

The National Biodiversity Data Centre has set a challenge for farmers to record some of the amazing biodiversity found on your farm during the year. We have 40 species for you to record.

Are you up for the challenge?

Species: Marmalade Hoverfly

Scientific Name: Episyrphus balteatus

Irish name: Beach ghabhair mharmaláide

Group

1 of around 180 hoverfly (syrphids) species in Ireland.

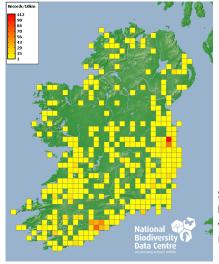
Hoverflies are important pollinators of plants and crops, the second most important after wild bees.

How common on farms

Biodiversity surveys were carried out across 40 farms within the National Biodiversity Data Centre's 'Protecting Farmland Pollinators' EIP project (https://biodiversityireland.ie/projects/protecting-farmland-pollinators/). The 40 farms were chosen to reflect farms of differing types and intensity levels. The Marmalade hoverfly was present on thirty nine of the 40 farms.

Distribution

Widespread and common.



Source: The Marmalade hoverfly records as viewed on Biodiversity Maps, 2023.



Marmalade Hoverfly. Note: Each abdomen segment has 2 black bands separated by 2 orange bands.

Identification Tips

- A small hoverfly, wing length 6 to 10 mm.
- Each abdomen segment has 2 black bands separated by 2 orange bands.
- Thick black bands alternate with thinner moustache bands.
- Dark coloured species can occur.

Biodiversity Tip No. 31

Encourage native plant species.

Allow some Bramble to flower, it's a valuable source of nectar and pollen for many pollinating insects.





Conservation Status

Red Lists are an internationally recognised methodology for assessing conservation status. A European Red List was published in 2022. It found that the Marmalade Hoverfly *Episyrphus balteatus* was not threatened with extinction in Europe. Based on the Red List, it is 'Least Concern'.

Management Tips

Food for adult Marmalade hoverfly:

- They are not social or nest making, so need a constant supply of food during their adult lives.
- Encourage native wild flowers, including Bramble, Knapweed, Dandelion, Scabious, Ivy, etc, especially flat topped flowers.

Native mixed-species hedgerows and field margins, non-farmed areas:

- Retain, manage, restore or create native hedgerows.
- -Retain, manage or create field margins and buffer strips, encourage native wildflowers to develop.
- Allow native wildflowers to develop in non-farmed areas.

Reduce pesticide use:

 It impacts beneficial insects (adults and larvae) through the food chain.

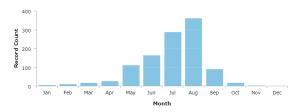


Hoverfly larvae (top) grazing on aphids, with a Lacewing larvae (below).

When?

Can be seen between February and November. The earliest it has been recorded in Ireland is 6 January (2019).

Records per month across all datasets



National Biodiversity Data Centre, Ireland, Marmalade hoverfly
Episyrphus balteatus image, accessed October 2023,
Marmalade Hoverfly (Episyrphus balteatus) - Detail - Biodiversity Maps
(biodiversityireland.ie)

Where on the farm?

In sunny spots in hedgerows, woodlands, field margins, crops and gardens.

Value

 These migrants provide important pest control in crops by consuming trillions of aphids.

- They also provide extensive pollination services and long-range pollen transfer.
- Migrant hoverflies play a vital role due to declines of other beneficial insects.
- Cross-pollination of our wildflowers, helping them to be resilient, and boosting their fruiting ability for the next generation and wildlife.



Hoverfly adult feeding on a Dandelion.



Further Info

This little hoverfly is sometimes known as the 'Farmer's Friend' as their larvae are veracious predator's of aphids.

They can survive in tillage fields and can complete their life cycle in crops, such as cereals, where the larvae feed on aphids. They are valued as a biological control agent for greenfly. They are also pollinators, making them uniquely beneficial to humans.

Numbers can be boosted by an influx of migrant's during the summer. Their migration is adaptive and they wait on mass for favourable winds to take them north when the weather is good, usually mid-summer. They then return south when the weather is less suitable.

They overwinter as an adult, in ivy or caves or similar nooks and crannies, and can be one of the first hover-flies to be seen in the spring.

The adults colour depends on the temperature at which the larvae develop. Larvae in hot conditions produce adults with more orange markings, in cooler weather the adults have darker markings.

Similar species

It is not similar to any other hoverfly on the island of Ireland, the banding pattern on their abdomen is unique.

Affected by a change in climate?

They may be affected by a changes in weather patterns and flowering plant periods. Poor weather may affect the adult population, as they cannot survive without a constant food supply.

They may be able to adapt more than others pollinators, as they have the ability to migrate.

Need some help with identification?

Just drop us a line, we'll be happy to help: pollinators@biodiversityireland.ie

Useful Links

Try this course on identifying Ireland's common farmland hoverflies:

https://learn.biodiversityireland.ie/courses/farmlandhoverflies

Hoverflies: Six species common on farmland https://biodiversityireland.ie/app/uploads/2021/01/Hoverflies-on-Farmland-Flyer-A5-PRINT.pdf

Marmalade hoverfly species profile:

Marmalade Hoverfly (Episyrphus balteatus) - Detail Biodiversity Maps (biodiversityireland.ie)

Record here

Your records will help us build a picture of farmland biodiversity in Ireland. If you're happy with your identification, you can submit your record.

• On the National Biodiversity Data Centre website:

<u>https://records.biodiversityireland.ie/record/biodiversity-on-</u> your-farm#7/53.455/-8.016

The Farmland Pollinator Officer post is funded by the Department of Agriculture, Food and the Marine as one of its contributions to assisting implementation of the All-Ireland Pollinator Plan 2021-2025.













An tSeirbhís Páirceanna Náisiúnta agus Fiadhúlra National Parks and Wildlife Service