

# Small grey sedge

(*Glossosoma intermedium*)



The Small grey sedge is a small to medium sized caddisfly and over the last ten years its numbers have declined rapidly in the UK. Due to its rarity and decline in numbers the insect has been added to the UK Biodiversity Action Plan. The case of this caddis is very distinctive because they are made of large sand grains and are shaped like a tortoise. However the identification of the larvae is difficult and requires a microscope. The adults are moth-like, dark grey-brown in colour, and fly in the early evening and at night.

Caddisflies have larvae (young) that are caterpillar like but with six strong legs. There are two distinctive types, 'cased' and 'free-living'. The cased caddis larvae make intricate shelters from a variety of materials such as small snail shells, precisely cut leaves, twigs and stones, all sewn together with a silk secretion. Adult caddisflies are moth-like in appearance but they have hairy, rather than scaly, wings. The wings are held 'tent like' over their body when resting. Like moths they often fly in the evening or at night.

## Life cycle

This caddisfly has a year long life cycle with adults in flight between April and May. Rapid larval growth occurs from April to July. Then they change into a pupa in small stone structures which are attached to larger stones. They remain here until the spring when they emerge as adults in April or May.

## Distribution map

This caddisfly has only ever been found for certain in four Lake District streams, these are the Hoathwaite Beck near Coniston, Pull Beck near Hawkshead, inflow of Hayeswater above Ullswater and also from the Troutbeck somewhere along its course. The records for this caddis vary over the last 40 years and it may have been lost from some of its original sites.



## Threats and causes of decline

There are a number of factors impacting the habitat that may be contributing to the decline of this insect; pollution by pesticides, nutrient enrichment by the construction of impounded dams, nutrient enrichment from sewage or farm run-off, siltation and disturbance from drainage works, alteration of flow regime from drainage works and shading by afforestation.

Dark green = recent records (after 1980)  
Light green = historic records (before 1980)



### Habitat

The Cumbrian streams where this species is or has been found are not typical streams for the area, they are all small to medium sized streams (1-3m wide) arising from base-rich rocks and with a moderately fast flowing current. At the Hayeswater inflow this species is found in the lower regions of the inflow where the flow is moderate.

### Habitat management

The main management requirement is to maintain the watercourses of the streams unchanged as far as water quality, flow and riverbed structure along their entire course at and above the location used by the Small grey sedge and also at a catchment level. This management will allow the maintenance of habitat where the Small grey sedge can still be found and restore sites where the species previously existed for future translocations. The most important management is the maintenance of water quality and preventing dipped sheep from entering the watercourses. Therefore no feeders or water butts should be positioned next to the streams.

## Environmental stewardship options

### HLS options

**HE9** 6m buffer strips on cultivated land next to a watercourse

**HE10** 6m buffer strips on intensive grassland next to a watercourse

**HJ5** In-field grass areas to prevent erosion and run-off

**HJ6** Preventing erosion or run-off from intensively managed, improved grassland

**HJ7** Seasonal livestock removal on grassland with no input restriction

**HJ8** Nil fertiliser supplement

**HJ11** Maintenance of watercourse fencing

**HL15** Seasonal livestock exclusion supplement

**UHH12/UOHJ12** Winter livestock removal next to streams, rivers and lakes

### HLS capital items

**FSB/H** Sheep fencing

**RPD** Cross-drains under farm tracks

**HBD** Hard base for livestock drinker

**HBF** Hard base for livestock feeder

### ELS options

**EE9-10** 6m buffer strips on intensive grassland next to a watercourse

**EJ5** In-field grass areas to prevent erosion and run-off

**EJ11** Maintenance of watercourse fencing

**UJ12** Winter livestock removal next to streams, rivers and lakes

**UJ3** Post and wire fencing along water courses

### References

This sheet can be accessed on the web at [www.buglife.org.uk](http://www.buglife.org.uk)

Further details of Environmental Stewardship Schemes can be found at:

[www.naturalengland.gov.uk/ourwork/farming/funding/es/default.aspx](http://www.naturalengland.gov.uk/ourwork/farming/funding/es/default.aspx)

The National Trichoptera (Caddis) Recording Scheme, Liverpool Museum.

Dr Ian Wallace, Email: [Ian.Wallace@liverpoolmuseums.org](mailto:Ian.Wallace@liverpoolmuseums.org)

Cumbrian Biodiversity Action Plan - A Caddisfly Action Plan  
[www.wildlifeincumbria.org.uk/cbap/index.asp](http://www.wildlifeincumbria.org.uk/cbap/index.asp)



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River Kent - typical *Glossosoma* sp. habitat (c) Andrew Dixon.

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