

Director of Planning
Vale of White Horse D.C.
Benson Lane
Crowmarsh Gifford
Wallingford
OX10 8ED

Dear Sir or Madam

RE: Planning Application P14/V2626/FUL Land adjoining Hitchcopse Farm, Cothill Road, Cothill

Implementation of seasonal holiday accommodation, green infrastructure and informal public open space

Case Officer: Sarah Green

From:

Dr Judith A Webb

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I am writing to very strongly object to the proposed development of 14 houses ('holiday lodges') on this greenbelt field, which had sand extracted more than 30 years ago and is now known locally as '**Cothill Pitt**'.

I do not live nearby. I do not own a dog. I am an Environmental Consultant, but my connection to this site is because of my various voluntary roles in relation to the wildlife of the area, as follows:

- Member of the **Oxfordshire Flora Group** (formerly Rare Plants Group) of the **Ashmolean Natural History Society of Oxon** (ANHSO) and involved in producing the **Rare Plants Register for Oxfordshire**. See <http://www.anhso.org.uk/>
- Recorder for the **Fungus Survey of Oxfordshire** (FSO) see <http://www.fungusoxfordshire.org.uk/>
- **Fly Guardian** within the **Dipterists Forum** for the Endangered Clubbed General Soldierfly *Stratiomys chameleon*. See <http://www.dipteristsforum.org.uk/index.php> and <http://judithwebb.weebly.com/rare-plants-and-invertebrates-monitored.html>
- **Voluntary Species Recorder for Natural England and BBOWT within Cothill NNR** (& whole of Cothill Fen SSSI/SAC and Dry Sandford Pit SSSI)
- **Voluntary Species Recorder for Thames Valley Environmental Record Centre (TVERC) on Local Wildlife Sites**

Whilst my main expertise is in the wildlife of the area, I have a view on other issues to do with this proposed development and where relevant I incorporate the views of my husband, Stephen Gerrish, who is an expert in sustainable housing design and an energy assessor.

My comments are under the following headings:

- A. Incursion on the Green Belt and countryside access issues
- B. Unsustainability of this housing development
- C. Wildlife of Cothill Pitt and links to neighbouring protected sites

A. INCURSION INTO THE GREEN BELT AND COUNTRYSIDE ACCESS ISSUES.

Green Belt

This proposed development presents an unacceptable damaging incursion into the green belt. These properties cannot be justified under the heading of 'recreation'.

Paragraph 79 of the National Planning Policy Framework (NPPF) states that "The fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the essential characteristics of Green Belts are their openness and their permanence".

The Vale of White Horse District Council (VWHDC) Local Plan Core Policy 9 also requires the maintenance of "Green Belt openness and open character." Paragraph 89 of the NPPF deals with the exceptions to the advice given to local authorities that new buildings in the Green Belt are inappropriate. None of these exceptions apply in the present case. There are no special circumstances to justify going against national and local planning policy.

There is more implied as damage to the green belt than this application. The applicant's first application put in for 12 holiday lodges. The latest application has increased that to 14. Anyone who has studied the plan will quickly see the development is unlikely to stop at 14 – there is a road that seems to go nowhere so it may be presumed it will lead to the next phase of development if this application is successful.

Access to the Wider Countryside

The applicant claims that the proposed development would increase access to the green belt and wider countryside. It would of course **remove** access to the part of the green belt which would be built on. The wider countryside is already well served by a network of paths. There is a risk that any increase in the number of people walking in this area could damage it; already the paths have been widened by the amount of use and plants trampled, resulting in the loss of some areas of bluebells in the woods.

A greater footfall to extremely sensitive wildlife sites locally like the fragile wetlands on peat of **Cothill Fen SSSI/SAC**, should be **reduced** rather than encouraged and increased. From my own observations, already greater footfall in the Cothill NNR has resulted in areas of trampled and churned peat where there should be growing vegetation. Log reinforcement of paths and installation of plastic boardwalks have become necessary to protect the habitat of the site from increasing walking traffic. It needs fewer footfalls, not more.

B. UNSUSTAINABILITY OF THIS HOUSING DEVELOPMENT

The proposed development is for 14 wooden average-sized houses (even if they are described by the applicant as 'holiday lodges – Finnish chalets'). Even if they are only occupied as holiday homes, the damage to wildlife and the damage to the character of the green belt will be the same as the construction of any other type of buildings of similar size.

The stated environmental benefits of the imported Finnish Chalets are spurious. The choice of 'green' building materials and construction methods as part of the proposed development does not change any of the key detriments associated with the development. The buildings provide no net overall environmental benefit from the proposed development: and presenting it as a 'green development' is a clear case of 'greenwash'.

In their statement the applicant quotes directly from the Artichouse (the Finnish log cabin suppliers) website: "Artichouse build from sustainable Finnish timber, planting more replacement trees than it utilises in production. It should also be noted that timber lodges absorb carbon dioxide resulting in a net carbon reduction despite transportation from Finland."

This statement is incorrect as the carbon sequestration value of the timber used to construct these homes occurs in Finland as forests absorb carbon dioxide from the atmosphere during photosynthesis. This carbon is then locked up within the timber during the building's lifetime and is released when the wood decays or is burnt at end-of-life of the houses.

The statement in the submission is therefore misleading, as the 'timber lodges' will not be absorbing carbon dioxide during the use phase of the holiday homes and will be carbon liberators at the end of their life.

The use of low carbon/zero carbon materials in aspects of the proposed construction should not be seen as an overall ecological benefit to the local environment.

Use of timber to construct the imported Finnish cabins would certainly have a global greenhouse gas benefit compared with using more traditional local materials (brick, stone, concrete). Use of timber sourced from within the UK would be better still.

However, **the local environment will suffer a net loss of biodiversity, an irreversible loss of carbon sequestration** due to land previously fixing carbon dioxide from the atmosphere now being occupied by the significant coverage of 14 concrete pads on which the Finnish chalets would sit and the additional hard standing and roadways associated with the development of the site.

'Artichouse' makes a huge range of prefabricated wooden buildings in Finland. We only have the company's word that the 'slow grown' wood is harvested sustainably – no independent accreditation.

In the building design double-glazing is emphasised, because almost all customers understand the benefits. Most do not understand that the walls, floor and roof are more important in terms of heat loss and no mention is made of insulation levels. We cannot take Artichouse's word for anything. Their products are aimed at the rich, not the environmentally aware.

These 'lodges' are up-market. They have very large area of glazing on one side. These are clearly intended by the designer for passive solar gain in the winter. The upstairs bedroom is on a mezzanine floor and the area adjacent to the glazing is a full height open space extending to the roof.

If you look at the site plan, you see that the **orientation of the lodges completely ignores this design feature**. Such a large glazed area facing east through north to west will increase annual heating costs. Modern windows U-value is around 1.6 W/m²K, whereas walls have to be at least as low as 0.28 W/m²K – much better than windows. If there is no passive solar gain, then this large and inefficient heat loss surface becomes a complete liability in the heating season.

If you have passive solar gain, you need good insulation and air-tightness to take advantage of it. There is no information about that.

They are likely to be heated by electricity (gas will require a statutory annual inspection which will be the responsibility of the landlord, who will not want the cost of administering this requirement – most developments of flats have electric heating for this reason).

This is in no way an environmentally-friendly, sustainable, development, unless only occupied between May and October.

C. WILDLIFE OF COTHILL PITT AND LINKS TO NEIGHBOURING PROTECTED SITES

The reader is referred to the Ecology Report of Dr. Bob Eeles on this site, which draws together all wildlife information currently available on Cothill Pitt.

The applicant relies on data and conclusions of the consultants acting on behalf of Ecology Solutions Ltd (2014). Their report is, in my view, totally inadequate and the conclusions therefore are highly misleading. Ecology Solutions Ltd. **significantly underestimates the importance of the site to wildlife**. Some of the significance will be discussed further below. Because Ecology Solutions have not identified the important wildlife on site, the proposed cutting regime would actually be detrimental to the invertebrate biodiversity now known to be present.

My view is that this site (a potential Local Wildlife Site) is so important for wildlife, that any application should not be considered without a formal **Environmental Impact Assessment**.

This proposed development lies within a **Conservation Target Area (CTA)** known as the **Oxford Heights West**. This area is designated for the importance of its dry sandy soils of the Jurassic Corallian limestone and associated wetlands.

The applicant maintains this is a 'brownfield' site. He also mistakenly claims that the site is of limited ecological importance (Supporting Statement 7.1.4). The applicant's claim that the development would improve biodiversity is unfounded.

In my view nothing could be farther from the truth that this site is of limited ecological importance. This is not a 'brownfield' site. It once was, immediately after sand extraction, but in the intervening 30-40 years it has 'greened-up' and now is a now a very high value ecological value site because of the dry, sandy, warm conditions which have led to 'lichen heath' and multitude of flowers in both the short turf and longer meadow-type areas.

The habitat mosaic that has developed has a conservation importance in its own right and it is classified in the conservation system as **Open Mosaic Habitat On Previously Developed Land** - abbreviated to '**OMH**'. Nothing the developer can do in his 'site improvements' will in any way compensate for the wildlife losses he will occasion by this development and the elimination of the OMH by housing, access roads etc.

OMH can have a very high wildlife value, particularly for invertebrates.

This range of dry, sandy, warm vegetation types is similar to that found in nearby SSSI sites of Hitchcose Pit and Dry Sandford Pit, both managed by BBOWT and Frilford Heath Ponds and Fens SSSI.

Cothill Pitt is currently being considered for designation as a **Local Wildlife Site (LWS)** based on species data recorded by local ecologists during 2014. All sites that are candidate LWS are treated as if they were already LWS in connection with planning applications relevant to the site.

The following seeks to illustrate the wildlife value of the site from my personal knowledge:

PLANTS

My personal observations of the plants on site reveal a wealth of common-to-scarce flowers. Particularly attractive and much valued by members of the public are the numbers of **Bee orchids *Ophrys apifera*** and **Pyramidal orchids *Anacamptis pyramidalis***. A variety of successional stages are present from bare sand (occasioned by rabbit diggings, dog walking and rabbit grazing) to moss/lichen heath to short flowery turf to longer flowery grassland, rank grassland and young scrub.

Due to the length of time since sand extraction and the effects of leaching, the flora presents a very interesting mixture of plants that prefer calcareous conditions (Common rest harrow, greater knapweed, wild carrot) with ones that prefer more acid conditions (e.g. sheep's sorrel) in the more leached areas.

Rare Plants on site

My recording with relevance to the work of the Oxfordshire Flora Group (formerly Rare Plants Group) of the Ashmolean Natural History Society of Oxon (ANHSO), which is producing the **Rare Plants Register (RPR)** for the county, reveal the following dry sandy soil species present in 2014 which are on the Draft Rare Plants Register for Oxfordshire: **Common Cudweed *Filago vulgaris***, **Corn Chamomile *Anthemis arvensis***, **Knotted Clover *Trifolium striatum***, **Squirrel tail Fescue *Vulpia bromoides***, **Mat Grass Fescue *Vulpia unilateralis***, **Silver hair-grass *Aira caryophyllea*** (six species).

Additionally **Corn Chamomile** has national conservation status of Endangered. **Weasel's Snout *Misopates orontium*** was historically recorded on the site in 1977-1979 (TVERC records) and may still be present in an area not yet searched or in the seed bank. This is both on the Oxon Rare Plants Register and it has national red list status as Vulnerable.

One example of the effect of this proposed development on the rare plants present is the fact that the biggest population of the Oxon RPR plant **Mat Grass Fescue *Vulpia unilateralis*** is exactly under the area proposed for the 14 'lodges' and the road (to nowhere?) going north by them. It would be lost in this development.

Some other plant species at Cothill Pitt which were considered to be nationally common and of 'Least Concern' have recently been reassessed and, due to population declines, have been given higher conservation status in the new '**Vascular Plant Red Data List for England**' published Sept. 2014. Examples present in the Cothill Pitt are **Carlina thistle** *Carlina vulgaris* (now Near Threatened) and **Field Scabious** *Knautia arvensis* (now Near Threatened).

A survey in July 2014 recorded 22,700 flowering Field Scabious plants producing potentially as many as 100,000 individual blooms throughout the flowering season. This population at Cothill Pitt is thus probably amongst the largest for any site in the county, and there are important invertebrates that depend specifically on it.

Undoubtedly more plant species remain to be discovered in Cothill Pitt with more recording effort. In particular the annuals of early spring will have been missed so far and there may be rare early-flowering species present. This development may eliminate species before they are even discovered.

FUNGI

I am recorder for the local Fungus Survey of Oxfordshire (FSO - a local group of the British Mycological Society). In a 2-hour visit to Cothill Pitt in November I observed 40 species of fungi and two lichen species. Lichens are part fungi. In the very short turf and bare sandy soil areas there are good amounts of the leafy plates of green-grey **dog lichen** *Peltigera lactucifolia* and the branching tufts of *Cladonia rangiformis*. These areas are developing examples of a valuable habitat typical of such dry sandy soils and mature sand dunes known as 'lichen heath'.

As to fungi proper, many common species are present and no rare species found, but the most conservation-worthy are the uncommon special species of nutrient-poor grasslands: **wax-cap toadstools** (*Hygrocybe* sp.) **pink-gill toadstools** (*Entoloma* sp.) **fairy clubs** (Clavarioids) and **earth tongues** (*Geoglossum/Trichoglossum* sp.) of the grazed very short turf and lichen heath areas. An assessment of the species number in these groups is a well-known method of assessing the fungal conservation value of a grassland site.

Present on the site, from only one visit, are: four waxcap species, one pink-gill, one earth tongue and three species of fairy clubs (clavarioids), which makes the assemblage **at least of local importance for such grassland fungi**.

It takes many years recording to get anywhere near a full fungal species list for any site due to the erratic nature of fungal fruiting. With further recording, I consider it very likely the site eventually will turn out to be important specifically for the fungi of calcareous to acid low-nutrient sandy soils.

INVERTEBRATES

Recording of invertebrates over the past 9 months has revealed a wealth of species and the ecology report of Bob Eeles clearly explains the importance of the diversity so far discovered. **However it should be understood that the known species will be just the tip of a very large iceberg of invertebrate species actually on this site** and it will take several years of recording to have any idea of the true biodiversity and importance of the species present, which are likely to contain many typical of sandy soils in a coastal situation or the dry soils of the Breckland area of East Anglia.

Some invertebrate groups, like spiders, bugs and ground beetles, have not been properly studied at all. Only bees and wasps have had anything like an adequate survey (but for summer months only) and here the preliminary total of 91 species with several Notable/Nationally Scarce species **puts Cothill Pitt in the same league as other nearby SSSI sites** conserved partly for the biodiversity of bees and wasps present, such as Hitchcopse Pit and Dry Sandford Pit.

From the viewpoint of the big and obvious invertebrates, any site that has uncommon things like glow-worms, great green bush crickets, stripe-winged grasshoppers, plus the clouds of common butterflies and the red-listed **small blue butterfly *Cupido minimus*** actually breeding on site, is worthy of protection in entirety just for wildlife. No fragmentation by development should be allowed.

A plant species of particular importance to pollen- and nectar-feeding insects on site is the Field scabious, *Knautia arvensis*. I have personally observed the large numbers of the Red Data Book **large scabious mining bee, *Andrena hattorfiana***, and the Nationally Scarce **Brassy longhorn moth, *Nemophora metallica***, which depend entirely on Field scabious. Their populations at Cothill Pitt are probably amongst the largest for any site in the county.

One of my specialities is the study and identification of flies (Diptera). The yellow and black (wasp-mimic but harmless) **Clubbed General Soldierfly *Stratiomys chamaeleon*** is designated **RDB1/Endangered**. The Cothill Fen SAC/Dry Sandford pit SSSI is its **only English site** and it is high on the list of '**Fly species at high risk of extinction in England**' being drawn up at the moment by the charity Buglife for Natural England. Only two other national sites for it exist anyway outside England (one in Wales, one in Scotland).

More adult Clubbed General Soldier flies were seen this summer nectaring on parsnip flowers in Cothill Pitt than I have ever seen in the nearby fen SAC during my last three years' research investigations on this species, for which I am 'Fly Guardian' within the Dipterists Forum. See <http://judithwebb.weebly.com/rare-plants-funqi-and-invertebrates-monitored.html>

It is an insect with a high dependence on nectar as an energy source from flowers in the Apiaceae (hogweed, angelica, wild parsnip) to complete its life cycle (it has aquatic larvae in fen pools) and there is a shortage of such flowers in the breeding area at Parsonage Moor/Cothill SAC, so it flies out into the wider countryside in search of them. Hence **Cothill Pitt wild parsnip flowers may be extremely important for the success of the breeding population of this Endangered insect in the nearby SAC fens**. The biggest population of wild parsnip used by the Clubbed General Soldierfly is in the north-east corner of the Cothill Pitt site, immediately under an area scheduled by the application for destruction for chalets, a 'road to nowhere' and an unnecessary excavation for a pond.

OTHER ANIMALS – MAMMALS, BIRDS, AMPHIBIANS, REPTILES

The reader is referred to the Ecology Report of Bob Eeles and I endorse all his comments on these groups in regard to the importance of Cothill Pitt.

Links to neighboring wildlife sites

The finding of this very rare clubbed general soldier fly of the fens on this site illustrates clearly the importance of Cothill Pitt in support of the biodiversity of the designated wildlife sites around it (Cothill fen SAC, Dry Sandford Pit SSSI, Hitchcopse pit SSSI, Frilford Heath ponds and fens SSSI, Barrow Farm fen SSSI, Gozzards Ford LWS).

Winged invertebrates, mammals, birds, amphibians and reptiles will be moving between these sites freely, enabling important genetic exchange and re-population, if there should be any local extinction. Cothill Pitt is most likely an essential part of the network of protected sites within this CTA. Allowing this development would damage its important role in the support of other sites.

Safeguarding the site from inappropriate development would exactly accord with the stated aim of the draft Vale of White Horse Local Plan 2031 to protect biodiversity: "Local, national and international wildlife designations will need to be protected and improved where possible through enhancing, restoring, expanding and linking key wildlife habitats and species populations."

In conclusion, this site (a potential Local Wildlife Site) is so important for wildlife, any application should not be considered without a formal **Environmental Impact Assessment**.

The current application should be refused for all the reasons discussed above.

Judy Webb 18.12.2014