

## Bullet point summary of Dr J A Webb's Biodiversity Survey of Land at the Triangle adjacent to Stratfield Brake East Woodland

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- Considerable biodiversity of **314** species so far was found, including a small number of uncommon to rare species; although these surveys report only a small proportion of the total invertebrate biodiversity which might be expected here, with further surveys.
- In total **127** species of Vascular Plants were found in the Triangle. **This is a very good total for a site of this area** that has a lot of one type of shrub (Osier willows).
- 104 species of herbaceous plants including two rare ones (Narrow-leaved Bird's-foot Trefoil *Lotus tenuis* and Corn Mint *Mentha arvensis*) in the scrub and wood margins.
- **43 Pyramidal Orchids *Anacamptis pyramidalis*** and **52 Common Spotted Orchids *Dactylorhiza fuchsia*** were found and more will be present. A site with good numbers of two species of orchids is valuable.
- Thick species-rich marginal scrub and woodland belts with mature trees surround the central area planted up with Osier willows, harvested annually in blocks for fencing, and with wide mown access rides, provide a valuable combination providing a diverse **mosaic of habitats** beneficial to overall biodiversity.
- The willow (Osier) coppice is *not* a monoculture, generates only light shade and has temporary glades resulting from willow cutting, so there is a complete rich diverse ground flora under all the blocks as well as in glades and the rides.
- The very winter-wet (often flooded) heavy clay soil has developed a specific flora of a number of marsh or wetland plants adapted to the soil being inundated in winter and completely dried-out in summer.
- Common flowers present such as Common Fleabane, Hogweed, Wild Carrot and Wild Parsnip are known big pollen and nectar attractants in summer; and the flowers of these on site were well visited by butterflies, bees, flies, beetles and wasps, many of which were identified.
- The most abundant wetland plant on site is a *vast* population of Common Fleabane with golden daisy-type flowers in many *thousands* in mid-August which feed many pollinator insects.
- Specific insects were found which breed in the Fleabane, one of them a rare fly.
- A number of uncommon wild roses are present on site with a probable rare hybrid.
- Three mature Pedunculate Oaks are present on the Oxford Road margin, the largest of which was estimated to have a trunk diameter at chest height of 72cm, meaning it could be over 100 years old.
- Very good numbers of common butterflies are found, with the breeding presence of rare Brown Hairstreak Butterfly confirmed.
- Soprano Pipistrelle and Noctule bats are confirmed as using the site for foraging.
- The Willow Coppice occupies a large area of the site centre and might be assumed to be of low ecological value as a monoculture, however this would be a wrong assumption. The willow (Osier) coppice supports dependent insects, some of them (willow beetles) in vast numbers, which will provide much food for insectivorous birds.

- Willow can support a big total diversity of invertebrate species; one quote is up to 450 dependent species, which will include: bugs, bees, beetles, flies and moths.
- The amounts of **Common Fleabane** under the willow coppice are **truly extraordinary**. As mentioned, in late August the thousands of yellow daisy-type flowers open here present a short-lived stunning spectacle which makes the willow coppice look like a flower garden.
- The non-intensive rotational willow coppice management of the site centre is the best thing that could have happened here to maximise biodiversity, especially of flowers and invertebrates. Abundance of common insects is important as well as diversity. The sheer abundance of common leaf-feeding beetles on the osier coppice growth will be important as a food resource for all species higher up the food web, particularly insectivorous birds and bats. Recent decline of insect populations is causing much concern, but insect decline is not observable here.
- The Triangle habitats support and connect via mobile species (like deadwood-breeding beetles) to the Ancient Woodland Priority Habitat (Cherwell District Wildlife Site) of Stratfield Brake, the east section of which is contiguous with the southern margin of the Triangle.
- Lowland Mixed Deciduous Woodland habitat adjacent to the Triangle to the south in Stratfield Brake East is a Priority Habitat (Habitat of Principal Importance, NERC act 2006) and fulfils all the criteria for Ancient Woodland.
- The Triangle east and west margins (not hedgerows, more woodland/scrub belts) provide a thick and valuable habitat. **Scrub is the most valuable habitat for bird diversity** and will support many insects plus the marginal strips will be corridors for foraging, hunting bats. The lack of street lighting along Frieze Way for most of its length makes the marginal belt on the west side especially important to commuting bats.
- Seven fungal species were found including the rare (Nationally Red Data Listed) **Scented Bracket *Trametes suaveolens*** which always grows on dead willow wood and is found within the Osiers at this site on **eight coppice stools**.
- The Triangle habitats are a good foraging area for bats. **Soprano Pipistrelle *Pipistrellus pygmaeus*** and **Noctule *Nyctalus noctule*** were recorded. These bats are both **Priority Species (Section 41 Species of Principal Importance under the 2006 NERC Act in England** (Previously UK BAP Priority Species). The bats will be using the nearby Ancient Woodland of Stratfield Brake East for roosting as it has mature trees and plenty of standing deadwood with peeling loose bark habitat. **Further bat surveys are needed**. Moths are an important source of food for bats and these flying insects will be generated by caterpillars feeding on scrub and trees including the coppice Osiers and other willows. Currently Frieze Way has no street lights for most of its length so there is little to dissuade bats from commuting across it from the bigger Stratfield Brake western woodland block and Woodland Trust plantings.
- **161** invertebrate species so far have been identified (42 beetles, 17 butterflies, 7moths, 1 lacewing, 4 dragonflies & damselflies, 20 true bugs, 17 bees & ants & wasps, 1 sawfly, 6 grasshoppers & crickets, 30 true flies, 2 molluscs, 14 spiders & harvestmen. This is just a small range and nothing like the full species diversity of invertebrates that will be present.
- Common plants can support rare insects; this is the case for the Common Fleabane on site which when 'swept' yielded several individuals of the small rare picture wing fly (Tephritid) ***Myopites inulaedyssentericae***.

- Nearly all common species of **Bumble Bee** were recorded on site visiting the abundant summer flowers for nectar and pollen. A number of smaller solitary bees were also seen. Willow catkins are a very important food source for spring bees; both specific spring solitary bee species and especially newly emerged Bumble Bee queens building up resources to found new colonies. Spring insect surveys are much needed.
- A good range of common **butterflies** (16 species) was found on site. In addition a female of the rare **Brown Hairstreak *Thecla betulae*** was seen in September 2023 and one egg of this species was found on Triangle blackthorn in February 2024.
- There is plenty of Blackthorn around the site margins, so searches specifically for rare Black Hairstreak and more surveys for Brown Hairstreak butterflies need to be carried out by specialist recorders. **Purple Hairstreaks *Favonius quercus*** are also known from Stratfield Brake East oak trees immediately adjacent to the Triangle. **19 butterfly species** in total are noted on site or adjacent in hedges.
- **Common Blue Damselflies, Blue-tailed Damselflies, Common Darter and Emperor Dragonfly** were seen to be using the Triangle as a hunting ground to catch flies; but their breeding site will almost certainly be the nearby Stratfield Brake West constructed wetland or the canal adjacent to that. They will have crossed Frieze Way to access the Triangle for food.
- Apart from the good overall invertebrate biodiversity it is particularly notable how the abundant summer and late summer flower resource supports the needs of all vital pollinating insects that are in national decline (bees, flies etc.) **at a time when flower resource in other habitats, such as verges or meadows, is not available** (due to being in seed or cut for hay).
- Dr Webb considers there is sufficient diversity of plants and invertebrates at this Triangle site for it to be **worthy of consideration for District Wildlife Site Status**, it would be a good extension to the existing Stratfield Brake DWS. Currently the Triangle habitats and species are valuable in themselves, but they also perform a very important role in supporting and protecting the wildlife of the narrow strip of priority habitat Ancient Woodland to the south (Stratfield Brake East) which is also in the **core zone of the Proposed Nature Recovery Network for the County**. Without the Triangle as it is now, a carefully managed sustainable willow coppice, this valuable small woodland site will suffer damaging isolation.
- It has been amply demonstrated that this is a high biodiversity site. The total of all species so far found is 314 without even full surveys. There will be many more species to find.
- Dr Webb expects that a very high percentage of the plant and invertebrate species found (including most of the rare or notable ones) to be eliminated by plans for development of a football stadium and associated structures. Mobile animals like bats would be disadvantaged by having to find another feeding area.