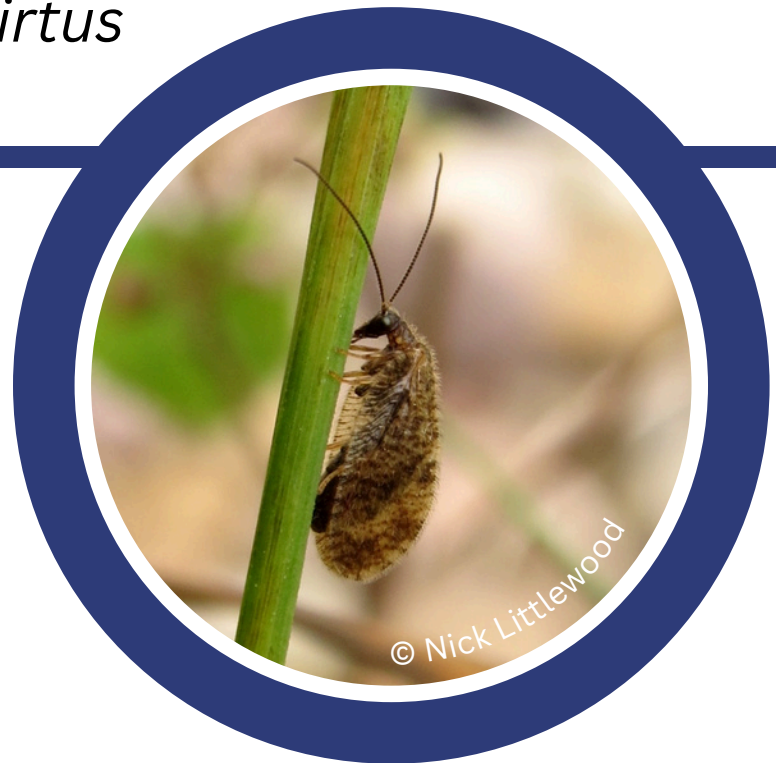![buglife Scotland logo]

Bordered Brown Lacewing
Megalomus hirtus

© Nick Littlewood

In the UK, the Bordered Brown Lacewing only occurs in Scotland along the eastern coast. Known populations are found at a few sites along the Aberdeenshire coast and in Holyrood Park, Edinburgh. This small lacewing has a brown body with patchy brown and translucent wings. They are mainly spotted on Wood Sage (*Teucrium scorodonia*), a native perennial wildflower that prefers rocky south easterly exposed slopes.
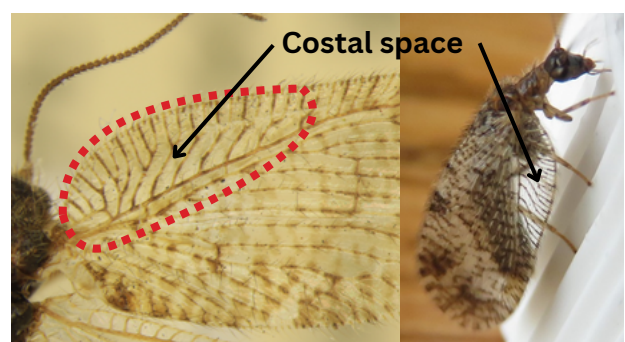
Quick Facts

- **Size:** Up to 1cm in length
- **Life span:** Typically, 1 year
- **Diet:** This species eats aphids and other insects on Wood Sage growing on rocky exposed slopes.
- **Reproduction:** Females lay eggs individually and on the underside of leaves. They typically overwinter in their cocoons.
- **When to see:** Adults have been recorded from June to August, although they may be active earlier and later depending on the local climate. They spend most of the day deep amongst vegetation.
- **Conservation Status:** They are recognised on the Scottish Biodiversity List as being of key importance for biodiversity conservation in Scotland and in greatest need of conservation action.
- **Threats:** Loss of habitat - they seem to prefer rocky and exposed cliffs along the coast and at Holyrood Park. These are fragile habitats threatened by erosion and encroachment of scrub, particularly Gorse.

There are at least 70 species of lacewing in the UK and at least 31 of these are in the 'brown family' called Hemerobiidae.

How can we identify them from other lacewings?

Identifying Bordered Brown Lacewings involves some technical knowledge on their wing patterns, which when you look close enough are distinct from other lacewings. There is a wide costal space on both fore wings (between the outer edge of the wing and the humeral vein that runs along the length of the wing). This can be seen either with our own eyes or with a hand lens. It also has at least five (sometimes six or seven) veins that branch off from the humeral vein.

Generally, they can appear to be a little 'hunched' with a prominent 'shoulder' that tapers off towards the apical tip of the wing. However, it's really the costal space and veins that help us sort out the Bordered Brown Lacewing from others in its family.

Costal space

Species on the Edge

Species on the Edge is an ambitious programme for species recovery in Scotland, that aims to take action on over 37 declining and threatened species across Scotland's coasts and islands.

Buglife Scotland is working with partners on the Invertebrates on the Edge strand of the programme. This project aims to conserve invertebrate species, like the Bordered Brown Lacewing, create more safe havens and restore lost populations by empowering local communities.

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How we survey for the Bordered Brown Lacewing

It is easiest to survey the Bordered Brown Lacewing when they are adults. Their eggs and larvae are very small and can be difficult, although not impossible, to find in the field. It's best to survey them when the weather is dry and in the afternoon and early evening. During the day, the Bordered Brown Lacewing spends most of its time amongst the vegetation and are often unwilling to move, even when disturbed.

The two main methods we use are sweep netting, which involved brushing a net over vegetation to see what it scoops up, or firmly beating vegetation over a collection tray to see what falls out.

While we are out surveying, we also keep an eye out for encroaching scrub that might present a future threat to the habitats that the Bordered Brown Lacewing favour.

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Interested in getting involved in Bordered Brown Lacewing surveys?

200 Hours for Lacewings Challenge

We're asking the Scottish public to learn about and look for the Bordered Brown Lacewing, to report any sightings of it or its eggs to us, and then to let us know how many hours you've clocked up so we can add it to our total - can you help us reach 200 hours of survey time?

Visit speciesontheedge.co.uk/volunteers/200-hours-of-lacewings-challenge-survey-the-bordered-brown-lacewing/ or scan the QR code for more information.