

Inland Bombus muscorum: the 2025 season in the Mayo and Joyce Country / Western Lakes area

Across Europe, *Bombus muscorum* is classified as being vulnerable to extinction. On the island of Ireland, populations continue to decline at a rate of around 5% per annum. But for Mayo's inland *Bombus muscorum* watchers, 2025 has been a season of encouraging developments.

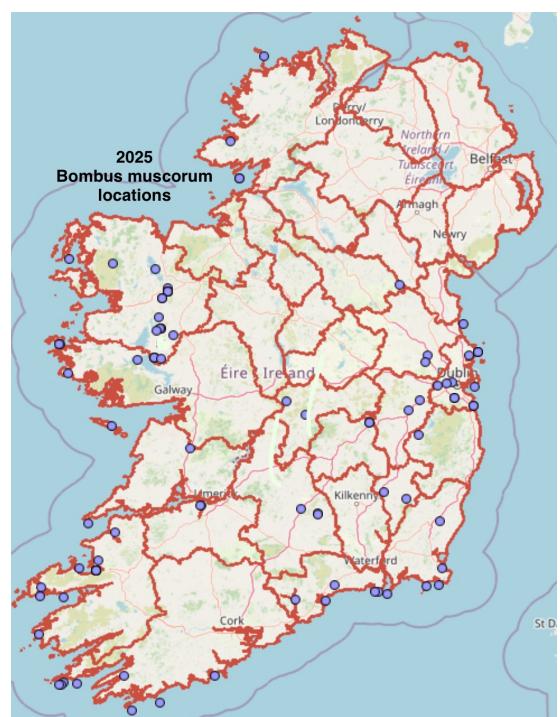
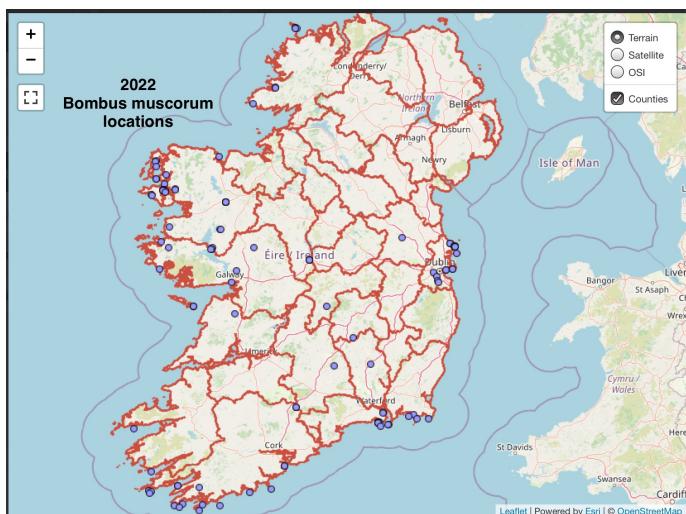
From July onwards, the species:

- has been recorded from almost all of its previously known inland sites in Mayo;
- has been confirmed on three promising new sites, (with two more reported and probable sites awaiting additional photographic evidence next season), adding to what was already a very significant cluster of inland sites;
- has occurred for the first time on one of inland Mayo's four National Bumblebee Monitoring transects.

Although there are as yet no uploaded records from this season, the three communities in North Galway where *Bombus muscorum* colonies were confirmed in 2024 are following agreed site management plans, and are factoring the species' needs into their biodiversity planning

A comparison of the 2022 and 2025 NBDC records of large carder sighting locations across the island shows:

- a) the expansion of the recorded inland Mayo / Western Lakes cluster as a result of three seasons' observations;
- b) its significance in the national context, with only the three coastal preservation projects currently underway showing similar clustering.



The emerging distribution pattern of the Mayo colonies tends to confirm the association of grassland *Bombus muscorum* with limestone habitats, logical enough in view of their pronounced preference for Fabaceae (vetches and clovers) as pollen sources.

The way forward: protecting and starting to rebuild our inland populations

So far, the recovery project is still in the initial phase of locating and occasionally checking on colony sites, while to date only a handful of observers have been trained in identifying *Bombus muscorum* in the field.

The first requirements for developing protection strategies are observation training, and more regular local monitoring. (Cf Protecting rare pollinators: Helping the Large Carder Bee in your local community. All-Ireland Pollinator Plan, How-to Guide 9, 2022, t.)

On that foundation, practical habitat management plans can be drawn up to protect and consolidate existing colonies. Mentoring support with the implementation will be particularly important in Mayo, as this project is the first to address inland population recovery, and grassland-living colonies.

With one nature reserve and three public recreational areas now known to be hosting *Bombus muscorum* populations, and ready to engage in population-building habitat improvement, there is exciting potential for making the species publicly visible, building engagement and support for its protection in the wider countryside.

Both the initial coastal community Large Carder recovery projects have already moved into that third phase of building environmental networks around the original sites to encourage expansion of the species into the surrounding area. They have achieved this mainly by co-opting existing urban and suburban infrastructure, such as school grounds, coastal walks, motorway verges, effectively domesticating the bees:

“Uniquely in Ireland, [*Bombus muscorum*] can be found in urban environments, particularly in areas where there are large meadows in urban parks.”
(NBDC, 2022.)

For the open country areas frequented by Mayo’s grassland *Bombus muscorum*, however, conservation approaches would need to be closer to those advocated in the NBDC’s recent Shirl Carder protection guide (Protecting rare pollinators: Shirl Carder Bee. All-Ireland Pollinator Plan, How-to Guide April 2024), and would involve active collaboration across farming for nature and wildlife conservation organisations. My initial contacts with Co-operative, ACRES, the Lough Carra Catchment projects, and the local NPWS, along with the newly established UNESCO GeoPark, have been encouraging.

Celia Graebner

Clooncullenbaun
Co Mayo

October 2025

