## Richmond Council Local Planning Team

To: <a href="mailto:localplan@richmond.gov.uk">localplan@richmond.gov.uk</a>



16 March 2025

Dear Richmond Council Local Plan

I am writing to you regarding the Minor Modifications that Richmond Council has made to the Screening Assessment of Richmond Park SAC in the post-Examination in Public Habitats Regulations Assessment of the new Richmond Local Plan- HRA SD004a (the "post examination HRA").

I attach my comments on the final Habitats Regulations Assessment of the draft Richmond Local Plan SD004A (the HRA) below. I believe that there are significant further changes that need to be made to the HRA to ensure that it is correct, evidence-based, consistent and reaches conclusions that cannot be undermined by rational argument. I urge you not to publish the new Richmond Local Plan as a result of the changes that need to be made. I request that you consider the evidence that I lay out in this letter as the basis for making such a decision.

Yours sincerely



Caroline Shah

I draw your attention to the information I have previously sent you in addition to the representations that I make in A and B below:

Date	Туре	Information		
31/10/23	Email	8 attachments:		
		Email to Natural England;		
		Distance A308 and Richmond Park;		
		Point 4.54 from Reg 19 HRA;		
		Points 4.55 and 4.56 Reg 19 HRA;		
		Point 4.65 Reg 19 HRA;		
		Concerns relating to recreational pressure at		
		Epping Forest;		
		Point 4.65 Reg 19 HRA;		
		Epping Forest District Council – effects of one		
		extra vehicle on pollution		
8/11/23	Email	As above		
10/11/23	Email laying out APIS pollution	3 attachments:		
	levels in Richmond Park 2018-	1. Video of woodland between Kingston		
	2020	Gate and Ladderstile Gate of Richmond		
		Park SAC		
		2. Map showing deposition and ancient		
		woodland		
		3. Map showing Exceedance for nitrogen		
		deposition in Richmond Park according to		
		APIS		
30/11/23	Email	Request that take the Reg 19 HRA back to council		
		to correct errors and omissions and to reconsider		
		analysis and put out to consultation again.		
11/3/24	Email with new Expert Advice	1. Availability of dead wood depends on		
		trees in Richmond Park;		
		2. Quality of dead wood is vulnerable to air		
		pollution;		
		3. Quality of dead wood is vulnerable to		
		recreational pressure;		
		4. Lucanus Cervus does not purely depend		
		on deadwood;		
		5. Nitrogen deposition can favour more		
		competitive fungi.		
1/7/24	Email	Stag beetle vulnerable to recreational pressure,		
		need for constant supply of ancient trees. David		
		Attenborough correspondence.		
25/7/24	Email with attachments	2 attachments:		
		<ol> <li>In depth exposition of why Reg 19 HRA</li> </ol>		
		screening assessment of Richmond Park		
		SAC is not sound;		
		2. Expert Evidence supporting assertions that		
		screening assessment of Richmond Park		
		SAC is not sound.		

I would like to make the following additional observations following publication by Richmond Council of HRA on 19 January 2025: A. Screening out of Recreational Pressure and Urbanisationfrom the new Richmond Local Plan as having a likely significant effect on the habitats of the stag beetle in Richmond Park SAC

Basis of screening out of Richmond Park from needing Appropriate Assessment for recreational pressure is not based on evidence or justified and does not follow the precautionary principle.

Point 4.63 makes reference to the scale of residential development coming forward in the new Richmond Local Plan of 4110 new homes over the next 10 years but does not extrapolate this in to likely visitor numbers to Richmond Park SAC, either from the plan alone or in combination with other plans and projects coming forward<sup>1</sup>. In point 3.32, Richmond Council states that it has taken a "*risk based approach*" based on the "*precautionary principle*" and that "*a conclusion of no significant effect was only reached when it was considered unlikely, based on current knowledge and the information available, that a development plan policy or site allocation would have a significant effect on the integrity of the site." However, this is not the case, as the information in the screening assessment is erroneous and "current knowledge*" and "the information available" have not been taken into account. In point 3.45, Richmond Council refers to the "*HRA Handbook*", a subscription only handbook written by private individuals, the guidance in which should not be relied upon by the competent authority.

Richmond Council acknowledges in 4.62 that "recreational pressure and general human presence can have a likely significant effect on a European site as a result of physical disturbance eg through erosion and trampling or disturbance to qualifying species". In 4.66, Richmond Council states that each European site will have a Zone of Influence of 7 km.

Two paragraphs, 4.69 to 4.70, of HRA SD 004a relate to "recreation and urban impacts" in Richmond Park SAC. In point 4.69, Richmond Council states that "*it is recognized that recreation is an important issue that affects habitats and species found at Richmond Park and that increases in recreation from the Local Plan has potential to result in increased pressure on those ecological features in the park.*"

In 4.70, Richmond Council state that "Richmond Park SAC is designated for the stag beetle, <u>which are</u> not susceptible to recreational impacts at this location because the site is managed to ensure that the deadwood habitats which they depend upon is maintained...the <u>majority of this species lifecycle</u> is reliant on deadwood habitats located underground, and as such impacts are considered to be limited and unlikely to result in a reduction in the extent and availability of this habitat for this species." Richmond Council then conclude that "proposed site allocations will not result in a LSE, either alone or in-combination with other plans or policies, on the qualifying features of this SAC".

The conclusion drawn in point 4.70 that the policies of the Richmond Plan are unlikely to have a significant effect on the protected species and its supporting habitat in Richmond Park ignores the acknowledgement in 4.69 that "increases in recreation from the Local Plan has potential to result in increased pressure on these ecological features in the Park." The supporting habitat of stag beetle larvae in Richmond Park SAC, as can be seen from the Conservation Objectives for the SAC and the JNCC description of Richmond Park SAC, is not "deadwood habitat located underground". The habitat is the "decaying timber of ancient trees". The Citation for Richmond Park SAC supports the fact that it is the trees that are the primary source of habitat for the stag beetle in Richmond Park

<sup>&</sup>lt;sup>1</sup> 4110 homes at an average occupancy of 2.60 people gives 10,686 new residents.

SAC<sup>2</sup>. The larvae of the stag beetle in Richmond Park develop over about six years in the decaying timber of the trees in Richmond Park SAC. This may consist of stumps, parts of trunks, roots, and other parts of trees as laid out in the Conservation Objectives. Mr Colin Hawes, England's preeminent stag beetle expert, has reinforced in recent correspondence with me the reliance on the trees in Richmond Park as the habitat for the stag beetle in this Special Area of Conservation. Mr Hawes in an email reinforced that it is the decaying roots and underground part of the trunk or bole of older trees that are the essential continuing source of decaying wood for the Habitats Directive protected stag beetle, thus necessitating the long term survival of the trees that provide that decaying wood:

"Stag beetle larvae live underground. What is perhaps not understood by Richmond Park is the fact that it is the subterranean decaying deadwood that is essential because it is the food that stag beetle larvae use i.e. <u>underground decaying roots as well as the decaying wood under the bole of the tree</u>. The essential decaying wood that is used by the larvae can be from any broadleaf tree including veteran trees. However, stag beetle larvae will not feed on conifer wood."

The council relies in its conclusion on management by the Royal Parks to "maintain deadwood habitats" which is not an assumption that is allowed as it measures to reduce the likely effects of a plan may not be taken in to account at screening assessment as part of a Habitats Regulations Assessment. Richmond Council ignores the fact that the female stag beetle lays her larvae near or in rotting wood on the ground. Richmond Council ignores the fact that the male and female stag beetle spend the summer months in the open in the woodland and that the male stag beetle in particular stays close to where he emerges and is attracted to tarmac and paths and road surfaces that are warn in the sun and where he is vulnerable to being injured or killed. If a stag beetle larva is exposed as a result of its removal from, or by disturbance to, the decaying wood in which it is situated, the larva will die. It cannot be disputed that a higher number of people visiting Richmond Park will mean more trampling around trees and more decaying branches and limbs of trees that are partially covered in soil being taken to make dens or being disturbed by people climbing on or playing with them, killing both larvae and mature stag beetles. The more people who visit Richmond Park SAC, the more vulnerable old trees will be to damage and deterioration from people climbing in them, trampling their root areas and destroying the vital ecosystems on which the trees rely for their longterm survival.

Richmond Council ignores an assessment of the impact of its Local Plan policies on the **supporting habitats** for the stag beetle. These comprise scattered veteran trees as laid out in the Joint Nature Conservation Committee (JNCC) description of the habitat feature for which Richmond Park SAC is protected for the Habitats Directive Annex II species, the stag beetle. This states: *"Richmond Park has a large number of ancient trees with decaying timber. It is at the heart of the south London centre of distribution for stag beetle Lucanus cervus, and is <u>a site of national importance for the conservation of the fauna of invertebrates associated with the decaying timber of ancient trees."</u>* 

In addition, Natural England's Conservation Objectives for Richmond Park SAC clearly that the objectives for the site include the habitats of the stag beetle in Richmond Park:

"Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the

<sup>&</sup>lt;sup>2</sup> "The ancient parkland and its associated trees supports a nationally significant assemblage of invertebrates" and "indicative of ancient forest areas where there has been a long continuous presence of overmature timber."

site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by

maintaining or restoring;

I The extent and distribution of the <u>habitats</u> of qualifying species

2 The structure and function of the <u>habitats</u> of qualifying species

I The supporting processes on which the <u>habitats</u> of qualifying species rely

2 The populations of qualifying species, and,

2 The distribution of qualifying species within the site."

and

"These Conservation Objectives are those referred to in the Conservation of Habitats and Species Regulations 2017 as amended from time to time (the "Habitats Regulations"). <u>They must be</u> <u>considered when a competent authority is required to make a 'Habitats Regulations Assessment'</u>, including an Appropriate Assessment, under the relevant parts of this legislation."

In addition, the Supplementary Advice to the Conservation Objectives highlights how the habitats on which the stag beetle relies are vulnerable to recreational pressure throughout the stag beetle's lifecycle:

*"Female stag beetles lay their eggs <u>near the rotting wood and roots of broadleaved trees</u> which are in contact with the soil so that the wood remains moist and is able to rot."* 

"It is therefore <u>critically important that sources of decaying timber are left undisturbed</u> wherever possible."

"During their short adult lives the male stag beetles <u>will spend their days sunning themselves</u> in an attempt to gather strength for the evening's activities of flying in search of a mate."

"Active and ongoing conservation management <u>is needed to protect, maintain or restore</u> this feature at this site."

*"The majority of decaying wood should be permanently moist and therefore timber is most favourable <u>when buried at or near the soil surface</u>".* 

"Views about Management" highlights the "wood pastures" with "Mosaics of scattered old trees" that constitute one of the two SSSI interests at Richmond Park. "Views about Management" also states:

## "Access to the site, and any recreational activities within, may also need to be managed."

In addition, "**Operations likely to damage the special interest**" available on the Designated Sites website, clearly states for Richmond Park OLD1002388 that the following Types of Operation which can arise as a result of recreational pressure and increased human activity around Richmond Park SAC, amongst other types of operations, are likely to damage the special interest. These are all ignored by Richmond Council:

7. Dumping, spreading or discharge of materials

8. Burning

9. The release in to the site of any wild, ferral or domestic animal, plant or seed

10. The killing or removal of any wild animal\* (\*"animal" includes invertebrates), including pest control

11. The destruction, displacement, removal or cutting of any plant or plant remains, (Including tree, shrub, herb, hedge, dead or decaying wood, moss, lichen, fungus, leaf-mould, turf)

12. Tree and/ or woodland management

13a. Drainage

21. Construction, removal or destruction of roads, tracks, walls, fences, hardstands, banks, ditches or other earthworks, or the laying, maintenance or removal of pipelines ad cables, below or above ground.

22. Storage of materials

23. Erection of permanent or temporary structures, or the undertaking of engineering works, including drilling

26. Use of vehicles or craft likely to damage or disturb features of interest.

27. Recreational or other activities likely to damage features of interest.

Further, while Natural England in "Defining Favourable Conservation Status in England EIN062" makes clear that "securing appropriate management, and addressing pressures or threats...can be considered in plans and strategies for achieving favourable conservation status," such management measures cannot be considered cannot be taken in to account in the screening assessment of the effects of the policies of a Local Plan as part of a HRA screening assessment.

The Screening Assessment conclusion in 4.70 of no likely significant effect takes into account management activities of The Royal Parks , which is not permissible at screening stage of a HRA. Richmond Council itself refers to this in paragraph 3.12 of the HRA SD 004a, quoting People Over Wind, Sweetman vs Coillte Teoranta, that "<u>it is not appropriate, at the screening stage, to take account of measures intended to avoid or reduce the harmful effects of the plan or project on that site</u>."

While The Royal Parks have fenced some areas containing veteran trees off from the public (the fencing can be and often is breached by visitors), thus reducing recreational impact to some extent in such areas, the vast majority of trees and woodland in Richmond Park SAC are accessible to the public. Dead wood habitat in these locations therefore remains vulnerable to recreational impacts and many new paths are already being trodden through the woods and near to veteran trees.

In terms of urbanization, Richmond Council has ignored the expert opinion that I sent to it on 11 March 2024, that states that:

"Lucanus cervus does not purely depend on dead wood. It strongly depends on temperature and the proper mycelia inhabiting the dead wood; both are influenced by urbanization. The urban heat island can put species under additional stress and risk of extinction."

And

"Veteran trees and their associated species are to be considered micro ecosytems with hundreds of specialized insect (and other arthropods) species and fungi. Many of them will no doubt be strongly impacted by urbanization due to urban heat island, increased nitrogen deposition and other pollution, light pollution etc."

Further, there is clear evidence of erosion from trampling, compaction and cycling, all causing erosion as "urban edge effects" in Richmond Park SAC. This is particularly apparent from Kingston

Gate to Ham Gate along the Tamsin Trail and from Kingston Gate to Isabella Plantation but also throughout the park.

There is no evidence that Richmond Council has considered the in-combination effects of development projects and plans that have been agreed and that are coming forward in surrounding areas in the screening assessment of the effects of recreational pressure on the woodland and veteran tree interests of Richmond Park SAC that are the habitat of the stag beetle. In the Epping Forest Local Plan HRA, the Council states in 2.12 that "an in-combination assessment is of greatest relevance when the plan would otherwise be screened out because its individual contribution is inconsequential". So, if the number of homes being built in Richmond over the 10 year period of the new Local Plan is considered to be inconsequential, it is even more important to look at development coming forward in other Local Plans in surrounding areas.

The London Plan 2021 shows that 60,250 new homes are being built in Richmond, Merton, Wandsworth, Hounslow and Kingston between 2019/20 and 2028/29 . Assuming an average occupancy rate of 2.6 people, this means that 156,650 new residents in these boroughs alone will be living in these Boroughs by 2029, all of whom will be in easy reach of the park. If 50% of these new residents visit Richmond Park an average of just once a fortnight , this will result in an additional 2 million visits a year, an increase from assumed 2019 levels 25%.

For example, as of 8 March 2024, the Kingston Local Plan finished its Regulation 18 stage consultation and the council had considered feedback given; therefore considerable weight should have been given to the housing and employment targets for Kingston in that plan in accordance with government guidance<sup>3</sup>, a s well as arising from the fact that the Opportunity Area targets in the new London Plan are minimum targets.

In terms of individual projects in Kingston Town alone, Richmond Council has not taken into account the impact from recreational pressure from the following approved large-scale projects and plans in Kingston Town alone. It should be noted that a further 1181 units are being developed at Signal Park Tolworth, only 5km from Richmond Park. The number of projects approved but not completed within a 7km radius of Richmond Park SAC need to be considered in the in-combination assessment for likely significant effect from recreational pressure and urbanization effects on Richmond Park SAC and the stag beetle:

Kingston Town development		Number of units	Additional residents @2.6 per unit	Number of additional visits to Richmond Park SAC at 2 x per week
a.	The Cambridge Road Estate	1400	3,640	378,560
b.	Surrey County Council County Hall	292	759	78,957
C.	Canbury Place Car Park	265	689	71,656
d.	Eden Campus	115	299	31,100
e.	Roupell House, Cumberland House, York Way	101	263	27,310

<sup>&</sup>lt;sup>3</sup> <u>https://www.gov.uk/guidance/habitats-regulations-assessments-protecting-a-european-site#screening</u>

and Cambridge Road			
f. Homebase, Kingston Road	297	772	80,288
	2,470	6,422	
TOTAL number of additional visits from Kingston Town			<u>667,871</u>
g. Signal Park, Tolworth	1181	3070	319,342
TOTAL	3,651	9,492	987,213

The developments in a. to e. alone account for an additional <u>987,213 additional visits to Richmond</u> <u>Park SAC just from SIX developments</u>.

"A Vision for Kingston Town Centre", approved by Kingston Council in June 2023 includes the development of Kingston in to "London's leading Metropolitan Town Centre:



There is photographic evidence that woodland in Richmond Park is experiencing trampling, erosion, destruction of trees, deterioration and isolation of trees, disturbance of fallen wood and removal of branches to make dens and for other recreational purposes. Significant increases in recreational pressure from increasing visitors - from plans and projects coming forward in combination with The Richmond Local Park - to Richmond Park will over time cause greater disruption and disturbance and destruction to vital elements of the ancient tree habitat on which the stag beetle relies for its long term survival in the absence of significant and planned mitigation measures which must not be taken in to account at screening assessment stage.

While Natural England has recently raised the Conservation Status of the woodland SSSI units in Richmond Park to "favourable", this change was based on an explicitly limited survey and comments on each SSSI unit are identical and generic, indicating that very little real inspection of the condition of individual trees and the diverse woodland habitats across the SAC took place. Notes from a Natural England dated 3 October 2023 also do not deny that visible effects of recreational pressure already exist in the park. Photo evidence I have collected shows the effects of recreational pressure to be greater and more widespread than indicated by Natural England. Similarly, the number of dogs

in Richmond Park has soared in recent years. However, no account has been taken of the effects of dog walking and eutrophication from dog urine on the protected habitat for the stag beetle.

Natural England site condition visit notes:

• "Evidence of ground damage due to excessive trampling is very localized"

i.e. ground damage from excessive trampling already exists now

• Some limited evidence of "desire lines" being created through"

i.e. new paths are already being made by visitors

• "No real evidence seen of significant damage to trees by deer, vandalism, ground compaction in root zone (except in vicinity to car parks)"

i.e. there is evidence but it is not real or significant apart from in vicinity to car parks where there is real evidence of significant damage by the listed things

• <u>"Pending review of the data, there is nothing to indicate that the saproxylic invertebrate</u> assemblages should not be assessed as being in favourable condition, but <u>do just need to</u> consider whether there is sufficient consideration of long and very long term provision of veteran tree features across the site, and also <u>sufficient connectivity of the supporting</u> <u>habitat</u> across the site."

i.e. there is no positive evidence that the assemblages should be assessed as being in favourable condition and review of the data has not yet occurred, and there is a need for consideration of the "long and very long term provision of veteran tree features … and sufficient connectivity of the supporting habitat across the site".

Leaving decaying wood in situ does not remove possible recreational impacts on the stag beetle. When the male and female stag beetle emerge from their larval stage, in spring and summer months, they travel in order to find a mate. The female travels from 1 metre to 241 metres from where she emerged and the male travels from 144 metres to 250 metres from the place from where it emerged . No management actions can mitigate for the risk to stag beetles from recreational pressure given the random places to which stag beetles will travel to find a mate.

There is evidence that adult stag beetles are attracted to the warm surfaces of roads and paths where they can be trampled, run over, killed, gathered or predated .

An arbitrary "Zone of Influence" for all sites, including Richmond Park SAC, has been set at 7km. This is claimed to be a "precautionary approach" but Richmond Council has not considered the incombination recreational pressure that will be created by developments that *have already been approved* within 7km of the perimeter of Richmond Park in Kingston, Merton, Wandsworth, Hounslow as well as in Richmond, let alone arising from the plans themselves. Moreover, Richmond Council has referred to a privately written "HRA Handbook" as authority rather than relying on government guidance that gives different advice.

In addition, evidence exists that visitors come to Richmond Park from much further afield than 7km, a fact that undermines assumptions made by Wandsworth Council in its screening assessment of Richmond Park SAC, which it anyway erroneously describes. According to the Royal Parks Movement Strategy Consultation for Richmond Park in 2021, of 10,765 people who responded to the consultation, 42% of people came from local post codes, with 48% of all responses (5,135 responses)

from "other locations in the UK (the majority from within Greater London)". *31% of people who came to the park came by car* and 82% of all visitors visited the park at least fortnightly.

The Friends of Richmond Park stated in 2015 that there were already 5.4 million annual visitors to the park in 2015, up from 2.5 million in the mid-1990s and 4 million in 2008.

In the Richmond Park Management Plan 2019 – 2029, The Royal Parks state that "visitors to the park have increased twofold in the past 10 years and 4 fold in the past 25 years" and that "visitor numbers are continuing to rise". Extrapolating from visitor data provided by The Friends of Richmond Park for 2008, this would make visitor numbers in 2019 over 8 million people. Up to 1000 people responded to the consultation from Lambeth which is 10 miles from Kingston Gate of Richmond Park SAC, and that many other people responded from each of a large number of locations much further afield in London .

The in-combination assessment that appears to have taken place only for Wimbledon Common SAC as part of the screening of that site is flawed, contains inconsistencies and is not evidence-based.

There is inconsistency in the screening of Richmond Park SAC and Wimbledon Common SAC that biases screening out Richmond Park SAC on the basis of recreational pressure and which exposes the lack of evidence used to screen out Richmond Park SAC from needing appropriate assessment. In 4.71, Richmond Council states of Wimbledon Common SAC that "It is still considered that the site will draw in recreational visitors given its size, quality features of interest and the majority of proposed allocations within the 7km Zone of Influence". But all the development sites in the Richmond Local Plan are nearer to Richmond Park than to Wimbledon Common SAC. In screening Richmond Park SAC, Richmond Council ignores the fact that large numbers of visitors are attracted to much larger Richmond Park SAC with its scattered veteran trees and woodlands and which covers nearly 2500 acres in size compared to the 1140 acres that comprise Wimbledon and Putney Commons. Richmond Park is a Royal Park that has many "features of interest" that attract visitors, ranging from several ancient woodlands, acid grasslands, Pembroke Lodge for teas and food, weddings and other events, famous views from Pembroke Lodge Terrace and from King Henry's Mound, to Holly Lodge for school trips and other education events, to The Royal Ballet School, to the renowned Isabella Plantation and Pen Ponds, to the park's famous deer (which now appear on the signs welcoming people to Richmond Park), to two circuits around the park used by thousands of cyclists every week.

Wimbledon Common has only one free car park at The Windmill, which is halfway down Parkside a long way from any densely inhabited area. Richmond Park has car parks at Roehampton Gate, Kingston Gate, near Richmond Gate at Pembroke Lodge, at The Pen Ponds and at Sheen Gate, allowing many more visitors to come to Richmond Park by car. Wimbledon Common has only one café and one set of toilets, at the Windmill. Richmond Park has seven cafes: at Roehampton Gate, Pembroke Lodge – two, one outside and a restaurant inside – Ham Gate, Kingston Gate, Isabella Plantation and Pen Ponds and toilets at Kingston Gate, Roehampton Gate, Isabella Plantation, Pembroke Lodge and Ham Gate.

Paragraph 4.76 explicitly states that the screening in of Wimbledon Common SAC for possible significant effects of recreational pressure includes the consideration of in combination effects. No such consideration has been made for Richmond Park SAC.

## B. Screening out of Pollution from the new Richmond Local Plan as having a likely significant effect on the habitats of the stag beetle in Richmond Park SAC

In reaching its conclusion of no likely significant effect from its Local Plan in terms of air quality either alone or in combination with other plans and projects, Richmond Council is mistaken:

i. Not to have acknowledged or to have analysed in a coherent manner the sensitivity to nitrogen deposition of the supporting habitat – woodland and individual ancient trees - for the stag beetle in Richmond Park SAC.

While Richmond Council states that qualifying features of the site "may be indirectly affected by changes to the supporting habitat" (4.44 of the HRA of the Richmond Local Plan), the council claims in 4.55 that the stag beetle relies on "deadwood habitats" that are "not considered susceptible to impacts from air pollution". This is contradicted on APIS - Species – Pollutant Results, Nutrient Nitrogen, Habitat Sensitivity where it is clearly stated that the broadleaved, yew and mixed woodland habitat on which the stag beetle relies for the decaying timber in which its larvae develop IS sensitive to nitrogen. In addition, APIS makes clear the deleterious effect of nitrogen pollution on soil processes and of nutrient imbalances on its website under "indicators of N enrichment" and "Critical Load/Level". This level is exceeded in Richmond Park SAC.

It should be noted that, although Natural England has recently changed the status of the woodland SSSI units in Richmond Park to "Favourable", this has been done without proper observation and analysis. The comments are generic, identical and do not allow a meaningful understanding of the condition of the woodland habitat needed to support the stag beetle in each unit. This contrasts with the unit comments for Epping Forest's woodlands where specific observations have been made of each unit and separate comment given.

The statement in point 4.56 of the HRA that "the ability of Richmond Park SAC to meet its Conservation Objectives for stag beetle is unrelated to nitrogen deposition rates" and that "partially buried deadwood" "will not be affected by changes in nitrogen deposition" is clearly not based on evidence and the assertion that "This is based on the APIS website which clarifies that no negative effect on stag beetle is expected despite the sensitivity of its broad habitat" provides no reasonable explanation for why this might be the case.

APIS states that the stag beetle is not itself sensitive to nitrogen impacts on the broad habitat. However, the reason that is given is tautological and does not explain why harm to the stag beetle's habitat will not harm the stag beetle: it states simply that there is "*no expected negative impact on species due to impacts on the species' broad habitat*". Why not? No explanation is given. While the stag beetle and its larvae may not themselves be sensitive to pollution, nitrogen deposition on the veteran (including ancient) trees and the habitat supporting those trees that comprise the stag beetle's habitat in Richmond Park risks threatening the long-term existence of the ancient woodland habitat on which the stag beetle relies in the long term for its own survival. In addition, international etymologist, Arno Thomaes has stated that "*The quality of dead wood is vulnerable to air pollution (higher nitrogen content has been found in wood under higher nitrogen deposition which in turn strongly influences the fungi and mosses community living in/ on the logs*)" and "Nitrogen deposition *can favour more competitive fungi outrunning the needed fungi for Lucanus Cervus.*"

According to the JNCC, it is the "*decaying timber of ancient trees*" on which the stag beetle relies for its long-term survival in Richmond Park SAC and not simply dead wood.

Moreover, the Natural England Advice states in 4.5 that "When determining whether air pollution from a plan or project has a likely significant effect upon a given qualifying feature under the Habitats Regulations, the extent to which there are risks of air pollution that might undermine the Conservation Objectives of the site is central." The Conservation Objectives for Richmond Park SAC which are made up of Conservation Objectives and Supplementary Advice - make clear that maintaining or restoring the supporting woodland habitat for the stag beetle at favourable conservation status is critical to the integrity of the site in terms of:

- The extent and distribution of the habitats of qualifying species
- The structure and function of the habitats of qualifying species
- The supporting processes on which the habitats of qualifying species rely".

The Supplementary Advice clarifies the composition of this habitat. The habitat is titled "decaying wood habitat" the target for which, in terms of structure and function, is the maintenance of "an abundance and constant supply of ancient trees, standing dead trees, fallen trees, stumps and roots in a state of decay". Under "Woodland Habitat", the Supplementary Advice states that the target is: "Maintain a well-structured broadleaved woodland habitat, with sheltered, sunlit glades and rides containing stumps and other suitable decaying wood". Further, under Supporting Processes, Natural Processes, the Supplementary Advice states that the target is "continuity of timber decay and nutrient recycling processes, in particular the continued provision of plentiful stumps and roots."

Mr Arno Thomaes, a European entymologist has conducted research that provides evidence that dead wood is sensitive to pollution. Mr Thomaes has written in correspondence that:

"Special Areas of Conservation are designated for habitats and/or species, never for dead wood. The quality of dead wood is vulnerable to air pollution (we found for example higher Nitrogen content in wood under higher nitrogen deposition which in turn strongly influence the fungi and mosses community living in/on the logs) and recreational pressure (the conflict between public safety and maintenance of veteran trees for example). Secondly, Lucanus Cervus does not purely depend on dead wood. It strongly depends on temperature and the proper mycelia inhabiting the dead wood: both are influenced by urbanisation. The urban heat island can put species under additional stress and risk of extinction, N deposition can favour more competitive fungi outrunning the needed fungi for Lucanus Cervus. Furthermore, veteran trees and their associated species are to be considered as micro ecosystems with hundreds of specialised insect (and other arthropods) species and fungi. Many of them will no doubt be strongly impacted by urbanisation due to urban heat island, increased nitrogen deposition and other pollution, light pollution etcetera."

Further, The Royal Parks, in their Richmond Park Management Plan 2019 to 2029, state that "The stag beetle…is the largest terrestrial beetle, Richmond Park…is at the heart of the South London centre of distribution for the stag beetle. Larvae develop in decaying tree stumps and fallen timber of broadleaved trees in contact with the ground, especially of oak among other species, and the presence and continuity of this resource in Richmond Park is essential to the conservation of this species".

Lastly, The Woodland Trust states in Woodwise – Life in Deadwood Autumn 2019 that: "Decaying wood, whether on the ground or in a tree, is dynamic and transient. For a saproxylic species, availability of decaying wood habitat in the right place at the right time is vital. To conserve the diversity of life in deadwood we must ensure the nextgeneration of veteran trees is already growing and cared for. Unfortunately, new tree planting will do little in the short-term to benefit saproxylic

organisms. Such young trees will not provide those veteran features for many years and so there's urgent need to bridge the gap between decaying wood habitats of the present and those of the future. Above all though, we must value our current veteran trees and prevent their loss wherever possible."

ii. Not to have considered the actual levels of nitrogen deposition in Richmond Park and huge exceedances that already exist – which give a broad idea of nitrogen deposition levels across the park despite the latest measurements being taken during COVID. Where I previously noted a 2018-20 pre-Covid measurement, it was significantly higher as can be seen in the table below.to have accepted an arbitrary requirement for an increase in average annual daily traffic figures from a plan, alone and in combination with other plans, of 1000 vehicles on any road, or 200 HGVs, for an air quality appropriate assessment to be needed, even when a site, as is the case with Richmond Park SAC, already has a significant exceedance of nitrogen deposition. The range for the woodland habitat is listed as 10 to 15 kg N/ha/year. APIS states clearly that the lower level of 10 kg N/ha/year must be used in any screening assessment of nitrogen deposition in a protected site.



	Grid Reference	Actual N deposition	Exceedance
Name of woodland area		level kg N/ha/yr vs	(over 10kg
		10kg target during	target)
		COVID	
		(2020-22)	
Teck Plantation	TQ201744	24.09	14.09
Sidmouth Wood	TQ190731	23.73	13.73
Queen Elizabeth Plantation	TQ194729	23.55	13.55
Pond Plantation	TQ197725	23.55	13.55
Prince Charles' Spinney	TQ204721	23.82	13.82
Isabella Plantation	TQ198718	23.47	13.47
Spankers Hill Wood	TQ207728	23.82	13.82
Saw Pit Plantation	TQ198728	23.55	13.55
Richmond Park near A3 at		<u>2018-2020</u> : 33.7	
Roehampton Gate			
Ham Cross APIS monitoring site	TQ191718	23.47 (31.51 pre-	13.47 (21.51
		Covid)	pre-COVID)

Modifying factors for empirical critical loads of nitrogen
Empirical critical loads of nitrogen are provided as a range for each habitat e.g. 5-10 kg N ha<sup>-1</sup> yr<sup>-1</sup>. Modifying factors have sometimes been used to determine what
critical load value should be applied with the range based on the sensitivity and specific location of features - for example loops in areas with high precipitation have been
considered less sensitive. However, UK evidence included in the 2022 review of critical load ranges. The UK Conservation Agencies and Regulators therefore require the
minimum value of the critical load range for the most sensitive habitat type present on the site to be used during the screening / Likely Significant Effect stages of air
quality assessments. The enables assessment of exceedance of a threak-old that reflects sensitive examples of the habitat. If exceedance of any threak-olds are indicated
during the detailed modelling stage, modifying factors can be considered based on the evidence provided in Bobblink et al. 2022 and Rowe & Hina, 2023 reports or other
evidence sources for review by the relevant regulator during detailed assessment stages / Appropriate Assessment.
Rowe EC, Sawicka K, Hina NS, Carnell E, Martin Hernandez C, Vieno M, Tomilinson S, & Jones L (2023) Air Pollution Trends Report 2023: Critical load and critical level
executances in the UK. Report Detain under Contract AD0849, UKCEH project 0767.

iii. Not to have conducted a baseline assessment of nitrogen deposition levels in Richmond Park, for example by seeking APIS information about past and current levels of nitrogen deposition in Richmond Park, including seeking information on nitrogen deposition levels where trees exist in proximity to Queen's Road along its 2.2 mile length as it runs both ways through Richmond Park SAC from Kingston Gate to Richmond Gate.

iv. To have relied on Natural England's internal advice for Competent Authorities on Road Traffic and Habitats Regulations Assessments, published in June 2018 ("the Natural England Advice") and to have ignored the fact that the Natural England guidance is simply guidance and not rules.

v. To have relied on arbitrary and not relevant or evidence-based assertions in the Natural England Advice paragraphs 4.24 and 4.25 which in turn rely on "non-statutory or guideline threshold" used in the Design Manual for Roads and Bridges about the assumed level of increase in traffic that will harm a protected habitat in terms of emissions. The statement that new emissions must be more than 1% of the critical load is ambiguous and does not reflect the statement on APIS that in conducting screening assessment the lower band of the critical load must be used. In the case of broadleaved mixed woodland in Richmond Park SAC, the lower band for nitrogen deposition is 10kg of nitrogen per hectare per year, so an increase of 1% in this level would be an increase in 0.1kg of nitrogen per hectare per year.

vi. Not to have included traffic levels on Park Road, King's Road and New Road, KT2, that run within 200 metres of Richmond Park . King's Road is often congested with traffic accessing Richmond Park and travelling to Kingston Hospital and the A3. Park Road is used as a Kingston by-pass for traffic travelling from the A3 to Richmond, and not have regard to traffic data that was collected by Kingston Council on Park Road in 2022 and which was updated in 2024.

vii. Only to have considered "air pollution from changes in traffic volumes on roads close to sensitive habitats" (Point 3.30), ignoring Queen's Road that is open in daytime hours through Richmond Park. Queen's Road runs for 2.2 miles through Richmond Park. Queen's Road is a road used as a major daytime relief road for the congested A307 both ways from Kingston to Richmond.

viii. Not to have corrected the erroneous statement in point 4.53, that, following consultation with Natural England, it has also considered the B351, Queen's Road, of which it states 1.01% lies within 200 metres of Richmond Park. This is not the case. Queen's Road is a through road for cars which runs for 2.2 miles from Kingston Gate to Richmond Gate and is surrounded by veteran trees and ancient woodland.

ix. To have relied on the statement in 4.38 that "only those roads forming part of the primary road network...might be likely to experience any significant increases in vehicle traffic as a result of development (such as greater than 1000 AADT etc)" and "as such, where a site is within 200 me of only minor roads no significant effect from traffic-related air pollution is considered to be the likely outcome." These are arbitrary and non-evidence based assertions. One of two main routes between

Kingston and Richmond in daylight hours is Queen's Road through Richmond Park. This road takes as much car traffic and sometimes more than the A307 Petersham Road. The individual situation that exists for Richmond Park SAC has been ignored.

x. Not to have calculated the total percentage of Richmond Park's woodland habitat that is exposed to emissions or drawn a conclusion about the significance of the habitats within 200 metres of a road which are affected by nitrogen deposition. Even by its own calculations, 35 hectares of deciduous woodland is within 200m of a road passing near Richmond Park SAC, a figure that is ignored by Richmond Council. This does not include many individual veteran trees and small clumps of veteran trees. It is also before taking in to account the trees and woodland habitat surrounding the B351 Queen's Road as it runs for 2.2 miles through Richmond Park, and emissions from traffic on King's Road and Park Road where these roads pass within 200 metres of woodland areas in Richmond Park SAC.

xi. Not to have considered the habitat in Richmond Park for the stag beetle to be the ancient trees and the woodlands in the park that are the source of "decaying timber", and not merely "dead wood". The Citation for Richmond Park SAC description of the protected habitat in Richmond Park SAC includes noting the "ancient trees found throughout the parkland" and states that "broadleaved woodlands ...add to the diversity of habitats present and ancient trees are present throughout". It further states that "the ancient parkland and its associated trees supports a nationally significant assemblage of invertebrates. It is one of the prime sites in Britain for beetles associated with dead and decaying wood...Many of these beetles are indicative of ancient forest areas where there has been a long continuous presence of overmature timber." This supports the JNCC designation of Richmond Park SAC for the stag beetle in which it describes the supporting habitat as the "decaying timber of ancient trees".

xii. Not to have considered international stag beetle expert opinion sent to Richmond Council by me on 11 March 2024 and 25 July 2024, which includes amongst other statements that "the quality of dead wood is vulnerable to air pollution ( higher nitrogen context has been found in wood under higher nitrogen deposition which in turn strongly influences the fungi and mosses community living in/on logs"), and "Nitrogen deposition can favour more competitive fungi outrunning the needed fungi for Lucanus Cervus".

xiii. Not to have corrected the statements in points 4.54 and 4.61 of the HRA in which Richmond Council states that, in 4.54, that "the habitats within 200m of the strategic roads were comprised solely of lowland acidic grassland", and – in 4.61 - that "despite recent traffic data having not been attained, it is considered that increased traffic flow along these routes would not significantly impact the qualifying or support features of which the Special Area of Conservation is designated for, as the habitats situated within 200m of the road are not suitable for stag beetle". There is no justification for this statement.

xiv. Not to have screened out the possibility of any likely significant effect from pollution arising from the policies of its new Local Plan without forecasting likely traffic increases arising from its new Local Plan in combination with other plans and projects coming forward. The Natural England Advice states in 4.44 that in-combination effects from "any proposed plans or projects that are reasonably foreseeable" must be taken in to account at the screening stage. Richmond Council has stated in 4.66, that there is a 7km Zone of Influence in its Local Plan. In combination effects must therefore consider the likely impact on air quality from developments coming forward in Hounslow, Merton, Kingston, Wandsworth and any borough within the 7km zone.

xv. to have relied on UCL Datashine Commute Data for commuting patterns to inform traffic forecasts (Reference 28 to Point 4.40). However, this data relates to a project that ran from 2013 to 2015 and the data from which is out of date.

xvi. To have ignored housing figures in The London Plan 2021 which show that between 2019 and 2029, a total of 60,250 new homes are forecast to be built in Hounslow, Kingston, Merton, Richmond and Wandsworth alone, with capacity for 54,000 new jobs in the same boroughs, excluding Merton. Many of these homes will be within 7km of Richmond Park SAC.

xvii. to have relied on the assessments that screened Richmond Park SAC out from any likely significant effect in existing and forthcoming Local Plans for local authorities in surrounding areas, such as Wandsworth and Hounslow. This is because the basis of the conclusions of the screening assessments is inconsistent, irrational, not based on evidence, is not precautionary and does not bear scrutiny.

xviii. Not to have included likely vehicular movements coming forward from the draft Kingston Local Plan for which Kingston Council had completed its Regulation 18 consultation in February 2023, before the Regulation 19 Richmond Local Plan was being consulted upon (between 9 June to 24 July 2023). Furthermore, Kingston Council's new Local Development Scheme, agreed in February 2025, states that "A new local plan is needed to conform with the requirements of... the adopted London Plan at the time of its Submission... and the need to plan for the London Plan's housing target for Kingston". This leaves no doubt as to the minimum numbers of new housing units and increase in the number of residents, as well as other development targets, for example, for employment, leisure, night time and education uses, that will be seen in Kingston as laid out in the London Plan. The London Plan is a statutory planning document for Kingston and the housing and employment targets in it must be translated into the Kingston Local Plan. Further, projects already approved or seeking planning permission in Kingston are already bringing 6,422 new residents in to the Borough in the next few years.

xix. To have screened out any likely effects from emissions from traffic movements generated by the Richmond Local Plan alone and in-combination with other plans and projects without giving the assumptions used when arriving at the modelling figures laid out in Appendix E. This undermines conclusions reached as a result of the figures given.

Caroline Shah 16 March 2025