

Damselflies & Dragonflies of the Cairngorms



Male and female
Northern damselfly in tandem

An identification guide

Dragonflies are amazing insects that combine stunning colours with awesome aerial displays. This guide will help you identify the 13 species of dragonfly and damselfly found in and around the Cairngorms National Park. You can get involved and record all these species and help put together a national atlas of dragonflies.

Published by The Cairngorms LBAP



**CAIRNGORMS
BIODIVERSITY**



1M



2M



3M



1F



2F



3F

Damselflies Delicate insects, weak fluttery flight. Eyes on each side of oblong head, wings usually held closed at rest.

1. Emerald Damselfly

Total body length (Tot):

35 – 39mm

Range: Cairngorms-wide

Rarity: common

Habitat: well vegetated standing water, ditches and loch edges

Seen: 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.

2. Large Red Damselfly

Tot: 33 – 36mm

Range: Cairngorms-wide

Rarity: common

Habitat: still or slow moving water

Seen: May to August

A distinctive red and black damselfly that is often the first to be seen in late spring. Females are darker with black and yellow bands on the abdomen. Males defend their territories vigorously.

3. Northern Damselfly

Tot: 31 – 33mm

Range: limited to only 30 sites in the Cairngorms

Rarity: rare

Habitat: shallow pond or lochan edges sheltered by sedges

Seen: late May to early August

The black and blue males fly slowly and weakly among widely spaced aquatic

vegetation usually below the tops of plants, and avoid large areas of open water. The underside of the eyes and face are bright green. Males have two 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.

4. Common Blue Damselfly

Tot: 29 – 36mm

Range: Cairngorms-wide

Rarity: common

Habitat: most wetlands including slow moving water

Seen: June to mid September
Males are bright blue, flying fast and low over the water, often in large numbers and can be distinguished by the club shaped black mark on abdomen segment 2 and the blue upper segments 8 and



4M



5M



6



4F



5F



7

9. Both males and females have a single black stripe on the side of thorax. Females have more black, are much more drab than males and come in yellow, pale green or brown forms. All females have a spine below segment 8.

5. Blue-tailed Damselfly

Tot: 30 – 34mm

Range: Cairngorms-wide

Rarity: uncommon

Habitat: most wetlands

Seen: May to early Sept

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

Dragonflies Powerful flyers, more robust than damselflies. Eyes nearly cover whole head, wings held open at rest.

6. Golden-ringed Dragonfly

Tot: 74 – 85mm

Range: Cairngorms-wide

Rarity: common

Habitat: patrolling burns but also flying over moorland or woodland rides

Seen: June to mid September

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

7. Four-spotted Chaser

Tot: 40 – 48mm

Range: Cairngorms-wide

Rarity: common

Habitat: moorland bogs, ditches and ponds

Seen: May to August

Territorial males are extremely active and aggressive, flying rapidly then returning repeatedly to the same perch. 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.



8M



9M



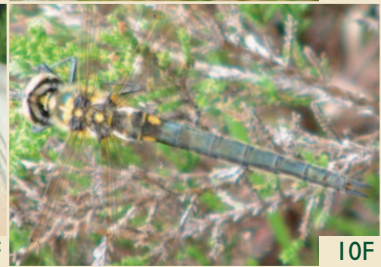
10M



8F



9F



10F

8. Azure Hawker

Tot: 54 – 64mm

Range: a few Strathspey sites

Rarity: rare

Habitat: boggy moorland, open birch woodland and bog pools

Seen: late May to July

It is a sun loving dragonfly with few recent sightings. The very blue males are seen actively flying low and fast over the edges of ponds. Males have paired blue spots and no yellow unlike the Common Hawker. Females have 2 colour variations, either yellow/beige or blue but no coloured stripes on top of the thorax.

9. Common Hawker

Tot: 65 – 80mm

Range: Cairngorms-wide

Rarity: common

Habitat: most still waters but also in woodland rides; often active in the evening

Seen: July to September

This large dragonfly is a fast and powerful flier, being difficult to approach. 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 edge to its wings.

10. Northern Emerald

Tot: 45 – 51mm

Range: a few Strathspey sites

Rarity: rare

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

Seen: early June to August

It flies fast and straight at height, is difficult to approach. It is often seen patrolling at about one metre above the water. This is a medium sized very dark metallic green, almost black, dragonfly with distinctive shining green eyes and a characteristic box shaped thorax. Has more yellow on the thorax than other emerald dragonflies and males have a distinctive rear-end clasper.



I1M



I2M



I3M



I1F



I2F



I3F

I1. Common Darter

Tot: 35 – 44mm

Range: Cairngorms-wide

Rarity: uncommon

Habitat: ponds, lochs and 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 orange to 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.

I2. Black Darter

Tot: 29 – 34mm

Range: Cairngorms-wide

Rarity: common

Habitat: moorland pools and bogs with plenty of vegetation

Seen: mid July to September

This small dragonfly has a short, erratic flight, perching frequently among vegetation near water. Males have black abdomens with yellow markings on the side of the thorax, and paired red or yellow spots on lower abdomen which can fade with age. Females and immature males are yellow, females turning olive with age. Both have completely black legs while females have a black triangle on top of the thorax.

I3. White-faced Darter

Tot: 31 – 36mm

Range: a few Strathspey sites and Muir of Dinnet in Deeside

Rarity: rare

Habitat: bog pools supporting floating and submerged moss

Seen: mid May to mid July
A small dragonfly that flies in an agitated, skittish manner.

It frequently hovers low over water and will bask on bare soil or vegetation. It is not easily approached. Males are dark almost black with single red spots on the abdomen and red on the thorax that fade with age. The characteristic white face is very distinctive. Females and young males have yellow and black markings on the abdomen and thorax.

Images of common hawker and golden ringed at approximately 0.75 times life size, others at approximately life size.

Guide to dragonfly flight periods in the Cairngorms

Weather is the major factor for early emergence and extended flight period

Common Name	Latin Name	Apr	May	Jun	Jul	Aug	Sep	Oct
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>		■	■	■	■	■	
Golden-ringed Dragonfly	<i>Cordulegaster boltonii</i>		■	■	■	■	■	
Four-spotted Chaser	<i>Libellula quadrimaculata</i>		■	■	■	■	■	
Azure Hawker	<i>Aeshna caerulea</i>		■	■	■	■	■	
Common Hawker	<i>Aeshna juncea</i>			■	■	■	■	■
Northern Emerald	<i>Somatochlora arctica</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

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 42 species breed in Britain. Dragonflies were one of the first flying insects with fossil records dating back 350 million years.

The majority of a dragonfly's life is spent in water during the larval stage, spending up to five years as larvae. Adult dragonflies emerge from water, leaving behind the spent larval shell or exuviae, and live only for a short period of 3-4 weeks. You can identify dragonflies by examining larvae but this is not covered in this publication.

Males and females mate in tandem forming a wheel position with the male clasping the female. Egg laying takes place after mating and in many cases the male will continue to hold onto or guard the female to prevent other males interfering. The female lays eggs directly into water or mud or vegetation depending upon the species.

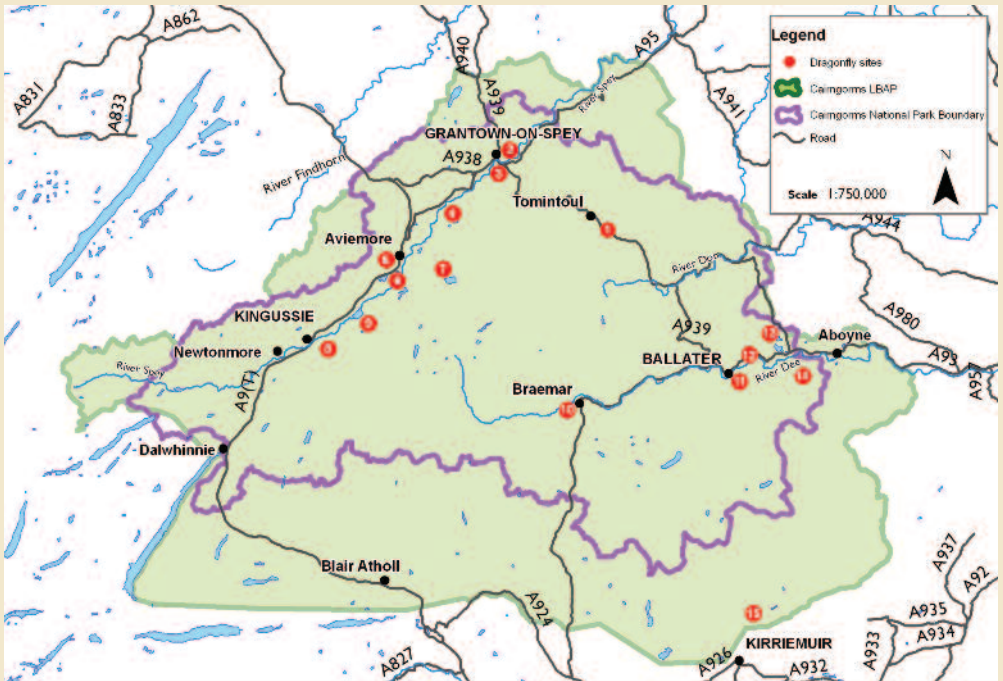
Threats

The main threats are habitat loss: drainage of wetlands, pollution, afforestation or conversion to agriculture, water abstraction and river engineering. Ponds filling in naturally and cold, wet summers are also factors. Climate change could potentially threaten the northern species, especially if drier summers lead to the drying out of bog pools. New species may also colonise such as the Azure Damselfly that is found in Perthshire.

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
- Binoculars and an insect net can be useful aids
- Dragonflies are delicate creatures so handle them as little as possible
- Ponds can be dangerous - do not enter the water, your own safety comes first
- Be aware of water borne diseases and ticks
- Be suitably equipped, wear appropriate footwear and clothing
- Take a notebook and pen to record any sightings of dragonflies
- A GPS is very useful for obtaining accurate locations
- Care for your environment and take your litter home
- Think climate change - where possible use public transport, walk or cycle
- Remember dragonflies do not sting or bite

Good sites to see dragonflies in the Cairngorms



Damselflies and dragonflies site information

Site Name	How to get there	Main interest	OS grid reference and other location details	More information
1 Glenmulliach Forest, Tomintoul	A939 from Grantown-on-Spey or Ballater	Large red, emerald & common blue damselflies; black darter	Glenmulliach car park and picnic site, ponds adjacent to car park. NJ193167	Glenlivet Ranger, 01479 870070
2 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 Council Ranger 01479 873914
3 Revack Highland Estate, Grantown-on-Spey	B970 off the A95 near Grantown-on-Spey, enter signposted gardens	All 5 damselflies including northern damselfly and 5 dragonfly species	From the café walk down the exit road and there are 2 ponds on the left. NJ033260	Highland Council Ranger 01479 873914
4 Abernethy NNR, Boat of Garten	From A95 off the B970 near Boat of Garten, follow signs to the RSPB Osprey Centre	All 13 species recorded on the RSPB Reserve including northern damselfly, azure hawkler & 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 821409
5 Craigellachie NNR, Aviemore	B9152 off the A9 to Aviemore, follow signs to Youth Hostel	12 species including northern damselfly & white faced darter	Follow the signs from Youth Hostel under A9 to the lochans. NH889122	Reserves Manager, SNH 01479 810477
6 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
7 Glenmore Forest Park	From Aviemore take the B970 towards Cairngorm Mountain	10 species including white faced darter	Park at one of the sites beside Loch Morlich and walk around the loch. NH959096	Forestry Commission 01479 861220
8 Insh Marshes NNR, Kingussie	From A9, take exit to Kingussie. Follow B970 south from village beyond Ruthven Barracks	3 species of damselfly and 6 species of dragonfly	Park by the hides off the B970 east of the barracks and follow the Invertromie trail. NN775998	RSPB Reserve Office 01540 661518
9 Uath Lochans, Inshriach	Take B970 from Kinraig or Kingussie, and turn on to the minor road near Insh House	10 species including northern emerald	Car parking at Uath Lochans, walk around the board walks. NH835023	Forestry Commission 01479 861711
10 Morrone Birkwood, Braemar	From the A93 at Braemar, take the Lin of Dee road then left at the Taste Cafe	3 damselfly and 5 dragonfly species	At the car park at the top of Chapel Brae, follow path to the reservoir. NO139908	SNH 01224 642863
11 Curling Pond, Ballater	From A93 at Ballater, cross bridge over River Dee to B976	5 damselfly and 3 dragonfly species including northern damselfly	Opposite bridge where waymarked route starts, take the right-hand track (not marked) through the woods. NO373952	Aberdeenshire Council South Marr Ranger 013398 85751
12 Cambus O'May	Sign on the north side of the A93 between Ballater and Dinnet	3 damselfly and 2 dragonfly species	From the Forestry Commission car park take the West Lochan trail. NO403981	Forestry Commission Ranger 01466 794161
13 Muir of Dinnet NNR	From the A93 at Dinnet take the A97 north toward Ordie; or turn off the A93 to the B9119	5 damselfly and 5 dragonfly species including northern damselfly & white faced darter	Pools in Ordie & Black Moss next to the A97 (NJ454012) or the loch at Lochhead north of the Visitor Centre (NJ434010)	Reserve Manager, SNH, 01224 642863
14 Fairy Loch, Glen Tanar	Southwest of Aboyne, off the B976 road at the Bridge and Tower of Ess	4 damselfly and 4 dragonfly species including northern damselfly	Park opposite the Braeloine Centre, cross the river and follow the Fairy Loch trail. NO483961	Glen Tanar Ranger Service 013398 86072
15 Glen Prosen	Take the B955 from Kirriemuir then the minor road to Glen Prosen	4 damselfly and 2 dragonfly species	The pond is next to the road 1km west from the Dykehead Hotel. NO375607	Angus Glens Ranger Service 01575 550233

Get involved and help dragonflies

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

Contact Stephen Corcoran, Cairngorms Biodiversity Officer, to sign up to a 10km square in the Cairngorms area, 14 The Square, Grantown-on-Spey, PH26 3HG, stephencorcoran@cairngorms.co.uk, 01479 870 528.

Any record of a damselfly or dragonfly is useful so please record which species you saw, how many, and when and where you saw it. Records of egg laying and mating are particularly important and if possible a grid reference from an Ordnance Survey map. Send all records to Stephen Corcoran; or the Scottish Dragonfly Recorder, Pat Batty, Tel: 01546 605 316, E-mail: pat@patbatty0.wanadoo.co.uk; or the Local Biological Records Centre, www.nesbrec.org.uk.

For more information about dragonflies and information on local or national events, go to the British Dragonfly Society's website: www.dragonflysoc.org.uk.

If you would like this leaflet in an alternative format please contact the Cairngorms National Park Authority on 01479 873 535.

This leaflet was funded by the Cairngorms National Park Authority. Thanks to members of the British Dragonfly Society for their help in putting together this leaflet.

Photographs copyright of Nick Littlewood, Jonathan Willet, Audrey & Bob Turner, David Kitching, Scottish Natural Heritage, Tim Caroen, Matthew Webster, Jonathan P Tyler, and Alan Nelson.
Artwork by Justin Prigmore.

