

SPECIES HANDBOOK

Window-winged Caddis Fly (*Hagenella clathrata*)

Ecology, conservation, survey
and management

the
species
recovery
trust



Conservation Status

ENDANGERED

- Facing a high risk of extinction in the wild
- Only four native sites remaining in the south of England
- Habitat degradation is a key threat

The Window-winged Caddis Fly is one of the rarest insects in the UK. In the south of England, it is only found at Chobham Common, Whitmoor Common, Frensham Common and Ancells Farm and Foxlease Meadows Nature Reserve.

While there appears to be a strong population remaining at Whitmoor Common, sadly, in recent years, surveys have failed to find the caddis fly at Chobham Common. This suggests that the population is struggling or may even have disappeared.

This is likely to be a result of scrub encroachment, which is a major threat to Window-winged Caddis Flies, as it leads to the drying out of the boggy habitats that it depends on.

On a more positive note, the populations at Frensham and Ancells and Foxlease have only recently been discovered, which suggests that there may be other populations in the south of England surviving unnoticed. It is important that we identify these sites so that we can ensure they are protected.



Description

Adult caddis flies are similar to moths in appearance, but with their wings folded back along the body. They have a fine set of hairs on their wings. Adult Window-winged Caddis Flies have mottled orange and black wings, that appear darker in flight. They have long dark antennae and orange legs. The larvae have a uniform head colour, to help to camouflage them in the shaded peaty bogs they live in.

Lifecycle

Egg masses are laid in wet areas, under a leaf litter layer. The larvae hatch a few weeks after laying and hide in the surrounding damp litter. Like other caddis flies, they build cases in which to pupate. Adults emerge and fly between May and early June in the south, and June and July in the north.





Habitat

These caddis flies commonly live in damp, tussocky vegetation and are only found in a few raised bogs and heathlands in the UK. They inhabit areas with an abundance of purple moor grass, pools available to them in autumn and early summer, and trees and shrubbery (for larval food, cast-making material, and sites for adults to swarm).

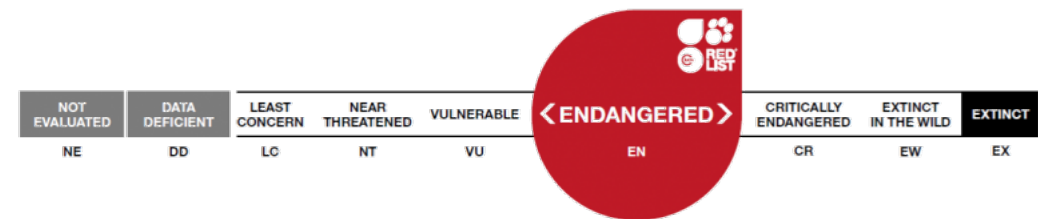
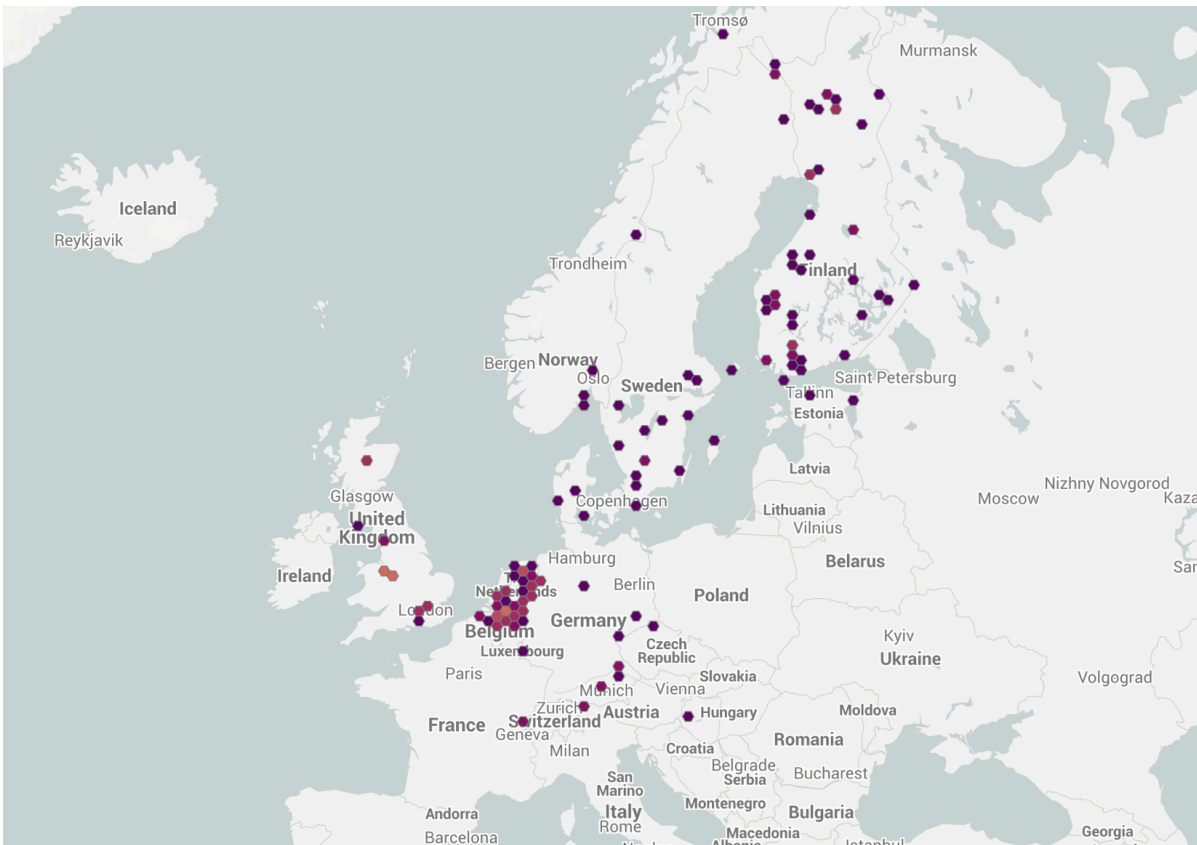
It is important that the water is not stagnant and is moving, even if almost imperceptibly.

Distribution

Populations are found in two sites near Aviemore, one in Galloway, two on the Shropshire Welsh boarder, three in Staffordshire, three in Surrey and one in Hampshire. In addition to being extremely rare in the UK, it is also vanishing almost everywhere in Europe due to its bog habitats being exploited.

Status

Endangered, meaning it is facing a high risk of extinction in the wild.



Reasons for decline

The biggest threats to Window-winged Caddis Flies are the drying out of their habitat, the encroachment of trees into their boggy habitat, wildfires, and the opening of tussock habitat by livestock trampling the ground.

Protection under the law

Listed as a species of Principal Importance in England and Wales under the NERC Act 2006 and is a UK Biodiversity Action Plan priority species.



Damp heath colonised by scrub and trees



SURVEY

Habitat

Found on the edge of lowland raised bogs, quaking bogs and wet heaths. Commonly seen resting on vegetation in damp tussocky areas, consisting principally of Purple Moor Grass (*Molinia caerulea*). Birch trees are also thought to be an important element of their habitat.

What to look for

Adults: A structured walk/transect approach is recommended, through areas of wet heathland dominated by tussocks of Purple-moor Grass and Birch scrub. Caddis Flies can be spotted primarily through visual searching of the foliage with occasional sweep-netting of vegetation (e.g. Birch scrub and grass tussocks) if needed. It is best to follow the same transect each time you survey.

When to survey

The best time of year to survey is between early May and the middle of June, as Window-winged Caddis Flies have a short flight period. Surveys should be undertaken on relatively still, warm, dry days and ideally in the afternoon, when the caddis flies are more likely to fly.

SURVEY

Confusable species

Can be confused with *Oligotricha striata*, which is often found in the same habitat. This is particularly the case when the Caddis Fly is in flight, as it appears darker in flight. As such, *H. clathrata* seen in flight should be followed until seen at rest, so that it can be distinguished by its orange chequered wings, rather than the black-streaked, dark brown wings of *O.striata*. *O.striata* also has a striking orange/yellow neck.

What to record

- Number of caddis flies seen
- Location (grid reference or GPS if possible)
- Take photos if possible of the species and the habitat





MANAGEMENT

Scrub clearance

The encroachment of scrub into the boggy habitats of the Window-winged Caddis Fly is one of the primary threats to the species. Dense scrub/secondary woodland should be cleared and scrub kept to a low level within glades of purple moor grass.

Grazing

Grazing needs to be carefully managed to prevent over-grazing of tussocks and to prevent livestock trampling the ground and potentially damaging larvae.

Wildfires

Arisings from any scrub clearance work should be removed from the site to help prevent wildfires. It can take several years for the habitat to recover from the effects of wildfires.

OUR WORK

- Regular surveys of sites in Surrey and Hampshire, working with our network of trained volunteers
- Habitat work where needed

SUCCESS

- Five training courses run to teach volunteers to survey
- Population at Ancells Farm and Foxlease Meadows now confirmed as a breeding population following our surveys

The main focus of our work has been training volunteers to survey for this species, and this will continue to be our focus moving forward. We are keen to build up an accurate picture of how this species is faring at each of its sites and then work with landowners and the Wildlife Trusts to ensure that any necessary habitat work is undertaken.

We are also keen to work with volunteers to explore new sites with potentially suitable habitat, in the hope that we can discover new populations of this species.



Survey training day in Surrey

The Species Recovery Trust is a charity set up to tackle the loss of some of the rarest species in the UK.

There are over nine hundred native species in the UK that are classed as under threat, with several hundreds more currently widespread but known to be in significant decline. The countryside is now bereft of many species that were a familiar sight a mere generation ago.

A small number of these species are on the absolute brink of existence, poised to become extinct in our lifetimes; our goal is to stop them vanishing.

Our aim is to remove 50 species from the edge of extinction in the UK by the year 2050. In addition we are reconnecting people with wildlife and the natural world through training programmes and awareness raising.



A photograph of a forest floor in spring. The ground is covered with a dense carpet of small, purple-blue flowers, likely bluebells. In the foreground, a large, weathered tree stump lies on the ground, partially covered in moss. The background is filled with tall, slender trees with lush green foliage, suggesting a healthy woodland environment. Sunlight filters through the trees, creating dappled light on the forest floor.

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