

# Wild bees: Champions for food security and protecting our biodiversity

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Bumblebees are important pollinators in several crops. Credit: Maj Rundlöf

Pollinating insects contribute to agricultural production in 150 (84%) European crops. These crops depend partly or entirely upon insects for their pollination and yield. The value of insect pollinators is estimated to be €22 billion a year in Europe. Declines in managed pollinators, such as honeybees, and wild pollinator such bumblebees, solitary bees and hoverflies, are therefore of growing concern as we need to protect food production and the maintain wildflower diversity.

Scientists involved in STEP, a large-scale project funded by the 7th

Framework Program (FP7) of the European Union, have therefore taken an inclusive approach looking at the status and trends of all Europe's [pollinators](#).

New findings have been presented at a dedicated STEP symposium at the 5th EurBee meeting held in Halle, Germany on 3-6 September 2012. Prof Simon Potts from the University of Reading, UK and coordinator of STEP opened the discussion: "To help Europe secure sustainable food production and conserve its biodiversity we need to provide policy makers with [clear evidence](#) of who pollinates our crops and flowers and what are the best options to safeguard pollination services in a changing world"

More than 32 million European records of pollinators and plants have been analysed. "We have shown that not only has bee diversity been declining but communities are becoming more uniform in their composition", commented the lead scientist Dr Koos Beiswenger from Netherlands Centre for Biodiversity Naturalis, The Netherlands



This is a snapshot of the English version of the fact sheet. Credit: STEP project

One key threat to [bees](#) is agrochemicals; "we are now finding strong negative effects of pesticides, not only in [honeybees](#) and [bumblebees](#), but also [solitary bees](#)– as Europe has more than 2,500 solitary bee species we expect the implications of our research to be very wide ranging" said Dr Christoph Sandrock of Swiss Bee Research Centre.

Many European countries have an array of agri-environment options aiming to support biodiversity, including bees, but it is unclear how effective these really are. "Our analysis is the first to systematically test whether agri-environment options are actually benefiting bees" said Dr David Kleijn from Alterra, Netherlands.

Several European countries have programmes aiming to improve honeybee health, but there is very little support for wild pollinators despite their critical roles in ecosystems. "One of the big achievements of the STEP project will be the first ever European Red List for bees which will provide an essential tool for politicians and land managers to direct conservation efforts targeted at wild bees" said Mr Stuart Roberts from University of Reading, UK.

"There is increasing evidence that honeybee numbers are insufficient in many parts of Europe to provide adequate pollination services, and so wild pollinators are needed to cover the shortfall" stated Dr Tom Breeze from University of Reading, UK.

The STEP project will continue to use high quality research to deliver the evidence politicians need to develop better policies to protect all of Europe's pollinators. The project also uses its findings to develop specialist factsheets targeted at groups such as farmers and translated in

15 languages: see [step-project.net/page.php?P=4&SP=14](http://step-project.net/page.php?P=4&SP=14)

Simultaneously, STEP is undertaking a broad-scale survey of the public opinion through online questionnaires available in seven European languages. The survey aims to reveal if, and to what extent, people are aware of the role of pollinators in agricultural ecosystems and the consequences for the environment from the decline of bees and other [insect pollinators](#). Please spend 5 minutes of your time and fill it in at: [www.step-project.net/page.php?P=26](http://www.step-project.net/page.php?P=26)

**More information:** 1. Pollinators Support Farm Productivity. STEP best practices recommendations for farmers to maintain the diversity of pollinators in 15 languages: [step-project.net/page.php?P=4&SP=14](http://step-project.net/page.php?P=4&SP=14).

2. Online questionnaire to survey the public opinion on the role of pollinators: [www.step-project.net/page.php?P=26](http://www.step-project.net/page.php?P=26).

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