NEURO NEWS

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The Newsletter of the British Isles Lacewing and Allies Recording Scheme

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ISSUE 3 (3RD SERIES)

Dear Subscribers,

Welcome to the 2023 issue of Neuro News, inside we have information on the website, workshops and webinars, some new articles, a call for specimens for an interesting research project, and a piece about the Snow Flea.

The organizers of the Lacewing and Allies Recording Scheme would like to wish you all a very merry Christmas and all the best for 2024.

Euroleon nostras

INSIDE

If you have any content for the newsletter, this can be anything from articles, observations, or just a nice photograph, please send via email to the newsletter editor James E. Jepson at **LacewingRS@gmail.com**.

Archive editions of NeuroNews are being added to the recording schemes website:

https://www.laars.jamesjepson.com/neuro-news/

Are you on the mailing list for the newsletter? If not and you would like to be, please drop the editor an email, at **LacewingRS@gmail.com**, and you will be added to the list. Also, if you want to be removed from the mailing list, again please email the editor.

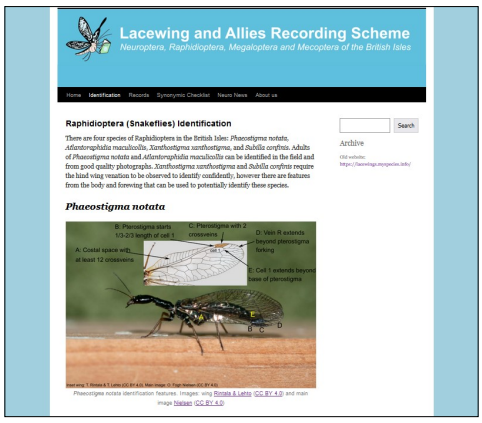
CALL FOR CONTENT:

If you have any content for the next or upcoming newsletters please email us at LacewingRS@gmail.com. This can be anything Lacewing and Allies related - for example, articles on Lacewing and Allies species/interactions/habitats/ etc, interesting sightings, relevant book reviews, or photographs of species seen.

James E. Jepson

Website change

The recording scheme website has changed from https://lacewings.myspecies.info to a temporary home at https://laars.jamesjepson.com. The old website on scratchpad is now no longer being supported or updated, but it will remain on the internet. The new website is currently being updated. So far it has been updated with identification resources and guides to identifying British Isles Mecoptera (Scorpionflies and Snow Fleas), Megaloptera (Alderflies), and Raphidioptera (Snakeflies), as well as the Synonymic Checklist, Records, and the latest and archived Neuro News. The website will be popullated with identification guides for Neuroptera (Lacewings) in the future.



Images from the new Website

Workshops and Webinars

This year I delivered an in-person workshop and two webinars on how to identify British Isles Lacewing and Allies. The workshops were hosted by the Tanyptera Trust, World Museum Liverpool. These focused on how to identify Lacewings and their Allies from photographs, in the field and under the microscope. The workshop and webinars were well attended and have received positive feedback, it is hoped that they will encourage more people to identify and record Lacewings and Allies in the future, which will help us to get a better idea of their distribution in the British Isles. Links to the webinars on youtube: Part 1 and Part 2.

Participants and specimens at the Lacewing and Allies Workshop, World Museum Liverpool

Lacewing and Allies Webinars

New articles

Two articles one on Alderflies (Megaloptera: Sialidae) and one mentioning Spongeflies (Neuroptera: Sisyridae) were published this year using data and information from the Recording Scheme.

Chloe Louise Rice and colleagues updated the distribution of the Alderflies (Megaloptera: Sialidae) of Devon and Cornwall (VCs 1–4). The authors collated records from the Recording Scheme, Lacewing Digital Library, Natural History Museum Online Data Portal, and from scouring the literature, in addition to data from Malaise trap sampling from West Countries River Trust, to give a robust view of the distribution of Alderflies throughout Devon and Cornwall. They found all three species of British Isles Alderflies present: *Sialis lutaria*, *Sialis fuliginosa*, and *Sialis nigripes* in these counties, with *S. fuliginosa* and *S. nigripes* rarely being recorded. This is an excellent resource for up to date information on Alderflies from Devon and Cornwall.

Rice, C.L., Howard-Williams, E., Foster, C., Simmons, J. and Paling, N. 2023. An updated distribution of Alderflies (Megaloptera: Sialidae) in Devon and Cornwall, British Journal of Entomology and Natural History, Vol 36:2023, 85-95.

Jonathan Briggs wrote an excellent article for British Wildlife on British Isles freshwater sponges and their inhabitants. He gives excellent information on these often overlooked invertebrates, explaining what freshwater sponges are, the species found in Britain and Ireland, including really useful information on how to identify them, their distribution and habitats. Importantly for us he talks about their associated species which includes the Spongeflies (Neuropterta: Sisyridae), giving information on their distribution and relationships with the sponges. Other associated species are also mentioned such as Caddisflies (Trichoptera). He finishes with information on the uses and impacts of freshwater sponges, and areas for future research.

Briggs, J. 2023. Freshwater Sponges: our native species and their inhabitants. British Wildlife, Volume 35(2), Nov 2023, 105-114.

Specimens needed for a project on insect reproduction at the University of Lincoln

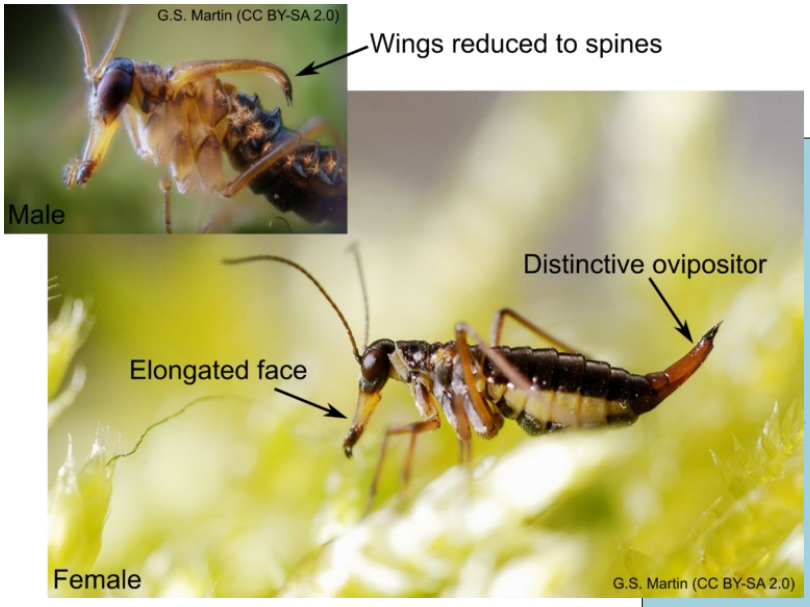
Dr. Carl Soulsbury from the University of Lincoln is undertaking a project on insect reproduction, characterising sperm evolution and how this is related to female reproductive tracts. His project currently has data for over 1500 species; however he is in the need of specimens of Raphidioptera, Megaloptera, and Neuroptera. He is keen to get hold of specimens of these orders, ideally 5-10 (2-3 would be okay) males and if possible 3-5 females – identified to species level. They do not need to be live, just relatively freshly stored in ethanol.

Their project is running for another 20 months or so and they will be collecting, dissecting and scanning all of 2024. Therefore they will be happy to receive specimens throughout this period.

If you can help Carl please email him at csoulsbury@lincoln.ac.uk

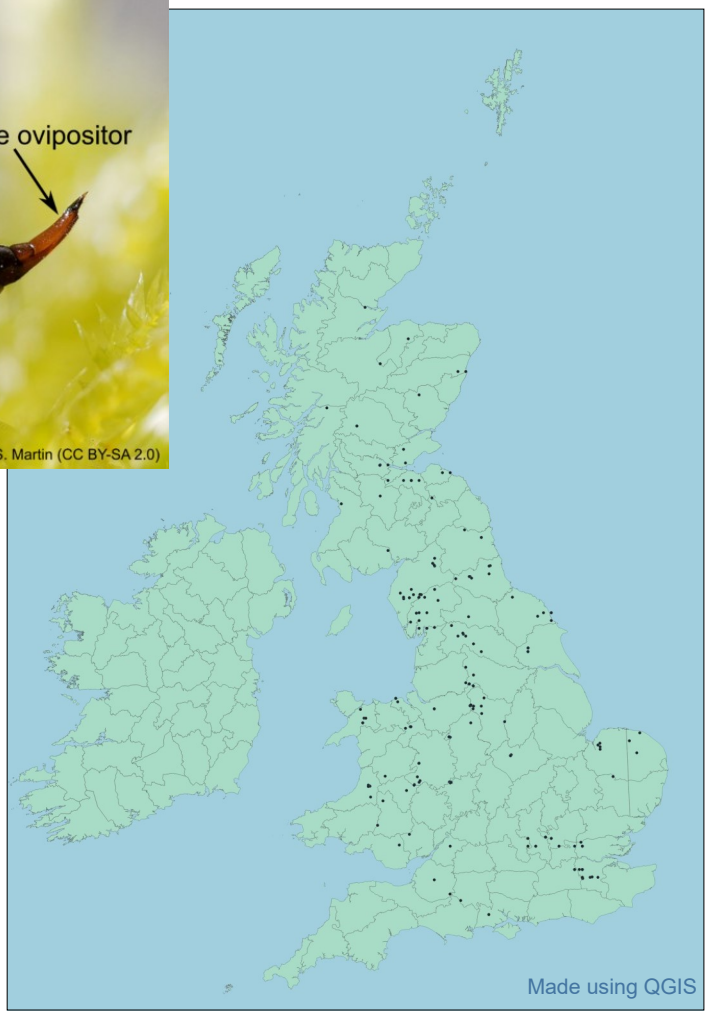
The Snow Flea - *Boreus hyemalis*

If you are out and about over the winter months, keep an eye out for a very tiny insect, *Boreus hyemalis,* the Snow Flea. This is a species of Mecoptera, found in the British Isles, that is active as an adult during the Winter months. Adults start to emerge around October and November, and can be found from October to April. They are mainly found on heaths and moors, and are most easily observed on the surface of snow, walking or jumping, but can also be found through close observation of mosses. The adult is around 5 mm in length, has an elongated face, both males and females have very reduced wings, in males the wings are reduced into spine-like structures. All parts of their life cycle are associated with moss, however, little is known about the specific mosses they utilise, with only one species being mentioned *Polytrichum commune*. If you do find and record Snow Fleas it would be very useful to identify (if you can) the moss that they were found on.



Boreus hyemalis Male (image: G.S. Martin (CC BY-SA 2.0)) and Female (image: G.S. Martin (CC BY-SA 2.0)) showing distinctive features

Boreus hyemalis image: O.L.P. Hansen (CC BY 4.0)



Records of *Boreus hyemalis* in the British Isles

Checklist of British Isles Lacewings and their Allies

NEUROPTERA Linnaeus, 1758

CONIOPTERYGIDAE Burmeister, 1839

CONIOPTERYGINAE Burmeister, 1839

CONWENTZIA Enderlein, 1905

Conwentzia pineticola Enderlein, 1905

Conwentzia psociformis (Curtis, 1834)

CONIOPTERYX Curtis, 1834

Subgenus ***Coniopteryx*** Curtis, 1834

Coniopteryx borealis Tjeder, 1930

Coniopteryx tineiformis Curtis, 1834

Coniopteryx pygmaea Enderlein, 1906

Synonym: *Coniopteryx parthenia* (Navás & Marcet, 1910)

Subgenus ***Metaconiopteryx*** Kis, Nadler & Mandru, 1979

Coniopteryx esbenpeterseni Tjeder, 1930

Coniopteryx lentiae Aspöck & Aspöck, 1964

SEMIDALIS Enderlein, 1905

Semidalis aleyrodiformis (Stephens, 1836)

Semidalis pseudouncinata Meinander, 1963

PARASEMIDALIS Enderlein, 1905

Parasemidalis fuscipennis (Reuter, 1894)

ALEUROPTERYGINAE Enderlein, 1905

ALEUROPTERYX Enderlein, 1905

Aleuropteryx juniperi Ohm, 1968

HELICOCONIS Enderlein, 1905

Helicoconis hirtinervis Tjeder, 1960

CHRYSOPIDAE Schneider, 1851

CHRYSOPINAE Schneider, 1851

CHRYSOPA Leach, 1815

Chrysopa abbreviata Curtis 1834

Chrysopa commata Kis & Újhelyi, 1965

Chrysopa dorsalis Burmeister, 1839

Chrysopa pallens (Rambur, 1838)

Chrysopa perla (Linnaeus, 1758) nec Stephens, 1836, nec Evans, 1848

Chrysopa phyllochoma Wesmael, 1841

CHRYSOPERLA Steinmann, 1964

Chrysoperla carnea (Stephens, 1836)

Chrysoperla lucasina (Lacroix, 1912)

Chrysoperla pallida Henry, Brooks, Duelli, & Johnson, 2002

CHRYSOPIDIA Navás, 1910

Chrysopidia ciliata (Wesmael, 1842)

CUNCTOCHRYSA Hölzel, 1970

Cunctochrysa albolineata (Killington, 1935)

Cunctochrysa cosmia (Navás, 1918)

Synonym: Cunctochrysa bellifontensis Leraut, 1988

APERTOCHRYSA Tjeder, 1966

Apertochrysa flavifrons (Brauer, 1850)

Synonym: *Mallada flavifrons* (Brauer, 1850)

Synonym: *Dichochrysa flavifrons (*Brauer, 1850)

Synonym: *Pseudomallada flavifrons* (Brauer, 1850)

Apertochrysa prasina (Burmeister, 1839)

Synonym: *Mallada prasina* (Burmeister, 1839)

Synonym: *Dichochrysa prasina* (Burmeister, 1839)

Synonym: *Pseudomallada prasinus* (Burmeister, 1839)

Apertochrysa ventralis (Curtis, 1834)

Synonym: *Mallada ventralis* (Curtis, 1834)

Synonym: *Dichochrysa ventralis* (Curtis, 1834)

Synonym: *Pseudomallada ventralis* (Curtis, 1834)

NINETA Navás, 1912

Nineta flava (Scopoli, 1793)

Nineta vittata (Wesmael, 1841)

Nineta inpunctata (Reuter, 1894)

Nineta pallida (Schneider, 1846)

NOTHOCHRYSINAE Navás, 1910

NOTHOCHRYSA McLachlan, 1868

Nothochrysa capitata (Fabricius, 1793)

Nothochrysa fulviceps (Stephens, 1836)

PEYERIMHOFFINA Lacroix, 1920

Peyerimhoffina gracilis (Schneider, 1851)

OSMYLIDAE Leach, 1815

OSMYLUS Latreille, 1802

Osmylus fulvicephalus (Scopoli, 1793)

SISYRIDAE Handlirsch, 1908

SISYRA Burmeister, 1839

Sisyra dalii McLachlan, 1866

Sisyra nigra (Retizus, 1783)

Synonym: *Sisyra fuscata* (Fabricius, 1793)

Sisyra terminalis Curtis, 1854

MYRMELEONTIDAE Latreille, 1803

MYRMELONTINAE Latreille, 1803

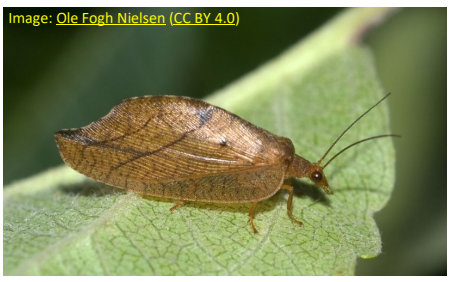
EUROLEON Esben-Petersen, 1918

Euroleon nostras (Fourcroy, 1785)

MYRMELEON Linnaeus, 1767

Myrmeleon formicarius Linnaeus, 1767

HEMEROBIIDAE Latreille, 1802



PSECTRA Hagen, 1866

Psectra diptera (Burmeister, 1839)

MICROMUS Rambur, 1842

Micromus variegatus (Fabricius, 1793)

Micromus angulatus (Stephens, 1836)

Micromus paganus (Linnaeus, 1767)

DREPANEPTERYX Leach, 1815

Drepanepteryx phalaenoides (Linnaeus, 1758)

HEMEROBIUS Linnaeus, 1758

Hemerobius humulinus Linnaeus, 1761

Hemerobius perelegans Stephens, 1836

Hemerobius simulans Walker, 1853

Hemerobius stigma Stephens, 1836

Hemerobius atrifrons McLachlan, 1868

***Hemerobius pini* Stephens, 1836,** nec Leach

Hemerobius contumax Tjeder, 1932

Hemerobius striatus Nakahara, 1915

Synonym: *Hemerobius fenestratus* Tjeder, 1932

Hemerobius nitidulus Fabricius, 1777

Hemerobius micans Olivier, 1792

Hemerobius lutescens Fabricius, 1793, nec auctt.

Hemerobius marginatus Stephens, 1836

Hemerobius handschini Tjeder, 1957

WESMAELIUS Krüger, 1922

Subgenus ***Kimminsia*** Killington, 1937

Wesmaelius malladai (Navás, 1925)

Wesmaelius mortoni (McLachlan, 1899)

Wesmaelius ravus (Withycombe, 1923)

Wesmaelius balticus (Strøm, 1788)

Wesmaelius nervosus (Fabricius, 1793)

Wesmaelius subnebulosus (Stephens, 1836)

Subgenus ***Wesmaelius*** Krüger, 1922

Wesmaelius concinnus (Stephens, 1836)

Wesmaelius quadrifasciatus (Reuter, 1894)

SYMPHEROBIUS Banks, 1904

Sympherobius elegans (Stephens, 1836)

Sympherobius pygmaeus (Rambur, 1842)

Sympherobius pellucidus (Walker, 1853)

Sympherobius fuscescens (Wallengren, 1863)

Sympherobius klapaleki Zelený, 1963

MEGALOMUS Rambur, 1842

Megalomus hirtus (Linnaeus, 1761)

RAPHIDIOPTERA Handlirsch, 1908

RAPHIDIIDAE Latreille, 1810

SUBILLA Navás, 1916

Subilla confinis (Stephens, 1836)

XANTHOSTIGMA Navás, 1909

Xanthostigma xanthostigma (Schummel, 1832)

ATLANTORAPHIDIA Aspöck & Aspöck, 1968

Atlantoraphidia maculicollis (Stephens, 1836)

PHAEOSTIGMA Navás, 1909

Phaeostigma notata (Fabricius, 1781)

[note: some authors list as *Phaeostigma notatum*]

MEGALOPTERA Latreille, 1802

SIALIDAE Leach, 1815

SIALIS Latreille, 1803

Sialis fuliginosa F.J. Pictet, 1836

Sialis lutaria (Linnaeus, 1758)

Sialis nigripes A.E. Pictet, 1865

MECOPTERA Packard, 1886

BOREIDAE McLachlan 1868

BOREUS Latreille, 1825

Boreus hyemalis (Linnaeus, 1767)

PANORPIDAE Leach, 1815

PANORPA Linnaeus, 1758

Panorpa cognata Rambur, 1842

Panorpa communis Linnaeus, 1758

Panorpa germanica Linnaeus, 1758

The current total count of British Isles lacewings and their allies is 10 families, 32 genera, and 83 species.

Neuroptera: 6 families, 25 genera, and 72 species

Raphidioptera: 1 family, 4 genera, and 4 species

Megaloptera: 1 family, 1 genus, and 3 species

Mecoptera: 2 families, 2 genera, and 4 species