

### Scotland ~ by Pat Batty

In 2021 Scotland experienced a colder winter than the previous year, as well as a cool spring. The summer weather was exceptionally dry and sunny, especially in the west. As a result of the good weather more people spent time outdoors and there was an increased number of sightings. However, many bogs became very dry with pools not refilling until mid-September; this could have a negative impact on White-faced Darter, Northern Emerald and Azure Hawker. BDS staff and volunteers visited numerous sites in 2021 and noted a number of breeding pools were in poor condition, even lochans were infilling. They continue to work with land owners and managers, such as Forestry and Land Scotland, to encourage the maintenance of dragonfly wetlands. For example, bog restoration work at the Moss of Achnacree near Oban has resulted in new potential breeding pools, which will be surveyed in future years.

Large Red Damselfly was first reported on 29 March near Aberdeen; apart from this anomalous early record, the species was on the wing from 22 April. Another fairly widespread species, the Common Blue Damselfly, was first seen on 16 May. Four-spotted Chaser was recorded from 13 May, a similar start date to 2019, and Golden-ringed Dragonflies were sighted from 16 May. Both these species are also widespread, more so in the north and west.

The **Hairy Dragonfly** appeared much later than in 2020 and was first seen on 30 May in Dumfries and Galloway. There were fewer records (only 26) in 2021 but new breeding sites were discovered in Dumfries and Galloway. This species is only known to inhabit wetlands in south-west Scotland and Argyll.

The **Keeled Skimmer** is increasing its distribution in Scotland, especially in the west (from southwest Scotland to Argyll and Morvern) and was first seen in 2021 on 6 June. Excitingly, two new breeding sites were discovered as far north as Assynt, Sutherland. It was also seen further inland along the Great Glen; there is an established breeding site in the hills near Spean Bridge. Unusually, an adult was seen near Bridge of Orchy, Argyll - possibly a prospecting male.

**Beautiful Demoiselle** were in flight from 2 June, and were mainly recorded in the west of Argyll, Morvern and Mull, with records from new sites in these areas, as well as on Islay and the smaller islands off Oban.

The **Banded Demoiselle** had fewer records in 2021 and the species was first seen on 17 June. This species is increasing its occupancy in southern Scotland. As in 2020, a single male was seen in Fife, at Morton Lochs. New sites were discovered in Berwickshire and larvae were found near Gretna, Dumfries and Galloway.

The **Brilliant Emerald** also had a better summer in 2021 with 43 sightings from Argyll and Inverness-shire, with some records at new lochans. Larvae and exuviae were found from the 4 June in Argyll, suggesting an early emergence. Egg laying was also seen at a hill loch in Argyll on 21 July; the female inserted her eggs into moss on steep banks above the lochan.

**Downy Emerald** was seen from 13 May at lochs near Oban and a new site was found in the same area. There were 21 records in total in 2021; most sightings were from the Affric, Cannich and Loch Bran areas. Interestingly, males of both **Downy** and **Brilliant Emerald** were seen at the Dubh Loch and Loch Bran on 16 and 20 July, likely as a result of extended good weather.

The White-faced Darter had 65 records, from 25 people on 37 recording days in 2021. These were from the north-west, where several new pools were found, the Glen Carron and Torridon area, Affric, Abernethy and Mid Argyll. Larvae were found at the Corrour Estate in the Highlands, the most easterly site for the species on Rannoch Moor. Adults were seen from 16 May, a fortnight earlier than in 2020.

The Northern Emerald had 37 records, from 19 people on 24 recording days in 2021. This is more than usual and records came from both new and known sites. The species was first recorded on 2 June and sightings came from the north-west at Torridon and Loch Carron areas, further south near Fort William and Loch Arkaig, and east to Glen Affric and Strathspey areas. They were also recorded from Loch Bran and from Sutherland, as far north as the Spinningdale and Drumlaih bogs. Several sightings came from the restored bog pools at Flanders Moss, near Stirling, the southernmost site for the species. It was not seen in Mid Argyll this year, a result of many of the sphagnum filled runnels drying out.

Azure Hawker had an exceptional year with good flight conditions resulting in a high number of adult sightings: 85 records from 32 people on 52 recording days. Sightings were mainly from known areas in the north and west; however, there was a slight range extension with new site records from Sutherland, most notably at 16 different locations from the hills north of Lairg.

Azure Hawker is a BDS Priority Species due to its 'Vulnerable' Red List status and the BDS works with land managers to survey potential breeding pools; for example, transect surveys are now carried out at Beinn Eighe by a NatureScot warden. Unlike the adult records, larval records were down in 2021 because many pools were dry. Only three larvae were found in pools at Corrour, the same pools that produced a count of 193 in 2019. These were the only larval records for 2021 despite 20 days searching in known breeding sites in the west and Assynt areas. Pools that dried out in summer had no larvae after rain refilled them in autumn. Searches for Azure Hawker were also carried out in the south-west but they again failed to produce any records; thus, it is extremely likely the species no longer breeds here.

Northern Damselfly had 85 records from 32 people on 52 recording days in 2021, a record total. The monad recording project was successful and found new small breeding pools near three known sites including RSPB Insh Marshes and the Invercauld Estate. Many of the records were from known pools but 15 new pools were discovered, mainly in Strathspey. Most of these were close to other known sites and produced low counts (1-2 adults or larvae). Three, interestingly, were SuDS (Sustainable drainage system) ponds. However, a new site was discovered near Coylumbridge that had larvae and a strong population of adults. Another good pool was found on Tulloch Moor; the other three previously known pools in this area are now infilled. An invertebrate survey in the Cairngorms also revealed Northern Damselfly at Loch Builg a very remote upland site. On Deeside two new sites were found, one on Balmoral Estate and the other south of Banchory; in addition a breeding site near Inverurie was confirmed. The first site north of the Great Glen was discovered by Bob Swann near Tain, over 30km north of the nearest known site.

#### The Northern Damselfly Survey Project looked at 22 sites in 2021 with the following results:

#### Site conditions:

- 11 good/very good condition
- 8 moderate/poor
- 3 infilled naturally
- Larvae were found at 17 out of 22 sites.

#### Deeside: 12 sites were surveyed.

- 5 good/very good condition.
- 6 moderate/poor condition
- 1 lost
- Larvae found at 11 sites.
- Urgent management work is needed at 4 sites and a further 2 in the future.

#### Perthshire: 10 sites were surveyed.

- 6 good/very good
- 2 moderate/poor
- 2 lost (conifers were planted near one site)
- Larvae were found at 6 sites including 2 newly created pools, showing colonisation is possible.
- Management work is needed for at least 4 sites and discussions continue with Forestry and Land Scotland.

Strathspey: see report by Stephen Corcoran in Dragonfly News Autumn 2021.

Castle Fraser: Annual surveys continue here, conducted by Toni Watt. Northern Damselfly larvae were found at both ponds in 2021 with a small rise in numbers from 2019. However, the count was still much lower than those recorded in previous years; 128 were counted in 2014 but only 18 in 2021. The colder winter may have helped this year by delaying the development and emergence of the Northern Damselflies competitors.

We are pleased to report a grant was obtained to carry our management work to enhance Northern Damselfly habitat in the Cairngorms National Park.

The **Azure Damselfly** was recorded in flight from 1 May to 16 August with 248 records ranging from southern Scotland, Perthshire and Angus to Aberdeenshire. It is now well established at some of the lower Northern Damselfly sites in Deeside and Perthshire.

Some new sites were discovered for **Variable Damselfly** in south-west Scotland, however there were only 16 sightings in total in 2021.

The **Emerald Damselfly** is not declining in Scotland as it is in England; there were 35 records from as early as 7 June (recorded in the north-west) and into October (recorded in Peterhead). It was recorded from southern Scotland to Caithness and Sutherland as well as on the Western Isles and Orkney.

The Black Darter is fairly widespread and 2021 produced 361 records from 18 June to October. The Common Darter was reported even more widely, apart from Orkney and Caithness, with 614 sightings from 6 June to 11 November.

Each year the **Southern Hawker** expands its range; there were 127 sightings in 2021. Records have now been received from over 200 hectads compared with only 22 pre-2000. Emergence was early again starting from 12 June and the species was on the wing through to 6 October. It is now more widespread in Scotland, particularly in the south, and with records from Inverness-shire, north to Brora and Golspie in Sutherland. There are fewer records in the north-west but the species was seen for the first time near Sheildaig in Wester Ross.

Emergence of the **Common Hawker** was very early with the first adult sighting confirmed on 4 June, then again on 12 June. Sightings continued to 12 October throughout Scotland, with breeding records from a variety of sites, from upland pools to garden ponds. There appears to be no decline in Scotland, as experienced in England, with 530 sightings in 2021.

After a cold winter there were less sightings of some southern species.

Emperor Dragonflies were less common in 2021 with only 14 records, compared with 42 in 2020. It was only seen on one occasion at Newmains Farm in the Borders, on 24 June; ovipositing was witnessed here on several occasions last year and tenerals were also seen. Sightings this year came from sites such as Kirkconnell Flow, near and in Edinburgh, Mabie Forest and the Carrick Hills in Ayrshire. No breeding activity was recorded and the species was last recorded on 11 September.

Migrant Hawker is now seen annually in Scotland and there were 31 records in 2021. These came from sites in the south-west, like Colvend and Caerlaverock, as well as in the Borders and near to Edinburgh. In addition, a pair was seen in copulation at Clonyard Loch. There was one sighting in Ayrshire and an early record from the Loch Tummel area on 13 July. Records were most abundant in August and September but continued to 8 October.

**Broad-bodied Chaser** emergence was witnessed at Gelston, in the south-west, on 30 April. There were only two other possible sightings in 2021: one at Gordon Community Garden, south of Edinburgh, and the other at Flanders Moss, near Stirling.

There was one record for **Red-veined Darter** in 2021 from Newmains Farm, in the Borders, on 7 June, and near Edinburgh on 9 July.

There were no sightings of Black-tailed Skimmer in 2021.

The **Vagrant Emperor** was seen at Scatsta, in the Shetlands, on 1 October and at Kirkwall, on Orkney, on 17 October.

A **Brown Hawker** was seen again at Strathclyde Country Park, near Hamilton, from 23 August to 8 September and a pair in copulation were recorded.

In Scotland we continue to work with Forestry and Land Scotland, the RSPB, the Scottish Wildlife Trust and the National Trust for Scotland. Thanks again to the Butterfly Conservation Society for passing on their dragonfly records. A huge thanks to the large number of recorders who contributed this year; over 6600 records were submitted from 578 individuals and on approximately 2000 recording days. Congratulations to Peter Stronach who achieved his goal of seeing all the Scottish species in one year, and Bob Swann for his new sightings in the far north.

# Orkney VC111 ~ by Graeme Walker

The cool weather of spring 2021 delayed emergence of Large Red Damselflies by about two weeks, so the flight season was only officially underway when one was reported in Harray on 29 May. During the summer Large Red Damselflies were seen across Hoy, as well as throughout West Mainland, and also on Rousay.

Nearly stealing the 'first emergence crown' from the Large Red Damselflies were Four-spotted Chasers - seen in Hoy on 1 June. Four-spotted Chasers haven't been recorded in Orkney for a few years, so it was pleasing to hear that they were still maintaining small breeding populations in a few remote moorland pools.

Blue-tailed Damselflies were at least a week late in 2021, but the first were spotted on 16 June in Hoy. They are our most widespread species, and were also found in Graemsay, Sanday, Westray, South Ronaldsay and Flotta, as well as East and West Mainland.

The flight seasons for both Common Blue Damselflies and Emerald Damselflies were underway by 3 July, when both species were seen in Hoy. During the summer, the Common Blue Damselflies were also seen in Flotta and Graemsay. Emerald Damselflies were only recorded from Hoy and Flotta this year, so we continue to wait for evidence of a West Mainland incursion via Stromness.

The first sighting of a **Golden-ringed Dragonfly** was in Wyre on 13 July. Other than Hoy, this was the only island to produce a record of these large and charismatic insects. The Hoy sighting was personally joyful, my first Orkney **Golden-ringed Dragonfly** for 15 years, but it was immediately usurped by a flyby from a White-tailed Eagle!

Common Hawker and Black Darters finally put in an appearance on 17 July when they were spotted in Hoy, appropriately enough, while the recorder was carrying out a recce for a dragonfly walk. Common Hawkers were then seen throughout Hoy and in several parishes of West Mainland, particularly Birsay and Evie. Black Darters were much more widespread, with sightings from Hoy, Rousay, South Ronaldsay, West Mainland and a much anticipated first record for Stronsay on 24 July.

The dragonfly walk for National Dragonfly Week was attended by eight folk. The traditional pilgrimage to Wee Fea in Hoy did not disappoint, despite the overcast and cool conditions. In fact, the weather probably played into our hands, as the low temperatures allowed good views of roosting Odonates: a superb mature male **Common Hawker** was star of the show.

And if that wasn't exciting enough, 2021 had one more trick up its sleeve, with a record from Kirkwall of a female **Vagrant Emperor** on 17 October. This was found by a pet cat called Nyx.

My sincere thanks to the staff of BDS Scotland for their assistance with an objection to a wind farm application centred on Wee Fea in Hoy. Whilst we were heartened that the Scottish Government's own Reporter recommended refusal of the application, this was over-ruled by the powers-that-be, but hopefully the mitigation we have campaigned for will materialise when the project goes ahead.



# County Dragonfly Record Contact Details Local Group Details

Can be found on the BDS website under the 'About' drop down menu.

## www.british-dragonflies.org.uk

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