Bad news for Europe’s bumblebees

Gland/Brussels, 2 April, 2014 (IUCN) – Twenty-four percent of European bumblebee species are threatened with extinction on The IUCN Red List of Threatened Species™, according to a recent study assessing the species group at the European level.

The study examines all of the 68 bumblebee species that occur in Europe. It is part of the Status and Trends of European Pollinators (STEP) project and the European Red List of pollinators, both funded by the European Commission.

Bumblebees, like other pollinators, play a critical role in securing food production. They allow plants to reproduce and improve the production of crops, such as tomatoes, peppers and many other types of fruit, vegetables and seeds that make up our diet. Of the five most important pollinators of European crops, three are bumblebee species. Together with other pollinators, bumblebees contribute more than 22 billion Euros to European agriculture per year.

“We are very concerned with these findings. Such a high proportion of threatened bumblebees can have serious implications for our food production,” says Ana Nieto, European Biodiversity Officer of IUCN and coordinator of the study. “Protecting bumblebee species and habitats, restoring degraded ecosystems and promoting biodiversity-friendly agricultural practices will be essential to reverse the negative trends in European bumblebee populations.”

According to the study, 46% of bumblebee species in Europe have a declining population, 29% are stable and 13% are increasing. Climate change, the intensification of agriculture and changes in agricultural land are the main threats to the species. Other reasons for their decline include pollution from agricultural waste and loss of habitat due to urban development.

“The plight of Europe’s bumblebees is a problem that needs to be tackled on all fronts. The European Union recently banned or restricted the use of certain pesticides that are dangerous to bees, and is funding research into status of pollinators,” says Janez Potocnik, EU Environment Commissioner. “However, efforts clearly need to be scaled up, not least through better mainstreaming of biodiversity into other policies, but also to raise awareness about the benefits that pollinators bring.”

“Many of these species live in very restricted areas and in low numbers,” says Pierre Rasmont, member of the STEP team and the IUCN Species Survival Commission’s Bumblebees Specialist Group. “They are often extremely specialized on their host plants, which makes them susceptible to any environmental change.”

Climate change, through increasing temperatures and long periods of drought, is responsible for major changes in bumblebee habitat. Bombus hyperboreus, the second largest bumblebee of Europe, listed as Vulnerable on the IUCN Red List, is strictly associated with Arctic and Subarctic regions and only lives in the Scandinavian tundra and in the extreme north of Russia. Climate change is likely to dramatically reduce the area of its habitat, leading to population decline.
Changes in land use and agricultural practices that result in the loss of the species’ natural environment also represent a serious threat to many bumblebees in Europe. The geographic range of the Critically Endangered Bombus cullumanus has shrunk enormously in the last ten years following habitat fragmentation and changes in farming practices which involve removing clovers – its main forage. As a consequence, its population has declined by more than 80% over the last decade. Previously widespread, it now only occurs in a few scattered locations across Europe.

Europe’s largest bumblebee, the Endangered Bombus fragrans, is also seriously threatened by the intensification of agriculture, which is destroying its native habitat in the steppes of Ukraine and Russia.

“The contribution of bumblebees to food security and the maintenance of wider plant biodiversity is an essential part of Europe’s natural capital,” says Simon Potts, Coordinator of STEP. “However, this capital is under increasing threat and the results of this Red List assessment represent an important tool to help protect an indispensable component of biodiversity.”

Measures such as increasing the margins and buffer strips around agricultural fields that are rich in flowers and wildlife and the preservation of grasslands are deemed effective tools in alleviating the rapid decline in bumblebee species. They can provide bees with forage and help underpin stable populations of pollinators, whose survival is crucial for European food security.

The assessment comes at a time when progress in implementing Europe’s strategy to halt biodiversity loss is under review. It stresses the need for conservation efforts to be stepped up and for the EU 2020 Biodiversity Strategy to be fully implemented in order to meet the 2020 biodiversity target to halt biodiversity loss and the degradation of ecosystems services, set by EU leaders in March 2010.

Notes to editors

This study on bumblebees is part of the European Red List of pollinators, an ongoing project, that aims to assess at the European level and according to IUCN regional Red Listing guidelines, the conservation status of all bees occurring throughout Europe (about 2,000 species) by the end of 2014. It identifies those species that are threatened with extinction at the regional level, so that appropriate conservation action can be taken to improve their status.

More than 6,000 European species (including mammals, reptiles, amphibians, freshwater fishes, butterflies, dragonflies, and selected groups of beetles, molluscs and vascular plants) have already been assessed as part of the European Red List initiative. In addition to pollinators, assessments of medicinal plants, birds and marine fishes are currently underway.

The European Red List uses the methodology of the IUCN Red List of Threatened Species™ (or The IUCN Red List) which is the world’s most comprehensive information source on the global conservation status of plant and animal species. It is based on an objective system for assessing the risk of extinction of a species.

The European Red List of bumblebees was compiled by IUCN’s Global Species Programme, the IUCN Species Survival Commission and its expert network, the experts from the STEP project ‘Status and Trends of European Pollinators’ (www.STEP-project.net) as well as other experts. The European Red List is the product of a service contract with the European Commission.

**About the STEP (Status and Trends of European Pollinators) project**

STEP is a project bringing together 120 leading researchers from 17 countries to address the challenges of pollinator conservation and the management of pollination services. The overall aim of STEP is to assess the current status and trends of pollinators in Europe, quantify the relative importance of various drivers and impacts of change, and identify relevant mitigation strategies and policy instruments. STEP is inclusive in its approach by including all pollinators, both managed and wild, and wild flowering plants as well as agricultural crops. The project has published more than 140 peer-reviewed papers on pollinators and delivered over 225 presentations to a wide range of stakeholders. This project has received funding from the European Union’s Seventh Framework Programme for research, technological development and demonstration under grant agreement No 244090. Find out more: [www.STEP-project.net](http://www.STEP-project.net).

**About IUCN**

IUCN, International Union for Conservation of Nature, helps the world find pragmatic solutions to our most pressing environment and development challenges. IUCN is the world’s oldest and largest global environmental organization, with more than 1,200 government and NGO members and almost 11,000 volunteer experts in some 160 countries. IUCN’s work is supported by over 1,000 staff in 45 offices and hundreds of partners in public, NGO and private sectors around the world.

IUCN’s European region covers the European continent, Russia and Central Asia, and includes the European Union overseas entities. Representing one third of the global membership, this is IUCN’s largest programmatic region. The Mediterranean biodiversity hotspot is an important area of work for IUCN. A dedicated office, the Centre for Mediterranean Cooperation, defines and implements action to conserve biodiversity in the Mediterranean countries.

Visit the [IUCN European](http://www.iucn.org) and [Mediterranean websites](http://www.iucn.org).  

**The IUCN Red List of Threatened Species™ - guiding conservation for 50 years**

In 2014 IUCN is celebrating the significant contribution of The IUCN Red List in guiding conservation action and policy decisions over the past 50 years. The IUCN Red list is an invaluable conservation resource, a health check for our planet – a Barometer of Life.

It is the world’s most comprehensive information source on the global conservation status of plant, animal and fungi species. It is based on an objective system for assessing the risk of extinction of a species should no conservation action be taken. Species are assigned to one of eight categories of threat based on whether they meet criteria linked to population trend, population size and structure and geographic range. Species listed as Critically Endangered, Endangered or Vulnerable are collectively described as ‘threatened’.

The IUCN Red List is not just a register of names. It is a rich compendium of information on the threats to the species, their ecological requirements, where they live, and information on conservation actions to reduce or prevent extinctions. [www.iucnredlist.org](http://www.iucnredlist.org) [www.facebook.com/iucn.red.list](http://www.facebook.com/iucn.red.list) [@amazingspecies](http://www.facebook.com/iucn.red.list)

**About the Species Survival Commission**

The Species Survival Commission (SSC) is the largest of IUCN’s six commissions with a global membership of around 8,000 experts. SSC advises IUCN and its members on the wide range of technical and scientific aspects of species conservation, and is dedicated to securing a future for biodiversity. SSC has significant input into the international agreements dealing with biodiversity conservation.

[http://www.iucn.org/about/work/programmes/species/who_we_are/about_the_species_survival_commission](http://www.iucn.org/about/work/programmes/species/who_we_are/about_the_species_survival_commission)