# NatHistCam Newsletter January 2020





## End of data collection phase

The end of the decade 2010-2019 marks the end of our main fieldwork campaign. In January 2016 we set up a committee to guide our project and chose the name NatHistCam because it is an abbreviation of 'Natural History of Cambridge', and NatHistCam had no hits on Google. The project was planned in three main stages

- Stage 1. Planning and testing of methods (2016)
- Stage 2. Fieldwork and data collation (2017-2019)
- Stage 3. Data analysis and writing up (2020).

# **Cambridge** is growing

The photograph at the top of this newsletter shows the view from the Gogs in May 2016. As we enter 2020 the forest of massive cranes shows no sign of becoming thinner. Red lamps on cranes illuminate the darkness like the Eye of Sauron. This has resulted in some parts of the city becoming temporarily inaccessible, but it has not greatly hindered our fieldwork. New building has helped to spread new species. Many introduced plant species are transient, arriving with building materials and then disappearing as ecological succession takes place. On the other hand, the riverside and historic centre, with their commons and college gardens have changed relatively little.

## Cambridge has an abundance of wildlife

In 2019 we found an abundance of wildlife, including a Purple Emperor on Chesterton Sidings (Chris Heron) and Wasp Spiders in Ditton Meadows (Duncan Mackay).

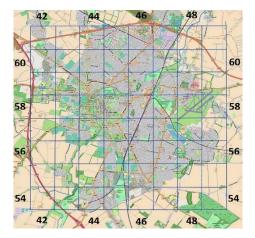
#### NatHistCam has worked with local groups of experts

A perusal of our website **www.nathistcam.org.uk** shows the extent of our observations; you will need some time to read through them all. The Monthly Sightings blog, collated by Olwen Williams, features mammals, birds, wasps, spiders, fungi (very rich in autumn 2019) and plants. Project blogs by Bob Jarman have concentrated on birds. Many rare birds fly over the city at night. Egrets, badgers and box-tree moths have increased markedly during our project. The badgers present a problem for release of hedgehogs, which cannot coexist with them.



## NatHistCam study area

We focussed our studies on an  $8 \times 8$  km square centred on the NW end of Mill Road. At the periphery there is much arable land, which in 2007 covered 34% of the area. Urban and suburban land covered 40% of the area, and grassland 23%. There is almost no woodland, in



spite of the fact that according to council estimates, the tree canopy covers 17% of the city. (The city occupies 40.7 km², almost all within our study area of 64 km²). According to a report published in 2013, the tree density was 33.2 trees ha¹¹, amounting to 135,000 city trees even in the absence of woodland.

We have surveyed vascular plants, mosses and liverworts in the 64 monads (1-km squares) of our study area. 60 domestic gardens were selected so that there were not more than 2 gardens per monad.

#### NatHistCam special projects

Special projects have included observations on Mistletoe and Rooks, as well as visits to 60 domestic gardens and almost all the college gardens. Mistletoe is largely confined to northwest of the city. It is almost absent from Trumpington, Cherry Hinton and the Barnwell area. There were 134 Rooks' nests in 6 rookeries in 2019—down from 1158 nests in 1960.

#### What do we now know?

For vascular plants, Jon Shanklin has data from the 64 monads of our study area. The results have not yet been analysed. We found 175 species of bryophytes during 2010-2019—a remarkably large number when compared with the 242 species found during the same period in the whole of Cambridgeshire. Results of the domestic garden survey show that Squirrels, Frogs and Hedgehogs had been seen by the owners in 90%, 73% and 50% of the gardens in the previous two years. Large Bindweed and Green Alkanet were the worst weeds.

## **Preparations for a book**

There is much further analysis to be done. We are collating data from moth traps and seeking out experts on topics where we are less well informed. We aim for a book of 120,000 words.

- Physical and human setting (10,000 words—geology and landscape 3,500, development of the city 3,500, habitats 3000)
- Animals (45,000 words—character of our urban fauna 6,000, insects 10,000, other invertebrates 5,000, fish & herptiles 6,000, mammals 10,000, birds 8,000)
- Plants and fungi (45,000 words—character of our urban flora and fungi 6,000, vascular plants 23,000, cryptogams 8,000, fungi & lichens 8,000)
- Sites and nature conservation (20,000 words—interesting sites 15,000, nature conservation 5,000)

## Keeping our website and blogs going

In the next few months we shall continue to update our website, whose webmasters are Monica Frisch and Duncan Mackay, but our main efforts will go into analysis and writing.

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