

Norfolk Hawker

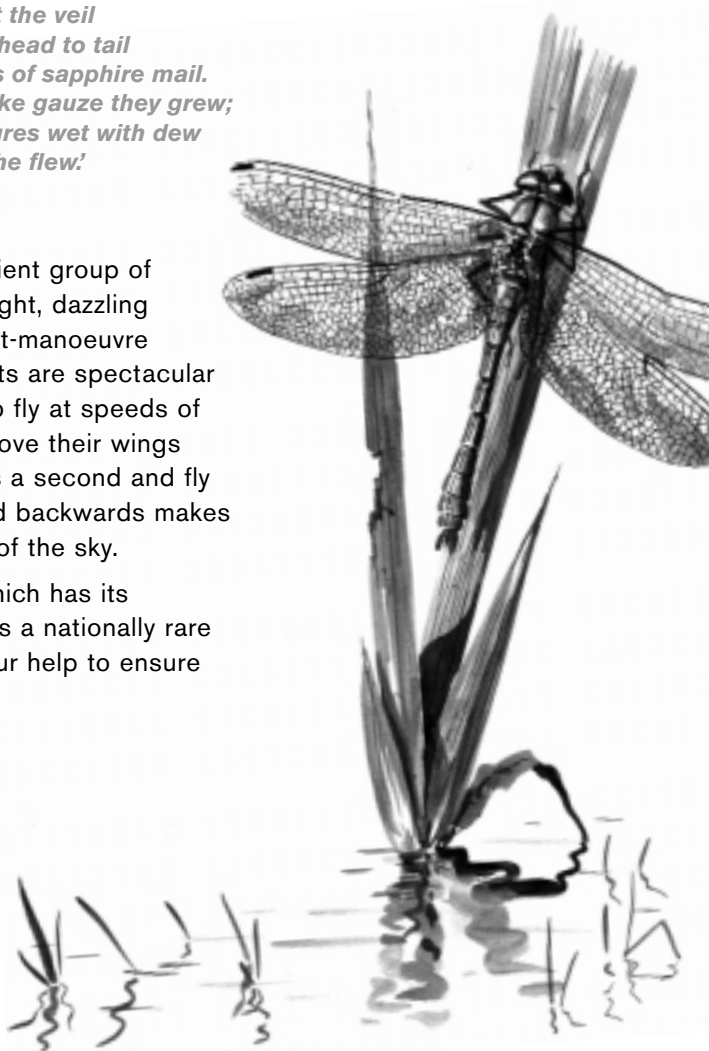
Aeshna isosceles

*'To-day I saw the dragon-fly
Come from the wells where he did lie.
'An inner impulse rent the veil
Of his old husk: from head to tail
Came out clear plates of sapphire mail.
'He dried his wings: like gauze they grew;
Thro' crofts and pastures wet with dew
A living flash of light he flew!*

Alfred Lord Tennyson

Dragonflies are an ancient group of insects whose quick flight, dazzling colour and ability to out-manoeuvre most other flying insects are spectacular to watch. Being able to fly at speeds of up to 36km an hour, move their wings approximately 30 times a second and fly forwards, sideways and backwards makes these insects masters of the sky.

The Norfolk hawker, which has its stronghold in Norfolk, is a nationally rare dragonfly that needs our help to ensure its survival.



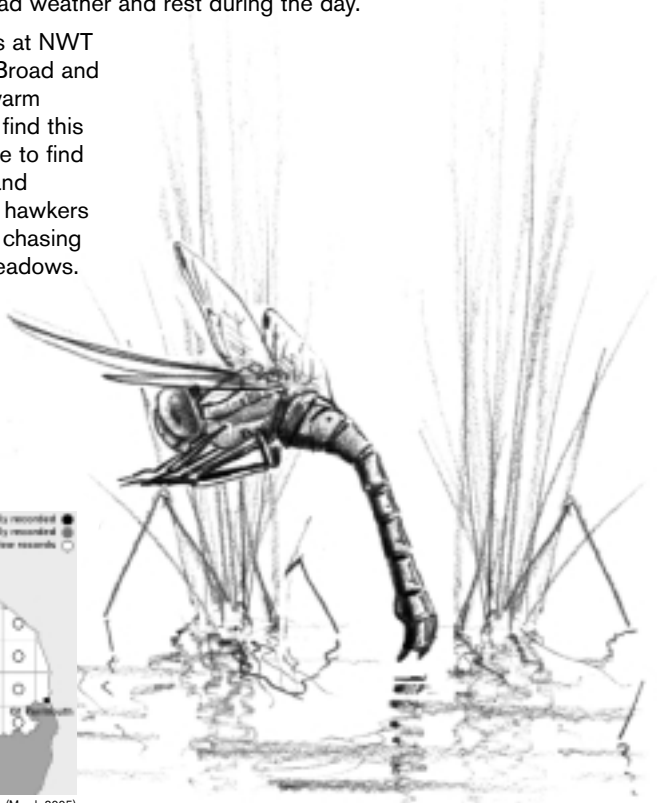
How to recognise Norfolk hawkers

There are two brown hawker dragonflies found in Britain, the Norfolk hawker and the brown hawker. The scientific name of the Norfolk hawker – *isosceles* – refers to the yellow triangle shape on the second segment of the dragonfly's body. The quick flight of dragonflies can make them quite difficult to identify unless you are lucky to find one at rest. Clear wings and green eyes are the main distinguishing features that separate Norfolk hawker from the more common brown hawker with its brown wings and brown eyes.

Where to see Norfolk hawkers

The Norfolk hawker is a resident of the Norfolk Broads and north-east Suffolk where it can be found soaring above the reed-fringed dykes hunting other insects. In Britain it tends to favour slow-flowing dykes and ditches where water soldier plants grow. The reason for this association is not fully known, but water soldier is a good indicator of pollution-free water. The waterbody also needs to be close to trees where the adults can hunt insects, shelter from bad weather and rest during the day.

Go in search of Norfolk hawkers at NWT Hickling Broad or NWT Upton Broad and Marshes nature reserves on a warm summer's day and if you do not find this elusive dragonfly you will be sure to find many other beautiful dragonfly and damselfly species. Male Norfolk hawkers can be seen patrolling dykes or chasing other males across adjoining meadows. Unlike other species of dragonfly they spend quite a large proportion of their time perched on vegetation.



Distribution map provided by Norfolk Biological Records Centre (March 2005)

The Norfolk hawker's year

Most of the Norfolk hawker's life is spent as a larva under water; however, it is the few weeks it spends as an adult when we are most likely to see it.

January – March

- Dragonfly larvae remain in water – they are fierce predators feeding on other aquatic insects.



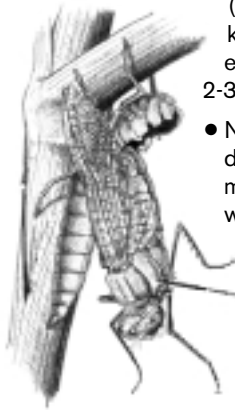
July – September

- Dependant on temperature the eggs usually hatch after 2-5 weeks. The larvae will remain underwater for approximately two years.
- The flight period of the Norfolk Hawker usually finishes in mid-July.



April – June

- In late May and June mature dragonfly larvae (approximately two years old) climb out of the water onto an aquatic plant at night, where they emerge from their skin as adult dragonflies (the shed larval skin is known as an exuvia). This emergence usually takes 2-3 hours.



- Newly-emerged hawker dragonflies wait till early morning to fly off to wooded areas to feed.
- The adults reach sexual maturity after 2-3 weeks. Once the female has mated she will fly off on her own and lay her eggs on an aquatic plant, usually water soldier.

October – December

- Dragonfly larvae continue their development underwater.



What's happening to Norfolk hawkers?

The Norfolk hawker is classified as endangered and is fully protected by law. During the last century much of the habitat this dragonfly relies on, grazing marsh, disappeared, converted to arable land. Dykes that were originally managed by hand were dredged by machine destroying both aquatic vegetation and dragonfly larvae. Run-off from fields and roads created polluted water systems and nitrates from fertilisers entered water courses causing algal blooms. All these factors have threatened this rare and beautiful dragonfly.

Since the 1980s the Norfolk hawker has started to recolonise areas encouraged by active broadland conservation. Ditches are being cleaned, grazing marshes reinstated and fenland restored. However, the species is still vulnerable and its future uncertain due to climate change. The Norfolk hawker cannot tolerate brackish or saline water, which could be a serious threat to its habitat in the future should sea levels continue to rise. Active conservation is still needed to ensure its survival.

How to help Norfolk hawkers

A summer's day in the broads would be a poorer place without dragonflies. Not only are they beautiful to watch but they also control many insect pests. So, what can you do to help these rare and vulnerable insects?

- Support conservation organisations such as the Norfolk Wildlife Trust who are actively managing grazing marshes and broadland habitats.
- Create your own wetland habitat. Build a pond in your garden. You may not attract Norfolk hawkers but you will help other dragonfly species. Stock your pond with native plants, ensuring you have a good variety of submerged and marginal plants.
- Send details of your Norfolk hawker sightings to Norfolk Wildlife Trust – make your sightings count!

Finding out more

If you would like to discover more about the Norfolk hawker and other dragonflies then follow this link:

www.dragonflysoc.org.uk

or read

Taylor, P **Dragonflies of Norfolk** Norfolk and Norwich Naturalists' Society Occasional Publication No. 9

Brooks, S (2002) **Field Guide to the Dragonflies and Damselflies of Great Britain and Ireland** British Wildlife Publishing ISBN 0953139905

or contact

British Dragonfly Society, The Secretary, 23 Bowker Way, Whittlesey, Peterborough, PE7 1PY



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