

Press Release - Embargoed 15 May 2018

As World Bee Day, May 20th, approaches, new research shows Irish Bumblebee populations are still in decline



Pic caption: The Large Carder Bee (*Bombus muscorum*) has suffered a 23% population decline since 2012.

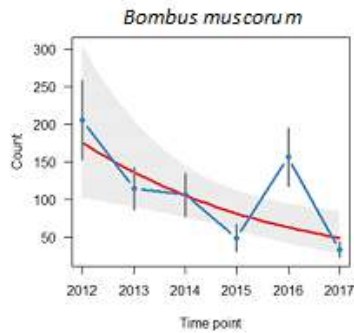
PULL QUOTE: *Irish Bumblebee populations recorded in 2017 are the lowest they've been since monitoring began in 2012.*

The All-Ireland Bumblebee Monitoring Scheme, coordinated by Dr Tomás Murray, Senior Ecologist at the National Biodiversity Data Centre, has revealed marked losses in our native bumblebee species. The bumblebee populations recorded in 2017 were the lowest they've been since monitoring began in 2012. Consequently, the current overall trend from 2012-2017 is a year-on-year decline of 3.7%, leading a total loss of 14.2% from 2012-2017.

In Ireland, we have 21 species of Bumblebee. These insects are vital pollinators of our crops and wild plants. Findings released today are based on the past six years of monitoring our eight most common Bumblebee species as sufficient information has already been gathered on these to accurately assess changes. The current monitoring scheme stretches across over 100 sites across the island of Ireland and as this expands and the monitoring scheme matures more species will be included in the analyses.

Based on a 2006 Red List of Ireland's Bees, we already knew that 6 of our rarer 21 bumblebee species are threatened with extinction from this island. These include the charismatic **Great Yellow Bumblebee** now confined to the north west and the **Shrill Carder bee**, with its distinctive buzz, now only found in isolated populations in the west of Ireland. Indeed, of our 98 wild bee species (which includes 77 solitary bees), one third are threatened with extinction. For the first time, these new findings from Dr Murray's All-Ireland Bumblebee Monitoring Scheme provide an early warning signal on how our more common species are faring.

The **Large carder bee** (*Bombus muscorum*) is threatened across Europe and, despite Ireland having relatively widespread populations of this species, we've observed a 23% decline in the numbers seen since 2012.



Dr Murray warns, 'Given the variability around our estimate, we have to be cautious about not crying wolf, but it is telling that we are detecting moderate declines in widespread species after only six years. When we drill down into the data and isolate the eight species where we have enough information to accurately estimate how their populations have changed, one is increasing, two are decreasing and five are too variable to assign a trend.'

It is only thanks to the generosity of 80 citizen scientist volunteers across over 100 sites who take part in the All-Ireland Bumblebee Monitoring Scheme that we are able to detect these declines. Volunteers walk a fixed route 1-2km walk once a month from March-October and count the number and type of each bumblebee they observe using a standardised methodology. Dr Murray is very aware of how this research is supported by volunteers: 'When the numbers are compiled at the end of the season it's humbling to see how much effort everyone is willing to give to support bumblebee monitoring and conservation. In 2017, we collectively walked 883.2 km over 490 hours, and counted 12,969 bumblebees across 14 species, making this one of the first national citizen science schemes in the world that tracks changes in wild pollinator populations.'

'Given that we're seeing six-fold differences in the number of bumblebees across sites means we now have excellent information on what makes a 'good' or 'bad' bumblebee area. For anyone wishing to make their garden, public spaces or farm the best they can be for bees, all that information is contained within the All-Ireland Pollinator Plan.'

The All-Ireland Pollinator Plan

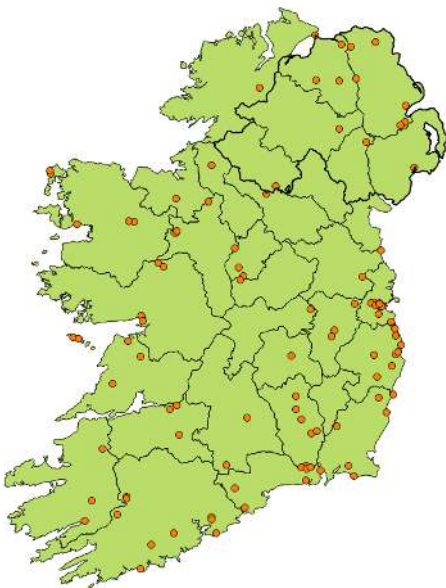
To address declines in pollinating insects, and to try to create an Ireland where pollinators can survive and thrive, the All-Ireland Pollinator Plan was launched in 2015. Its implementation is coordinated by the National Biodiversity Data Centre. The Plan has 81 actions is supported by more than 80 organisations. It is a shared plan of action that requires all of us, from farmers to councils, local communities, businesses, schools, gardens and transport authorities to help. Already the Plan is successfully encouraging the provision of food, shelter and safety for pollinators back in our landscape, but much more still needs to be done. Visit the website to find out what evidence-based actions you can take to help: www.pollinators.ie

Juanita Browne, All-Ireland Pollinator Plan Project Officer said 'The All-Ireland Pollinator Plan is such an exciting project. Yes, bees are declining, but the good news is we know exactly what we need to do to help bees, and the actions needed are very doable and will show results almost immediately.' 'Today's results show the urgency with which we must all get behind the All-Ireland Pollinator Plan' said Dr Una FitzPatrick, Project Coordinator of the All-Ireland Pollinator Plan.

NOTES FOR EDITOR:

International Bee Day - 20th May 2018:

In December 2017, the United Nations General Assembly adopted by consensus a resolution declaring 20 May as World Bee Day. Every year on this day, the attention of the global public will be drawn to the importance of preserving bees and other pollinators. People will be reminded of the importance of bees for the entire humanity and invited to take concrete action to preserve and protect them. The resolution was co-sponsored by 115 UN Member States, including the USA, Canada, China, the Russian Federation, India, Brazil, Argentina, Australia and all the European Union Member States.



About the Irish Bumblebee Monitoring Scheme

The Irish Bumblebee Monitoring Scheme was piloted in 2011 and launched in 2012. It is a long-term citizen science project designed to track changes and detect the early warning signs of a general threat to bumblebees and to Irish pollination services. Our citizen scientists record all bumblebees along specific routes over a fixed time and area, walking once a month between March-October. It is one of the first national citizen science schemes in worldwide that tracks changes in wild pollinator populations.

Now in its seventh field season, the monitoring scheme is now the largest it has ever been, with 79 recorders now monitoring bumblebee populations across 102 sites [map]. It's humbling to see how much effort everyone is willing to give to support bumblebee monitoring and conservation. In 2017, we collectively walked 883.2 km over 491 hr 19 min and counted 12,969 bumblebees across 14 species.

<http://www.biodiversityireland.ie/record-biodiversity/surveys/bumblebee-monitoring-scheme/>

About the National Biodiversity Data Centre

The National Biodiversity Data Centre is a national organisation for the collection, collation, management, analysis and dissemination of data on Ireland's biological diversity. Biodiversity data are a key requirement for understanding our natural surroundings, for tracking change in our environment and for gaining a greater insight on how we benefit from, and impact upon, the ecosystem goods and services provided by biological diversity; a national asset which contributes at least €2.8 billion to the Irish economy each year. The Data Centre was established by the Heritage Council in 2007 and is funded by the Heritage Council and the Department of Culture, Heritage and the Gaeltacht. The Centre is operated under a service level agreement by Compass Informatics Limited, an information and location technologies company focussed on applications in natural resources and planning.

<http://www.biodiversityireland.ie>

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