

## Ecological Summary for Land South of the Swan Development

### Wildlife Meadow

The land in question is rich botanically, the plants support an enormous number of invertebrates, and hence a range of amphibians, reptiles, mammals and birds. Although there was awareness of this, in 2019 an area of the meadow was mown, just before the Common Spotted-orchid *Dactylorhiza fuchsii* started to flower. There were more than a hundred plants in the area and this action was ecologically inexplicable and inept. Planning permission had been granted for this site subject to two conditions relating to ecology being met: there has to be enhancement and also management of biodiversity.

Some of the plants present are unusual in Kent e.g. Bog Pimpernel *Lysimachia tenella* (*Anagallis tenella*), Fen Bedstraw *Gallium uliginosum* (although not nationally threatened, **both are on the Kent Rare Plants Register**), Blue Water-speedwell *Veronica anagallis-aquaticq*, and Adder's-tongue *Ophioglossum vulgatum*. More survey work has been completed, and the Kent Wildlife Trust (KWT) believes that the area may be interesting enough to be designated as a Local Wildlife Site. It could be classified as **species-rich neutral grassland**, which is a rare habitat in Kent, only 3.4% of grassland being of this type. Countryside Properties in their ecological update (ABC Planning Application 20/00508/AS Ecological Update) have put aside a small, grassland area of the site in the south west, labelled 'Areas of most botanically diverse grassland (including calcareous influenced grassland, marshy grassland and ditch banks) retained and managed to enhance site biodiversity' (ABC Planning Application 20/00508/AS, Indicative Landscape Master Plan). **Because of its small size this area would be unsustainable** and the rare plants growing there at present would soon start to disappear. Their plan is to plant a small, new wildflower meadow, but the present ecosystem has built up over very many years and is of great interest because of the diversity of species, all suited to the terrain and the climate. In addition there is to be a detention basin sited in this area. The construction method for this is not clear, but according to the plan in the drainage technical note, it occupies a large area, so further reducing the size of the area of interest and its viability.

The problem is that in a small, fragmented area the population of each species will be small and the edges are close to the centre, which makes each species more likely to die out, and be vulnerable to disease, predation, effects of weather and disturbance, and there is no chance of recolonization from surroundings. In addition, one border lies along the access road, which means that conditions are very different here, and this will further impact the viability of the area. The rare plants are likely to quickly become extinct.

Vincent Ganley of KWT recommends an area of at least **0.8 hectares** for a wildlife site here to be sustainable. If this were realised it could be managed as a wildlife reserve and it would be a source of pride for the residents and for the village. Any area of grassland would need long-term monitoring and management, preferably by seasonal grazing, alternatively by seasonal mowing followed by raking and removal of all arisings. Fencing would be required and boards explaining the natural history interest of the reserve would enhance its value. With some limited restrictions, residents could be encouraged to enter and enjoy the area. Because there are no nationally rare species or habitats on this site, Natural England (ABC Planning Application 20/00508/AS, Consultee Comment) does not object to the DHA proposals, although within Kent its own rarities need conservation.

## Hedgerows

Hedgerows are an important nature reserve in their own right and, properly managed, can be a haven for plants and animals. It is good to see that Countryside are planning to retain the hedgerows, replanting where necessary to fill gaps.

## Streams and ditches

In some cases, ditches run along the field boundaries and streams also cross the open grassland areas. They are important for wild-life and some of the banks are of great botanical interest. It is clear that Countryside have recognised this and their plans show that most will be conserved within habitat corridors.

## Trees

Nearly all the trees on site are to be conserved, apart from those which are to be removed for construction of the new access road, and native species are to be newly planted (ABC Planning Application 20/00508/AS 020, Addendum Arboricultural Impact Assessment). However, there is a big gap in the information provided concerning the existing small woodland in the extreme south-east of the site, where there is currently a number of interesting old trees. The information box on the Indicative Plan states, 'Existing woodland retained and managed to enhance biodiversity value, fly-tipping removed' (ABC Planning Application 20/00508/AS, Indicative Landscape Master Plan). Surely this is a **key ecologically important area**; there seems to be no reference to it in the Arboricultural Impact Assessment report and it does not appear to be mapped correctly on Tree Protection Plan AIA Addendum Sheet 3 of 3.

The Kent Downs AONB (ABC Planning Information, Kent Downs AONB) are requesting the planting of more trees along the edges of ditches east-west across the site. However it should be noted that if trees are introduced along the two branches of the streams in the planned botanically diverse grassland area this would diminish the possibility of survival of several rare species.

## Monitoring and Management

A regime for long-term monitoring and management of each of the diverse ecosystems on the site needs to be planned and detailed by DHA. This includes those habitats already there and new habitats to be created. Regular monitoring must take place to inform management.

During the winter of 2020, heavy vehicles did a lot of damage around the stream banks in the meadow area which is planned to be 'the area of most botanically diverse grassland'. There is great detail in the Addendum Arboricultural Impact Assessment concerning steps to be taken to protect the trees **during the construction phase**, including advice to contractors. This should be extended to protect the areas of botanical biodiversity.

The needs of the species-rich habitats must be addressed. This means a clear understanding of the requirements of the plant communities and of their habitats, and their reliance on the hydrology of the site. Recognising what is needed for **maintaining** a viable community is of key importance, to be followed by a clear **annual management strategy**, described in a detailed Ecological Management Plan. This should include a **monitoring** regime, starting with a baseline survey, to inform ongoing management.

Without the right conservation measures the biodiversity of the site would soon be lost.

*Charing Parish Council is grateful to Jacky Langton for providing this note*