

# Drayton Estates South

## ***Introduction***

The South Drayton Estates is a proposed housing development site in Drayton, comprising 8 to 9 ha of land between East Way and the High Street.

Animal and plant species were recorded during a period of about four hours on the Carpenter and Bomfords Estates on 27<sup>th</sup> September 2013. The Bishop Parks Estate was viewed through binoculars from the west side.

All of the land is either grazed presently or was so in the past.

The land slopes gently from north to south and southern parts of the Carpenter Estate and the central part of the Bomfords Estate are wetter, containing more wetland species.

The land comprises three Estates:

### **Carpenter Estate**

This strip of land, about 50 metres wide, is dominated by rank grass and herb species. There is evidence of former grazing and a fibreglass shelter containing straw bales, was located in the southern part of the site.

The southern part of this strip is more diverse than the north, which is dominated by Creeping Thistle and Blackthorn thicket.

There is a small dense wood on the NW edge of the strip, which was not investigated.

### **Bomfords Estate**

This strip is approximately 60 metres wide and is presently grazed by horses. A paddock was in use at the southern end. The north and mid-sections have shorter vegetation than in the Carpenter Estate, indicative of recent grazing.



Veteran Oak in Bomfords Estate

### **Bishop Parks Estates**

This land consists of rough grassland with stands of Creeping Thistle and Spear Thistle. This is presently being grazed by a small herd of cattle.

A ditch runs E-W across the centre of this land with associated mature Willows and a large Ash.



Veteran White Willow in tree group in Bomfords Estate

## ***Main Findings***

Species records are contained in an Excel file: Drayton South Estates.xls

### **Notable Trees**

An Oak tree dominates the northern end of the Bomford Estate has a measured girth of 4.44 m and a height of about 26 m.

A White Willow in the east-central part of Bomfords Estate has a measured girth of 5.40 m

The Woodland Trust's criteria for 'veteran trees' are:

Oaks: more than 3.10 m girth

Willows: more than 4.70 m girth

Hawthorn: more than 1.90 m girth



Tree group in Bishop Parks Estates

Assuming 'good' growing conditions throughout their lives, the estimated age of these two trees is 200 to 250 years. (The age estimate will increase if growing conditions have been worse than 'good'.)

The highest priority should be given to ensuring these trees get preservation orders, if they have not been designated already.

Groups of trees can be given preservation orders, when together they make up a feature of amenity value, but separately might not.

We consider that three tree groups should be awarded preservation orders for their scenic value. All of these are outlined in green in the Google aerial view, at the end of this report.

- A group of trees on the Bomford Estate including the veteran White Willow, a Weeping Willow and Crack Willows. One of the Crack Willows is partly procumbent and contains rotting wood. This is a valuable habitat for invertebrates and fungi, which in turn, are food sources for higher animals. Such rotten wood should not be removed from the site.
- A tree group consisting of Willows and an Ash, growing along the E-W ditch which bisects the Bishop Parks Estate.
- A group of Hawthorns in the middle of the Carpenter Estate.

There may be other notable and veteran trees worthy of preservation orders, not noted above.

## **Hedges**

Most of the hedges on site contain several tree and shrub species and are worth retaining in the proposed Development. Some of these, selected as of particular value, are shown in the aerial view (Google Earth) at the end of this report. Retained hedges can also be a means to provide privacy for residents and to enhance the visual character of the housing estate. There was insufficient time to

## **Plants**

No rare plants were found on site, but the diversity of species did vary from one part to another.

The southern part of the Carpenter Estate is significantly more diverse than the northern part, which is dominated by just a few species. On the Bomford Estate, (excluding the paddock), the diversity was greater and more uniform. It is thought that grazing has been beneficial here. Wetland plants, including Sedges, Rushes and Meadowsweet were found in the central / southern area, whereas in the northern part, dry grassland herb species were more prevalent.

## **Invertebrates**

Only 27 invertebrate species were recorded during the short visit. The lateness of the season undoubtedly contributed to the paucity of species.

Notably, there was an abundance of Grasshoppers and Bush Crickets of at least four different species in the grassland areas.

Three species of Gall Wasp were recorded. These are all parasitic on the leaves and acorns of the Veteran Oak.

## **Birds**

The number of birds seen on the visit was disappointing. This is not surprising, since the date of the survey was at a time of year when most summer migrants had departed and winter visitors had not yet arrived.

## Mammals

Only Rabbits were actually seen on site, though the presence of four other species was deduced from faeces and other signs.

It is very likely that bats hunt over the site and may roost in tree cavities and behind bark. No survey of suitable roost sites was made however.

## Fungi & Lichen

Four species were found. A notable fungus *Oudemansiella radicata*, the Rooting Shank, was found under the veteran Oak.

A spectacular lichen, a *Cladonia* species, with pale green wine-glass-like structures was found completely covering a fallen and rotting fence post.



## Recommendations

It is envisaged that, if this Development proceeds, it should be in sympathy with the existing surroundings with a significant proportion of existing grassland, trees and hedges retained. The provision of artificial breeding sites for mammals and birds, and the use of green roofs, and permeable green paving will mitigate to some extent, the habitat loss that will occur. A mosaic structure retaining the best wildlife and scenic areas of the existing site, softening the hard visual outlines of buildings by retained hedges, trees and wildflower meadows.

### Wildflower Meadows

Wildflower meadows have declined by 97% since the 1930s and this has contributed to the decline of bees, butterflies and other wildlife. This new development provides an opportunity to redress this decline.

It is suggested that, wildflower meadows should be located around retained trees and tree groups and adjacent to retained hedges. Wildflower meadows do not need much maintenance as they require mowing just twice a year. The hay should be removed from the site as, if left, it will rot down and encourage the growth of tall growing herbs and grasses. Wildflower meadows should have low fertility, as this encourages low growing plants and fine grasses.

### Bats and Swifts

Swifts are dependent almost exclusively on buildings for nesting. Swift numbers have declined by 38 % in the UK during the last 15 years. This is believed to be due partly to the loss of nest sites, due to building renovations blocking access to roof spaces and the complete lack of access in new buildings.

Several bat species also use human habitations for roosting and breeding. However modern buildings do not allow access for these creatures. Further information on this can be obtained from the Bat Conservation trust (BCT):

[http://www.bats.org.uk/pages/bats\\_and\\_buildings.html](http://www.bats.org.uk/pages/bats_and_buildings.html)



Bat-bricks and Swift-bricks, as roosting and breeding cavities, can be incorporated into the walls of new buildings. Several manufacturers produce these special bricks, including: Schwegler, Ibstock and Habitat.

Swifts prefer to nest communally. A tower, with nest boxes attached at the top, provides for this requirement..If Swifts are not present near to the site initially, a record of swift calls should be played during April and May to attract the birds. Once the site has been adopted, they will continue to return to breed.



Schwegler bat-brick



Ibstock Swift-brick



Ibstock Bat-brick

### Swift Towers

A well designed tower could be a central feature of the proposed Development. A number of towers, have been built in the UK and abroad, incorporating a wide variety of designs. More information on Swift Tower designs, can be obtained from

Dick Newell: [dick.newell@gmail.com](mailto:dick.newell@gmail.com)  
 Swift Conservation can also advise on Swift boxes and Swift Towers: <http://swift-conservation.org/news.htm>



Dick Newell design Swift Tower

It is envisaged that Bat as well as Swift boxes / bricks, could be provided in such a tower.

### Other Bird Boxes

House Martin artificial nest-cups, can be attached under the eaves of houses. As these birds are already present in the Village, it is likely they will be induced to nest, provided that there are sufficient flying insects, which themselves depend on the inclusion of sufficient suitable natural habitats as part of the Development.

It is quite likely that Barn Owl and Kestrel, which hunt over open areas, will use this site and adjacent land. Tawny Owl too, may inhabit the small woodland areas on site. These three species require different types of nest box, all of which are catered for by a number of manufacturers, and could be provided on the Developed site.

### Living Roofs and Walls

Any flat or low-incline roof can be used as a living or green roof, where plants that can tolerate dry conditions, can thrive. This habitat provides forage for bees, butterflies and other insects. Many birds such as Wagtails, Finches, Sparrows and Starlings will also be attracted to such areas because of the



seeds and insects they provide.

For a soil depth of 5 cm, plants such as *Sedum*, *Delosperma* and *Sempervivum* will thrive. For 10 to 15 cm soil depth, a much greater variety of drought tolerant species can be introduced.

## Moths & Lighting

Butterfly Conservation report a 40% decline of moths in southern Britain since 1968. Sadly some of the most attractive species are among those that have declined most.

One cause of the decline is probably street lighting, which attracts them at night, and interferes with breeding and foraging activities. In the RIBA publication (detailed below), the advice is:

- keep the wattage low
- only use light where needed
- use tightly sealed units so that insects cannot become trapped within the unit.

## Green Permeable Paving

It is recommended that driveways and parking-bays should be permeable to reduce run-off and flooding risk. Grassing the interstices between paving blocks provides durable, permeable and sustainable driveways and parking areas.



Further information can be found on the internet – e.g. :

<http://www.marshalls.co.uk/homeowners/view-grassguard-permeable-paving>

<http://combinedharvesters.com/ecogrid-porous-paving/permeable-car-parking/>

## Further information

The Bat Conservation Trust, in cooperation with RIBA have published a 2nd edition of the book: “*Biodiversity for Low and Zero Carbon Buildings: A Technical Guide for New Build*”. This covers many of the issues discussed above in greater detail.

See also the RIBA website:

<http://www.architecture.com/SustainabilityHub/Designstrategies/Water/1-3-2-5-SUDS.aspx>

David Guyoncourt  
Abingdon Naturalists Society  
October 2013





Veteran Oak

Group containing large Hawthorns

Veteran White Willow

Group of Willows

Group of Willows and an Ash

124 m

© 2013 Infoterra Ltd & Blinesky

© 2013 Google

Google earth