](#) have undertaken a number of monitoring studies in Flanders and Brussels for specific habitats, species and geographic locations.

See the citizen engagement section for more recording initiatives.

RESEARCH INITIATIVES

The federally funded [BELBEES research project](#) (2014-2018) collected and analysed data on recent changes in wild bee populations in Belgium, in order to assess the different drivers behind the decline and to identify combinations of actions needed to restore pollination service in agro-ecosystems. The project focussed on five key factors driving the decline in Belgian wild bee populations: climate change, landscape change, agricultural intensification, pesticides and disease development.

The research project [PolBEES](#) led by Louis Hautier at the Walloon Region agricultural research centre (CRA-W Centre Wallon de Recherches Agronomiques) is evaluating the risk of systemic pesticides on honeybees and the solitary bee *Osmia* sp. It is also testing the impacts of nutritional stress due to lack of pollen resources.

TAXONOMICAL EXPERTS ON POLLINATORS

Taxonomical experts are available in the Université de Mons, the Université Libre de Brussels, and other research groups. Several highly skilled non-professional experts observe pollinators and post their findings on the portal [observations.be](#). The SAPOLL project has trained 580 wild bee identifiers.



INITIATIVES TACKLING THE CAUSES OF POLLINATOR DECLINE

ACTION PLANS ON SPECIES AND HABITATS

Flanders has species action plans for the following butterfly species:

- Grayling - *Hipparchia semele* (formally adopted)
- Alcon Blue – *Maculinea alcon* (developed but not formally adopted)
- Ilex Hairstreak - *Satyrium ilicis* (developed but not formally adopted)
- Sooty Copper - *Lycaena tityrus* (developed but not formally adopted)
- Wall Brown - *Lasiommata megera* (developed but not formally adopted)

FARMER AND LANDSCAPE INITIATIVES, AS WELL AS LOCAL LEVEL STRATEGIES

Two regional scale projects are creating pollinator habitat on farms and on public land:

More nature for strong fruit ([Meer natuur voor pittig fruit](#)) is a EUR1.3 million project, of which 50% co-funded through EU Interreg V (ERDF). It is a partnership between five (mostly government-funded) regional landscape/nature organisations (three Flemish and two Dutch), the Flemish Province of Vlaams-Brabant and an international research institute for fruit farming based in Belgium. The project, which started in January 2016, focuses on increasing wild bee populations in the border region between Belgium and The Netherlands. The project will work with more than 100 fruit farmers in the

region, and land- and water managers around their farms such as municipalities and water boards, to both improve wild bee populations as well as species supportive in pest control such as bats, birds of prey and martens. Moreover, the project will work on awareness-raising among citizens and encourage them to have bee-friendly gardens. Foreseen measures on farms include placement of >5000 'bee hotels' and natural nesting opportunities in soil, the development of >10ha wild flower fields/rows and almost 15km of flower-rich hedgerows.

The EU Interreg-funded [SAPOLL project](#) is developing a joint initiative for wild pollinators (bees, hoverflies and butterflies) in the border region of France, Wallonia and Flanders. The project is co-funded by the Wallonia regional government, and includes the Provinces of West and East Flanders, all of which manage areas of public land. The project also includes awareness raising activities such as a newsletter, exhibitions and events, and is building up a trans-border network of volunteer pollinator observers. Researchers are carrying out systematic monitoring and evaluation of pollinator populations and pollination services.

Regional strategies for roadside management

The Flemish roadside 'network' comprises almost 25,000 ha, nearly the size of its protected nature areas, and the Flemish 'roadside act' 1984 sets regional rules for more ecologically-friendly management such as delayed mowing regimes. The Flemish government agency for road transport conducted a successful pilot with pollinator-friendly roadside management.

In Wallonia, the communes are invited to sign up to an agreement to not cut road verges until the end of the growing season and not to cut below 10cm (Opération - Bords de routes – Fauchages tardif) (Convention « Bords de routes – Fauchage tardif »). The government maintains a [database of road verges](#) registered under the agreement. Over 75% of Walloon municipalities have signed up. Herbicide use on roadsides is banned since 1986 (with the exception of paved or gravel areas, within 1m of railway tracks, and on cemetery paths).

Brussels is also revising roadside mowing practices and revising its public procurement standards to promote environmentally friendly management practices. Streetbees, a study commissioned by Brussels Environment, will clarify how pavements and roadsides should be designed to support ground-nesting bees.

Several Belgian municipalities are revising their green spaces management to avoid use of pesticides and fertilisers, and to encourage biodiversity. An example is the city of Tournai.

MEASURES ON PESTICIDES

The [Belgian National Action Plan NAPAN \(2018-2022\)](#) sets the objective to protect pollinators in the context of the pesticide authorisation procedure, referring to the [second Federal Bee Plan \(2017-2019\)](#). As part of this plan, Belgium has adopted a [national approach to data requirements and risk assessment for bees](#), defining the risk assessment requirements in the absence of EU approval of the

EFSA bee guidance document². It requires acute toxicity tests on bumblebees and chronic toxicity tests on honeybees (as well as the acute tests), but no tests of sublethal effects, no acute or chronic toxicity tests on solitary bees, and no chronic toxicity tests on bumblebees.

In Belgium the sale of herbicides to non-professional users is banned since December 2018, except for certain products made from basic substances, biological and low risk pesticides. A federal task force has been set up to bring together the federal experts responsible for pesticide and biocide regulation, honeybee health, and the promotion of sustainable and pollinator-friendly consumer products³.

The Belgian regions have banned the **use of pesticides by public authorities** in areas such as parks, roadsides, school grounds, and playgrounds and picnic areas.

The Walloon Region [bans pesticide use in amenity areas](#) from June 2019, with the exception of certain areas such as cemeteries, railway lines and paved or gravel covered areas. Wallonia prohibited the use of herbicides on roadsides since 1986 (except for paved or gravel areas, within 1m of railway tracks, and on cemetery paths).

In Flanders, [pesticide use is prohibited in places offering a public service](#) to vulnerable groups, including schools, childcare services, hospitals, healthcare institutions, churches, since 2015. Many towns in the Flanders region have already either gone pesticide free or made significant reductions in the use of pesticides. Flanders [prohibits the use of pesticides within the Vlaams Ecologisch Netwerk \(VEN\)](#) [Flemish Ecological Network], and certain other sensitive areas.

The Brussels region has [banned pesticides in public spaces since 2013](#), and in establishments used by vulnerable groups since 2014, with the exception of tree nurseries and greenhouses and applications to control certain noxious weeds or invasive alien species. Brussels has also [banned pesticide use in its nature reserves including Natura 2000](#). In 2018, Brussels [banned the use of all types of neonicotinoids and similar substances](#) in order to protect pollinators⁴.

In the national pesticide action plan 2018-2023, the Brussels region commits to study the adoption of new regulatory measures with a view to reducing the use of products that are most problematic to pollinating insects. The region also commits to raising awareness among residents of the value of spontaneous vegetation ('Sauvages de ma rue' [wildlife on my street] project; Belles de ma rue [beautiful things on my street] website; partnership with Tela Botanica NGO).

² The document states that this national procedure is considered a temporary solution, until there is agreement on a harmonized approach within the central zone or within the EU.

³ FPS Health, Food Chain Safety and Environment belonging to the DG Environment and the DG Animals, Plants and Foodstuffs, along with the Federal Agency for the Safety of the Food Chain and the Federal Agency for Medicines and Health Products

⁴ This goes beyond the EU wide ban by banning the neonicotinoids acetamprid and thiacloprid, and the insecticides fipronil, sulfoxaflor and flupyradifurone, and any nicotinic acetylcholine receptor antagonists (nAChRs) or pesticides with similar systemic modes of action that may be approved in the EU in future



RAISING AWARENESS, ENGAGING SOCIETY-AT-LARGE AND PROMOTING COLLABORATION

TRAINING AND AWARENESS RAISING CAMPAIGNS

The website ‘Long live the bees!’, ([Vive les Abeilles!](#) [Leve de Bijen!](#)) supported by the federal and three regional governments, brings together information on wild and domesticated pollinators in Belgium including news, information, educational material, inspiring examples and dedicated action-oriented sections for private citizens, schools, municipalities, companies, associations, beekeepers and farmers in Flemish and French.

The Wallonia government ([Service Public de Wallonie](#)) provides a dedicated website with information on wild bee species. It runs the Plan Maya campaign (see below).

The Brussels Capital Region [Brussels Environment](#) provides information about wild bees in Brussels and organises awareness raising events for World Bee Day. Brussels has set up the dedicated [Wild Bees in Brussels](#) webpage and facebook page, with information on species, events and tips for what people can do for wild bees in their gardens and public spaces.

The three regions organise annual bee theme weeks in May or June: Flanders [week van de bij](#), Wallonia [Abeilles et compagnie](#), Brussels [Week of bees and pollinators](#) (to become part of the month of nature from 2021).

See also the initiatives listed below, which include awareness raising components.

EDUCATIONAL CAMPAIGNS AND MATERIALS ON WILD POLLINATORS

The bee plan initiated collaboration between the DG Environment, the FPS Health, Food Chain Safety and Environment and the Royal Belgian Institute of Natural Sciences (IRScNB-KBIN) to create awareness tools and training courses to highlight ecosystem services and the role of bees as pollinators. These include:

- an educational guide for secondary school children and others (FR) (Coppée 2014)
- factsheets on the risks of biocides for pollinators, gardening for wild bees, and the importance of bee diversity.

The Flemish nature NGO [Natuurpunt website](#) provides detailed advice in long-reads for farmers, based on educational material prepared by the agricultural knowledge agency of the Province of West-Flanders (INAGRO), companies and local authorities.

The Brussels Region has published an [educational guide for schools](#) on the theme of biodiversity, which includes information and proposals for activities on the subject of wild pollinators.

CITIZEN ENGAGEMENT CAMPAIGNS

The Flemish government department of Environment, Nature & Energy holds a competition with the Flemish association for public green spaces (VVOG) to reward the most [bee-friendly municipality](#).

The Wallonian government [Plan Maya](#) plan promotes actions for citizens, regions (communes) and beekeepers.

- Citizens are invited to sign the Charta Maya and become ‘Jardinier Maya’ by stopping use of pesticides and planting 10m² of flowering plants for bees.
- Communes are invited to apply to adopt the logo and name ‘Commune Maya’ and receive funding for taking a series of actions for pollinators. The obligatory actions include planting and sowing trees, hedges and flowers for pollinators (with at least 20% of all municipal plantings for pollinators), launching a citizen engagement campaign (targeting both children and adults), adopt a plan for pesticide-free weed control, raise awareness of the Asian Hornet eradication campaign, and sign up to the road verges late cutting agreement. The website shows the progress communes report annually.

Brussels environment department is currently carrying out the citizen engagement campaign [Streetbees](#) to record observations of ground-nesting solitary bees in pavements, walls and roadsides.

The Brussels-capital region provides financial support to municipalities (within the framework of local Agenda 21) to implement projects useful to pollinators and biodiversity in general (with a participative dimension). Citizens are also directly targeted by the ‘Inspirons le quartier’ call for projects, which provides funding for a dozen participatory planting projects per year.

The Wallonian NGO Natagora [Réseau Nature](#) (nature network) project engages citizens, schools, private companies and municipalities to commit themselves to the ecological management of their gardens and surroundings. The project is supported by the Brussels region.

The Flemish NGOs Natuurpunt and Velt launched a [campaign](#) in April 2015 targeted at private gardens, giving away 1,000 bee hotels in cooperation with the largest newspaper in Flanders.

Under the previous federal Bee Plan, various civil society initiatives received funding for awareness raising activities, including the NGOs Loupiote, Natagora and Natuurpunt, trade unions Arbeid & Milieu and RISE & BRISE, and PC Bijen (AFSCA, 2015).

The city of Genk is active in citizen engagement for pollinators. The city of Genk Bee Plan was developed by a working group of beekeepers, city services, environmental organisations, and concerned citizens and approved in 2014. The plan aims to improve pollinator living conditions on

public land, engage citizens to do the same (for example, [Heempark](#) green space), and support local beekeepers (Wilk et al. 2019).

PRIVATE SECTOR INITIATIVES FOR WILD POLLINATORS

The social enterprise [Beeodiversity](#) has informed and advised a wide range of large private-sector players on integrated approaches on how to make their operations more bee-friendly since 2012.

APICULTURE SECTOR INITIATIVES FOR WILD POLLINATORS

A publication has examined the evidence for competition between honeybees and wild bees (Vereecken et al, 2015). The Brussels capital region is taking steps to study and, if necessary, mitigate the phenomenon, but is currently limited by lack of data on hive placements. The region is considering a new piece of legislation that would provide public data on beehive locations and numbers⁵.

The Wallonia government [Plan Maya](#) promotes better bee health and beekeeping skills by funding beekeeper training groups (ruchers-écoles), which are training around 500 new beekeepers a year.

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⁵ Personal communication, Brussels Environnement, February 2020

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Educational materials

Schoolchildren

Coppée, I (2014) «La biodiversité en Belgique - Zzzoom sur les abeilles». Société royale belge d'Entomologie. At https://www.reseau-idee.be/outils-pedagogiques/fiche.php?media_id=4402

Target age: 11-15 (but also suitable for younger ages)

Cette brochure vise à apporter aux enseignants et aux élèves de l'enseignement secondaire, ainsi qu'aux enseignants des autres niveaux scolaires, les informations utiles à la compréhension de l'importance des abeilles. Elle aide à mieux connaître leur mode de vie, leur diversité, l'évolution et l'adaptation mutuelle de celles-ci et des fleurs qui en fait les pollinisateurs les plus efficaces, leur importance pour le maintien de l'agriculture. Elle expose les dangers qui les menacent et comment les protéger.

Brussels educational guide for schools 'La biodiversité et l'école'. Bruxelles Environnement <https://environnement.brussels/thematiques/espaces-verts-et-biodiversite/lecole/outils-pedagogiques-sur-le-theme-de-la-biodiversite>

Target age: primary and secondary (5-18 years)

Includes posters of wild bee species in spring and summer – affiches « Nos Abeilles Sauvages »