

Window winged sedge

(*Hagenella clathrata*)



The Window winged sedge is a freshwater species and is one of Britain's rarer caddisflies. The larvae have a uniform head colour for camouflage in shaded peaty pools where it lives. The adults have yellow chequered, dark brown wings.

Due to its rarity and decline in numbers the insect has been made a Priority Species on the UK Biodiversity Action Plan (BAP).

Life cycle

Adult Window winged sedges emerge and fly between May and early June in the south and between June and early July in the north. They will rest on vegetation or be active on warm afternoons.

Egg masses are laid somewhere soggy beneath the litter layer. Larvae hatch a few weeks after laying and will hide in the damp leaf litter. In water, the larvae grow quite rapidly and reach full size in spring.

Distribution map

This caddis has been recorded from two sites near Aviemore, one in Galloway, two adjacent sites on the Shropshire Welsh border, three sites in Staffordshire, one site in Greater London and three confirmed sites in Surrey.

Habitat

In the UK this species lives in pools that occur on bogs and heathland. It is associated with areas with well-developed tussocks, principally of Purple moor grass (*Molinia caerulea*). These areas need to have small, shallow pools between tussocks from autumn to early summer. These pools are often so over-shaded by the plants and their associated litter that no surface water is apparent. They usually dry to mere sogginess by mid-summer when the adults fly.

Trees and shrubs appear to be an important element in the habitat as they provide at least some of the larval food and case-making material and are also important as sites for adults to swarm and meet.

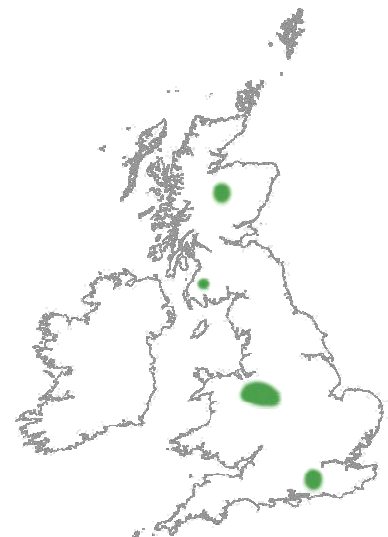


Fig. 1 Distribution of confirmed records in the UK



Threats and causes of decline

The main threats include:

1. Drying out of habitat
2. Encroachment of trees into habitat
3. Opening up of tussock habitat by trampling of livestock
4. Wildfires
5. Inappropriate conservation activities i.e. overgrazing, inappropriate pond creation and location, ill-informed re-wetting

Habitat management

Due to the exploitation of bogs there has been a decline in this species habitat. Therefore there is a great need to protect bogs and to restore areas of previous peat workings. The use of standardised management prescriptions can be very damaging; therefore management regimes must be carefully tailor-made and done so cautiously and lightly*. Management considerations should include:

- **Reducing abstraction:** including abstraction directly from watercourses or via drawdown of aquifers and reservoirs in order to gently raise water levels; and
- **Managing tree encroachment on pool habitat:** in order to maintain wet pools for this species it is important to control succession of surrounding habitats whilst maintaining some birch habitat nearby. Herbicide treatments of cut stumps should be done with use of appropriate products, licensed for use on and near 'watercourses' and done with caution (e.g. manual painting of cut stumps rather than foliar application and use of vehicles).

Environmental stewardship options *

There are a number of options relevant to the protection of this species including:

HLS options: **HQ9** Maintenance of lowland raised bogs
 HQ10 Restoration of lowland raised bogs

HLS capital items: **SB** Scrub management – 25% to 75% cover

*** For specialist advice when devising conservation works in areas with this species please contact Ian Wallace through Buglife (see contact details below).**

References

Wallace, I (2011) Species dossier: *Hagenella clathrata*, Window winged sedge. Buglife. Available at www.buglife.org.uk



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Photography: Pupae case of *Hagenella clathrata* – modified from Wallace & Wiggins (1978); Mating adult pair *Hagenella clathrata* © Matthew Wallace

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