"Early in 2021, Helen Edwards contacted me in my capacity as Dragonfly Recorder for Oxfordshire, to request surveys at the reserve to establish a base level from which to record changes in biodiversity, in the light of habitat restoration work.

"Dragonfly sightings were mainly on the Garden and Large Pond and their surroundings. The Garden Pond, a compact pond in good condition was a great place to view and photograph these charismatic insects that can be seen flying over, resting on and ovipositing (laying eggs) around the vegetation. Several dragonfly exuviae (casings) from emerged larvae were found, mainly those from the impressive Emperor Dragonfly.

"Later in the season, the impressive Southern Hawker was seen at both ponds well into autumn with a female laying eggs on my shoes once!"

Stephen Burch

County Dragonfly Recorder for Oxfordshire (VC23)



Broad-bodied Chaser (male)

Oxford Urban Wildlife Group

OUWG are local community wildlife enthusiasts who manage Boundary Brook Nature Reserve as a vital wildlife oasis and public amenity.

arge Red Damselfly (male)



The group works with local partners and groups to fulfill their vision for the reserve and promote the creation and value of green spaces and sites of ecological importance. The group provides inclusive opportunities for nature study and connection as well as skill sharing in nature conservation.

How you can join OUWG

Becoming a member is easy via our website. Visit: www.ouwg.org.uk/membership/

Membership is £5 (individual), £8 (family/household) per year, concessions are available.

Come to one of our regular Thursday morning or weekend work parties, meet the team and get involved in our seasonal events.

Email: info@ouwg.org.uk Twitter: @bybrookox Facebook: ByBrookOx Instagram: @boundarybrook Website: www.ouwg.org.uk



42 Boundary Brook Road, Oxford OX4 4AN Corner of the cycle track by Larkrise Primary School

OUWG is grateful for support from:







Dragonflies

at Boundary Brook Nature Reserve

Southern Hawker (male)

Come and look for dragonflies and damselflies on a fine sunny day between May and September.

You might well find some flying over the Garden or Large Ponds and others settled on plants around and near the water.

Ten species have been seen at the reserve so far, but habitat improvements to the ponds may encourage others to move in such as the Emerald Damselfly seen once briefly in 2021. Please send us any photos or records of any dragonflies you see!

Boundary Brook Nature Reserve - a vital wilderness helping East Oxford to discover our wildlife

10 species of dragonfly have been sighted on the reserve (since 2021):

Banded Demoiselle Emerald Damselfly Large Red Damselfly **Blue-tailed Damselfly Azure Damselfly** Southern Hawker **Emperor Dragonfly Broad-bodied Chaser Ruddy Darter Common Darter**



Dragonflies (Anisoptera) and Damselflies (Zygoptera) belong to the order of insects know as Odonata (meaning 'toothed jaws').

Damselflies are delicate, slender insects, the size of a matchstick, with weaker flight. A rectangular head, has eyes either end. Similarly shaped front and back wings are held closed when resting.



Emerald

Damselfly

(female)

Dragonflies are larger and stronger fliers. A more spherical head is dominated by a huge pair of compound eyes. Differently shaped front and back wings rest open. Dragonflies are ancient creatures.

> whose ancestors flew above the carboniferous

forests 300 million years ago, before dinosaurs roamed. These ancestors included Meganuera, also called 'Griffinflies', whose wingspans could be over 70cm!

Dragonflies have extraordinary colour vision, much better than in humans. Their large compound eyes are made up of upto 30,000 lenses (ommatidia) more densely packed in the upper part of the eye which has the clearest vision. This enables dragonflies to hunt by sight and ambush prey from behind with their feet.

Life Cycle

Dragonflies are hemimetabolous with no life cycle pupal stage like butterflies. Instead they have a long larval phase underwater (8 weeks to 5 years), when they will eat tadpoles, mosquitoes, fish, other insect larvae and even each other, followed by a short adult phase.

Dragonfly illustrations by Andrew Kay (c) 2022 Printed on 100% recycled paper by OxfordGreenPrint.com using non-toxic veg-oil inks and a low-energy risograph press

Habitat

Dragonflies usually require permanent water and are found in wetland habitats from ditches, bogs and lakes, Thriving in unpolluted waters supporting plenty of aquatic plants, ideal sites for egg-laying and emergence, Dragonflies prefer open sunlit places with good shelter. Woodland glades, hedgerows and meadows are good hunting grounds for adults and shelter for immature dragonfly development, away from aggressive territorial males that patrol the wetland breeding grounds.

New species

In recent decades several species have arrived in Britain from continental Europe, as part of a generally northerly movement almost certainly caused by climate change. In the last twenty years, three new species have arrived in Oxfordshire, with the last two arriving as recently as 2019 and 2020. Of these, the Willow Emerald Damselfly is now spreading widely across the county, and may well be sighted at the reserve in the next few years.

Ecosystems

CALCE CON

1zure Damselfly (male)

Dragonflies are important in ecosystems. Their larvae prey on other aquatic invertebrates and are an important food source for animals, like amphibians. As adults, Dragonflies eat other flying insects, especially controlling mosquito populations, and are prey for some birds.

Emperor (male)



Common Darter (male)