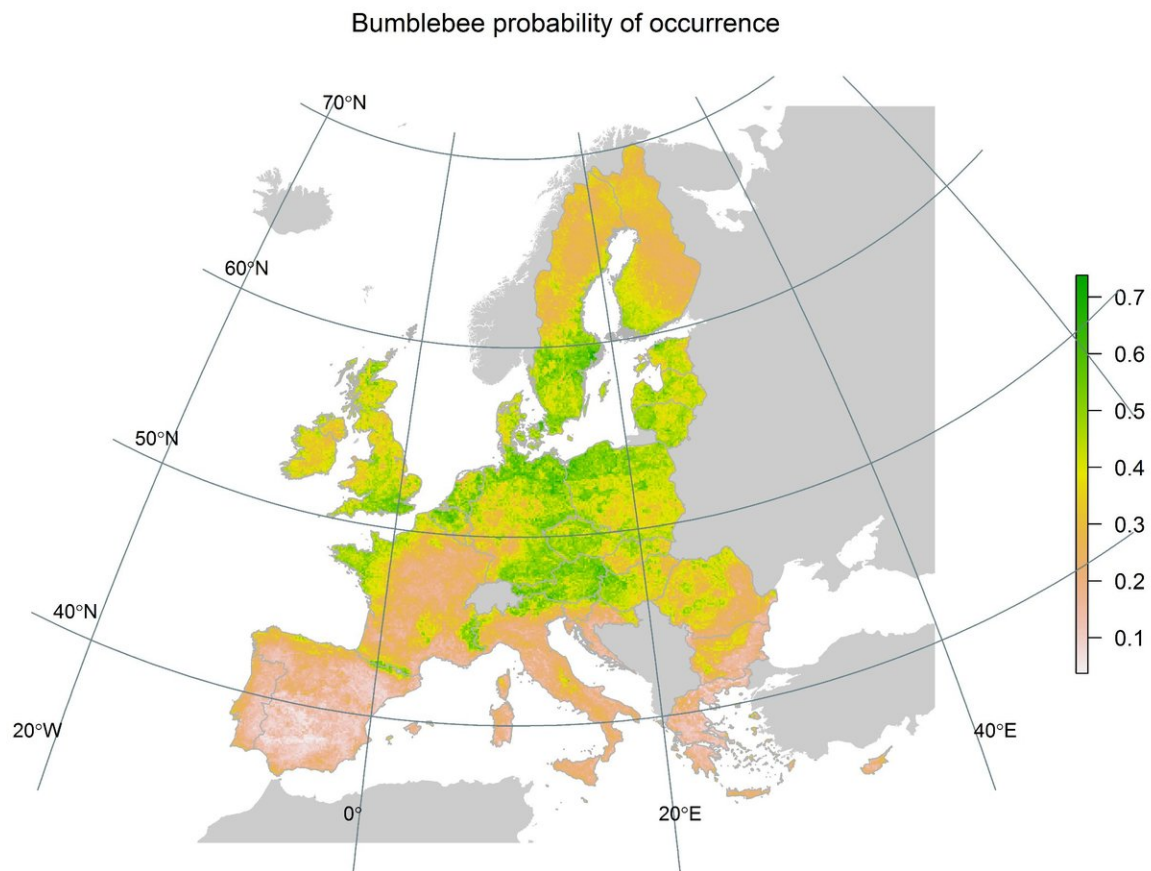


Distribution of bumblebees across Europe

October 18 2018



Credit: European Commission, Joint Research Centre (JRC)

Scientists have mapped the distribution of bumblebees in Europe and created a predictive map that can be used to monitor and mitigate bumblebee decline.

The recent decline in plant and crop pollination represents a threat to ecosystems and agriculture.

The predictive map created by scientists from the JRC and Status and Trends of European Pollinators (STEP) project could serve as a [monitoring tool](#) for farming professionals and policymakers, with the ultimate goal of preserving [pollinators](#).

Mapping pollinators

STEP and JRC scientists mapped the distribution of the 47 most common [bumblebee](#) species, which are known to be important [pollinators](#) due to their distinctive physical characteristics such as body size, hair and strength.

This led to the creation of 47 maps based on environmental land data, climate statistics and field observations.

Experts can use the maps to assess the distribution of bumblebees across the EU and predict potential areas of decline for each species.

Most species are currently located in central Europe.

Their presence decreases towards European coasts, due to the unsuitably hot weather around the Mediterranean Sea.

Global warming is likely to impact the future distribution of bumblebees.

The decline in pollinators is a global phenomenon, which is exacerbated by pesticide use and habitat loss.

Tool to prevent pollinator decline

Pollination plays a crucial role in maintaining healthy ecosystems and agriculture, notably by increasing yields of fruits and vegetables.

Therefore, a further decline in the population of bumblebees could result in higher costs of certain products.

The new monitoring tool predicts areas where bumblebees are likely to decline as well as areas where they are likely to flourish.

It can be used for preventive purposes by policymakers, land-use managers, consultants, ecologists and the scientific community.

The pollinator maps can support monitoring programmes and facilitate conservation actions as part of the recent EU Pollinator's Initiative.

Launched on 1 June 2018, this initiative proposes actions to improve knowledge about pollinator decline, tackle its causes and raise awareness through societal engagement and collaboration.

More information: Chiara Polce et al. Distribution of bumblebees across Europe, *One Ecosystem* (2018). [DOI: 10.3897/oneeco.3.e28143](https://doi.org/10.3897/oneeco.3.e28143)

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