

Stat 1 Should be removed because of the uncertain and highly likely damage to a scheduled biodiversity site with international cultural significance

Our responses need to be submitted on the official form found at

http://www.southoxon.gov.uk/site/default/files/COMMENT%20FORM%20FOR%20PRINT_0.docx

Or electronically via <http://survey.southandvale.gov.uk/s/LocalPlan2034/>

2 What we will lose

The Sidlings Copse and College Pool SSSI is designated nationally as being important for four reasons:

- a) cultural value;
- b) rare and scarce species; and
- c) rare habitats, and
- d) the contribution of the site to the range (area of the England) where the species and habitats are found.

The site have unique value together because of the combination of habitats they contain.

The Conservation Target Area (CTA) around the site is vital to enable our wildlife be resilient to Climate Change, and SSSI play a vital role in its effectiveness.

2a/ Loss of Cultural Value; international, national, regional and local impact

Losing these rare habitats and species, and flanking the reserve with an urbanised County Park with high recreational use will degrade the SSSI' cultural importance: The site are remnants of our natural landscape, uniquely combining five rare habitats in one landscape, in a rural setting.

In terms of international and national cultural value, famous historical figures, such as the herbalist Gerard, Ashmole of Ashmolean fame in the 17th Century and Druce (he published one of the first British Floras in 1930) recorded wildlife in the site natural habitats. Ref SSSI citation <https://designatedsite.naturalengland.org.uk/PDFsForWeb/Citation/1000378.pdf> .

For some wildlife this is the first place in England that they were found and described. Nationally there are few (if any) SSSI with all these habitats next to each other.

Regionally the cultural value of the SSSI is unique in the way they bring together Acid grassland, heathland, calcareous grassland, two types of ancient woodland, scrub and base rich fen in an

attractive 'natural' landscape not found anywhere else. The people of Oxfordshire have enjoyed the site on an occasional visit as a rural refuge of natural landscape, to see the rare wildlife and also more common species now becoming scarce. All of this will be lost.

There are only 7 SSSIs in the South Oxfordshire District Council outside of the Chilterns, and this is one of the largest. If it is degraded and the natural habitats lost the Council's Area will become even more of a desert for wildlife outside the Chilterns, and its inhabitants have little idea of the historic landscape.

2b /Loss of rare, scarce and protected species; national, regional and local impact

Degradation of the SSSI would impact the national population levels and connectivity between populations and therefore survival chances of many species. The site's contribution to viable populations is via both additional numbers and connecting up with other sites with the species. The site is important for 11 species ('Priority') subject to National Action Plans because they are in severe decline and threatened with extinction. They include birds, butterflies, fungi and moths. The SSSI is also designated for many scarce species and its diverse fungi flora. All are in decline and of conservation concern. The site has value for possible re-introduction of rare species as long as the habitats are not further degraded.

For Oxfordshire the site is very important for species conservation. For example it is home to nine plants on the Oxfordshire Register of rare and scarce plants. These species are considered threatened with extinction in Oxfordshire. They are Early-hair grass, Silver hairgrass, Bog pimpernel, Black Bog rush, Brookweed, Herb Paris, Green-flower Helleborine, Common Heather (*Calluna Vulgaris*), Marsh Helleborine.

In the South Oxfordshire DC area the SSSI is the only site for Wild Liquorish, Brookweed and Black Bog Rush, and is the only site outside the Chilterns for a number of plants including Herb Paris and Large Thyme (both very susceptible to trampling).

The site has not been systematically surveyed across all types of wildlife; many more rare and scarce species particularly invertebrates are likely to be present considering the habitats and history of the site- a commissioned survey would find them. No additional surveys have been done before deciding on policy **Strat 13**, leaving uncertainty about what is about to be lost.

2c/ Loss of rare habitats, and rare combination of habitats; international, national, regional and local impact

Losing the habitats here would impact national action plans for biodiversity, and greatly reduce the diversity of wildlife to be seen in the SODC area (making one habitat extinct in the area), and impact significantly conservation of rare, scarce and less common wildlife, much already in decline nationally and in Oxfordshire. The habitats have also been identified at risk at a European level, with the UK promising to take action to preserve them.

The biodiversity value of habitats complements that of individual species; they have a rarity in themselves, but also provide the physical conditions and the other species (often less rare) that

provide food, micro nutrients, physical structures and microclimate conditions for rare species to survive.

The loss of the habitats on the SSSI would have an impact on the national biodiversity resource. All the 7 habitats at the SSSI is designated 'Priority Habitats' because they are rare and considered under threat of serious decline at a National level, with National Action Plans to stop further losses. The SSSI value is even greater because all 7 habitats are found close together. This increases their value as specialist species use more than one habitat for their life cycle. At the simple level of percentage of habitat area, the fen is a significant part of what is left of this habitat nationally; there is only 19ha left in the UK of the type of fen (M13 type).

For Oxfordshire there are only 5.9ha of Lowland Heathland left, of which 10% is at the SSSI; and only 40ha of Lowland Acid Grassland of which 8% is at the SSSI. At the SODC level, the site has 100% of the Alkaline Fen which would therefore become extinct from the area (though there is a restoration site at Spagnam fen), and the site has 16% of the Lowland Oak with hazel understorey woodland and 16% of the acid grassland found in the SODC area. The type of calcareous grassland would become extinct in the South Oxfordshire area are if lost here.

2d/ Loss of species and habitats in this location; national, regional and local impact

The degradation of Sidlings Copse and College Pool SSSI would have a national impact because of the loss of species and habitats and habitat combinations **in this location**. The series of SSSI were designated nationally since the 1950s as the minimum site to keep the natural spread of species and habitats. Biodiversity conservation has as an aim to keep the natural spread of locations where species and habitats are found. Conservation is failing if the range where species or habitats are found declines significantly- for example Nightingales are now just found in Southern England from Hampshire to Kent.

With the collapse in wildlife populations and habitat areas in the wider countryside since the 1950s, SSSI now play three new important function **based on their location**:

- providing key resource for species that need large territories and were once common in the wider countryside
- acting as a local reservoir for recolonization
- providing steppingstones for species changing their range in response to climate change

Degrading the habitats of Sidlings Copse and College Pool would leave a large gap in the range (distribution) of many species and habitats, and would be completely counter national policy on helping wildlife build resilience to climate change. To assess the full impact we would need comprehensive surveying of the species across the genera (invertebrates, plants etc). Conservation bodies have not carried out extensive surveys of the SSSI because their designation brought the assumption they would be safe from harm.

2e/ Reduction in the effectiveness of the Conservation Target Area; national, regional, local impact

We will lose much of the function of a nationally protected area which is a priority for habitat management, enhancement, restoration and creation.

In seeking resilience to Climate Change, and responding to the collapse of wildlife in the wider countryside, the Government has protected areas identified as ecological networks and 'safeguard areas' (NPPF para 174b).

Oxford Heights East Conservation Target Area (CTA) includes the SSSI and land to the North and West. For four of the protected habitats, the SSSI is the only location in the CTA where they are found, and the loss of the habitats would remove the source of the non-plant species needed to colonize any restored or created habitat. As the CTA is adjacent to the allocated housing site, it would suffer the same impact on habitat creation and management- recreational pressure and restriction of vital operations such as grazing.

3. The threat

3a/Significance of the biodiversity damage

The threat posed by the allocation of land for housing under policy Strat13 to the SSSI and the CTA is significant. This is because of the proximity and size of the development compared to the SSSI size, fragility, narrowness and need for grazing. Additional factors include the new Barton Bypass, increased access via the new Country Park and green access corridors, and removal of Green belt protection from housing planning permission adjacent to the SSSI and the base-rich fen.

Policy **Strat 13** allocates a 150 ha site to the south of the Sidlings Copse and College Pond nature reserve for 1,100 houses, and takes the land out of the Green Belt. The proposal also includes a new Barton bypass that will see significant flow of cars, diesel lorries and vans within 500m of the reserve. The site is proposed to meet Oxford's portion of the Oxford Growth Deal housing target, but is not required if the other proposed site are allocated too.

The habitats and rare plants and animals are particularly vulnerable; compared to council mown grass or a patch of nettles they very susceptible to trampling, dog faeces, air pollution, importing of garden seeds on footwear, fires, and removal of dead wood for wood stoves. (See English Nature 2005 "Dogs, access and nature conservation, Report no649)

Examples of the vulnerability of habitats include:

- Heather and acid grassland are damaged at relatively low levels of trampling. 200 to 400 passages reduces vegetation cover by 50%, and 400 to 600 passages by 80%. That figure is not a 'per year' figure, it is based on actual number of passages. The vegetation grows back slowly if it is protected and trampling stops. With no protection, the path goes to bare earth. On steep slopes (found on the reserve) the effect of trampling is worse.
- Lower levels of trampling still damage biodiversity. Research shows that only 10 tramps a month over a habitat can lead to a loss of the vegetation litter (dead material) and greatly affect invertebrates.
- National research suggests that nitrogen deposit from the air (mostly through NOx) is getting near to tipping levels for lowland dry heath at 12kg nitrogen per ha per year and not far from the threshold level for acid grassland (15 kg), and calcareous grassland (20kg). The alkaline fen is also sensitive to nitrogen levels. Any additional nitrification leads to total loss of the habitat.

These impacts interact and greatly increase the level of harm: For example plants stressed by high nutrients from dog faeces and air pollution (from the new nearby Barton bypass) are more

susceptible to trampling, the resulting gaps are ideal for exotic non-native plants to grow. Lack of grazing will eventually result in the loss of the open habitats- acid grassland, calcareous grassland, heathland and the base-rich fen.

Because of the small size of the area of habitats, and that shape of the areas are long and narrow, the edge effects of pollution and disturbance by visitors is going to be over the whole area. Published studies indicating damage to habitats from recreational pressure are based on large blocks of habitat where the impact is seen at the edges (400m from access points for heathland and woodland). Here all the habitat block is in effect at the edge.

The size of the development (950 houses on the nearby part of the site) with improved access to the Countryside will mean the recreational and pollution impact will be large. Accurate modelling based on recorded behaviours, access and location of housing could provide sound estimates. However we can have some idea of the size of the threat by looking at dog faeces enrichment, and trampling:

- It takes only 10 dogs a day defecating in the 5ha of open land to deposit in a year 8.5kg per ha of available nitrogen, more than enough to take the habitats over the tipping point.

Dogs defecate within the first 800m. Based on dog ownership and dog toileting trips about 175 dogs from the development are within 800m of the reserve and likely to use the reserve. This excludes other owners driving into the estate and up to the Country Park to walk their dogs on the reserve. Based on figures for urine and faeces production and pick up rates the nitrogen deposited is between 1,488 kg and 2,463 kg per year. Using the lower figure if **just 6%** of that was deposited on the open land of the reserve (5 ha.) that would be 8.5 kg per ha. per year. Research shows that dogs defecate within 10m of their owners, and regular users frequently use short cuts off official paths so it is not unreasonable to assume wide deposition across the open land.

- Using an estimate based on simple assumptions (including more than one entrance point and a relatively even distribution of trampling) we can get an idea of the scale of impact; a starting point for detailed modelling. Our estimate is the reserve will get **68 trampling passes a year per metre square**. The actual rate is likely to be much more unevenly distributed and biased to the vulnerable open habitats, and the fen which is closest to the development. The trampling will soon pass the level to strip vegetation by 50 to 80%.

This estimate of the number of walks into the reserve by new inhabitants, based on sports and leisure data, is around 15,000 visits a year. This is probably an under estimate given the improved access to those outside the development. If visitors do on average walk of 1,000m in the reserve (halfway into the reserve and back) and we have everyone doing a different route, a total of 15,000,000 metres will be walked. Divide this by the area of the reserve (22 ha., times 10,000 to convert to square metres) of 220,000 square metres, you get an average of 68 passes (single episode of trampling across the vegetation) for each square metre, every year without respite. Obviously those parts of the reserve beyond 500m from the entry points would get progressively fewer passes, however it is likely that people will access the reserve from more than one spot, spreading the trampling more evenly. The trampling rate is likely to be greater on vulnerable open grassland and heath habitats because people will keep to the more open areas.

Any hope that development will be kept away from the SSSI is not backed by the policy **Strat13**. The concept map is just illustrative, and taking the fields by the SSSI out of the green belt makes it possible to apply for planning permission to building right up to the nature reserve.

The development will also greatly impact wildlife's response to Climate Change by making the CTA area ineffective with the loss of Priority Species and habitats to recolonise areas from, and the disruption of management for restoration and creation of habitats for the priority species. (See NERR063 Natural England Research Report 2016 "Is the management of local wildlife sites affected by the urban fringe?")

3b/ Residual impact still significant after 'avoid, mitigate, compensate' hierarchy

The development will cause Air pollution and recreational damage and therefore have a significant biodiversity impact of national and possibly international (for cultural reasons), But it is likely that the SODC and the developers will argue they can be mitigated, or compensated off-site leaving only a residual negative impact that is acceptable.

The issue of avoiding the damage is- are there nearly as acceptable places to provide housing for the Oxfordshire Growth Board Region; its self-evident that there are very likely to be since the Growth Board has identified 36 site, of which only a few have been selected by Councils in the County. See below for more details.

With reference to mitigation, the writer of the Council's Background Site Selection Report says that the recreational impacts cannot be mitigated. There are many reasons to concur with the writer of that report, not least the inappropriateness and cost of trying to exclude the public, or to divert them. Any Buffer zone is likely to make the development uneconomic, removing a significant area set for housing, and would not be based on extensive research. There is no mention of the air pollution impact, which could be considerable because of the new Barton Bypass.

If we assume that mitigation is not possible that leaves compensation off-site.

Compensation elsewhere is not possible because of unique features of the SSSI:

- The CP&SC SSSI brings together 5 rare habitats not found together or restorable together on any other site nearby. As a result:
 - Species using more than one habitat will be lost.
 - The national series of SSSI will be significantly harmed because of the function of representing the distribution of these habitats together.
- The cultural importance linking the site to Gerard, Ashmole and Druce.
- The cultural value of all 5 types of semi-natural vegetation together

In addition compensation outside the Oxford Heights East would not compensate for the loss of representative habitats for this area of Oxfordshire. A search for potential site would be needed and availability assessed. Local knowledge indicates that such a site away from the Bayswater Brook development site does not exist.

Also the SSSI include irreplaceable habitats – ancient woodland and plantations formerly ancient woodland (irreplaceable as stated in legislation and the NPPF planning policy). You cannot compensate for the loss of irreplaceable habitats – by definition! Significant damage or loss of irreplaceable habitat where it results from development if only allowed where there is an overriding national interest and the development cannot reasonably be sited elsewhere. Neither condition for allowing development is applicable here.

Compensation for some of the individual habitats within the same natural area would not be possible in Oxfordshire. In relation to dry sandy heath and acid grassland, the nearest reserve is Shotover Country Park where managers have failed to establish grazing to maintain habitats, and have not restored any significant area of habitat because of high visitor numbers.

Finally, compensation schemes have a poor track record. Research on creation and restoration projects shows that they are of uncertain effectiveness and therefore compensation is still likely to leave an unacceptable residual impact. The dependence on very specific conditions for calcareous fen, and the importance for all the habitats of the associated microfauna and flora and seed bank.

To conclude, the residual harm after mitigation and compensation is likely to be significant and therefore the development should not go ahead unless of overriding national importance- which it is not since SODC have claimed the choice is to supply the 5 year land supply.

How Strat 13 is unsound

1 The evidence presented to SODC shows that it is highly likely there will be a nationally significant impact on biodiversity and cultural value if **Strat 13** stays in the Local Plan, including wildlife's ability to adapt to climate change.

- This is in SODC's own Site selection Background Paper (See ref http://www.southoxon.gov.uk/ccm/support/dynamic_serve.jsp?ID=994974784&CODE=79DBF26D35774E3F413F28278F0D2CB1 page409

p409 "this is considered a high-risk allocation from an ecological perspective"

and Natural England submission in previous rounds of consultation. The Background paper includes saying it is unlikely to be possible to mitigate (reduce the impact's significance) or adequately compensate (provide biodiversity improvement elsewhere equal to that remaining after mitigation).

- Tell the Inspector, from your own knowledge, experience and values:
 - how you value the cultural history and wildlife of the site,
 - you want to hand down to our descendants the spread and range of wildlife we have now
 - You consider the site irreplaceable because of its history and unique combination of habitats and the lack of evidence that the habitats can be recreated

5.2 Before deciding on policy **Strat 13** SODC have not followed the evidence in the background paper and have not carried out the proper hierarchy of decision-making

- SODC should have done a proper assessment and decision making because of advice they have received and the NPPF:
 - Background paper says **do not allocate the site until proper research and review** ref Strategic Site Selection Paper p409). The site has been allocated before the review is done. See also the Head of Planning's report to Council saying that there was insufficient

evidence on the impact on Ecology to allocate the site:

<http://democratic.southoxon.gov.uk/documents/s15338/2018-12-03%20Scrutiny%20-%20draft%20report%20Local%20Plan%20Reg%2019.pdf>

“23 g. Land north of Bayswater Brook for approximately 1,100 homes: i. There have been some helpful suggestions from Oxfordshire County Council on potential transport mitigations needed for this site: 1. A new road connection from the site with the A40 at locations to the east and west of the strategic allocation; 2. Significant enhancements to existing junctions at Oxford City; ii. There is a need for more evidence on ecology; iii. There is significant risk about the ability of us being able to demonstrate the deliverability of this strategic allocation.”

- The policy Strat 13 is against national policy (mostly laid out in the National Planning Policy Framework) (NPPF) which says
 - SODC should refuse development where a SSSI’s biodiversity value is likely to be significantly harmed after mitigation and compensation. SODC has not carried out a study to assess the harm. They have not assessed the residual impact after mitigation and compensation. SODC has proceeded to allocate the Bayswater Brook site applying wrongly the BIC process which can only be applied after review of how to Avoid, Mitigate, Compensate, and a judgement that compensation is possible and sufficient to leave a residual non-significant impact. SODC has done none of those steps.
 - SODC, according to the Rio accord should apply the precautionary principle, in the face of difficulties in assessing the significance of the impact on biodiversity of policy Strat 13, they should not allocate the site for housing.
 - Local Plans and local authorities in assessing planning permission should protect Priority habitats, Priority Species and areas such as the Conservation Target Area that provide protection to areas where wildlife will need to move to protect against climate change. Neither the SA nor the Strategic site selection paper have assessed the impact of the Local Plan and policy Strat 13 on biodiversity adaptation to Climate Change, and the impact on the Oxford Heights CTA. The overall assessment by the SA of the Local Plan is there is uncertainty with regard to biodiversity that makes a full assessment impossible.
 - SODC needs to explain why they have ignored evidence and professional advice. Their explanation is that they did not like the evidence they got so they asked their own (not independent) ecologist to come to a different opinion, an opinion that what not been subject to scrutiny of consultation, has not been published and is likely to be wrong
 - SODC should not allocate the site because they have insufficient evidence that the requirements in the Local Plan under Strat 13 allocating the site are deliverable. Since a Strategic Site is by definition essential to the Local Plan, this leaves the whole plan not ‘sound’. Biodiversity considerations should see rejection of the site. Because SODC has not shown the site can be

developed and meet legal and policy requirements to not harm biodiversity, the site should not be allocated.

5.4 The Site Selection process is inconsistent and too limited to have assessed avoiding damage to the Sidlings Copse and College Pool SSSI and its priority habitats and species.

- the Site Selection in the SA only compared two scenarios that would meet the Growth Board Housing Need, and did not actively seek options that would avoid the damage to the SSSI by excluding selecting Bayswater Brook
- The SA explicitly excluded a site for its significant biodiversity damage (Reading Golf Course), on the basis of impact on Priority Species and Habitats but failed to do so for Bayswater Brook Site- without explanation.

5.5 Policy **Strat 13** is not *effective* because:

- It is uncertain and highly unlikely to meet National and other Local Plan policies and objectives.
- SODC is not following the NPPF requirement that the Plan needs to be evidence led, and applied the Precautionary Principle established in international treaties. SODC has not shown that it has enough evidence that significant damage will not occur or can be mitigated or compensated.
- **Strat 13** allocation of the site for Housing has a high risk of not being delivered because of biodiversity impact
 - SODC has provided no evidence that its conditions (called 'requirements' in policy Strat 13) on any future planning permission are feasible and therefore the development may fail to get planning permission.
 - The site is thus highly marginal and vulnerable to a range of cost escalations, and biodiversity is one.

The viability assessment has a mistake which it means it overestimates the robustness of the viability of the site. The wrong figure was put in the 'sensitivity' table for the section 106 infrastructure payments (mostly the new Barton Bypass)- £4 million instead of £55 million (which the Local Plan Infrastructure Plan says could be between £55 mi up to 70 million). The total estimated profit is £4,807,395, but the new road has a £15 million margin of error on the estimates. See pages 41/45 and 45/45 of the Financial Viability Assessment Report Appendix 6 'Residential Appraisals' (pages 265 and 269 if looked at in Adobe reader)

http://www.southoxon.gov.uk/ccm/support/dynamic_serve.jsp?ID=993457572&CODE=F0B25C0F31965D9ADD26E48CB65700A6

- The Viability assessment would be invalid if
 - mitigation measures reduced housing numbers (for example a buffer zone of 500m would remove 270 houses, based on the Concept Map)

- Compensation was needed that recreated the habitats together and nearby. The cost would be in the millions, much more than the £100,000 in the Viability Assessment

- The new Green Belt Boundary in **Strat 13** makes it possible for highly damaging housing to be built right next to the wildlife reserve, contrary to other policies in the Local Plan. The proposed new boundary of the Green Belt releases land adjacent to the SSSI for development.

- **Strat 13** allows nationally significant damage to biodiversity to enable a local housing development, a balance of local social and economic need overriding national environment and social benefit, counter to national Policy. The housing is not even required to meet the locally assessed housing need for the Oxfordshire Growth Board target.