

# Damselflies & Dragonflies of the Highlands

An identification guide

Golden-ringed Dragonfly



Dragonflies are amazing insects that combine stunning colours with awesome aerial displays. This guide will help you identify the 18 species of dragonfly and damselfly found in the Highlands. You can get involved by recording the species you see and sending in your records. This will contribute to a national atlas of Dragonflies.

Published by Highland Council



1M



2M



3M



1F



2F



3F

## DAMSELFLIES

### *Cuilleagan Cruinneig*

#### 1 Beautiful Demoiselle

#### *Òigheag Bhrèagha*

Length: 45 – 49mm

Range: Lochaber, west of Fort William and Sleat on Skye

Rarity: restricted to the above areas but under-recorded

Habitat: only found in running water, burns and rivers with stoney bottoms

Seen: late May to late August

This species is unmistakable as the males have dark blue wings and a metallic blue-green body. Females have metallic bronze-green bodies with golden-brown tinged wings. Most activity takes place near water with the males displaying to females using a fast, fluttering flight. Females only come to the water to mate or lay eggs, so are not seen as often as males. Immatures and females can be found away from the water at the edges of Bracken stands or woodland.

#### 2 Emerald Damselfly

#### *Cruinneag Uaine*

Length: 35 – 39mm

Range: widespread

Rarity: common

Habitat: well vegetated standing water, ditches and loch margins

Seen: late June to September

A slender species, with a weak, fluttery flight. Males are metallic green with blue segments 9 and 10 on the rear of the abdomen.

Females are a duller green with a pale brown abdomen.

On dull days often rests on vegetation near water holding its wings half open.

The most common late summer damselfly.

#### 3 Large Red Damselfly

#### *Cruinneag Dhearg*

Length: 33 – 36mm

Range: widespread

Rarity: common

Habitat: standing or very slow moving water

Seen: May to August

A distinctive red and black damselfly that is the first to be seen in late spring.

Females are darker with black and yellow bands on the abdomen. Unusually for damselflies the males are territorial so this keeps the numbers low at waterbodies.



4M



5M



6M



4F



5F



6F

#### 4 Northern Damselfly *Cruinneag a' Chinn a Tuath*

Length: 31 – 33mm

Range: restricted to only 30 sites in the Cairngorms National Park

Rarity: rare

Habitat: shallow pond or lochan edges sheltered by sedges

Seen: late May to early August

The only UK damselfly only found in Scotland. The black and blue males fly slowly and weakly among widely spaced aquatic vegetation nearly always below the tops of plants and avoid large areas of open water. The underside of the eyes and face are bright green.

The male has 2 short black lines on each side of the thorax, and a spear-shaped mark and 2 black lines on the second abdominal segment. Females are pea-green with the 2 thorax lines.



#### 5 Common Blue Damselfly *Cruinneag Chumanta*

Length: 29 – 36mm

Range: widespread

Rarity: common

Habitat: standing water

Seen: June to mid September

Males are bright blue, flying fast and low over the water, often in large numbers. They can be distinguished by the club-shaped black mark on the top of segment 2 of the abdomen and the blue upper surface of segments 8 and 9. Both males and females have a single black stripe on the side of thorax. Females are much drabber than males with more black and can come in yellow, pale green or brown forms. All females have a spine underneath segment 8.

#### 6 Blue-tailed Damselfly *Cruinneag Ghrinn*

Length: 30 – 34mm

Range: widespread

Rarity: can be localised but is possibly under-recorded

Habitat: standing water

Seen: May to early September

Commonly seen flying low down among waterside vegetation but also far from water. Males are dark, almost metallic black with a bright blue band (segment 8) on the rear of the abdomen and a green or blue thorax. Females usually have a dull brown band (segment 8) and either a brown/pale grey/pink thorax. Males and females have a small black and white wing spot at the end of each wing.



7M



8M



9M



7F



8F



9F

## DRAGONFLIES *Tarbh Nathrach*

**Hawkers.** These are fast flying insects, chasing after prey and seldom seen perching (apart from the Azure Hawker).

### 7 Azure Hawker

*Tarbh Nathrach Liath*

**Length:** 54 – 64mm

**Range:** a few Strathspey sites and scattered all over the west Highlands but not Skye. Under-recorded

**Rarity:** rare

**Habitat:** boggy moorland, open birch woodland and moss-rich bog pools up to an altitude of 600+ metres

**Seen:** late May to July

This species is restricted to Scotland. It spends a lot of time perched, basking on rocks and tree trunks. The bright blue males fly fast and low at the edges of pools. The males are blue and black, with no yellow markings. Females can have the male colouration or are yellowy brown and black. Neither sex has coloured stripes on the top of the thorax.

### 8 Common Hawker

*Tarbh Nathrach nan Cuilcean*

**Length:** 65 – 80mm

**Range:** widespread

**Rarity:** common

**Habitat:** most standing waters to an altitude of 600+ metres

**Seen:** July to October

This large hawkler is a fast and powerful flier, being difficult to approach. They almost never perch. Males have paired blue and yellow markings on the abdomen but appear very dark in flight. Females are usually dull yellow with a brown background or sometimes blue/green. This species has a distinctive yellow leading edge to its wings. Females can be found egg-laying on cold mornings at the end of the flight season.

### 9 Southern Hawker

*Tarbh Nathrach a' Chinn a Deas*

**Length:** 65 – 75mm

**Range:** spreading. Southern Lochaber and from Garve to coastal Easter Ross, Strathglass, over to coastal Morayshire

**Rarity:** becoming more common

**Habitat:** most lowland standing waters

**Seen:** late June to October

This large hawkler is inquisitive and will come within a few feet of an observer. The females have apple green markings on a black background, with three bands of green at the end of their abdomen. Males have a similar green colour but the underside of their abdomen is powder blue as are the three stripes at the end of their abdomen. Common Hawklers have paired spots at the end of their abdomen and these are the best features to separate these two species.



10M



11M



12M



10F



11F



12F

**Golden-ringed.** These are represented by only one species in the UK. They behave exactly the same as Hawkers.

**10 Golden-ringed Dragonfly**  
*Tarbh Nathrach*  
*Òrfhàinneach*

**Length:** 74 – 85mm

**Range:** widespread.

**Rarity:** common in upland areas

**Habitat:** upland burns, moorland and woodland rides

**Seen:** June to mid September

One of Britain's largest dragonflies and readily approachable. The bright yellow bands on a black background and bright green eyes make identification simple. Males have a very pinched waist and females have a pointed end to their abdomen for egg laying.

**Emeralds.** They are similar to Hawkers but smaller.

**11 Downy Emerald**  
*Smàrag*  
*Umha-dhathte*

**Length:** 46 – 54mm

**Range:** only found in Strathglass and Glen Affric

**Rarity:** rare

**Habitat:** large ponds and lochans with tree cover along part of the bank

**Seen:** late May to July

A medium-sized dragonfly that appears dark unless seen well in bright sunlight. The male has an abdomen that bulges noticeably at segments 7 and 8. Both sexes have bright green eyes and a small amount of yellow-brown suffusing the very base of the wings.

**12 Brilliant Emerald**  
*Smàrag Ghleansach*

**Length:** 49 – 57mm

**Range:** only found in Strathnairn and Strathglass

**Rarity:** rare

**Habitat:** large ponds and lochans with tree cover along part of the bank

**Seen:** late May to August  
The most green of the Emerald Dragonflies. Both sexes have a slight yellow tinge to their wings. Aside from the colour, the male has a waisted abdomen but without the obvious bulge of the Downy Emerald. The female is unmistakable if seen from the side; she has what looks like a thorn pointing down at 90 degrees, at the end of the underside of her abdomen. This species has brown, not dark-coloured wing spots.





### **13 Northern Emerald** *Smàrag na Mòintich*

**Length:** 45 – 51mm

**Range:** widespread but under-recorded. Not found north of Lairg

**Rarity:** uncommon

**Habitat:** sphagnum bog pools with scattered cotton grass among open woods or moors

**Seen:** early June to August

This dragonfly is often seen patrolling at about one metre above the water. It flies fast and straight at height, often feeding along the tree tops, and is difficult to approach. This is a medium sized very dark metallic green, almost black, dragonfly with distinctive shining green eyes and a characteristic box shaped thorax and a flattened abdomen. When viewed from the side it looks like a matchbox with a piece of string trailing behind it. Males have a distinctive “earwig-like” calliper-shaped clasper at the end of their abdomen.

**Chasers.** As the name suggests the males constantly patrol low over the water, at about knee height to find prey, chase off rivals and find females.

### **14 Four-spotted Chaser** *Ruagaire Ceithir-bhallach*

**Length:** 40 – 48mm

**Range:** widespread

**Rarity:** common

**Habitat:** moorland bogs, ditches and ponds

**Seen:** May to August

Males are extremely active, flying rapidly then returning to the same perch. Unusually for a male dragonfly they are not territorial, so they can be found at densities of 30+. Of moderate size and likened to a flying cigar. Both sexes have a narrow, tapering dark brown abdomen with yellow sides and a black tip. The wings are characteristically marked with brown patches at the base and a smaller spot on the middle of the leading wing edge.

**Skimmers.** Their behaviour is very similar to darters but they fly low over the ground or water in an erratic flight.

### **15 Keeled Skimmer** *Uachdarair Dìreach*

**Length:** 38 – 46mm

**Range:** Morven and a few scattered sites on the west coast

**Rarity:** rare

**Habitat:** runnels and open bog pools

**Seen:** late May to August

The males have a tapering, powder blue abdomen, the only dragonfly in the Highlands with this colour. Females have a parallel-sided, golden-brown abdomen with a black line down the centre (the keel) and black cross lines above each segment joint.



**Darters.** They dart from a perch to catch prey or chase after mates.

### **16 Common Darter** *Gathair Cumanta*

**Length:** 35 – 44mm

**Range:** widespread

**Rarity:** common

**Habitat:** ponds, lochs and very slow moving burns

**Seen:** July to mid-September

A small, restless dragonfly that regularly perches among bank side vegetation, often returning to the same spot. Males have a dark red abdomen and the females have a yellowish to light brown abdomen. Both have black markings on the side of the thorax and underside of the abdomen, and black marks on segments 8 and 9. The black legs have a distinctive yellow stripe, this is only visible when the insects are perched.

### **17 Black Darter** *Gathair Dubh*

**Length:** 29 – 34mm

**Range:** widespread

**Rarity:** common

**Habitat:** moorland pools and bogs with plenty of vegetation

**Seen:** mid-July to September.

This small dragonfly has a short, erratic flight with frequent perching among vegetation near water. Males have black abdomens with yellow markings on the side of the thorax, and paired yellow spots on lower abdomen (these can fade with age). Females and immature males are yellow, the females turning olive with age. Both sexes have completely black legs. Females and immatures have a black triangle on top of the thorax, this distinguishes them from the very similar Common Darter. The UK's smallest dragonfly.

### **18 White Faced Darter** *Gathair Bàn-aghaidheach*

**Length:** 31 – 36mm

**Range:** not found north of Wester Ross. Scattered

sites in Easter Ross, Inverness-shire and Lochaber and a few Strathspey sites.

Under-recorded

**Rarity:** uncommon

**Habitat:** bog pools supporting floating and submerged moss

**Seen:** mid-May to mid-July

A small dragonfly that flies in an agitated, skittish manner. Frequently hovering low over water and will bask on bare soil or vegetation. It is not easily approached. Males are dark almost black with two or three red spots on the abdomen and red on the thorax that fades with age. The characteristic white face is not always that obvious. Females and young males have yellow and black markings on the abdomen and thorax.

# Guide to dragonfly flight periods in the Highlands

Warm, settled weather is the major factor for early emergence and extended flight period

Common Name	Latin Name	Apr	May	Jun	Jul	Aug	Sep	Oct
Beautiful Demoiselle	<i>Calopteryx virgo</i>							
Emerald Damselfly	<i>Lestes sponsa</i>							
Large Red Damselfly	<i>Pyrrhosoma nymphula</i>							
Northern Damselfly	<i>Coenagrion hastulatum</i>							
Common Blue Damselfly	<i>Enallagma cyathigerum</i>							
Blue-tailed Damselfly	<i>Ischnura elegans</i>							
Azure Hawker	<i>Aeshna caerulea</i>							
Common Hawker	<i>Aeshna juncea</i>							
Southern Hawker	<i>Aeshna cyanea</i>							
Golden-ringed Dragonfly	<i>Cordulegaster boltonii</i>							
Downy Emerald	<i>Cordulia aenea</i>							
Brilliant Emerald	<i>Somatochlora metallica</i>							
Northern Emerald	<i>Somatochlora arctica</i>							
Four-spotted Chaser	<i>Libellula quadrimaculata</i>							
Keeled Skimmer	<i>Orthetrum coerulescens</i>							
Common Darter	<i>Sympetrum striolatum</i>							
Black Darter	<i>Sympetrum danae</i>							
White-faced Darter	<i>Leucorrhinia dubia</i>							

 key flight period       early/late flight period

## What is a dragon/damselfly?

Dragonflies are large robust insects about the width and length of a cigarette. They have eyes that meet in the middle and when at rest, they hold their broad wings out at 90 degrees to their body.

Damselflies are much finer insects about the size and width of a matchstick. They have teardrop-shaped wings that are held parallel with their body when they land. The Emerald Damselfly is different from the other damselflies as it holds its wings at 45 degrees to its body. Confusingly when talking about both dragonflies and damselflies the word Dragonfly is used!

## Dragonfly life-cycle

Dragonflies and damselflies belong to the order of insects called Odonata (meaning toothed jaw). There are over 5,500 species worldwide and about 50 are found in Britain, 18 of these breed in the Highlands. Dragonflies were one of the first flying insects and fossil dragonflies have been found that are 325 million years old.



Large Red Damselflies Mating

The majority of a dragonfly's life is spent underwater as a larva. Some species can spend five years or more as a larva. In late spring or early summer, when the larva is fully grown, it crawls out of the water and seeks a suitable spot close to the edge of the water to emerge. Once free of its larval skin its wings and body expand and dry; once this has happened the adult makes its first flight.

During mating the male and female form a wheel shape with the male holding onto the female's neck using his claspers. Egg laying takes place after mating and in most species the male will continue to hold onto the female's neck (known as being in tandem) or he will hover close to her, guarding the female to prevent other males mating with her. The female lays eggs either directly into water or in mud or in vegetation depending upon the species.

## Watching damselflies and dragonflies

- Choose warm, sunny days with little or no wind
- Check the flight period table to see what might be flying
- Ponds with vegetation and no fish are usually better places to visit
- The best equipment is your own eyes, sit quietly and wait
- Close focussing binoculars can be useful for identifying perched insects
- Dragonflies are delicate creatures so avoid handling them where possible
- They do not sting or bite
- Ponds can be dangerous, do not enter the water, your own safety comes first
- Watch out for deep water, steep slippery banks and other obstacles
- Be aware of water borne diseases and ticks
- Make sure you wear appropriate footwear and clothing
- Carry food and drink, a map and compass (and know how to use them)
- Take a notebook and pen to record any sightings
- A GPS is very useful for obtaining accurate locations

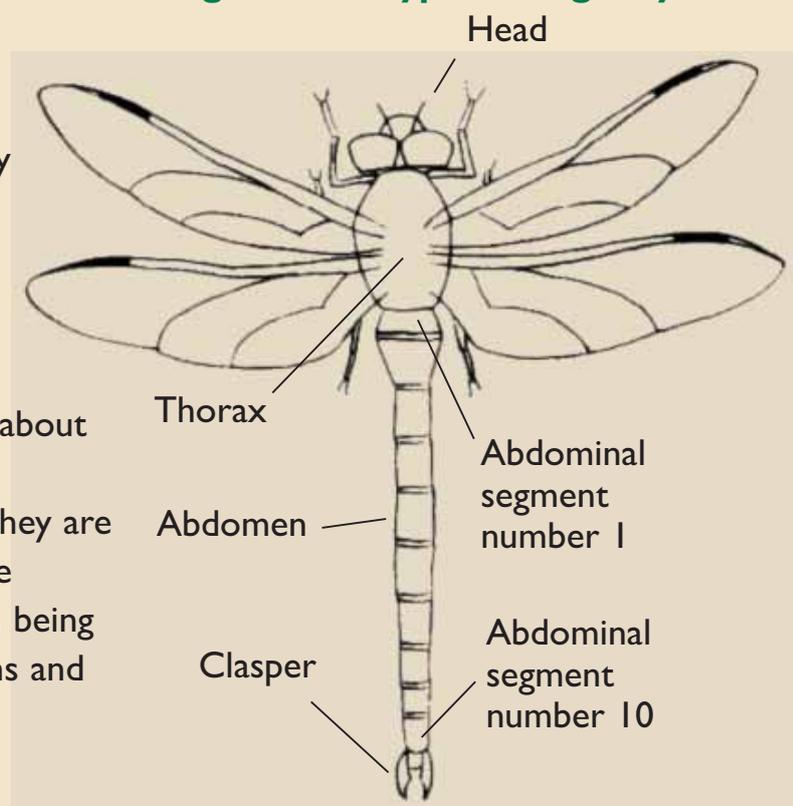
## Larvae

You can identify dragonflies by examining larvae, but this is not covered in this publication, see the British Dragonfly Society website for more information.

There are three main types of larvae:

- **Hawkers:** These are about 4cm long when fully grown and torpedo-shaped.
- **Chasers:** darters and emeralds; These are about 1-2cm long with squat, rounded bodies.
- **Damselflies:** These are around 1 cm long. They are much less chunky than the dragonflies. The Emerald Damselfly larvae is the exception being up to 3cm long, very slim with long tail fins and it swims in a sinuous, fishy manner.

## Diagram of a typical dragonfly



## Good sites to see dragonflies in the Highlands

Site Name	How to get there	Main interest	OS grid ref & other location details	More information
Dunnet Forest, Caithness	Dunnet Forest lies to the south of the village of Dunnet, adjacent to the A836 Thurso to John O'Groats road	6 species of dragon and damselflies have been recorded from the surrounding site	There is a car park and paths through the forest and two accessible ponds. ND221699	Dunnet Forest Trust <a href="http://www.dunnetforest.org">www.dunnetforest.org</a> Caithness Countryside Rangers 01847 821531
Culag Wood, Lochinver, Sutherland	Culag woodland is one kilometre south of the village of Lochinver on the unclassified road to Inverkirkaig	10 species of dragonfly and damselfly have been recorded locally. The bog in the woodland is an excellent spot for watching	Car park by the road, good paths through the woodland and access to the shore of Loch Culag. NC094213	Culag Community Woodland Trust on 01571 844368 or <a href="http://www.culagwoods.org.uk">www.culagwoods.org.uk</a> Sutherland Countryside Rangers 01571 844654
Forsinard RSPB	On the A897, 24 miles from Helmsdale. There is also a train station beside the reserve	6 species recorded. Three damselflies and three dragonflies, there must be more to be found	The Reserve Visitor Centre is in the Train Station. NC891425	RSPB Forsinard 01641 571225
Inverewe NTS	The garden is less than a one mile walk from Poolewe along the A832	12 species recorded nearby including; Azure Hawker, White-faced Darter & Northern Emerald.	The main car park is 1 mile north of Poolewe	NTS Inverewe Ranger Service 01445 781470
Torriddon NTS	The Countryside Centre is just off the A896 at the Turn off to Torriddon village	12 species recorded including; Azure Hawker, White-faced Darter and Northern Emerald	There are several footpaths in the area passing through large areas of bogland. NG905557	NTS Torriddon 0844 4932229
Beinn Eighe Visitor Centre	Two miles north-west of Kinlochewe off the A832 road	13 species recorded including; Keeled Skimmer, Azure Hawker, White-faced Darter and Northern Emerald	There are numerous trails both low level and high going through extensive areas of bogland and woodland. NH019630	Beinn Eighe Visitor Centre 01445 760254. April to October
Monadh Mor, Black Isle	The car park is two miles north-west from the Tore roundabout on the A835	One of the best places to see White-faced Darter in the UK. 9 species recorded with the suspicion of another two being present	A variety of paths and several large ponds on the site. NH579525	Forestry Commission Scotland - Inverness Recreation Ranger 01463 791575
Culbin Forest	Leave the A96 Inverness – Aberdeen road at Brodie, following the signs to Culbin	9 species recorded. Good for Southern Hawker	Wellhill car park. NH997615	Forestry Commission Scotland - Moray 01343 820223
Loch Bran	One mile south of Foyers, on the south east side of Loch Ness, on the B853 take the left hand turn on a sharp bend. 400 metres along this road is the car park	10 species recorded including the Brilliant Emerald Dragonfly	Car park and boggy track to the loch side. NH507192	Inverness, Ross and Skye Forest District 01463 791575
Coire Loch and Glen Affric	Glen Affric is 5 miles west of Cannich on the Glen Affric road, off the A831. There are three car parks in the Glen.	14 species recorded, Southern Hawker has been recorded close by so it could be 15 soon. All three Emerald dragonflies found at Coire Loch	Park at the first car park you come to, Dog Falls. Signed trails to Coire Loch. NH289284	Inverness, Ross and Skye Forest District 01463 791575
Anagach Woods, Grantown-on-Spey	Follow signs from the Square in Grantown to woodland walks and Speyside Way	12 species recorded including Northern Damselfly, Northern Emerald & White-faced Darter	From the car park by golf course take the Green route to an area of bog woodland. NJ038272	Highland Ranger Service 01479 873914
Abernethy NNR, Boat of Garten	From A95 off the B970 near Boat of Garten, follow signs to the RSPB Osprey Centre	13 species recorded on the RSPB Reserve including Northern Damselfly, Azure Hawker & White-faced Darter	Various ponds by trails in woods, use car park at B970 Boat of Garten junction, or near Loch Garten. NH966192	RSPB Abernethy 01479 831476
Rothiemurchus, Aviemore	From Aviemore take the B970 to Inverdrue	12 species including Northern Damselfly, Northern Emerald & White-faced Darter	Inverdrue car park or Loch an Eilein car park is a 1km walk from Lochan Mor. NH898095	Rothiemurchus Ranger Service 01479 812329
Balmacara Estate. NTS	Balmacara Garden is 2.5 miles east of Kyle, just off the A87(T), as is the Square	11 species recorded here including Northern Emerald, Golden-ringed Dragonfly and White-faced Darter.	Balmacara Square Car Park. NG 80652831	Balmacara Ranger Service 01599 511231
Glencoe Lochan, Lochaber	Turn off the A82(T) at Glencoe village. Pass through the village and over the River Coe bridge. The entrance to the woodland and car park is signposted on your left a short distance later	7 species have been recorded from this site, including the Southern Hawker	From here trails lead to the lochan and there are two ponds by the car park. NN104593	Iain MacEachern, Recreation Forester Lochaber Forest District 01397 702184 <a href="mailto:iain.macechern@forestry.gsi.gov.uk">iain.macechern@forestry.gsi.gov.uk</a>

## Get involved and help dragonflies

You can contribute to the National Dragonfly Atlas Project which, seeks to update the known distribution of British dragonfly and damselfly species. Recording is essential to help map these amazing insects and to help identify important areas for them. Volunteers are needed to record in one or more 10km squares – there are many squares in the Highlands that have no or few records. You can help fill in these gaps.

Contact Jonathan Willet, Biodiversity Officer, Highland Council, Glenurquhart Road, Inverness, IV3 5NX, Email: [jonathan.willet@highland.gov.uk](mailto:jonathan.willet@highland.gov.uk) , Tel: 01463 702274 for more information about under-recorded areas in Highland.

Any record of a damselfly or dragonfly is useful and you should record what species you saw, how many, when and where you saw it and if possible a grid reference from an Ordnance Survey map. Records of egg laying and mating are particularly important. Send all records to either Jonathan Willet or to the Scottish Dragonfly Recorder, Pat Batty. E-mail: [pat@patbatty0.wanadoo.co.uk](mailto:pat@patbatty0.wanadoo.co.uk)

For more information about dragonflies and information on local or national events, check out the British Dragonfly Society's website: [www.dragonflysoc.org.uk](http://www.dragonflysoc.org.uk).

To see the distribution of dragonflies and damselflies in Highland look at the National Biodiversity Network Gateway [www.searchnbn.net](http://www.searchnbn.net)

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