

Eight-Eyed Summer Shiner!

The Bog Sun-Jumper

Consultant ecologist Chris Cathrine, founder and director of Caledonian Conservation Ltd, an organisation which provides expert ecology and ornithology services for development and conservation projects in the UK, encourages us to look closer at a very special local spider and appreciate its beauty.

The bog sun-jumper spider (*Heliophanus dampfi*) is a beautiful animal. Found at only 11 sites in the UK (seven in Scotland), this spider is very rare, and lives only on bogs. Six of the known sites for this species are local to Doune and Deanston, with Flanders Moss one of, if not the best, place to see the bog sun-jumper in the UK.

As its name suggests, the bog sun-jumper is a jumping spider (Salticidae), and actively hunts its prey (other invertebrates) on the bog. Although most spiders have poor eyesight, two of a jumping spider's eight eyes are particularly large and are able to see clear binocular images just like humans: these cute wee spiders really are watching you! The other six eyes are arranged around their 'cephalothorax' (head and body), giving a degree of vision for almost 360°.

Bog sun-jumpers don't make webs but do leave a drag line of silk which can be a useful safety feature if they fall or misjudge a jump. Bog sun-jumpers are rather small, measuring just 3 mm in length (about 1/8"); however, they are very pretty, with neon yellow-green legs, some white trim, and a dark body which shines with all the colours of the rainbow in sunlight. On a sunny summer's day, you can see them hopping about on the wet moss, hunting; the best time to spot bog sun-jumpers is between June and August. In cooler conditions, bog sun-jumpers shelter in grass and sedge tussocks; they may even overwinter in these, as I have found their close relative, the common sun-jumper (*Heliophanus flavipes*) to do.

We're really lucky to have on our doorstep NatureScot's Flanders Moss National Nature Reserve, the largest remaining lowland raised bog in Europe; peatland habitats such as this store more carbon than forests and are super important in our efforts to tackle climate change. These habitats also support very special wildlife, which is often rare due to being restricted to peatlands, the extent of which has been significantly reduced by human activities such as drainage for farming, commercial afforestation and harvesting for fuel or compost.

In Scotland, 98% of all known terrestrial and freshwater animal species are invertebrates. It should come as no surprise that peatlands support a plethora of awesome wee beasties, and Flanders Moss is a Site of Special Scientific Interest (SSSI) designated for, amongst other things, its invertebrates. It's important to be aware that, in order to protect its special nature for future generations to enjoy and benefit from, visitors are not allowed to collect animals or plants from Flanders Moss SSSI without permission from NatureScot.

Spiders are very interesting animals. There are more than 440 species of spider known from Scotland; almost all are completely harmless to people (their fangs are too small to penetrate human skin), and none are dangerous - unless you have an allergy. If you'd like to learn more, check out the British Arachnological Society <https://www.britishspiders.org.uk/>. Spiders are also under-recorded in Scotland: although many species are difficult to identify, requiring microscope examination, you can submit records of easily recognised spiders at the Scottish Spider Search http://www.wildlifeinformation.co.uk/scottish_spider_search.php and Spider Recording Scheme <http://srs.britishspiders.org.uk/portal.php/p/Species+surveys/>. If you would like to learn more about local wildlife check out the Stirling & Clackmannanshire Scottish Wildlife Trust Group <https://www.swtstirling.org.uk/>. In addition, there is a lot of information available about the bog sun-jumper as well as other spiders and invertebrates at the Caledonian Conservation Ltd web page <https://www.caledonianconservation.co.uk/>.



*In a bog near you: the very rare Heliophanus dampfi.
Photograph by Chris Cathrine.*

*Chris Cathrine
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Watch Chris Cathrine show Chris Packham the bog sun-jumper spider at Flanders Moss at <https://youtu.be/mEf3lUXh8IE>.

For an introduction to Scotland's spiders and how to identify them, watch the talk given by Chris Cathrine for Buglife at https://youtu.be/Odmc_5D0hTo