

## Scarse grey flag

(*Hydropsyche bulgaromanorum*)



The Scarse grey flag is a freshwater species and is one of Britain's rarest caddisflies. This is a large caddisfly species with case-less larvae which have a strong association with stones and gravel substratum. Larvae can be told apart from other species by the head being silt-covered at the front.

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

This caddisfly is likely to have one generation a year. The adults have their flight period between June and October.

### Distribution map

This caddisfly is only known from stony areas on the River Arun in Sussex.

### Habitat

The larvae of this caddisfly are associated with the lentic i.e. still parts of the river, where it lives in shallow warm water on stones. The larvae are associated with hard substratum with the third instar larvae mainly found on gravel and the final instar larvae found mainly on stones. Adults appear to rest during the day on vegetation.



Fig. 1: Distribution of confirmed records in the UK

## Threats and causes of decline

The main threats include:

1. Pollution events
2. Unsympathetic dredging
3. High levels of suspended silt
4. Unsympathetic engineering work
5. Abstraction leading to low water-flows and the upstream migration of the tidal influence
6. Marginal and riparian vegetation is likely to be important to adults for shelter and swarming and large changes in areas where it lives could be detrimental

## Habitat management

This species relies upon good water quality therefore the most important management is the maintenance and improvement of water quality. Additional management considerations should include:

- **Maintain good structure and management of marginal and riparian vegetation:** any work that is likely to damage aquatic or bankside vegetation should be carried out only on one bank or on side of the river and preferably on only short stretches; allow a buffer strip of uncultivated vegetation along watercourses and ensure bankside vegetation is not overgrazed by livestock;
- **Reduce abstraction:** including abstraction directly from watercourses or via drawdown of aquifers and reservoirs;
- **If maintenance and engineering works are necessary, including dredging:** plan them sympathetically to avoid habitat loss (especially side channels) and excessive riverbed disturbance, any habitat loss should be mitigated by habitat enhancements and creation;
- **Habitat creation:** increasing hard substratum of gravel and stones in slow flowing areas of the river channel.

## Environmental stewardship options

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

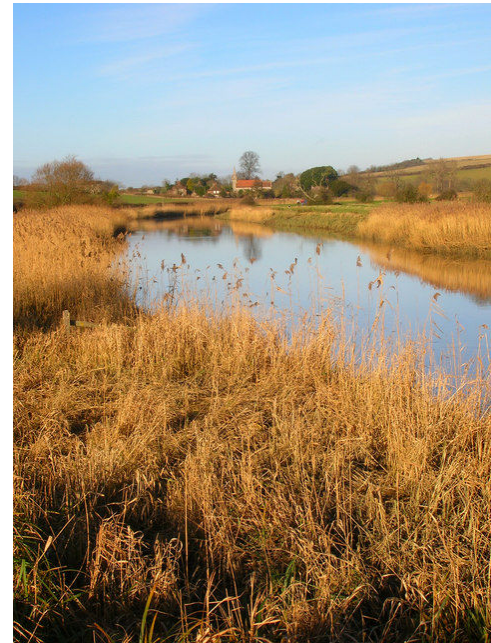
### HLS options

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

### ELS options

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

**EJ11** Maintenance of watercourse fencing



## References

Wallace, I (2011) Species dossier: *Hydropsyche bulgaromanorum*, Scarce grey flag. Buglife. Available at [www.buglife.org.uk](http://www.buglife.org.uk)



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