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# LADYBIRDS OF BADENOCH AND STRATHSPEY

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- There are 12 species of 'classic' ladybirds that have been found in Badenoch and Strathspey (the word 'classic' is used here as there are a number of other species in the beetle family Coccinellidae, which ladybirds belong to, that while they are ladybirds they do not have the 'classic' look of ladybirds)
- There are over 5000 different ladybird species in the world.
- They are identified by being round or oval in shape, the elytra are brightly coloured usually with spots or streaks, have short clubbed antennae, short legs and usually with coloured markings on the pronotum.
- Ladybirds overwinter as adults in a secluded protected place such as under leaf litter, in trees and even in houses.
- Eggs are laid in around early June and the larvae can be seen in late June/early July.

- Their bright colours act as a warning to predators, such as birds, that they taste bad! It is a very effective defence. When attacked they also exude a yellow substance called 'reflex blood' which is distasteful to most predators.
- Ladybirds occur in many varied habitats and these are outlined below under each species description.
- The name 'Ladybird' is believed to have its origins with the common 7-spot ladybird. The word 'Lady' is believed to be inspired by the Virgin Mary, who is often seen wearing a red cloak in early paintings, and the 7 spots represent the seven joys and seven sorrows of Mary.
- Most ladybirds eat aphids and scale insects, which is why they are often liked by gardeners.
- Ladybirds are not dangerous or poisonous to humans.
- The number of spots on a ladybird is not an indication of its age ... the number of spots stay the same throughout adulthood ... though there is great variation in the number of spots a species can have.
- Most ladybirds live about one year.
- Some people believe ladybirds can predict the weather ... if you have one on your hand and it flies off then the weather will be fine but if it falls off then it will rain!
- There is one invasive, introduced ladybird in Britain ... the Harlequin Ladybird ... which is originally from Asia and was introduced to Europe and North America in order to control aphids but, as is often the case in such introductions, it has escaped into the wild and spread rapidly. At present, while it has been seen in Scotland, it has not yet been seen within Badenoch and Strathspey. It has been described as one of the most invasive species Britain has ever seen and attacks other ladybirds as well as eating their food, such as aphids, so leaving no food for our native ladybirds. Keep an eye out for this voracious invader! For further information see this website which is tracking its spread ... <http://www.harlequin-survey.org/>



*The Harlequin Ladybird (Harmonia axyridis)*

26 species of 'classic look' ladybird have been recorded within the UK and of these 12 have been recorded within Badenoch and Strathspey:

➤ **5-spot Ladybird (*Coccinella quinquepunctata*):**



The 5-spot Ladybird is a rare Red-listed species in Britain and one of its main strongholds is the Spey valley including Badenoch and Strathspey.

It can be found within Badenoch and Strathspey between approximately April to August, depending on the weather.

Its preferred habitat in Britain is unstable river shingle though in Europe it is to be found in a wider variety of habitats. In 2008 members of BSCG found an adult 5-spot ladybird on Thistle on an unimproved grassland in Carr Wood, Carrbridge which was a good distance from the nearest river shingle and this is possibly the first time in Britain that an individual of this species has been found outside its normal British preferred habitat and is more likened to where it is often found on mainland Europe. Further research on this find is on-going.

It is usually found on low-growing vegetation, amongst river shingle, including Nettles, Thistles and Wild Angelica.

It feeds on aphids.

It overwinters as an adult, mainly in leaf litter and under stones.

It is a Red-listed rare UK species and currently the overall population is stable.

It is about 4-5mm long. The elytra normally have 5 black spots on a red background. It has black legs and the pronotum is black with white marks at the sides. This ladybird has quite a domed appearance.

➤ **7-spot Ladybird (*Coccinella septempunctata*):**



The 7-spot Ladybird is probably the best known of all the ladybirds and one of the most common species found in Britain though less so in Scotland. It has a fairly widespread but scattered distribution throughout Badenoch and Strathspey.

It can be found within Badenoch and Strathspey between approximately April and August, depending on the weather.

It is thought that the name 'Ladybird' comes from this species with the red colour representing the red cloak that the Virgin Mary was often depicted as wearing and that the 7 black spots represent her seven joys and sorrows.

It is to be found in many varied habitats including grasslands, both coniferous and deciduous woodlands and on heathland.

It will be found on a wide variety of low-growing vegetation including Thistles, Ragwort, Heather, and various umbellifers, though it has a particular liking for Stinging Nettles especially in spring.

It feeds on aphids.

In autumn many adult 7-spot Ladybirds gather together in over-wintering sites such as under bushes and amongst pine needle leaf litter.

The overall UK population is currently stable.

It is about 5-8mm long. The elytra normally have 7 black spots on a red background. It has black legs and the pronotum is black with white marks at the sides.

➤ **10-spot Ladybird (*Adalia decempunctata*):**



The 10-spot Ladybird is an extremely variable beetle, as can be seen in the above photos, and comes in many different forms with a wide variety of markings which can make identification difficult.

It can be found within Badenoch and Strathspey between approximately May and late July, depending on the weather.

It is a very common species across southern Britain though less so in northern Scotland and in Badenoch and Strathspey there are not many records but is fairly widespread in its distribution throughout the district.

It is to be found mainly in woodlands and anywhere else where trees and shrubs occur in good numbers such as mature gardens. It will mainly be found on such trees as Oak, Sycamore, Hawthorn and Birch but also occasionally on conifers.

It feeds on aphids and it overwinters as an adult amongst leaf litter and often also in beech nuts.

The overall UK population is currently decreasing.

It is about 3-5mm long, has brown legs, and as stated, there are many variable forms to this ladybird. The 'typical form', as seen top left above, has a red background with normally 10 black spots, the 'melanic form', as seen top right, is black with orange or red shoulder flashes, and the 'chequered' form, as seen in bottom photo, has a buff or light brown background with normally 10 maroon or black spots in an almost grid-like pattern.

➤ **11-spot Ladybird (*Coccinella undecimpunctata*):**



The 11-spot Ladybird is an elusive and declining species within the UK and there have been no more than a handful of records within Badenoch and Strathspey with the most recent being back in 1998 at Feshie Bridge.

It can be found within Badenoch and Strathspey between approximately May and August, depending on the weather.

It can be found in a variety of habitats but it particularly favours sand dune systems and therefore is generally a more coastal species.

It is often found such plants as Gorse, Thistles and Rosebay Willowherb though there have been some records of it on deciduous trees such as Ash, Beech and Oak.

It feeds on aphids.

It often overwinters in buildings though usually is found amongst leaf litter.

The overall UK population is decreasing.

It is about 4-5mm long. The elytra normally have 11 black spots on a red background, and occasionally the black spots have a thin yellow ring around them. It has black legs and the pronotum is black with white marks at the sides.

➤ **14-spot Ladybird (*Propylea quattuordecimpunctata*):**



While the 14-spot Ladybird is a very common species in southern Britain it is much rarer in the north and within Badenoch and Strathspey there has only ever been one record which was in the Glenmore area in the 1960's.

It can be found within Badenoch and Strathspey, if seen at all, between approximately late May and August, depending on the weather.

It is to be found in a wide variety of habitats amongst low vegetation on grasslands, woodlands, scrub and arable fields.

It is usually found on low vegetation and has a special liking for Stinging Nettles.

It feeds on aphids.

It overwinters as an adult amongst leaf litter, and is often known as the 'dormouse ladybird' as it emerges after winter later than most other species of ladybird.

The overall UK population is decreasing.

It is about 3-5mm long. The elytra normally have somewhat rectangular black spots, which are often fused, on a yellow or cream background. Often the shape of the black spots on the elytra is described as resembling an anchor or a clown's face. It has brown legs, and a yellow or cream pronotum with either a series of black spots or a single large black mark.

➤ **18-spot Ladybird (*Myrrha octodecimguttata*):**



The 18-spot Ladybird is a localised species in the UK and quite uncommon in Scotland with only 2 previous records in Badenoch and Strathspey. The most recent was in 1991 near Aviemore.

It can be found within Badenoch and Strathspey, if seen at all, between approximately May and September, depending on the weather.

This species is restricted to Scots Pine trees. It tends to generally stay high up in mature trees as it is not tolerant of wood ants. It has been found in younger Scots Pine trees occasionally.

Apart from its favoured Scots Pine it has also been recorded from Monterey Cypress, Oak and Sycamore but these latter species are not thought to be important to this species.

It feeds on aphids of Scots Pine.

It overwinters high up in mature Scots Pine trees and also under the bark of this tree.

The overall UK population is stable at present.

It is about 4-5mm long. The elytra have a maroon-brown background colour with cream coloured spots which are often fused together and the front two spots are of a distinctive 'L' shape. It has brown legs and the pronotum is creamy-white with a rounded red M-shaped mark.



➤ ***Cream-spot Ladybird (Calvia quattuordecimguttata):***



The Cream-spot Ladybird is more common in England than in Scotland. Within Badenoch and Strathspey it is uncommon but widespread.

It can be found within Badenoch and Strathspey between approximately May and August, depending on the weather.

It is a deciduous tree species specialist and can be found amongst the foliage of numerous types of tree.

Most often this ladybird is found on Ash trees but has also been recorded from Oak, Lime, Beech and Sycamore as well as Gorse, Hawthorn, Broom and Sallow. Records from conifer trees are rare but there have been some records from Scots Pine.

It feeds on aphids and psyllids.

It overwinters in leaf litter and under bark.

The overall UK population is currently decreasing.

It is about 4-5mm long. The elytra have a maroon-brown background colour with 14 cream spots. It has brown legs and the pronotum is a maroon colour with white marks at the sides.

➤ ***Eyed Ladybird (Anatis ocellata):***



The Eyed Ladybird is Britain's largest native ladybird. It is a widespread but uncommon species in Britain and within Badenoch and Strathspey there have only been a handful of records.

It can be found within Badenoch and Strathspey between approximately April and August, depending on the weather.

It gets its name from the black spots on the elytra having pale rings around them making them look a bit like eyes.

This species is a conifer tree specialist and most often found in these types of woodland.

It is most often associated with Scots Pine and occasionally also Larch and Douglas Fir. In autumn they have been found on deciduous trees such as Oak.

It feeds on aphids.

It overwinters within the soil or leaf litter of coniferous woodlands.

The overall UK population is currently stable.

It is about 7-9mm long. The elytra have a red background with usually 15 black spots which have pale rings around each of them. It has black legs and the pronotum has white markings around the edge and a distinctive black 'M' mark in the centre.

➤ ***Hieroglyphic Ladybird (Coccinella hieroglyphica):***



The Hieroglyphic Ladybird is a localised species within the UK and within Badenoch and Strathspey.

It can be found within Badenoch and Strathspey between approximately June and September, depending on the weather.

It is quite an elusive and variable species and gets its name from the markings on the elytra which resemble an Egyptian hieroglyph.

It is a heathland species and is nearly always found on or near to this type of habitat.

It is closely associated with Heather and very rarely found far away from this plant.

It feeds on other insects associated with heathland such as the Heather aphid and also feeds on the eggs and larvae of the Heather leaf beetle *Lochmaea suturalis*.

It overwinters in the dead heather litter and also occasionally on Scots Pine trees on heathland.

The overall UK population is currently decreasing.

It is about 4-5mm long. The elytra can be quite variable in its markings but the 'typical' form has a red or orange background with black stripes and spots that resemble an Egyptian hieroglyph. It has black legs and the pronotum is black with white marks at the sides.

➤ **Larch Ladybird (*Aphidecta oblitterata*):**



The Larch Ladybird is a widespread species though not always common. In Badenoch and Strathspey this ladybird is quite widespread where its preferred habitat occurs.

It can be found within Badenoch and Strathspey between approximately April and August, depending on the weather.

As a defence mechanism the Larch Ladybird uses reflex bleeding to discourage predators.

It is a conifer specialist species and will be found in woodland especially where the Larch tree grows.

It is most closely associated with the Larch tree but may also be found on other conifers such as Norway Spruce and Scots Pine.

It feeds on scale insects and adelgids, the latter being very small members of the true bugs (Hemiptera) and often pests of conifer tree species.

It overwinters usually in bark crevices of the Larch tree but also on Norway Spruce and sometimes Scots Pine.

The overall UK population is currently stable.

It is about 4-5mm long. The elytra have a tan brown background colour and usually have no markings though occasionally can have a small dark line on each side. It has brown legs and the pronotum is a pale colour with distinctive black 'M' mark.

➤ ***Orange Ladybird (Halyzia sedecimguttata):***



The Orange Ladybird is a widespread and fairly common UK species. In Badenoch and Strathspey it is quite widespread where its preferred habitat occurs.

It can be found within Badenoch and Strathspey between approximately April and September, depending on the weather.

It was thought to be an indicator of ancient deciduous woodland but its recently observed wide occurrence on Sycamore trees has thrown that into question.

It is a deciduous woodland specialist though there have been a few records in urban areas.

It is most closely associated with Ash and Sycamore trees though can also be found on Hawthorn, Lime, Birch and Hazel and very occasionally on Scots Pine.

It feeds on mildew.

It overwinters in leaf litter and occasionally in amongst Ivy.

The overall UK population is currently increasing.

It is about 4-6mm long. The elytra have an orange background with normally 16 white spots. It has orange legs and a pronotum which is orange with a translucent edge.

➤ ***Striped Ladybird (Myzia oblongoguttata):***



The Striped Ladybird is a localised and specialist species with a scattered distribution throughout the UK. In Badenoch and Strathspey it is quite widespread and common.

It can be found within Badenoch and Strathspey between approximately April and August, depending on the weather.

This species is a conifer specialist most commonly found in Scots Pine woodland.

It is most often found on mature Scots Pine trees with only a few records from Larch trees.

It feeds on aphids associated with Scots Pine, such as the large brown aphids of the genus *Cinara*.

It overwinters within leaf litter or moss at the base of Scots Pine trees.

The overall UK population is currently stable.

It is quite large at about 6-8mm long. The elytra have a chestnut-brown background colour with approximately 13 white variable spots and stripes. It has brown legs and the pronotum is white with a chestnut-coloured 'M' mark.

# GLOSSARY OF TERMS

**Adelgids** – often known as woolly aphids, they are members of the true bug order of insects (Hemiptera) and are often pests of pine trees.

**Antennae** – a pair of appendages attached to the head which are the primary sense of smell for ladybirds.

**Aphids** – insects such as greenfly and blackfly. Are members of the family Aphidoidea within the order Hemiptera which include all the true bugs.

**Coccinellidae** – the Latin name for the group of beetles that ladybirds belong to.

**Elytra** - The main part of the body which are in fact wing cases and cover and protect the wings and abdomen and part of the thorax beneath. The elytra are coloured with a variety of markings including spots, stripes and streaks.

**Head** – the first part of the ladybird body containing the antennae, eyes and mouth.

**Hemiptera** – the Latin name for the order of insects which all true bugs belong to.

**Larva** – the young of the ladybird. They look very different to the adults and are separated by the distinctive markings they have. The larvae are not covered in this leaflet though there is a photo of an example of one at the end of this glossary.

**Mildew** – a mould fungus often found growing on plants.

**Pronotum** – the area between the head and the elytra which is in fact the first segment of the thorax. The markings on the pronotum are very useful for identification when the number of markings on the elytra varies from the normal.

**Psyllids** – also known as ‘jumping plant lice’ and are very small members of the true bug group of insects (Hemiptera)

**Reflex bleeding** – if they feel threatened some ladybirds will exude a staining and foul-smelling yellow liquid from the joints of their legs and abdomen as a way of distracting and discouraging predators.

**Thorax** – the central part of the ladybird body to which the legs and wings are attached.



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*The larva of the 7-spot  
Ladybird*



**Badenoch and Strathspey Conservation Group.**

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