Oak Processionary Moth Management Plan

To be completed by the plan author:		
Woodland or Property name	Kingston University (KU) Sites: Please see KU Biodiversity Action Plan for the overview of all sites, the KU tree management policy and the KU Tree and Woodland Management Plan (TWMP) for detailed information on our tree scape, survey methodology and management aims.	
OPM Management Plan case reference *(Forestry Commission Official use only)*		
The landowner agrees this plan as a statement of intent for the site(Y/N)		Y
Plan author name	Sivakhami Sivanesan Biodiversity and Landscape Manager, Kingston University, biodiversity@kingston.ac.uk	

For FC Use only:				
Plan Period *(dd/mm/yyyy – Five Years)*	**Approval Date:**		**Approved until:**	
Five Year Review Date				

Revision No.	3	
Date	04/11/2025	
Status (draft/final)	Final – KU Approved	
Reason for Revision	Revision undertaken as per item 6 of the OPM Management Plan Criteria	

OPM Management Plan Criteria

Prior to submission review your plan against the criteria using the check list below.

No	OPM management plan criteria	Minimum approval requirements	Author check ☑
1	**Plan Objectives:** OPM management plans should state the objectives of management and set out how an appropriate balance between social, economic, and environmental objectives will be achieved.	• Management plan objectives are stated. • Consideration is given to environmental, economic and social objectives if relevant to the vision for trees and woodland habitats	
2	**OPM context and important features in management strategy:** OPM management plans should address the context of the pest particularly in relation to the plan objectives (e.g. where there is high footfall)	Management intentions communicated in ***Sect. 6*** of the management plan are in line with stated objective(s) ***Sect. 2***.	
3	**Identification of designations within and surrounding the site:** For designated areas, e.g. National Parks or SSSI, particular account should be taken of landscape and other sensitivities in the design of forests and forest infrastructure.	• Relevant designations have been considered, taking account of tree, public and animal health along with biodiversity.	In TWMP
4	**Management of OPM** Lay out the procedures for monitoring, managing and communicating OPM	• Surveys are undertaken annually by our Grounds Contractors. • Where trees are in conflict with high usage areas, we undertake manual removal where tree works budgets allow. This is after allowing funding for the primary Quantified Tree Risk Assessment (QTRA) tree health and safety recommendations as per our Tree Policy	Undertaken but no step by step process currently
5	**Consultation:** Consultation on OPM management plans and proposals should be carried out, where required (e.g. SSSI's),	• Evidence that consideration of neighbours and authorities for designated areas has been shown	Not done
6	**Plan Update and Review:** Plans will be reviewed and updated when mutually needed	• On an annual basis in September of each year information from surveillance and management has been presented in a suitable format as agreed with the FC	Updated when the TWMP is updated – which is every 4-5 years

Section 1: Site details

Property Name		Kingston University sites: Kingston Hill (KH); Roehampton Vale (RV); Tolworth Court (TC); Seething Wells (SW – managed separately to the main University); Penrhyn Road (PR); Knights Park (KP); Dorich House Museum (DH)	
Name	**Sivakhami Sivanesan**	**Owner (Manager)**	**Kingston University**
Email	**biodiversity@kingston.ac.uk**	**Contact Number**	07825 793 279
Agent Name (if applicable)			
Email		**Contact Number**	
County		**Local Authority**	Royal Borough of Kingston Upon Thames
Grid Reference	**Please see Biodiversity Action Plan for grid refences for all sites**	**Single Business Identifier**	Kingston University
What is the total area of this OPM management plan? (In hectares)		The total area for all of our sites which are known to have OPM is 48.48 hectares– but the sites don't have collective uniform tree cover, so the hectarage doesn't reflect the extent of OPM on our landholdings.	
Have you attached a map depicting the location of oak trees (ideally GIS)?		No, we don't list the location of all oak trees as we have large areas of mixed trees and only those which are assessed under our annual QTRA surveys are mapped location wise. The maps provided here are for site occupancy and transitory information for our sites.	
Have you included an Inventory of Oak and operations plan within this OPM management plan?		No	
Have you listed the maps associated with this woodland management plan? E.g. SSSI's, risk zoning		Site usage maps as detailed in the risk assessment section are provided – these do not show tree coverage or OPM locations within the site.	
Do you agree to make the OPM management plan publicly available?		Yes (but only after it's been approved by the University's Estate Committee for formal adoption by the University).	

Section 2: Vision and Objectives

Managing all of our trees across our sites (in all habitat settings) to maximise biodiversity on our sites including all associated fauna while minimising risk using the Quality Tree Risk Assessment (QTRA) method.

QTRA will be used to prioritise management work within the available budget in any financial year.

2.1 Vision

The long-term vision for the Kingston University Treescapes across all of our sites is to have a healthy biodiverse habitat for native flora and fauna. To achieve this, we will continue on our long-term goals of removing non-native invasive plant species which are on our sites where we are able to and minimise the impact on non-native fauna without compromising biodiversity.

Invasive plants:
Sources of the current invasive species infestations include historic planting (e.g. Rhododendron) and garden escapees (e.g. Bamboo and Spanish Bluebells) and dumped garden and contractor fly-tipping (e.g. Variegated Yellow Archangel, incidents of Japanese Knotweed and Himalayan Balsam).

Invasive fauna:
We are in the core zone for OPM infestation, eradication is deemed unfeasible and attempts at eradication may only have limited success but with an unacceptable negative biodiversity impact as well as financial costs, neither of which the University is willing and able to accept as it would negate our work to protect other biodiversity.

For species such as OPM, we will continue to work to minimise the chances of encountering nests on our sites with high footfall area. We would also want to increase opportunities for native fauna to predate on the nests etc. without long term negative impacts from chemical interventions. Since 2022, Kingston university has been a part of the OPM Alternative Control Working Group. As part of this group, we will be investigating the implementation of Nature-based Solutions on our sites.

We also have issues with grey squirrels and tree damage. Currently no work to cull squirrels have been attempted due to the lack of similar work in the London area, however we hope to take part in any roll outs or research on targeted oral contraception on our site, should the opportunity arise in the future.

We will determine success by increased species occupancy (native species) in areas of the restored woodland and a long term decrease in the invasive flora cover.

2.2 OPM Management Objectives

No.	Objective
	Environmental/Ecological and Health and Safety
1	Survey sites for OPM annually to get a broad image of the status on sites.
2	Continue to undertake manual removal and incineration of nests which are above footpaths and next to buildings in our campuses to minimise the negative impacts of chemical control on lepidoptera species, while minimising contact with high numbers of people.
3	In one of our campuses where the sites are located by a main arterial road out of London (A3) where able, spraying may be undertaken on the year of and following year where high numbers of OPM nests are observed, though it is understood that this will not result in eradication.
	Economic
4	Undertake/ring fence the tree works funding for QTRA tree works prior to actioning any OPM removal works. Following this, continue as objective 2.

Section 3: Plan Review – Achievements

Use this section to assess your achievements at the end of the OPM seasons against the objectives in Section 2.2.

Objective	Achievement
1	Annual surveys under the grounds maintenance contract have met the requirements for surveying for OPM and has integrated the results against the QTRA mapping undertaken by Mark Clews as part of the annual tree health and safety work at Kingston University.
2	Where required manual removal and incineration works has been undertaken to remove nests on trees in high people contact areas. In other areas nests have been left to maximise the breeding cycle of the predatory Carcilla sp. Which predate on OPM.
3	During the last four years, the OPM levels next to the A3 have remained low. As moth trapping surveys have shown a good number of different species present around the site, spraying has not been undertaken as of yet, as the levels of OPM have not warranted it.
4	Funds have been allocated as point 4, to allow for OPM removal works (when required) following the QTRA works each year.

Section 4: OPM Survey

This section is about collecting information relating to your site, its location (including any statutory constraints i.e. designations), and OPM infestation. **This will include a map with Oak locations ideally as a GIS shapefile however a spreadsheet with locations is acceptable.**

4.1 Description

Br**ief description of the OPM on the property:**
OPM has been found across all of our sites, but the occurrence from a year to year aspect changes, which some sites showing no return and others seeing yearly infestations. The survey undertaken by our grounds contractors link to the mapping references produced during the QTRA surveys by the Arborist that we use.

4.2 Information

Use this section to identify features that are both present in your woodland(s) and where required, on land adjacent to your woodland. It may be useful to identify known features on an accompanying map. Woodland information for your property can be found on the Magic website or the Forestry Commission Land Information Search.

Feature	Within Site(s)	Compartments (Cpts)	Adjacent to site(s)	Map No
Biodiversity Designations (Y/N)				
Site of Special Scientific Interest	N/A		N/A	N/A
Special Area of Conservation	N/A		N/A	N/A
Tree Preservation Order	y		y	N/A
Conservation Area	y		y	N/A
Special Protection Area	N/A		N/A	N/A
Ramsar Site	N/A		N/A	N/A
National Nature Reserve	N/A		N/A	N/A
Local Nature Reserve	N/A		N/A	N/A

Feature	Within Site(s)	Compartments (Cpts)	Adjacent to site(s)	Map No
Other (please Specify):	Y (KH = SINC, part of MM = SINC))			N/A
Site of Nature Conservation Interest (SNCI)	N/A		N/A	N/A
Park and Garden of Special Historic Interest (PGSHI)	N/A		N/A	N/A
Environmental considerations (Y/N)				
Section 41 butterflies and moths	y		y	N/A
Other (please Specify):	Y – badgers, bats, nesting birds		Y – badgers, bats, nesting birds	N/A
Oak specific Lepidoptera	Purple hairstreak butterflies (KH)		Purple hairstreak butterflies (KH)	N/A
Boundaries and Veteran Trees	Y (KH, TC)		Y (KH, TC)	N/A
People				
CROW Access	n			N/A
Public Rights of Way (any)	n		Y on one side only outside the boundary line to KH	N/A
Other Access Provision	N/A		N/A	N/A
Public Involvement	y		y	N/A
Visitor Information	n			N/A
Public Recreation Facilities	n			N/A
Provision of Learning Opportunities	y			N/A
Anti-social Behaviour	y		y	N/A
Other (please Specify):				N/A
Water				
Watercourses	n		At two of our sites (KP/MM and TC)	N/A
Lakes	n		y	N/A
Ponds	Y (PR, KH)		y	N/A
Other (please Specify):	Damp areas and possible springs in places (KH)		y	N/A
Notes				

Section 5: OPM management

This section is for capturing the survey methodology and operational control processes

5.1 Risk Matrix

Please describe the risk that OPM poses to your woodland and stakeholders, determined by the likelihood of the outcome and the severity of the effect (refer to table below).

Assessment Year	2025
Workplace Address	Kingston University sites as listed at the start
Assessment Date	Nov 2025
Name of Assessor	Sivi Sivanesan
Associate Documents	Zoning maps
Expected Review Date	Only if the verified reported impacts change

Risk Rating Matrix:		***Severity***			
		Minor	***Serious***	***Major***	***Extreme***
Likelihood	***Likely***	Low	Medium	High	High
	Possible	Low	Medium	Medium	High
	Unlikely	Low	Low	Medium	High
	Rare	Low	Low	Low	Medium

What are the hazards?	Who might be harmed and how?	Risk Rating before mitigation (H, M, L)	What are the existing controls?	Risk Rating after mitigation (H, M, L)	What further action is necessary? ***Always* when Risk is *Medium* or *High***	Action by when / whom	Action complete (Date)
Manual removal of Nests	Operators are most at risk as they are the ones removing the nest and so have contact with the nests	L	The Operators wear full PPE and do the work under their risk assessment and methodology – they aren't undertaking work to remove nests without mitigation in the first place. Full Risk Assessments and Method Statements (RAMS) are submitted to the University's Permit to Work System by the Contractor. And all works are carried out following those RAMS	L	Low	The operators doing the removal work	Dates will vary depending on when the work is commissioned each year
Spraying	The environment – as the spray impacts other species as well as OPM, there is a negative impact of spraying on other lepidoptera species	H	To only undertake spraying on some areas of sites where there is a high risk of OPM accessing routes out of the control zone, for example by landing on cars traveling down the A3 out of the core zone into the control zones.	M	There is always going to be a negative impact on other species when spraying is undertaken. The risk is only mitigated in its severity by limiting which trees are being sprayed and only spraying those where features are next to arterial roads like the A3. And only spraying on hears with high levels of recorded OPM and the subsequent year to the recorded high levels.	The operators doing the removal work	Dates will vary depending on when the work is commissioned.
Spraying	Passers-by/ neighbours	M	The spraying works conducted per contractor RAMS as submitted on the Permit to Work System. Steps to reduce exposure to passers-by/ neighbours include spraying in the early mornings when there is little pedestrian foot traffic. As well as communication with neighbours about spraying times for trees on boundaries with residential properties, so that they can avoid their gardens/having windows open. As the trees that we would be spraying are all located away from boundaries with other neighbours, the early morning spraying is the most important method for reducing contact with others.	L	The mitigation is done by the contractor so that they can ensure that they have contacted people on the appropriate dates where spraying is being undertaken adjacent to other people's properties.	The operators doing the removal work	Dates will vary depending on when the work is commissioned.

NB - Following completion of the risk assessment you should ensure the controls identified are included within your work procedures / method statements / work instructions and safe systems of work HSE Guide - Five steps to risk assessment

5.2 Zone mapping

In the 12 years plus where OPM has been recorded on our largest site at Kingston Hill, occurring in areas of all occupancy ranges; we have never had a serious, server or extreme reaction reported as being caused by OPM.

Where one or two issues of rashes have been reported accidentally, no supporting evidence was provided to categorically link it to OPM and KU has several injurious plants and insects on site that can cause similar e.g. stinging nettles. However, if we do take a view that if all reported rashes were correctly attributed to OPM, only mild symptoms from possible OPM exposure have ever been reported. As such, all our sites are mapped as low risk.

The maps below are occupancy target ranges based on QTRA which give an indication of how busy our sites can be, and thus, why we have categorised them as having a low risk of minor reactions, given the historical occupancy of OPM alongside the site use

Forestry Commission England

Kingston University London

Kingston University London

KUBAP Mapping

Estimate of site usage based on the QTRA methodology.
1 = Occupation: Constant – 2.5 hours/day: Pedestrians & cyclists: 720/hour – 73/hour
2 = Occupation: 2.4 hours/day – 15 min/day: Pedestrians & cyclists: 72/hour – 8/hour
3 = Occupation:14 min/day – 2 min/day: Pedestrians & cyclists: 7/hour – 2/hour
4 = Occupation:1 min/day – 2 min/week: Pedestrians & cyclists: 1/hour – 3/day
5 = Occupation: 1 min/week – 1 min/month: Pedestrians & cyclists:2/day – 2/week
6 = Occupation: <1 min/month – 0.5 min/year: Pedestrians & cyclists: 1/week – 6/year

Legend

- 1
- 2
- 3
- 4
- 5
- 6
- Buildings
- External Roads/Paths

KH 2021 Target Occupancy and/or Penestrian/Cyclist Passing Rates

Contact biodiversity@kingston.ac.uk for any enquiries regarding biodiversity on KU sites

Meters
0 25 50 100

N W E S

Forestry Commission England

Kingston University London

Kingston University London

KUBAP Mapping

Estimate of site usage based on the QTRA methodology.

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Pedestrians & cyclists:2/day – 2/week

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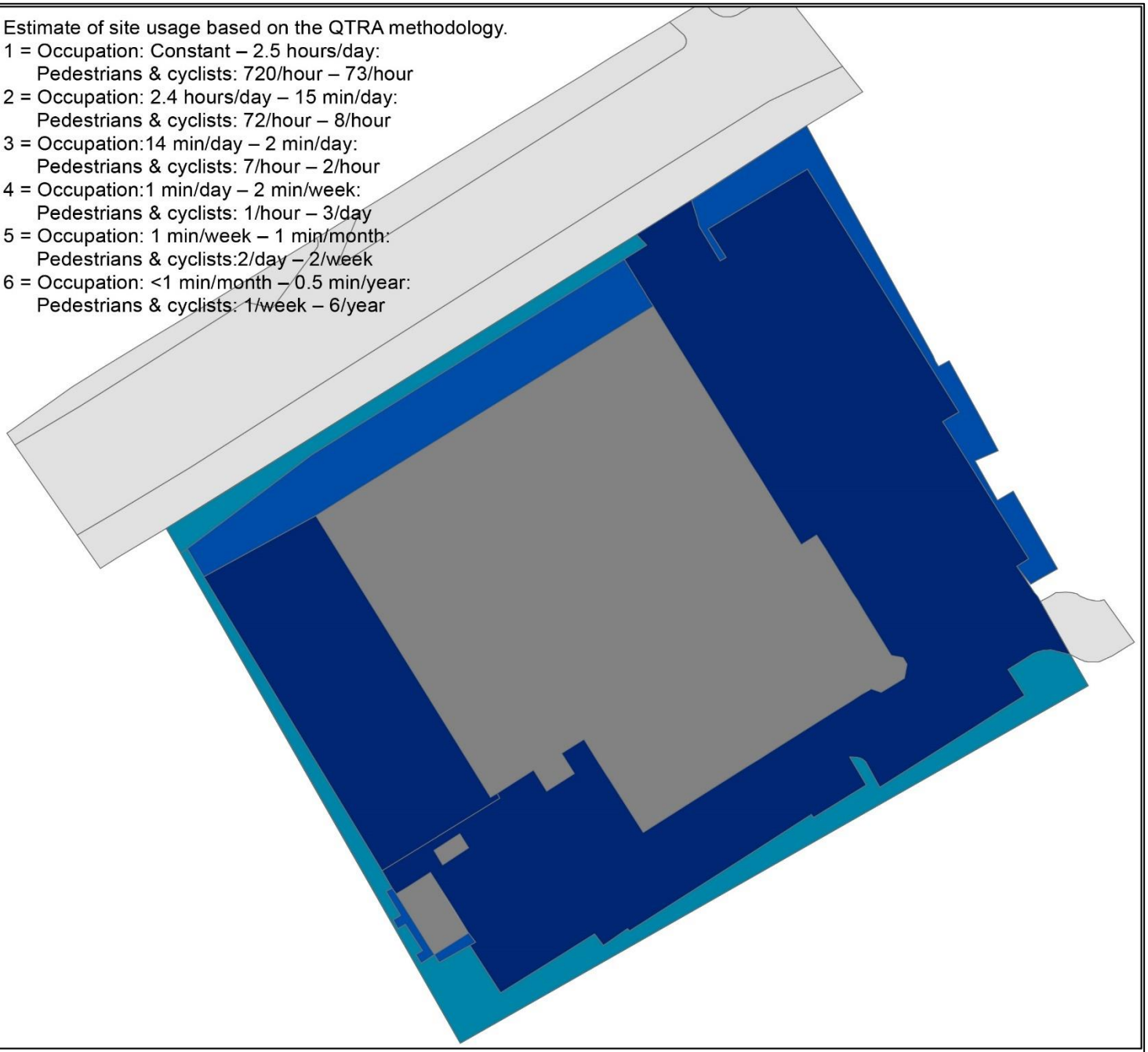
Pedestrians & cyclists: 1/week – 6/year



Legend

- 1
- 2
- 3
- 4
- 5
- 6
- Buildings
- External Roads/Paths

RV 2021 Target Occupancy and/or Penestrian/Cyclist Passing Rates

Contact biodiversity@kingston.ac.uk for any enquiries regarding biodiversity on KU sites

Meters
0 5 10 20

N W E S

Forestry Commission England

Kingston University London

Kingston University London

KUBAP Mapping

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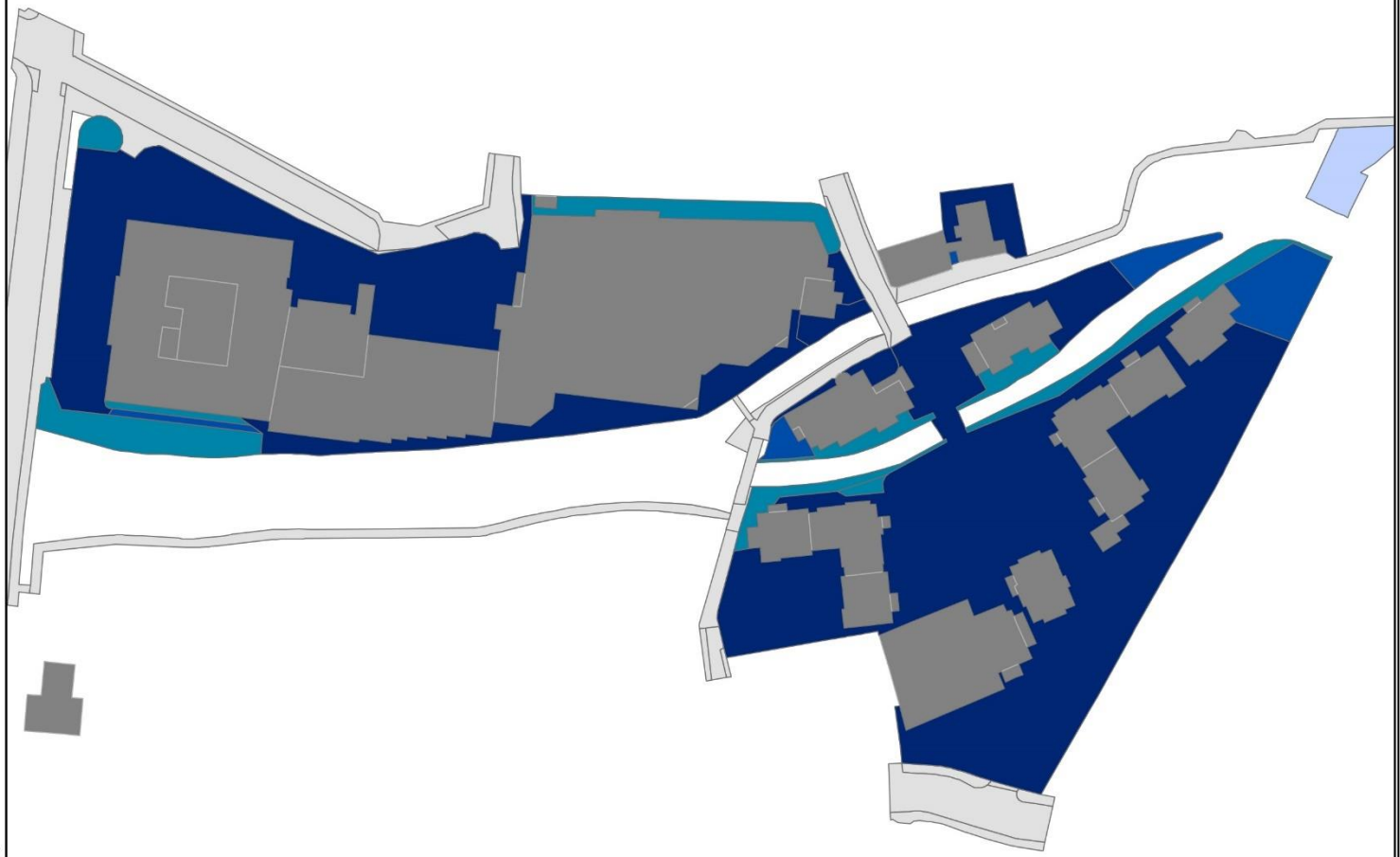

Legend

- 1
- 2
- 3
- 4
- 5
- 6
- Buildings
- External Roads/Paths

KP Campus Complex 2021 Target Occupancy and/or Penestrian/Cyclist Passing Rates

Contact biodiversity@kingston.ac.uk for any enquiries regarding biodiversity on KU sites

Meters
0 12.5 25 50

N W E S

Forestry Commission England

Kingston University London

Kingston University London

KUBAP Mapping

Legend

- 1
- 2
- 3
- 4
- 5
- 6
- Buildings
- External Roads/Paths

PR 2021 Target Occupancy and/or Penestrian/Cyclist Passing Rates

Contact biodiversity@kingston.ac.uk for any enquiries regarding biodiversity on KU sites

Meters
0 15 30 60

N W E S

Estimate of site usage based on the QTRA methodology.

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Forestry Commission England

Kingston University London

Kingston University London

KUBAP Mapping

Estimate of site usage based on the QTRA methodology.

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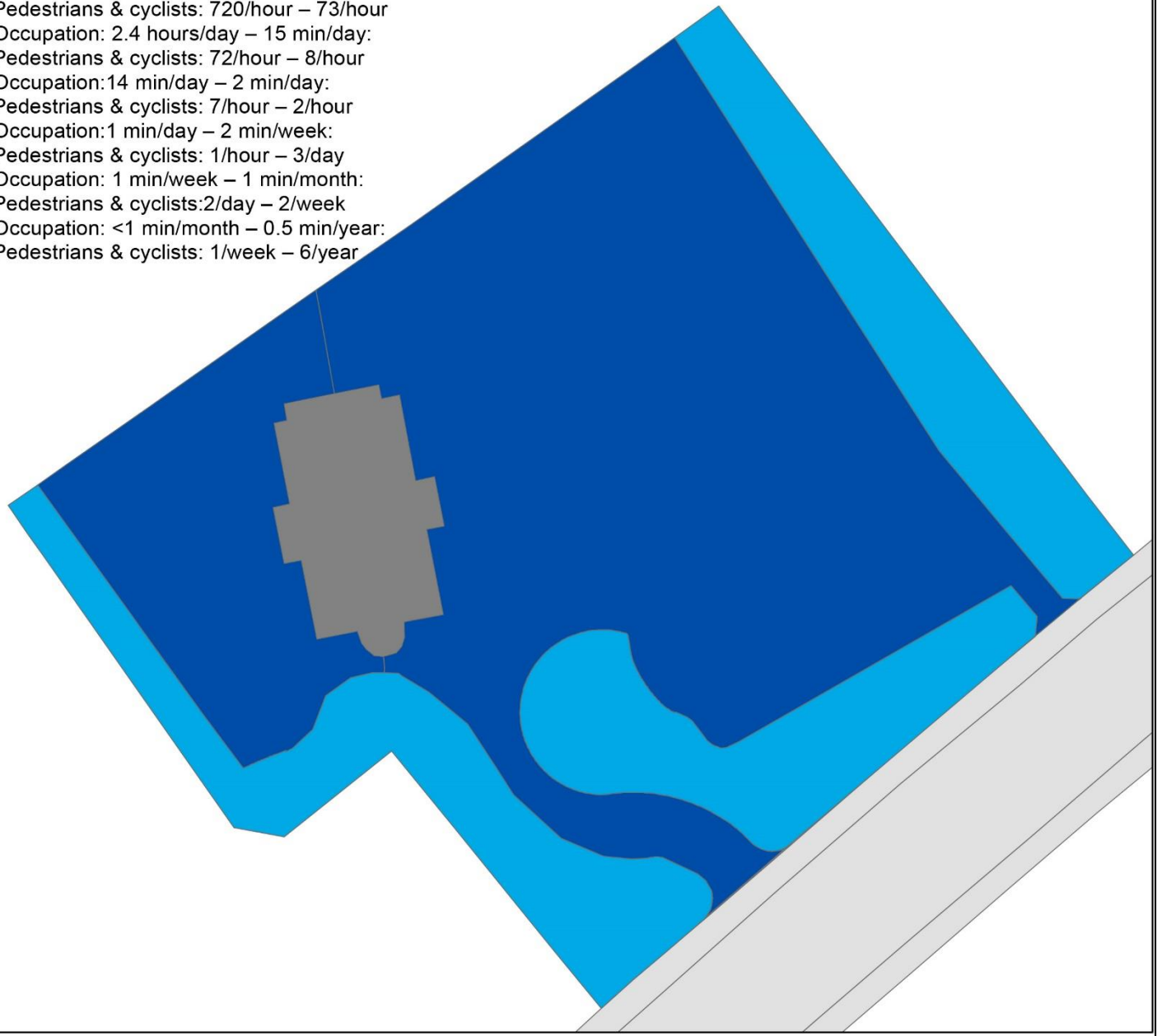


Legend

- 1
- 2
- 3
- 4
- 5
- 6
- Buildings
- External Roads/Paths

DH 2021 Target Occupancy and/or Penestrian/Cyclist Passing Rates

Contact biodiversity@kingston.ac.uk for any enquiries regarding biodiversity on KU sites

Meters
0 3.75 7.5 15

N W E S

Forestry Commission England

Kingston University London

Kingston University London

KUBAP Mapping

Legend

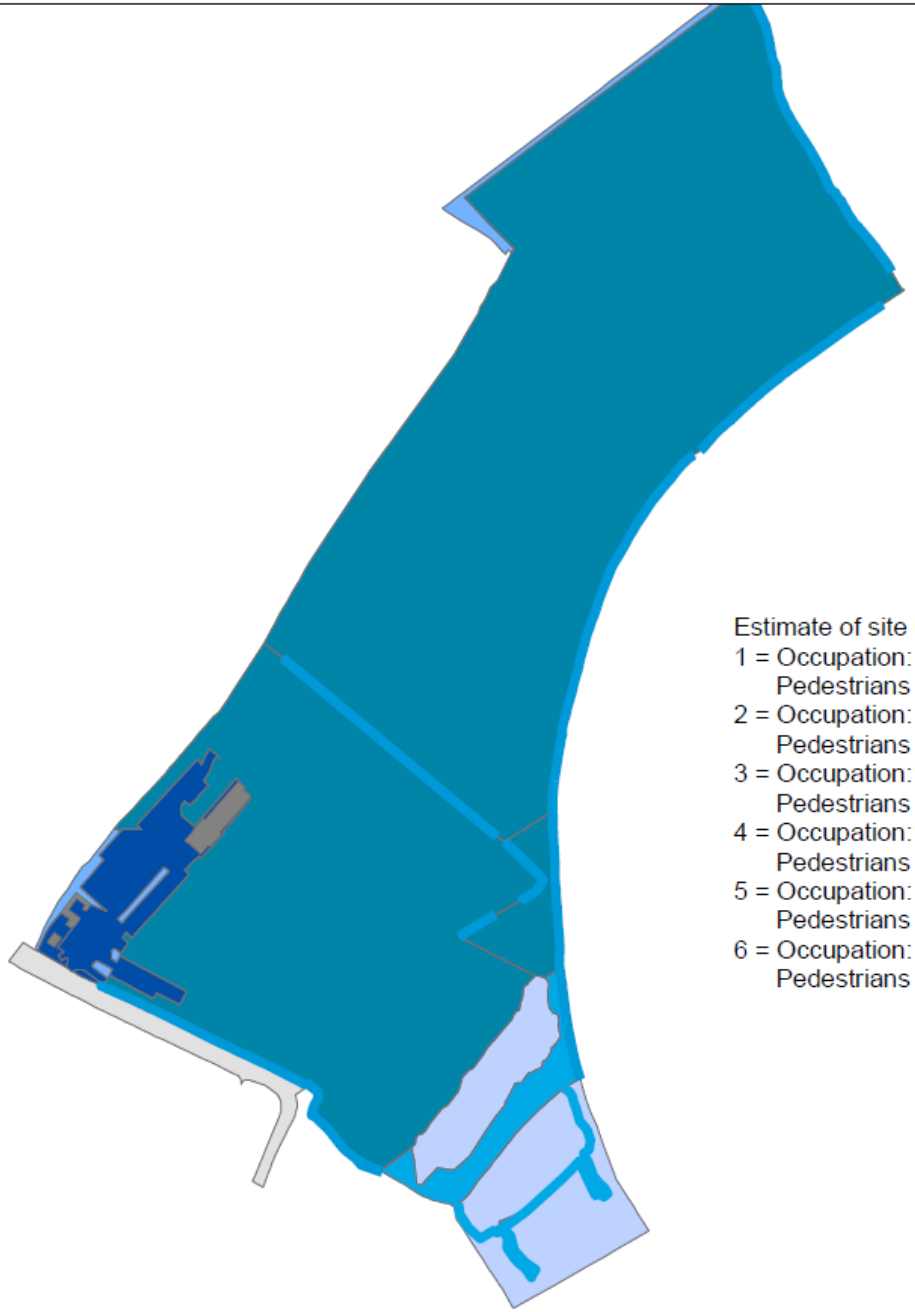
- 1
- 2
- 3
- 4
- 5
- 6
- Buildings
- External Roads/Paths

TC 2021 Target Occupancy and/or Penestrian/Cyclist Passing Rates

Contact biodiversity@kingston.ac.uk for any enquiries regarding biodiversity on KU sites

Meters
0 45 90 180

N W E S



Estimate of site usage based on the QTRA methodology.

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Pedestrians & cyclists:2/day – 2/week

6 = Occupation: <1 min/month – 0.5 min/year:
Pedestrians & cyclists: 1/week – 6/year

5.3 Survey and monitoring plan

Surveys are undertaken in the Summer in areas of our site where there may be risk of OPM occurring from past observations or anecdotal reports.
The survey approach does change depending on risk (to health) where there is little risk of physical contact with OPM due to site use, the trees are not checked for OPM.
Findings are recorded in a table and linked to the relevant QTRA survey maps to indicate the location of the tree/the general area of the tree depending on if it's recorded in the QTRA.
When OPM is found, its recorded and reported by the Grounds Maintenance contractors to the Contracts Manger in KUSCo (the Kingston University owned facilities company) and to the Biodiversity and Landscape Manager in the University's Estates and Sustainability function in the Finance Directorate.
As we are in the core zone, we are only working to mitigate the risk of contact on our sites, as we are in an infected borough where re-infection or new colonisations occur from neighbouring properties. For example, 2021 is the first year where we have recorded OPM at Dorich House Museum – which shares a boundary wall with Richmond Park.

5.4 Control plan

Use this section to identify which control methods would be appropriate for each risk zone you have identified.
Please find guidance on OPM control methods here.

Risk Zone	Control Method	Reasoning
For all risk zones	Manual removal of nests and incineration where appropriate. Investigate Nature Based Solutions on all sites and implement where possible	Other methods outside of manual removal are not appropriate currently due to the level of biodiversity on our sites which would be negatively impacted by current methods of chemical control. Because we are in the core zone, where OPM is classed as endemic – the negative impacts of chemical control on exiting biodiversity cannot be accepted. Where possible implement Nature Based Solutions on sites, including adding bird nest boxes for species that are known to target OPM.
Roehampton Vale Campus – only on the treeline by the A3	Manual removal and incineration Some chemical control on high OPM burden years	This is the one exception to the no spraying stance for our sites. As the line of trees is adjacent to an arterial road leaving out of the core zone into other areas, we will undertake both manual removal and also periodic chemical control to reduce the OPM load on these trees, which have been heavily infested in the past.

5.5 Communication

Currently the University undertakes internal communications to staff and students via the comms teams with periodic intranet articles about OPM on our sites, with warnings about the nests and advising people to avoid contact. As the online communication is a little ad hoc at the moment; we need to look to a way to consolidate it, including investigating onsite signage for specific areas where there may be higher risks of contact such as by the halls of residence at Kingston Hill – possibly similar to those used at Richmond Park on their oak trees.

Section 6: Consultation

We do not consult with external stakeholders such as other schools etc. due to the specialist knowledge requirements for management.

Section 7: Monitoring

Indicators of progress/success should be defined for each management objective and then checked at regular intervals. Other management activities could also be considered within this monitoring section. The data collected will help to evaluate progress.

Management Objective/Activities	Indicator of Progress/Success	Method of Assessment	Frequency of action	Responsibility	Action undertaken
Objective 1	Surveys have continued each year annually	Reports from contractors	Yearly	Contractors and Contract Manager for auditing	Yes
Objective 2	Control measures have been done yearly as per the surveys	Costs for OPM removal raised and paid each year	yearly	Contract manager at KUSCO	Yes
Objective 3	Obtaining costs and commissioning work if feasible	Spraying undertaken and confirmation email of action.	On high burden years only	Contract manager at KUSCO	Has not been applicable from 2022-2025
Objective 4	Communications have been undertaken each year as planned for the key locations	Posters/information are present when visiting the site	Undertaken as needed for specific locations	Biodiversity manager/ Operations coordinator for checking/ Contract manager at KUSCO	Not yet

Forestry Commission England

Approved *This means FC is happy with your plan; it meets Forestry Commission requirements.*	**Name (Forestry Commission)**	**Date**
Year 1		
Year 2		
Year 3		
Year 4		
Year 5		