Leonardslee Estate

Leonardslee Park and Gardens Conservation Management Plan Addendum

Final report
LUC
February 2025

Leonardslee Estate

Leonardslee Park and Gardens Conservation Management Plan
Addendum

Version	Status	Prepared	Checked	Approved	Date
1.	Draft	K.Milner D.Zacks	K. Milner	M. Parkhill	31.10.2024
2.	Final	K.Milner	K.Milner	M.Parkhill	28.02.2025

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Chapter 1
Introduction

This introductory chapter provides the context for the Addendum and explains its scope and purpose in relation to the Leonardslee Park and Gardens Conservation Management Plan (GCMP).

Addendum Context, Scope and Purpose

1.1 This 2024 Addendum to the Leonardslee Park and Gardens Conservation Management Plan (hereafter referred to as the Addendum) provides additional information to support the Leonardslee Gardens Conservation Management Plan (GCMP) produced in 2023 by Donald Insall Associates.

1.2 The purpose of the Addendum is **to supplement the evidence base for the GCMP's recommended policies with the aim of preserving and enhancing the cultural and natural heritage significance of Leonardslee Park and Gardens**.

1.3 Responding to comments on the GCMP made by Historic England and the Sussex Gardens Trust in March 2024, this Addendum provides extra information to supplement a number of chapters of the GCMP, as set out in **Table 1.1** below. LUC met with the Leonardslee Estates Manager and Head Gardener in September 2024 to confirm scope and content of the Addendum.

1.4 The feedback provided by Historic England and the Sussex Gardens Trust on the GCMP is presented in **Table 1.2.** An explanation is provided to show how each comment has been addressed/ responded to by this Addendum.

1.5 It is intended that this Addendum is read alongside and in conjunction with the GCMP. Both documents should be used together as a working tool to inform the management and maintenance of Leonardslee Park and Gardens, added to where necessary as new information

comes to light. A full review of the GCMP and this Addendum should be undertaken in 5 years and re written after 10 years.

Table 1.1: Additional information provided by the Addendum, organised by GCMP chapter

2023 GCMP Chapter heading	2024 Addendum additional information
Chapter 1:0: Introduction	■ Chapter 1: Introduction – Addendum Context, Scope and Purpose
Chapter 2.0: Understanding the Asset	■ Chapter 2: Understanding the Asset – The High Weald Context – Timeline Prior to 1685 – Ecology of the Park and Gardens – Visitor Numbers
Chapter 3.0 Assessment of Significance	■ Chapter 3: Overall Significance of the Landscape of Leonardslee and Vision – Statement of Overall Significance – Vision Statement
Chapter 4.0 Issues and Policies	■ Current Management, Issues, Gaps and Forces for Change – Forces For Change – Supplementary Information on the Current Management of the Park and Gardens
Chapter 5.0 Adoption and Implementation	■ Chapter 5: Addendum Policies and Actions – Table of Addendum Policies and Actions
Chapter 6.0 Gazetteer	■ No additions
Chapter 7.0 Bibliography	■ Chapter 6: Bibliography

1.6 Throughout this document Leonardslee Gardens is referred to as the ‘Park and Gardens’. This is to ensure the whole site including the wider parkland and woodland as well as the formal gardens are considered.

1.7 Leonardslee House and Estate Buildings are considered separately within the House Conservation Management Plan (HCMP) produced by Donald Install Associates 2023. This is an Addendum to the GCMP only.

Table 1.2: Comments received from Historic England and Sussex Gardens Trust on the 2023 GCMP and how they have been addressed in this Addendum

Theme/ component of GCMP	Comments on 2023 GCMP	Action/ response in Addendum
Historic England Advice in letter dated 11th March 2024		
Vision Statement	*There appears to be no vision statement for the park and garden. This needs to highlight the significance of its past and future relationships and opportunities with the other High Weald plantsman gardens in the area.* *Leonardslee's location within the High Weald National Landscape with its international tourism offer of the 'High Weald Experience' provides the opportunity for co-ordinated partnerships with Kew Gardens and The National Trust. This is an opportunity/action that the CMP has not explored to share knowledge, manage risks and to help reduce the risk of over development by possibly sharing of visitor pressures at peak times. A more sustainable tourism model across these gardens could be developed.*	A vision statement for the Park and Gardens informed by the statement of overall significance is included. This is based on a review of evidence within the existing GCMP and additional material (see Bibliography). It has been developed in conjunction with, and incorporates the aspirations of, the Client Team. The location of Leonardslee in the High Weald National Landscape and its proximity and relationship to other High Weald Gardens is considered - in relation to significance and opportunities for partnership working. Actions regarding partnership working in relation to the challenges of increasing visitor numbers, habitat management and climate change are provided.
Hierarchy of Significance and Ecology	*The CMP has chosen a method of delineating significance across the registered park and garden according to a 'hierarchy of significance' with some areas identified as of high significance and other areas of lesser significance. We do not think this is a useful approach as it fails to develop an overview of the overall significance of the whole landscape and how its features and parts contribute to this.* *The parkland, also designated as UK BAP Wood Pasture Habitat, is particularly vulnerable to development pressures from the use of the site as a visitor attraction. Determining the significance of the park and garden as a spatial hierarchy where the parkland is seen as of lesser significance (as seen in the resulting harm of the extension of the car parks) increases this threat. The CMP should identify actions to manage this threat and help preserve the significance of the parkland from both heritage and nature conservation perspectives.*	The statement of significance has been updated to define the overall significance of the Park and Gardens based on consideration of its heritage values. Information on nature conservation value (based on existing information only) has been incorporated, including reference to wood pasture and parkland. A Phase 1 Habitat Survey, to further understand the nature conservation value of the Gardens and to understand the works required to conserve features of nature conservation importance, is recommended in the Action Plan (Chapter 5, Table 5.1). This will be used to further inform the statement of significance and actions to manage the resource.

Theme/ component of GCMP	Comments on 2023 GCMP	Action/ response in Addendum
		Policies and actions are provided to help preserve the significance of the parkland from both heritage and nature conservation perspectives.
Visitor Pressure	*The CMP does not identify what might be deemed unsustainable visitor numbers and too harmful a scale of visitor infrastructure nor does it contain policies and actions required to mitigate that risk.* *For example, how many visitors does the current use and activity yield, how many more visitors are required to secure the conservation management of the gardens and an appropriate return on the investment, and what is a sustainable level of use without adding more development into the parkland and also causing risk to the plant collection?*	Visitor capacity of the Park and Gardens and the management approach to mitigate the risk to the cultural and natural heritage significances has been considered including understanding the impact of existing visitor numbers on the fabric of the Park and Gardens; actions to understand the number of visits required to secure the long-term conservation of the Park and Gardens; and consideration of the potential impact of increased use on the Park and Gardens.
Climate Change	*The threat of the changing climate and adverse weather conditions is only briefly mentioned in the CMP. An increase in the frequency of storms bringing high winds and flooding, increased summer droughts and pests and diseases are serious risks that need greater exploration in the CMP. These risks may exacerbate issues for the growth and heath of plants in the gardens or increase plant diseases that affect the rhododendrons, including the deciduous azaleas. The collection of Loderi rhododendrons is of national importance with 17 species types grown in public and private gardens.* *The CMP needs to identify the need for a specific action plan to understand the requirements for conserving the national collection of Loderi rhododendrons and succession planning, including the time frame required in the face of climate change.* *This needs to understand the vulnerability of the collection (location, genetics etc), the threats these vulnerabilities create (biosecurity, drought, heat, visitor pressure) and the actions required to reduce or mitigate the risk of loss from the threat (sufficient replacement plant stock, moving of stock, shelter etc).* *The current garden team is a valuable resource for their work, skills and knowledge of the gardens and its botanical interest. The threat to the significance of the botanic material and original genetic stock which the*	The implications of climate change on the Gardens, particularly on the national collections of *Loderi* rhododendrons has been addressed: ■ Anticipated changes in climate at Leonardslee Gardens are considered. ■ The Head Gardener has been consulted to understand views on impacts on the collections. ■ A policy/ action to record the need for a specific action plan to conserve the national collection and succession planting, including the timeframe is provided. ■ A recommendation to explore opportunities to increase relationship with Kew Wakehurst is provided.

Theme/ component of GCMP	Comments on 2023 GCMP	Action/ response in Addendum
	gardens hold is high if the resource for the identification, cataloguing and a plant propagation programme for their conservation value is not secured going forward. *Outsourcing this to the Duchy of Cornwall Estate may become untenable in the future*	■ A recommendation to prepare a biosecurity policy for the Gardens has been added.
Other issues and actions	*The condition of parts of the Pulhamite gardens is recognised as poor in the CMP. The CMP proposes monitoring, but this is not an appropriate action as the condition will not improve without a programme of repair. A suitably informed conservation programme for the repair of vulnerable built garden structures should be required and identified as an action in the CMP.* *Restoration (of landscape features, views etc) is a specific conservation action which needs a high level of evidence and careful planning by a suitably qualified Landscape Architect working in partnership with the extensive knowledge of the head gardener and the intimate knowledge of the gardens of the gardening team.* *A tree conservation management plan is required to plan for the management and succession planning of significant trees and to understand the risk and plan action to retain significant trees such as removing the target from any fall area and allowing standing deadwood to remain.* *A hydrology management plan is required to understand the vulnerability of the gardens and its water features to changing precipitation patterns and to provide an overall water management action plan.* *The approach by Sussex Wildlife Trust for the introduction of beavers back into the garden could have impacts on the park and garden's heritage significance. This needs full consideration and any risks to significance identified.*	The following have been considered and added as actions in the Addendum: ■ Preparation of a conservation programme for the repair of vulnerable built garden structures including the Pulhamite gardens and the conservation of components of the designed landscape (landscape features, views etc.) informed by evidence and careful planning. ■ Preparation of a tree conservation management plan ■ Preparation of a hydrology management plan A statement about introducing beavers back into the Garden is included.

Theme/ component of GCMP	Comments on 2023 GCMP	Action/ response in Addendum
Sussex Gardens Trust in letter dated March 2024		
Gazetteer	*The Gazetteer provides the detailed survey and analysis of the character areas necessary to guide managing the complexities of the Garden's fabric, views and historic significance though in some cases it is not entirely clear which features or aspects of an area are the significant ones or whether a described view is significant or not. It might also be helpful to make an assessment of the sensitivity of each character area to change or development, especially in the light of the policy UGD4 which we consider to be a sensible approach:*	An action has been added to: ■ Locate features and highlight specific features of significance. ■ Highlight the visual and landscape sensitives of each character area.
Climate Change	*We would just question whether sufficient attention has been paid to the potential impact of climate change on the historic tree collection. Perhaps this is something that could be addressed in more detail in the 5-year plan review when more baseline data will be available.*	See comments on climate change and tree conservation management plan above.
Adoption of CMP	*We recommend to HDC that both CMPs, for the garden and the buildings, are jointly adopted by both the applicant and the Local Planning Authority and that the submission of 5-year plan reviews be made a condition of its approval*	An action has been added regarding the requirement for the garden and buildings CMPs to be jointly adopted by the client and the LPA and that submissions of five-year plan reviews are made.

Chapter 2
Understanding the Asset

This chapter provides supplementary baseline information about the Park and Garden's cultural and natural heritage assets.

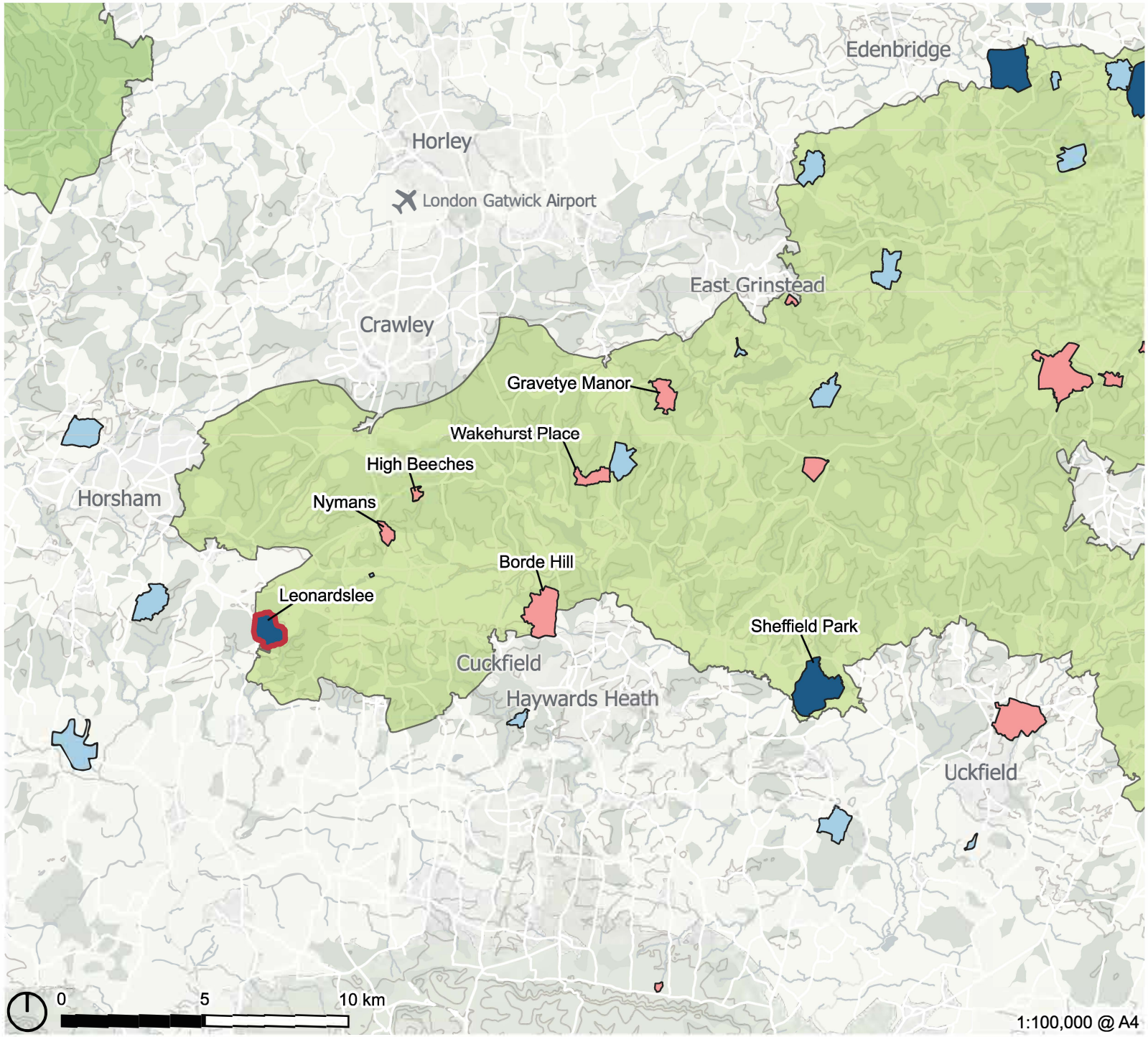
The High Weald Context

2.1 **Figure 2.1** illustrates Leonardslee Park and Gardens within the High Weald Context

2.2 Leonardslee lies on the western edge of the High Weald National Landscape which is designated for its outstanding natural beauty. The natural beauty of the High Weald is defined by components of its character which make the landscape recognisably distinct and homogenous. Many of these characteristics are represented at Leonardslee including:

- deeply incised landform of clays and sandstone;
- ancient woodland;
- areas of heath and species rich grassland;
- dark skies;
- sense of history including the legacy of features and ideas left by writers, artists, and gardeners inspired by the landscape; and
- undiscovered archaeological features.

Figure 2.1: Leonardslee Park and Garden within the High Weald Context



Leonardslee Registered Park and Garden Extent

Registered Parks and Gardens

- Grade I
- Grade II
- Grade II*

National Landscapes

- High Weald
- Surrey Hills

2.3 The High Weald AONB Management Plan 2024-2029[1] sets out the long term objectives for conserving this landscape, which Leonardslee is part of, providing a guide for residents, businesses and visitors on actions to safeguard the special qualities of the area.

2.4 The High Weald has a wealth of historic houses and gardens. Those located in the west of the High Weald (refer to **Figure 2.1)** have strong connections with Leonardslee - both geographically (location, geology, soils, water and climate) and historically (family connections and shared design principles and botanical interest). Sir Robert Loder, Sir Edmund's father, owned High Beeches where Sir Edmund grew up, and his brother Gerald owned Wakehurst Place. This group of 19th-20th century High Weald 'Plantsman' Gardens include[2]:

- Grade I Leonardslee;
- Grade I Sheffield Park from 1910 (Arthur Gilstrap Soames now the National Trust);
- Grade II* Nymans from 1890 (Ludwig Messel and now The National Trust);
- Grade II* Borde Hill from 1892 (Colonel Ralph Stevenson Clarke and now a registered charity);
- Grade II* Wakehurst Place from 1903;
- Grade II* Gravetye Manor from 1884 (William Robinson); and
- Grade II* The High Beeches from 1906.

Timeline prior to c.1685

2.5 Figure **2.2** provides an extract from a timeline produced by the lead volunteer tour guide at Leonardslee. It provides information on the site prior to 1685 which is omitted from the illustrated timeline within the GCMP. The complete timeline is provided in **Appendix A** of this Addendum.

Figure 2.2 Timeline prior to c.1685

Medieval & Tudor periods	- St Leonard's Forest, mainly used for timber, pannage and warrens. Later, iron works were founded and charcoal burning started.
1560's	- Gosden furnace built
1562	- Queen Elizabeth I purchased St Leonards Forest for its desirable timber.
1602	- The Crown had the timber rights and used for shipbuilding,
1650	- Iron works destroyed on Cromwell's order.
1660's	- Charles II grants the Forest to his physician, **Sir Edward Greaves**. (1608-1680)

2.6 Further information on the early history of the site, which has been used to inform the statement of significance and vision (Chapter 3 of this Addendum), is contained in an unpublished report [3] put together by the descendants of the Hubbard family and made available by the Head Gardener.

The Ecology of the Park and Gardens

2.7 Section 41 of the Natural Environment and Rural Communities Act (2006) lists habitats and species of principal importance in England. The list includes 56 habitats and 943 species first identified as priority habitats and species in the UK Biodiversity Action Plan (UK BAP).

Habitats

2.8 The following nationally recognised habitats, shown in national datasets, are present within the Park and Gardens.

[1] Available at AONB Management Plan - High Weald National Landscape
[2] Information provided by Historic England
[3] Jonathan Egerton Hubbard (2021) Leonardslee

Ancient Woodland

2.9 Ancient woodland includes ancient semi-natural woodland and plantations on ancient woodland sites and is defined as 'land that has been continually wooded since at least 1600AD'.

2.10 Within the Park and Gardens, woodland on both sides of the valley is classified as Ancient Replanted Woodland extending to connect with Ancient and Semi-Natural Woodland beyond the registered park and garden (RPG) boundary (refer to **Figure 2.3**).

2.11 Ancient Replanted Woodland comprises ancient woodland sites replanted with conifer or broadleaved trees. These areas retain ancient woodland features, such as undisturbed soil, ground flora and fungi. Ancient Semi-Natural Woodland is mainly made up of trees and shrubs native to the site, usually arising from natural regeneration. Both types have woodland have equal protection in the National Planning Policy Framework[4]

Priority Habitats

2.12 The following priority habitats occur within the Park and Gardens (refer to **Figure 2.4**):

- Wood pasture and parkland (covers the entire Park and Gardens excluding small areas on the eastern boundary adjoining farmland). The parkland compartment includes the higher ground to the west which, historically, provided the setting and approach to the House. To the east compartments are defined as wood pasture.
- Deciduous woodland (all areas of valley sides excluding lowland heath).
- Lowland heathland (in north and west/ south west of Park and Gardens).

2.13 These habitats are recognised as a priority for conserving biodiversity and the list is to help landowners inform their nature recovery planning, action and funding applications[5].

Habitat and Species Survey data

2.14 A Biodiversity Enhancement Strategy Report[6] was produced for the lakes and gardens in 2023 as part of a planning condition associated with installation of permanent sculptures.

2.15 The following specific habitat and species survey data is currently available for the Park and Gardens (refer to **Appendix B** for detail):

- Sussex Botanical Recording Society (2023) Deer Park Botanical Survey
- Sussex Botanical Recording Society (2023) Garden Botanical Survey
- Leonardslee Estate Butterfly List; Odonata List; and Wild Birds List (lists only)
- Historical Lichen Records 1968-2003
- Rare/scarce and important Fungi at Leonardslee summary

Priority and Protected Species

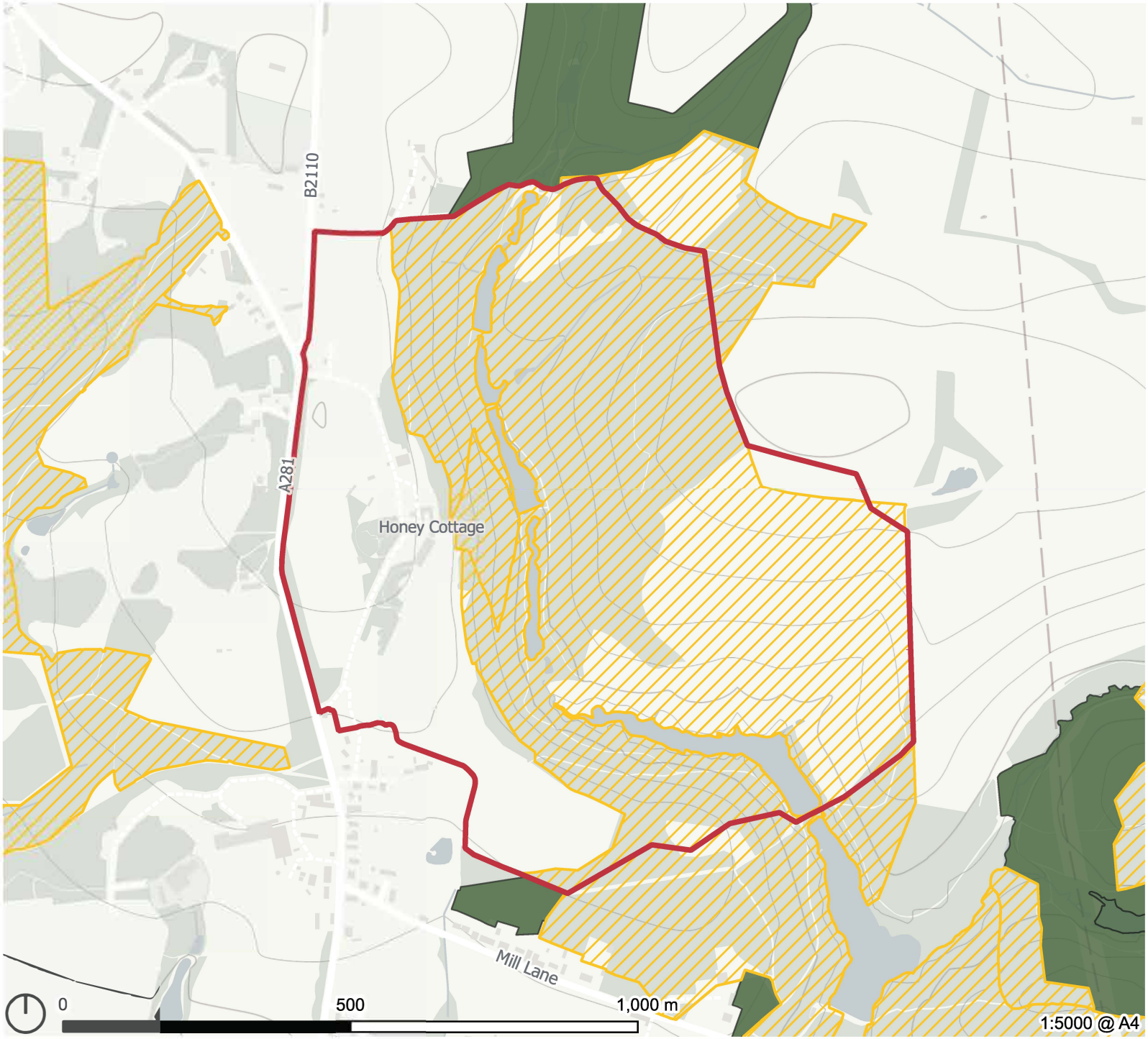
2.16 As stated in the Enhancement Strategy Report (Temple 2023) it is likely that the habitats within the Park and Gardens have the potential to support a wide range of noteworthy species, including protected species and priority species;

- Nine species of bat, including brown long-eared bat *Plecotus auritus*, identified within 2km of the Site;
- Hazel dormice *Muscardinus avellanarius* were identified on Site in 2018 and 2019;
- Barn owl *Tyto alba*, a schedule 1 bird and other species of common birds were identified within 2km of the Site 2020-2023;
- Slow worm *Anguis fragilis* and other widespread species of reptile;
- Dispersing and hibernating great crested newts were identified in connected habitat surrounding Leonardslee Lakes and gardens;
- Foraging, dispersing and sett-building badgers *Meles meles*; and
- Foraging, dispersing and sheltering hedgehogs *Erinaceus europaeus.*

2.17 The 'rare/scarce and important Fungi at Leonardslee summary' is included below (updated by the Head Gardener):

[4] Ministry of Housing Communities and Local Government (2023) National Planning Policy Framework.
[5] Habitats and species of principal importance in England - GOV.UK
[6] Temple (2023) Leonardslee Gardens, West Sussex Biodiversity Enhancement Strategy Report for Leonardslee Lakes and Gardens

Figure 2.3: Ancient Woodland



Leonardslee Registered Park and Garden Extent

Ancient Woodland Inventory

Ancient & Semi-Natural Woodland

Ancient Replanted Woodland

Figure 2.4: Priority Habitats (Habitats of Principal Importance)

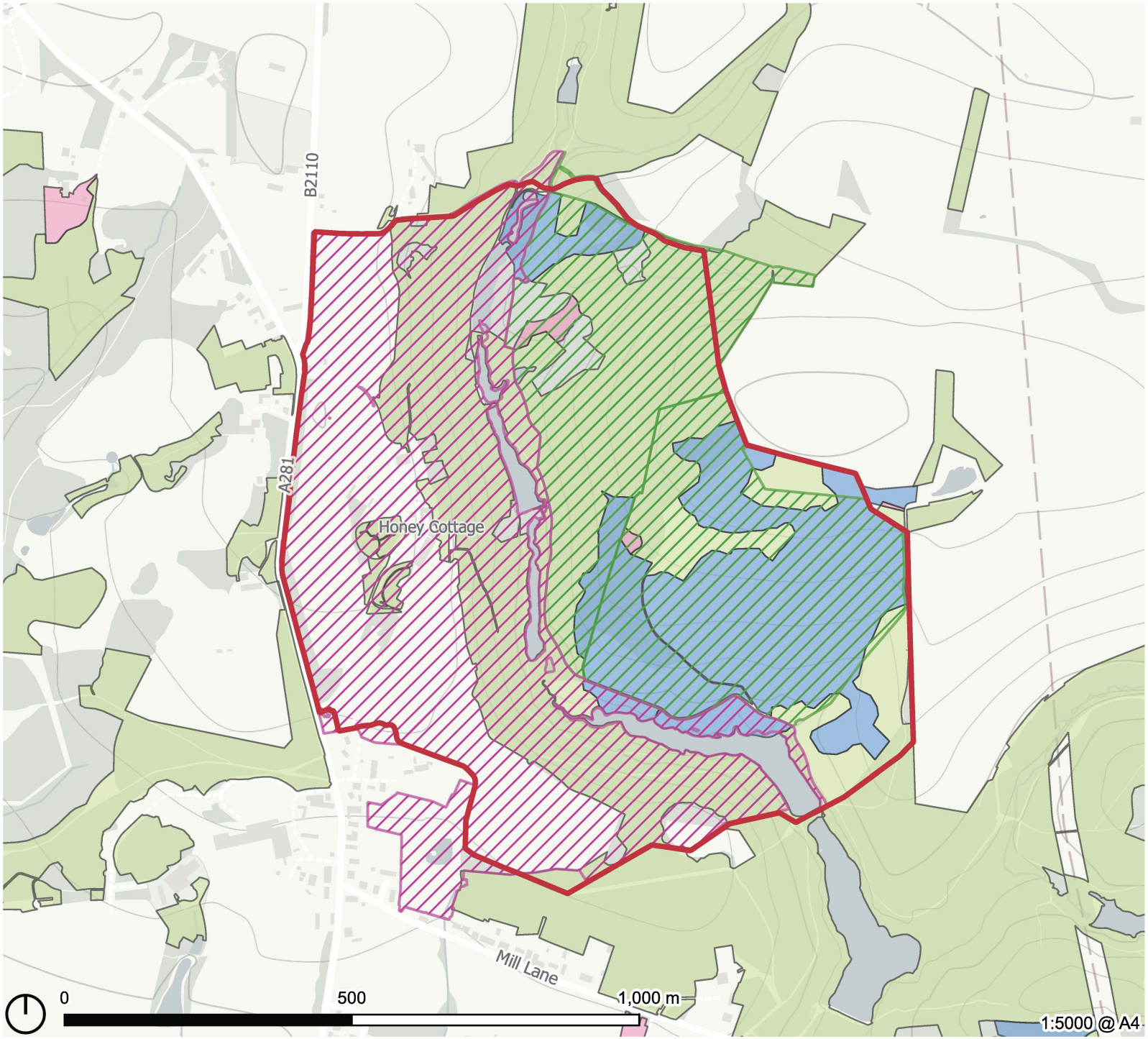


Table 2.1: Rare/scarce and important Fungi at Leonardslee

Name	Comments
Zoned Rosette *Podoscypha multizonata*	Found growing at the base of oak and beech trees, currently four trees on the estate with this fungus, three oaks and a beech. Internationally rare and threatened, England holds a significant proportion of the global population. Needs veteran trees and ancient woodland. BAP priority species, part of oak deadwood assemblage.
Cauliflower *Sparassis spathulata*	The rarer of the two cauliflower fungus found in Britain, grows on roots of broadleaved trees rather than conifers, more robust and leaf-like fronds. One was found top of the deer park seemingly associating with a beech tree.
Jack o' Lantern *Omphalotus illudens*	Very rare in Britain, mostly in the south-east, saprobic on dead stumps or logs of broadleaf trees, a clump was found in 2023 emerging from the large dead stump of a Quercus petraea just behind the mansion.
False Truffle Elaphomyces *granulatus*	Not necessarily uncommon, but rarely recorded due to the fruiting bodies being subterranean, a large number were found underground during bulb planting around the roots of a mature Douglas Fir near the Red House.
Oak deadwood assemblage	A list of fungi strongly associated with deadwood on veteran or ancient oaks, if a site has eight species from this list it qualifies for notification as a SSSI. So far the following have been found on the estate; Oak Mazegill, Mycena inclinata, Beefsteak fungus, Oak bracket, Oak curtain crust, Zoned Rosette, Chicken-of-the-Woods, Hen-of-the-Woods, Spindleshank.
Waxcap Grassland Assemblage	Waxcaps identified so far on the estate: Parrot *(Hygrocybe psittacine)*, Slimy *(Gliophorus irrigatus),* Scarlet *(Hygrocybe coccinea),* Goblet *(Hygrocybe cantharellus),* Butter *(Hygrocybe ceracea),* Golden *(Hygrocybe chlorophana),* Snowy *(Cuphophyllus virgineus),* Blackening *(Hygrocybe conica), Honey (Hygrocybe reidii),* Spangle *(Hygrocybe insipida),* Meadow Waxcap *(Cuphophyllus pratensis),* Crimson *(Hygrocybe punicea),* Persistent *(Hygrocybe acutoconica),* Glutinous *(Hygrocybe glutinipes),* Fibrous *(Hygrocybe intermedia),* Vermillion *(Hygrocybe miniata)*
	Numerous other Waxcap grassland assemblage can also be found across the site, including a wide range of Entoloma, Earthtongues and Clavarioid species. Further surveying for identification is required for many of these species. Clavarioid species identified so far on the estate: Golden spindles *(Clavulinopsis fusiformis)*, Smoky Spindles *(Clavaria fumosa)*, Apricot Club *(Clavulinopsis luteoalba)*, Yellow Club *(Clavulinopsis helvola)*, Ivory Coral *(Ramariopsis kunzeii)*, White Spindles *(Clavaria fragilis),* Upright coral *(Ramaria stricta),* Yellow Stagshorn *(Calocera viscosa).*

2.18 There is suggestion in the 'rare/scarce and important Fungi at Leonardslee summary' that the site qualifies for SSSI status based on fungi strongly associated with deadwood on veteran or ancient oaks.

Visitor Numbers

2.19 Table 2.2 shows visitor numbers at Leonardslee recorded from August 2023 to August 2024. The total headcount is broken down to show headcount by till admission, online admission and event ticket.

2.20 The summary shows the peak visitor numbers in December, coinciding with the Leonardslee Lights event. Visit numbers also peak in April and May when the Gardens are in full bloom. The Labyrinth Challenge (inflatable obstacle course) event in August also contributes to high visitor numbers.

2.21 The total annual number of visitors Sept 2023 – August 2024 is **225,722**.

Table 2.2: Admission headcount summary by month 2023 - 2024

Date	Headcount			
	Total	Till Admission	Online Admission	Event Ticket
Aug-23	22796	5394	1739	**9519**
Sep-23	9017	3038	678	861
Oct-23	12699	3649	2279	306
Nov-23	14569	1887	484	7444
Dec-23	**61659**	1071	479	**56412**
Jan-24	7260	1098	238	87
Feb-24	8760	2011	382	250
Mar-24	13679	3115	1818	285
Apr-24	**25067**	**8312**	3825	745
May-24	**25190**	**8849**	2937	3144
Jun-24	15044	5300	1314	1123
Jul-24	13769	4373	1108	675
Aug-24	19009	4081	1249	**7987**

2.22 For comparison Table 2.3 shows information compiled by the Association of Leading Visitor Attractions (ALVA)[7] on total visits made in 2023 to a number of the other High Weald Gardens. Based on these annual visitor numbers Leonardslee is most comparable with Sheffield Park. However it is worth noting that while the house at Sheffield Park is in private residential use, Leonardslee has two businesses operating in the main house. Sheffield Park is also a slightly smaller site than Leonardslee (74ha compared to 86ha).

Table 2.3: Visits made in 2023 to High Weald Gardens (as recorded by ALVA)

Garden	Total Visits 2022	% +/- since 2021	Total Visits 2023	% +/- since 2022
Nymans (approx. 26ha)	348,491	18%	401,046	15%
Wakehurst (approx. 40ha)	384,415	-7%	400,123	4%
Sheffield Park (approx. 74ha)	293,726	-1%	284,358	-3%

2.23 These numbers provide a useful basis for further analysis in Chapter 4.

[7] Available at https://www.alva.org.uk/details.cfm?p=618

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Chapter 3
Overall Significance of the Landscape of Leonardslee and Vision Statement

This chapter provides a statement of the overall significance of the Park and Gardens based on its natural and cultural heritage values. The overall vision for the Park and Gardens is presented.

Statement of Overall Significance

3.1 Current national guidance for the assessment of the significance of heritage assets is set out in Historic England's document '*Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment'* (2008). This guidance is considered to provide a useful basis for the assessment of historic designed landscapes, such as Leonardslee, which have a broad range of heritage assets to consider overall.

3.2 As explained by the guidance, a statement of significance of a place ***'is a summary of the cultural and natural heritage values currently attached to it and how they inter-relate, which distils the particular character of the place'.*** The statement of significance should explain the relative importance of the heritage values of the place (with reference to statutory designation), how they relate to its physical fabric, the extent of any uncertainty about its values (particularly in relation to potential for hidden or buried elements), and identify any tensions between potentially conflicting values.

3.3 This statement of significance provides the evidence base upon which management policies in the GCMP have been supplemented to guide management and ensure the cultural and natural heritage of the Park and Gardens is protected, conserved and enhanced for future generations to appreciate and enjoy.

3.4 It has been informed by:

- Research carried out in the 2023 GCMP and supplemented by information in the preceding chapters
- Information provided by the Leonardslee Head Gardener and
- Information from sources listed in the Bibliography (Chapter 6 of this Addendum).

Heritage values

3.5 As defined by Historic England's guidance, significance of heritage assets are assessed around the following values[8]:

- **Evidential value**, which derives from the potential of a place to yield evidence about past human activity;
- **Historical value**, which derives from the ways in which past people, events and aspects of life can be connected through a place to the present. This is typically either illustrative or associative;
- **Aesthetic value**, which derives from the ways in which people draw sensory and intellectual stimulation from a place;
- **Communal value**, which derives from the meanings of a place for the people who relate to it, or for whom it figures in their collective experience or memory.

3.6 Assets may derive their significance from one or more of the above values, but a lack of interest in one or more of these areas does not indicate a lower level of heritage significance, just that their interest lies elsewhere. For the purposes of this report the level each value contributes is summarised as follows:

- High – A value that makes a fundamental contribution to our understanding of the site's significance.
- Medium – A value that makes an important contribution to our understanding of the site's significance.
- Low – A value that makes some contribution to our understanding of the site's significance.
- Nil – A value that makes no contribution to our understanding of the site's significance.
- Uncertain: assets of uncertain importance.

3.7 It is important to note that these levels are an assessment of the heritage values of the Park and Gardens as it exists at present. They are not static and have the potential to vary in importance over time. There are instances where there is a lack of information or understanding of parts or aspects of the place. The level of significance of these elements may be adjusted as understanding develops and this document evolves.

3.8 The habitats which the site supports are considered as contributing to the evidential, historical and aesthetic value of the Park and Gardens as set out below. The national importance of identified habitat and species are also considered below alongside the Park and Garden's Grade I heritage designation.

Heritage Values - by reference to designation

3.9 Leonardslee Park and Gardens is included at Grade I on Historic England's Register of Parks and Gardens of Special Historic Interest in England. Three grade bands provide guidance on significance, with Grade I (the highest) meaning of **exceptional historic interest.** Leonardslee was given this status in 1984, when the register was first established due to the plant breeding and resulting plant collection, particularly rhododendron that the Loder family, predominantly Sir Edmund, put together from 1889 onwards.

3.10 Leonardslee Park and Gardens lies on the western edge of the High Weald National Landscape which is **nationally designated** as an area of outstanding natural beauty defined by character components that make it recognisably distinct. A number of these special qualities are represented at Leonardslee including deeply incised landform, ancient woodland, heath and species rich grassland and legacy of gardeners inspired by the landscape.

3.11 Leonardslee Park and Gardens supports the following habitats and species which are considered of **national importance.** These include

[8] These values are broadly equivalent to those set in the National Planning Policy Framework (NPPF, 2019): Archaeological, Architectural, Artistic and Historic

- Wood-pasture and parkland mosaic habitats valued for their trees, especially veteran and ancient trees, and the plants and animals that they support. Wood pasture and parkland landscapes are frequently of **high biodiversity value** and can be of **international historic, cultural and landscape importance.** More research and survey work is needed to understand the condition of these habitats at Leonardslee.
- Ancient woodland which is defined as land that has been continually wooded since 1600AD. Ancient woodland takes hundreds of years to establish and is defined as an **irreplaceable habitat**[9]. Ancient woodland is nationally valuable natural asset, important for the diversity of flora and fauna species which they support including rare saproxylic invertebrates (organisms living in decaying wood). Ancient woodland is also important for carbon capture; storage and contributing to the seed bank and genetic diversity and is of cultural, historical and landscape value.
- **Further surveys are required and recommended to understand the importance of the ecological resource.**
- Species of **internationally and nationally** rare and threatened fungi associated with/ dependent on deadwood, veteran trees, and species rich unimproved grassland. Including an assemblage of fungi associated with deadwood on veteran or ancient oaks, which could qualify for Site of Special Scientific Interest (SSSI) selection[10]. A SSSI is a conservation designation designed to protect areas of land or water that are considered **particularly valuable** for their wildlife, geology or landform features.

3.12 Designation focuses on the importance of specific heritage values of a place but **decisions about its day to day management should take account of all values that contribute to its significance.**

Summary of all Heritage Values contributing to Significance

3.13 The heritage values of Leonardslee Park and Gardens are summarised in the following:

Evidential value

3.14 The **evidential value** (value deriving from the potential of a place to yield evidence about past human activity) is **high** due to:

- The topography of the site including it steep valley sides which prevented the site being cleared for agriculture by early settlers. This allowed continuation of forest cover with decomposition of leaves over millennia to retain relatively acidic soils in an otherwise predominantly alkaline area. The steep terrain and acidic soil have created sheltered growing conditions which allow rhododendrons to thrive today.
- The chain of lakes, all man-made which lie in a deep, sheltered north to south stream valley. The valley streams were dammed and the first ponds excavated at Leonardslee in the 16th century to provide water power for the iron smelting industry which used local sandstone rich in iron and supplied by charcoal from the forest. New Pond (the southern most pond) is a former hammer pond (established as part of the iron industry).
- The presence of lowland heath reflects the acidic soil and sandstone geology of the Park and Garden and its past management. Heathland plants spread into St Leonard's Forest as clearings were made by early settlers to provide fuel for the iron industry. These habitats occur in fragments across the High Weald.[11]
- This mosaic wood pasture and parkland, a habitat shaped closely by human uses with a long history of continued management of which grazing animals were fundamental.
- The name 'Leonardslee' which derives from 'the lea or valley of St. Leonard's Forest', one of the ancient forests of Southern England. The presence of ancient woodland highlights the continuation of tree cover on this site.
- The physical presence of Leonardslee House (built in the mid-1800s) as a principal feature of the country estate. This can be used to trace changes made over time including

[9] https://www.gov.uk/guidance/ancient-woodland-ancient-trees-and-veteran-trees-advice-for-making-planning-decisions#ancient-woodland
[10] Joint Nature Conservation Committee 2018, Guidelines for the Selection of Biological SSSIs Part 2: Detailed Guidelines for Habitats and Species - Groups Chapter 14 Non-lichenised fungi. Available at: https://data.jncc.gov.uk/data/d1fcb171-8086-4f5b-ade5-a34c5edc78c5/SSSI-Guidelines-14-Non-lichenisedfungi-2018a.pdf
[11] High Weald Land Managers Pack – Heathland in the High Weald Landscape. Available at: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://highweald.org/document-library/guidance/heathland/high-weald-land-management-guidance-heathland/?layout=default

the time before and after the estate became residence to the Loder family and their role in establishing the Gardens.

- The presence of rockery in the Upper Dell (American Garden) and a ha-ha[12] which evidence the origins of an earlier house (Beauclerk, early 1800s) and the laying out of Gardens and Park within a wider forested landscape.
- Few archaeological features have been found to date which relates to the continuation of tree cover with relatively undisturbed soils. Also no comprehensive archaeological walk-over surveys have been carried out across the site[13].. Archaeology has remained undisturbed, if present, in relation to developments that have been carried out to date.

Historical value

3.15 The **historical value** (deriving from the ways in which past people, events and aspects of life can be connected through a place to the present. This is typically either illustrative or associative) is **high** due to:

- The primary association with the **Loder Family and Sir Edmund Giles Loder** who lived at Leonardslee 1889-1920 (through marriage to Marion Hubbard of Leonardslee). A plant collector, breeder and grower, Loder developed a collection of hybrid rhododendrons at Leonardslee, Gardened by three generations of the Loder family with further hybrids produced after Edmund's death in 1920.
- The international importance of Leonardslee as the home of the original collection of **Loderi hybrid Rhododendrons**. Part of the historic plant collection has been recognised by Plant Heritage who awarded a **Full National Collection** status to Leonardslee for the Loderi & Leonardslee-related Rhododendrons. There are now 68 different rhododendrons in the collection (over 100 different specimens) including 32 registered as threatened in cultivation and 17 currently believed to be unique to Leonardslee in the UK.
- Leonardslee is an exceptional example of a **historic woodland garden** and landscape created in the 19th century. The style of woodland gardening seen at Leonardslee was popularised in the UK by **William Robinson** (renowned as an expert in gardening to mimic nature). Created at a time when new plant material from China and other parts of the world was obtained by plant hunters. It demonstrates large scale informal planting using exotic plants within a woodland setting with key features including grand views and vistas, large water feature and carpets of bulbs. The **gardenesque style** with tree and plants positioned to accentuate their individual character and natural form using unusual varieties marked a transition from the formality and geometry to more naturalistic garden design.
- Leonardslee is one of a **group of 19th-20th century Wealden plantsmen gardens in the High Weald National Landscape** which includes Sheffield Park (Grade I) Nymans, Wakehurst Place, Gravetye Manor and High Beeches, Borde Hill (all Grade II*). These gardens have comparable setting, microclimate and soils to Leonardslee and their shared design principles, characteristics and horticultural and botanical interests (William Robinson lived at Gravetye and advised on Nymans) make them of **national and international importance**. There are also strong Loder family associations which further strengthen Leonardslee's connection to High Beeches and Wakehurst Place.
- The presence of the **Pulhamite Rock Garden** laid out in 1890 by Pulham and Sons combining large natural rocks with their own Pulhamite constructions. Pulhamite was made to a specific construction that was never revealed, with similar features made at Buckingham Palace, Chatsworth and Sandringham.
- The brick based Pulhamite animal shelter (relatively rare) also created at this time remains in use in the wallaby enclosure. The present group of wallabies are descendants from Loder's original collection of wild exotic animals.
- The collection of Champion Trees evidences the 19th century horticultural specimen curation and design by former residents and owners. Champion trees are either the tallest or exhibit the largest trunk circumference of their type, and Leonardslee currently contains 31 British & Irish Champion trees, 6 English Champions, and over 80 county champions. It also has one Monumental Tree, the Algerian Oak *Quercus canariensis* which the tallest of its type recorded in the World[14].

[12] Historic England Official Listing for Leonardslee Park and Garden
[13] At time of writing (Nov 2024), archaeologists are assessing areas around the south end of Waterfall Pond, Camellia Grove, Maple Walk and the Memorial predominantly to find evidence of rifle ranges and shooting target areas.
[14] The Tree Register, 2024. Available at: https://treeregister.org/

- Wood pasture and parkland supporting veteran and mature trees, which reflect the age and history of the Park and Garden.

Aesthetic value

3.16 The aesthetic value (deriving from the ways in which people draw sensory and intellectual stimulation from a place) is **high** due to:

- The framework of gardens, parkland and woodland as a whole which provide a setting for the Grade II Italianate Mansion built in local Wealden sandstone, which is the principal feature of the country estate.
  - The **house**, located on elevated natural topography taking advantage of far ranging views over the wooded valley. With no apparent back of house, the surrounding landscape was designed to be seen from all sides of the house. The South Downs escarpment (15-25 km away) including Devil's Dyke is visible providing a much wider landscape context and sense of place.
  - **Views and vistas** including across chain of ponds (the ponds were designed and enlarged to create vistas) and towards the house.
  - **Parkland, although eroded by visitor car parking** which provides an important setting and marked contrast to the more formal gardens created by the Loder family. The pattern of pasture dotted with occasional mature individual trees or small clumps is shown established on the OS 1st edition surveyed in 1874. The house was designed to be approached from the west through a series of sweeping drives across open parkland.
  - The series of **ancillary buildings**, of vernacular and utilitarian character, west of the house including former stables, generator building, Dolls House Museum, Alpine House and estate worker cottages and their relationship to the principal mansion building. The brick engine house, further down the valley that housed the pumps that supplied water for the estate
- In spring and autumn the aesthetic value and visitor interest are at peak when the collections of Rhododendrons, Azaleas and Camellias provide impressive displays of colour as flowers bloom in spring and leaves of the wider tree collection turn in autumn.

Communal Value

3.17 The **communal value** (deriving from the meanings of a place for the people who relate to it, or for whom it figures in their collective experience or memory) is **medium** due to:

- Rhododendron cultivars developed by Sir Edmund Loder are widely available for purchase by the public from commercial nurseries and are commonly found in domestic gardens. Many have received the Royal Horticultural Society's Award of Garden Merit including *Rhododendron* 'Loderi King George', 'Loderi Pink Diamond'' and 'Loder's White'.
- The shared importance of the High Weald Gardens as a collective and their geographical and historical connections.
- Information provided to the Head Gardener by family members and former staff provide anecdotal accounts of the Leonardslee, personalising its history and bringing it to life.

Consequences of the heritage values and overall significance

3.18 For the heritage values and overall significance of Leonardslee to be conserved, enhanced and to be of continuing value to the present day and future generations, the management of the Park and Garden needs to be clearly understood - for the landscape as a whole as well as for its component features.

3.19 In terms of the wider landscape, this means understanding the design principles governing the placing and composition of open areas, woodlands and trees relative to the built environment, understanding the key views within, out and into the landscape. In terms of features within the landscape, their individual nature and significance needs to be considered as well as their part in the landscape.

Vision Statement

3.20 The vision for Leonardslee Park and Gardens is informed by the preceding statement of overall significance alongside the aspirations of the Head Gardener and wider Client Team.

To protect and celebrate the cultural and natural heritage values of Leonardslee Grade I Registered Park and Gardens. Underpinned by the Loder family's legacy of plant breeding and the resulting plant collection; the rich history of the landscape prior to this; and a new phase going forward as restoration of the estate continues.

To ensure the key horticultural collections; history and historical connections; design intent; built features and diverse habitats are conserved, enriched and interpreted for the enjoyment, appreciation and education of visitors now and for generations to come.

To continue the history of innovation and interaction between people and the natural world which has shaped the Park and Gardens. Embracing new ways of doing this to secure resilience and viability of the estate including propagating and introducing new plant collections, using produce from the estate and adapting to a changing climate. While looking back to traditional forms of management to perpetuate and improve the habitats of the wider park.

To reach an equilibrium whereby as many visitors as possible have the opportunity to enjoy Leonardslee in as many ways as possible without detriment or dilution of the ethos, historic character and natural habitats of the Park and Gardens. Using income generated by the visitor offer to, in turn, secure sustainable conservation, management and enhancement of the Park and Gardens.

To continue to deliver management and maintenance of the Park and Gardens by a dedicated, knowledgeable and skilled team. Working with other High Weald Garden Teams to further understand the significance of this group of Gardens and as a collective, (including with the High Weald National Landscape Team), share knowledge to overcome new and existing challenges together.

Chapter 4
Current Management, Issues/ Gaps and Forces for Change

This chapter provides supplementary information to the GCMP by documenting current aspects of management of the Park and Gardens including its natural and cultural assets. Issues and forces for change facing the Park and Gardens are highlighted along with gaps in baseline information and data.

4.1 Information in this chapter provides a step towards adding to the policies for the Park and Gardens (Chapter 5 of this Addendum)

Forces For change

Change in Visitor Numbers

4.2 The Client Team's target for future visitor numbers is a 10-15% increase per year. Based on the total annual visitor numbers Sept 2023-August 2024 which totalled 225,722, a 10% increase per year will yield the following annual visitor numbers over a 5 year period.

Table 4.1: Projected Leonardslee visitor numbers based on a yearly 10% increase

Year	Year 1	Year 2	Year 3	Year 4	Year 5
Visitor numbers	248,294	273,124	300,436	330,480	363,528

4.3 The following factors should be taken into account in relation to increased visitor numbers:

- **How many more visitors are required to secure the conservation management of the gardens and an appropriate return on the investment**. These calculations need to be understood to inform investment in visitor infrastructure and management/ maintenance of the resource (including staff numbers).
- **Comparison to other High Weald Garden taking into account, there size and visitor offer should be made**. Projections show that future visitor numbers at Leonardslee could compare more to those currently experienced at Nymans and Wakehurst (refer to Table 2.3). Partnership working with other Estate/ Garden Teams is vital to understand how visitor numbers are managed including, importantly, in relation to protection of the natural and cultural heritage assets. Information on sustainable and unsustainable levels of use need to be understood.
- **Increasing visitor numbers in the months currently experiencing lower visitor numbers should be considered.** Making the visitor offer more attractive throughout the year is a way of increasing overall visitor numbers without further increasing footfall in the already busier months. This way visitor use of the Park and Gardens can be managed more evenly across the year avoiding peaks in visitor numbers when damage may be more likely to occur**.**
- **Increasing the spend per head of visitors based on existing visitor number should be encouraged but not in way that would exclude people from visiting.** Diversifying the offer in order to increase spend per head of existing visitors is a way of increasing revenue without increasing footfall.

4.4 As reported by the Head Gardener current visitor numbers do not result in damage to the fabric of the Park and Gardens. The following issues could arise with an unsustainable increase in visitor numbers and footfall:

- Soil compaction by vehicles and people.
- Erosion and compaction of paths by people and compaction by vehicles could amplify the drought stress on the plant collection and parkland by reducing water percolation through the soil.
- Visitors straying from the established path network could cause damage to soils, the plant collection and wider habitats and associated species
- Insufficient staff presence to deter unwanted behaviour.
- Damage to built structures caused by footfall and possible unwanted behaviour such as climbing on structures.
- Condition of the parkland compromised through use by visitors and events

➢ Recommendations are made in Chapter 5 (Policy U1 and U2) relating to visitor use and visitor numbers

Climate Change

4.5 The UK's climate continues to change with the first decades of the 21st century demonstrably warmer, wetter, and sunnier than the 19th and 20th centuries.[15] 2023 was the second warmest year on record for the UK since the Met Office temperature records began in 1884, with only 2022 warmer. 2023 was the seventh wettest year on record for the UK since rainfall records began in 1836, with 113% of the 1991–2020 average, and large areas of the UK exceeding 125%.

[15] Kendon et al., 2024. State of the UK Climate 2023. Available at: https://rmets.onlinelibrary.wiley.com/doi/10.1002/joc.8553

4.6 2023 was 0.83°C above the 1991–2020 average and 1.66°C above 1961–1990. The months of February, May, June and September of 2023 were all ranked in the top-ten warmest months for the UK since 1884.

4.7 2014-2023 has had almost a week fewer air frosts per year than the 1991–2020 average and over a fortnight fewer than 1961–1990, and over a week fewer ground frosts per year than the 1991–2020 average and almost a month fewer than 1961–1990.

4.8 Five of the 10 wettest years for the UK in the series from 1836 have occurred in the 21st century, with March, July, October, and December 2023 all top-ten wettest months in the UK monthly rainfall series from 1836; the first year this has happened for four separate months.

4.9 The previous decade has been 2% wetter than 1991–2020 and 10% wetter than 1961–1990 and has also had on average 4% more hours of bright sunshine per year than the 1991–2020 average and 9% more than 1961–1990. 2014–2023 is the sunniest 10-year period in the UK since sunshine records began in 1910.

Current climate and growing conditions

- Spring 2023 indicators were generally near-average or later compared with the 1999–2022 baselines. Insect activity, in particular, appeared later. However, Hazel had its earliest flowering date since 1999.
- Bare tree dates were a few days later than the 1999–2022 baseline due to warm September temperatures and a generally mild autumn.
- Overall, the 2023 leaf-on season was slightly longer than the 1999–2022 baselines, although the shorter lawn-cutting season might be attributed to a mixture of low temperatures in early March inhibiting growth and wet grass in autumn discouraging late cutting.

4.10 Effects of climate change are starting to become apparent within the Gardens. Several Rhododendrons were lost in 2024 due to a variety of fungal conditions (including the fungal like organism *Phytophthora*) and it was suggested by DEFRA that this was most likely a result of wetter, warmer conditions. The effects of climate change are likely to be seen increasingly, with research showing that towards the end of the century, southern and eastern England are likely to be significantly affected by climate change[16].

4.11 The following changes have potential implications/ could cause potential issues for the Park and Gardens and should be considered in long term management planning:

Carbon dioxide increase

4.12 Depending on the success of global measures to reduce emissions, CO_2 concentration could reach between 440 and 540 parts per million (ppm) by 2050, compared with the pre-industrial level of 280 ppm. This will likely lead to a rise in the rate of growth across all vegetation types including invasive species,

4.13 This will increase the demand on the financial and staffing resources for maintenance, management, and monitoring activities within the Garden.

➢ Recommendations are made in Chapter 5 (Policy IM1) relating to future resource requirements

Temperature increase and reduced summer rainfall

4.14 All UK regions are expected to warm. Warmer temperatures will result in reductions in humidity, particularly in summer, and could cause drought. Increased drought stress could lead to greater and more severe pest and disease outbreaks on weakened vegetation. Drought tolerant species should be selected on well-drained sites sensitive to lower moisture levels.

4.15 Warmer temperature will prolong the growing season leading to earlier bud burst, later bud set, and more shoot growth in late summer. This will allow for the planting successful establishment of specimens of more near-native and exotic origin, however it will also lead to an increase in woodland mammal populations, more generations of insect pests per year, an increase in disease transmission, and increased colonisation by invasive species. Increasing

[16] Forestry Commission, 2022. Adapting forest and woodland management to the changing climate. Available at: https://cdn.forestresearch.gov.uk/2022/05/UKFSPG026.pdf

the diversity of planted material will reduce the severity of outbreaks, and increased pest and disease education and monitoring will enable successful interventions.

4.16 Warmer, drier weather conditions and more frequent and longer dry spells will also increase the risk of natural and intentional wildfires starting. Risks of spreading will be increased by the simultaneous increase in ground vegetation growth, and more leaf and branch litter fuels caused by pest or disease outbreaks.

4.17 The area is likely to experience more frequent drier summers, which, when combined with predicted temperature increases, will compound drought stress. Sustainable and efficient irrigation systems should be planned for when adding to or renovating areas of ornamental planting. Trees should be irrigated to establishment but then left to develop a proper root system and to not encourage excess surface root network.

➢ Recommendations are made in Chapter 5 (Policies T1,S1, L1, IS1, IS2, BI2 and BI3) relating to the effects of temperature increases and reduced summer rainfall due to climate change

Increased winter rainfall

4.18 An increase in precipitation from November to March will lead to increased erosion and slope failures as well as waterlogging, which, when combined with visitor footfall, will lead to increased soil compaction and anaerobiosis. Many paths area steep and already suffer with heavy erosion due to run-off. Milder, wetter winters will also lead to greater instances and outbreaks of *Phytophthora ramorum* and *Phytophthora kernoviae*.

➢ Recommendations are made in Chapter 5 (Policies L1, P1 and IS2) relating to the effects of increased winter rainfall due to climate change

Pests and diseases

4.19 *Phytophthora ramorum* and *Phytophthora kernoviae* are primarily diseases of heavy or waterlogged soils, and the symptoms can be very difficult to separate from those arising due to waterlogging itself. Both *Phytophtora* species have the potential to kill some species of native British trees and are a serious threat to the environment and commerce including amenity plantings, heathland flora, historic gardens and woodland sites. Although in the past there have been small outbreaks of *P. ramorum* in the Gardens, these have been quickly contained and there currently there are no known instances.

4.20 *Xyllla fastidiosa* is a bacterium spread by sap sucking insects and is one of the biggest risks to the UK horticultural industry and wider landscape. It infects a wide range of plants including many species grown in gardens, such as cherry, hebe, lavender, oak and rosemary. The bacterium causes symptoms including leaf scorch, wilt, dieback and plant death, and can easily confused with stresses such as frost damage and drought, or other plant diseases. Long-distance movement of the disease is most likely to occur through trade in infected plant material so an effective biosecurity policy should be in place that addresses the provenance of any new plant material.

➢ Recommendations are made in Chapter 5 (Policy and IS2 and IS3) relating to invasive rhododendron species and associated pests/ diseases

Re-introduction of Beavers

4.21 The reintroduction of beavers has been considered by the Estate and Garden Team and will not be taken forward due to concern about the detrimental impact on the collection of important trees and plants.

➢ The reference to re-introduction of beavers can be removed from the GCMP

Supplementary Information on the Current Management of the Park and Gardens

4.22 Much of this specific information about the management of the Park and Garden has been provided by the Head Gardener and collated into this chapter.

Propagation and Succession of Important Plant Collections

4.23 Leonardslee currently holds the National Collection of *Rhododendron* 'Loderi and Leonardslee Hybrids . National Plant Collections are registered and documented collections of a group of plants that are linked botanically by plant group, or perhaps have a shared history or geography[17]. Ensuring that the correct conservation and succession measures are in place will guarantee the future of this important resource for gardeners, nurserymen, garden designers, researchers, plant breeders and those interested in historical gardens and landscapes.

- If *Phytophthora ramorum* or *P. kernoviae* were to take hold in the garden or a storm similar to the Great Storm of 1987 that the National Collection plants as well as the 116 Champion Trees we have and the many thousands of other plants in the garden would be at risk.
- The plan in the short and long term is to have some back up plants of as many of the plants in our National Collection as possible in both the nursery area and in new plantings throughout the garden.
- We cannot propagate our important Rhododendrons from seed because they would never come true due to the vast numbers of Rhododendrons in the garden.
- Rhododendrons, particularly the Loderi hybrids, are notoriously tricky to propagate, and Leonardslee currently has very limited on-site facilities. The below details current measures taken:
  - Air layering on a select number of specimens
  - Millais Nurseries[18] have taken some cuttings to their advanced facilities with the first group of cultivated plants (10 x Rhododendron 'Selig') received back in October 2024.
  - Smaller specimens of Loderi hybrids have been purchased to be grown on at Leonardslee and which will be planted out when large enough.
  - Material from all National Collection plants has been sent for micropropagation at The Duchy College in Cornwall[19] as an historic case study.

➢ Recommendations are made in Chapter 5 (Policy S1 and S2) relating to propagation and succession

Restoration of the Park and Garden (historic design intent, views and built heritage features)

4.24 The Park and Garden was closed and abandoned between 2010 and 2017, much of the garden became overgrown and out of control. Prior to this it is thought the Loder family were struggling with the upkeep of the Garden. Before the Great Storm in 1987 it is thought that up to 50% of the garden was closed to the public due to being unsafe and inaccessible.

4.25 Early work by the present owners, focussed on getting the garden open for initial visitors in terms of car park, hard paths, café etc.

4.26 The present Head Gardener has been in post since 2021. The following are examples of the type of restoration work carried out:

- Opening up several historic views in locations such as The Rotunda, The Dell etc and work is planned to do similar view opening at Memorial Table, Top Walk and Top Garden.
- Restorative pruning of overgrown plants including camelias and azaleas prioritising key areas such as Camellia Grove and Rock Garden.
- Opening up enclosed areas (e.g. hard pruning in the Mossy Ghyll and the Coronation Garden) to reveal views and glimpses through. Within the Loderi Garden and Cox's Walk the number of rare and important plants make it harder and more complicated to carry out such work and takes a lot more planning and consideration.

[17] Plant Heritage. Available at: https://www.plantheritage.org.uk
[18] Millais Nurseries Rhododendron specialist - Millais Nurseries
[19] https://duchy.ac.uk/duchy-college-micropropagation-unit/

- Opening up of over grown paths
- There are still a couple areas of the garden that are not open to the public. The current priority of these areas is a space that was called the Hillside Garden by the Loder family. A team of woodland volunteers work here every week and are joined by the garden staff from time to time.
- Restoration and clearance work on and around the Champion Trees and the Rhododendrons in the National Collection.

4.27 The evidence base for restoration of the landscape, its features and views has started to be compiled in the GCMP and evidence in other documentation is currently being prepared as part of masterplan proposals. However much of the analysis of historic mapping has been focused on the house and the evidence base for the Park and Gardens as a whole needs to be consolidated, with more in depth analysis undertaken to ensure the resource if comprehensively understood and management decisions are well informed.

➢ Recommendations are made in Chapter 5 (Policy H1, H2, H3, H4) relating to the evidence base for restoration and conservation

Pulhamite Rock Garden

4.28 Over time the Pulhamite in the rock garden has become cracked and degraded in places. It has also suffered some periods of lengthy neglect. Pulhamite was made by Pulham and Sons to their own secret recipe which was never revealed. Specialist stone masonry skills are needed to understand the materials and methods needed to undertake successful repair before the condition of the historic Pulhamite gets worse and beyond repair. Other garden features such as the waterfall are in need of repair.

➢ Recommendations are made in Chapter 5 (Policy H1 and H2) relating to restoration and conservation of built garden structures/ features

Invasive Species, Pests and Diseases

4.29 Section 14 of the Wildlife and Countryside Act 1981[20] prohibits the introduction into the wild of any plants listed under Schedule 9 part 2 of the Act which may cause ecological, environmental, or socio-economic harm. It is expected that reasonable measures will be taken to confine them to the cultivated area so as to prevent their spreading to the wider environment and beyond the landowner's control; any failure to do so, which in turn results in the plant spreading to the wild, could be considered as 'causing to grow in the wild' and as such would constitute an offence

Invasive *Rhododendron* species

4.30 *Rhododendron ponticum* is listed under Schedule 9 Part 2 of the Wildlife and Countryside Act 1981[21] and present within the Gardens. Current operations mean as much as possible is being removed. *R. ponticum is* also a host to *Phytophthora ramorum*, *P. kernoviae,* both notifiable fungus-like pathogens which causes damage to a wide range of trees and plants. If left unchecked the disease could be detrimental to the collection at Leonardslee.

4.31 *Rhododendron luteum* is also listed under Schedule 9 Part 2 and is a vigorous plant that has taken over several areas, although it is not a vector for disease. It is attractive and scented making it a popular plant with visitors and is pruned back hard and allowed to regrow.

Japanese Knotweed

4.32 A previously hidden area of extensive, well established Japanese knotweed has recently been found between Bluebell Bank and the Vineyard. The area covers approximately one third of a hectare. Japanese knotweed must be stopped from spreading. Soil or plant material contaminated with Japanese knotweed can cause ecological damage.

➢ Recommendations are made in Chapter 5 (Policy IS1 and IS2) relating to invasive species including rhododendron species and associated pests/ diseases

[20] https://www.legislation.gov.uk/ukpga/1981/69/section/14

[21] https://www.legislation.gov.uk/ukpga/1981/69/schedule/9/part/II

Woodland and Tree Survey and Management

4.33 Tree safety surveys of the site are currently being managed in-house by the existing Garden Team. Two members of the Garden Team have the advanced tree survey qualification and four more have the basic tree survey qualification. The whole Park and Garden is zoned into areas of priority for tree surveys and the frequency of surveys depends on the defined risk priority of the area (refer to zones and associated information in **Appendix C**).

4.34 . The management of trees for health and safety is defined by the zones which relate to the intensity of usage by visitors and staff as well as users of adjacent roads (A281). The very high usage zones (car park, along the A281, principal paths, buildings and visitor attraction) are inspected annually and after sever weather events. Low usage zones (wider woodland and parkland with low levels of visitor use away from principal paths are) are not formally inspected with observation and awareness of general condition of trees. More detailed information about tree safety management is provided in **Appendix C**. Surveys are currently stored on handwritten and scanned work sheets and there is an aspiration to record this information digitally using new tree survey software.

4.35 There are approximately 120 trees within the gardens which are recognised as champions by the Tree Register[22]. Champion trees are either the tallest or those with the largest trunk circumference (girth) of their type in either the county, Britain or Britain and Ireland. 40 of the champion trees are mapped and described on a leaflet available for visitors. Restoration and clearance work on and around the Champion Trees is undertaken.

4.36 While trees are managed for public safety. There is no overall tree strategy or conservation management plan in place for successional planting. Veteran trees, a defining feature of wood pasture and parkland are present across the estate but have not been recorded or surveyed.

4.37 As restoration of the estate continues the longer term aims of woodland management should be considered and documented.

➢ Recommendations are made in Chapter 5 (Policy T1,T2, T3, T4, T5) relating to the tree, woodland and dead wood resource

Ecology and Biodiversity

4.38 Although a number of reports have been produced and surveys have been undertaken, overall, the habitats within the Park and Gardens, and the species they support are not fully understood. There is currently little information on the mosaic of habitats within the Park and Garden (including the grassland, wood pasture and parkland and lowland heath habitats), their condition and appropriate management to protect and enhance them.

4.39 Potential threats to species and habitats include loss of habitat through change in land use; changes in visitor use and visitor numbers which could disturb or degrade habitats (e.g. erosion and compaction); pests and diseases; and changing conditions brought about by climate change.

➢ Recommendations are made in Chapter 5 (Policy BI1-BI6, LI1) relating to habitats and species within the Park and Gardens

Lakes and Hydrology

4.40 The approximate total acreage of the lakes is 6.07 acres and their overall volume approximately 10,564,090 gallons. More detailed data on the lakes is provided in **Appendix D**.

4.41 The main concerns for the lakes relate to:

- Silt build up - which can increase risk of flooding, can be detrimental to wildlife and is unsightly in appearance. Clapper Pond was part-dredged in house approximately four years ago but with limited success. Quotes from contractors have been obtained to continue dredging the lakes but undertaking the work has not been regarded as a priority.

[22] The Tree Register

- Bank erosion - the worst case scenario is that the erosion, which is starting to creep under the paths, causes areas where visitors access to collapse.
- Lakes running dry in summer and lakes bursting their banks in extreme wet weather – this is managed by regularly opening up and clearing tributary gulleys before and during the dry season to increase flow. The individual lake levels can also be controlled, to some extent, with a series of caps and pipes.
- Run-off from nearby farmland and other neighbouring land that is high in nitrates or other pollutants. The estate lies within the Adur East Nitrate Vulnerable Zones (NVZs), these areas are designated as being at risk from agricultural nitrate pollution.
- Leak in the waterfall – repair is planned for summer 2025 including which should solve the leak, make the waterfall more efficient and reduce erosion further down the bank.

4.42 The issues highlighted above are being addressed by the Head Gardener where they can be. However there is need for an overarching understanding of the hydrology of the site highlighting the vulnerability of the gardens and its water features to changing precipitation patterns and to provide an overall water management action plan.

➢ Recommendations are made in Chapter 5 (Policy L1, L2, L3 and P1) relating to management of hydrology and hydrological features

Deer Management

4.43 There is a collection of Sika and Fallow deer on the estate, with a few rogue Muntjacs also. All deer should be within the deer park but due to a series of historical gate and fence failures, there are an unknown number of deer also found in the garden where they cause huge amounts of damage to the plant collection.

4.44 The estate employs deer management contractors who carry out shoots in the garden after closing hours during the deer season. All meat is used in the Interlude restaurant within the Mansion House. While deer are shot fairly regularly, it is not possible to control the breeding population. A night license has recently been granted from Natural England which allows to shoot for longer periods.

4.45 A one-way deer gate and catch pen is installed between the Top Garden and deer park. An automatic feeder and camera system allow the estate to track when deer have been caught and they can be released into the deer park. Further methods to stop deer getting into the garden include one way ‘kissing gates’ at various points between the two areas and timed automatic closing systems on other gates.

4.46 All newly planted shrubs are sprayed with a calcium and natural plant extracts product called ‘Grazers’ which tastes unpleasant to the deer and should stop them from attempting to eat the same plant twice. It isn’t permanent however and needs to be reapplied regularly.

4.47 Tree guards are also placed around newly planted single specimen trees to stop deer from reaching the plants.

4.48 In 2022 the deer ate all the daffodils in the garden and will also browse hydrangeas and any newly planted trees and shrubs. The presence of the deer in the garden is continuing to cause damage to the plant collection and stopping large-scale replanting schemes from taking place.

➢ Recommendations are made in Chapter 5 (Policy D1) relating to deer management

General Management and Maintenance Planning

4.49 Currently the garden staff include 12 full time equivalent, 2 full time apprentices and 15 garden volunteers.

➢ Recommendations are made in Chapter 5 (Policy IM1) regarding management and maintenance planning

Chapter 5
Addendum Policies and Actions

This chapter draws on information in preceding chapters to provide additional policies and actions complementary to the GCMP

5.1 The following supplementary policies are organised under the headings provided in the policies sections of the GCMP. This is to aid joint use of the GCMP and this Addendum.

5.2 These additional policies place emphasis on the perpetuation and resilience of the Park and Gardens to climate change; the balance of increased visitor use; and the nature conservation value of the Park and Gardens.

5.3 The formation of policies and actions is guided by the statement of significance and the vision for the Park and Gardens and responds to issues identified in Chapter 4.

5.4 Each policy is assigned actions, a timeframe and staff member with responsibility for overseeing/ undertaking.

Table 5.1: Addendum Policies and Actions

5.5 Note many of the policies and actions are interrelated and do not exist in isolation. Timeframes provided indicate Short term <5 years, Medium term 5-10 years and Long term 10+ years.

Addendum Policy No.	Addendum Policy	GCMP Policy relates to	Action	Timeframe for actions (policy remains in place)	Responsibility
Implementing the GCMP and Addendum Policies					
IM1	Agree standards and detail of maintenance across the Park and Gardens ensuring this is consistent the character; design and layout; nature conservation and visitor use. Ensure the required financial and staff resources available to achieve this is understood and secured.	MG1, CMR4	■ Prepare a costed management and maintenance plan to: – Understand the standards and priorities for management and maintenance within the Park and Gardens – Provide detail of the management and maintenance operations required within the southern car park where rectification work has been carried out but many areas are heavily compacted and grass has not established – Guide waste management including proposals for managing and separating waste – Understand the necessity of cyclical repairs – Understand the financial and staff resources (including specialist knowledge skills) available and necessary to achieve standards. ■ Ensure the GCMP and future MMP is made available to all staff and volunteers working in the Park and adopted/ accepted as the guidance for managing and maintain the Park.	Short term priority	Head Gardener, Estate Manager
IM2	The GCMP and Addendum and Building CMPs are to be jointly adopted by the Client Team and the Local Planning Authority	No policy	■ Adopt Garden and Buildings CMPs and implement policies. ■ Submissions of a 5-10 plan review to be made. Including updated information on climate change and impacts.	Short term	Estate Manager Local Planning Authority
IM3	Promote partnership working and seek guidance from other organisations (High Weald Garden	No policy	■ Forge greater links and networks with other High Weald Gardens Teams, to share knowledge between the skilled garden staff, other estate staff (such as	Short term	Head Gardener, Estate Manager

Addendum Policy No.	Addendum Policy	GCMP Policy relates to	Action	Timeframe for actions (policy remains in place)	Responsibility
	Teams and High Weald National Landscape Team) with shared goals and issues to overcome.		events teams) and volunteer managers and to highlight their shared regional and national significance. – Make initial contact with High Weald Garden Teams including the National Trust (Nymans) and Kew (Wakehurst Place) – Invite representative from each Garden to Leonardslee for a tour and discussions with the aim of setting up a co-ordinated Partnership. Encourage visits to the other Gardens – Once a team has formed, meet periodically to share knowledge; discuss issues and opportunities; and overcome challenges collectively including regarding visitor number and climate change ■ Work with and seek advice from the National Landscape Team on habitat management and funding opportunities. ■ Seek guidance from Natural England, Historic England and Environment Agency.		
Use					
U1	Measures will be taken to ensure any increase in visitor numbers are sustainable and 1) in balance with the revenue required to secure ongoing conservation, management and enhancement of the Park and Gardens 2) do not cause damage or detriment to the cultural and natural heritage of the Park and Gardens.	UGD5 and MG3	■ Carry out calculations to understand the number of visitors required to generate the required income to secure long-term conservation and enhancement of the Park and Gardens. Staffing need to be quantified to ensure appropriate resources are in place to maintain the Park and Gardens to a high standard given an increase in visitor use. ■ Consider the potential impact of the required number of visitors on the fabric of the Park and Gardens. From this understand 'visitor capacity' whereby a balance can be found between the numbers required to generate necessary income without detriment to the Gardens which would, in turn, increase costs.	Short term – ongoing	Estates Manager; Head Gardener

Addendum Policy No.	Addendum Policy	GCMP Policy relates to	Action	Timeframe for actions (policy remains in place)	Responsibility
			■ Work with other High Weald Garden/ Estate Teams to share information on, and understanding of, increasing visitor numbers and visitor capacity. – Consider the viability of a ticket which allows visitors entrance to a number of the High Weald Gardens as part of a 'High Weald Experience' to help dissipate visitor pressure at peak times – Consider options for sustainable transport connections to and between Gardens including cycle routes and public transport as part of the experience. ■ Seek to spread the visitor offer across the Park and Gardens including providing walking trails. ■ Where existing structures are underutilised and in need of refurbishment, the structures which are furthest away from the main house have the best potential to spread visitors across the site. ■ Seek to make the visitor offer more attractive throughout the year thereby increasing visitor numbers across the year instead of at peak times. ■ Seek to increase visit spend per visit but not to exclude visitors. ■ Consider staff presence, if necessary, to help deter unwanted behaviour. ■ Consider methods to time limit visitors e.g. for visits to the rock garden. ■ Effective monitoring of damage and degradation should be enacted. Undertake remediation work immediately and make adjustments to acceptable levels of access to prevent further damage. ■ Provide interpretive material to convey the vulnerability of built features, plant collections and habitats to ensure visitors keep to paths, do not trample on vegetation, compact soil; climb on structures etc. If necessary consider		

Addendum Policy No.	Addendum Policy	GCMP Policy relates to	Action	Timeframe for actions (policy remains in place)	Responsibility
			physical barriers that are effective but do not compromise character or intended design.		
U2	Ensure planned activities and events are appropriate and meet the vision for the Park and Gardens.	No policy	■ Develop an Events Strategy to ensure events can be held successfully without damaging the fabric of the Park and Gardens. Consider/ include: – Development of a clear check list to effectively challenge whether events are appropriate and beneficial the Park and Gardens, bringing a positive outcome for the Park and Gardens and where possible, aiding visitor understanding and appreciation of the Park and Gardens – Income compared with logistics of event – is it profitable? – Tree protection, vehicle movements, root compaction – risk assessments on event by event basis – Closure of / prevent access to vulnerable areas of the Garden (e.g. Pulhamite Rock Garden) on event days when large numbers of visitors are expected. Provide information to explain reasons for closure. – Undertaking Heritage Impact Assessment if necessary	Short-term	Estates Manager
Tree Management					
T1	**General** Manage trees and their renewal/ succession taking account of public safety, historic landscape design intent, identified key views, pests and diseases, public use, biodiversity, appropriate species and resilience to climate change.	MG7	■ Appoint arboriculturist to update and provide tree surveys by priority area (refer to **Appendix C** and implement recommendations.. Carry out updates of tree surveys at a frequency defined by the Head Gardeners' risk priority for each zone (**Appendix C**). ■ Continue to assess options and prices for purchasing new tree survey app/ software to assist with storing and using data effectively.	Short term – Ongoing	Head Gardener

Addendum Policy No.	Addendum Policy	GCMP Policy relates to	Action	Timeframe for actions (policy remains in place)	Responsibility
			■ Appoint specialists (landscape architect and arboriculturist) to prepare a Tree Conservation Management Plan and Tree Strategy for the whole Park and Garden alongside the Head Gardener. To include: – Guidance on appropriate species (relating to character; resilience to pests and diseases and climate change) – Understanding of the risks to significant trees (e.g. fall areas) and actions required to avoid risks. – Planting locations and management guidelines for new and successional trees including of significant trees. Consideration should be given to the age and structure of trees to ensure continuity of historic design intent (e.g. as established on the OS 1st edition surveyed in 1874 - refer Policy H3) and the diversity of the surrounding habitat – Policies on non-replacement (e.g. to restore views) – Refer also to policies on evidence base, tree protection, veteran trees and dead wood		
T2	Assess veteran tree resource and manage veteran trees to ensure public safety and to enhance biodiversity and ensure longevity.	MG7	■ Appoint an arboriculturist to: – Survey for veteran trees – Depending on numbers present, prepare individual management plans or general guidelines to manage veteran trees for public safety; biodiversity and to ensure longevity – Identify younger trees (not veterans) for veteranisation and provide advice on techniques for accelerating the formation of veteran trees and associated biodiversity	Medium term	Head Gardener, Estate Manager

Addendum Policy No.	Addendum Policy	GCMP Policy relates to	Action	Timeframe for actions (policy remains in place)	Responsibility
T3	Retain dead wood in appropriate areas (that do not conflict with character of landscape or where it could pose a hazard to the public).	SEB1	■ Prepare a dead wood policy to incorporate: – Health and safety considerations – Standing dead wood in relation to historic views – Dead wood as a natural barrier to deter access – Retaining dead wood in situ where possible to provide important habitat for invertebrates and fungi (characteristic of wood pasture and parkland) – Removal of dead wood containing disease or pathogens to prevent further spread – Removal of smaller dead wood litter to prevent risk of wildfire	Medium term	Head Gardener
T4	Protect and mitigate the effects of visitors and site traffic on tree root protection area.	MG7	■ Identify trees most at risk from ground compaction and enact a program of protection and decompaction to improve soil growing conditions: – Mulching of the root zone a cycle of no more than 3-years using suitable organic materials – Erecting protective barriers during events, construction, and when climatic conditions increase compaction risks (i.e., prolonged wet weather)	Short term	Head Gardener; Estate Manager
T5	Provide a long term vision for the wider native woodland as restoration of the Park and Garden continues.	No policy	■ Set out a long term vision and objectives of woodland management to include consideration of public access, biodiversity (e.g. including woodland edge, glades, diversity of age and structure) and use of felled wood. ■ Outline threats facing the woodland (e.g. deer, plant health). ■ Provide a strategy with work prescriptions including consideration of traditional woodland management techniques (e.g. coppicing or pollarding).	Medium term	Head Gardener; Garden Volunteers
Deer Management					

Addendum Policy No.	Addendum Policy	GCMP Policy relates to	Action	Timeframe for actions (policy remains in place)	Responsibility
D1	Control the deer population to prevent damage to the plant collections and allow new planting to take place. With a view to returning all deer within the garden to the deer park.	No policy	■ Undertake monitoring to determine number of deer within the Garden. ■ Continue deer control as agreed with Natural England. ■ As deer are returned to the deer park phase out use of 'Grazers'. ■ Monitor impact of deer on trees and vegetation within the deer park taking measures to protect newly planted trees.	Ongoing	Head Gardener, Estate Manager
Landscape Character, Historic Design Intent and Built Garden Structures/ Features					
H1	Provide a Gazetteer of built garden structures/ features.	No policy	■ Locate and map all built garden structures/ features with a key that links them to a Gazetteer. Provide photographs and record heritage significance of each individual structure/feature in the Gazetteer. ■ To include consideration of the ha-ha mentioned within the Historic England Official List Entry on the Register of Parks and Gardens.[23]	Short term	Head Gardener, Estate Manager
H2	Prepare a conservation programme for the restoration, repair and maintenance of built garden structures/ features (including the Pulhamite Rock Garden and Wallaby Enclosure).	No policy	■ Undertake specialist survey by a conservation architect to record condition of built features/ structures identified in the Gazetteer including Pulhamite Rock Garden and Wallaby Enclosure. – A quote has been obtained from Cliveden Conservation[24] for survey of the rock garden and this in the process of being instructed by the Estate. ■ Develop and implement a costed, conservation programme for the restoration and repair of built garden structures/ features. Prioritising those most vulnerable.	Short term with the Pulhamite Rock Garden as priority	Head Gardener, Estate Manager

[23] https://historicengland.org.uk/listing/the-list/list-entry/1000159?section=official-list-entry
[24] Home - Cliveden Conservation

Addendum Policy No.	Addendum Policy	GCMP Policy relates to	Action	Timeframe for actions (policy remains in place)	Responsibility
			– Following survey, prepare and carry out conservation programme for the restoration and repair for the Pulhamite Rock Garden as a priority ■ Prepare a costed, rolling programme of maintenance for built garden structures/ features to maintain good condition. – Undertake appropriate fencing repairs needed to stop rabbit damage in the Rock Garden and replace the gates with something more in keeping with the heritage status. ■ Carry out regular inspections to monitor, record condition and add maintenance actions. Review and Update Gazetteer accordingly to reflect work carried out. ■ Ensure restoration and repair work is undertaken by qualified specialists using 'like for like' materials and traditional skills.		
H3	Consolidate evidence base for restoration and conservation of the historic designed landscape.	MV1, CMR7	■ Appoint a landscape architect with heritage specialism to prepare an analysis of the historic development of the entire Park and Garden including map overlays. Researching and collating historic mapping (including OS 1st edition surveyed in 1874), photographs and written evidence. Working in partnership with, and drawing upon the knowledge of, the Head Gardener and Garden Team to form a consolidated evidence base to aid restoration proposals including wider parkland, approaches and path layout, tree planting locations, views and vistas. ■ Consider in phased completion of car park works and associated landscape proposals. ■ Use evidence base alongside GCMP to guide, plan and prioritise restoration. Ensure evidence base is incorporated and fully integrated into future updates of the GCMP.	Short term – ongoing	Head Gardener

Addendum Policy No.	Addendum Policy	GCMP Policy relates to	Action	Timeframe for actions (policy remains in place)	Responsibility
			■ Protect and maintain key views and vistas which have been opened up as part of ongoing management (identified in the CMP including Plate 21) and reinstate and strengthen lost views where appropriate. ■ Maintain long distance view to the South Downs from the southern part/ edge of the visitor car park. Ensure this is recorded and mapped in the GCMP and highlighted in visitor interpretation material.		
H4	Conserve the Park and Garden's overall character and distinct variations of character areas within.	CMR6 Character Areas	■ Add to the GCMP Gazetteer to highlight the landscape and visual sensitivities of each character area to inform management guidelines. ■ Develop a Design Guide for site furniture (benches, bins, gates and boundary treatment/ fencing) to minimise intrusion in to the historic landscape. ■ Add to the GCMP Gazetteer to highlight the landscape and visual sensitivities of each character area to inform management guidelines.	Short term	Estate Manager
Successional Planting					
S1	Ensure that a successional planting strategy is put in place to 'future proof' the character and structure of the gardens in the face of existing and emerging threats.	MPL1	■ Continue with propagation and succession planning activities relating to the *Rhododendron* 'Loderi hybrid' cultivar collection. ■ Identify trees and shrubs potentially at risk and categorise according to immediacy of threat and potential consequences of failure on the overall design of the garden. Suggest Red/Amber/Green (RAG) rating with suitable associated timeframe for replacement. ■ Identify a list of replacement specimens that will be more resilient to climate change, and pests and diseases. Suggested replacements should comprise a mixture of native, near-native, and exotic species that will continue the ethos	Short term	Head Gardener

Addendum Policy No.	Addendum Policy	GCMP Policy relates to	Action	Timeframe for actions (policy remains in place)	Responsibility
			and character of the original garden, whilst balancing the ecological benefits for local biodiversity. ■ Work with Kew Wakehurst (and other High Weald Garden Teams) to develop strategy.		
S2	Carry out selective felling and clearing where necessary, and planting of new specimens.	MPL1	■ Select new specimens and identify planting locations. New material should reflect the character of the area to be planted and the ethos of the Garden itself which is to use spectacular, exotic plants in an informal setting. Where possible incorporate species native to geographical locations with climate conditions most like that projected to occur at Leonardslee in future scenarios. This is likely to include plant species with an origin of between 2-5° latitude south of the site.[25]	Short/medium term depending on RAG rating	Head Gardener
Hydrology					
L1	Understand the vulnerability of, and protect, the Gardens and its hydrological performance from changing precipitation patterns.	ML1, CMR8	■ Appoint a specialist to prepare a Hydrology Management Plan for the Park and Gardens. To provide an overall water management and drainage action plan. To review existing management regimes and planned operations and provide recommendations which respond to current and future issues (relating to climate change).	Medium term	Estate Manager Head Gardener Environment Agency
L2	Investigate viability for programme of phased dredging of the lakes to improve storage capacity, benefit wildlife, and improve appearance.	ML2	■ Commission a specialist survey of the lakes to establish the level of silt build up and undertake a feasibility study on a suitable location for spreading. ■ Work closely with the Environment Agency to comply with all legislation and find a suitable place to deposit the dredgings. Consider approaching the landowner to the east to see if land can be used for spreading and drying silt	Short term priority	Head Gardener; Estate Manager. In liaison with the Environment Agency and

[25] Forestry Commission, 2020. Managing England's woodlands in a climate emergency. Available at: https://assets.publishing.service.gov.uk/media/5e6a4a7b86650c727d932b0e/Climate_Change_Full_Guide.pdf

Addendum Policy No.	Addendum Policy	GCMP Policy relates to	Action	Timeframe for actions (policy remains in place)	Responsibility
			(removing wet waste is costly). Both the silt itself and the landowners soil need to be tested and matched by the Environment Agency in order for this to be an option.		adjacent landowner
			■ Following survey and feasibility study produce a plan for phased dredging going forward. – Research means of obtaining grants and bursaries to fund costly operations	Long term	Head Gardener; Estate Manager. In liaison with the Environment Agency
L3	Take measures to prevent erosion of lakes sides.	No policy	■ Continue to take measures to stabilise banks prioritising areas where damage to paths could restrict visitor access. Undertake restoration works on the banks to reduce risk of undercutting paths. Replant edges and margins of the lakes as part of phased works. – Using hazel faggots and coir roles to secure the boundary. The coir rolls can be pre-planted with marginals. This is the preferred option for areas where the lake edge is visible and where there the existing planting can be improved. – Using a prefabricated material called Nicospan (https://nicospan.co.uk/) which allows some of the dredged silt as backfill. This is the preferred option for areas where the lake edge is hedged and therefore less visible.	Short term priority-ongoing	Head Gardener
Paths					
P1	Ensure paths are maintained in good condition to encourage access throughout the Gardens and Park. Plan for increased frequency and intensity of heavy	MP2 and SED1	■ Consider alternative surface material (in keeping with historic fabric of the Garden) for path repair and upgrades and to improve accessibility.	Short term priority	Head Gardener; Estate Manager.
			■ Consider improvements to drainage within the Gardens in line with Hydrology Management Plan to understand and plan for current and future surface water flows.	Medium term	

Addendum Policy No.	Addendum Policy	GCMP Policy relates to	Action	Timeframe for actions (policy remains in place)	Responsibility
	rainfall events relating to erosion of paths.				
Invasive Species, Pests and Diseases					
IS1	Continue to manage, prevent spread of and eradicate invasive species.	CMR9	■ Continue to manage invasive Rhododendron species to prevent the spread and achieve eradication of *Rhododendron ponticum* (burning stumps and roots to stop regrowth) and keep *Rhododendron luteum* in check (pruning back very hard). ■ Apply for grant funding to aid mass removal and disposal of *Rhododendron ponticum.* ■ Follow up initial quotes from specialist management contractors to prevent spread of and properly dispose of Japanese knotweed. Carry out alongside in-house work once stem injection training has been completed. Follow best practice guidance provided by the Environment Agency and DEFRA.[26]	Short term priority - ongoing	Head Gardener
IS2	Train staff and keep up to date on guidance and practices for monitoring for, and controlling and managing pests and disease outbreaks.	No policy	■ Ensure all Garden staff are familiar with *Phytophthora* spp. host range and are able to recognise symptoms. ■ Improving soil drainage can greatly reduce the risk of plants succumbing to *Phytophthora* spp. ■ Where *Phytophthora* spp. is localised in the Garden, affected plants should be destroyed and the soil from the root-run replaced with fresh topsoil. Replanting should be done with less susceptible species to prevent recurrence.	Short term - ongoing	Head Gardener
IS3	Prepare a Biosecurity Policy for the Park and Gardens.	No policy	■ Policy to include:	Short term	Head Gardener

[26] https://www.gov.uk/guidance/prevent-japanese-knotweed-from-spreading

Addendum Policy No.	Addendum Policy	GCMP Policy relates to	Action	Timeframe for actions (policy remains in place)	Responsibility
			– Responsible sourcing of new plant material (i.e. must have phytosanitary documentation/plant passport, must be grown on UK nursery for at least one year, plant health check and quarantine in suitable location upon arrival at the Garden) – Monitoring methods, measures, and targets – Action plan for biosecurity issues already identified within the garden – Communication with other High Weald Gardens to enable sharing of knowledge and best-practice		
External Lighting					
LI1	Take measures to ensure lighting does not adversely impact on wildlife and dark skies of the High Weald.	SEL1, SEL, SEL3	■ Refer to guidance provided by the High Weald National Landscape in relation to dark skies[27]	Short term	Estate Manager
Habitat Management and Biodiversity					
BI1	**General:** Existing wildlife habitats will be maintained, conserved, enhanced and expanded where possible, including measures to protect rare, scarce, or notable species.	UGC8	■ Appoint an Ecologist to Produce an updated Phase 1 Habitat Survey with detailed mapping, description of habitats and target notes as a general overview of the nature conservation value of the Park and Garden. Use Phase 1 Habitat Survey to further understand nature conservation value of the Gardens and to understand the works required to conserve features of nature conservation importance. Use information to further inform the statement of significance and actions to manage the ecological resource.	Short term	Head Gardener, Estate Manager Natural England

[27] highweald.org/document-library/legislation-and-planning/high-weald-national-landscape-dark-skies-planning-advice-note/?layout=default

Addendum Policy No.	Addendum Policy	GCMP Policy relates to	Action	Timeframe for actions (policy remains in place)	Responsibility
			■ Appoint an ecologist to provide more specific habitat management plans to inform appropriate management for conservation and where necessary, enhancement, expansion and connection of habitats (including detail in Policies BI2-4 below). ■ Consider wider context of habitats beyond estate boundaries in relation to habitat connectivity. ■ Maintain up to date database of species present including protected and priority species. Understand and provide required conditions to ensure they thrive. ■ Develop an Ecological Monitoring Strategy (in consultation with local specialists and interest groups) to provide a baseline against which change can be monitored. ■ Refer to land management guidance provided by the High Weald National Landscape at: https://highweald.org/guidance/land-management/. ■ Provide appropriate interpretation for visitors to understand about the different habitats and species within the Park and Gardens and help protect them. ■ Understand requirements for notification of SSSI (based on qualifying list of fungi associated with deadwood on veteran or ancient oaks). Natural England is responsible for identify and notifying as area as SSSI.		
BI2	Protect the **Wood Pasture and Parkland** habitat by assessing its condition and identifying opportunities for conserving and enhancing this Priority Habitat.	UGC8	■ Appoint an ecologist to: – Conduct a survey of the Wood Pasture and Parkland habitat to understand its condition – Prepare a Wood Pasture and Parkland Management Plan to protect and enhance its condition with consideration of opportunities for management	Short term	Estate Manager

Addendum Policy No.	Addendum Policy	GCMP Policy relates to	Action	Timeframe for actions (policy remains in place)	Responsibility
			and protection of key ecological features which this type of habitat supports including saproxylic species, rare fungus and lichens – Include recommendations on management to ensure resilience to threats posed by climate change (including pests and diseases) – Note cross over with policies on veteran trees (Policy T2), dead wood (Policy T3) and historic landscape (Policy H3)		
BI3	Protect the **lowland heath** habitat by assessing its condition and identifying opportunities for conserving and enhancing this Priority Habitat.	UGC8	■ Appoint an ecologist to: – Conduct a survey of the lowland heath habitat to understand its condition. – Prepare a Lowland Heath Habitat Management Plan to protect, restore and enhance the condition of lowland heath habitat and the species it supports. Including appropriate management and deterring invasive species. – Include recommendations on management to ensure resilience to threats posed by climate change (including pests and diseases)	Short term	Estate Manager
BI4	Protect the grassland habitats found within the Garden and the wider estate.	UGC8	■ Understand current management regimes that are beneficial to the Waxcap population within grassland. ■ Identify additional management practices that will conserve and enhance the Waxcap populations.	Short term	Head Gardener, Estate Manager (input required from ecologist)
BI5	Pursue funding opportunities available through grants and schemes to support habitat management.	UGC8	■ Contact the High Wead National Landscape Team and Natural England for advice in the first instance. ■ Depending on opportunities available apply for funding to support habitat management.	Short term	Head Gardener, Estate Manager

Addendum Policy No.	Addendum Policy	GCMP Policy relates to	Action	Timeframe for actions (policy remains in place)	Responsibility
BI6	Maintain an up to date digital record of fungi found within the Estate.	No policy	■ Continue to survey, identify and maintain a database of fungi within the Estate. Including identifying the conditions necessary for perpetuation. ■ Where possible involve volunteers and local interest groups. ■ Undertaking cyclical monitoring to ensure data base is kept up to date.	Ongoing	Head Gardener, Volunteers, Local Interest Groups

Chapter 6
Bibliography

This bibliography provides sources of information supplementary to the GCMP

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[28] Available at https://historicengland.org.uk/listing/the-list/list-entry/1000159?section=official-list-entry

Appendix A

Timeline

Leonardslee Timeline

Medieval & Tudor periods	- St Leonard's Forest, mainly used for timber, pannage and warrens. Later, iron works were founded and charcoal burning started.
1560's	- Gosden furnace built
1562	- Queen Elizabeth I purchased St Leonards Forest for its desirable timber.
1602	- The Crown had the timber rights and used for shipbuilding,
1650	- Iron works destroyed on Cromwell's order.
1660's	- Charles II grants the Forest to his physician, **Sir Edward Greaves**. (1608-1680)
1681	- **Mary Calfe** inherits the estate (Sir Edward Greaves's daughter)
1690's	- **Capt. William Powlett** inherits the estate (Mary Calfe's nephew)
1746	- **John Aldridge** acquired the estate. (Capt. Powlett's cousin)
1760	- **Abel Aldridge** acquired the estate (John's brother)
1782	- **John Clater Aldridge** acquired the estate (Abel's son)
1795	- **John Aldridge** acquired the estate (JC Aldridge's son)
1803	-1,000 acres sold to **Charles Beauclerk** who built **St Leonard's Lodge**, this was according to a design by the British architect, John Johnson. (1732-1814) He started to develop the ornamental Gardens and walled kitchen garden.
1852	- Estate sold to **William Hubbard**.(wealthy trader) purchased for 42K
1855	- Italianate mansion built and renamed Leonardslee**.**
1876	- Sir Edmund Loder marries Marion Hubbard
1883	- William Egerton Hubbard Snr dies, his son of the same name takes up residence.
1889	- **Sir Edmund Loder** bought the estate from his In-laws. He further expanded the gardens & wallabies first arrived. Purchased for £105K.
1890	- Rock Garden built by James Pulham & Son for Sir Edmund's alpine collection
1907	- Gardens open to the public.
1920	**- Sir Giles Loder** (Sir Edmund's grandson) inherits at the age of 6.
1920-1945	- **The Dowager Lady Loder** looks after the running of the gardens.

1945	**- Sir Giles** takes over the running of the estate and continues planting the gardens.
1945-50's	- The market garden produced fruit and vegetables which were sent to Covent Garden, London and local greengrocer, Carters in the Carfax.
1947	- Black Narcissus filmed here.
1952	- Coronation Garden planted.
1957	- Camellia grove planted by Sir Giles.
1971	- Leonardslee House reduced in size.
1973	- Leonardslee House granted Grade 2 listed status.
1981	- Sir Giles retires, his son, **Robin Loder** takes over.
1984	- Eurotherm Intl. purchases the mansion for commercial/business use.
1984	- Gardens granted Grade 1 listed status.
1986	- Red House built.
1987	- Hurricane caused significant damage including the loss of thousands of trees, and a unique 1902 pinetum. Robin Loder took advantage of the opportunity to redesign parts of the estate and introduce new planting, glades and vistas.
2000	- Robin plants Maple and Oak Tree walks to celebrate the Millennium.
2005	- Robin Loder retires, twin children Peter and Mary continue until 2008 when the estate was put up for sale.
2010 – 2017	- Estate sold and closed
2017	- **Penny Streeter,** OBE purchases Leonardslee.
2018	- Pinotage vineyard planted.
2019	- Gardens re-open.

Appendix B

Ecology Surveys

Deer Park Botanical Survey

BRC no.	Species	Confidenti	Location	Grid Ref	Tetrad	10km	Status	Comments	Rec.	Det.	Herb.	Date	Year	VC
100	Anagallis tenella		Leonardslee	TQ22472568			N	frequent along dith by track	Sussex Botanical Recording Society			26-07-2023	2023	13
399	Carex pallescens		Leonardslee	TQ22622563			N	one clump with Carex laevigata in a flush	Sussex Botanical Recording Society			26-07-2023	2023	13
408	Carex pulicaris		Leonardslee	TQ22622565			N	in flushes	Sussex Botanical Recording Society			26-07-2023	2023	13
783	Euphrasia officinalis subsp. anglica		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
822.2	Festuca filiformis		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
887	Galium uliginosum		Leonardslee	TQ22562566			N	in flushes	Sussex Botanical Recording Society			26-07-2023	2023	13
891	Genista anglica		Leonardslee	TQ22552566			N	c.6 plants here and one or two others nearby	Sussex Botanical Recording Society			26-07-2023	2023	13
1047	Isolepis setacea		Leonardslee	TQ22142606			N	one plant in boggy flush	Sussex Botanical Recording Society			26-07-2023	2023	13
1344	Nardus stricta		Leonardslee	TQ2225			N	frequent	Sussex Botanical Recording Society			26-07-2023	2023	13
1654	Ranunculus omiophyllus		Leonardslee	TQ22142606			N	boggy flush	Sussex Botanical Recording Society			26-07-2023	2023	13
1874	Scutellaria minor		Leonardslee	TQ22472568			N	frequent, especially along ditch by track	Sussex Botanical Recording Society			26-07-2023	2023	13
2061	Thymus pulegioides		Leonardslee	TQ22472569			N		Sussex Botanical Recording Society			26-07-2023	2023	13
2114	Ulex minor		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
2215	Viola palustris		Leonardslee	TQ22142606			N	boggy flush	Sussex Botanical Recording Society			26-07-2023	2023	13
2230	Wahlenbergia hederacea		Leonardslee	TQ22472568			N	scattered along ditch by track and also in bog TQ22142606	Sussex Botanical Recording Society			26-07-2023	2023	13
7	Achillea millefolium		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
35.2	Agrostis canina		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
40	Agrostis capillaris		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
39	Agrostis stolonifera		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
42	Aira praecox		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
121	Anthoxanthum odoratum		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
237	Betonica officinalis		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
307.2	Callitriche stagnalis		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
309	Calluna vulgaris		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
361	Carex demissa		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
370	Carex echinata		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
385	Carex laevigata		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
397	Carex leporina		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
400	Carex panicea		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
404	Carex pendula		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
405	Carex pilulifera		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
421	Carex sylvatica		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
451	Centaurium erythraea var. erythraea		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
467	Cerastium fontanum		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
513	Circaea lutetiana		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
520	Cirsium palustre		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
569	Crataegus monogyna		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
1822	Cytisus scoparius		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
1915	Danthonia decumbens		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
675	Eleocharis palustris		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
726	Erica cinerea		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
731	Erica tetralix		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
824	Festuca rubra agg.		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
833	Filipendula ulmaria		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
882	Galium palustre		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
878	Galium saxatile		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
941	Gnaphalium uliginosum		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
999	Hydrocotyle vulgaris		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
1011	Hypericum humifusum		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
1050	Juncus acutiflorus		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
1054	Juncus articulatus		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
1058	Juncus bulbosus		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
1063	Juncus conglomeratus		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
1131	Leontodon saxatilis		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
1191	Lotus corniculatus		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13
1194	Lotus pedunculatus		Leonardslee	TQ2225			N		Sussex Botanical Recording Society			26-07-2023	2023	13

1201	Luzula campestris	Leonardslee	TQ2225	N		Sussex Botanical Recording Society	26-07-2023	2023	13
1204	Luzula multiflora	Leonardslee	TQ2225	N		Sussex Botanical Recording Society	26-07-2023	2023	13
1219	Lycopus europaeus	Leonardslee	TQ2225	N		Sussex Botanical Recording Society	26-07-2023	2023	13
1250	Medicago lupulina	Leonardslee	TQ2225	N		Sussex Botanical Recording Society	26-07-2023	2023	13
1307	Molinia caerulea	Leonardslee	TQ2225	N		Sussex Botanical Recording Society	26-07-2023	2023	13
1323	Myosotis secunda	Leonardslee	TQ2225	N		Sussex Botanical Recording Society	26-07-2023	2023	13
1488	Plantago major	Leonardslee	TQ2225	N		Sussex Botanical Recording Society	26-07-2023	2023	13
1514	Polygala serpyllifolia	Leonardslee	TQ2225	N		Sussex Botanical Recording Society	26-07-2023	2023	13
1588	Potentilla erecta	Leonardslee	TQ2225	N		Sussex Botanical Recording Society	26-07-2023	2023	13
1610	Prunella vulgaris	Leonardslee	TQ2225	N		Sussex Botanical Recording Society	26-07-2023	2023	13
1619	Pteridium aquilinum	Leonardslee	TQ2225	N		Sussex Botanical Recording Society	26-07-2023	2023	13
1625	Pulicaria dysenterica	Leonardslee	TQ2225	N		Sussex Botanical Recording Society	26-07-2023	2023	13
1640	Quercus robur	Leonardslee	TQ2225	N		Sussex Botanical Recording Society	26-07-2023	2023	13
1651	Ranunculus flammula	Leonardslee	TQ2225	N		Sussex Botanical Recording Society	26-07-2023	2023	13
1728	Rubus fruticosus agg.	Leonardslee	TQ2225	N		Sussex Botanical Recording Society	26-07-2023	2023	13
1735	Rumex acetosella	Leonardslee	TQ2225	N		Sussex Botanical Recording Society	26-07-2023	2023	13
1872	Scutellaria galericulata	Leonardslee	TQ2225	N		Sussex Botanical Recording Society	26-07-2023	2023	13
1899	Senecio jacobaea	Leonardslee	TQ2225	N		Sussex Botanical Recording Society	26-07-2023	2023	13
1947	Solanum dulcamara	Leonardslee	TQ2225	N		Sussex Botanical Recording Society	26-07-2023	2023	13
1954	Sonchus oleraceus	Leonardslee	TQ2225	N		Sussex Botanical Recording Society	26-07-2023	2023	13
1127	Spirodela polyrhiza	Leonardslee	TQ2225	N		Sussex Botanical Recording Society	26-07-2023	2023	13
2009	Stellaria graminea	Leonardslee	TQ2225	N		Sussex Botanical Recording Society	26-07-2023	2023	13
2046	Teucrium scorodonia	Leonardslee	TQ2225	N		Sussex Botanical Recording Society	26-07-2023	2023	13
2081	Trifolium dubium	Leonardslee	TQ2225	N		Sussex Botanical Recording Society	26-07-2023	2023	13
2092	Trifolium repens	Leonardslee	TQ2225	N		Sussex Botanical Recording Society	26-07-2023	2023	13
2112	Ulex europaeus	Leonardslee	TQ2225	N		Sussex Botanical Recording Society	26-07-2023	2023	13
2180	Veronica serpyllifolia	Leonardslee	TQ2225	N		Sussex Botanical Recording Society	26-07-2023	2023	13
697	Epilobium palustre	Leonardslee	TQ22142606	N	bog between track and lake	Sussex Botanical Recording Society	26-07-2023	2023	13
1008	Hypericum elodes	Leonardslee	TQ22592564	N	above ditch also at TQ22512563	Sussex Botanical Recording Society	26-07-2023	2023	13
1328	Myrica gale	Leonardslee	TQ22592564	N	flush above ditch by track	Sussex Botanical Recording Society	26-07-2023	2023	13

Gardens Botanical Survey

BRC no.	Species	Confidenti	Location	Grid Ref	Tetrad	10km	Status	Comments	Rec.	Det.	Herb.	Date	Year	VC
551	Lepidium didymum		Leonardslee	TQ2226			C		Sussex Botanical Recording Society			26-07-2023	2023	13
23	Agrimonia procera		Leonardslee	TQ22352652			N		Sussex Botanical Recording Society			26-07-2023	2023	13
393	Carex nigra		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
710	Epipactis purpurata		Leonardslee	TQ22095258 41			N	under shrubs	Sussex Botanical Recording Society			26-07-2023	2023	13
783	Euphrasia officinalis subsp. anglica		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
1583	Potentilla anglica		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
7	Achillea millefolium		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
40	Agrostis capillaris		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
35.1	Agrostis vinealis		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
46	Ajuga reptans		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
77	Alnus glutinosa		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
99	Anagallis arvensis		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
105	Anemone nemorosa		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
109	Angelica sylvestris		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
121	Anthoxanthum odoratum		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
211	Athyrium filix-femina		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
231	Bellis perennis		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
237	Betonica officinalis		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
244	Blechnum spicant		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
270	Bromus hordeaceus subsp. hordeaceus		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
309	Calluna vulgaris		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
311	Calystegia sepium		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
385	Carex laevigata		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
401	Carex paniculata		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
404	Carex pendula		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
405	Carex pilulifera		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
412	Carex remota		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
421	Carex sylvatica		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
444	Centaurea nigra		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
451	Centaurium erythraea var. erythraea		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
467	Cerastium fontanum		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
513	Circaea lutetiana		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
515	Cirsium arvense		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
520	Cirsium palustre		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
522	Cirsium vulgare		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
541	Conopodium majus		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
572	Crepis capillaris		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
592	Cymbalaria muralis		Leonardslee	TQ2226			E		Sussex Botanical Recording Society			26-07-2023	2023	13
1915	Danthonia decumbens		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
628	Deschampsia flexuosa		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
640	Digitalis purpurea		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
662	Dryopteris affinis agg.		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
661	Dryopteris dilatata		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
665	Dryopteris filix-mas		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
692	Epilobium hirsutum		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
696	Epilobium obscurum		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
698	Epilobium parviflorum		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
726	Erica cinerea		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
731	Erica tetralix		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
763	Eupatorium cannabinum		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13
777	Euphorbia peplus		Leonardslee	TQ2226			A		Sussex Botanical Recording Society			26-07-2023	2023	13
833	Filipendula ulmaria		Leonardslee	TQ2226			N		Sussex Botanical Recording Society			26-07-2023	2023	13

882	Galium palustre	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
918	Geranium robertianum	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
934	Glyceria maxima	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
941	Gnaphalium uliginosum	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
983	Holcus lanatus	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
984	Holcus mollis	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
687	Hyacinthoides non-scripta	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1003	Hypericum androsaemum	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1015	Hypericum pulchrum	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1016	Hypericum tetrapterum	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1020	Hypochaeris radicata	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1050	Juncus acutiflorus	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1063	Juncus conglomeratus	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1067	Juncus effusus	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1077	Juncus tenuis	Leonardslee	TQ2226	E	Sussex Botanical Recording Society	26-07-2023	2023	13
1104	Lapsana communis	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1112	Lathyrus linifolius	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1131	Leontodon saxatilis	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1183	Lolium perenne	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1188	Lonicera periclymenum	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1191	Lotus corniculatus	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1194	Lotus pedunculatus	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1204	Luzula multiflora	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1207	Luzula pilosa	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1219	Lycopus europaeus	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1221	Lysimachia nemorum	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1225	Lysimachia vulgaris	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1250	Medicago lupulina	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1256	Melampyrum pratense	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1263	Melica uniflora	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1272	Mentha aquatica	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1307	Molinia caerulea	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1413	Oxalis acetosella	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1442.2	Pedicularis sylvatica subsp. sylvatica	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1530	Persicaria hydropiper	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1537	Persicaria maculosa	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1454	Phalaris arundinacea	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1488	Plantago major	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1514	Polygala serpyllifolia	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1584	Potentilla anserina	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1588	Potentilla erecta	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1596	Potentilla sterilis	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1607	Primula vulgaris	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1610	Prunella vulgaris	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1619	Pteridium aquilinum	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1625	Pulicaria dysenterica	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1640	Quercus robur	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1734.1	Rumex acetosa subsp. acetosa	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1742	Rumex crispus	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1753	Rumex sanguineus	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1865	Scrophularia auriculata	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1867	Scrophularia nodosa	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13
1872	Scutellaria galericulata	Leonardslee	TQ2226	N	Sussex Botanical Recording Society	26-07-2023	2023	13

1899	Senecio jacobaea	Leonardslee	TQ2226	N		Sussex Botanical Recording Society	26-07-2023	2023	13
1951	Solidago virgaurea	Leonardslee	TQ2226	N		Sussex Botanical Recording Society	26-07-2023	2023	13
1953	Sonchus asper	Leonardslee	TQ2226	N		Sussex Botanical Recording Society	26-07-2023	2023	13
1981	Sparganium erectum	Leonardslee	TQ2226	N		Sussex Botanical Recording Society	26-07-2023	2023	13
2003	Stachys palustris	Leonardslee	TQ2226	N		Sussex Botanical Recording Society	26-07-2023	2023	13
2005	Stachys sylvatica	Leonardslee	TQ2226	N		Sussex Botanical Recording Society	26-07-2023	2023	13
2021	Succisa pratensis	Leonardslee	TQ2226	N		Sussex Botanical Recording Society	26-07-2023	2023	13
2032	Tamus communis	Leonardslee	TQ2226	N		Sussex Botanical Recording Society	26-07-2023	2023	13
2034	Taraxacum agg.	Leonardslee	TQ2226	N		Sussex Botanical Recording Society	26-07-2023	2023	13
2046	Teucrium scorodonia	Leonardslee	TQ2226	N		Sussex Botanical Recording Society	26-07-2023	2023	13
2070	Torilis nodosa	Leonardslee	TQ2226	N		Sussex Botanical Recording Society	26-07-2023	2023	13
2081	Trifolium dubium	Leonardslee	TQ2226	N		Sussex Botanical Recording Society	26-07-2023	2023	13
2092	Trifolium repens	Leonardslee	TQ2226	N		Sussex Botanical Recording Society	26-07-2023	2023	13
2126	Urtica dioica	Leonardslee	TQ2226	N		Sussex Botanical Recording Society	26-07-2023	2023	13
2168	Veronica chamaedrys	Leonardslee	TQ2226	N		Sussex Botanical Recording Society	26-07-2023	2023	13
2173	Veronica officinalis	Leonardslee	TQ2226	N		Sussex Botanical Recording Society	26-07-2023	2023	13
2180	Veronica serpyllifolia	Leonardslee	TQ2226	N		Sussex Botanical Recording Society	26-07-2023	2023	13
720	Equisetum sylvaticum	Leonardslee	TQ22172641	N		Sussex Botanical Recording Society	26-07-2023	2023	13
2560	Hieracium agg.	Leonardslee	TQ22282635	N	beside lake, resembling umbellatum to a degree	Sussex Botanical Recording Society	26-07-2023	2023	13
1411	Osmunda regalis	Leonardslee	TQ2226	E	presumably originally planted	Sussex Botanical Recording Society	26-07-2023	2023	13
2230	Wahlenbergia hederacea	Leonardslee	TQ2226	N	in damp grass near lake	Sussex Botanical Recording Society	26-07-2023	2023	13

Leonardslee Estate Butterfly List

1. Gatekeeper
2. Meadow Brown
3. Small Heath
4. Ringlet
5. Marbled White
6. Speckled Wood
7. White Admiral
8. Red Admiral
9. Peacock
10. Comma
11. Painted Lady
12. Large White
13. Small White
14. Green-veined White
15. Purple Hairstreak
16. Large Skipper
17. Small/Essex Skipper
18. Silver-washed Fritillary
19. Brimstone
20. Holly Blue
21. Common Blue
22. Orange-tip
23. Small Tortoiseshell

Leonardslee Estate Odonata List

1. Banded Demoiselle
2. Beautiful Demoiselle
3. Azure Damselfly
4. Common Blue Damselfly
5. White-legged Damselfly
6. Red-eyed Damselfly
7. Small Red-eyed Damselfly
8. Large Red Damselfly
9. Blue-tailed Damselfly
10. Willow Emerald Damselfly
11. Hairy Dragonfly
12. Emperor
13. Southern Hawker
14. Migrant Hawker
15. Brown Hawker
16. Golden-ringed Dragonfly
17. Downy Emerald
18. Brilliant Emerald
19. Common Darter
20. Ruddy Darter
21. Broad-bodied Chaser
22. Four-spotted Chaser
23. Scarce Chaser
24. Black-tailed Skimmer

B = breeding on estate

V = visitor to estate

Red highlighted is of conservation importance

Leonardslee Estate Wild Bird List

1. Wren (B)
2. Robin (B)
3. Blue Tit (B)
4. Great Tit (B)
5. Coal Tit (B)
6. Marsh Tit (B)
7. Long-tailed Tit (B)
8. Goldcrest (B)
9. Firecrest (B)
10. Dunnock (B)
11. Treecreeper (B)
12. Nuthatch (B)
13. Great Spotted Woodpecker (B)
14. Green Woodpecker (B)
15. Siskin (B? V)
16. Lesser Redpoll (V)
17. Common Crossbill (V)
18. Chaffinch (B)
19. Bullfinch (B)
20. Greenfinch (B)
21. Goldfinch (B)
22. Woodpigeon (B)
23. Stock Dove (B)
24. Collared Dove (V)
25. Feral Pigeon (V)
26. Carrion Crow (B)
27. Rook (B)
28. Jackdaw (B)
29. Jay (B)
30. Magpie (B)
31. Raven (B?)
32. Buzzard (B)
33. Kestrel (B)
34. Hobby (B)
35. Peregrine Falcon (V)
36. Red Kite (V)
37. Tawny Owl (B)
38. Sparrowhawk (B?)
39. Goshawk (V)
40. Blackbird (B)
41. Song Thrush (B)
42. Mistle Thrush (B)
43. Fieldfare (V)
44. Redwing (V)
45. Chiffchaff (B)
46. Willow Warbler (B?)
47. Blackcap (B)
48. Spotted Flycatcher (B)
49. Swallow (V)
50. House Martin (V)
51. Swift (V)
52. Woodlark (B?)
53. Skylark (V)
54. Yellowhammer (B)
55. Meadow Pipit (V)
56. Woodcock (B? V)
57. Moorhen (B)
58. Coot (B)
59. Little Grebe (V)
60. Tufted Duck (V)
61. Mallard (B)
62. Mandarin (B)
63. Canada Goose (B)
64. Greylag (B)
65. Egyptian Goose (V)
66. Grey Heron (V)
67. Cormorant (V)
68. Teal (V)
69. Common Sandpiper (V)
70. Pheasant (B)
71. Red-legged Partridge (V)
72. Black-headed Gull (V)
73. Herring Gull (V)
74. Mediterranean Gull (V)
75. Wheatear (V)
76. Grey Wagtail (B)
77. Pied Wagtail (B)
78. Kingfisher (V)
79. Cuckoo (B?)
80. Little Egret (V)
81. Ring-necked Parakeet (V)
82. Starling (B? V)

83. Barn Owl (V)
84. Mute Swan (V)

Historical Lichen Records

VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Arthonia spadicea	Cort	CQ					Francis Rose	LC0003050000 8TJX	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Arthonia vinosa	Cort	CQ					Francis Rose	LC0003050000 8TJY	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Arthothelium ruanum	Cort	CCs					Francis Rose	LC0003050000 8TJZ	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Baeomyces rufus	Terr						Francis Rose	LC0003050000 8TK0	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Buellia griseovirens	Cort	CQ					Francis Rose	LC0003050000 8TK1	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Calicium abietinum	Cort	CQ					Francis Rose	LC0003050000 8TK2	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Calicium viride	Cort	CQ					Francis Rose	LC0003050000 8TK3	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Chrysothrix candelaris	Cort	CQ					Francis Rose	LC0003050000 8TK4	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Cladonia chlorophaea s. lat.	Cort	CFg; CQ					Francis Rose	LC0003050000 8TK5	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Cladonia ciliata var. tenuis	Terr						Francis Rose	LC0003050000 8TK6	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Cladonia coniocraea	Cort	CBt; CFg; CQ					Francis Rose	LC0003050000 8TK7	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Cladonia digitata	Cort	CQ					Francis Rose	LC0003050000 8TK8	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Cladonia fimbriata	Terr						Francis Rose	LC0003050000 8TK9	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Cladonia floerkeana	Terr						Francis Rose	LC0003050000 8TKA	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Cladonia furcata	Terr						Francis Rose	LC0003050000 8TKB	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Cladonia ochrochlora	Cort	CFg					Francis Rose	LC0003050000 8TKC	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Cladonia parasitica	Cort	CFg					Francis Rose	LC0003050000 8TKD	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Cladonia polydactyla var. polydactyla	Cort	CQ					Francis Rose	LC0003050000 8TKF	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Cladonia portentosa	Terr						Francis Rose	LC0003050000 8TKG	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Cladonia squamosa s. lat.	Cort	CQ					Francis Rose	LC0003050000 8TKH	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Cladonia uncialis subsp. biuncialis	Terr						Francis Rose	LC0003050000 8TKI	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Cliostomum griffithii	Cort	CFg; CQ					Francis Rose	LC0003050000 8TKJ	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Dendrographa decolorans	Cort	CQ					Francis Rose	LC0003050000 8TLU	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Dibaeis baeomyces	Terr						Francis Rose	LC0003050000 8TKK	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Enterographa crassa	Cort	CQ					Francis Rose	LC0003050000 8TKL	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Evernia prunastri	Cort	CQ					Francis Rose	LC0003050000 8TKM	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Felihaneropsis vezdae	Cort	CQ					Francis Rose	LC0003050000 8TKN	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Flavoparmelia caperata	Cort	CP; CQ					Francis Rose	LC0003050000 8TKO	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Graphis elegans	Cort	CFg					Francis Rose	LC0003050000 8TKP	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Graphis scripta	Cort	CFg					Francis Rose	LC0003050000 8TKQ	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Hypocenomyce scalaris	Cort	CFg					Francis Rose	LC0003050000 8TKR	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Hypogymnia physodes	Cort	CBt; CFx; CP; CQ		fertile			Francis Rose	LC0003050000 8TKS	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Hypotrachyna revoluta s. lat.	Cort	CFg					Francis Rose	LC0003050000 8TKT	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Lecanora chlarotera	Cort	CFg					Francis Rose	LC0003050000 8TKU	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Lecanora conizaeoides f. conizaeoides	Cort	CFg; CQ					Francis Rose	LC0003050000 8TKV	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Lecanora expallens	Cort	CQ					Francis Rose	LC0003050000 8TKW	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Lepraria incana s. lat.	Cort	CBt; CFg; CQ					Francis Rose	LC0003050000 8TKX	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Melanelixia glabratula	Cort	CQ					Francis Rose	LC0003050000 8TKY	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Melanelixia subaurifera	Cort	CQ					Francis Rose	LC0003050000 8TKZ	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Normandina pulchella	Cort	CFg					Francis Rose	LC0003050000 8TL0	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Ochrolechia androgyna	Cort	CBt; CFg					Francis Rose	LC0003050000 8TL1	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Ochrolechia turneri s. lat.	Cort	CQ					Francis Rose	LC0003050000 8TL2	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Opegrapha atra	Cort	CFg					Francis Rose	LC0003050000 8TL3	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Opegrapha sorediifera	Cort	CFg; CQ					Francis Rose	LC0003050000 8TL4	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Opegrapha vulgata	Cort						Francis Rose	LC0003050000 8TL5	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Pachyphiale carneola	Cort	CFg					Francis Rose	LC0003050000 8TL6	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Parmelia saxatilis s. lat.	Cort	CFg; CQ					Francis Rose	LC0003050000 8TL7	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Parmelia sulcata	Cort	CQ					Francis Rose	LC0003050000 8TL8	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Parmeliopsis ambigua	Cort	CFx					Francis Rose	LC0003050000 8TL9	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Parmotrema crinitum	Cort	CQ					Francis Rose	LC0003050000 8TLA	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Parmotrema perlatum	Cort	CQ					Francis Rose	LC0003050000 8TLB	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Parmotrema reticulatum	Cort	CQ					Francis Rose	LC0003050000 8TLC	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Peltigera hymenina	Terr						Francis Rose	LC0003050000 8TLD	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Pertusaria amara f. amara	Cort	CFg; CFx; CQ					Francis Rose	LC0003050000 8TLE	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Pertusaria coccodes	Cort	CQ					Francis Rose	LC0003050000 8TLF	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Pertusaria hymenea	Cort	CFg; CQ					Francis Rose	LC0003050000 8TLH	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Pertusaria multipuncta	Cort	CFg					Francis Rose	LC0003050000 8TLI	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Pertusaria pertusa	Cort	CFg; CQ					Francis Rose	LC0003050000 8TLJ	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Phaeographis dendritica	Cort	CFg					Francis Rose	LC0003050000 8TLK	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Phlyctis argena	Cort	CFg; CQ					Francis Rose	LC0003050000 8TLL	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Platismatia glauca	Cort	CQ					Francis Rose	LC0003050000 8TLM	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Porina leptalea	Cort	CFg					Francis Rose	LC0003050000 8TLN	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Punctelia reddenda	Cort	CFg					Francis Rose	LC0003050000 8TLO	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Punctelia subrudecta s. lat.	Cort	CQ					Francis Rose	LC0003050000 8TLP	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Pyrenula chlorospila	Cort	CFg					Francis Rose	LC0003050000 8TLQ	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Pyrrhospora quernea	Cort	CFg; CQ					Francis Rose	LC0003050000 8TLR	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Ramalina farinacea	Cort	CQ					Francis Rose	LC0003050000 8TLS	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Rinodina roboris var. roboris	Cort	CQ					Francis Rose	LC0003050000 8TLT	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Schizotrema quercicola	Cort	CQ					Francis Rose	LC0003050000 8TLV	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Scoliciosporum pruinosum	Cort	CQ					Francis Rose	LC0003050000 8TLW	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Stenocybe septata	Cort	Clx					Francis Rose	LC0003050000 8TLX	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Thelotrema lepadinum	Cort	CQ					Francis Rose	LC0003050000 8TLY	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Trapeliopsis granulosa	Lig			Senso latu			Francis Rose	LC0003050000 8TLZ	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Usnea cornuta	Cort	CQ					Francis Rose	LC0003050000 8TM0	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Usnea rubicunda	Cort	CQ					Francis Rose	LC0003050000 8TM1	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Usnea subfloridana	Cort	CQ					Francis Rose	LC0003050000 8TM2	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose		Varicellaria hemisphaerica	Cort	CQ					Francis Rose	LC0003050000 8TLG	125000	522000
VC 13 West Sussex	Leonardslee	TQ22		TQ22	15/10/1968	1968	Francis Rose	BM Det Book 2	Arthonia spadicea				BM Det Book 2: 164			Peter James	LC0003050018NRX	120000	520000
VC 13 West Sussex	Leonardslee	TQ22		TQ22	15/10/1968	1968	Francis Rose	BM Det Book 2	Arthonia vinosa				BM Det Book 2: 166, as A. didyma			Peter James	LC0003050018NRY	120000	520000
VC 13 West Sussex	Leonardslee	TQ22		TQ22	15/10/1968	1968	Francis Rose	BM Det Book 2	Calicium glaucellum				BM Det Book 2: 168, as C. abietinum			Peter James	LC0003050018NRZ	120000	520000
VC 13 West Sussex	Leonardslee	TQ22		TQ22	15/10/1968	1968	Francis Rose	BM Det Book 2	Cladonia coniocraea				BM Det Book 2: 168			Peter James	LC0003050018NS0	120000	520000
VC 13 West Sussex	Leonardslee	TQ22		TQ22	15/10/1968	1968	Francis Rose	BM Det Book 2	Cladonia digitata				BM Det Book 2: 166			Peter James	LC0003050018NS1	120000	520000
VC 13 West Sussex	Leonardslee	TQ22		TQ22	15/10/1968	1968	Francis Rose	BM Det Book 2	Cladonia fimbriata				BM Det Book 2: 166			Peter James	LC0003050018NS2	120000	520000
VC 13 West Sussex	Leonardslee	TQ22		TQ22	15/10/1968	1968	Francis Rose	BM Det Book 2	Cladonia furcata subsp. furcata				BM Det Book 2: 168			Peter James	LC0003050018NS3	120000	520000
VC 13 West Sussex	Leonardslee	TQ22		TQ22	15/10/1968	1968	Francis Rose	BM Det Book 2	Cladonia ochrochlora				BM Det Book 2: 168			Peter James	LC0003050018NS4	120000	520000
VC 13 West Sussex	Leonardslee	TQ22		TQ22	15/10/1968	1968	Francis Rose	BM Det Book 2	Cladonia parasitica				BM Det Book 2: 168			Peter James	LC0003050018NS5	120000	520000
VC 13 West Sussex	Leonardslee	TQ22		TQ22	15/10/1968	1968	Francis Rose	BM Det Book 2	Cladonia peziziformis				BM Det Book 2: 168			Peter James	LC0003050018NS6	120000	520000
VC 13 West Sussex	Leonardslee	TQ22		TQ22	15/10/1968	1968	Francis Rose	BM Det Book 2	Opegrapha vulgata				BM Det Book 2: 168			Peter James	LC0003050018NS7	120000	520000
VC 13 West Sussex	Leonardslee	TQ22		TQ22	15/10/1968	1968	Francis Rose	BM Det Book 2	Pachyphiale carneola				BM Det Book 2: 168			Peter James	LC0003050018NS8	120000	520000
VC 13 West Sussex	Leonardslee	TQ22		TQ22	15/10/1968	1968	Francis Rose	BM Det Book 2	Parmotrema crinitum				BM Det Book 2: 166			Peter James	LC0003050018NS9	120000	520000
VC 13 West Sussex	Leonardslee	TQ22		TQ22	15/10/1968	1968	Francis Rose	BM Det Book 2	Peltigera hymenina				BM Det Book 2: 168			Peter James	LC0003050018NSA	120000	520000
VC 13 West Sussex	Leonardslee	TQ22		TQ22	15/10/1968	1968	Francis Rose	BM Det Book 2	Pertusaria multipuncta				BM Det Book 2: 168			Peter James	LC0003050018NSB	120000	520000
VC 13 West Sussex	Leonardslee	TQ22		TQ22	15/10/1968	1968	Francis Rose	BM Det Book 2	Punctelia reddenda				BM Det Book 2: 166			Peter James	LC0003050018NSC	120000	520000
VC 13 West Sussex	Leonardslee	TQ22		TQ22	15/10/1968	1968	Francis Rose	BM Det Book 2	Pyrenula chlorospila	Cort	CFg		prev. as Pyrenula nitida var. nitidella. BJC DB 4: 87	BM		Brian Coppins	LC0003050018NSD	120000	520000
VC 13 West Sussex	Leonardslee	TQ22		TQ22	15/10/1968	1968	Francis Rose	BM Det Book 2	Rinodina roboris var. roboris				BM Det Book 2: 168			Peter James	LC0003050018NSE	120000	520000
VC 13 West Sussex	Leonardslee	TQ22		TQ22	15/10/1968	1968	Francis Rose	BM Det Book 2	Usnea				BM Det Book 2: 168, as U. fragilescens			Peter James	LC0003050018NSF	120000	520000
VC 13 West Sussex	Leonardslee	TQ22		TQ22	15/10/1968	1968	Francis Rose	BM Det Book 2	Usnea ceratina				BM Det Book 2: 164			Peter James	LC0003050018NSG	120000	520000
VC 13 West Sussex	Leonardslee	TQ22		TQ22	15/10/1968	1968	Francis Rose	BM Det Book 2	Usnea rubicunda				BM Det Book 2: 166			Peter James	LC0003050018NSH	120000	520000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Anisomeridium biforme	Cort						Simon Davey	LC0003050008TM3	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Chaenotheca ferruginea	Cort						Simon Davey	LC0003050008TM4	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Chrysothrix candelaris	Cort						Simon Davey	LC0003050008TM5	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Chrysothrix flavovirens	Cort						Simon Davey	LC0003050008TM6	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Cladonia arbuscula subsp. squarrosa	Terr		A/R				Simon Davey	LC0003050008TM7	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey	BioBase. SR Davey	Cladonia arbuscula subsp. squarrosa	Terr		A/S	Queried by BE April 2007, ssp. arbuscula confined to NE Scotland.			Bryan Edwards	LC0003050005N72	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Cladonia ciliata var. tenuis	Terr						Simon Davey	LC0003050008TMB	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Cladonia coniocraea	Lig						Simon Davey	LC0003050008TM9	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Cladonia fimbriata	Terr						Simon Davey	LC0003050008TMA	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Cladonia floerkeana	Terr		A/R				Simon Davey	LC0003050008TMB	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Cladonia furcata	Terr						Simon Davey	LC0003050008TMC	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Cladonia polydactyla var. polydactyla	Lig						Simon Davey	LC0003050008TMD	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Cladonia portentosa	Terr						Simon Davey	LC0003050008TME	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Cladonia pyxidata	Terr		A/R				Simon Davey	LC0003050008TMF	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Cladonia ramulosa	Terr						Simon Davey	LC0003050008TMG	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Cladonia squamosa s. lat.	Terr						Simon Davey	LC0003050008TMH	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Dimerella pineti	Cort						Simon Davey	LC0003050008TMI	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Evernia prunastri	Cort						Simon Davey	LC0003050008TMJ	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Flavoparmelia caperata	Cort						Simon Davey	LC0003050008TMK	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Hypogymnia physodes	Cort						Simon Davey	LC0003050008TML	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Hypotrachyna revoluta s. lat.	Cort						Simon Davey	LC0003050008TMM	125000	522000

VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Lecanactis abietina	Cort						Simon Davey	LC0003050000 8TMN	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Lecanora conizaeoides f. conizaeoides	Lig						Simon Davey	LC0003050000 8TMO	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Lepraria incana s. str.	Cort						Simon Davey	LC0003050000 8TMP	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Melanelixia glabratula	Cort						Simon Davey	LC0003050000 8TMQ	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Parmelia sulcata	Cort						Simon Davey	LC0003050000 8TMR	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Pertusaria amara f. amara	Cort						Simon Davey	LC0003050000 8TMS	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Pertusaria hymenea	Cort						Simon Davey	LC0003050000 8TMU	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Phlyctis argena	Cort						Simon Davey	LC0003050000 8TMV	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Physcia tenella	Cort						Simon Davey	LC0003050000 8TMW	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Punctelia jeckeri	Cort						Simon Davey	LC0003050000 8TMX	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Pyrrhospora quernea	Cort			fertile			Simon Davey	LC0003050000 8TMY	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Trapeliopsis flexuosa	Lig						Simon Davey	LC0003050000 8TMZ	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Usnea cornuta	Cort						Simon Davey	LC0003050000 8TN0	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Varicellaria hemisphaerica	Cort						Simon Davey	LC0003050000 8TMT	125000	522000
VC 13 West Sussex	Leonardslee	TQ2225	TQ2225	TQ22	18/03/2003	2003	Simon Davey		Xanthoria parietina	Cort						Simon Davey	LC0003050000 8TN1	125000	522000
VC 13 West Sussex	Leonardslee - Deer Park	TQ2225	TQ2225	TQ22	13/10/1968	1968	Francis Rose	RDB. F Rose	Cladonia peziziformis	Terr			RDB L3601: Damp heathland in Deer Park (Wallaby Park). Not seen since 1 BM			Francis Rose	LC0003050000ZDQK	125000	522000
VC 13 West Sussex	Leonardslee - Deer Park	TQ22		TQ22	15/10/1968	1968	Francis Rose	BM Det Book 2	Cladonia peziziformis				BM Det Book 2: 164			Peter James	LC0003050001 8NSJ	120000	520000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Arthonia didyma	Cort	CCo		as A. aspersella			Brian Coppins	LC0003050001FY6A	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Arthonia radiata	Cort						Brian Coppins	LC0003050001FY6B	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Arthonia vinosa	Cort	CQ					Brian Coppins	LC0003050001FY6C	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Arthothelium ruanum	Cort	CCs					Brian Coppins	LC0003050001FY6D	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Bacidia	Cort						Brian Coppins	LC0003050001FY6E	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Cladonia coniocraea	Cort						Brian Coppins	LC0003050001FY6F	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Cliostomum griffithii	Cort						Brian Coppins	LC0003050001FY6G	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Cyrtidula quercus	Cort						Brian Coppins	LC0003050001FY6H	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Evernia prunastri	Cort						Brian Coppins	LC0003050001FY6I	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Fellhaneropsis vezdae	Cort	CAc; CCs; CFg; CQ		BJC notes			Brian Coppins	LC0003050001FY6J	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Flavoparmelia caperata	Cort						Brian Coppins	LC0003050001FY6K	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Graphis elegans	Cort						Brian Coppins	LC0003050001FY6L	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Graphis scripta	Cort	CCo					Brian Coppins	LC0003050001FY6M	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Hypogymnia physodes	Cort	CQ					Brian Coppins	LC0003050001FY6N	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Hypotrachyna revoluta s. lat.	Cort						Brian Coppins	LC0003050001FY6O	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Lecanora albella	Cort						Brian Coppins	LC0003050001FY6P	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Lecanora pulicaris	Cort	CQ					Brian Coppins	LC0003050001FY6Q	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Lepraria incana s. lat.	Cort						Brian Coppins	LC0003050001FY6R	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Melanelixia glabratula	Cort						Brian Coppins	LC0003050001FY6S	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Melanelixia glabratula	Cort						Brian Coppins	LC0003050001FY6T	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Micarea nitschkeana	Cort	CQ			E	*	Brian Coppins	LC0003050001FY6U	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12, F	Micarea nitschkeana	Cort	CQ; CTw					Brian Coppins	LC0003050001HQDA	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Ochrolechia androgyna	Cort						Brian Coppins	LC0003050001FY6V	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Opegrapha soredifera	Cort						Brian Coppins	LC0003050001FY6W	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Parmelia saxatilis s. lat.	Cort						Brian Coppins	LC0003050001FY6X	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Parmelia sulcata	Cort						Brian Coppins	LC0003050001FY6Y	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Pertusaria coccodes	Cort						Brian Coppins	LC0003050001FY6Z	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Pertusaria leioplaca	Cort						Brian Coppins	LC0003050001FY70	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Pertusaria multipuncta	Cort						Brian Coppins	LC0003050001FY71	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Pertusaria pertusa	Cort						Brian Coppins	LC0003050001FY72	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Porina aenea	Cort	CCo					Brian Coppins	LC0003050001FY73	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Porina leptalea	Cort	CFg					Brian Coppins	LC0003050001FY74	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Schizotrema quercicola	Cort	CQ					Brian Coppins	LC0003050001FY75	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Scoliciosporum pruinosum	Cort						Brian Coppins	LC0003050001FY76	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Thelotrema lepadinum	Cort	CCo; CQ					Brian Coppins	LC0003050001FY77	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Trapeliopsis flexuosa	Lig	LTs		as Lecidea granulosa			Brian Coppins	LC0003050001FY78	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Usnea cornuta	Cort						Brian Coppins	LC0003050001FY79	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Varicellaria hemisphaerica	Cort	CQ					Brian Coppins	LC0003050001FY7A	125000	523000
VC 13 West Sussex	Leonardslee - valley E of	TQ2325	TQ2325	TQ22	21/02/1973	1973	Brian Coppins;Fran	BJC Notebook 12 &	Violella fucata	Cort						Brian Coppins	LC0003050001FY7B	125000	523000
VC 13 West Sussex	Leonardslee - Wallaby Park	TQ2225	TQ2225	TQ22	02/11/1982	1982	Francis Rose		Baeomyces rufus	Terr						Francis Rose	LC0003050000 8TN3	125000	522000
VC 13 West Sussex	Leonardslee - Wallaby Park	TQ2225	TQ2225	TQ22	02/11/1982	1982	Francis Rose		Cladonia chlorophaea s. lat.	Terr						Francis Rose	LC0003050000 8TN4	125000	522000
VC 13 West Sussex	Leonardslee - Wallaby Park	TQ2225	TQ2225	TQ22	02/11/1982	1982	Francis Rose		Cladonia ciliata var. tenuis	Terr						Francis Rose	LC0003050000 8TN5	125000	522000
VC 13 West Sussex	Leonardslee - Wallaby Park	TQ2225	TQ2225	TQ22	02/11/1982	1982	Francis Rose		Cladonia coniocraea	Terr						Francis Rose	LC0003050000 8TN6	125000	522000
VC 13 West Sussex	Leonardslee - Wallaby Park	TQ2225	TQ2225	TQ22	02/11/1982	1982	Francis Rose		Cladonia floerkeana	Terr						Francis Rose	LC0003050000 8TN7	125000	522000
VC 13 West Sussex	Leonardslee - Wallaby Park	TQ2225	TQ2225	TQ22	02/11/1982	1982	Francis Rose		Cladonia macilenta	Terr						Francis Rose	LC0003050000 8TN8	125000	522000
VC 13 West Sussex	Leonardslee - Wallaby Park	TQ2225	TQ2225	TQ22	02/11/1982	1982	Francis Rose		Cladonia portentosa	Terr						Francis Rose	LC0003050000 8TN9	125000	522000
VC 13 West Sussex	Leonardslee - Wallaby Park	TQ2225	TQ2225	TQ22	02/11/1982	1982	Francis Rose		Cladonia squamosa s. lat.	Terr						Francis Rose	LC0003050000 8TNA	125000	522000
VC 13 West Sussex	Leonardslee - Wallaby Park	TQ2225	TQ2225	TQ22	02/11/1982	1982	Francis Rose		Cladonia subulata	Terr						Francis Rose	LC0003050000 8TNB	125000	522000
VC 13 West Sussex	Leonardslee - Wallaby Park	TQ2225	TQ2225	TQ22	02/11/1982	1982	Francis Rose		Cladonia uncialis subsp. biuncialis	Terr						Francis Rose	LC0003050000 8TNC	125000	522000
VC 13 West Sussex	Leonardslee - Wallaby Park	TQ2225	TQ2225	TQ22	02/11/1982	1982	Francis Rose		Hypogymnia physodes							Francis Rose	LC0003050000 8TND	125000	522000

Rare/scarce and important Fungi at Leonardslee

- Zoned Rosette *Podoscypha multizonata* – found growing at the base of oak and beech trees, currently four trees on the estate with this fungus, three oaks and a beech. Internationally rare and threatened, England holds a significant proportion of the global population. Needs veteran trees and ancient woodland. BAP priority species, part of oak deadwood assemblage.
- Cauliflower *Sparassis spathulata* – The rarer of the two cauliflower fungus found in Britain, grows on roots of broadleaved trees rather than conifers, more robust and leaf-like fronds. One was found top of the deer park seemingly associating with a beech tree.
- Jack o' Lantern *Omphalotus illudens* – Very rare in Britain, mostly in the south-east, saprobic on dead stumps or logs of broadleaf trees, a clump was found in 2023 emerging from the large dead stump of a Quercus petraea just behind the mansion.
- Waxcaps – Parrot, Slimy, Scarlet, Goblet, Butter, Golden, Snowy, Blackening, Honey, Spangle, Meadow, Crimson and Persistent Waxcaps have so far been found growing in grasslands on the estate (mostly daffodil lawn), along with associated grassland fungi such as spindles, clubs and pinkgills. These waxcaps indicate the grasslands are high-quality, species-rich, unimproved, undisturbed and very old, so therefore important and in need of conserving. Part of the Waxcap grassland assemblage.
- False Truffle *Elaphomyces granulatus* – Not necessarily uncommon, but rarely recorded due to the fruiting bodies being subterranean, a large number were found underground during bulb planting around the roots of a mature Douglas Fir near the Red House.
- Oak deadwood assemblage – a list of fungi strongly associated with deadwood on veteran or ancient oaks, if a site has eight species from this list it qualifies for notification as a SSSI. So far the following have been found on the estate; Oak Mazegill, Mycena inclinata, Beefsteak fungus, Oak bracket, Oak curtain crust, Zoned Rosette, Chicken-of-the-Woods, Hen-of-the-Woods, Spindleshank.

Appendix C

Tree Survey Information

At present, the establishment of Usage Zones is an informed judgement based on local knowledge, rather than precise measurement of visitor numbers or traffic levels, although where this information is already available, it should be taken into account. Area Managers and functional advisers can help to ensure a consistent approach among Property Managers to the designation of Usage Zones.

Table 1 – Usage Zones

Usage Zone	Level of use	Description
 1 Very high	Very high volume road or rail traffic Very high levels of visitor use High likelihood of staff/volunteers/visitors gathering or staying in the area	Areas close to motorways, busy trunk roads, busy road junctions Areas close to railway lines Areas used for large-scale events Areas used for car parks, visitor entrances, adventure playgrounds, cafes with outside seating, picnic areas Gardens with high visitor numbers Areas close to residential buildings, e.g. base camps, holiday cottages, caravan sites, tenant farms Areas close to high value buildings, structures and other property
 2 High	High volume road traffic High levels of visitor use Some likelihood of staff/volunteers/visitors gathering or staying in the area	Areas close to well-used roads and junctions Footpaths, bridleways, way-marked trails, avenues with high levels of visitor use Areas used for small-scale events where visitors are dispersed Gardens with moderate visitor numbers Routes with high visitor numbers in parks and woods Areas close to staff working areas, e.g. estate yards, workshops
 3 Medium	Moderate volume road traffic Moderate levels of visitor use Visitors tend to disperse rather than gather	Areas close to local roads with moderate traffic levels Footpaths, bridleways, way-marked trails, avenues with moderate levels of visitor use Gardens with low visitor numbers Main routes in parks and woods with moderate visitor numbers Areas close to farm buildings
 4 Low	Low volume road traffic Low levels of visitor use Visitors well dispersed	Areas close to minor roads with low traffic levels Footpaths, bridleways, way-marked trails, avenues with low levels of visitor use Parks and woods with low visitor numbers Areas restricted for public access, or impeded by natural or planted vegetation
5 Very low	Very low level of visitor use	Areas of woodland and forest in more remote areas Areas restricted for public access, or impeded by natural or planted vegetation

01 Estate Location Plan as Existing
EP 1001 Scale 1:2500@A2

Estate Boundary

0 25 100
Scale 1:2500 m

Notes
1. Any dwg format drawing is to be read in conjunction with and at the scale of the accompanying pdf.
2. Where colours other than black or grey are used, the drawing must be plotted in colour.
3. For status 'C' (Construction) drawings all dimensions are to be checked on site by the contractor, scaling is for Local Authority purposes only.
4. Unless otherwise indicated, all dimensions are in millimeters.
5. All information on this drawing is to be read in conjunction with the relevant Donald Insall Associates specification and trade contractors' drawings and information by specialists.
6. In the event of any discrepancy, please contact us immediately.
7. This drawing may contain survey information by others and is to be used solely for the purposes for which it was issued.
8. These are uncontrolled documents issued for information purposes only. If you have any queries regarding the drawings, please contact DIA immediately.
9. Please note DIA cannot be held responsible for any errors arising from changes made to an uncontrolled dwg file.

Drawing Status
F Feasibility
S Sketch Design
P Planning
B Building Control
D Developed Design
M Measurement
T Tender
C Construction
R Record

Rev	Date	Dwn	Auth	Revision
-	01.03.18	RXB	NML	Initial Issue

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Leonardslee, Lower Beeding, West Sussex

Estate Location Plan as Existing

Project	No
LLWS.02	EP 1001
Scale (A2)	Status / Revision
1:2500	P / -

National Trust

Tree Safety

Table 2 – Usage Zone and frequency of inspection.

Usage Zone	Frequency of inspection	VTA method
1 Very high	Normally annually and after severe weather events	Thorough inspection of every tree for defects – with binoculars, tapping mallet and probe required to be available for use.
2 High	Normally two years and after severe weather events	Thorough inspection of every tree for defects - binoculars, tapping mallet and probe required to be available for use
3 Medium	Normally every three years (with discretion up to 5 years) and after severe weather events	Walk by inspection of every tree looking for obvious defects
4 Low	During normal routine visits	No formal inspection - observation and awareness of the general condition of trees
5 Very low	No inspection required	No inspection required

Appendix D

Lake Data

Leonardslee lake data

- **Clapper Pond**
  312 ft x 46 ft = 0.33 acres
  Average depth = 2.5 ft
  Volume = 270,456 gallons

- **Leucothoe Pond**
  520 ft x 91 ft = 1.09 acres
  Average depth = 4.6 ft
  Volume = 1,632,514 gallons

- **Middle Pond**
  395 ft x 62 ft = 0.56 acres
  Average depth = 3.7 ft
  Volume = 674,512 gallons

- **Engine Pond**
  627 ft x 140 ft = 2.02 acres
  Average depth = 6.6 ft
  Volume = 4,345,594 gallons

- **Waterfall Pond**
  820 ft x 110 ft = 2.07 acres
  Average depth = 5.4 ft
  Volume = 3,643,014 gallons

- **Total acreage = 6.07 acres approx.**
  Total volume = 10,564,090 gallons approx.

Leonardslee Lakes Information

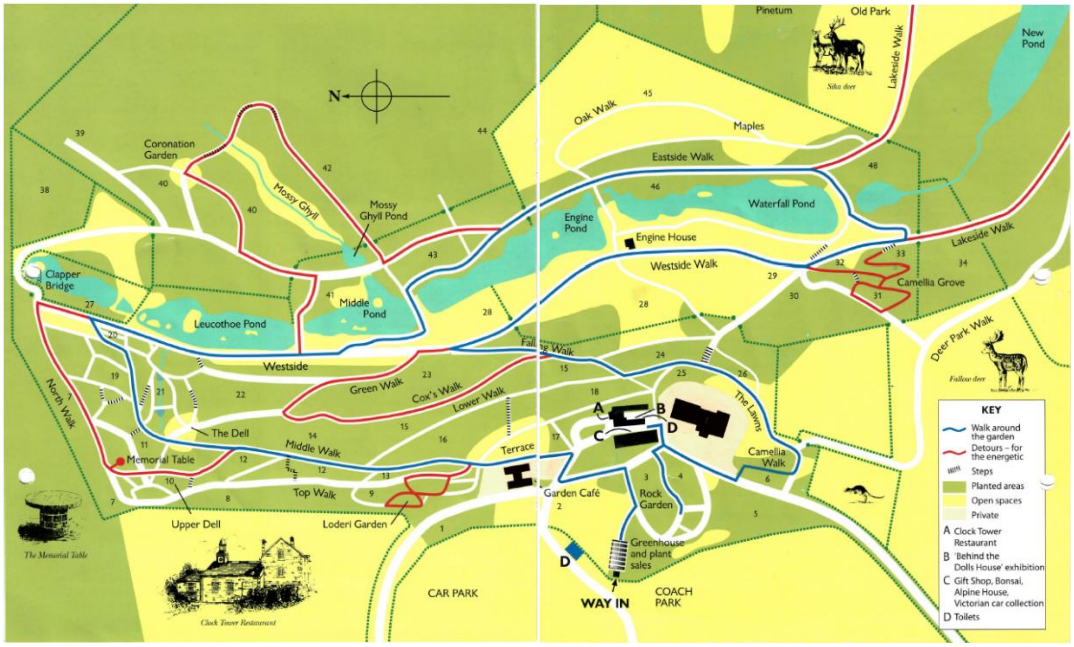

Fig 1: Property map showing lakes

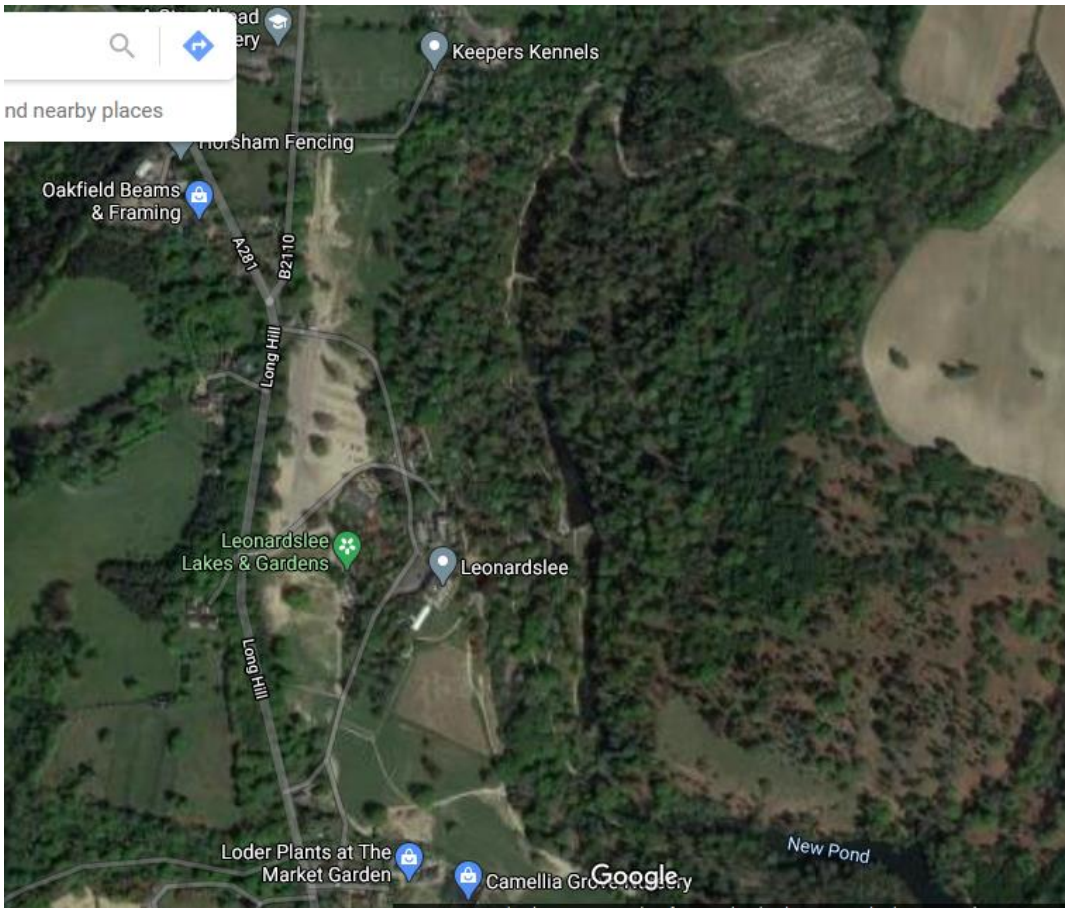

Fig 2: Google satellite image showing lakes

Stats and History

- Approximate acreage of lakes: 6 acres
- Five lakes called (N to S) Clapper Pond (0.3 acres), Leucothoe Pond (1 acre), Middle Pond (0.5 acres), Engine Pond (2 acres) and Waterfall Pond (2 acres).
- The volume of the lakes has been calculated to be approximately 10,564,090 gallons.
- Lakes (once referred to as Hammer Ponds) were originally excavated for iron ore in the 16th century, but have been extended and added to over the years.
- Waterfall Pond enlarged to encompass Beaver Pond (which housed beavers between 1899 and 1947) in late 20th century.
- Engine Pond constructed between 1852 and 1874. The Engine House was once used to pump water up to the mansion.
- Leucothoe and Middle Pond (once referred to as the Top Ponds) constructed between 1874 and 1909.
- Clapper Pond constructed in late 19th century.
- Outside the garden boundary to the south, but still within the Leonardslee Deer Park is new Pond. This was created from two older ponds and was the only extensive body of water shown on the 1852 sale plan.
- To the north of the property there are further lakes not owned or managed by Leonardslee. These feed into our water system.

Issues and Concerns

1. Extensive duckweed coverage

2. Periods of low water levels

3. Extensive silt debris and leaf litter on lake beds

4. Piles and silt and soil runoff removed from one of the gulleys which feeds the lakes.

5. Examples of path/lake edge erosion and undercutting

6. Examples of bank erosion and collapse

7. Water escaping from hole beneath water fall