

Submission on Planning Applications Merton 21/P2900, Wandsworth 2021/3609 at Wimbledon Park Golf Club, SW19 7HR.

Dr D.G. Dawson, September 2021

I am a professional environmental scientist. I have been working on the history and biodiversity of the Wimbledon Park heritage landscape for many years. Before retirement, I was joint head of the Greater London Authority Environment Section. I worked on biodiversity in planning for London Boroughs for some 33 years and was responsible for developing the London hierarchy of Sites of Importance for nature conservation.

The application

These are objections to a planning application to the London Boroughs of Merton and Wandsworth for a: "Cross boundary (merton/wandsworth) hybrid planning application (comprising part full permission and part outline planning permission) for expansion of the all england lawn tennis club grounds onto wimbledon park golf course with the introduction of new tennis courts, tennis related infrastructure and new buildings. Full planning permission for the provision of 38 grass tennis courts and associated infrastructure, comprising of the re-profiling of the landscape and the removal, retention and replanting of trees; provision of 7 no satellite maintenance buildings; the provision of a boardwalk around the perimeter of and across wimbledon park lake, lake alterations (including lake edge, de-silting & de-culverting), highway works to church road; new pedestrian access points at the northern and southern ends of the site; new vehicular access points; and the creation of a new area of parkland with permissive public access. Outline planning permission (with appearance, means of access, landscaping and scale reserved - layout only considered in detail) for the erection of new buildings and structures, including an 8,000-seat parkland show court incorporating a qualifying player hub, guest facilities and associated event operational facilities; a central grounds maintenance hub and 2no. Players hubs. An environmental statement has been submitted with the application under the town and country planning (environmental impact assessment) regulations 2017"

Biodiversity

These submissions are made to object to the application proposals because they fail to achieve a net gain for biodiversity as is proposed in the Environment Bill, currently before Parliament. The application should be refused because no net gain is demonstrated.

I put my objections first and follow this with a detailed examination of the claims made in the relevant chapters of the Environmental Impact Statement. References are made to the numbered sections, tables, figures and paragraphs of the chapters of the EIS.

Objections

The analysis of biodiversity in the Environmental Impact Statement supporting the application claims a net gain, as is expected by the National Planning Policy Guidance. This claim is seriously faulted for six reasons. I estimate that these faults prevent there being a net gain within any reasonable time period.

Reasons:

- 1. The data on the application site were inadequate because the surveys were minimal and largely at the wrong time of year. This deficiency was not**

remedied by recourse to existing independent information based upon much better surveys. Failure to find is equated wrongly with absence, so biasing the comparisons in favour of the predicted value of the habitats proposed seeming better than the underestimated existing value.

2. The extent of a national priority habitat, *Wood pasture and parkland*, was grossly underestimated because of a miss-reading of the habitat definition, leading to the exclusion of many valuable trees and almost all of the grassland. This is compounded by an under-valuing of the grassland component of the priority habitat, which has potential as neutral (mesotrophic) grassland. Most of the parkland is to be sacrificed to intensively-managed sports facilities, amenity grass and built development and the remainder (in the south of the golf course) is to be sacrificed in an attempt to replace the naturally fertile soil with an infertile sandy acid soil. The supposed “gain” of acid grassland from this expensive substitution is very unlikely to be achieved.
3. Wimbledon Park Lake was seriously undervalued because no recourse was had to the findings of a five-year study of lake water quality and the habitat value of the lake. Large areas of the lake shallows are proposed for disposal of sediment dredged from the centre of the lake, dressed up as reedbed, and as a habitat gain. In fact, the lake is a national priority habitat supporting a rich biota, including 8 species of bats that come for the insect food emerging from the water, making the landscape one of the best for bats in London. Replacement of a large area of this with reedbed is a net loss to biodiversity.
4. Sediment excavated from the lake bed is proposed to be dumped around the edge of the lake. This compromises water’s edge vegetation and a national priority habitat, wet woodland. These losses are underestimated, so tipping the balance incorrectly towards net gain.
5. The surveys of birds were inadequate, so missing a large proportion of the species that breed, pass through on migration or winter in the heritage landscape, including a good number of priority species for conservation. This omission, too, introduces a fictional “gain” when compared with a purely theoretical species composition in future. Many of the species supposed to be gained already occur in the heritage landscape and others are most unlikely to come because of the proposals. Many existing species will be harmed by the losses of trees and reduction in the area of shallow eutrophic water and the food that thrives in and above the water.
6. The adverse effects of the proposed buildings, tennis courts and access paths are not properly accounted for. The introduction of lighting and access for people, however well designed, takes away from undisturbed habitat and dark skies, seriously compromising bat habitat. The intensive management of the grass courts risks nutrient and herbicide pollution, affecting the parkland grasslands and water quality in the lake. A very large number of existing trees are to be removed to make way for these developments and this is not redressed by new planting, which will take well over 100 years to achieve replacement quality.

I broadly support the conclusions of the fisheries survey, but regret that these seem not to have been incorporated into the detail of the proposals.

Phase I habitat survey

This report (EIA appendix 12.1) summarises Land-use Consultants' evaluation of the heritage landscape. Its Figure 1 gives the boundaries of the various parts of the landscape and, like other environmental maps, erroneously includes the whole of Ashen Grove Wood within the golf course, whereas half of this ancient wood actually falls within the public park.

Strangely, paragraph 2.9 refers to two non-existent documents (the Biodiversity Action Plans for Merton and Wandsworth), and fails to refer to the action plan for London, which is based in the Mayor of London's biodiversity strategy: *Connecting with London's nature*.

The desk study does not include reference to many published documents on the biodiversity of the heritage landscape, most of which were copied to AELTC amongst many others, nor to full descriptions of national priorities for biodiversity¹. This omission is common to the other EIA sections considered below. Failure to take proper account of these documents leads to inappropriate evaluation.

Table 4.1 purports to summarise the attributes of designated sites within 2km of the heritage landscape. Unfortunately, this disregards much existing published information and more recent changes, resulting in many errors and omissions². The contents of the table should be disregarded in favour of the more comprehensive and accurate information in the source documents, cited by me below.

Phase I survey is a generic method, the results of which will be affected by vegetation management that obscures value, the intensity of survey and the season. The time spent is not given, so the intensity is undefined. September is far from an optimal time for documenting most biota. The protocol for habitat survey in Greater London³ is derived from phase I, with adjustments to achieve comprehensive coverage and facilitate even-handed comparison of candidate sites of importance. Employing this generic phase I rather than the London protocol impedes comparison with other places in London.

The description of Ashen Grove Wood (4.3 & 4.4 and "target note" 1) omits mention of many of its species, including four ancient woodland indicator species, bats and notable breeding birds^{1:11}. Both Ashen Grove Wood and the other old wood, Horse Close Wood, fall within the National Vegetation Classification W8d⁴, characterised here by a canopy of Oak and Ash with a sub-canopy of Elm. This is typical of woodlands in the south-east of England on base-rich, fertile soils and with a long history of canopy closure. Note that these old woodlands indicate base-rich, not acid, soils and so help to confirm that there is little acid soil in the heritage landscape.

Other woodland on the golf course is dismissed in paragraph 4.5 and target notes 4 and 6 as "typically devoid of an understorey and comprised short mown improved grassland." Such places often retain some remnant plants and old soils, with a woodland seedbank⁵ and value is easily missed when surveyed in the wrong season. These actually have existing potential for natural regeneration of a more complete woodland structure. They should not be dismissed, nor "improved", before checking what grows naturally there, and it is unfortunate that clearance of woodland is contemplated (5.42).

I presume that the woodland on the western shore of the lake (4.6 and target note 11) is that beside the Wimbledon Club and possibly Owl Copse north of there^{1:14}. If

so, the description is lamentably brief. It summarises the abundance of trees misleadingly and omits mention of other plants and the birds and other animals of the wet woodland.

Paragraph 4.7 is badly deficient in describing the parkland of the golf course as “scattered trees and tree lines”. Whilst degraded by decades of mismanagement by the golf club, in fact this is descended from Capability Brown’s parkland and is a national priority habitat: *Wood pasture and parkland*. A good number of old trees occur and there are younger trees providing potential to retain old trees in the very long run. The value of old trees is well-established. However, close mowing of its grassland component doubtless hides remnant grassland value, see my next paragraph. It is unfortunate that clearance of trees, hedgerows and scrub is contemplated (5.42).

Paragraph 4.8 and target note 3 dismiss the grassland of the golf course as species-poor throughout. However, I note that a fine-leaved grass was not identified, being noted as *Festuca* or *Agrostis*, which suggests great difficulty in characterisation of these grasslands. I have found 10 species characteristic of the mesotrophic (neutral) grassland communities MG5 and MG6 in the golf course grasslands, most of which were missed in the phase I survey⁶. This suggests that cessation of treatment with fertiliser and herbicides could lead to some recovery of meadowland species diversity. The presence of Pepper saxifrage even shows a potential for a wet meadow community in places. The dismissal of these grasslands in the phase I report is therefore insecure.

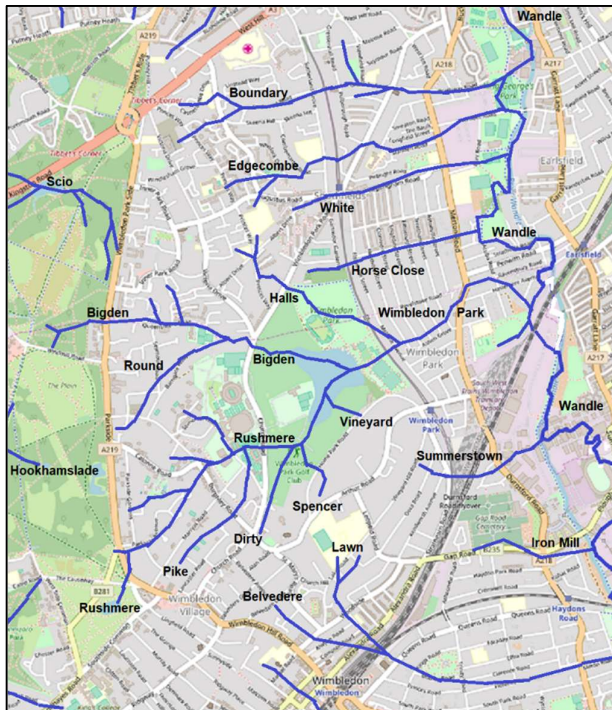
Paragraph 4.10 and target note 8 describe plots “improved” with a wildflower mix but miss most of the species concerned. The mix was applied also to a scatter of other parts of the golf course and was not appropriate to the soils and history of the heritage landscape. It should be regarded as misdirected.

Paragraph 4.11 describes a strip of acid grassland on sandy soil parallel to the public park boundary in the north of the golf course. All the species concerned occur elsewhere in the heritage landscape and are found in neutral soils (MG5 or MG6) apart from Sheep’s sorrel, which is characteristic of the acid grassland “U1” found on the top terrace of Wimbledon Common and Putney Heath to the west of the heritage landscape. Other characteristic species, however, were not found⁷. This strip coincides with a field boundary on top of a broad ridge between Bigden and Halls Brooks which was removed when the public park was separated from the golf course in the early 1930s. Strangely, I have extensive survey data from the part of the public park a short distance east of this place and no evidence of diagnostic acid grassland species, nor sandy soil. The success of Wild carrot on part of the golf course described in appendix 2 as acid grassland is a strong indication that the soils there are not acid. The soils of the heritage landscape elsewhere are generally clay-rich loams, not predominantly sandy, except where material has been imported for hard standing or construction⁸. We should have a sounder basis than this small sandy area to plan the treatment of the whole south of the golf course as is proposed in paragraph 5.16. Taken together with the survey having missed indicative species elsewhere, it is clear that the grasslands of the golf course should be allowed to grow tall and be subject to thorough survey before remedial treatments are prescribed. Where the sward shows potential, it is always best to manage this appropriately, rather than assume no existing value. Use of imported seeds (5.17), however

carefully sourced, is prone to failure and should not be attempted unless proven to be needed. The recommendation of 5.18 is premature and damaging.

Paragraph 4.13 and target note 10 describe the lake and its margins. This reflects a lamentably poor survey, missing all but one of the submerged aquatic plants and most of the emergent species of the lake margins⁹. The brief statement that the lake “suffers from siltation” is not supported. I have reviewed the effect of the lake sediment on water quality and biodiversity, but none of my work is referenced. The “ephemeral woodland pond” of paragraph 4.14, is the stilling pond at the lake outfall. It is not ephemeral. It is unfortunate that it is proposed to clear marginal vegetation (5.42).

The Brook that enters the southwest corner of the lake is not Bigden Brook, which



enters the northwest corner. It is Rushmere Brook. I attach my map of the brooks that feed the lake to help redress the confusion. Rushmere Brook and associated ditches once held a rich aquatic flora, but this has been depleted by golf course management since the golf course came into AELTC ownership.

The habitat appraisal for bats (paragraphs 4.19-23) is deficient in not referring to earlier surveys for bats^{1:16} and failing to account fully for the habitats of the heritage landscape that attract a wide variety of bat species (dark skies, wood pasture, lines and clumps of woodland, wet woodland and wetlands providing structures, shelter and food for bats).

Figure 1. The historic brooks of the wider area

The evaluation of habitat suitability for the Great-crested newt (paragraphs 4.24-27) and reptiles (4.30-32) is agreed, except that the recent records of Slow-worm at the lake edge were missed because the angling club records were not given credence.

Paragraph 4.28 fails to review existing published information on the birds of the heritage landscape, invalidating the speculative bird habitat review (paragraph 4.9).

Active badger setts occur near the southern boundary of the heritage landscape and badger sign has been seen occasionally in the public park, so it is very likely that badgers forage across the golf course and that there are active setts on the course. The EIA (6.102) states that there is an outlier sett on the golf course. Given the depleted nature of many London badger social groups, it is possible that this is, in fact, a small main or ancillary sett. The proposals should assume a main badger sett (paragraphs 4.33-35).

Existing published documentation^{1:2} confirms that Stag beetles (4.37), hedgehogs (4.38) and European eels (4.39) occur. The habitat evaluation for the eel is naïve and wrong.

The overview (section 5) is compromised by the failure to cite a habitat of principal importance in the UK (5.1), wet woodland. Much of the importance of the heritage landscape was missed because of survey too late in the year and the failure to take into account existing published information. This means that the damning of the site in paragraph 5.3 is unfounded and so the potential to improve the landscape for biodiversity is much more limited than is suggested in paragraph 5.4.

These deficiencies lead to inadequacies in the “key design principles” (5.5). Avoiding harm should extend to “amenity grassland, young scattered trees, non-native and ornamental trees and shrubs.” The site lacks large areas where compensation for losses is possible and losses can be avoided should a good design be implemented. The introduction of lighting, however “sensitive” will lead to a loss of dark skies and the need to manage the built structures and grass courts will introduce much disturbance and a strong possibility of pollution with nutrients and herbicides. A landscape masterplan is desirable, but insufficient to ensure management for ecological benefit in perpetuity. It is essential that monitoring of ecological trend is carried out (5.20) and that any grant of planning approval is conditional on ensuring that adverse trends are redressed.

The contention that existing woodlands and blocks of scattered trees on the golf course are relatively isolated, showing a need for better connectivity (5.8) is faulted. First, is that the existing woodlands are quite well connected^{1:2}. Second, is that the value of parkland trees comes from their very isolation in a grassland matrix away from woodland and other trees^{1:4}. Third, is that the species suggested as benefitting from connectivity, the stag beetle and birds of conservation concern, do not require connectivity at this scale: they readily cross the gaps. They require a sufficient amount and quality of habitat, not any particular arrangement of it in space^{1:5}.

I agree the desirability of enhancing the existing woodlands of the golf course (5.9). However, failure to find because of inadequate survey is all too readily equated with real lack. Any real lack is best redressed through ceasing existing damaging management and seeing what comes¹⁰.

The national priority habitat, wet woodland, is erroneously omitted from the London priorities in paragraph 5.10¹¹. The proposal to create wet woodland, bog and water's edge habitats¹² omits to mention that these exist already and are threatened by the proposed reedbeds. The need to conserve these existing habitats is a serious omission. Even more serious, is the failure to observe that reedbed creation is achieved at the expense of another priority habitat, eutrophic standing waters (the lake¹³). Loss of one biodiversity priority remains a loss even where another priority habitat is created. The swop is not a net gain.

The tunnel in the south of the golf course (5.11) carries drainage from the site of the Spencer Manor house¹⁴. The nearby culverted Dirty Brook does not originate at the tunnel and would be a more sensible deculverting.

Bats are best conserved by retaining the habitat features that attract them to the heritage landscape. However, in the phase I report, there is far too much emphasis on the discovery of roosts and breeding sites (5.22-5.26) as these are worthless on

their own. They must be accompanied by the retention of the parkland, woodlands, wetlands and lake, as it is there that the bats find the food that attracts them to the heritage landscape (5.27). In short, the heritage landscape feeds bats from a wide catchment.

Recommended habitat enhancements for bats (5.33-34), other mammals (5.58-065, 5.69), reptiles (5.52-5.57), amphibia (5.35-40), Stag beetle (5.66-68) and birds (5.48-51) are welcome, but should not be seen as biodiversity gain, but rather as theoretical and partial compensation for losses of habitat quality resulting from the development proposals. The bird species that the habitat enhancements are supposed to benefit are naively ambitious. Comparison with the nearby Wetland Centre^{1:8} clearly indicates the limitations in attracting rare birds within a space-limited design despite world-beating habitat provision.

Bat survey

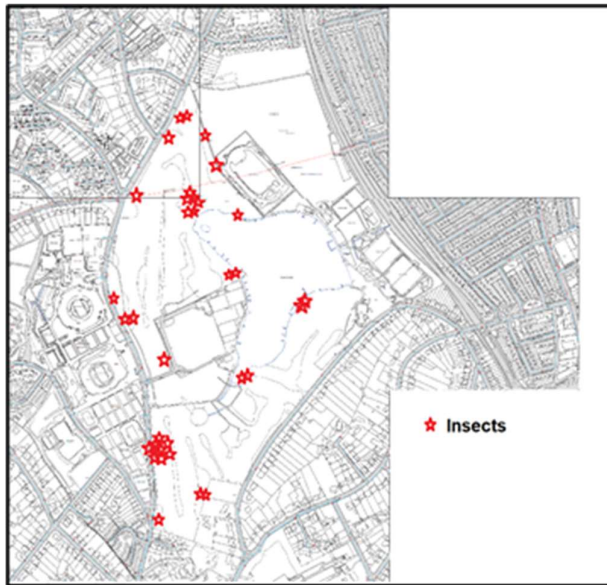
The survey (EIA appendix 12.2) confirmed earlier surveys^{1:16} which had already established high populations of Common and Soprano Pipistrelles, Leisler's, Noctule and Daubenton's, with smaller numbers of Serotine and Nathusius' Pipistrelle. Brown Long-eared is difficult to detect, but had been recorded in Horse Close Wood before (a record not found in the desk study, again because an existing publication was not consulted). This too, was confirmed, especially in the roost survey, suggesting that the other methods generally missed this species and that it is much more common than the detections would suggest.

The failure of the bat survey to confirm high populations of Daubenton's bat (4.8) is strange, given the results of the recent citizen science survey. Previous work has established a great decline of this species over the time period that light spillage has increased, and the present-day distribution is confined to the darker and more sheltered reaches of the lake. The report speculates that Daubenton's is sensitive to light pollution, a speculation that is confirmed by the earlier work but not referred to.

The confirmation that the drainage channel from the Spencer Manor House was used by three of the common species as a winter roost (4.3-4) is new information, helping to confirm the importance of the heritage landscape for bats and highlighting the need to keep the winter roost.

Buildings and other habitats in the public park have been surveyed for bat use recently^{1:16}, but this information was not cited.

Invertebrate interest



The report by Jones (EIA appendix 12.5) is based upon just five visits and employed a limited range of survey methods to the golf course and lake edge. No invertebrate survey was undertaken of the lake water and only a few old trees were sampled. So, it will have missed very many important invertebrate species, including any in the old trees of Ashen Grove Wood, Horse Close Wood and elsewhere in the public park. The implied comparisons with other places are compromised by the lack of even-handed methodology.

Figure 2. The location of interesting and noteworthy invertebrates¹⁵

Despite these limitations, the invertebrate interest of the golf course is correctly identified. This resides in the very considerable interest in the invertebrates of old parkland trees (not just trees of ancient woodland as stated in the summary). I agree the need for “management to encourage logs and tree trunks to moulder naturally [that] will hugely benefit the many scarce invertebrates that depend on this diminishing and vulnerable habitat.” More complete survey would serve to document this value in better detail.

This value shows that the old trees in a grassland matrix, together with small stands of woodland and younger trees are very valuable habitat for invertebrates. This value is put into a local context below where I outline the importance of the heritage landscape for animals.

Breeding birds

The report by Haines (EIA appendix 12.6) is deficient as a basis for evaluating the site’s importance for breeding birds, because it is based upon just four visits in one breeding season. Five visits were recommended in the phase I survey report. The method used (territory mapping) gives unreliable estimates of the population for most species¹⁶, so these numbers should not be regarded as accurate. At best, the numbers might allow a comparison with other sites surveyed by the same observer with the same method, but this was not done. The maps showing the detections of each species are also seriously deficient by being based upon a small amount of survey effort. The maps of the site unaccountably include much of Ashen Grove Wood as part of the golf course, whereas half lies in the public park.

I have been studying birds detectable from the public park for 35 years and have also made many incidental observations elsewhere in the heritage landscape. My data were offered to AELTC in exchange for their survey information, however AELTC did not take up this offer. Some of my data have been published online (by

the Friends of Wimbledon Park) and some has been submitted to the national Wetland Birds Survey. By spending more time looking, I inevitably found more species than did Haines. My study confirms that all but the Lesser whitethroat and Goldcrest of the species classified as “probably” or “possibly” breeding fully met the criteria to confirm breeding. This adds 14 species confirmed to be breeding. A further four species (Grey heron, Herring gull, Swift and House martin) commute to the heritage landscape from their nearby nests when collecting food for their young and so are breeding species dependent upon the site. I found also four breeding species not detected by Haines (Little owl, Tawny owl, Sedge warbler and Willow warbler). I put aside five previously breeding species that have declined to local extinction and not seen in recent years. In sum, Haines missed evidence of 22 (45%) of the breeding species.

My data also extend the list of non-breeding species. I have seen recently an additional 21 species in the heritage landscape in the breeding season which are not known to depend upon it for breeding. So, the breeding season list comprises 80¹⁷ species, which is 25 (31%) more than counted by Haines. The breeding-season species missed by Haines mean that the site was undervalued and so there is less room for improvements from enhancing its habitats than implied by Haines.

The criteria employed by Haines to evaluate the site from its breeding bird species list are inappropriate for the London context, where site evaluation employs even-handed comparison of all candidate areas to identify the best places for nature. These procedures are described in the Mayor of London’s biodiversity strategy, *Connecting with London’s nature*. I examine how the heritage site measures up to these criteria below.

Haines’ suggestions for conserving and enhancing the breeding bird interest of the site unaccountably omit existing natural habitat features of great importance. The existing wet woodland and water’s edge habitats receive no emphasis, nor does the vital importance of insect food emerging from the lake and of the role of the lake in providing food and safe refuge. The suggested great increase in area of reedbed could provide habitat for only one or two extra species¹⁸ and would not compensate for the loss of open water and water’s edge. Nest boxes are no substitute for the shelter provided by an existing structural diversity provided by woodland, scrub, and a good age range of existing trees. The abundance of natural holes means that there is no need to provide nesting boxes. The great habitat value of parkland, with individual trees scattered in a grassland matrix receives no mention, despite several bird species depending upon this habitat.

These deficiencies are remarkable in the context of the losses to bird breeding habitat from the clearance of vegetation, disturbance and proposed desilting of the lake as indicated in the Phase I report (5.46-47)

Winter birds

The survey for winter birds (EIA appendix 12.7) was little better than that for breeding birds, as birds are more mobile in winter and so just five visits in just one year will seriously underestimate the list of species using the area. The winter studied was much wetter than normal and the hours studied, and covid-related activities biased the distribution of some species. This is perhaps why the importance of the public park for geese and Woodpigeons was missed. The numbers recorded were even less reliable than the breeding season numbers because of the

greater mobility of most species in winter. The same is true for the maps of each species, where most of the known distribution of most species was not documented.

As for breeding birds, my data from recent years found an extra 27 species in winter or on passage (32%) that were not found by Haines. These included 11 amber list species (Common tern, Common sandpiper, Gadwall, Kingfisher, Meadow pipit, Pintail, Redshank, Shelduck, Short-eared owl, Tawny owl and Wigeon) and seven from the red list (Curlew, Lapwing, Linnet, Redpoll, Skylark, Swallow and Yellow wagtail), as well as Sand martin from the London list. These omissions doubtless led to an under-evaluation of the value of the heritage landscape as habitat for passage and wintering birds.

Again, the suggestions for enhancements to bird habitat fail fully to identify the existing value.

Fish survey

The map of the lake for this survey omits the far southern tip of the lake, probably in error? It is commendable that this report does not make population estimates using the removal method as did the earlier AGA survey in a most misleading fashion¹⁹. Also commendable is the employment of four different methods of survey, so covering for the deficiencies of each in documenting the abundance and distribution of fish.

I welcome the recommendations for the conservation of the European Eel.

However, the recommendation to decommission the culverts, thus reinstating the hydrological connections between Wimbleton Common and the River Wandle seems unrealistic. Whilst deculverting is entirely possible within the open land of the golf course and would be most welcome, the culverts uphill of Church Road and downhill of the tube line embankment pass through built development. Deculverting there would necessitate undoing 100 to 150 years of suburban land use and the purchase of very many private properties.

Sadly, this report confirms my earlier observation that bottom-feeding fish (“benthic species”) may be responsible for the, sometimes, poor quality of the lake water. Literature reviews of remediation of lake water quality in this kind of lake²⁰ concur that the removal of bottom feeding fish species and encouragement of predatory fish may help maintain low nutrient status and hence high-quality water. The report states that “This would lead to improved water clarity and quality, an increase in the food web heterogeneity and an increase in macrophyte (aquatic plant) diversity.” I concur, and strongly recommend that the fishery be regulated to ensure that the population of Carp, Tench and Bream remains very low.

Biodiversity net gain

This appendix (EIA appendix 12.9) applies procedures to estimate a balance sheet for the biodiversity of the application site (golf course and lake). It attempts to establish a net gain as required in National Planning Policy Guidance.

There is an error in the scoping, in that the Hedgehog has been scoped out (12.11), despite having been recorded within the heritage landscape recently^{1:2}.

The appendix claims to have followed principle 2 in that the proposals have “ensured that irreplaceable habitats are protected from loss” (3.7) addressed risk (3.10) and ensured additionality (3.17). These claims are incorrect in three respects.

1. Veteran trees are “protected”, however, not protected from loss. No tree is immortal, so it is inevitable that there will be an attrition of veteran trees. This natural loss has no built-in replacement because mature and old trees developing veteran values are not protected, precluding automatic recruitment by natural maturation. A planted tree cannot develop veteran character in the short run, leaving attrition unreplaced for decades at least. This risk is not addressed, and so veteran trees are not protected from loss.
2. The priority habitat of the lake (eutrophic standing water) is practically irreplaceable in that there is nowhere nearby where new large waterbodies can be created. The proposals replace large areas of this existing priority habitat with another priority habitat, reedbeds. This ensures loss, rather than protects the lake from loss. The proposed reedbeds have a promise of new value but are not additional, in that they put a brave face on an existing proposal by LB Merton to remove sediment from the centre of the lake and dispose of it around the edges²¹. This infringes additionality.
3. Old grassland and woodland soils are an irreplaceable biodiversity asset as they have developed structure, fertility, drainage and a seedbank over centuries of development. In this regard they are comparable to veteran trees. The soils of Ashen Grove Wood, other old woodland on the golf course and at the water’s edge and the grasslands of the golf course have taken centuries to develop and are not protected. Indeed, it is proposed to create reedbed over wet woodland and water’s edge habitat and acid grassland over soils with a very long history of mesotrophic (neutral) grassland. The theory that the natural soil here is acid is flimsy, not supported by survey data and contrary to existing information, so there is a very significant risk of error. It is next to impossible to create acid grasslands on the wrong soil and any attempt to do so would destroy the existing heritage soils. This does not protect historic soils from loss.

The use of 2.5ha as the area of wood pasture and parkland (4.5) is laughable. The golf course is almost entirely wood pasture as defined in the national priority description²², so the area of wood pasture should be around 25-30ha, an order of magnitude error! Counting this habitat as poorly connected (Table 4.12) repeats this same error. A similar error is involved in summing just the tree canopy of younger trees which are scattered within the grassland matrix of the site (4.9). These trees are within the wood pasture.

Failure to consult existing published information^{1:12} leads to an incorrect name and land area for Horse Close Wood (4.13) and a failure to recognise its value. It also leads to a failure to identify the ancient nature of Ashen Grove Wood (Table 4.1). The condition assessment of appendix 2 of peripheral woodland suffers from poor survey, for example native trees are regenerating there. It also equates a natural species composition of moist, base-rich soils as evidence of harm due to enriched soils. The soils of the golf course are naturally fertile. Whilst these woods can benefit from improvement, they are afforded too low a score, so biasing the predicted impact of the proposals on biodiversity.

The assumption that all existing grassland away from trees (some 22ha) is of low value and can be lost (4.14) also reflects a misunderstanding of the nature of wood pasture and parkland as a priority habitat. This gross error writes off most of the area of parkland as of minimal value. The condition assessments of the fairways and

roughs in appendix 2 are compromised by value being obscured by frequent mowing and the late season of survey. These assessments should be disregarded.

Wimbledon Park Lake is dismissed as in fairly poor condition (4.15), despite its great value as habitat for the national priority European Eel, as a habitat for water life and wetland birds, and a food source for protected and priority bats, swifts and hirundines. Its area is underestimated (it is around 9ha in extent). Filling in large areas around the edges of the lake to dispose of sediment excavated from the middle of the lake involves the loss of national priority habitat. There would be a small gain in lake area by the proposed restoration of the southern arm of the lake.

The loss of water's edge habitat and wet woodland around the edges of the lake (4.16) involves further national priority habitat. The area assumed (0.23ha) is a significant underestimate because past miss-management by the golf club has obscured the extent of this regenerating habitat. So, both the area and value of these habitats is underestimated.

The gains from the proposals are minor. The proposed reinforcement of peripheral woodland (4.22) is at the expense of parkland grass, so involves little or no gain. The enhancement of a small area of existing woodland is welcome. The proposed tree transplants (4.24) will cause temporary harm through a setback in growth if not mortality. Transplants do not belong on the positive side of the scale. The proposed tree planting will get nowhere near to replacing the proposed losses of trees within the target of 32 years or so (4.24) as the most valuable of the trees that are to be sacrificed are those 100 years or more in age. These represent a net loss in any realistic time frame.

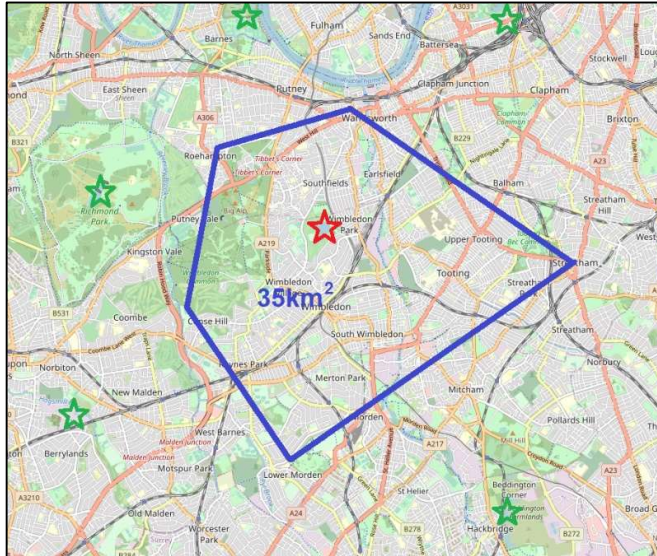
There is no proposal to manage the existing grassland as mesotrophic ("neutral") grassland and so enhance the historic grasslands of the priority parkland habitat. Most is to be relegated to grass courts, buildings, access routes and intensively-managed amenity grassland of little value and the rest is proposed as acid grassland on neutral soils, a nearly impossible task, so that the target for fairly good within 25 years (4.27) is fully unrealistic.

I have been studying the biota, chemical composition, water clarity and quality of the lake for 5 years. These results show that the quality assessment in appendix 2 is incorrect. The area of the lake within the application area is seriously incorrect, it is not 1.48ha, but approximately 9ha. My data give individual component scores as follows: physical 3, hydrological 2, chemical 2, biological 2.5, averaging 2.4. The greatest discrepancy comes from the very poor score of 4 given to chemical naturalness in the appendix. My results show that this is clearly wrong. I presume that it is based upon an inadequate investigation. The average score of 3.75 given in appendix 2 is not sourced to any recent study and must be rejected.

The evaluation of the existing water's edge and reedbed vegetation in appendix 2 shows it has considerable value, but unaccountably concludes that the condition is "fairly poor". In fact, it hosts a much greater variety of plants than listed, a good number of breeding birds, including Reed warblers, and has a thriving aquatic fauna, proving a habitat value very considerably better than the score given.

The importance of the heritage landscape for animals

The London sites hierarchy takes the best available site in a given area to protect nature. The heritage landscape is important for wet woodland, wetland birds and the birds and bats species that forage on the insects that are abundant above wetlands. My figure 3 shows that people living within a surrounding area of about 35km²,



estimated to have a population of around 200,000, have the heritage landscape as their nearest good site to find wetland species. The green stars are all the comparable wetlands nearby and the blue polygon is the area for which the landscape is nearest. This is not a theoretical value, as is demonstrated regularly by people visiting the lake to watch birds, damselflies and dragonflies by day and bats at night.

Figure 3. The heritage landscape in a local context²³

The landscape is also important for the fungi, lichens, invertebrate and bird species that thrive in a parkland, where old trees stand in a grassland matrix, with also a good number of small patches of woodland. The only comparable such place anywhere nearby is Richmond Park, which is around 4km west of the heritage landscape. Richmond Park is thirty times the land area of the golf course and so has a considerably greater number of trees and area of grassland matrix. As a National Nature Reserve and Special Area for Conservation it is internationally important for nature. Although of less importance, the heritage landscape serves to extend that value eastwards, providing access to these rarities for those living nearby, and supporting a diversity of biota typical of old parkland habitat in the south-west quarter of London.

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1. *Nature conservation in Merton (sites MeB12 & MeB11)*. London Ecology Unit Handbook 29. Greater London Authority.
2. *Special species and special places for nature in the Wimbledon Park Grade II* heritage site: a map, schedule and background*. Friends of Wimbledon Park
3. *UK Biodiversity Action Plan Priority Habitat Descriptions*
4. *Environmental stewardship and historic parks*. Natural England, 2013.
5. *Do wildlife corridors work?* Paper by DG Dawson for English Nature & Landscape Institute 1997.
6. *The London Plan habitat targets*. Greenspace Information for Greater London, 2017.
7. *Long-term trends in the birds of Wimbledon Park*. Friends of Wimbledon Park website, Dawson.

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8. *WWT London Wetland Centre – the first 20 years*. British Wildlife August 2021.
 9. Wimbledon Park Lake October 2017. Friends of Wimbledon Park, Dawson.
 10. The Wimbledon Club lakeside. November 18. Report to the Club, Dawson.
 11. Ashen Grove Wood. March 2018. Friends of Wimbledon Park, Dawson.
 12. Horse Close Wood management plan. 2015. Friends of Wimbledon Park, Dawson.
 13. Capability Brown's Wimbledon Park, a history. August 2016. Accompanying an exhibition at the Plaistow Gallery, Wimbledon, Dawson.
 14. Woodland management on the Wimbledon Park Golf Course, December 2017. Friends of Wimbledon Park, Dawson.
 15. Canada Geese at Wimbledon Park. November 15. Friends of Wimbledon Park, Dawson.
 16. *Bat emergence and activity surveys, Heritage Wimbledon Park*. 2017, Fure.
 17. The night shift at Wimbledon Park. March 18. Wimbledon Society Newsletter, Dawson
 18. Death of a veteran. December 2016. Wimbledon Society Newsletter, Dawson.
 19. A right royal flock. September 2015. Wimbledon Society Newsletter, Dawson.
 20. Fowl play from invasive species. December 15. Wimbledon Society Newsletter, Dawson.
 21. What remains of Capability Brown's woods. June 2015. Wimbledon Society Newsletter, Dawson.
 22. The state of Capability Brown's historic lake. March 14. Wimbledon Society Newsletter, Dawson.
 23. If you think it gets cold here in winter, try the Baltic. December 13. Wimbledon Society Newsletter, Dawson.
 24. Restoring Wimbledon Park's lost glory. March 17. Wimbledon Society Newsletter, Dawson.
 25. The future of Wimbledon Park. September 16. Wimbledon Society Newsletter, Dawson.
 26. How many of today's trees would Capability Brown remember? December 14. Wimbledon Society Newsletter, Dawson.
 27. LB Wandsworth biodiversity sites. <https://enablelc.org/parks-about-us/biodiversity/sinc>
 28. UK Biodiversity Action Plan Priority Habitat descriptions for Lowland meadows, Lowland mixed deciduous woodlands, Wood pasture and parkland, Reedbeds, Wet woodland and Eutrophic standing waters.

² Two illustrative examples: some species attributed to Horse Close Wood actually occur only in Ashen Grove Wood. Park House Middle School and its fine cedar of Lebanon are both long gone.

³ See appendix 4 of the Mayor's Biodiversity Strategy, *Connecting with London's nature*.

⁴ In the National Vegetation Classification, "Ash/Field Maple/Dog's-mercury woodland, ivy sub-community".

It has two of the three typical canopy species (Oak and Ash), with the typical Hawthorn and Elder underneath. The absence of Field Maple is allowed in the description of the sub-community. The main distinguishing features of the sub-community are the absence of Bracken and the abundance of Ivy as ground cover. The NVC supposes that the relative scarcity of Bluebells and Dog's-mercury in this subcommunity reflects a long period (over 20-50 years) of canopy closure. Rodwell, J.S. et al. 1991. British plant communities. Volume 1. Woodlands and scrub. Cambridge University Press.

⁵ A local example of this is The Glade in Horse Close wood which was cleared for National Grid maintenance purposes and where a good variety of wet woodland species, not previously known in the wood, regenerated from the seed bank.

⁶ Bird's-foot trefoil, White clover, Yarrow, Meadow foxtail, Daisy, Hardheads, Common mouse-ear, Yorkshire fog, Ribwort plantain, Creeping buttercup, Dandelion and Cock's-foot. Allowing the grass to grow long and surveying at an appropriate time of year would doubtless increase the list considerably. However, this list suffices to show that acid grassland habitat is rare on the golf course, just as in the rest of the heritage landscape.

⁷ Fine-leaved sheep's-fescue, Wavy hair-grass, Early hair-grass, Common bent, Heather, Stork's-bill, Tormentil, Heath and Lady's bedstraws, Mouse-ear hawkweed, Bird's-foot, Early-forget-me-not, Sweet vernal grass, Parsley-piert, Hoary and Stag's-horn plantains, and several characteristic mosses and *Cladonia* lichens. Whilst the sandy soil and Sheep's sorrel do suggest an acid grassland, it is either badly depleted or poorly surveyed.

⁸ This is from examination of several excavations for utility works within the public park, soil adhering to root plates of trees that have fallen and the ground investigations around Wimbledon Park Lake dam in relation to planned safety works. I note that the EIA includes no study of soils. I have found some species characteristic of acid grassland in disturbed parts of the public park. Whilst these just might reflect an acid grassland history, it is more likely that they reflect material imported as hard core for construction works. The community type of the old woodlands in the heritage landscape is indicative of basic, not acid, soils.

⁹ For example, sweet flag is the major emergent around most of the lake perimeter, but is not listed.

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- ¹⁰ A good local example is the 110 species that have arrived naturally in the three years since a veteran oak in the public park was fenced off and mowing ceased.
- ¹¹ Doubtless this is because of confusion over terminology. Two national priorities (Fen, Marsh and Swamp and Wet Woodland) are subsumed into one London target (Fen, Marsh and Swamp)¹⁻⁶.
- ¹² Stands of Yellow-flag iris are classified as wet woodland whereas those of Sweet flag are water's edge emergent.
- ¹³ There is limited scope for replacing lost eutrophic standing water with ponds, but insufficient to redress the balance.
- ¹⁴ Investigated by Surrey speleologists with the Wimbledon Society historians. It runs some 300 metres north-east from the site of the house to the opening on the golf course. The nearby Dirty Brook is piped underground, and its de-culverting would be more sensible, although its catchment may not suffice for year-round flow.
- ¹⁵ From the grid references in the report.
- ¹⁶ Dawson, D.G. 1981. *Studies in Avian Biology* 6: 392-398 & 554-558.
- ¹⁷ 27 confirmed by Haines, 14 probable or possible reclassified as confirmed, 2 not reclassified, 4 commuting from active nests, 8 residual non-breeders from Haines' list, 4 extra breeding and 21 extra non-breeders found by me.
- ¹⁸ *Bringing Reedbeds to Life*. Creating and managing reedbeds for wildlife. RSPB
- ¹⁹ The assumptions of the method were not met and the theoretical confidence limits were so wide as to render the estimates useless.
- ²⁰ Hilt & others *Response of Submerged Macrophyte Communities to External and Internal Restoration Measures in North Temperate Shallow Lakes*. *Frontiers in plant science*, 2018. Sondergaard *Nutrient dynamics in lakes – with emphasis on phosphorus, sediment and lake restoration*. Thesis National Environmental Research Institute University of Aarhus. Denmark 2007.
- ²¹ See Merton's masterplan for Wimbledon Park.
- ²² The Priority Habitat Description of Wood pasture tells us that the parkland can have various origins, but it is characterised as being "mosaic" habitats valued for their old trees, including ancient and veteran trees set in open grassland or heathland. Whilst it originates as grazed pasture with scattered trees, the values may persist after grazing ceases and is replaced by amenity use (as occurred in the heritage landscape around 120 years ago) provided that there is a continuity of grassland with scattered trees back through history. This mosaic of grassland and trees means that it is incorrect to identify boundaries specific to one component, the trees. Putting the boundary around the whole mosaic must include the grassland, regardless of the value of the grassland if it is considered alone.
- ²³ The green stars mark the nearest good wetland sites for birds around the heritage landscape: Barnes Wetland Centre, Battersea Park Lake, Beddington Farmlands, Hogsmill Valley Sewage Works and Pen Ponds Richmond Park.