

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: 14-spot Ladybird

Scientific Name: Propylea quattuordecimpuncata

Irish name: Bóin Dé ceithre bhall déag

# Group

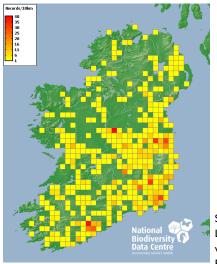
Ladybirds belong to the insect Family of Coccinellidae, 27 species occur in Ireland. Some of these are small and unspotted and would not be considered 'typical' ladybirds; generally Ladybirds refer to 19 species that have been recorded in Ireland.

### 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 14-spot Ladybird was recorded on two of the 40 farms.

### Distribution

Widespread and common.



Source: The 14-spot Ladybird records as viewed on Biodiversity Maps, 2023.



14-spot Ladybird. Note: Yellow with 14 almost square black spots.

## **Identification Tips**

- 3.5 to 4.5mm in length.
- Adult is bright yellow with 14 almost square black spots, some of these are joined or almost touching.
- There is a slight 'rim' around the edge of the elytra (wing case).
- Legs are pale brown with black on the upper body.
- Their larvae have whitish bumps along their body edge.

# Biodiversity Tip No. 24

Reduce pesticide/ insecticide use.

To encourage beneficial insects, like the 14-spot Ladybird.





### **Conservation Status**

The 14-spot Ladybird is one of our most common species and is thought to not be a species of conservation concern.

A Ladybird Atlas 2025 project, to better understand the status and distribution of ladybirds in Ireland, has been initiated, as a partnership project with the National Biodiversity Data Centre and the Centre for Environmental Recording and Data (CEDaR).

The project aims to increase the amount of ladybird observations, produce more comprehensive distribution maps and to improve the knowledge of habitat preferences for all species of ladybird.

## **Management Tips**

Food for the 14-spot Ladybird:

#### On the farm:

- Encourage low-growing herbaceous vegetation such as nettles, brambles, thistles, reeds, grasses, plantains, clovers and others, in hedgerows, field margins and non-farmed areas.
- Encourage pollen rich native plants such as cow parsley, hogweed, buttercup, angelica, dandelion and cocksfoot grass.

### Overwintering sites:

 Provide native hedgerows, evergreen plants, such as Gorse, Ivy, Holly and Scots Pine, dead leaves, and grass tussocks.

### Reduce pesticide/insecticide use:

• To allow natural predators to thrive, such as Ladybirds, Hoverflies and Parasitic wasps.

### Similar species

It can be distinguished from the smaller, but similar, 22-spot ladybird by its more rectangular, merging spots.

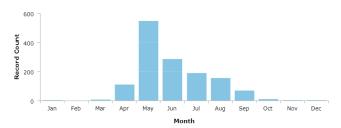
The smaller 22-spot ladybird.



### When?

They emerge from hibernation from April to September.

### Records per month across all datasets



National Biodiversity Data Centre, Ireland,14-spot Ladybird, image, accessed August 2023,

14-spot Ladybird (Propylea quattuordecimpunctata) - Detail - Biodiversity

<u>Maps (biodiversityireland.ie)</u>

### Where on the farm?

Found in low growing vegetation in meadows, scrub, hedgerows, field margins, woodland clearings and edges and gardens.

### Value

- Ladybirds are part of the farm ecosystem.
- They are commonly found on crops and are considered a very important aphid predator in agriculture.
- The larvae are voracious predators of aphids and can assist in the control of aphids, helping to reduce the use of pesticide/insecticide.
- A ladybird can munch through 50 aphids/day and around 5,000 aphids during its year-long life.





### **Further Info**

One of 2 yellow and black spotted ladybird species found in Ireland. The other is the 22-spotted Ladybird.

Both adults and larvae feed mostly on aphids. A ladybird can munch through 50 aphids/day or 5,000 aphids during its year-long life.

The 14-spot ladybird has a long hibernation period emerging as late as May to breed.

If handled they exude orange liquid from their joints. This is actually a form of controlled bleeding which stains the hands and is very pungent. Its bright colouration is a warning to predators that it is distasteful, although some birds may still have a go at eating it.

The lifecycle of a ladybird consists of four phases: the egg; the larval stage, during which the larva undergoes a series of moults; the pupa, in which the larva develops into an adult; and the adult phase, during which the female lays eggs in batches of up to 40.

The Harlequin ladybird is an invasive species present in Ireland since 2007. A voracious predator which feeds on aphids, soft fruit, pollen, small insects and other ladybird larvae. They may cause a decline in Irelands native ladybird species.

# Need some help with identification?

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

### **Useful Links**

A handy Ladybird identification swatch can be purchased here, €5

<u>Ladybird Swatch – National Biodiversity Data Centre</u> (biodiversityireland.ie)

Information on the invasive Harlequin Ladybird

<u>Species Alert - Harlequin ladybird - National Biodiversity</u>

<u>Data Centre (biodiversityireland.ie)</u>

# Affected by a change in climate?

Ladybirds that feed on aphids face challenges arising directly from climatic change and indirect challenges due to the effect of climate on their aphid prey and other organisms with which they interact.

They show some resilience to climate change, but future climate effects on their overall biodiversity are not fully clear.

#### 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 our website at the National Biodiversity Data Centre: <a href="https://records.biodiversityireland.ie/record/biodiversity-on-your-farm#7/53.455/-8.016">https://records.biodiversityireland.ie/record/biodiversity-on-your-farm#7/53.455/-8.016</a>

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An tSeirbhís Páirceanna Náisiúnta agus Fiadhúlra National Parks and Wildlife Service