South Downs
National Park Authority

Agenda Item 14

Report PR24/25-36

Report to	**Policy & Resources Committee**
Date	**26 June 2025**
By	**Nature-based Solutions Manager**
Title of Report	**Westerlands Estate Whole Estate Plan Endorsement**
Decision	

Recommendation: The Committee is recommended to:

1. Endorse the Westerlands Estate Whole Estate Plan at Appendix 1.

1. Introduction

1.1 In 2015, the South Downs National Park Authority (SDNPA) introduced the concept of Whole Estate Plans (WEPs) to encourage open dialogue between land-owning organisations and the SDNPA. The WEPs look to promote collaboration between individual estates and the SDNPA to help achieve the ambitions of both continuously striving for synergy, opportunities and understanding whilst ensuring estates are suitably equipped to meet the challenges they face in the 21st Century. A WEP is a non-statutory plan, which demonstrates the overall position, and aspirations an organisation has, as an Estate. Plans do not have to cover a specific timeframe and may be updated to reflect changes in circumstance or withdrawn if appropriate but are expected to provide a longer-term vision for the future, 10 years +.

2. Policy Context

2.1 WEPs are a progressive and almost unique approach by a Local Planning Authority (LPA) or National Park Authority (NPA) in the UK as they look to foster good working relationships with key stakeholders and facilitate better understanding of the issues surrounding sustainable rural estate communities – of the strengths, weaknesses, opportunities and threats. They are not focused on or to be limited to planning matters but rather the whole husbandry of the Estate – farming, woodland management, conservation, access provision, cultural heritage etc. This enables the Estate to demonstrate how they contribute to the policies and outcomes identified in the South Downs National Park Authority 2020-2025 Partnership Management Plan and support response to the Defra (2024) Protected Landscapes Targets and Outcomes Framework (31 January 2024).

2.2 The South Downs Local Plan (2019) sets out many of the planning policies to be used in the determination of planning applications in the South Downs National Park (SDNP) and recognises the significant influence of the Estates across the SDNP and the impact the management activities of these Estates has in the short, medium and long term. Policy SD 25 p.103 of the SDNPA (2019) Local Plan states, *"positive regard will be had…… where development proposals are part of a WEP that has been endorsed by the National Park Authority*

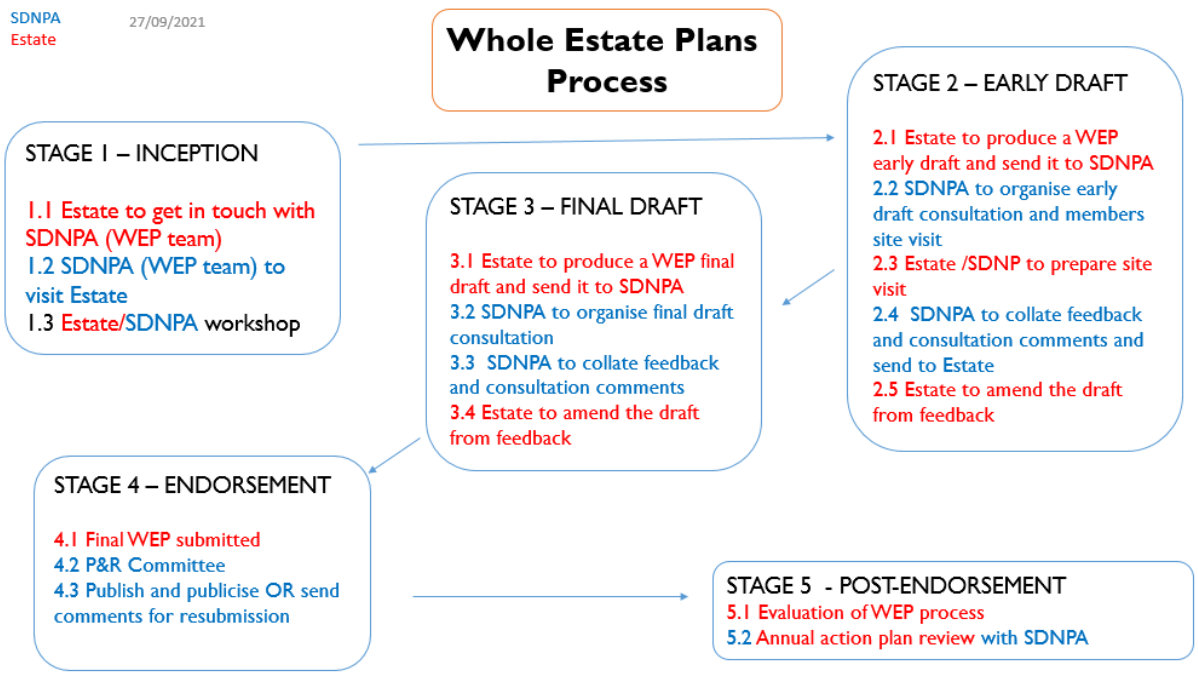
and deliver multiple benefits in line with the purposes and special qualities of the National Park". The inclusion of a development proposal within a WEP, however, does not guarantee that planning permission will be granted and any proposal will still need to comply with relevant development plan policies. A WEP can also be used to help guide and support funding bids, future neighbourhood plan production, agri-environment and forestry schemes and with other Natural Capital projects. Beyond the finished product, the WEP process also provides value in terms of relationship building; between the Estate and the SDNPA, as well as the local community.

3. The Whole Estate Plan Process

3.1 Guidance on producing WEPs was published in March 2022 and updated in April 2024 and is available online.

3.2 The process catalogues the various elements of a WEPs journey into five sequential stages allowing easy tracking and clarity for estates on the exact point of the journey they are currently on whilst clearly identifying next steps. Stage 1 is the inception stage and sets the framework for the WEP journey including introducing the process that must be adopted to achieve endorsement. Stage 2 focusses on the early draft, the Member site visit and the first internal SDNPA consultation involving Members and officers. Stage 3 builds on the feedback from the first consultation, which informs the final draft. This stage also contains the second and final internal SDNPA consultation. Stage 4 focuses on the creation of the final version of the WEP informed by the feedback received in the second consultation. This stage also includes the endorsement at P&R Committee. Stage 5 is the post endorsement stage and outlines the requirements of an Estate once the WEP has been successfully endorsed. This stage includes commitment to ongoing monitoring using the Survey123 system, which enables both parties to track performance against the action plan.

Figure 1. Below shows the WEP process.



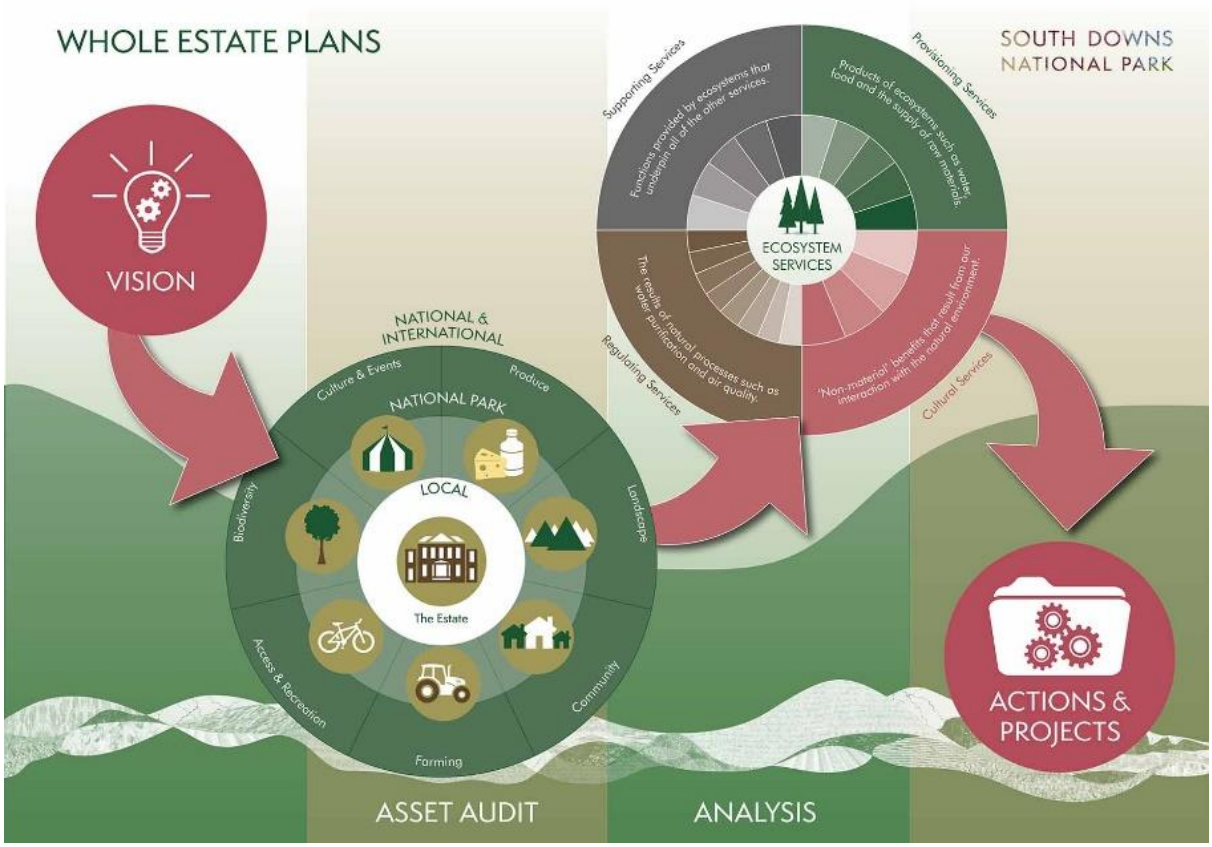
4. Issues for consideration

4.1 A WEP is comprised of four elements.

- A Vision, which highlights the estates priorities.

- An Asset Audit, which provides a complete picture of all the assets of the estate, both physical and non-physical.
- Ecosystem Services and Analysis, helps to identify the benefits obtained from nature, put value to them and build them into decision-making and management.
- An Action Plan is the response to the analysis findings and identifies key actions and projects.

Figure 2. below shows the four elements of a WEP in an infographic.



4.2 Officers look at how all these elements relate to each other, i.e. is the Vision a genuine representation of the actions proposed, and are the actions evidenced by the Asset Audit and Ecosystem Services Analysis? Estates should also be able to demonstrate that they have engaged with the local community during the process of producing the WEP.

4.3 Westerlands Estate engaged with the WEP process in August 2022 resulting in the creation of an early draft in April 2023, with the support from consultants Rural Solutions Ltd.

4.4 The Estate also hosted a Member Site Visit on 27 April 2023.The final draft was submitted on 19 August 2024, which acted as the catalyst for the final internal NPA consultation.

4.5 To ensure the WEP passed efficiently and effectively through the governance structures of the South Downs National Park Authority (SDNPA), the Westerlands Estate WEP progressed through the complete SDNPA process articulated in Item 3 above, to ensure that SDNPA Members were afforded the opportunities to consider and feedback on the WEP. Members were consulted on the early draft WEP in early April 2023, at the Member Site Visit held in late April 2023 and on the final version where Members were given the opportunity to feedback through the final consultation held in August 2024.

4.6 Westerlands is a 467-acre estate split between two sites and is located in the heart of the South Downs National Park in the County of West Sussex. The Westerlands site is located close to the village of Graffham whilst the Tegleaze site is located 1.5 km away, located on

the top of the South Downs. The estate was bought by the Jamison Family in 1982 and has been run as an intensive equine business up until 2022. Under a new management team established in 2010, the estate took the decision to move away from equine operations and realise its vision for the future, to run a successful nature first modern estate.

4.7 The WEP for the Westerlands Estate (Appendix 1) covers a period between 2025 to 2045

4.8 Westerlands are an estate integrated into the community. In addition to the schedule of events and activities that take place throughout the year, connecting Westerlands with the surrounding communities, bespoke events were held to provide the community with additional opportunities to engage with the estate whilst progressing through their WEP journey. These opportunities included the 'Open Farm Sunday' event which took place on 9 June 2024. This event successfully engaged 60 members of the local community.

4.9 Since June 2022 officers from across the SDNPA have had meetings with representatives of Westerlands to discuss their WEP aspirations, and facilitate, add value and enable the successful drafting of their WEP at various times on its journey. During the early draft consultation (13 April 2023), Member Site Visit (27 April 2023) and final draft consultation (22 July 2024) both officers and Members were provided with opportunities to comment on the emerging versions of the WEP.

4.10 The WEP for the Westerlands Estate has progressed in accordance with the SDNPA WEP Process and Guidance.

4.11 The WEP has been well received by officers across the SDNPA, and officers are encouraged by how comments and issues raised throughout the process have been taken on board and the WEP amended accordingly. Overall, the WEP fits well with the Authority's Partnership Management Plan and supports the delivery of the UK Government Protected Landscapes Targets and Outcomes Framework (2024).

4.12 The following provides a summary assessment of each of the four elements that make up the WEP.

Vision

4.13 The Westerlands Vision pledges that "*by 2045, Westerlands will be widely recognised as an exceptional example of a West Sussex pasture-based, regenerative farming system that has played a leading role in the restoration and healing of both nature and people."* The Vision and crucially the pursuit of it over the next 20 years, has been cleverly categorised into four Pillar's. These Pillars underpin all estate activity, initiatives, business strategy and operations. Pillar 1 is Nature Recovery & Restoration, Pillar 2 is Democratising Access to Nature, Pillar 3 is Community and Social, and Pillar 4 is Health, Healing and Wellbeing for All.

Asset Audit

4.14 The Asset Audit provides a thorough account of all the features, activities and services on the Estate. In the WEP, these are helpfully broken down into five focus areas which are: Natural Capital, Built Capital, People & Community, Cultural Heritage, Enterprise & Activity.

4.15 It is considered that the Asset Audit provides a comprehensive review of the assets and provides a solid foundation for expanding or developing the projects within the Action Plan.

Ecosystem Services and Analysis

4.16 Within the WEP there is a comprehensive Ecosystem Services Chapter that is categorised into four sections: Supporting Services, Provisioning Services, Cultural Services and Regulating Services. The analysis of this ecosystem services section, follows and takes stock of the key themes arising from the vision and the four Pillars. Although moving away from presenting and analysing the findings as a Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis table in this chapter, analysis is clearly evident with consideration afforded to Inputs and Outputs to enable delivery in the future. A SWOT analysis which considers

the whole estates strengths, weaknesses, opportunities and threats can still be found in the 'Realising Our Vision' chapter.

4.17 It is considered that Westerlands have demonstrated a comprehensive understanding of their assets as well as articulating clearly the opportunities and challenges facing the Estate which inspire the implementation section of the WEP, The Action Plan.

Action Plan

4.18 The Westerlands WEP has taken the decision to integrate the Action Plan section into the Vision chapter within the WEP rather than opting for a more traditional Action Plan that follows the Ecosystem Services and Analysis Chapters as witnessed in previous WEPs. The Vision section not only sets the vision for 2045 through an impressive categorising of assets across the estate into Pillars, but also clearly articulates how each Pillar will be realised through a clear, concise and SMART (Specific, Measurable, Achievable, Relevant and Time-bound) Action Plan, presented in a table format. Each Pillar has its own dedicated Action Plan which is a welcome alternative to the more traditional layout of WEPs seen previously.

4.19 It is considered that there is a clear link between the analysis work outlined in the Ecosystem Services and Realising Our Vision chapters and the future actions the estate is committed to delivering in response. The Action Plan, integrated into the Vision and articulated Pillar by Pillar, offers SMART targets, each listed as a table which are welcome and will provide clarity for The Estate when 'realising their vision' in the years to come.

4.20 For the reasons set out above, the Westerlands Estate Whole Estate Plan is recommended for endorsement.

5. Options & cost implications

5.1 There are no direct cost implications associated with the consideration of the endorsement of the WEP.

5.2 If endorsed, the Authority will continue to work with Westerlands Estate to realise some of the projects identified. The Authority will also support ongoing monitoring using the Survey123 system, which enables both parties to track performance against the action plan.

6. Next steps

6.1 If the WEP is endorsed, it will be placed on the SDNPA website and officers will be made aware that it is now a material consideration in the assessment of planning applications.

7. Other Implications

Implication	**Yes/No**
Will further decisions be required by another committee/full authority?	No, although applications for grant funds or planning permission may be submitted for consideration relating to actions highlighted within the WEP.
Does the proposal raise any Resource implications?	No. If endorsed, the WEP will be included on the SDNPA website, however update and review of the document is the responsibility of the Estate. If the WEP is amended, it will need to be considered again by Officers and Members.
How does the proposal represent Value for Money?	N/A
Which PMP Outcomes/ Corporate plan objectives does this deliver against	Outcome1: Landscape & Beauty Outcome 2: Increasing Resilience

	Outcome 3: Habitats and Species Outcome 4: Arts & Heritage Outcome 5: Outstanding Experiences Outcome 6: Lifelong Learning Outcome 7: Health & Wellbeing Outcome 8: Creating Custodians Outcome 9: Great Places to Live Outcome 10: Great Places to Work
Links to other projects or partner organisations	N/A
How does this decision contribute to the Authority's climate change objectives	Westerlands Estate owners are committed to *"own and manage a fully net zero Social Enterprise business by 2045"*.
Are there any Social Value implications arising from the proposal?	No
Have you taken regard of the South Downs National Park Authority's equality duty as contained within the Equality Act 2010?	This decision has no direct equalities implications. This document will be used to inform future decisions by the Authority, which will be subject to their own equalities impact assessments.
Are there any Human Rights implications arising from the proposal?	No
Are there any Crime & Disorder implications arising from the proposal?	No
Are there any Health & Safety implications arising from the proposal?	No
Are there any Data Protection implications?	None

8. Risks Associated with the Proposed Decision

8.1 There is the potential for a reputational risk for the SDNPA through failure to endorse the WEP, without substantive reasons, after an Estate has gone through the process of producing a WEP that meets the criteria for endorsement. This risk is mitigated through the committee process and the requirement for the committee to give appropriate reasons for its decisions in public. There is also a risk of WEPs being misunderstood and considered as planning documents only or being interpreted as a 'green light' for development. Both of these risks are mitigated by providing continued support to Estates, case officers and other interested parties and providing guidance on the SDNPA website.

MARK ALDEN

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Appendices	1. Westerlands Whole Estate Plan 2025
SDNPA Consultees	Countryside Policy Manager; Monitoring Officer; Legal Services.
External Consultees	None
Background Documents	SDNPA Whole Estate Plan Guidance (April 2024) Protected Landscapes Targets and Outcomes Framework - GOV.UK Partnership Management Plan 2020-2025

Westerlands

SOUTH DOWNS NATIONAL PARK

WHOLE ESTATE PLAN

Summer 2025

by Oliver Hancock

CONTENTS

PREFACE

Westerlands sits in the geographic heart of the South Downs National Park, in the county of West Sussex in southern England, an area also designated an International Dark Skies Reserve in 2016. The Jamison family, resident community and visitors to Westerlands continue to enjoy the iconic, lowland landscapes, captured so brilliantly in bygone years by JMW Turner's paintings of the local area.

Times are changing. Westerlands has a 120+ year equine history (racehorses and polo) as well as 50+ years of shooting (pheasants), but both activities have, in the last 10 years, been brought to an end.

Now, against the overarching concern of **Climate Change**, our main aims of reversing **Biodiversity Loss** and restoring and enhancing nature's habitats have compelled us to pivot. All management efforts now focus on our wildlife and on climate-friendly livestock farming, whilst simultaneously **Democratising Access to Nature**. This means finding ways to increase social diversity in the South Downs National Park by encouraging visits from a broad demographic and range of socio economic groups, people who can't access nature or don't know how to.

> "Nature needs space to live and flourish, but around the globe we humans have decreased and diminished those spaces. This is especially the case in the UK. There are substantial negative consequences of living in a nature-depleted country. These include impacts on human health, and direct costs associated with adaptation to lost and damaged ecosystem services. Where damage has already occurred, restoring nature can cost less in the long-term than bearing the costs of continued degradation."
>
> — UK State of Nature Report 2023

Petworth Park 1828 by JMW Turner captures the same extraordinary light experienced at Westerlands. One can just see the spire of Tillington Church where Antonia Jamison & Oliver Hancock were married in 2000

We are addressing **rising mental health** issues and there is now increasing clarity around the healing benefits afforded by being in and connected to, the natural world. So we are now trying to balance what is a complex set of commercial, social and environmental initiatives and look forward to what can be achieved over the next 20 years.

We are smaller than some of our neighbours but have committed to working closely with the South Downs National Park Authority to ensure that Westerlands contributes proportionately more to the park's stated aims, objectives, purposes and duty*. We will support by sharing our space with stakeholders on the same regenerative journey, be a source of creative inspiration and a place to meet where knowledge and ideas can be exchanged.

Our aim in producing this, a first iteration of our Whole Estate Plan, is to record recent efforts to leave an unsustainable past behind, capture where we are today (Summer 2025) and set out our vision for future objectives and action plans.

Our intention is to update our Whole Estate Plan at regular intervals to coincide with the publishing of each UK State of Nature Report and we will transition to become a fully-fledged **Social Enterprise** in 2025.

*Appendix 1

Our Location

The estate is split into separate landholdings, two geologically distinct parcels located 1.5km apart (as the crow flies)

Westerlands

- 239 acres located close to the village and community of Graffham
- Borders Lavington Stud to the South and National Trust heathland (Lavington Plantation) to the north

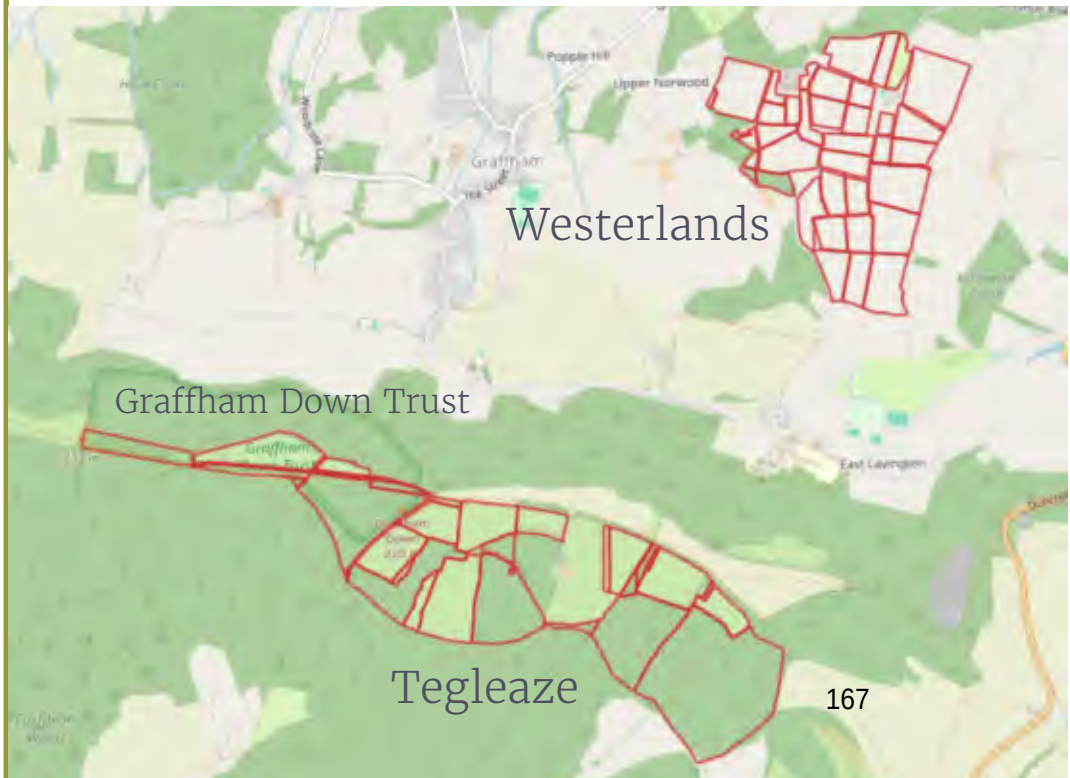
The lower ground at Westerlands comprises part of a series of clays and greensands that run through the South of England.

Tegleaze

- 228 acres located on top of the South Downs
- Borders 2 miles of the South Downs Way to the north
- Borders Cowdray and Goodwood Estates to the west and south
- Includes the Graffham Down Trust managed nature reserves, 70 acres (of which 35 acres are owned by Westerlands)

The higher ground at Tegleaze is more typical of open, chalk downland with panoramic views to the north and of the English Channel and Isle of Wight to the south.

The market towns of Midhurst and Petworth are within easy reach. The city of Chichester is 20 minutes drive to the southwest. South London, Heathrow and Gatwick airports are approximately a 1 hour drive. Seaside towns and beaches on the south coast are also easily accessed, just 30 minutes by car. The nearest train station is Pulborough with regular trains to Gatwick and London Victoria.



TIMELINE

1425 EARLS OF ARUNDEL – THE FITZALAN FAMILY

The whole of Graffham came into the hands of the Earls of Arundel in 1425. The three manors of Graffham, Wonerth and Woolavington remained in the Fitz alan family until 1578.

THE GARTON BROTHERS 1578

Sir Francis Garton, who later became the Mayor of Arundel and his brother Giles Garton an ironmonger bought the three manors of Graffham, Wonworth and Woolavington

1675 THE ORME FAMILY

In 1675 Robert Orme married Mary Garton (granddaughter of Giles Garton), and his heir Garton Orme, a British politician who sat in the House of Commons from 1739 to 1754 inherited the lands.

JOHN SARGENT M.P. 1778

John Sargent M.P. for Seaford in 1778 married Charlotte Bettesworth, granddaughter of Garton Orme and the land became his by marriage.

1828 SAMUEL WILBURFORCE

Emily Sargent, granddaughter of John, married Samuel Wilberforce, Bishop of Oxford and Winchester, with whom the lands remain until the turn of the century.

Our History

Westerlands – at the foot of the Downs
Pre 1900: Farming History

From the early 15th Century until the turn of the 20th Century, lands including the manor of Graffham exchanged hands a number of times through marriage and inheritance and were divided into a number of different farms, one of which was Westerlands.

Historic England has recorded that Westerlands was once called Waterlands Farm, but we have not been able to find any further records to this effect. We found this intriguing given that our research on Bronze Age prehistory revealed that the Rother Valley area was once marshland and therefore much wetter than it is today.

Westerlands – at the foot of the Downs

Post 1900: Equine History

A stud farm (racehorse breeding) was founded in 1904 by Lord Woolavington, who bought Westerlands as part of his Lavington Estate (including Lavington Stud and the current Seaford College) and to develop his breeding activities. He made his fortune with a whisky brand, 'Black and White' and some of Lavington's metal fencing is painted black and white to this day.

Westerlands was sold on Lord Woolavington's death to Captain Euan Wallace M.P. who then sold it on seven years later to the formidable Mrs Florence Nagle, a renowned racehorse trainer and breeder. Eventually she sold the farm to Andrew Wakeley who flipped it very quickly to the Van de Vegte brothers. She was still in situ at a cottage called Hunter's Moon when David Jamison bought Westerlands, not long afterwards in 1982.

David was a passionate playing member at Cowdray polo club and is a former Chairman there. During the late 80s, he pursued his interest in horses by recommencing a racehorse breeding program at Westerlands with Mrs Nagle still on site to provide valued advice.

TIMELINE

JAMES BUCHANAN 1903

In 1903, the manors were sold by Reginald Wilberforce to James Buchanan, who later became 1st Baron Woolavington

1935 CAPT. THE RT. HON. EUAN WALLACE, M.P.

After the death of Lord Woolavington, the Manor of Graffham was purchased by Captain Euan Wallace M.P.

FLORENCE NAGLE 1942

Florence Nagle was a British trainer and breeder of racehorses, a breeder of pedigree dogs, and an active feminist. She bought Westerlands and ran her stud farm here.

1972 THE VAN DE VEGTE FAMILY

The Van de Vegte brothers first acquired the land at Westerlands in Graffham in 1972. They began extensive land clearing and ploughing activities a few years later, in 1976 (Pictured: Frans Van de Vegte)

THE JAMISON FAMILY 1982

David Jamison purchased Westerlands. It is now run by his daughter Antonia and her husband Oliver.

Spotlight

Florence Nagle

Mrs Florence Nagle received recognition after she successfully fought the Jockey Club for 30 years and ultimately forced that establishment to allow women to train racehorses in their own name.

She bred racehorses and wolfhounds from Westerlands with great success, including prizes at Crufts dog show and notably, winning second place in the Derby Stakes horse race in 1937.

To open link in new tab hold CTRL or COMMAND key when you CLICK

Florence was a visionary, a font of knowledge on breeding strategy and her methods focused on her animals leading a natural life. She harvested rainwater from the two stable yards at Westerlands (each had a water well too) and would use plant remedies to heal her animals. Westerlands continues to use herbs and plant remedies to keep animals healthy at the farm and its equestrian centre (above).

Tegleaze – on top of the Downs

Prehistory to modern times

The lands, at Tegleaze, on top of the South Downs, have remained largely unchanged for millennia, with more or less grass and woodland shaping the landscape character. Early Bronze Age settlers created farming systems, cross dykes (linear earthwork boudaries) and barrows (burial mounds) some of which are still visible today.

Tegleaze has long been home to grazers of sheep, a “Teg” being old Sussex dialect for a young sheep and “leaze” meaning pasture and sometimes, woodland pasture. It is well known that the interface between woodland and pasture is a very valuable habitat, one that we are now, actively managing.

With a strong interest in nature conservation, the Jamison Family set about acquiring nearby parcels of land in the 1980s, including hangar woodland and chalk grassland above Graffham, in an effort to reconnect areas as they once were under the original Lavington Estate holding. Tegleaze Farmhouse was subsequently sold as it had become uninhabitable.

David Jamison was also keen to support The Graffham Down Trust (formed in 1983), a local community charity, run by volunteers, which protects nature reserve areas above Graffham and is still actively managed today.

Further, on the brow of the hill and adjacent to the South Downs Way, an area we know as 'the gallops' was used for training Lavington and Westerlands racehorses back in the day and must have been spectactular to see.

The land at Tegleaze is now being lightly grazed by cattle and sheep in order to enhance and preserve its landscape character. There is little permanent human activity present and the intention at Tegleaze is therefore to leave space for a pristine, natural environment, dominated by wildlife and chalk downland habitats. A Summer 2024 bat survey* at Tegleaze revealed 12 different species, some very rare.

*Appendix 8

From 2010: Regime change - 'Nature First' philosophy

Antonia Jamison took over the running of Westerlands and Tegleaze in 2010, with husband Oliver Hancock joining her in 2014.

Initially, Antonia worked on stabilising a failing racehorse breeding business with a view to a controlled and planned exit by 2017, whilst Oliver, returning from work abroad, came in to reduce balance sheet cost and risk by, amongst many other things, installing new water and heating systems.

Together, they set about focusing on the future and introducing new, recurring and sustainable revenue streams and by 2022, with the horse breeding activities successfully exited, the pheasant shoot as well as the annual wintering of up to 70 polo ponies had also been brought to an end.

It had become clear that none of these 'business' activities were compatible with nature recovery and restoration and in fact were likely having a negative ecological impact on flora and fauna and the health and balance of our ecosystems. This was the tipping point, a conscious shift from one land management approach to another and now, the focus is on using a small number of cattle and sheep as eco engineers to start to rebuild and repair the natural environment for future generations to enjoy. And it all starts with the soil.

Right: Picture taken by Oliver of Antonia and one of our Dexter cows

OUR VISION
& ACTION PLANS

Our Vision

CONTENTS

Introduction

OUR VISION

Our purpose now is to be guardians and custodians of our land at Westerlands and Tegleaze, leaving it in a better place than when we found it and to welcome many new people to share in the health benefits which nature can offer.

Our vision is that by 2045, Westerlands will be widely recognised as an exceptional example of a West Sussex pasture-based, regenerative farming system that has played a leading role in the restoration and healing of both nature and people.

We will know we have succeeded when Westerlands hosts and enriches a thriving community where caring and innovative stewardship produces and shares highly nutritious food and where people are welcomed and reconnected with nature. The scale of that success will be measured by the shared health of the land, animals, plants and people.

Right: Badger Face ewes grazing at Tegleaze.

PILLAR 1

Nature Recovery & Restoration

- Regenerative Livestock Farming
- Habitat creation & BNG
- Addressing biodiversity loss
- Carbon Sequestration
- Private sector partnerships

PILLAR 2

Democratising Access to Nature

- Short stays in nature
- Woodfire Camping
- Corporate Offsite days
- WeWorkWild
- Educational tours and events

PILLAR 3

Community & Social

- Horsebox Café
- Christmas Fairs
- Open Farm Sunday
- Film Nights
- Graffham Art Trail

PILLAR 4

Health, Healing & Wellbeing for All

- Equine Wellness Series
- WildFit & WildSpa
- Retreats & Workshops
- Treatments & Therapies
- Simply being at Westerlands

Our 4 Strategic Pillars

Our vision for the next 20 years, has at its heart, 4 pillars which will underpin all estate activity, initiatives, business strategy and operations. These pillars will help us focus on what we do (and don't do), why these things remain relevant and what success looks like. Constant reference to these four strategic pillars will force us to be clear on our priorities and permit us to be both ambitious and realistic.

We feel we have completed our transition from an unsustainable past, developing clarity of thought as we progress to visualise a sustainable future for both Westerlands and Tegleaze. Over the last 5 years, it has become clear to us what priorities need addressing. Our pillars are interdependent and will focus on the short-medium term (5-10 years), with several key activities aligned to each pillar.

These 4 strategic pillars will drive us to:

Give more people more reasons to come and visit and experience Westerlands, Tegleaze and the South Downs National Park.

Offer visitors more memorable, learning experiences to help improve their physical, emotional and mental health and overall understanding and enjoyment of the countryside, towns and villages in the area.

Always remain tranquil and to promote Westerlands as a place of calm, health & wellbeing; to create distinct and unique places and make space for people alongside nature.

Increase levels of engagement with and connectedness to the natural world; to address the isolation from nature felt by people in towns and cities and to help reconnect as many people with nature as possible over the next 20 years.

Support local suppliers and create more full-time jobs to help boost and champion the local economy.

Create distinguished provenance (the Westerlands brand and story) alongside a clear direction of travel to foster public and private partnerships to attract funding where needed.

Become prepared for environmental / natural capital markets when they get traction.

Ensure Westerlands and Tegleaze as landholdings and as a business become more resilient to current headwinds and to leave it in a much better place than when we took on the management of it.

Transition to a fully fledged Social Enterprise, managed for people and the environment.

OUR VISION
Strategic Pillar 1

NATURE RECOVERY AND RESTORATION

OUR VISION
NATURE

Nature Recovery and Restoration

Mother Nature can be random and chaotic, but when she is left alone, she works, she finds a way, she self-regulates.

Us humans have wanted to create order and structure over ever increasing amounts of usable land which only serves to suppress and suffocate natural processes and ecosystems. We have used our heavy boots for too long and now, we are being told to back off. This is especially clear when it comes to land use, land management and farming.

How we have shaped UK land over the last 80 years, the farming operations that have been prevalent and the chemical products used in farming, have all had a big negative impact. The UK is now one of the most nature-depleted on earth against 3 main measures, abundance, distribution and extinction risk. It is a relatively small piece of land with a large population and since World War II, there has been an emphasis on feeding its population to reduce reliance on imported food (approximately 70% of UK land is agricultural).

This has come at the expense of the health and wellbeing of Mother Nature. She has now begun to bite back in different ways and it is therefore imperative that we make changes in the way we think and act and to the way we manage our land. Happily, there are signs that this has started to happen across the UK, but much more needs to be done by a greater number of land managers and farmers and with a greater sense of urgency.

At Westerlands and Tegleaze, this is now our focus. The shift in thinking and doing has already happened and there is now a good foundation on which to build.

OUR VISION NATURE

NATURE ACCESS COMMUNITY HEALING

Farming Livestock Regeneratively

Inspired by the Partnership Management Plan objectives of the South Downs National Park and the Sustainable Development Goals of the UN, our vision is to build a sustainable and natural farming model which is financially viable (it currently isn't) over the long term and which contributes in a small way to national food security, whilst protecting a rich mosaic of habitats and diversity of wildlife.

This is about creating balance and balance is dynamic. It's moving all the time. We have experienced a mindset shift away from farming for profit (which may never come) to farming for nature, using cattle and sheep as ecoengineers, with more natural grazing techniques, to repair our soils and to try to reverse biodiversity loss.

Our ambition to address the issues of abundance, distribution and extinction risk comes at a cost, however and we do need to find sustainable ways to fund this long term nature recovery programme.

HELP US TO #RENATURE SOUTH DOWNS NATIONAL PARK

Partnership Management Plan Objectives*

Outcome 01: Landscape and Natural Beauty
Outcome 02: Increasing Resilience
Outcome 03: Habitats and Species
Outcome 04: Arts and Heritage
Outcome 05: Outstanding Experiences
Outcome 06: Lifelong Learning
Outcome 07: Health and Wellbeing
Outcome 08: Creating Custodians
Outcome 09: Great Places to Live
Outcome 10: Great Places to Work

*Appendix 1

United Nations

UN's 17 Sustainable Development Goals*

Our selected Goals from the UN list help us to focus

Goal 03: Good health and wellbeing for all at all ages
Goal 12: Sustainable consumption and production patterns
Goal 13: Urgent action to combat climate change and its impacts
Goal 15: Protecting, restoring and promoting sustainable terrestrial ecosystems and halting and reversing land degradation and biodiversity loss

*Appendix 2

OUR VISION NATURE

NATURE ACCESS COMMUNITY HEALING

Enabling Habitat Creation & Addressing Biodiversity Loss

Biodiversity, to us, means having all kinds of life on our land and across our landscape, insects, mammals, birds, plants, even microbes and bacteria and importantly, a lot of it (abundance). These and many more make up the natural world and when allowed to, will co-exist in inter-connected ecosystems to maintain a balance and support all life, including human life.

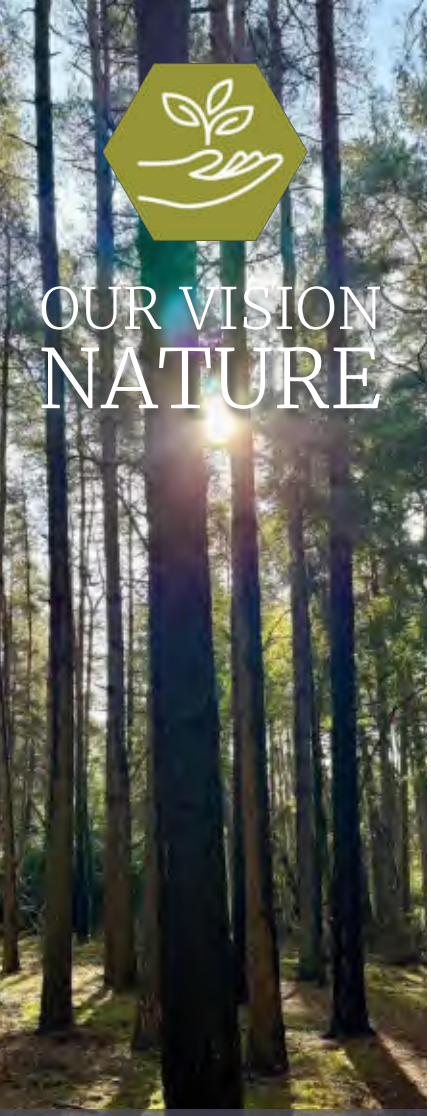
Regeneration, to us, means 'bringing back life'. At Westerlands, we are leaving all track-side verges and edges, field headlands and margins, waterways, existing hedges and woodland to grow wild and natural. Every cubic foot of foliage, scrub and shrubland, meadow as well as fields grazed by livestock, will harbour an abundance and variety of wildlife. We are not cutting. We are leaving be. We are leaving large areas to the natural world with little or no human activity. Where we can leave dead (ash*) trees in situ, whether standing or fallen, we do so as these are also fantastic habitats.

* ash dieback is a disease which is affecting the majority of ash trees across all of the UK

We are planting new hedgerows each winter, creating wildlife corridors and building beetle hotels from fallen branches and natural debris. We let meadows grow on through the summer to harbour insect life, which in turn, supports birdlife. We install bird boxes and we have our own bees which pollinate our area.

Regenerative farming and the creation and protection of habitats goes hand in hand and must coexist. Light management of water courses and wetter, low-lying areas will also improve opportunities for wildlife as well as field drainage.

Soil health and structure are vital and serve as the foundation for a biodiverse world above. Compacted soils (a legacy of our equine past at Westerlands) do not function optimally. Positive life forms in the soil require air, water and food to thrive and we have a plan in place to turn our compacted fields into healthy soils that will harbour a myriad biological life forms. Surface compaction is broken up using an aerator and then a sward lifting grassland subsoiler for areas which are compacted at depth. This will improve drainage and allow deeper rooting plants to benefit from nutrient uptake. Later, herbal leys (herb, legume and grass species) can be stitched in to improve sward diversity, water infiltration and water holding capacity and which will then surely build flood and drought resilience.



OUR VISION
NATURE

NATURE ACCESS COMMUNITY HEALING

Carbon Sequestration and Climate Risk Mitigation

The one topic which affects every human alive today and which isn't going away, is **climate change**. The heating of the planet, accelerated by the activities of man are having a devastating impact on wildlife, habitats and the natural world, all over the planet. Land degredation is everywhere. Desertification is increasing and sequestering more carbon from the atmosphere is now critical. Extreme weather patterns are also more common, which forces us to think about business and land management models which are going to be most resilient as well as sustainable over the next 20 years.

At Westerlands and Tegleaze, our permanent grassland, combined with adaptive 'mob' grazing of the right number of sheep and cattle will continue to sequester more carbon as we get better at it. The improvements over time to soil health and sward diversity will also help as there is a strong link between biodiversity loss and climate change. We allow vegetation to grow. We keep areas purposefully untidy as well as planting new trees and hedgerows, protecting them as they get established to foster future climate change resilience.

Ten years ago, we installed 2 woodchip biomass boilers, to generate renewable heat energy (radiators and hot water) displacing oil, gas and even electricity in all properties at Westerlands. Woodchip is sustainably sourced, often from dying ash trees, locally accessible, to make use of this valuable resource before most of it falls.

There is also an appetite to generate renewable power to reduce Westerlands' carbon footprint further. Photovoltaic (solar panels) at Westerlands on barn roofs is currently being researched and we have been invited to submit an application for the installation of a 100KW PV array to receive an Improving Farm Productivity Grant which will contribute 25% of the cost. Alternative sources of financing will be needed, but this represents a logical next step over the next couple of years.

As landowners, we are committed to the concept of doing what we can to mitigate climate change and to sequester more carbon from our atmosphere. We intend to do this via a combination of new initiatives, being proactive in many areas whilst being passive (leaving be) in others to encourage more growth, more growth, more growth, everywhere. We are now on a journey with a clear destination and advice on habitat creation and landscape management plans is being sought by professional advisors, Natural / Forestry England, Farming and Wildlife Advisory Group*, Envance UK, Clyde Jones Consultancy, Restore, amongst others.

*Appendix 3

OUR VISION
NATURE

NATURE ACCESS COMMUNITY HEALING

Private Sector Partnerships

We want to lead on the conservation and enhancement of the wild spaces and natural beauty of our land and will seek partnerships to support this activity through ESG (Environmental, Social, and Governance) / CSR (Corporate Social Responsibility) programmes. We hope that our transition to a Social Enterprise will raise our profile.

Companies, whether large or small, must consider how they are being viewed and in most cases, stakeholders are keen to create the perception that business is done in harmony with our planet. All businesses now need to be managed with the environment and sustainability high up on the agenda and managers need to be mindful of the contribution made to or the impact on the world's ecosystems. Many now have programmes which help to address the optics of how they are being run and none want to be accused of "greenwashing" where it is felt their actions towards the health of the planet are disingenuous or worse. Some consider sponsorships, funding or partnerships of different kinds with land managers and this can be for different reasons. One might be to offset a large carbon footprint.

Ecosystem services

These are the various benefits that are provided to people (and all living things) by the natural environment and healthy ecosystems, often described as direct and indirect benefits. The services are grouped into four broad categories: Supporting, Provisioning, Regulating and Cultural.

At Westerlands, our desire is to work with businesses which genuinely want to make a difference to the health of the planet and its natural world and we have ways to give back to these businesses.

There is now more focus on the benefits and services bestowed on us by nature and why we need to recognise and protect them. From February 2024, developers must now ensure a minimum 10% net gain in biodiversity based on a pre-development assessment of the land they are developing, to secure planning permission. Westerlands can work with these businesses and developers to create this net gain.

NATURE ACCESS COMMUNITY HEALING

ACTION PLAN
NATURE

Pillar 1 Action Plan
Nature Recovery & Restoration

Commitment	Action/Project	Outcome	Timeline	Funding
A Landscape and Nature Restoration vision that promises clearly defined habitat creation and maintenance for each and every parcel of land	Creation of a comprehensive Land Management and Habitat Creation Plan for both Westerlands and Tegleaze	A clear pledge and action plan for the next 5-10 years for the management of every acre, in service of nature.	Short to mid Term High priority	Combination of Countryside Stewardship, Expanded Sustainable Farming Schemes, English Woodland Creation Offer, Biodiversity Net Gain, Private sponsorship
Establish an initial baseline assessment of natural capital assets and put in place methods of monitoring and measuring future success	Build upon the Sussex Biodiversity Record Centre Audit and Baseline soil analysis*(Clyde Jones Consultancy) carried out in Spring 2024. Carry out a Biodiversity and Ecosystem Services Audit with ENVANCE - done July 2024 *Appendix 5	Establish our 2024 baseline to enable the process of measuring success and uplift across all areas over 20 years Our baselines then support the adoption of environmental accounting tools and software, in readiness for environmental markets	Short Term High priority	In house

NATURE ACCESS COMMUNITY HEALING

ACTION PLAN
NATURE

Pillar 1 Action Plan
Nature Recovery & Restoration

Commitment	Action/Project	Outcome	Timeline	Funding
Improve the health and structure of our soils	Respond to March 2024 Soil Analysis results following recommended actions.	Improved soils with much reduced iron levels, increased magnesium, calcium, potassium and sodium as well as trace elements and which is richer in organic matter.	Short to mid term High priority	In house / Farming in Protected Landscapes
Continued management of out of control deer populations	Create a landscape scale Deer Management Plan (DMP)* to include market growth for wild venison and increase in supply chain infrastructure and capacity *Appendix 9	Deer control increases from ~20% to ~40% of population seasonally which results in the rehabilitation of important woodland and other, protected habitats	Short to mid term High priority	Combination of inhouse, SDNP, Natural England / DEFRA

ACTION PLAN
NATURE

NATURE ACCESS COMMUNITY HEALING

Pillar 1 Action Plan
Nature Recovery & Restoration

Commitment	Action/Project	Outcome	Timeline	Funding
Restoration of Woodland Habitat	Replant trees at the historic Dominies Wood site for woodland and / or wood pasture	Restore land to its former habitat, offering shade for livestock and preventing nutrient loss and soil erosion and strengthening connectivity to Ridlington Copse	Mid term Medium priority	England Woodland Creation Offer / Woodland Trust
Manage the land in a regenerative and restorative way, adopting only climate and wildlife friendly methods and practices	Target Pasture for Life certification, using adaptive grazing techniques, with short, high intensity periods followed by long rest / recovery Sward-lifting /soil aeration of heavy compacted ground Ditchwork/land drains Drilling of herbal leys	Integration of nature-based solutions into a financially sustainable livestock enterprise Used as eco engineers, cattle and sheep reduce compaction and promote increased distribution and abundance in habitats to be monitored and verified at regular intervals Improved field system function, rainfall resilience	Long term High priority	In house / Expanded Sustainable Farming Incentive and Countryside Stewardship Higher Tier

ACTION PLAN
NATURE

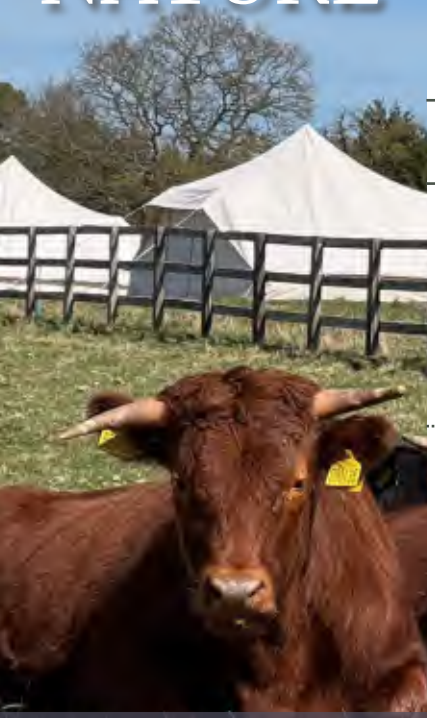
NATURE ACCESS COMMUNITY HEALING

Pillar 1 Action Plan
Nature Recovery & Restoration

Commitment	Action/Project	Outcome	Timeline	Funding
Combat Biodiversity loss with a focus on soil health and plant life - focus on monitoring and data gathering	Hedgerow Planting Programme Leave margins, verges, scrubland to wildlife Make more spaces for nature Restoring all woodland areas Set up University of Sussex 'Nature Sense'* Biodiversity monitoring station *Appendix 12	Increase microbial and mycorrhizal activity - Worm count / dung beetle / soil mentor assessment Net gains in Biodiversity via periodic audits Continual improvement of the health of our soils via regular monitoring against the 2024 base Increased carbon sequestration to mitigate climate change risk	Long term High priority	In house
Conserve Pollinator Zones	Dedicate fields at Westerlands to wild flowers and add these project sites to the B-Line mapping directory	Westerlands land becomes included in the official B-line.	Mid term High priority	In house

NATURE ACCESS COMMUNITY HEALING

ACTION PLAN
NATURE



Pillar 1 Action Plan
Nature Recovery & Restoration

Commitment	Action/Project	Outcome	Timeline	Funding
Supporting habitat creation as part of the greater regional landscape	Becoming part of the Weald to Waves Initiative pledging both Westerlands and Tegleaze acreage - done	Westerlands and Tegleaze play a part in the success of this ambitious project to connect 100 miles of wildlife corridors	Short to long term High priority	In house
Drive private investment and grant funding to restore landscape character, nature recovery and climate response	Forge long term ESG / CSR partnerships with private organisations Collaborate with neighbours to develop on a landscape scale Position to attract sponsorship / funding Collaborations - eg. Plantlife.org.uk Freshwater Habitats Trust or Newt Conservation Partnership	1874 OS field patterns are reinforced and reinstated using existing, rich hedgerow network and hedgerow planting Chalk streams are restored and enhanced through height of watercourse, riverine buffer and widening 'flood plain' 'Make the market' where private finance and the environment intersects	Mid term Medium priority	Collaborative

NATURE ACCESS COMMUNITY HEALING

ACTION PLAN
NATURE

Pillar 1 Action Plan
Nature Recovery & Restoration

Commitment	Action/Project	Outcome	Timeline	Funding
To offer a working platform for emerging and innovative brands committed to nature recovery and restoration	Open doors for workshops / seminars to those who share the vision Develop WeWorkWild offering Engage Chirrup.ai – an innovative solution to auditing bird and insect life and soil health	Nature recovery and restoration becomes a priority and a focus for existing and new enterprises in different sectors The twin threats of biodiversity loss and climate change get addressed quicker	Short term Medium priority	In house
To create educational experiences for all ages	• Farm tours for schools • Open Farm Sunday • Permaculture, foraging, bee-keeping workshops • Volunteer work / litter picking	Creation of a future generation of land custodians Improves understanding of and connection to nature Ensures pristine landscape Develops a pride and love for the land	Long term High priority	In house

ACTION PLAN
NATURE

NATURE ACCESS COMMUNITY HEALING

Pillar 1 Action Plan
Nature Recovery & Restoration

Commitment	Action/Project	Outcome	Timeline	Funding
To own and manage a fully net zero Social Enterprise business by 2045	Continually review our processes, community, supply chains Netzero strategy Establish "Powering Down" protocols for guests and tenants Installation of PV on barn roofs at Westerlands Proactively drive towards a carbon neutral (Scope 1 & 2) and then fully net zero (Scope 3) operation farming, visitor, and retreat enterprise	Have Net Zero be at the forefront of decision making in every aspect of the business Create a culture of energy conservation Achieve net zero status before the UK goal of 2050 Become an exemplar business and lead and inspire others within the SDNP to do the same	Long term High priority	In house / Collaborations and private funding support

ACTION PLAN
NATURE

Pillar 1 Action Plan
Nature Recovery & Restoration

Commitment	Action/Project	Outcome	Timeline	Funding
Self Sufficiency with Water and water storage	Harvesting rainwater to use during periods of dry weather. Underground and now decommissioned cesspools (large tanks) are used to do this. These can be pumped to IBCs or above ground tanks / tankers if needed for watering fields and gardens or dampening farm tracks in long periods of dry weather.	Reduce reliance on borehole water during dry weather increases resilience Responds to the increased risk of wild fires	Long term High priority	In house

OUR VISION
Strategic Pillar 2

DEMOCRATISING ACCESS TO NATURE

OUR VISION ACCESS

Democratising Access to Nature

Natural Deficit Disorder (NDD) isn't officially recognized as a medical condition yet, but growing evidence links it to various issues such as sensory dulling, attention problems, aggression, anxiety, depression, and Vitamin D deficiency. Worsened by the pandemic, both adults and children—especially in urban areas—are spending more time indoors on devices and less time in nature. Children are particularly affected; without access to green spaces, their senses can dull both physically and mentally. Across the UK, nature engagement is at a historic low, and people report weaker connections to nature than most Europeans*.

*Appendix 13

> "I didn't think places like this were for people like me."
>
> — Mohammed Bin, June 2021

Many people feel they can't access nature or don't know how. If this continues, more will feel disconnected and biodiversity loss and climate change will remain someone else's problem. At Westerlands, we're developing a platform to reverse this trend. Our goal is to help the South Downs National Park become the most socially diverse National Park, an achievable aim given its proximity to London and major airports. There's now a major opportunity to open nature's doors so everyone can discover, learn, enjoy and reconnect with the natural world.

We want to welcome more people to experience the unique qualities of Westerlands, Tegleaze and the South Downs. We're working to democratise access to nature by expanding accommodation to host more guests across diverse spaces and price points. On site, we'll offer a growing range of recreational and educational activities, as well as access to local areas and businesses. Westerlands will also serve as a base for corporate teams for everyday work, offsite days and retreats.

OUR VISION
ACCESS

Short Stays in Nature
Welcoming People to Westerlands

We have always believed that full immersion is the best way to experience nature and that a big part of our desire to democratise access to it should include offering people a place to stay at an affordable price. Staying overnight enhances people's enjoyment of the place, ability to learn from it, take part in recreational activities and propensity to engage with other local businesses such as pubs and shops. Furthermore, our ability to offer accommodation will make us more attractive to families and reconnecting children with nature is absolutely critical for future planetary health.

We therefore want to be able to offer people a bed so that they can drift off to the sound of owls at night, wake to the dawn chorus and benefit from fresh air, open spaces, big skies and all the greenery in between. We are offering a number of short-term rentals and holiday lets, but recognise there is a long way to go if we are to be able to accommodate a meaningful number of people throughout the year. We are mindfully bringing together a portfolio of different places to stay at different price points to suit individuals, couples, families and bigger groups alike.

Accommodation is the 'engine room' of the Westerlands balance sheet and is really what carries the whole enterprise, but to be financially sustainable, we are targeting a net gain in the number of beds in order to meet levels of demand and interest from the visitor economy.

Cedar Woods Holiday Accommodation.

OUR VISION
ACCESS

Camping and the Great Outdoors

We continue to work closely with Stella and Griff, the husband and wife team behind Woodfire Camping since 2018 and look forward to growing and developing our partnership. By the end of the 2025 camping season, Woodfire (already an exemplar business in the South Downs National Park) is estimated to have welcomed approximately 30,000 people to a single field at Westerlands.

Thanks to the growing popularity of Woodfire and the amazing work the team does there, we're delighted that Woodfire is already full for the 2025 season as this shows a growing demand for people wanting to get out and reconnect with nature and supports our own strategy and direction of travel. Woodfire's and Westerlands' ethos and ideology are aligned and the business models are certainly complementary. There is an opportunity to expand, possibly in a small way at Tegleaze in the future. The number of visiting campers is likely to grow from now on and the majority will walk to a pub or drive short distances to local towns and visitor attractions, helping to support the local economy.

As our brand grows and reaches new audiences, people are now coming to Westerlands in larger groups, spreading themselves either across our small portfolio or combining with the campsite. This affords guests some optionality in choosing where they would like to stay.

Stella Gurney & Mark Griffiths of Woodfire Camping.

OUR VISION
ACCESS

Corporate – Off Site Days for Teams

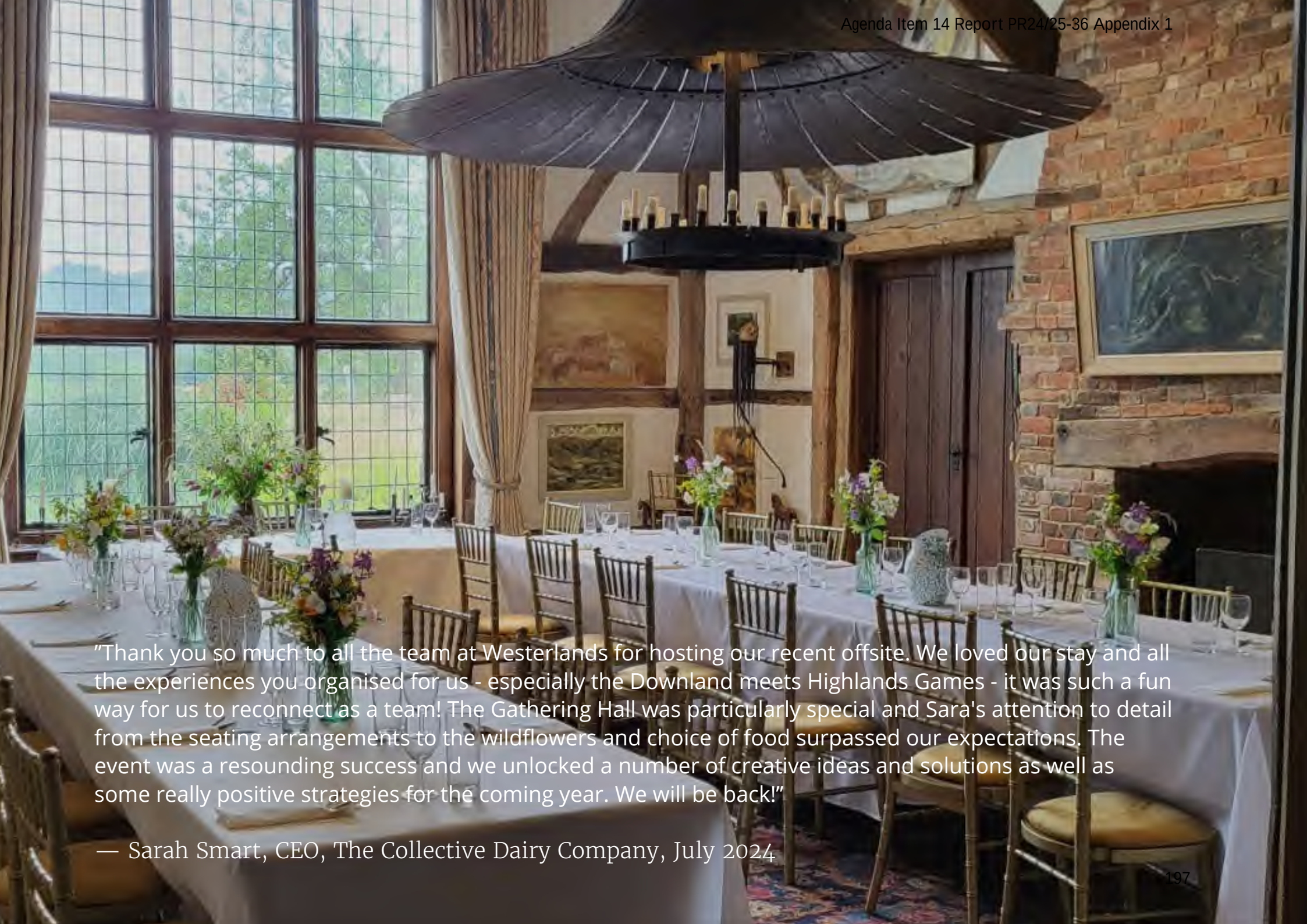
We are building our capability and capacity to deliver team "Away Days", corporate strategy, planning, workshop or team-building days that lean on nature's ability to help us relax, loosen our thoughts, unlock negative or complex business thinking, or just connect with oneself or others, better, in nature.

Given our background and skills as businesspeople, delivering these 'Event Services' is important to us at Westerlands. We have welcomed several groups, mainly during summer months, but are now also focused on the leaner Autumn and Winter months. Some have even started to hold their Christmas parties at Westerlands, whilst also enjoying winter time in nature.

Our in-house team can facilitate group days, sometimes acting as coordinator or mediator during workshops or intentionality sessions and working with local suppliers (as well as Woodfire Camping) for catering or activities. These structured days introduce new audiences to the South Downs National Park and business people quite often return with their families.

These events underline an ability to attract new, often younger and more diverse audiences to the South Downs National Park and research suggests that there is huge demand out there to experience nature in a more formal, structured way. Moreover, employee wellbeing programmes are now 'hard baked' into the budgets of large and small companies as they endeavour to retain staff and reduce the number of sick days. We are starting to focus on and would like to be able to accommodate this market.

Up World offsite: roundtable discussion .



"Thank you so much to all the team at Westerlands for hosting our recent offsite. We loved our stay and all the experiences you organised for us - especially the Downland meets Highlands Games - it was such a fun way for us to reconnect as a team! The Gathering Hall was particularly special and Sara's attention to detail from the seating arrangements to the wildflowers and choice of food surpassed our expectations. The event was a resounding success and we unlocked a number of creative ideas and solutions as well as some really positive strategies for the coming year. We will be back!"

— Sarah Smart, CEO, The Collective Dairy Company, July 2024

OUR VISION
ACCESS

WeWorkWild

Our recently installed superfast fibre broadband has prompted us to offer Westerlands as a place to convene, meet and work. Hot-desking and working remotely was 'a thing' well before the pandemic and and having good connectivity allows people to work from anywhere.

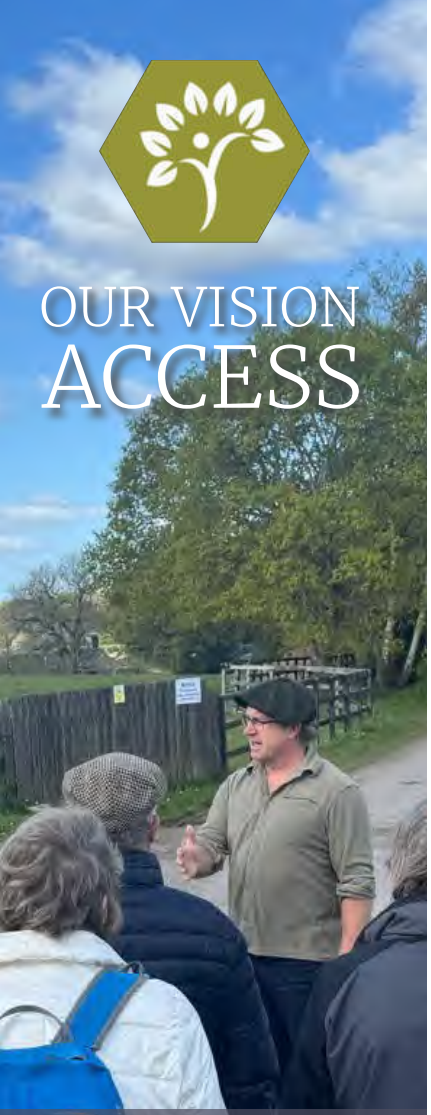
Creative Spaces

Westerlands provides inspiring, nature-based spaces ideal for retreats, team sessions and personal reflection. Designed to foster creativity and collaboration, our workspaces offer a refreshing alternative to traditional offices, combining access to fast internet with the freedom to think beyond the screen.

- **The Gathering Hall**, an impressive double-height boardroom space
- **The Study**, an old snooker room, perfect for presentations
- **The Rose Room** with French windows on to its own private garden
- **The Equestrian Club Room**, a large stable at our Trekking Centre
- **The Horsebox Café**, a reception area and hub, can provide outside seating

Dorothy the chicken visiting the office

At Westerlands, we can offer individuals or small groups a quiet place to work from where they can hold private, in person meetings, Teams or Zoom calls. Our WeWorkWild concept has been developed to entice people to enjoy working in an environment, surrounded by nature.



OUR VISION
ACCESS

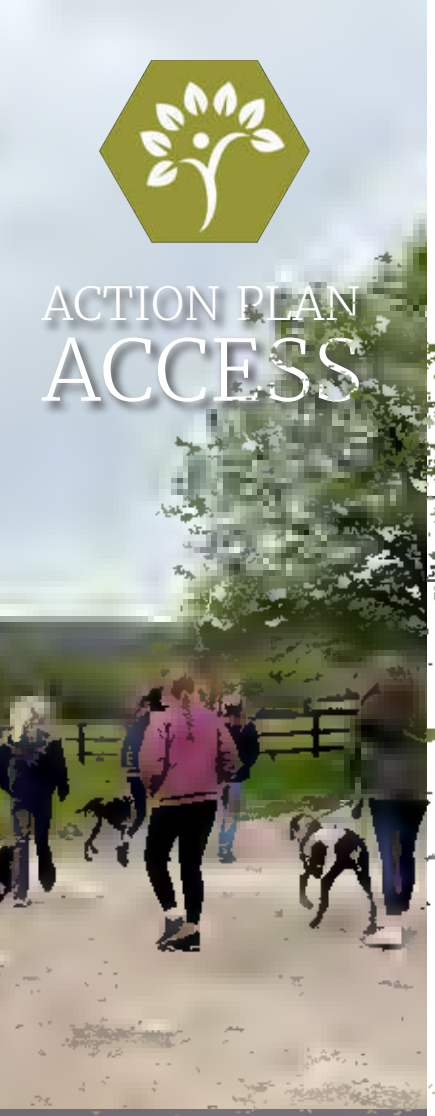
Educational Tours and Recreational Events

To date, on an ad hoc or on demand basis, we organise tours or events of different types for different sized groups. These could be farm tours for family or corporate groups, where we go into detail about regenerative farming and how we are operating for wildlife and nature. Or, they could be foraging walks or talks on bee keeping at the hives. Or walking and talking events (netwalking). We have organised a 'Downland meets Highland' Games for a corporate group. We have also organised talks on stargazing and will be introducing walking tours soon to take in Bronze Age monuments, barrows, crossdykes and ancient field systems. We often work with experts in their field and would like to offer more, regular and recurring events, making Westerlands and Tegleaze a destination for education and study.

Importantly, we would like to work more with local schools to help make sure that local children are connected with nature and in tune with what goes on in a farming environment.

Some basic facilities are needed in order to meet tightening regulations and we currently lack classroom facilities or equivalent which would help facilitate more of this type of work. An auditorium for talks, lectures or films about farming, nature conservation and the environment would afford us a larger, more versatile space, doubling up as meeting or conference facilities for larger groups who come to Westerlands to convene in the future. We often need to fall back on our office for these events.

Right: The Collective, Corporate Day - Downland Games



ACTION PLAN
ACCESS

Pillar 2 Action Plan
Democratising Access to Nature

Commitment	Action/Project	Outcome	Timeline	Funding
To increase the capacity and financial sustainability of the business via additional visitor accommodation, activities, experiences, events and wellness programmes Help to promote the use of "Book-a-Bus", the new, flexible transport option in our area, which can help people access Westerlands (from Haslemere and Pulborough train stations) in an affordable way Look at access issues for people who find it hard to get to isolated locations	Buy or create more, short stay spaces via conversion, change of use or looking at permitted development options Regularise planning permissions for existing and extant uses, if required Repurposing of unused assets Work with the National Park to design a future use of buildings Work on ways to improve access to Westerlands for some people who don't drive	An ability to host more people per night Create affordable accommodation for increased social diversity Boost to the visitor economy in the 'shoulder' and winter months Reconnect more people with nature, creating future custodians Immersion in nature brings health benefits to more people Overall occupancy rates increase which helps to secure the long term viability of the business	Short term High priority	Bank Finance

NATURE ACCESS COMMUNITY HEALING

ACTION PLAN
ACCESS

Pillar 2 Action Plan
Democratising Access to Nature

Commitment	Action/Project	Outcome	Timeline	Funding
To encourage more businesses to spend off-site days / retreats with their teams in nature at Westerlands	Enhance and create spaces indoors and out as well as natural assets to appeal to and facilitate group engagement and appreciation of the benefits that nature and the South Downs can offer businesses	More employee wellbeing programmes take place in the SDNP. Businesses are more likely to question their roles in and relationships with sustainability, the environment and climate change	Short term High priority	Bank Finance
Reduce food / carbon miles by selling Farm to Fork produce to onsite and local community	Look to establish a mobile slaughter unit with onsite chiller and butchery area for beef, lamb and venison Increase onsite sales / farm shop / online Ready meals made available to guests using Westerlands beef and lamb	Enable stress free / humane handling of livestock until the end. Visitors and the local community benefit from a circular economy. Selling direct to consumer cuts out middlemen and increases margin, whilst establishing clear provenance and growing meat brand	Mid term Medium priority	Bank Finance and local partners

ACTION PLAN
ACCESS

Pillar 2 Action Plan
Democratising Access to Nature

Commitment	Action/Project	Outcome	Timeline	Funding
A closer working and trading relationship with Woodfire Camping	Offer more experiences to campers Supply meat and veg to the campsite in volume	Increase occupancy through the camping season. Develops an internal market, circular economy	Short term High priority	In house
Increased promotion of the international dark skies reserve with our target market	Encourage use of the Westerlands community telescope during stays at the farm Encourage use of our affordable accommodation options which benefit from zero light pollution	Increases occupancy through the year, especially in winter when stargazing is at its best Anticipated approximately 60 bookings to be made on this basis alone in 2025. Creates more reasons for more people to come and visit	Long term Medium priority	In house

ACTION PLAN
ACCESS

Pillar 2 Action Plan
Democratising Access to Nature

Commitment	Action/Project	Outcome	Timeline	Funding
Create classroom or auditorium spaces plus associated facilities to be able to offer educational and recreational events	Feasibilty study and business plan followed by planning process to create educational and other event spaces	An ability to host a broad and diverse range of groups, both public and private, from students to families and charities to corporates	Short to medium term	Sponsorship
A more structured approach to offering regular and recurring on farm tours and activities	A study to determine what people want, what is offered elsewhere, how we can differ to offer outstanding experiences	A more socially diverse demographic gets to know Westerlands and Tegleaze and which become a gateway to the National Park	Short to medium term	In house
Westerlands to become a space for education and learning for school and college age students	Engage local schools and other educational establishments to explore areas of collaboration to offer courses and days out	Westerlands becomes known as a centre for learning excellence alongside farming for nature restoration	Short to medium	Local / state

OUR VISION
Strategic Pillar 3

COMMUNITY & SOCIAL

OUR VISION
COMMUNITY

NATURE ACCESS COMMUNITY HEALING

At Westerlands, community isn't just a buzzword—it's a way of life. We're committed to creating spaces and moments that celebrate our local spirit and foster lasting connections.

The Westerlands Resident Community

We support a long established and vibrant on-site community that includes families, young and old, resident artists, writers, poets, artisans, musicians, land stewards, business entrepreneurs, beekeepers, arborists, and horticulture/permaculture enthusiasts.

This diverse group of people and skills forms an important human ecosystem that underpins all activities at Westerlands. Some work at/from Westerlands and for many, Westerlands is home and this will always be respected.

It is very important to us that we consciously balance our resident and local community with those visiting from outside and make sure that Westerlands and environs always retains its intrinsically private, calming and tranquil qualities.

Horsebox Café: A Community Hub

Our Horsebox Café serves as a central meeting point, not only for our residents and team but also for Woodfire campers, local visitors and [illegible] a place where conversations flow, [illegible]park, connections are made and [illegible]ndships form. Whether it's a morning coffee or an afternoon chat, the Horsebox Café is where [illegible]mmunity bonds are nurtured.

View from inside the Horsebox Café.

OUR VISION
COMMUNITY

Connecting with Our Local Community

At Westerlands, we place great value on fostering connections and engagement with our local community. Through a diverse range of events and retail opportunities, we aim to create meaningful interactions that strengthen our ties with residents and visitors alike.

Film Nights: Cultivating Cultural Connections

Throughout the year, we host film nights that cater to diverse interests.

Outdoor Cinema

Picture warm evenings under the stars, or cosy nights in the barn with hot drinks, enjoying cinematic experiences with fellow residents and neighbours.

Educational Documentaries

We screen thought-provoking documentaries, such as the recent release of "Six Inches of Soil." These events provide touch points for meaningful discussions and shared learning.

Six Inches of Soil screening - May 2024.

OUR VISION COMMUNITY

Oliver leading a farm tour.

Open Farm Sunday

On June 9th 2024, we hosted our first Open Farm Sunday, an exciting national event that invites locals to explore their nearby farms. We welcomed 60 people for a guided tour of our regenerative farm operations, complete with a complimentary tea at the Horsebox Café upon arrival. The second event was on June 8th 2025.

Community Events Throughout the Year

Gra[illegible]am Art Trail

Our [illegible] artists participate annually in the Graffham Art Trail. Their captivating works are exhibited on-site, inviting local art enthusiasts to explore and appreciate creativity within our community.

Pamela Jamison with a selection of her paintings inspired by landscapes at Westerlands and the South D[illegible]

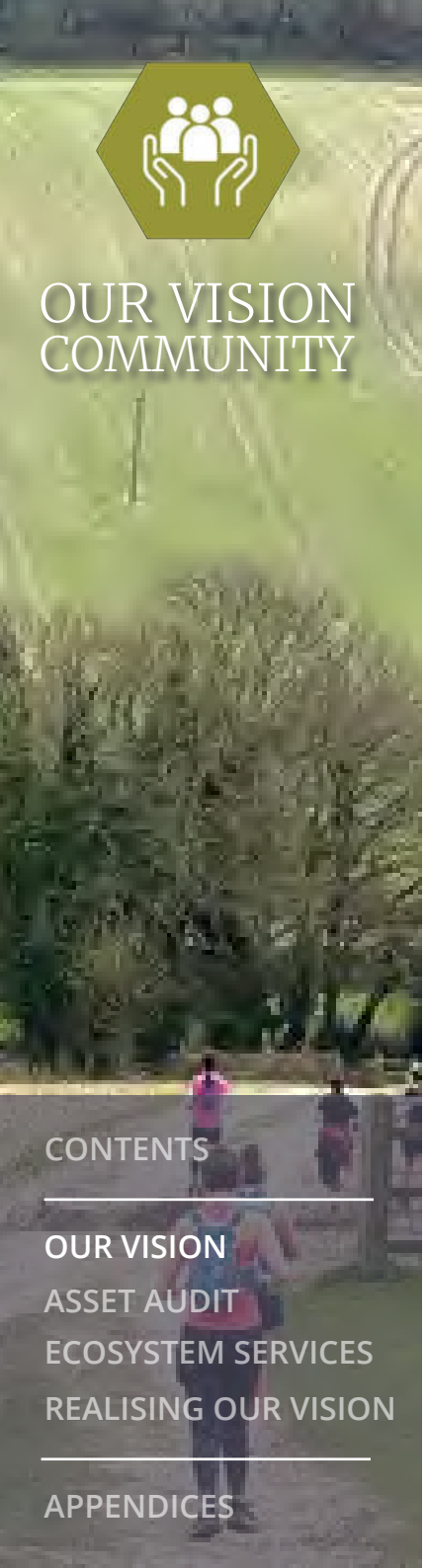
OUR VISION
COMMUNITY

Easter Egg Trail and Christmas Fair

Annually, we organise the Easter Egg Trail and Christmas Fair. These vibrant pop-up events attract between 50 and 150 local visitors, providing a platform for artisans and businesses to showcase their products. It's a win-win: attendees enjoy unique offerings and Westerlands benefits from increased hospitality and retail business.

Antonia selling Westerlands honey.

Local artisan stalls at our pop up Christmas Fair.



OUR VISION COMMUNITY

Community Vision for 2025 and beyond

We aspire to create a community that thrives in harmony with nature, uses renewable energy sources and conserves water, living in a sustainable and regenerative way.

Westerlands should be a welcoming space for people of all backgrounds, ages and abilities. Encouraging cultural exchange, celebrating traditions and fostering understanding among residents will enrich our collective experience. We would love for Westerlands to become a hub for learning. Workshops, seminars and skill-sharing sessions will empower residents and local people to grow personally and professionally. The creation of an onsite community library or resource centre would provide access to knowledge and encourage learning around the regenerative lifestyle we strive to uphold.

We want to foster the prioritisation of physical and mental health. Offering our green spaces, access to walking trails and communal Good Gut Garden will help to promote wellbeing and regular Wildfit classes, mindfulness sessions and health-focused events will contribute to a vibrant, healthy community.

We will continue to find ways to support local businesses and artisans, which will in turn strengthen our local economy. Pop-up markets, collaborative ventures and mentorship programs will foster entrepreneurship, too. As we continue to develop our WeWorkWild remote working offering and offer space to business startups aligned with our values, we hope to encourage innovation too.

Creativity flourishes at Westerlands and we can only see this expanding. Art exhibitions, music performances and literary gatherings will inspire our community and an outdoor performance or community studio space would be an ideal future project for cultural events. There are a number of ongoing planning matters that are being discussed with SDNPA officers to help navigate some of these ideas and future options.

As a Social Enterprise, we can envisage the advent of regular community and volunteer days to carry out nature based initiatives, where many hands make light work. These events will be designed to bring people together, out in nature with a common purpose.

ACTION PLAN
COMMUNITY

Pillar 3 Action Plan
Community & Social

Commitment	Action/Project	Outcome	Timeline	Funding
Deepen visitor engagement using our natural capital and the special qualities of the South Downs National Park* *Appendix 1	Create/design an online and on site map for guests and visitors to help with navigation and to enhance their experience	Clearly show all of our onsite activities and services as well as signpost network of public footpaths and South Downs Way/Serpent Trail	Short term High priority	In house
Keep visitors involved and informed with what's on at Westerlands	Erect a Community Noticeboard for guests and visitors to Westerlands at our Horsebox Café Regular newsletter to a growing number of people in the database	Provide an information point for guests and walkers using public rights of way, with Maps, Biodiversity information, news and events Horsebox Café becomes a information hub and reception area, also mobile when needed Work parties in the Spring and Autumn and other volunteer opportunities .	Short term Medium priority	In house

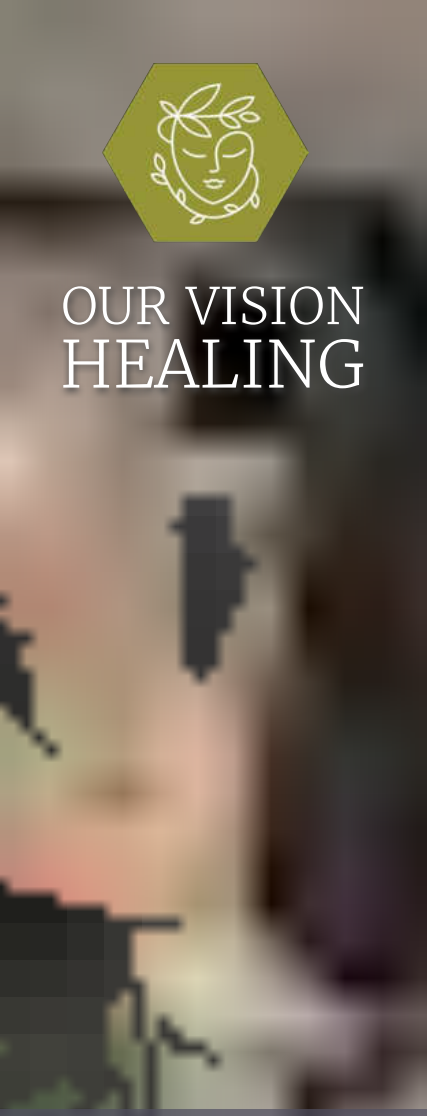
ACTION PLAN
COMMUNITY

Pillar 3 Action Plan
Community & Social

Commitment	Action/Project	Outcome	Timeline	Funding
Offer educational experiences to the local community	Screening of cutting edge Regen and Environmental documentaries at Westerlands plus other relevant events and workshops	Share knowledge and understanding of soil health and regen practices which align our values with our local community, enabling discussion and conversation about this key issue	Short term High priority	In house
Nature & Healing Education for all	Introduction of Permaculture, Medicinal Plant and Gut Health Workshops	Design and deliver informative and educational programmes of workshops available to the local community - with a plan for adequate indoor accessible amenity space	Medium term High priority	We will apply to the Biffa Award Small Grants Scheme or equivalent

OUR VISION
Strategic Pillar 4

HEALTH, HEALING & WELLBEING FOR ALL



OUR VISION HEALING

Nature, Healing

Arguably, if human beings had remained fully connected with the natural world, biodiversity loss and climate change would not be the current emergencies that they are. In encouraging more people to get out into nature and to experience the good it does to mind, body and soul, Westerlands is helping to address a growing Natural Deficit Disorder, using nature to heal.

Our natural capital is already helping to cleanse and to heal and importantly to reconnect people with nature. In time, the hope is that in a multitude of different ways, more and more people will enjoy a relationship with the landscapes and habitats available to them and will begin to understand them better, enhancing their lives and inspiring them to become more engaged and to want to care more consciously for the ecosystem services that nature provides us.

We want to create custodians of the land and whilst doing so, there is an opportunity here to create a positive mental health feedback loop for those most in need. Give to nature and nature will give back tenfold.

Relaxation area in nature.

The modern visitor economy now demands experiences alongside comfortable beds and beautiful views and logically, the right kinds of experiences can only serve to enhance wellbeing further and promote the good that nature can do.

At Westerlands, we are therefore offering experiences which we hope for some will trigger an ‘awakening’ and for others will deepen a connection to and enhance an existing relationship with the outside world.

OUR VISION
HEALING

NATURE ACCESS COMMUNITY HEALING

Equestrian – A British Horse Society Approved Centre

Westerlands has a rich equine heritage. It was, however, important to reduce the numbers of horses to protect the ground and to kick start regeneration, but we are delighted that we've been able to keep a link to the past with the establishment of our pony trekking centre, based out of one of the two Victorian stable yards.

Elly Middleton, an experienced equestrian, manages our riding experiences, taking groups of up to 6 riders at a time, either leading them around Westerlands itself, south onto the hill and Tegleaze or north to The National Trust's Lavington Common and in a loop around the serpent trail. We are happy to welcome novices to experienced riders and for some, we are aware of the therapeutic nature which horses can impart and which is why we have developed our '**Healing with Horses**' series.

The power of horses to help our mental health is well known and it is this, in combination with a deep dive into nature with a four-legged friend, which makes our riding experiences so memorable and increasingly of value to visitors of all ages and abilities.

A growing number of guests come and stay at Westerlands driven by the prospect of riding out from Westerlands. Others bring their horses on holiday from other parts of the UK to experience riding in the National Park and with two yards, redundant stables and lots of grass, we can B&B horses too. Moreover, all types of riding can continue to happen throughout Autumn and Winter which will help to boost activity and occupancy and bring people to the national park outside of the summer season.

OUR VISION HEALING

NATURE ACCESS COMMUNITY HEALING

Healing with Horses

Horses—and the connection they provide—are magical. The benefits of equestrian activities go beyond exercise (strength, balance, coordination, flexibility) and extend into mental health. Horses are sociable and sensitive, making them highly responsive to human interaction. Time spent with them is peaceful, rewarding and deeply connective.

For children, we offer enriching equine experiences designed to build confidence, empathy and a lasting sense of connection.

Our Pony Mornings (ages 5–10) and Pony Academy (ages 10–17) provide opportunities for children to learn how to care for ponies through sensory exploration, storytelling and hands-on activities that spark curiosity and engagement. These sessions go far beyond riding. They nurture a sense of responsibility and help children form meaningful, trusting bonds with the animals.

In September 2025, we will begin our BHS 'Changing Lives Through Horses' programme which supports children whose educational needs haven't been fully met, offering new opportunities for growth and learning.

Our adult wellbeing workshops support personal growth and wellbeing through guided equine experiences, offering opportunities to explore personal development in a supportive, non-judgmental environment.

Our specialised workshops for horse owners focus on equine wellbeing with practical skills like Equine Massage and Equine First Aid to enhance equine care and confidence.

OUR VISION
HEALING

NATURE ACCESS COMMUNITY HEALING

WildFit and WildSpa

The link between physical and mental fitness is well understood and given our vision to address mental health issues and to use our natural capital to heal in different ways, it was a logical step to complement our riding offering with an outdoor, back to basics fitness and recovery offering.

WildFit was conceived and classes of different types can now be booked via the Westerlands website. A 3,2,1,0 chilli scale helps people understand in advance what effort and intensity to expect and in the spirit of inclusivity, there are specialist classes through the week. These specialist classes might address anxiety and stress, diabetes or the menopause and allow people to come together, in a safe place, outside in nature.

Our vision with WildFit from the very beginning was that there should be something for everyone and that everyone is welcome. We work with a wonderful group of generalist and specialist trainers who are now part of the Westerlands family.

WildFit class in progress.

The idea with WildFit is twofold, to encourage greater numbers of guests to stay with us and enjoy this additional activity option and to create a local community hub where people can come and exercise in a friendly, natural and relaxed atmosphere.

Quite often, after a session, people convene at the horsebox café for a drink and a chat or go directly to our WildSpa to enjoy a wood fuelled sauna, followed by a dip in the cold water plunge pool. Others choose to combine a WildSpa with a treatment or therapy in The Rose Room in Westerlands Farmhouse.

OUR VISION
HEALING

NATURE ACCESS COMMUNITY HEALING

Wellbeing Retreats and Workshops

Wellbeing Retreats & Workshops, yoga/pilates, mindfulness, soundbaths, treatment rooms. We are now building on what our natural capital can do for people by expanding further into the wellbeing space.

We are doing this by offering a number of different classes, workshops and retreats either on a regular or ad hoc basis. These, then, give people another reason to come and visit, especially in Autumn and Winter. As with the riding and the fitness, we work with professional, like-minded therapists who will also impart their knowledge. As well as being a deeply relaxing and safe, healing environment, we want these sessions to also be educational and a good learning experience for all.
By offering more activities & experiences at Westerlands & Tegleaze which complement our Vision and Pillars, we are giving more people more reasons to come and stay. We want to become known as a wellbeing destination in nature.

The Rose Room ready for a massage treatment.

Treatments & Therapies

The Rose Room is a beautiful, calm and healing space, located in the original 17th Century part of Westerlands Farmhouse. It is used by a number of therapists providing a variety of services:

- Private Yoga Lessons
- Sound Baths
- Reiki Healing
- Massage
- Reflexology
- Physiotherapy
- Intuitive Readings

OUR VISION HEALING

GoodGut Garden

We have a number of special spaces which tie [illegible] Garden is our community veg[illegible]able [illegible] it, allowing visitors to come and work in the garden, pick vegetables and enjoy the space. We sell veg boxes to the resident community and campsite and always grow something which is especially good for the gut biome.

Farm grown vegetables sold to guests and walkers and paid for via an honesty box.

MindBodySoul Garden

The MindBodySoul Garden, whilst still in a concept phase, will incorporate a redundant tennis court. A circular decking area is conceived for the centre of the tennis court which will be a place for groups to come together for yoga, breathwork, reading or poetry, meditation or mindfulness and again, being outside in nature, will assist with health and healing. A 'growing maze' will surround the decking.

Consideration will be given as to what plants, shrubs and trees are grown in this area, but raised boxes could house more vegetables, lavender, commercial flowers, wild flowers for pollinators, a nursery for trees, medicinal plants (physic garden) and so on. It is envisaged that hundreds of different plants will be on show in this area.

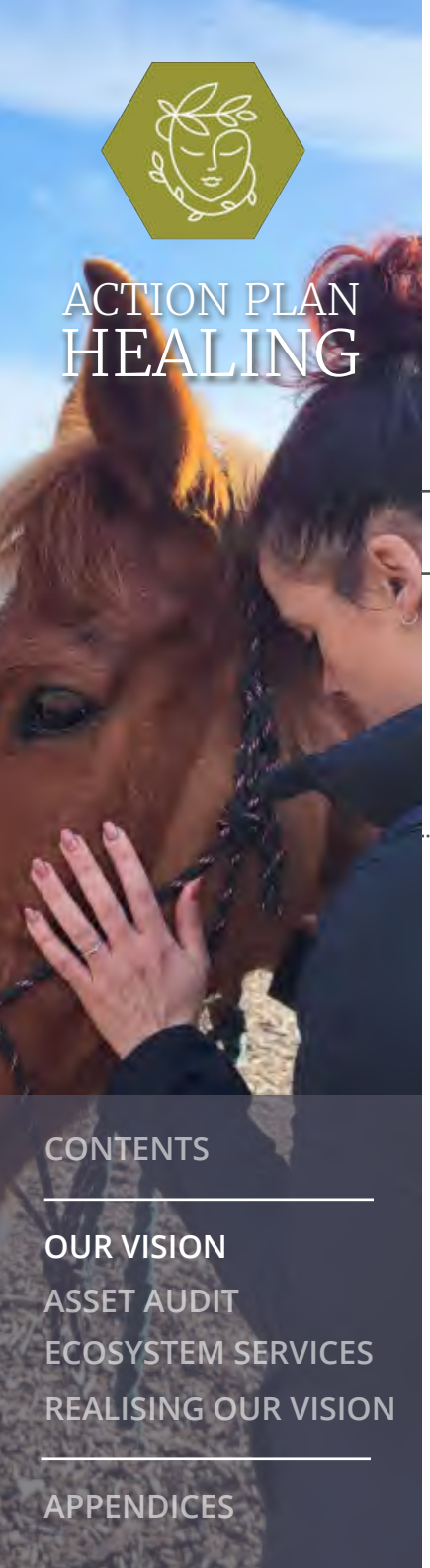
OUR VISION
HEALING

Simply Being at Westerlands

Mental health issues have been on the rise for a long time in the UK, certainly the last 15 years. A global financial crisis, Brexit, Covid19, cost of living, interest rates and war in Europe have combined with the relentless 'white noise' of social media and the blurring of home / work life balance to push people to the edge. There has been a cumulative build up, with layers of pressure filling people's minds to capacity.

Society has conditioned us to be in the 'business of busyness', to keep peddling harder, just to stand still. This is clearly not sustainable and Westerlands can be the antidote. Whilst we enjoy hosting guests and offering a range of experiences and activities, sometimes the best thing to do is to slow down, to pause, to stop, to ***simply be*** at Westerlands. We see the 'Westerlands effect' first hand, how people react to being here, how they change when they are here and how they look when they leave. It's a nice feeling and being in nature plays a big part in this.

A place to stop and rest at Westerlands, listen to birdsong and enjoy uninterrupted views of the South Downs.



ACTION PLAN
HEALING

Pillar 4 Action Plan
Health, Healing and Wellbeing for All

Commitment	Action/Project	Outcome	Timeline	Funding
A commitment to GoodGut Health	Provide fresh and nutritious produce from our "Good Gut Garden" and Farm to support the gut micro biome for residents and visitors	Development of our GoodGut and MindBodySoul Gardens	Short term High priority	Exploring the BIFFA Award Grant or equivalent
Offering experiences with animals as therapy	Equine Assisted Therapy to support mental health and physical therapy for all, including programmes for neurodiverse children and adults. Interaction with farm animals to promote cognitive, emotional and physical development	An important bolt on to the existing pony trekking business which gets people out into nature Helps those who most need it and develops an understanding of the workings of an operating farm and where food comes from	Short term High priority	We will apply to the Biffa Award Small Grants Scheme or equivalent

ACTION PLAN
HEALING

NATURE ACCESS COMMUNITY HEALING

Pillar 4 Action Plan
Health, Healing and Wellbeing for All

Commitment	Action/Project	Outcome	Timeline	Funding
The development of a year-round Wellness, Wildfit, WildSpa and Wellbeing Retreat programme	Build a full programme of accessible fitness classes and facilities for all weather and for larger groups A focus on Walking, Running and Cycling groups	• Gets more people out in to nature and drives occupancy and visitor economy • Improves physical and mental fitness • Underlines the concept that nature heals	Mid term Medium priority	In house
Providing enriching experiences based on culture and heritage of the estate and the SDNP	Promoting art in the local area Creative Writing and Poetry Workshops Art workshops	Creation of new dedicated spaces and facilties to promote educational, recreational and cultural activities, arts and entertainment, visitor/community attractions Expand on and promote the Graffham Art Trail	Mid term Medium priority	Community Grants

ACTION PLAN
HEALING

Pillar 4 Action Plan
Health, Healing and Wellbeing for All

Commitment	Action/Project	Outcome	Timeline	Funding
Creation of corporate event venue - where business and wellbeing intersect	Explore options for space creation across the existing built environment, with positive regard given to endorsed plans	New, indoor and versatile space to address increasing demand from bigger groups who can combine business with healing / wellbeing	Short term High Priority	Bank finance / sponsorship
Creation of versatile space to promote community, culture and the arts	Explore options for space creation across the existing built environment as above	New, indoor and versatile space for pop up theatre, art exhibitions, musical recital and other community, cultural events	Short term High priority	Bank finance / grant / sponsorship

ASSET AUDIT

Asset Audit

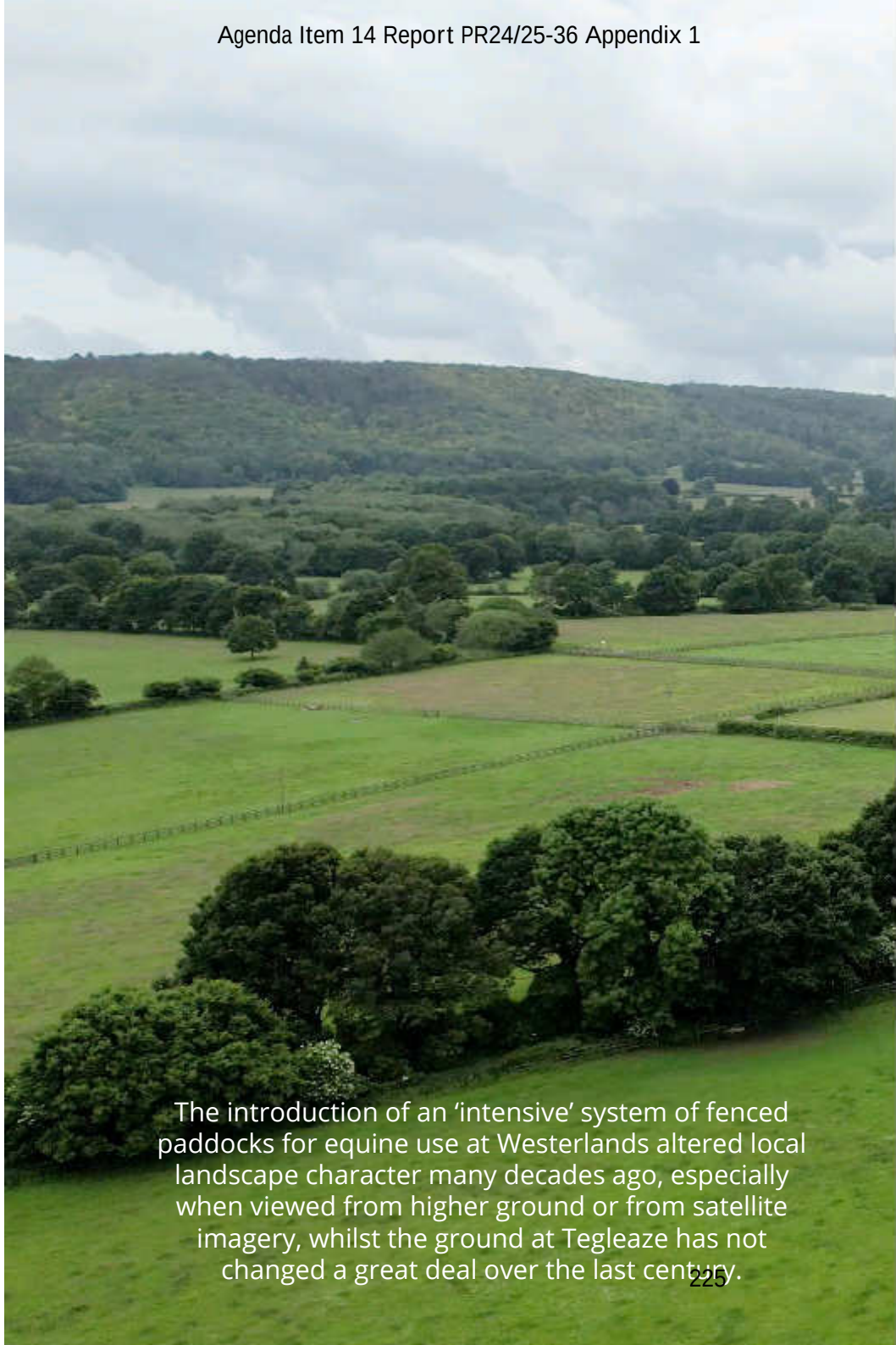
CONTENTS

Introduction

ASSET AUDIT

Our asset audit is a picture of all the main assets at Westerlands and Tegleaze, both physical and non-physical. What follows is a summary of our land and buildings, public rights of way, our community, our people and their skills, areas of interest and special focus, for example soil and dung beetles, tranquility and dark skies, enterprise and activity and our historic environment and cultural heritage. Our goal in setting out our assets in this way is that they are seen and understood, both within their local and a wider context.

The South Downs is the most wooded (24%) of our 15 National Parks - a wonderful habitat which creates a contrast with and adds diversity to the iconic chalk downland landscapes, often seen in paintings and literature. Westerlands' landscape character runs from sandstone heath and woodland commons in the north (National Trust owned), through a pocket of Sussex Rother Terrace sand and gravel overlying mudstone to Weald silt and clay to the south, then transitioning to Greensand at the foot of the north facing downland scarp slope, and then to the chalk downland of Graffham Down and Tegleaze.



The introduction of an 'intensive' system of fenced paddocks for equine use at Westerlands altered local landscape character many decades ago, especially when viewed from higher ground or from satellite imagery, whilst the ground at Tegleaze has not changed a great deal over the last century.

ASSET AUDIT
NATURAL CAPITAL

ASSET AUDIT
NATURAL
CAPITAL

Natural Capital

Our Natural Capital spans two different sites, Westerlands and Tegleaze, with Westerlands located close to the village and community of Graffham and with Tegleaze sitting above Graffham, high up and more isolated on the Downs with 2 miles of the South Downs Way along its northern edge. Very nearly all the acreage at Westerlands and Tegleaze can be described as 'natural assets'.

Image taken from LandApp, the digital mapping software we are using to help create a landscape management and habitat creation plan to include hedgerows and scrubland, wood pasture and new woodland and the overall improvement of our permanent grassland. Graffham Down Trust managed land lies to the west of Tegleaze.

NATURAL BUILT COMMUNITY CULTURAL ENTERPRISE

ASSET AUDIT NATURAL CAPITAL

Our Focus

Increasingly known as natural capital and by any definition therefore, deserving of a value, the role of natural capital in tackling climate change and reversing biodiversity loss should not be underestimated. Conserving and enhancing the natural world with its diverse habitats and extraordinary biodiversity will afford ecosystems and the services they provide, an increased chance to thrive and to restore a natural balance. If we humans acknowledge we are part of and not detached from that natural balance and we allow unencumbered growth of our natural assets, i.e. more regeneration, more diversity and more abundance, then more carbon will, in turn, be sequestered from our atmosphere, more will be stored underground and the heating process we now know as climate change can be slowed.

From the depth and structure of healthy soils to the canopy tops of woodland trees and all life in between, we will be allowing Mother Nature to do her job and at Westerlands and Tegleaze, we are now 100% focused on the future of our natural capital to help mitigate these well-known risks. We are single minded in wanting to protect the ecosystem benefits derived from our natural capital as without these, the future does not look bright.

OUR REGENERATIVE FARM

2 BORE HOLES
We installed 2 bore holes in 2016 which supply the whole estate

521 ECO-ENGINEERS
20 Breeding Dexters, 1 Bull and 29 followers. 191 Romney and Badger Faced Ewes, 4 Rams and 249 lambs

2 BIOMASS BOILERS
These boilers installed in 2015 provide hot water and space heating across permanent properties

347 ACRES OF PERMANENT GRASSLAND

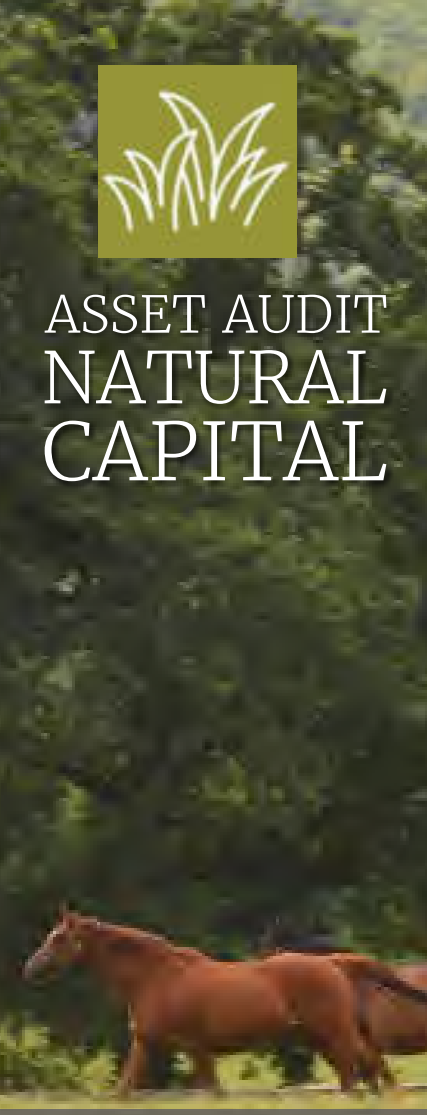
120 ACRES OF WOODLAND
100 at Tegleaze on the Downs. We also plan to restore a further 50 acres of Woodland Pasture

2720 METRES OF NEW HEDGEROWS
Between 2022 and 2025 we planted 2720 metres of hedgerows. We plan to plant a further 500m in 2026

2 STREAMS/DITCHES
We have 2 water courses of 1.5km flowing to the River Rother, that run through the estate

2.5 KM OF PUBLIC FOOTPATHS
Footpaths traverse the estate

5 BEE HIVES
from which we harvest an average of 300lbs of honey per year



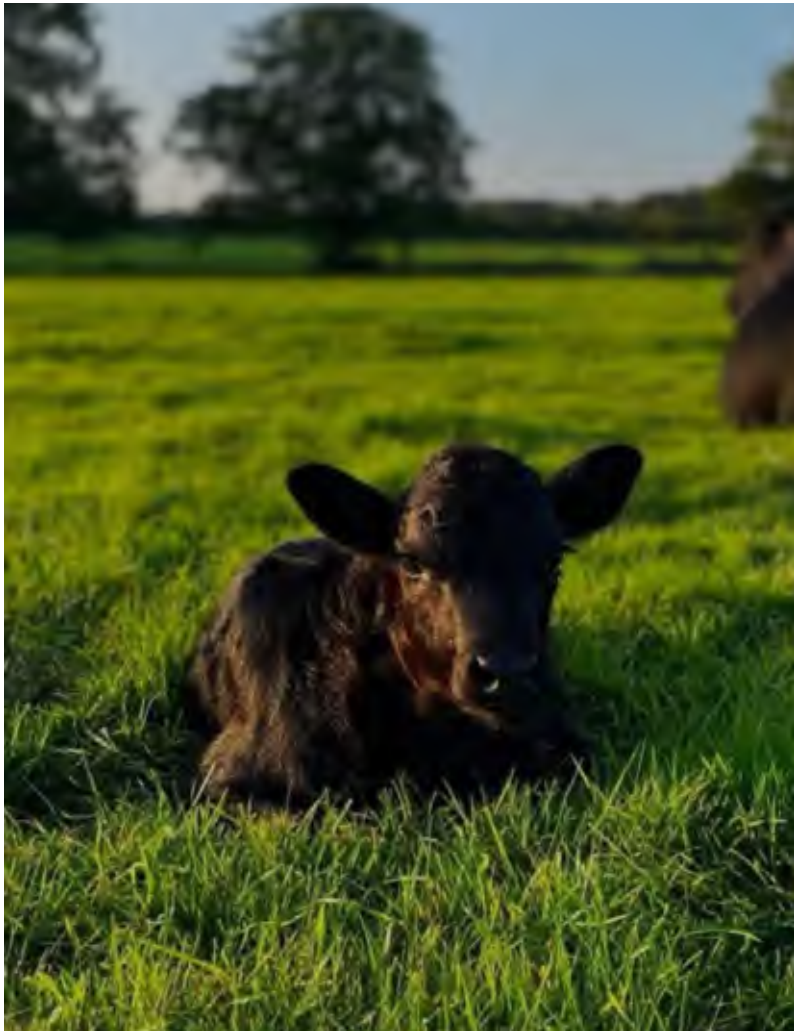
ASSET AUDIT NATURAL CAPITAL

Westerlands

Land Use, Then & Now

The block of land known as Westerlands is 239 acres, comprising 35 fields of different sizes, from 0.5 acre to 19 acres. The geology is split between 40% greensand and 60% clay, the lighter, sandy ground to the north, giving way to heavier, mineral rich clay to the south. Historically, the two land types made for perfect summer/winter equine rotation.

Now, these same paddocks, mostly with the original equine post and rail fencing still in place, host cattle and sheep, also at different times of year. These days, however, gates are often left open to allow the herd and flock the time and space to roam naturally through the farm, often choosing different places to be, at different times, depending on conditions. Much of the post and rail fencing is slowly falling into disrepair and one option is to flank sections with new hedgerows (already started in some places) or remove completely to return the landscape character to a former era. As soils improve, adaptive, multi-paddock grazing techniques will be used more, where we mimic nature's predator <-> prey relationship to keep herd and flock moving. This is designed to result in high intensity grazing of a specific area, followed by long rest periods.



Dexter calf in the fields at Westerlands.

ASSET AUDIT
NATURAL CAPITAL

Westerlands

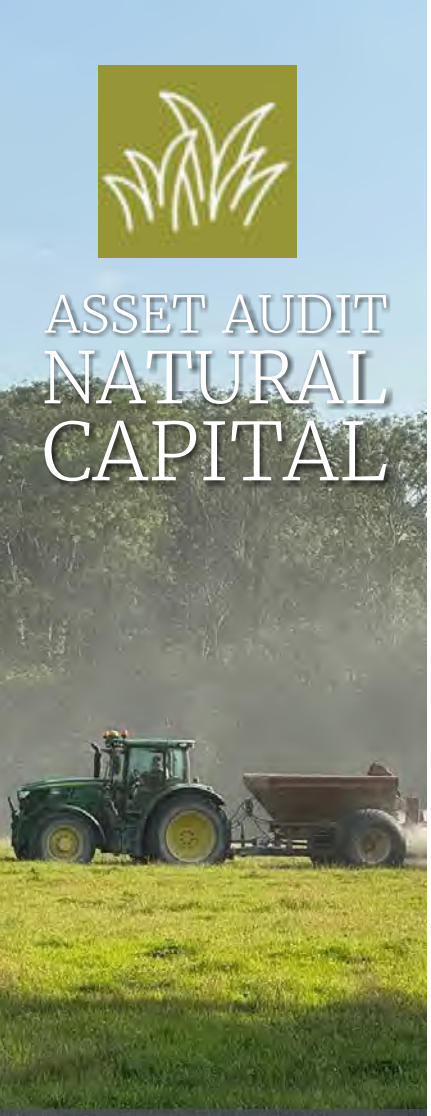
The influence of Climate Change

Climate change is now causing cycles of extreme weather patterns, often too wet or too dry and usually shifting rapidly from one to the other and back again. This influences decision making. In very wet conditions, usually Autumn/Winter, we are thankful for the better draining, sandy ground as the clay becomes waterlogged and unfit for any livestock. In dry conditions, especially in summer, the clay ground will hold a reservoir of moisture for longer, giving the sward a lifeline whilst the lighter, sandy ground will start to bake. So far this century, we are seeing more frequent periods of heat and drought which can lead to the sandy ground burning off completely and the clay ground beginning to crack.

Managing land and livestock is therefore becoming more challenging, but we are grateful for the two soil types at Westerlands which offer some optionality. Whilst the paddocks are not in bad condition, we now understand how the biology, chemistry and physics need to balance for our soil structure, biome and the sward above to thrive. We are looking to improve and manage the water and mineral cycles and we need to find ways to build in climate resilience over the next 20 years. Our ground is our most important asset therefore and we need to look after and protect it. Our livestock live outside all year, naturally.

Just as climate change alters habitats and ecosystems, loss of biodiversity contributes to climate change and intensifies its effects. It's a cycle which, if not addressed now, will end in an irreversible tipping point. Addressing biodiversity loss is a shorter term fix and all land managers and farmers can make a contribution.

Romney sheep grazing at Tegleaze.



ASSET AUDIT NATURAL CAPITAL

Westerlands

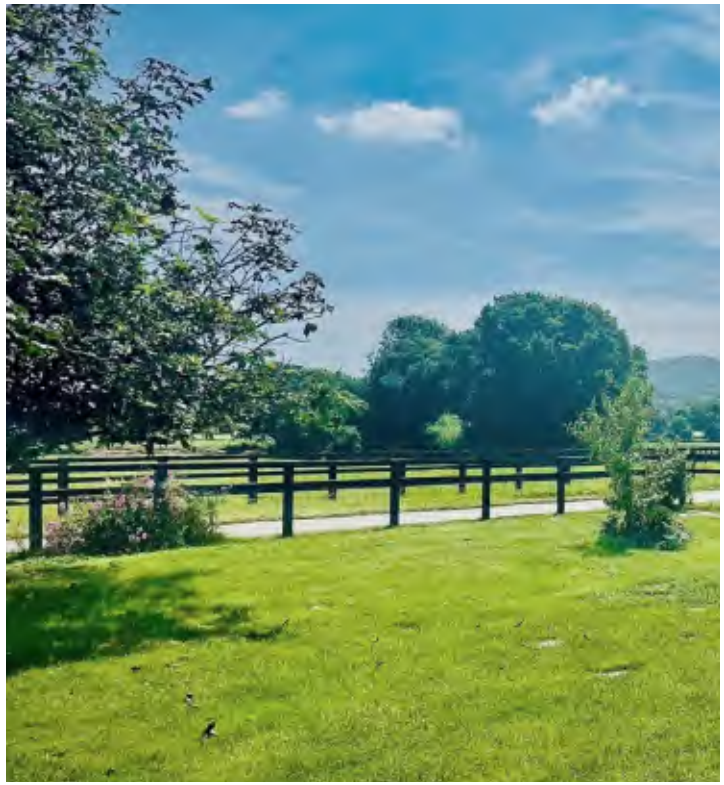
Transitioning away from Monoculture

We have already engineered a major land use change over the last 10 years with the transition away from the concentration risk of 'horses only' to a mix of diversified activities, but with a focus on livestock, farmed in a regenerative, wildlife and climate friendly way.

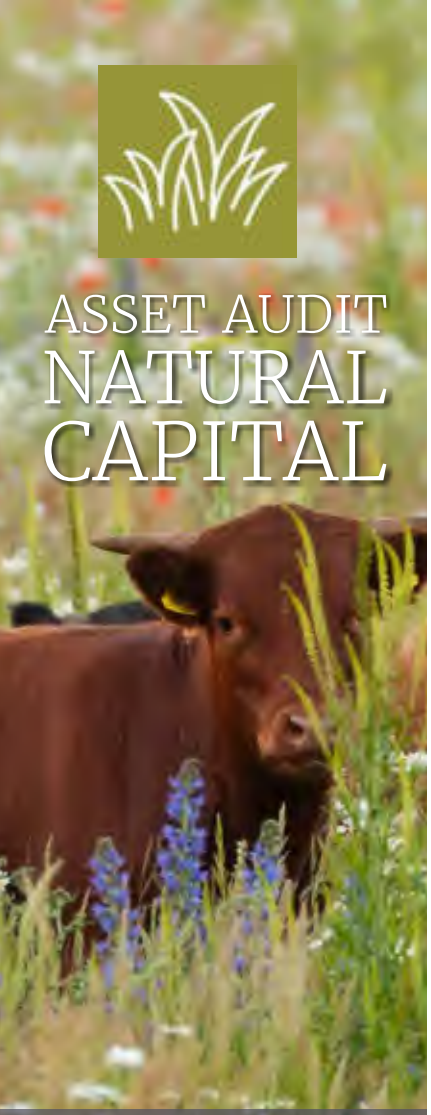
Racehorses can weigh more than half a tonne which means they compact the ground (the fence lines at Westerlands are half a foot higher than the field itself), whereas the cloven hoofed feet of sheep and cattle help to massage grass, plant roots and other material into the ground, resulting in a higher organic matter content, which improves the health and 'crumb' structure of the soil and which in turn, is better at receiving and storing water (holding capacity), providing better water infiltration during the extreme periods of dry and wet weather which is becoming the norm due to climate change.

For decades, the stud farm at Westerlands comprised two stable yards, post and rail fencing and green grass. There was linear uniformity everywhere, straight line hedges, cut thin and short. The grass was blanket sprayed with herbicides, there was no colour and no plant life other than perennial ryegrass of the right type and look.

With hindsight, this was certainly a type of monoculture with no room for Mother Nature. For decades, nothing was done nor managed with wildlife, habitat and climate health in mind.



Legacy post & rail fencing from when Westerlands was a stud.



ASSET AUDIT NATURAL CAPITAL

Westerlands

From Compacted ground to soil friendly Mob-Grazing

For more than a century, the weight of horses compacted all the ground at Westerlands, squeezing the life out of it. Now, to regenerate the land, we use cattle and sheep, in the right stocking density, to move around at their own pace, promoting growth and massaging and disturbing the ground's surface to increase the organic content and improve overall soil structure.

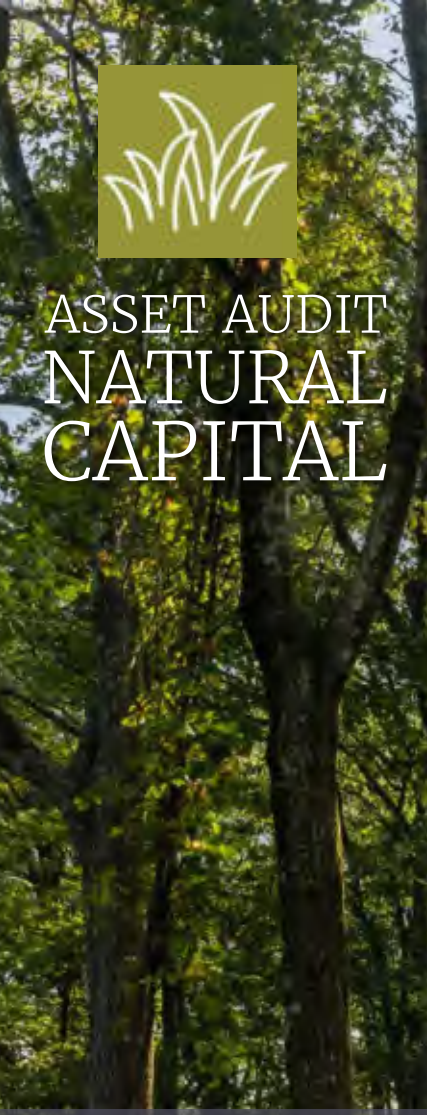
After decades of abuse, we are using livestock as eco engineers to start a process of repair to the ground and to nurture the early stages of nature recovery and restoration. In addition, a permanent break from all fertilisers and all chemical spraying in 2020 is already starting to yield positive results in increased biodiversity and abundance. We are not certified organic, but operate organic, management practices.

We are working with specialist consultants Envance who conducted a biodiversity and ecosystem services baseline audit in summer 2024 to measure exactly where we are now and to provide data on which to build. The increase in insect and birdlife has been particularly noticeable since 2020 and the pandemic.

WESTERLANDS PROTECTED INSECT *Species*

Red List Designation
Invertebrates recorded within a 2km radius of Westerlands since 2013.

(Source: Sussex Biodiversity Records Office)



ASSET AUDIT NATURAL CAPITAL

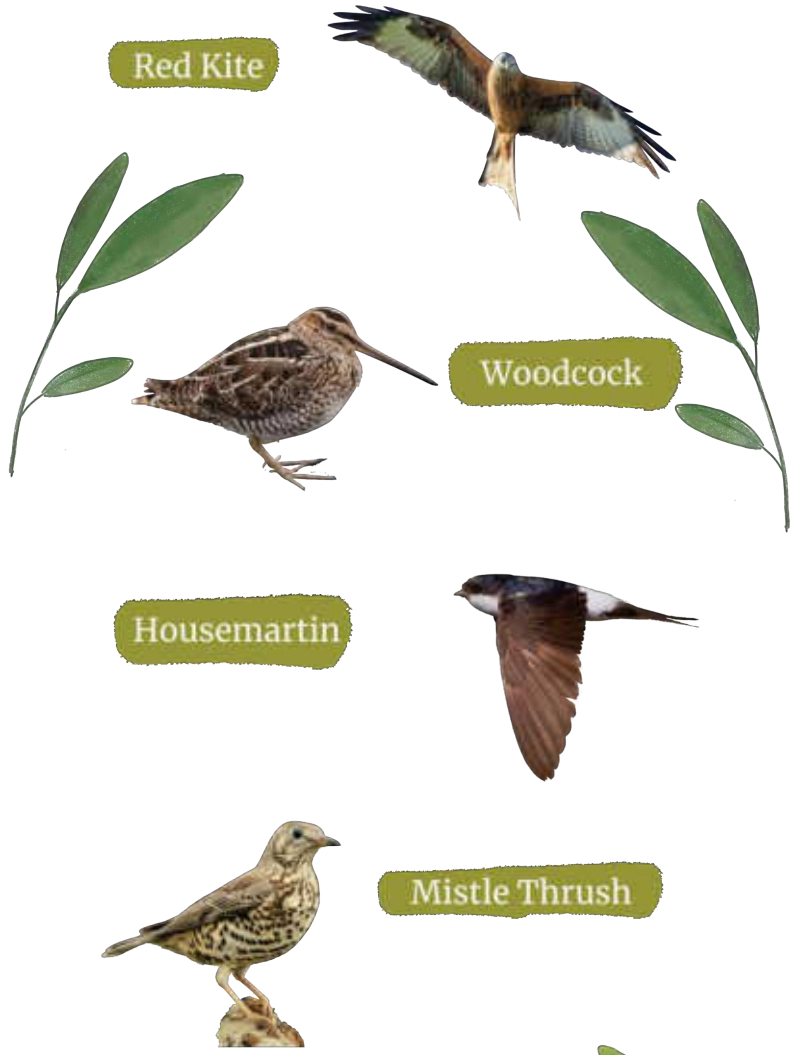
Westerlands

Woodland Habitats

Trees and woodland surround almost the entire Westerlands circumference. Only a short section of eastern boundary (350m) is without trees but completes this side with thick hedging instead. Westerlands is therefore 'enclosed' and makes for the interesting concept of protecting nature within. Moreover, there are several mature and specimen oaks, many flanking the ditches in different parts of Westerlands. Up to 2300 species are known to be associated with oak trees, not including types of fungi or bacteria and other microorganisms which create a symbiotic home with this noble tree (we planted one to note the King's Coronation 6/5/23). Whilst the oak, therefore, is a king of biodiversity, sadly most of the ash trees are dying. When they fall, we try to leave them in situ, to provide food and shelter to many and to slowly return organic matter back to the earth. Other tree species, mainly birch, sweet chestnut, field maple, sycamore, holly, poplar and pussy willow are prevalent at Westerlands and the majority are in good condition.

Our intention is to increase connectivity between our woodland and other nearby habitats (e.g. the National Trust heathland) by planting corridor trees, more hedging and allowing areas of new scrub to get a foothold to encourage rare, ground-nesting birds e.g. nightingale and red-backed shrike. Larger exclosures can also be built in a quiet spot at the back of the farm, specifically for this purpose.

WESTERLANDS PROTECTED BIRD Species



Red List Designation Notable Birds recorded within a 2km radius of Westerlands since 2013.
(Source: Sussex Biodiversity Records Office)

Spotlight

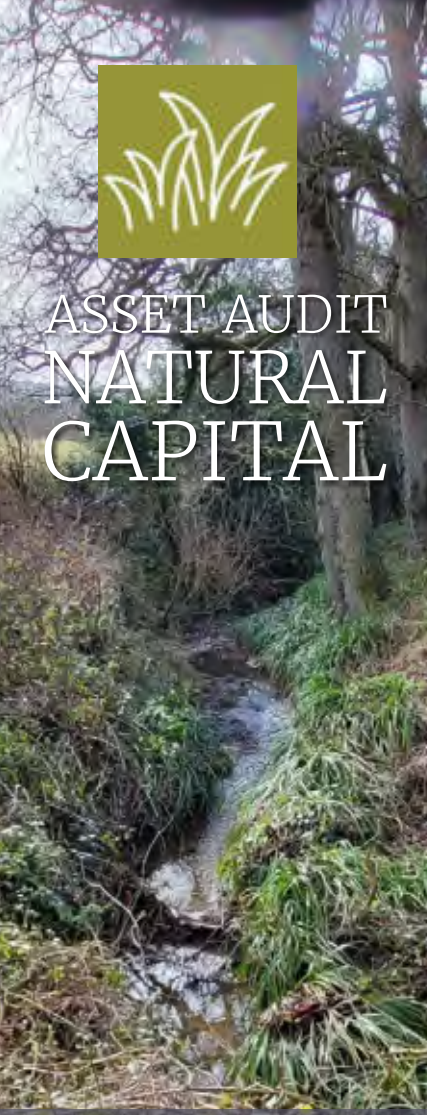
Habitat Restoration: Dominies Wood

The heavier clay fields to the south, known now as Parks 1 to 5 used to be woodland known as Dominies Wood, but this area was heavily thinned by a previous owner and then further damaged in the famous October 1987 storm. Oak trees still remain in 'the park' but in the aftermath, the debris was cleaned up and the ground turned into paddocks. Some oaks are currently standing dead, their bark having been 'ringed' all the way around by horses (cattle and sheep don't / can't do this).

Aerial photography from the 1940s shows how heavily wooded this area once was.

Dominies Wood offers us an opportunity to restore an area of landscape and habitat. We are exploring various schemes including The Woodland Trust "MOREWoods Scheme" and The England Woodland Creation offer. This will be an expensive project that needs funding, but we are committed to the concept and are exploring this with Forestry England via the creation of a new woodland management plan. In addition, we are exploring whether this area may also be suitable for the creation of habitat banks for future biodiversity net gain. If so, this will be central to our ambition to realise a mosaic of interconnected and wildlife rich habitats.

Map: ESRI World Imagery (Present Day) | Ariel Photo OS 1:10560 1944-1950 | Map: OS 1 inch 1885-1900



ASSET AUDIT
NATURAL CAPITAL

Westerlands
Water Habitats

We are also fortunate to have 2 watercourses which cross Westerlands from the south, joining up together in the middle of the farm and heading north to meet the River Rother. These are fed from the large South Downs catchment area just south of Westerlands, with natural springs bubbling to the surface in places to help feed the network. In total, there are 3 km of watercourses crossing Westerlands, much of which has carved steep-sided banks as volumes of water have increased over the years. A ditch network of land drains feeds into this water system, too.

These quiet areas are great habitats for small mammals, farm birds as well as pairs of mallard and mandarin ducks which come to nest. Mature oak trees flank these banks marshalling the flow of water as it heads north. They are all left undisturbed, with no human access. At one point only, a bridge crosses the water flow near Lower Barn House.

In lower lying areas and when clay ground starts to become saturated, 'pop up' dew pond type habitats appear, especially in 'the park' ground (previously Dominies Wood) where tree wells have left indentations in the ground. These are clearly visible from above on the hill. Small, clean water ponds can be rich wildlife habitats, supporting aquatic insects and birds. Frogs, toads and newts have been seen in these places at Westerlands as well as in livestock troughs and garden ponds.

Moreover, after very heavy rain, overflow from the stream can create larger bodies of water in certain fields which can often attract water birds such as Little Egrets, Herons and Egyptian geese. Lapwings have been seen, too, but only once. With the next round of dry weather, these areas disappear, but the benefit of having them is clear. Our aspiration is therefore for a more permanent pond or small lake to create more of these important water based habitats.

ASSET AUDIT
NATURAL CAPITAL

Westerlands
Hedgerows

Framing many of the paddocks are mature farm hedges, comprising mainly blackthorn and hawthorn but with more variety beginning to appear, now. In contrast to the old, stud farm days, these are now allowed to grow 'wild and woolly' and really harbour an abundance of life through the year. Since 2022, >2.5 km of new predominantly Hawthorn hedging has also been planted with several different varieties including, amongst others, Guelder Rose, Spindle, Wayfarer. Hazel, Crab Apple and Field Maple. These, too, will be allowed to grow wild over the next 20 years and become a haven for mammals, ground nesting birds and more. All of these link to existing areas of hedge or woodland and will provide cover and connectivity.

We are also complementing long standing wildlife corridors by planting new, double hedges, purposefully leaving wide gaps for wildlife protection. These will develop scrub areas, left to become overgrown and create cover and shelter for all types of wildlife. Native hedges are one of the most important and diverse wildlife habitats in the UK and which is why there is so much emphasis on conserving old and planting new. We plan to continue this project to cover other areas of the farm with a hedgerow planting schedule each Winter. Most recently, in February 2025, a volunteer group from the Lifelines programme by charity St. Ethelburga's visited Westerlands for the weekend and planted 250m of new hedgerow whips.

ASSET AUDIT NATURAL CAPITAL

Westerlands
Meadows and Field Edges

Conscious decisions are made about grazing management and which fields to 'lock up' either to make a few bales for livestock winter forage or to leave entirely to wildlife for longer periods. Leaving margins and entire fields to grow wild gives cover, shelter and shade (in times of drought), protecting both the ground and wildlife. In the summer, swallows, swifts and housemartins skim the tops of these fields, picking up insects on the wing. Barn owls, too, can often be seen 'quartering' a field in search of an evening meal.

Westerlands
Bonfire site and Gardens

Even where there is more human activity, wildlife finds shelter and a home. Areas of stacked wood, green waste or compost, woodchip and mulch, flowerbeds and flowerpots, under flagstones and in many gardens, nooks and crannies, wildlife will find a place. As long as toxic chemicals are never used, a rich, biodiverse world can happily coexist alongside human beings. We feel it is important to be mindful and to make space for nature in and around the built environment. In 2024 and for the first time, gardens at Westerlands joined the 'NoMowMay' initiative to support all pollinators in what is arguably the most important growing month of the year. Dandelions are particularly important and often get mowed.

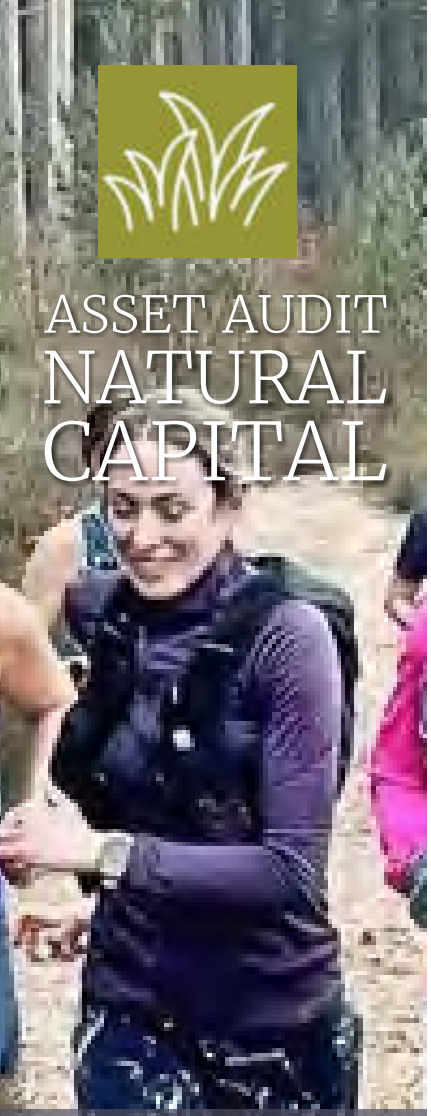
WESTERLANDS PROTECTED MAMMAL Species

West European Hedghog

Hazel Dormouse

European Rabbit

Red List Designation Terrestrial Mammals recorded within a 2km radius of Westerlands since 2013.
(Source: Sussex Biodiversity Records Office)



ASSET AUDIT NATURAL CAPITAL

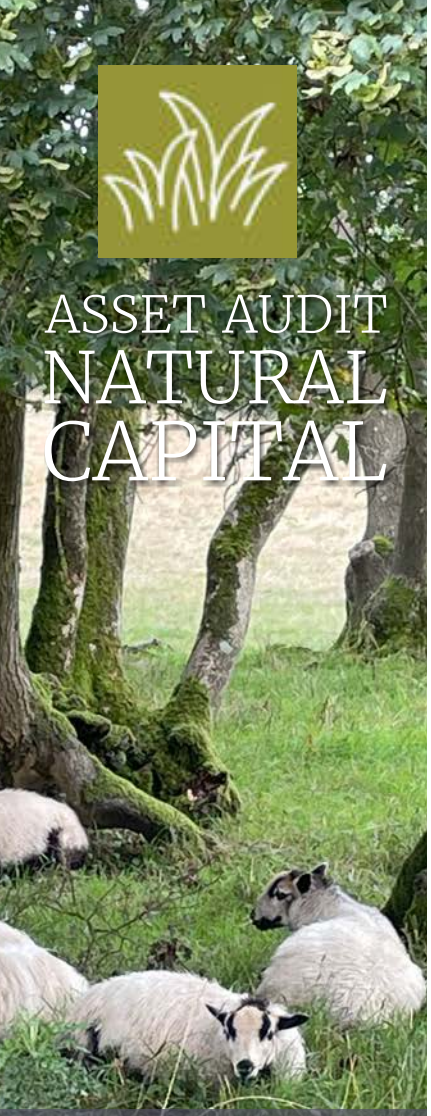
Westerlands

Human Access

As Westerlands opens its doors to more visitors each year, we try to give nature the space it needs to thrive and allow the wildlife to live, rest and breed in peace. However, finding and creating space for humans, too, is also part of our vision. Whilst there are no public rights of way across any of the fields, there are 1.5 kms of footpaths through the middle of Westerlands, giving walkers uninterrupted views (on both sides) of livestock, wildlife and other flora and fauna.

Those walking between Graffham and Duncton will pass through Westerlands with access also possible into Lavington Plantation and Common (borders to the north) which is National Trust owned heathland (also a rare habitat). This then links into the Serpent Trial and Graffham Common and on to neighbouring villages such as Selham and Heyshott. Walking south out of Westerlands' back gate, footpaths and bridleways lead through Lavington and Seaford College and up the north face of the hangar woodland (Woolavington and Graffham Down) to link to the South Downs Way and Tegleaze at the top. There is therefore a good network of public rights of way through and around Westerlands to link villages and their amenities, with a lot of rural peace and tranquillity in between. We encourage 'dwell time' at Westerlands and Tegleaze for people to Stop, Look and Listen.

Children enjoying a nature walk at Westerlands



ASSET AUDIT
NATURAL CAPITAL

Tegleaze

Land Use, Then & Now

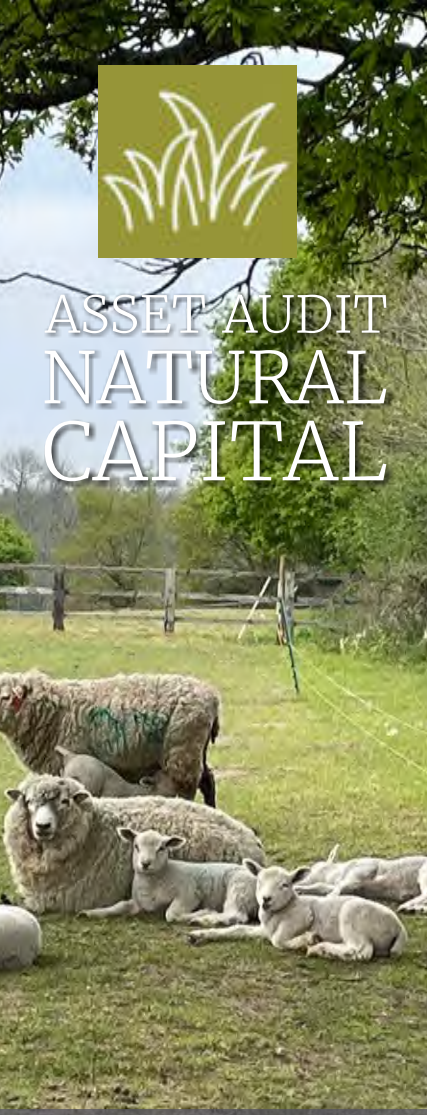
The block of owned land known as Tegleaze is 228 acres (100 of woodland), comprising 16 fields of fairly equal sizes and this whole area is best described as chalk downland. For more than 10 years, the majority has been managed under Natural England's Higher Level Stewardship scheme conditions, chiefly to preserve, protect and restore rare, chalk grassland habitats. Typically, the sward in this area contains* Marjoram, Perforate St.John's-wort, Crosswort, Wild Basil, Harebell, Cowslip, and Fairy Flax as well as Common Valerian, Small Scabious, Crosswort, Ladies Bedstraw, Pyramidal Orchid, amongst others, but here is more to be done to improve towards a really species-rich grassland habitat. Tegleaze is a very special place and deserves maximum protection as well as its own designation.

*Appendix 3

There isn't much depth to the soil, but enough (with careful management) to yield good grass and an interestingly mixed sward. With a base of porous chalk, the ground drains extremely well during periods of wet weather and we are therefore grateful for it in winter. As with Westerlands, the whole area is entirely flanked by either woodland or corridors of trees (Crown Tegleaze, furthest east is woodland owned by a third party) giving it a magical, isolated and secluded feel.

A recent (Summer 2024) bat survey* yielded 12 different species of bats at Tegleaze, with the common pipistrelle being the most abundant. However, rare species such as barbastelle and brown&grey long-eared bat as well as Natterer's and Leisler's Bat were recorded, indicating that the site may have significant value on a regional scale and potentially, on a national scale, if significant roosts for these species are present. The presence of 12 species underscores the importance of conserving local bat habitats and ensuring minimal disruption to their activities.

*Appendix 8



ASSET AUDIT NATURAL CAPITAL

Tegleaze
Then & Now

Goodwood's Charlton Forest borders to the south which is a large block of mainly beech, managed by Forestry England. Whilst the South Downs Way, a National Trail, runs the length of the northern boundary of Tegleaze and sees increased footfall each year, the whole area retains a rural and wild feel, with breathtaking views to the north and south from some of the highest points in the county. From a management perspective and imagining the Tegleaze block as a separate entity from Westerlands, our vision ten years ago was initially for a downland livestock unit and which prompted the need for adequate fencing and plentiful water. Natural England funded the drilling of a bore hole and water pipe trenching whilst a capital grant for fencing and livestock troughs completed the project.

Cattle and sheep now live an idyllic life behind stock tight fencing and water is gravity fed to all corners of Tegleaze, including to the closest of the Graffham Down Trust nature reserves along the South Downs Way to the west. It is possible to open gates through the majority of Tegleaze to allow livestock to mob graze. There is only one area, just east of Tegleaze Farm, where animals have to be marshalled across a footpath and strip of woodland for 70m to reach a nearby field.

A Selection of Red List Designation Invertebrates recorded within a 2km radius of Tegleaze since 2013.
(Source: Sussex Biodiversity Records Office)

ASSET AUDIT NATURAL CAPITAL

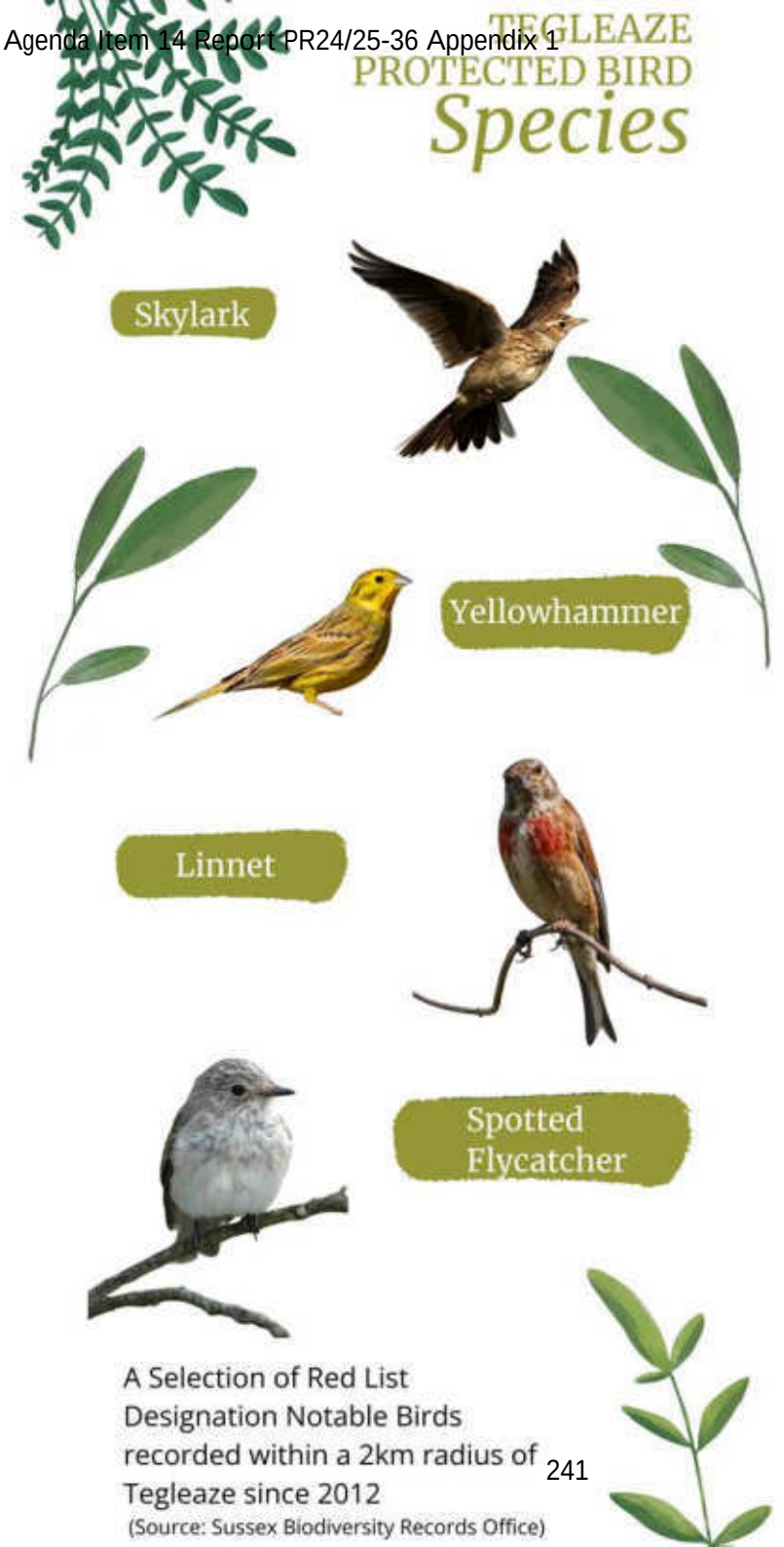
Tegleaze

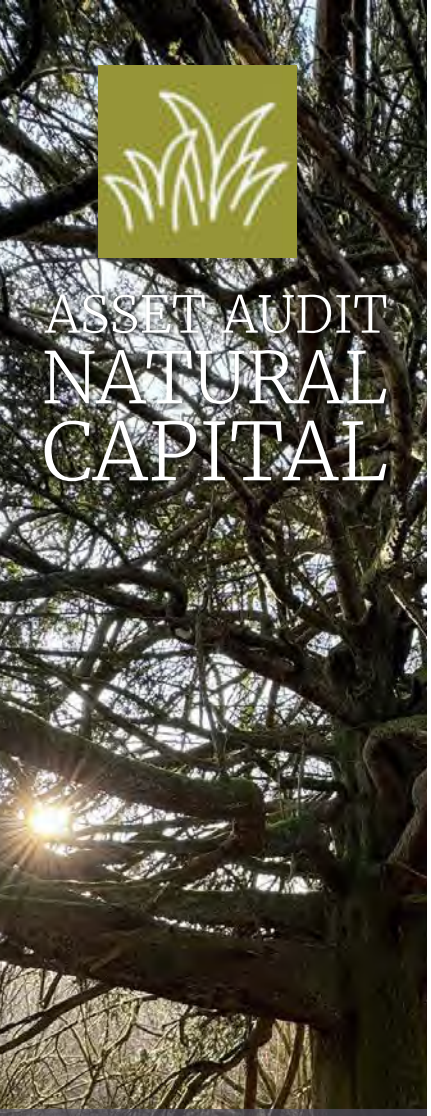
Shoot traffic v Mob grazing

For decades, a pheasant shoot operated across the whole area, with birds recently being reared in the same field as the bore hole. Pens, feeders, water stations, shoot traffic and thousands of birds all left their marks on the land over the decades and so the decision was made to end the shoot as it was clearly not compatible with nature recovery and restoration and in tune with our vision of leaving the place in a better state. Tegleaze is now entirely managed with wildlife in mind and over the next 20 years, it is exciting to imagine how this inspirational landscape may evolve, given the chance. Four of the smaller, fenced fields were drilled annually as cover crops (usually maize) for the shoot and these can now be repurposed, either back to grass or scrub or sown with wild bird or flower mix, as per some of the other small fields under stewardship.

The biggest risk to the whole area, all natural regeneration and any habitat creation will continue to be deer damage. Great efforts are ongoing to bring deer numbers down, but there is still a long way to go.

This landscape has been shaped by man over millennia. Farming communities have lived and worked up at Tegleaze since the Bronze Ages and there are, well conserved, archeological features of note, dotted throughout the area.





ASSET AUDIT
NATURAL CAPITAL

Tegleaze

Human access – The South Downs Way

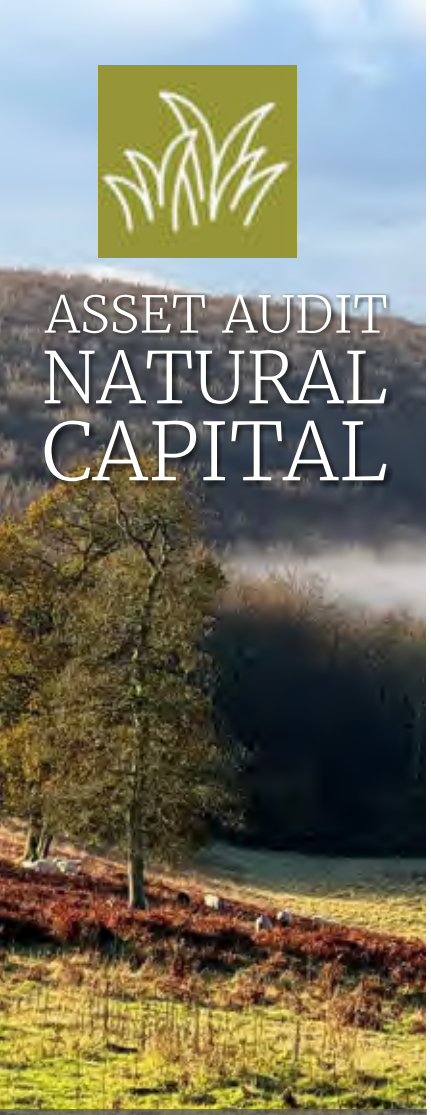
Arguably, the backbone of the South Downs National Park and part of our cultural heritage is the iconic South Downs Way, now a National Trail enjoyed by thousands every year but also marched upon by Roman soldiers nearly 2 thousand years ago. From Winchester in the west snaking along ridges and escarpments to Eastbourne in the east, it runs through the Graffham Down Trust nature reserves in the middle of the park leaving Tegleaze on the right-hand side.

The landscape on either side of this 100 mile National Trail has been shaped by many different peoples for 7000 years, with their influence still visible today, revealing ancient sites. As at Westerlands, no footpaths actually cross any of the Tegleaze fields but there is one at each end and one in the middle, all running north to south and linking the South Downs Way with Goodwood's Charlton Forest and on to the villages of Upwaltham, Charlton and Singleton.

There is not currently a network of hedges as there is at Westerlands. Rather, paddocks are bordered by strips or blocks of woodland, giving livestock shade or cover when needed. The interface between woodland and pasture is an important habitat.

This woodland will act to a certain extent as corridors for wildlife but deer pressure continues to impact the understorey of all woodland in the area and ash dieback is also changing the landscape. When deer numbers are adequately controlled, woodlands will recover and allow natural regeneration, for those ash trees that do survive the disease or for native breeds that replace them. Yew and beech do well at Tegleaze and there are plenty of nice examples to admire.

Whilst the emphasis at Tegleaze is perhaps understandably on species rich chalk grassland, there will be opportunities to intervene in certain areas, for example, the creation of 'Ecoclines' - a scrubby graduation from one ecosystem to another where there is no distinct boundary between the two. Until fairly recently, there was no borehole, meaning no reliable water source for livestock. Climate patterns may well have been very different during the bronze age, but these ancient farmers would still have coped through winter and summer without access to water as we now know it.



ASSET AUDIT
NATURAL CAPITAL

Tegleaze

Human access – The South Downs Way

Map of the South Downs Way within the South Downs National Park, with Tegleaze marked by pindrop.

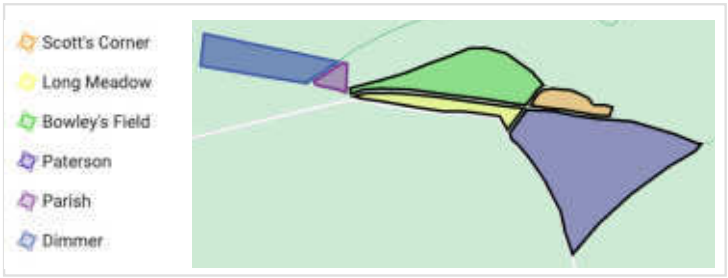
ASSET AUDIT
NATURAL CAPITAL

Tegleaze

Graffham Down Trust

On top of the hill, the Graffham Down Trust has been working for 40 years to conserve and enhance rare, chalk downland species and woodland habitat covering 70 acres. Across 6 nature reserves, each with its own special qualities, volunteer work parties convene at different times of the year to manage and protect these special habitats. We are grateful to Jim Kirke and his team for the ongoing work and commitment.

5 parcels remain in Westerlands' ownership and all are managed by the Graffham Down Trust. Our badger face sheep graze here in Autumn and Winter to reduce brambles and keep on top of the more open grazing areas.



For enquiries about the Graffham Down Trust, contact Jim Kirke at jimkirke@hotmail.com.

The Trust was formed in 1983 by a number of environmentally concerned residents of Graffham with the co-operation of David Jamison. The current Trustees have maintained the original objectives and are now managing the original area and several extensions.

Objectives of the Trust:

- To preserve and protect areas of open downland interspersed with woodland, trees and scrub on Graffham Down and in the neighbourhood of Graffham
- To preserve, enhance and reintroduce species of flora and wildlife which have been indigenous to Graffham and the neighbourhood, but which are, or may be in danger of extinction or substantial decline in numbers
- To allow access to residents of the Parish of Graffham and others, on foot only, to the reserves

These tranquil and pristine areas are valuable natural assets. They will help enhance awareness of the importance of protecting chalk downland areas within the SDNP and are used to support community outreach. With impressive views to the north and open access to the public including 'miles without stiles' to facilitate access, these reserves are popular with mental health charities.

ASSET AUDIT
NATURAL CAPITAL

A Land Management and Habitat Plan, 2025 and beyond

Farming is a subsidised industry in Europe and the UK. Over the last 10 years, Westerlands and Tegleaze acreage have been supported by 'Entry' and 'Higher Level' Stewardship Schemes, agri-environmental grant and subsidy based financial agreements to support farming and land management businesses.

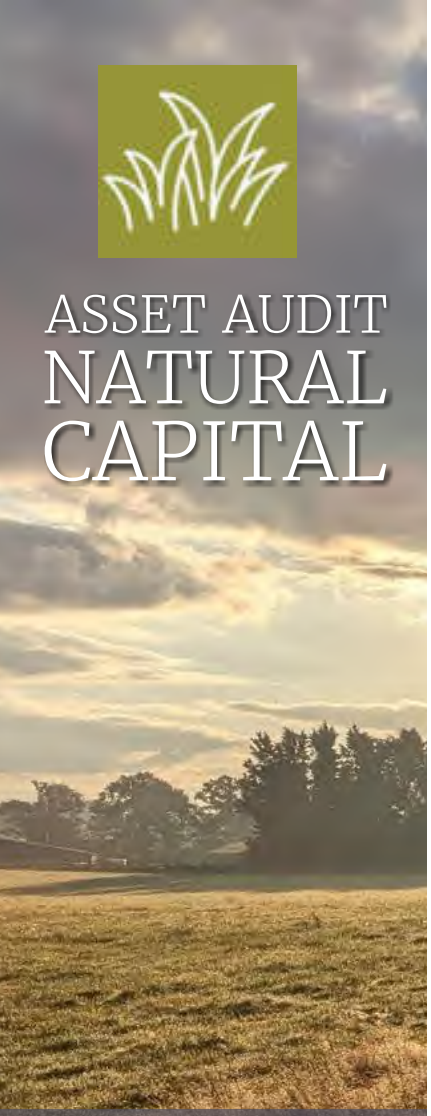
Now, out of Europe, the UK is standing on its own two feet and successive governments are trying to navigate a line between food production and protecting the environment. Food security is clearly important but many of the new schemes are focussing on biodiversity loss and the protection and creation of a wide range of habitats. Recently, grants for both capital works and Expanded SFI have been pulled with no notice as the new Government gets to grips with budgets.

New Environmental Land Management schemes are now emerging with varying levels of clarity and with a far greater number of 'actions' or management options to choose from. In addition, biodiversity and ecosystem service baseline audits are being put in place in anticipation of markets which will put a value on natural assets in different ways. Natural capital markets will emerge for buyers and sellers, i.e. those who own natural assets and those who don't, but need or want to.

Uplift in biodiversity / habitats

From April 2024, all new planning applications are required to deliver a 10% net gain for biodiversity. To enable this, a standardised method for measuring biodiversity by habitat type, Defra's Statutory Biodiversity Metric (SBM), has been developed. It was recognised that not all developers would be able to provide this within their development sites, therefore, structures are now in place to support development of a private market for delivery of habitat banks. This provides a standard approach for landowners and managers for measuring biodiversity value and also creates opportunities to generate income by providing public goods from nature, through habitat creation and enhancement.

Working with experts in their fields at Natural England, Forestry England, Farming and Wildlife Group, Envance UK and other ecologists and soil scientists, we are evolving our thinking and actions for what are the right habitats in the right landscape context at Westerlands and Tegleaze.



ASSET AUDIT
NATURAL
CAPITAL

Westerlands
Expanded Sustainable Farming Incentive 2025

At Westerlands, increasing the species diversity of the pasture will help to improve the soil biology and structure, providing drought resilience on the sandy soil and deeper root infiltration on the clay soils for water infiltration and holding capacity. The grass is currently classed as 'unimproved' but after efforts to improve our soils with aeration, application of lime, organic matter, cattle and sheep etc, the new SFI schemes will allow reseeding of a 'fit for purpose' herbal ley to improve sward diversity. We are now waiting for Government to reopen both capital works and expanded SFI schemes later in 2025.

Then, for more diversity, a wooded corridor or areas of scrub can be applied for. This will be particularly effective along the south/south-east boundary which has historically been woodland.

This could be in the form of:
1) Fenced scrub creation areas, but also around mature trees, where high to low 'ecoclines' can be designed.
2) Woodland creation - via the England Woodland Creation Offer grant.
3) Wood pasture creation (this would be a Countryside Stewardship Higher Tier agreement).

Hedgerows and Soil assessment

Capital grants have also existed for hedgerow management and the continued planting of new hedgerows. We intend to focus on hedgerows as a fantastic farmland habitat and work on connectivity between hedgerows and new areas of scrub and woodland.

Similarly, there is financial help to keep up the improvements in our soils by regular, annual assessments. As we now know, it is vital to get the biological, physical and chemical balance of our soils in perfect condition for everything above to flourish and thrive.

Overleaf:
Westerlands: Expanded Sustainable Farming Incentive 2024

*before DEFRA withdrew the scheme

Westerlands

Expanded Sustainable Farming Incentive 2024*

FWAG South East

FWAG Farming & Wildlife Advisory Group

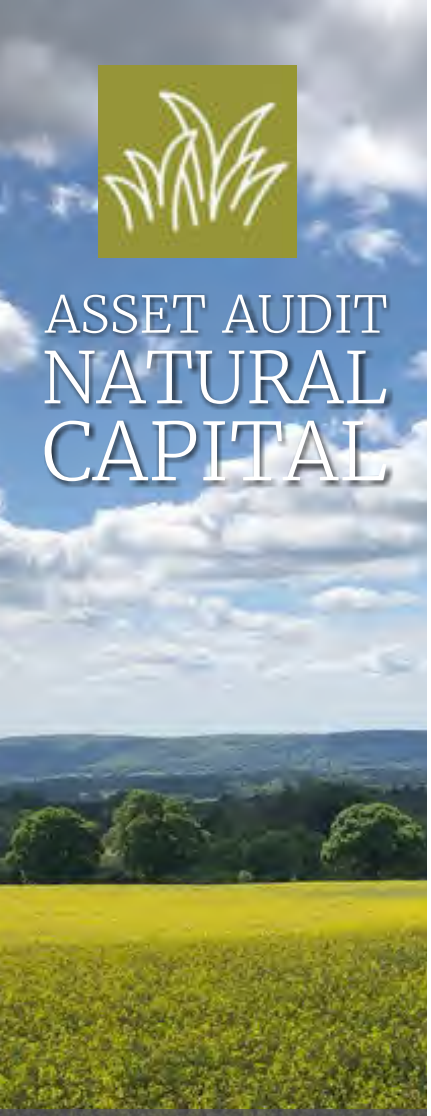
CLIG3 Permanent grassland with very low inputs (outside SDAs)

CSAM3 Legume and herb-rich swards

Horse/event/camping

Scrub creation/management

Management of hedgerows



ASSET AUDIT
NATURAL CAPITAL

NATURAL BUILT COMMUNITY CULTURAL ENTERPRISE

Tegleaze
Countryside Stewardship Higher Tier

We are also waiting for further information and clarity on CS Higher Tier, when we can apply and when it will start. It is likley though that this scheme will be appropriate for Tegleaze and at some point, we will leave our rolled over, Higher Level Stewardship scheme, behind.

The grassland is currently superb semi-improved grassland and will be providing a fantastic habitat for wildlife.

There are now two main options:

- Try and increase the plant species diversity. This will include more overseeding and potentially more prescriptive grazing, receiving revenue for "species-rich grassland restoration" and there would be capital grants for creating an implementation plan and corresponding works to create the habitat.

- Alternatively, apply for the "Management of grassland for target features" option. This would allow to continue with the current management regime.

Both would get supplements for native breeds and grazing support.

Old shoot cover plots

There are 4 old shoot, game cover plots which now have potential for repurposing.

They could go into:
- Create species rich-grassland, as above
- A wildflower plot: This would yield a higher income and less pressure to produce species per metre square, but for fewer years (3 rather than 5) and there would be no help with seed cost.

The original pheasant rearing field will still be high in phosphates and will likely stay out of any new scheme for now but we intend to encourage scrub/tussocky grass along the southern boundary to create a graded edge to the woodland.

Overleaf:
Tegleaze: Countryside Stewardship Higher Tier 2025

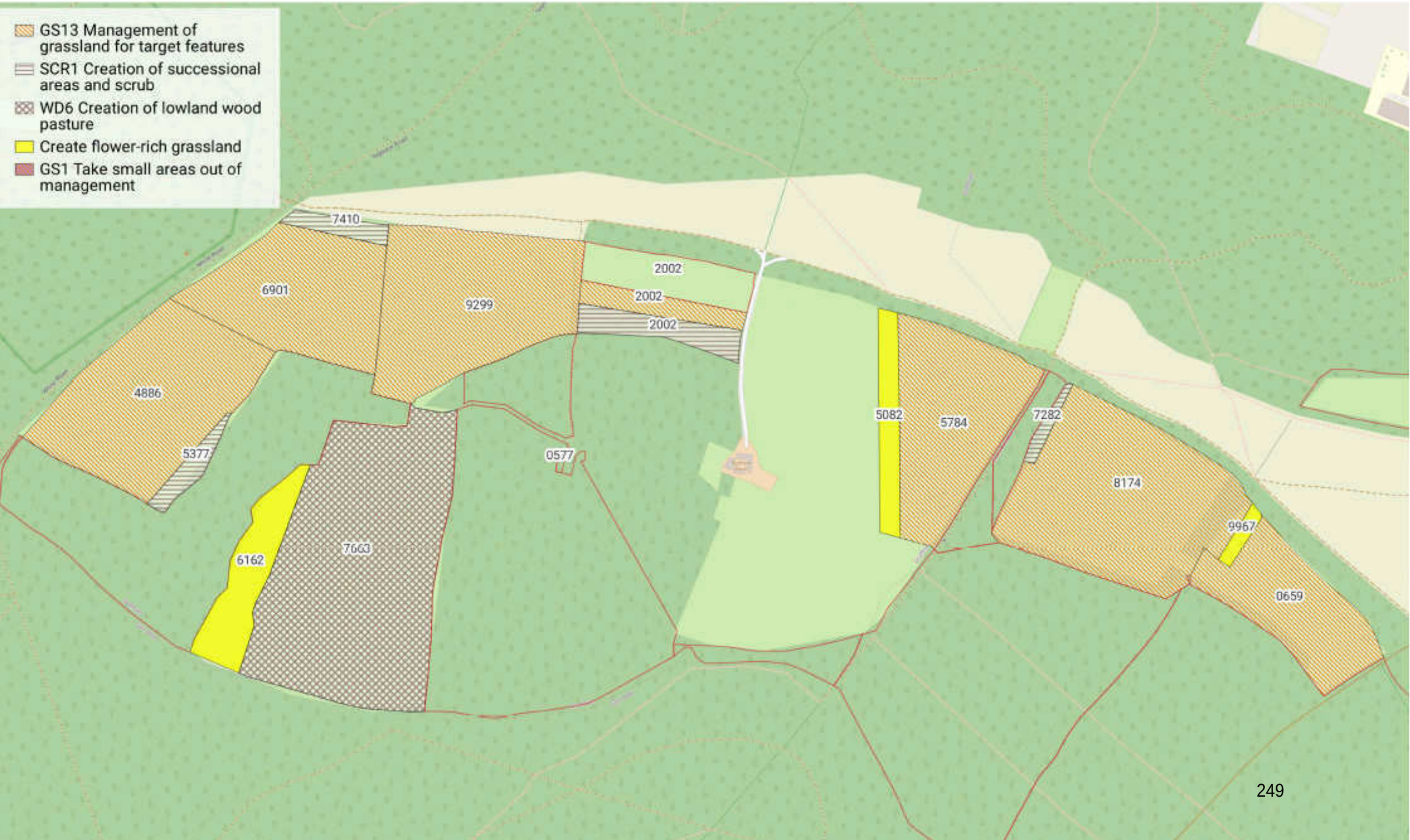
*waiting for clarity

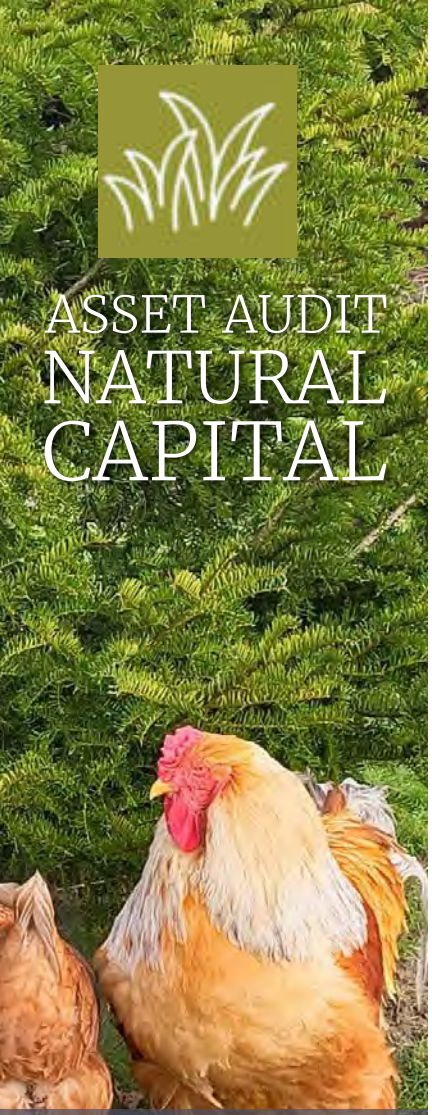
Tegleaze

Countryside Stewardship Higher Tier 2025*

FWAG South East

FWAG Farming & Wildlife Advisory Group





ASSET AUDIT
NATURAL CAPITAL

Areas of Special Interest and Focus

Moving forward from 2025, there are a number of areas or initiatives which stand out, either because they are critical to the long term viability of our vision or because they are simply close to our hearts.

Soil Health - the basis of everything and critical to get right over the next ten years

The Role of Livestock - a balancing act through the seasons and critical to get stocking densities right

Dung beetles and worms are unsung heroes - would like to breed both on site

Bees and other pollinators need protecting - expand efforts to support different species

Biodiversity at Westerlands / Mosaic of inter-connected habitats created over 20 years

Food metres not miles - a mobile slaughter unit to ensure the highest standards of animal welfare

Deer Management - already an ecological disaster in local areas and must get to 4-5 deer/km2

Weald to Waves - a great initiative to support and needs continued funding

Dark Skies Reserve - very lucky that we live in this area and needs protecting

Chirrup AI / Weald2Waves Song meters because bird life is a good barometer for farm health

Grant full access to University of Sussex for their Nature Sense Biodiversity monitoring stations

Spotlight

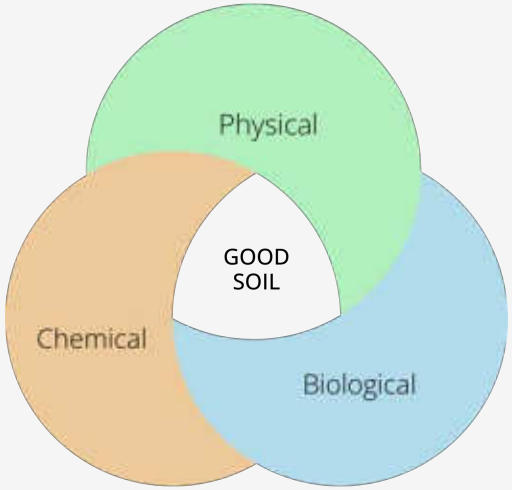
Soil Health

Having transitioned to a regenerative farming model, one very important focus is on improving soil health and soil structure and employing ways to increase the energy flows in our soils via rotational, 'mob' grazing, import of organic matter and aeration.

Our grassland at Westerlands (and Tegleaze) will always remain permanent. Our intention is to not dig nor plough the ground. No farming inputs are used at Westerlands (and Tegleaze). No fertilisers, no chemicals, herbicides, pesticides, insecticides etc no spraying of any kind. Stocking levels must therefore be carefully considered, in terms of how many feet and mouths the ground can bear for today's changing climate. We are in partnership, working with Mother Nature below and above ground. Farming is essentially a 'conversation' with nature.

THREE FACTORS MAKE GOOD SOIL

Improving and maintaining soil fertility to ensure soils have the capability to supply available nutrients to plants in a sustainable way is dependent on the three fundamental aspects of soils (Physical – Chemical – Biological) working together in an effective manner. If any one of the 3 fundamentals is ineffective then soil fertility is compromised.*



In March 2024 a soil analysis* was carried out on four different fields, revealing the impact of compaction by horses in the past, and opening up a clear pathway to restoration and recovery of our soil.

Key Observations:

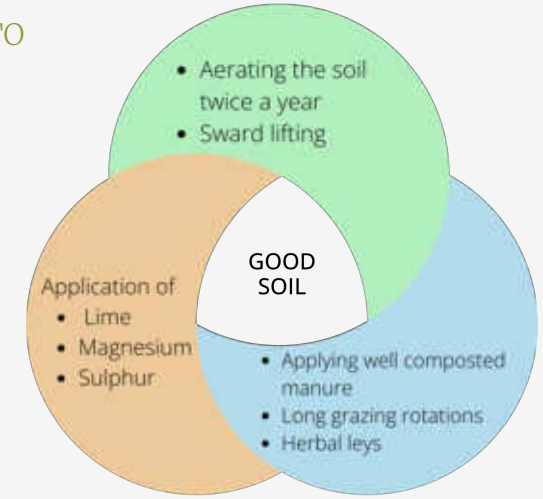
- Our soil is very high in Iron due to compaction by horses, which locks out oxygen and locks up trace elements (Physical)
- Generally, soil PH is low across the board
- Magnesium, Calcium and Sulphur levels are below what they should be (Chemical)
- Soil Organic Matter is also low (Biological)

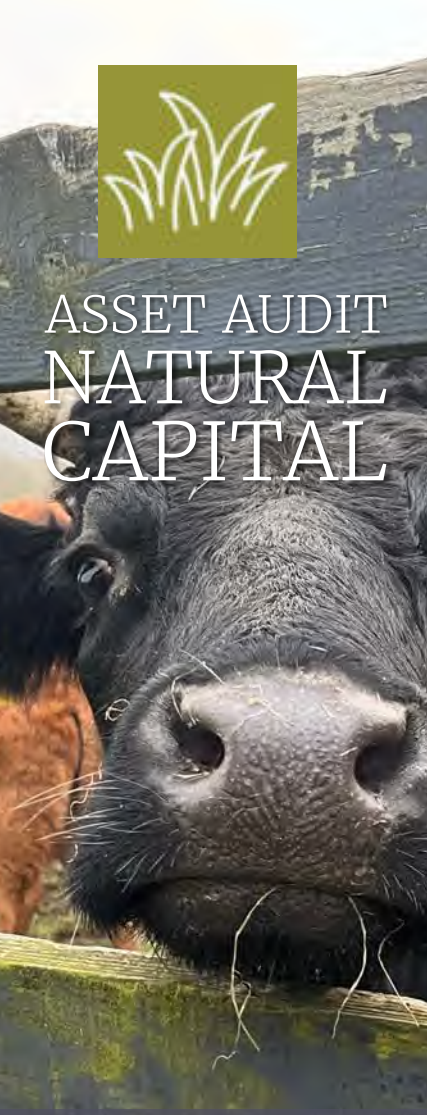
*Appendix 5: Detailed analysis carried out by Clyde Jones, Basis Cert in SLM, PFLA & BGS Grazing Mentor and Soil Association Farm Advisor.

WESTERLANDS PATHWAY TO IMPROVING SOIL HEALTH

These actions should restore soil health and allow the fields to function, drawing in nitrogen from the air and carbon by photosynthesis and this in turn will feed the soil microbes. Enabling the land to not require fertilisers outside of the restorative compounds we are delivering. Also improved soils grow better more nutritious pasture which will result in healthier livestock.*

*Clyde Jones Consultancy





ASSET AUDIT NATURAL CAPITAL

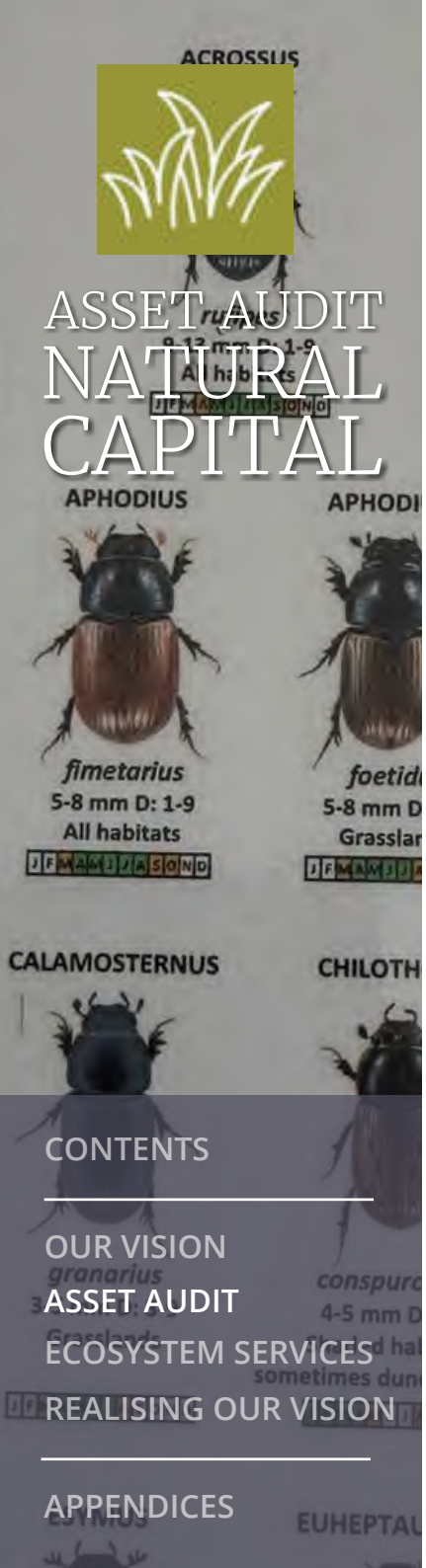
The Role of Livestock

We are hoping that over the next ten years our cattle and sheep will really help to restore our soils. At the beginning of this journey, though, it makes sense to get a head start with some regular mechanical intervention and the application of certain inorganic minerals, primarily a balancing of magnesium and calcium in order to improve drainage and promote deeper rooting for the benefit of nutrient uptake.

We hope that after ten years, these early actions will make the soil structure more stable and that our compacted fields will be a thing of the past. We will then be in a position to graze livestock across all fields at any time of the year, even in winter. Each of these steps has a cost attached and we are looking at different ways to fund them.

Food security is important to us, too and we want to make a small contribution. We manage a small herd of Dexter cows (20 breeding females) that are served by our own Dexter bull. Dexters are small and therefore gentler on the ground. We also run a flock of Romney ewes with a mix of rams to produce a butcher's lamb and recently acquired (early 2023) a small flock of pedigree badger faced ewes (plus Stamford the ram) for use in the Graffham Down Trust nature reserves as conservation grazers. Our cows and sheep are all grass fed over pastures which are therefore a mix of chalk, clay and sand across the two land holdings.

All our animals live a 365 day outdoor, stress-free life with plenty of natural forage and shade. As we do, they also love our pure, fresh, bore-hole water. 4km of trenching links all the paddocks up at Tegleaze and water is also supplied to the Graffham Down Trust area of nature reserves.



The Role of Dung Beetles

Dung beetles* are a group of beetles whose existence is completely dependent on dung. There are 60 different species in the UK, comprising surface 'dwellers' and 'tunnellers' Some are generalists and others, specialists. These insects perform a critical role in providing important ecosystem services in grasslands, including the recycling of dung from the surface back in to the soil and reducing parasite burdens in livestock. Those that tunnel, also aerate the soil.

A recent Natural England review showed that many of the dung beetle species in the UK were in serious trouble with almost 50% categorised as nationally scarce or threatened.

The loss of pasture to development and arable, alongside the removal of grazing livestock has certainly had a negative impact. Permanent pasture habitats have also decreased in favour of rotational grassland and short term 'leys'. These often require fertilisers and create soil disturbance, which, alongside livestock wormers, can be very detrimental to the dung beetle lifecycle.

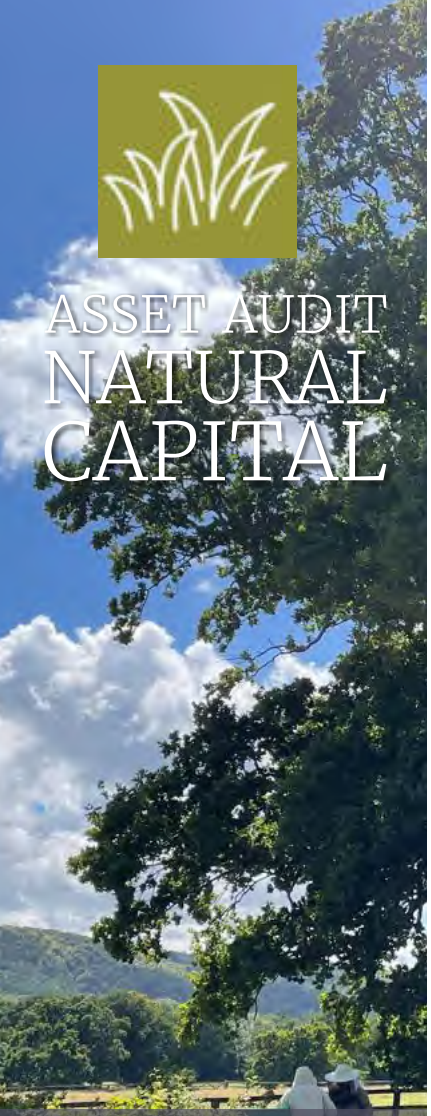
The permanent pastures at Westerlands and Tegleaze, mob grazed by cattle and sheep along with the complete removal of fertilisers and chemicals are now encouraging dung beetles and other insects. This, in turn, is increasing biodiversity as beetles and insects are an important food source for many.

Farmers and land managers can play a significant positive role in protecting and enhancing populations of these soil building, ecosystem engineers which provide benefits by improving the health of our pastures and livestock.

Our aspiration is that over the next 5-10 years, we see the number of dung beetle species increase as well as an explosion in abundance.

*Appendix 11

Acknowledgement and thanks to Dungbeetlesforfarmers for their inspiration and to Alex Botham for his passion and workshops.



ASSET AUDIT
NATURAL CAPITAL

Bees

We currently have five hives at Westerlands, purposefully sited in the centre of the landholding at one end of a large wildlife corridor made up of scrub, mature and young oaks, bramble and wildflowers. Other than beekeepers Martin Hill and Daisy Day, no one enters this 15m x 350m strip. The European honeybee (Apis mellifera) thrives here, but we're also aware of their potential negative impact on other pollinators. We're keen to build populations of mostly solitary native bees, such as the white-bellied and broad-faced mining bee and the hairy-footed flower bee.

Many UK bee species are in serious decline due to farm intensification and chemical spraying. We aim to support honey production while also increasing native bee populations. Westerlands borders a B-Line, and Tegleaze lies within one. In 2025, we aim to bring both landholdings fully into the mapped B-Line network by adding flower meadows at Westerlands.

What are B-Lines? B-Lines are a network of flower-rich insect superhighways, mapped and delivered through partnerships. They reconnect landscapes, helping pollinators and other wildlife move freely, supporting nature's recovery.

B-line traverses Westerlands and Tegleaze.

Our five beehives at Westerlands.

ASSET AUDIT
NATURAL CAPITAL

Biodiversity Auditing and Biodiversity Net Gain

Baseline biodiversity has been assessed using the Defra SBM (Statutory biodiversity metric). Within the metric, habitats are valued based on their size (area), type, condition and the strategic significance of their location. Habitat (assessment and creation) is used as a proxy for biodiversity and value is calculated in three different forms:

- Habitat Units (HU) for area-based habitats
- Hedgerow Units (HeU) for linear woody habitats (i.e. hedgerows)
- Watercourse Units (RU) for watercourse-based habitats (i.e. rivers, canals, and ditches)

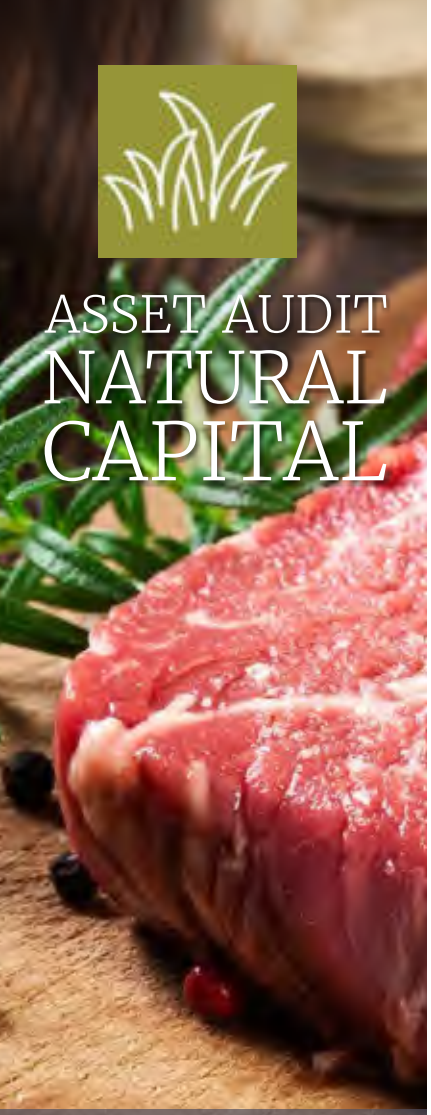
Baseline is then a habitat baseline and what is sold is gain or uplift in a habitat. The logic is that habitats of a certain type and condition will support associated biodiversity species.

The data includes various metrics that give a detailed picture of the species richness, abundance and overall health of the ecosystems to give current biodiversity values, providing a base for comparison with potential future scenarios.

BNG at Westerlands and Tegleaze

Following 120+ years of equine monoculture, the 'baseline' at Westerlands is currently much lower than that of Tegleaze. There may therefore be an opportunity to generate units (which can then be sold to offset new development such as housing and infrastructure), by creating a habitat bank at Westerlands and we are assessing, amongst others, the old Dominies Woodland site currently.

This is being considered in conjunction with current and future plans for Countryside Stewardship Higher Tier and Expanded Sustainable Farming Incentive (SFI). Once determined, the CS/SFI scheme will represent the baseline biodiversity value of the land parcel and the potential to enhance biodiversity value over and above this can be calculated. This approach can support decision making on where and when a scheme could be registered as a Biodiversity Gain Site and to sell Biodiversity units to developers who are required to deliver a10% net gain in biodiversity as part of their planning consent requirements.



ASSET AUDIT
NATURAL CAPITAL

Food metres rather than food miles

We like to think in terms of "food metres", rather than food miles. We work with local butchers, boxed lamb and beef schemes as well as on-site food preparation and consumption. Westerlands is farm assured by Red Tractor, an accreditation scheme that underpins the high standards of British food and is a member of Pasture For Life, an organisation which champions the restorative power of grazing animals on pasture to help restore ecosystems and implement positive change in our food and farming systems.

Our approach has therefore evolved to prioritise conservation and rehabilitation in land management, food production, and farming systems. We are deeply concerned about the continued decline of small, local abattoirs in the UK. At present, we have access to only one—and even that facility faces an uncertain future over the next decade.

This is why we are a strong advocate for the emergence of a licenced, mobile slaughter unit to operate locally, to visit farm clusters and to ensure the highest standards of animal welfare whilst supporting local traceability. There is clearly a need for this now and we urge DEFRA to step up.

Farming livestock can and must work hand in hand with efforts to enhance biodiversity and conserve and improve a variety of local and landscape scale habitats on behalf of all wildlife, not just rare or endangered species.

We know that the UK is one of the most nature depleted countries on earth and a myriad different initiatives must now combine across the country to stall and reverse this trend. Clearly, managing land and farming must play a major part in this. We saw evidence around the globe during the recent pandemic of how quickly Mother Nature can recover and restore if given the chance. We all need to do more.

Beef Boxes are collected same day as delivery from our butcher.

Spotlight

Deer Management in the South Downs National Park

Numbers of deer, especially fallow have been allowed to get out of control in the National Park and this has long since become an ecological disaster and hugely damaging for biodiversity on a landscape scale. In many areas, woodland of all kinds is stripped bare, millions of pounds are lost to crop damage and strategic sites and other designated areas of national interest remain at considerable risk from deer pressure.

Great efforts are being made by some to confront this challenge, from collaboration between neighbouring landowners to the use of night licences which allow deer to be managed outside of daylight hours when they are now most active. Numbers must be reduced significantly to have a positive impact on habitats throughout the National Park and a considerable amount of work and funding is required to increase supply chain capacity and to grow the market for wild venison in the UK.

Photo of heavily browsed understorey at Tegleaze.

Wild venison is a lean, organic and nutrient rich meat that needs to be made more accessible and priced fairly to match red meat from domesticated livestock, including farmed deer.

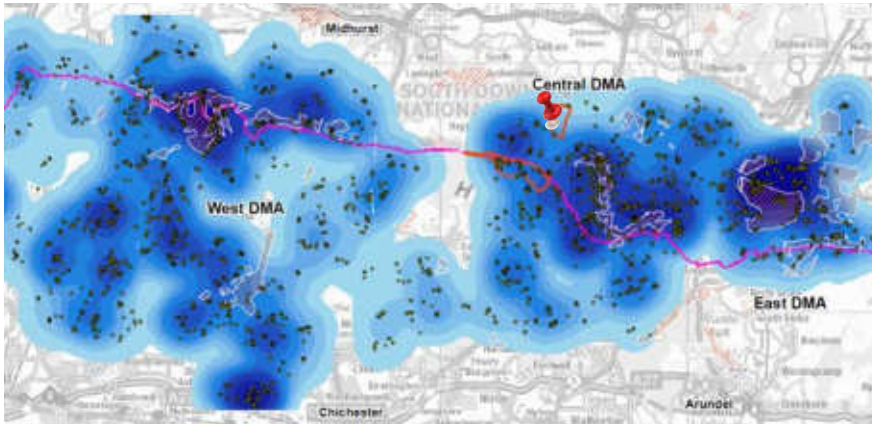
Westerlands and Tegleaze sit within the Central Deer Management Area of Natural England's Sussex Woods 'Protected Site Strategies' pilot. This project was set up in response to growing concerns around the impact of fallow deer on woodlands and other habitats, including many designated Sites of Special Scientific Interest (SSSI). The pilot seeks to improve our understanding of fallow deer impacts and numbers and to explore more collaborative ways of managing the deer population on a landscape scale.

This project has been running for more than 3 years and is producing a vast amount of evidence to inform the management of deer, both locally and regionally. Deer impacts and populations are monitored annually, the latter through thermal drone surveys carried out at night by Glenn Moores of Digital Fauna, a company specialising in high resolution, thermal image drone surveys. Reducing deer numbers in the South Downs National Park is arguably the most important short term goal for supporting nature recovery and restoration and which in turn supports efforts to mitigate climate change risk. Much more needs to be done.

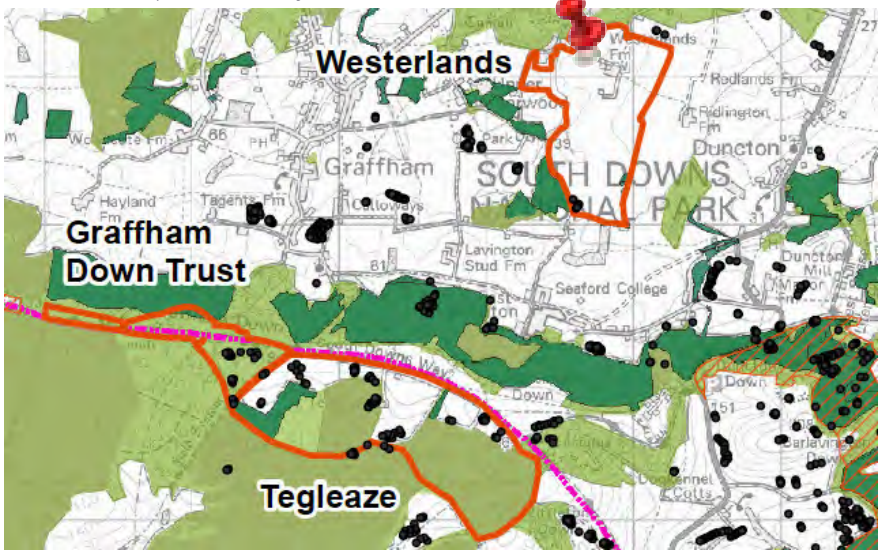
Spotlight

Collaborative ways of managing the deer population

Sussex Woods PSS Pilot:- Deer pressure heat map, all areas



Woodland map, deer mostly outside. 1 dot = 1 deer



A deer pressure map shows the distribution of deer at a given moment in time, but gives us a clear view on numbers and where impacts are likely to be highest.

Deer are a prey species and in the absence of any natural predators, culling by professional deer managers is the only way of limiting population growth and controlling numbers. Fallow deer have become largely nocturnal and it is interesting to see that at night almost all deer have left the safety of their daytime woodland hiding places and are outside or on the edge of woodland at the time of the drone survey. They will be eating crops and grassland and browsing trees, hedges and other foliage. It has also been noted that over the last couple of years, some fallow and roe deer have started to come in closer to human life, where they have recognised they are actually safer, but which often leads to an increase in road traffic collisions.

The challenge posed by deer numbers can seem overwhelming but efforts will continue on the ground and we are fortunate to have a deer processing facility nearby run by the team at South Downs Venison.

Data courtesy of Natural England and Digital Fauna
Night time thermal image drone survey carried out in Jan-Feb 2024
See Appendix 9 for further information

ASSET AUDIT
NATURAL CAPITAL

Participation in the Weald to Waves Initiative

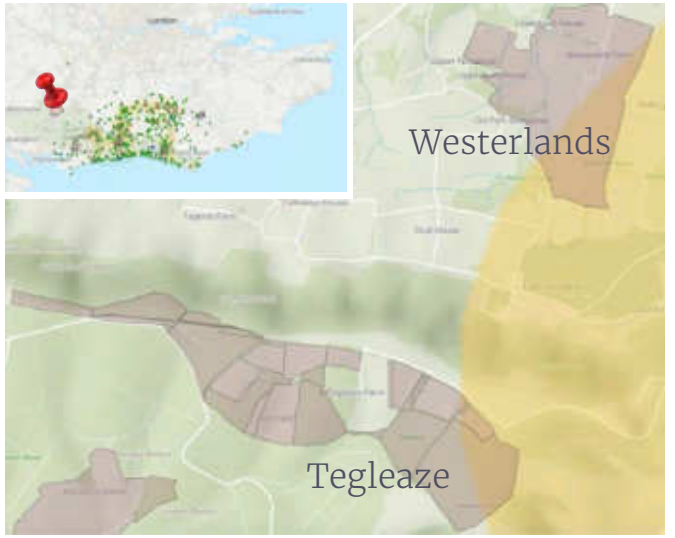
Weald to Waves is a bold initiative led by farmers, land managers, councils, researchers, wildlife charities, schools, gardeners and community groups and aimed at establishing a 100 mile nature recovery corridor across Sussex. From the High Weald to the Sussex coast, the corridor will encompass 20,000 hectares of contiguous habitat to boost biodiversity and capture carbon, but also enhance food production and enrich rural economies. Westerlands is a partner of this exciting project and Westerlands and Tegleaze land has been pledged to it.

Goal 1
To create a nationally significant wildlife corridor of 100 miles and over 20,000 hectares as a ribbon of largely contiguous natural habitat

Goal 2
To promote nature as a provider of vital ecosystem services, backed by sustainable farming and a reduction of the pollutants that are compromising our land and seascapes

Goal 3
To engage people and communities across Sussex by creating new opportunities to understand, enjoy and protect nature so that communities can thrive alongside nature

Land pledged by different farms to the Weald to Waves Scheme is shown as green dots.



ASSET AUDIT
NATURAL CAPITAL

Dark Skies Reserve

Given their isolation on top of the hill and at nearly 800 ft above sea level, the Tegleaze and Graffham Down Trust areas are arguably more tranquil compared with Westerlands, where there is more human activity. However, both areas are within the Dark Sky Core Zone (E0 Designation) of the International Dark Skies Reserve as measured by the brightness (magnitude) of an area of sky (arc second), denoted as Sky Quality Meter (SQM).

Dark skies and tranquillity are both special qualities of the South Downs National Park and as such need protecting and enhancing for the benefit of both wildlife and people.

At Westerlands, we regularly attract visitors who come specifically to star gaze, some with professional equipment. We also have a Celestron Telescope available for guests to hire. Winter months are often clearer gazing months and more fantastic than summer and our desire is to encourage more movement between Westerlands and Tegleaze, both day and night to promote both the tranquillity and the dark skies on offer.

Right: Photo of aurora borealis taken from the Woodfire Campsite at 1.30am on Saturday 11 May 2024.

Spotlight

Recording Birdlife

Chirrup AI – Our Robot Ecologist

Birdlife is a good barometer for farm health. We are using brand new technology to help us monitor resident and visiting birds. Using a neatly sized monitor and the artificial intelligence behind it, we operated a pilot scheme over a 2 week period from in February 2024 on two sites on the farm, to record the number of species of birds present. We then followed up with a further 4 monitors across May and June 2024 (2 at Westerlands and 2 at Tegleaze).*[1]

In addition and for comparison, scrub expert Rachel Bicker visited Westerlands and Tegleaze in June 2024 to look at areas for scrub potential and also hid a Weald to Waves song meter at both Westerlands and Tegleaze.*[2] These record 5 minutes every hour and are being moved every ten days to capture as much data as possible.

*[1] Appendix 6

*[2] Appendix 14

To listen to audio hold CTRL or COMMAND key when you CLICK

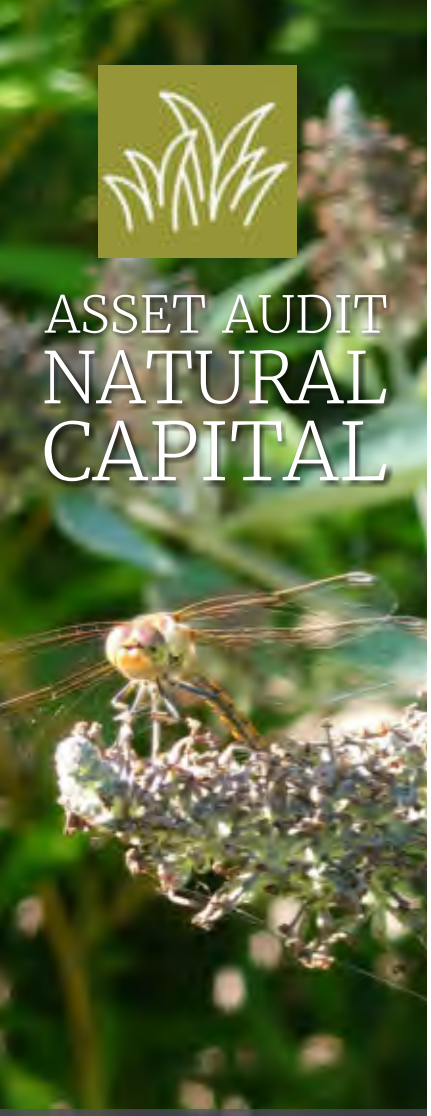
Listen to the dawn chorus at Westerlands

The lowdown:

- Records high quality audio in a 100+ metre radius around the box
- Always listening during its programmed hours
- Uses machine learning to identify the birds present and rate the farm
- Will chart improvement, how farms compare to each other, and match them with practices to boost the rating
- Pairs of monitors operate in 14-day blocks, installed and collected by our team
- Annually updatable report issued online
- Helps farms prepare for net gain, landscape and stewardship programmes, and customer biodiversity reporting

Livestock Manager Zak helping to install listening devices on the farm.

Lesser Spotted Woodpecker photographed at Westerlands



ASSET AUDIT NATURAL CAPITAL

Working with the University of Sussex

'Nature Sense' *is a University of Sussex land use and biodiversity monitoring initiative, designed to help land managers make evidence-based decisions to support food production, biodiversity and climate resilience. It is heavily data driven and explores key indicators of ecosystem health and productivity above and below ground. Its aim is to provide a picture of the state of nature and the benefits (ecosystem services) that nature provides people across different land uses and management contexts. This initiative may also become useful in unlocking revenue streams such as biodiversity credits or net gain as well as attracting green finance. It is also a useful tool to help engage the local community, visitors to Westerlands and Tegleaze and sudent groups.

Usually two monitoring stations are established in contrasting areas, including camera traps and passive acoustic monitoring. Quarterly surveys then use techniques including LiDAR scanning, drone monitoring, plant / vegetation structure, butterfly, earthworm and soil surveying.

Left: Common Darter Dragonfly at Westerlands

Structural diversity can then be used as evidence in support of woodland or habitat restoration funding bids, for example our Dominies Wood project.

Nature Sense can provide the hard evidence over time to help make important management decisions in support of farming, conservation and nature recovery projects, such as ours at Westerlands and Tegleaze. The data collected, the surveys made and the reports written will also help to monitor the benefits which Nature provides us, for example soil health, carbon sequestration and storage, food and timber production. It may also assist in tackling "shifting baseline syndrone", which is a phenomenon where each generation perceives the current state of the environment as "normal" or "healthy".

*Appendix 12

With thanks and acknowledgment to Dr Chris Sandom & Dr James Whitehead

ASSET AUDIT NATURAL CAPITAL

The Next 20 Years

Our Natural Capital is our most important asset. It represents ~99% of the land surface area and as the years roll by and we move more distant from the unsustainable monoculture of the past, we look forward to witnessing a continued evolution of biodiversity growth and an explosion of abundance across our lands as well as the wider landscape. A myriad interconnected habitats will function as one with as little human intervention as possible.

We shall continue to minimise the human footprint, leaving Mother Nature to self regulate and thrive and to return the ecosystem service benefits which mankind has become accustomed to rely on, but which are now, often, degraded. We shall look to agri-environmental schemes where it makes sense to do so for our context and to accelerate our vision and we look forward to working with private individuals, developers, corporates and sponsors who share our ideology and determination to create a 'best in class' space for nature.

ASSET AUDIT
BUILT CAPITAL

ASSET AUDIT

BUILT CAPITAL

A Family Home

In 1982, Westerlands was bought and developed as a family home, with pre-existing equine infrastructure in place to support a passion for polo and breeding racehorses.

Continuing a longstanding equine legacy and making use of the facilities made sense at that time, but after 40+ years, it has become clear that the next 20 years are about supporting our community and building a visitor economy to underpin the balance sheet, whilst evolving phases of nature recovery and restoration.

More recently therefore, Westerlands has transitioned from 'home and hobbies' to 'business and environment' with the natural and built assets having fallen into states of disrepair over the years and both now needing maintenance and an overdue rethink.

As with many small businesses in the UK, the relentless rise in running costs, coupled with strong competition and an inability to raise selling prices at the same rate, continue to increase financial pressures, which at times can be overwhelming. The business will need to source outside funding to realise its management vision in full.

But as long as the family is involved in the running and management of Westerlands, it will retain its personal touch, private qualities and authentic feel. Welcoming people into our home is usually well received and appreciated and comes with a very different feeling to other, more public destinations, where there is perhaps a feeling of being 'processed' because visitor numbers are much higher.

We believe it is of value to retain this special, intangible quality and to resist becoming too public at the expense of tranquillity for residents and visiting guests.

ASSET AUDIT
BUILT CAPITAL

Westerlands Farmhouse

Westerlands farmhouse is surrounded by 2 acres of garden. It is a Grade 2 Listed, two-storey, 5 bedroom family house - home to David and Pamela Jamison.

The original part of the house is 17th Century, ground floor brick, above tile-hung, probably covering timber framing with casement windows. This is the largest, built asset and for now, still a family home, located at the heart of Westerlands. The house includes the 'Gathering Hall' which was built using old timber in the 80s and includes 2 beautiful wooden columns that originate from Chichester Cathedral. A new kitchen has recently been installed but there is still substantial further maintenance and upgrade required.

We are mulling different options for the future use of the house, as well as unused spaces nearby that might be repurposed and which will likely need change of use or conversion planning consent for business use.

Columns originating from Chichester Cathedral in the Gathering Hall.

ASSET AUDIT
BUILT CAPITAL

NATURAL | BUILT | COMMUNITY | CULTURAL | ENTERPRISE

Residential Dwellings

There are five residential dwellings at Westerlands, which are occupied by various Jamison Family members and also by the tenants who make up our vibrant onsite community and are proud to call Westerlands home, including our wonderful gardener and florist, Martina Schneiderova and deer stalker / venison producer and arborist Ben Marks.

Upper Barn House, residential dwelling.

Holiday Accommodation

Our short stay, holiday accommodation comprises a small mix of holiday cottages and seasonal & moveable shepherd's huts and yurt. This enables us to offer affordable access in the South Downs National Park for a wide range of budgets. We are keen to be able to offer 'something for everyone'.

Left: Holiday accommodation, Cedar Woods.

ASSET AUDIT
BUILT CAPITAL

NATURAL | BUILT | COMMUNITY | CULTURAL | ENTERPRISE

Equestrian Yards

Our bottom stable yard, built to Victorian architectural standards and with 17 horse boxes is now the headquarters and centre for our pony trekking operation and equine wellness series experiences. The largest of the stables, in one corner is the original foaling box, now used as a club room for riding guests and their friends and family.

Our top, Victorian stable yard, incorporating a charming barn and located close to Westerlands House is now legacy infrastructure, no longer regularly used by horses and comprises 15 stables. However, our 'horse on holiday' offering is beginning to get traction, where people bring their horses from other parts of the country in order to enjoy many miles of bridleways in the South Downs National Park.

The barn adjoining the yard retains structural integrity, but needs maintenance, especially the original tiled roofs. It lacks services and amenities and cannot be used as a meeting or educational space as the stables within it divide the space in such a way that does not lend itself to hosting larger groups.

Left: Trekking horse, Caesar in the bottom yard stables.

ASSET AUDIT
BUILT CAPITAL

NATURAL | BUILT | COMMUNITY | CULTURAL | ENTERPRISE

Farm Buildings

Our main farm buildings comprise the 'American Barn' which is a large structure built in the mid 1980s and used for storing woodchip in bulk for the biomass boilers, farm vehicle and other storage. It is well maintained and retains its integrity. We also have the Dutch Barn used partly for storage and partly for the management of livestock when the need arises, for example for lambing and mothering up pens or for weaning calves.

Left: Pregnant ewes waiting to give birth in the lambing shed.

ASSET AUDIT
BUILT CAPITAL

Energy/Services Infrastructure

Heating

We have 2 x 150KW Herz biomass boilers which were installed in Summer 2016 and benefit from a 20-year Renewable Heat Incentive, which is a statutory tariff that the Government pays quarterly for the generation of renewable heat. They are fuelled by woodchip and supply heat energy (hot water) to all built and permanent properties at Westerlands.

Human Waste

In 2024, at a cost of £85k, we replaced and renewed our antiquated sewage systems which carry and store waste from all built properties on the farm. We decommissioned our outdated septic tank and cesspit infrastructure and replaced it with two state of the art sewage treatment plants, one near Westerlands Farmhouse and the second down near the bottom yard. Sewage treatment plants process human waste using bacteria and aeration and reduce environmental risk.

Water

We have 2 boreholes both drilled in 2016 by Nicholls Boreholes.

Westerlands: Supplies fresh water from a shallow aquifer which is to be found at a depth of 20m-40m, within the green sand belt of the Fowkestone formation. Westerlands' pre-existing distribution network then delivers a supply of borehole water to every property and every trough as well as to Woodfire's nearby campsite.

Tegleaze: Drilled to a depth of 172m. A solar powered pump draws water to the surface and into a 20,000 litre above-ground tank which then gravity feeds fresh, chalk filtered water to livestock troughs in every field at Tegleaze as well as the nearest reserve (Paterson's) of the Graffham Down Trust.

In addition, our recently decommissioned cesspit tanks now allow us to harvest rainwater for use in periods of very dry and hot weather.

ASSET AUDIT

BUILT CAPITAL

Up World, Up Fest event July 2024

The Next 20 Years

Our built capital plays a vital role in securing the viability of Westerlands as a diverse business. In order to be sustainable over the long term and to support our vision, along with its proposed services, offerings and community focus, we must look to use what we have to its full potential. It is a constant process of assessment and evaluation of costs versus return on investment. and we often revisit our permanent buildings with fresh eyes and a creative mindset, trying to anticpate market moves in order to stay ahead.

The economy of scale in our holiday lets business combined with our desire to offer varied and affordable accommodation for visitors to the National Park, propels us to grow the number of people we can accommodate per night and we will be exploring ways of creating more offerings to our small portfolio.

We've identified that targeting the corporate market is essential to sustaining our business. Demand is growing for corporate away days and offsites for groups of 30–50, prompting us to re-evaluate our current accommodation, indoor spaces, the investment needed to upgrade them and how to address key gaps.

To serve this market, we need a range of indoor and outdoor spaces of varying sizes. Ideally, this includes a conference room for 100 people and five smaller breakout/meeting rooms for 20-person groups for single-day events. For longer, immersive offsites or retreats, we must expand single-occupancy accommodation along with supporting facilities, bathrooms, catering space, and audio-visual infrastructure.

With some of this in place, Westerlands could also serve as an educational hub, welcoming schools and charities, even in poor weather. This is something we're passionate about. Our indoor spaces must be highly versatile, enabling us to host events year-round, not just during the summer.

ASSET AUDIT
PEOPLE & COMMUNITY

Our People & Skills

Early on, we made a conscious decision to find the right balance, spirit and like-minded ethos of those living and working in or from Westerlands. These people have become an extension of our family and we have worked hard to create and nurture the concept of community with them. As farming also encompasses social considerations, so follows that community is very much part of regenerative farming.

We cannot farm without people, both doing the work and buying the food. We believe that when a community has greater access to resources, resilience tends to grow, along with a positive mindset and increased likelihood of collaboration. In this context, those who live and work at Westerlands have different skills and interests which are compatible with and complimentary to our direction of travel. We have one full time employee.

Family

Oliver Hancock
Chief Earth Officer
Antonia Jamison
Managing Director
Emma Jamison
Artist
Melanie Jamison
Herbalist
Pam Jamison
Writer & Artist
David Jamison
Owner

Business Team

Sara Prior
Operations
Cheryl Hood
Bookings
Zak Foord
Livestock
Elly Middleton
Equestrian
Danni Lindress
Housekeeping
Jo Hutchinson
Publishing
Lauren Baxter
Marketing
Edwina Hodges
Accounts
Gemma Peterson
WildFit
Sarah Andreas
WildSpa
Taryn Machin-Garvey
Guest Services

Residents

Stella & Mark Griffiths
Woodfire Camping
Ben Marks
Arborist, Tree surgeon, Stalker
Kris Vill
Woodland Mgr, Timber Framing
Martina Schneiderova
Gardener, Florist, Horticulture
South Downs Marquees
Marquee Rentals
Apples & Pears
Gardening / Arborists
Rowan Chetwynd-Woods
Joinery

Specialists

Martin Hill & Daisy Day
Beekeepers
Nigel Hiscoke
Natural England
Erica Kemp
Envance UK
Alex Briggs & Ryan Ellis
Knepp Wildland Foundation
Belinda Bown & Kate Ellis
Farming & Wildlife Advisory
Clyde Jones
Agronomist
Rachel Bicker
Scrub expert
Kim Connor-Streich
Greenshank Environmental

ASSET AUDIT
PEOPLE &
COMMUNITY

Thought Leadership

The South Downs Food & Nature Fest

In June 2025, we launched the inaugural South Downs Food and Nature Fest at Westerlands, a special, one-day event on our regenerative farm, dedicated to exploring the dynamic between food and nature today, celebrating biodiversity and challenging the way we think about food and farming.

By joining us at Westerlands, guests had the opportunity to be part of a day which will inspire and educate. Engage in thought-provoking talks and discussions led by experts in their fields, covering topics that matter to our community, environment and landscape. They enjoyed guided walks through our beautiful farm and learned about our sustainable farming practices and the diverse ecosystems we nurture.

We hope to grow this event annually.

Right: Event flyer showing the speaker and activity line up

Spotlight

Creativity at Westerlands

Resident Artists

The landscape at Westerlands and its surrounds has long inspired famous artists. Renowned artist Ivon Hitchins, famed for his panoramic landscapes, owned woodland near Lavington Common, adjacent to Westerlands and painted here from 1940 until his death in 1979. His son, John, also a painter is still in situ.

Emma's intimate relationship to her home, to nature, and to this beautiful part of the world shapes her work. Inspired by the work of Ivon Hitchens, her landscape paintings tend to focus on ancient woodlands.

To listen to audio hold CTRL or COMMAND key when you CLICK

UNMAPPED PATHWAYS
by Pamela Jamison

In between chalk flinted webs of ancient
wanderings; are the unmapped paths crossing
the down lands, wefting through un-coppiced hazel,
through oak, beech, ash woods and over pasture.

These are the meanderings of foxes
and badgers, the fallow deer's slotted highways
and twisting ammoniac trails of voles
hidden under dog mercury and brambles.

All their escape and foraging routes etched
by generations in a warm blooded
ebb and flow and signposted with the scents
of urine, musk and fear; feral mind maps

on moonless nights when dark shapes pass unseen
and only silent footfalls leave their mark.

Pamela is a landscape artist inspired by Westerlands' surroundings and the South Downs National Park. She has also written a collection of poetry. Pam exhibited her work at Westerlands as part of the Graffham Festival 2024.

"If I have an emotional connection with a place, that is what draws me in. There is a depth that I want to draw out, to capture. There is something in it, a story, a history, that when I walk through the place, I am gripped and held by the atmosphere it conveys. It is there, you don't forget it."

– Emma Jamison

Spotlight

Community Survey & Open Day

20 April 2024

We engaged our local community for its thoughts and feedback for this plan and our 20 year vision. We held a Community Open Day at which we shared details of our 4 Strategic Pillars and took guests on walking tours of the farm. Prior to this we shared a Community Survey with local parish residents and the wider, local community via social media, with 44 responses.

In what ways would you like to see Westerlands play a greater role in local community life?

Monthly coffee mornings at the ...	10
Hosting fairs and markets eg: Ea...	22
Arts, music, theatre events	19
As a celebration venue	8
Accommodation overflow / spar...	9
Sports / fitness / recreational ac...	22
Education / schools / lifelong le...	18
Beef and lamb farm to fork, box...	20
Creation of habitats and protect...	28

Further responses to our survey can be found in Appendix 4

NATURAL BUILT COMMUNITY CULTURAL ENTERPRISE

Opportunities for the Future

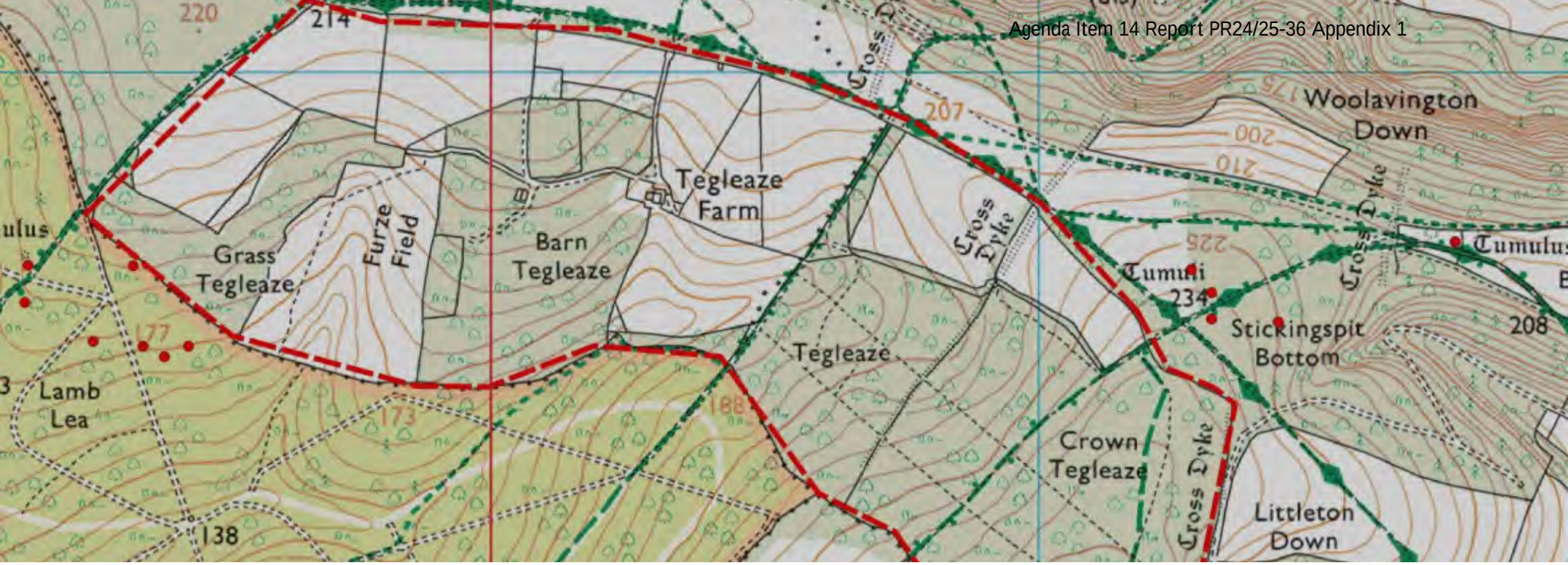
Community involvement and becoming a vibrant hub in the middle of the South Downs National Park for all things "Nature" and "Healing" is a real focus and passion of ours. Our Open Farm Sunday event and Food and Nature Fest speaks to this.

We are researching and developing opportunities to work with local schools to provide farm tours and workshops; exploring new regular events such as "Offline (device-free) Meetups" for people to chat, craft and connect with nature as a backdrop; and making exciting plans for our Good Gut Garden and Mind, Body, Soul Garden to be able to welcome local people for Permaculture, gut health workshops and more.

There is much we can do and offer outdoors, but our weakness is a lack of indoor facilities to welcome visitors, with adequate amenities. We would love to become fully accessible, indoors, too. For these facilities and as a Social Enterprise, we will be looking towards grants and wider funding for community projects.

Left: Headline speaker at Up Fest inspires marketing delegates at this dog-friendly event.

ASSET AUDIT
CULTURAL HERITAGE



A Deep Timeline of Human Habitation

The cultural heritage being conserved at Westerlands and Tegleaze illuminates a deep timeline of human habitation and land use, spanning neolithic (c.4100 to c.2500 BC) to more modern times. Bronze Age barrows (tumuli/burial mounds) and farming settlements are well documented in the Tegleaze area, where both Roman and Saxon artefacts have also been found, but two major projects, the Secret of the High Woods (2014-16) and the People of the Heath (2014-18) have also put a spotlight on these important and ancient landscapes

Sabine Stevenson's 2023 PhD, entitled Cosmology in the Rother Valley landscape of the Western Weald then sheds further light on how these bronze age peoples may have lived across Westerlands and Tegleaze lands and how they moved between the two areas.

See Appendix 7 for full summary.

Artefacts found at Tegleaze

Roman coins found by Jeremy Scott & Emma Jamison

Saxon coin (front & back) found by James Simpson

Westerlands and Tegleaze in a prehistoric context

Early to Middle Bronze Age
Climate & Vegetation

Tegleaze occupies the chalk and flint of the South Downs whilst Westerlands is over sandstones in the Rother valley, below. The chalk acts as an aquifer with springs emerging at the foot of the Downs and which then create tributaries to the River Rother, building the potential for wetlands in the valley.

Pollen core samples from the lower green sands have helped determine climate, vegetation and woodland composition, telling us it was cold and dry in the Early Bronze Age (c.2200 to 1500 BC) whilst there was a wet phase around 1450 BC, the Middle Bronze Age, suggesting an era of wetter marshland in the Rother Valley. (This propensity for wetter, lower lying valley land is perhaps why Westerlands has been called Waterlands in the past)

Pollen is then less well preserved in chalky, alkaline environments and so molluscs (snails) are used as a proxy for pollen to determine prehistoric conditions on top of the South Downs. It is important to bear in mind that over this long time period, the picture across the valley and higher up would have been a changing mosaic of vegetation with local clearances followed by regeneration.

Before agricultural activities impacted on vegetation, primary woodland consisted of mixed deciduous trees, birch, oak, hazel and lime. Elm preferred richer soils and alder favoured wetter areas and can be found, albeit in different densities, in all the investigated locations.

All eight pollen cores from the Rother valley show the presence of heathlands (heather) during the Early Bronze Age with Alder Carr (waterlogged wooded terrain) nearby indicating marshes during the Early and Middle Bronze Age. Grassland and heather would naturally colonise sandy soils which had become nutrient depleted with the opening up and clearance of woodland.

Elsewhere, project work reveals that hunter gatherer groups clearly moved between the heathlands of the Rother Valley and the higher ground of Tegleaze as a great number of flints have been found across the hangars (north escarpment of the South Downs), including above Graffham.

ASSET AUDIT
CULTURAL HERITAGE

Bronze Age

Barrows at Westerlands and Tegleaze

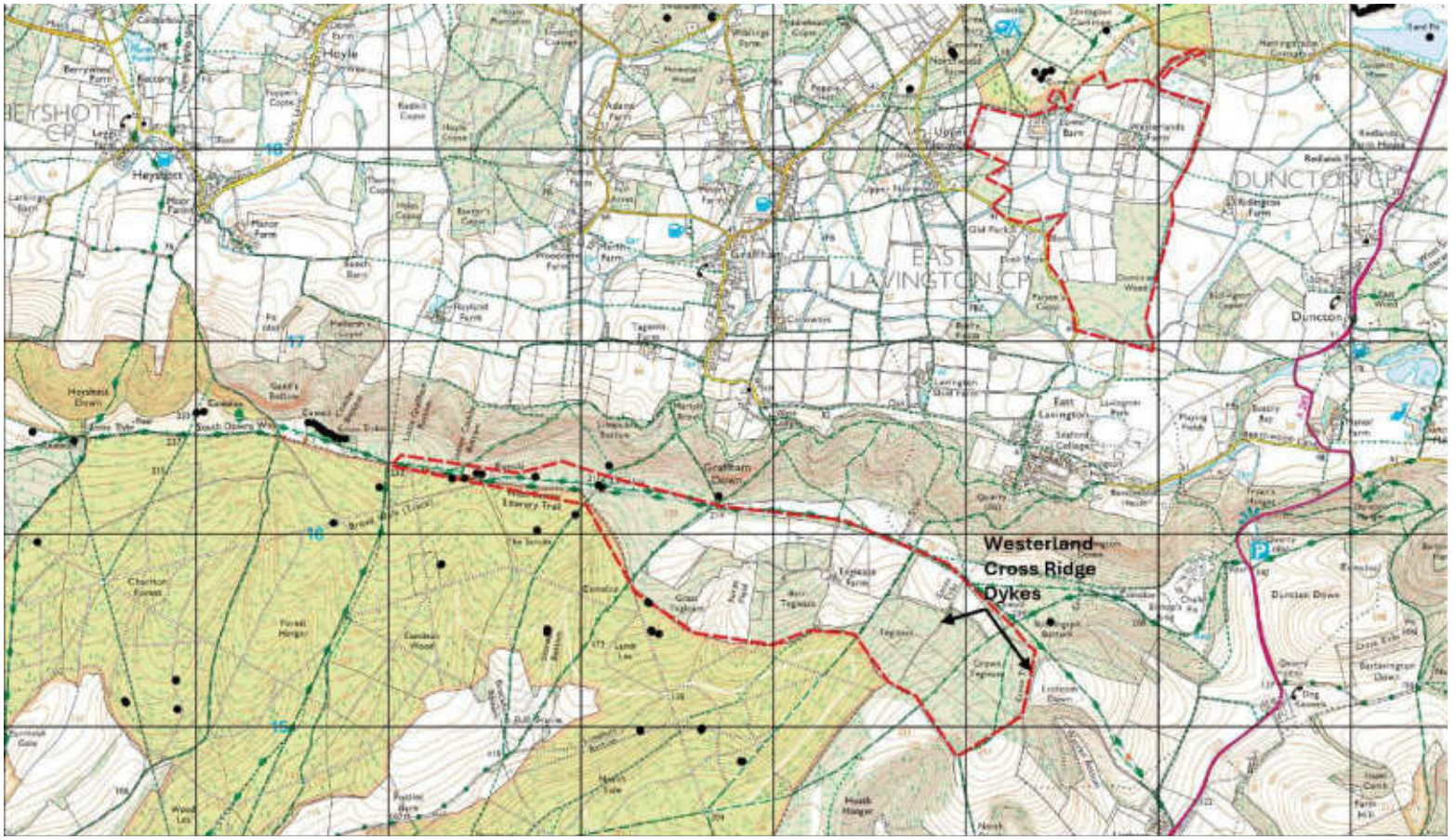


Figure 1 Westerlands valley and Downland (red dotted outline) within the Bronze Age barrows scape of the Rother valley and environs. Contains OS data © Crown copyright and database rights 2022 (100025252; Digimap licence 656865) Map: Sabine Stevenson

Bronze Age

Cemetaries at Westerlands and Tegleaze

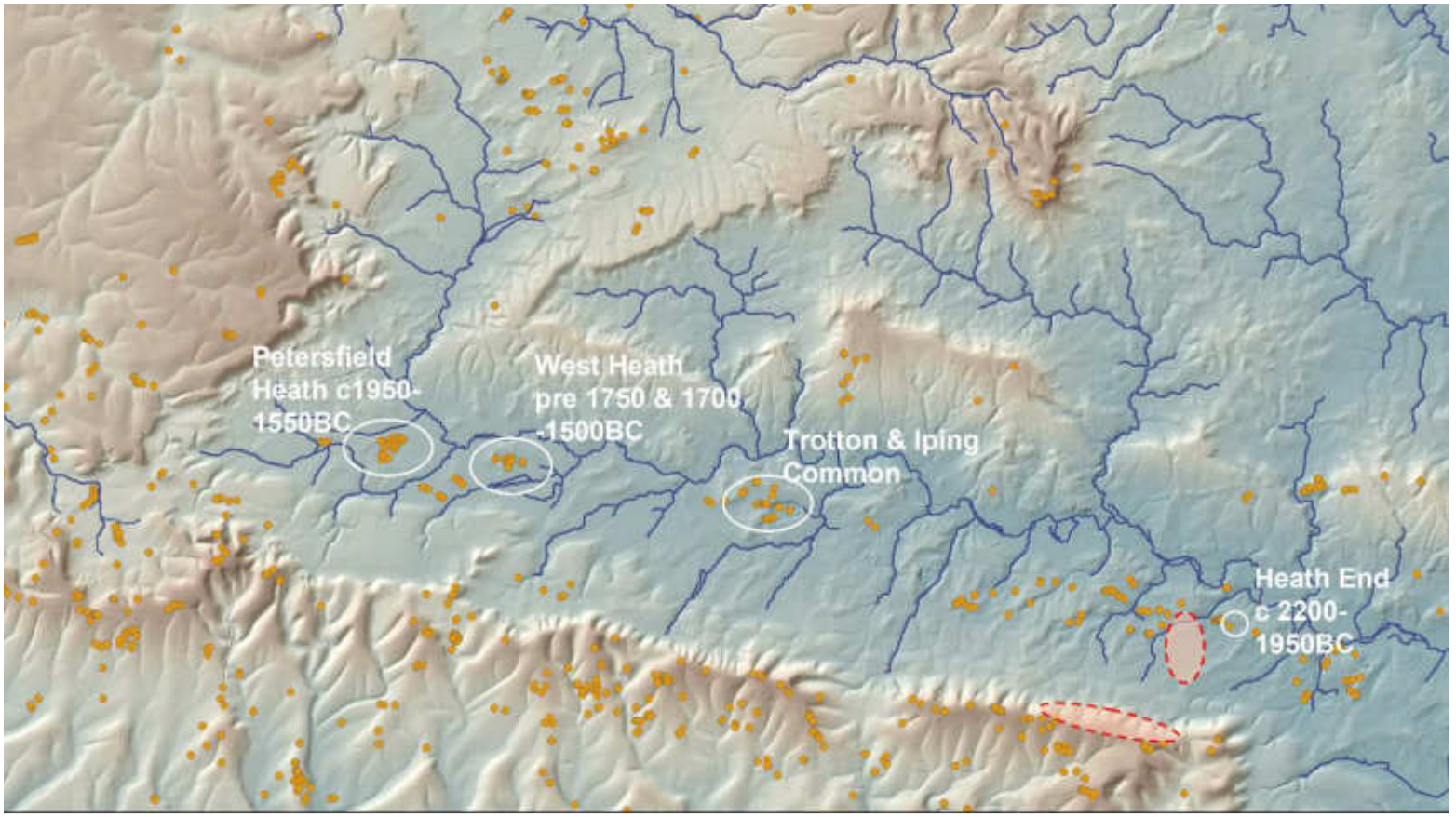


Figure 4 Westerlands valley and Downland (red dotted outline) within the topography and dated Bronze Age cemeteries and barrow scape of the Rother valley and environs. Contains OS data © Crown copyright and database rights 2021 (100025252) (Digimap license 656865), after Stevenson, 2013:Fig4.9.

ASSET AUDIT
CULTURAL HERITAGE

Early Bronze Age

Barrows at Westerlands & Tegleaze

Westerlands therefore sits within a well recorded, prehistoric landscape of barrows and other neolithic monuments. The People of the Heath project 2014 – 2018 explains the relationship between burial mounds and field systems connected by cosmology and places Petersfield Heath Bronze Age cemetery at the centre of a cosmographical network which connected Bronze Age communities across the Rother valley and South Downs landscape.

There are many barrow sites across the middle of the valley, including 14 barrows situated on Lavington common, only 100m from the Westerlands boundary, while just 800m to the east is the Heath End site, which is next to the impressive linear barrow group of 14 barrows at Duncton Quarry. This barrow scape in the Rother valley is then juxtaposed with the barrows on the South Downs where Tegleaze also extends into a well-researched Bronze Age landscape.

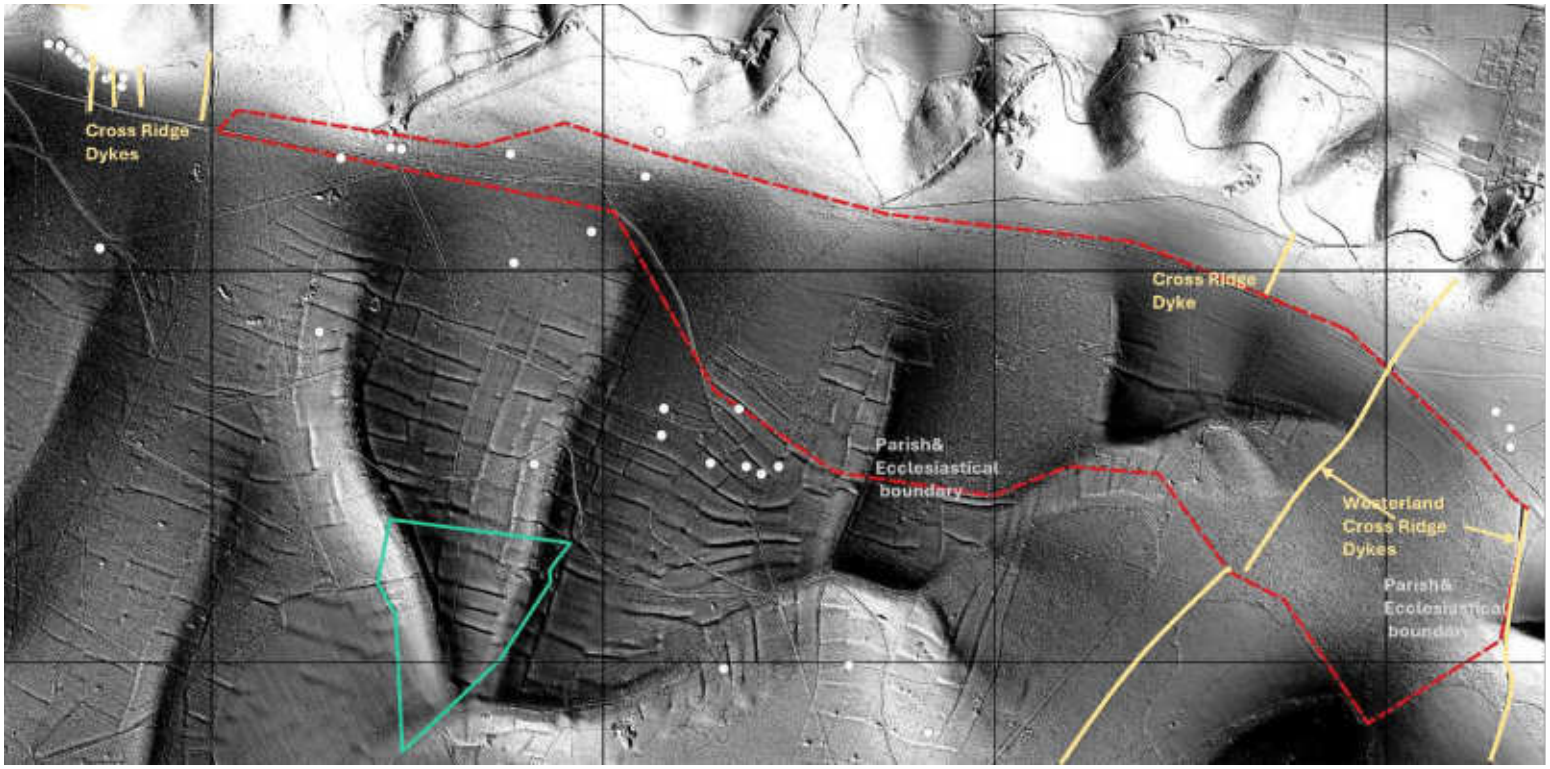
There are individual barrows on Tegleaze ground (white dots in picture over) as well as groups of barrows, just outside. Of note is the Heyshott linear barrow cemetery (just to the west) and the twin barrows, referred to as golden barrows which are found within the Graffham Down Trust nature reserves above Golden Coombe Bottom.

The golden barrows are a type of dished barrow which are unusual and only occur on three locations on the Downs. Looking at where possible Bronze Age communities in the Rother valley might have lived and been able to access resources, the benefit for the possible community around Heyshott and which extends across Tegleaze would have been the transect (known today as the Heyshott gap) from high chalk downland to the valley bottom where water and other resources would have been accessible.

ASSET AUDIT
CULTURAL HERITAGE

Early Bronze Age

Cross Ridge Dykes and field systems at Tegleaze



Tegleaze with prehistoric monuments (barrows white dots), Lamb Lea scheduled area (HER 1005820 green triangle) and Cross Ridge Dykes (yellow). Fieldsystems appear as linear ridges. LiDAR ASCI files courtesy of Fugro Geospatial & South Downs National Park Authority, processed DTM lit 45o – 40. Image Sabine Stevenson

Early Bronze Age
Characteristics and phasing of field relationships

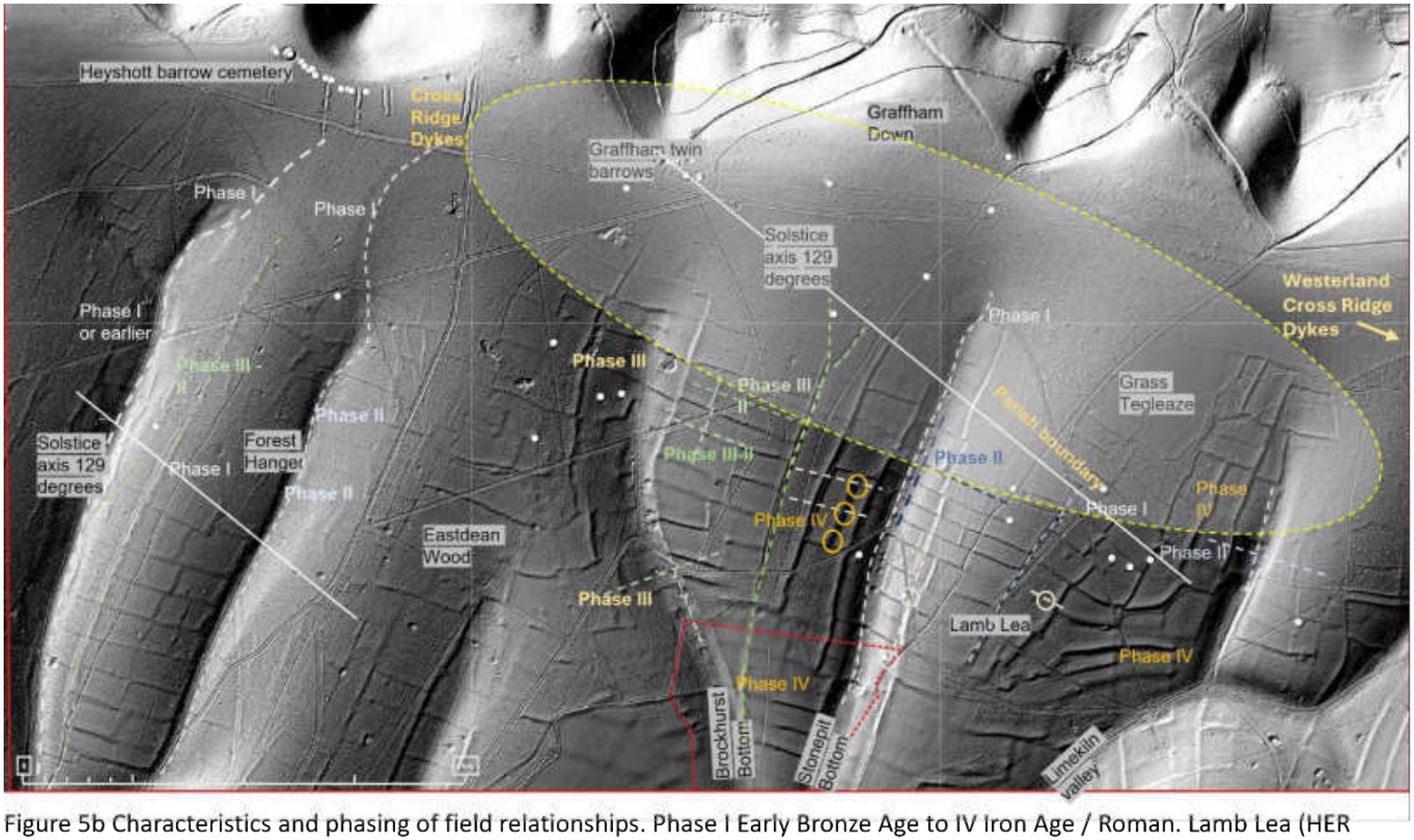


Figure 5b Characteristics and phasing of field relationships. Phase I Early Bronze Age to IV Iron Age / Roman. Lamb Lea (HER 1005820) red outline. Yellow dotted outline represents appr. Westerlands western upland extent LiDAR ASCI files courtesy of Fugro Geospatial & South Downs National Park Authority, processed DTM lit 315° – 45, after Stevenson, 2023:Fig 7.43.

ASSET AUDIT
CULTURAL HERITAGE

Middle Bronze Age
Agri-civilisation

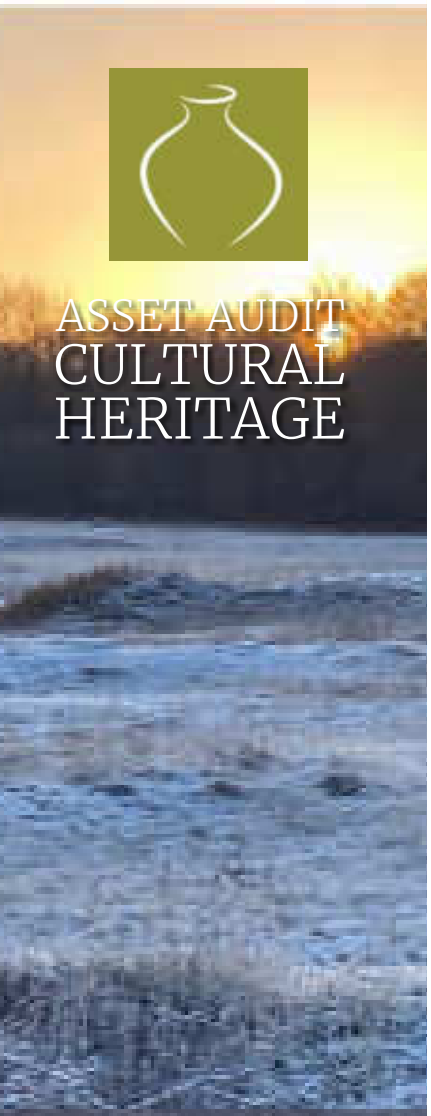
The nature of the field systems at Grass Tegleaze and those already designated at Lamb Lea just to the south, show the same characteristics. The seemingly mutually exclusive occurrence of barrows and field systems has traditionally led to the understanding that Early Bronze Age society shifted from a spiritual to an agricultural civilisation in the Middle Bronze Age.

This has been challenged in the last few years with some blocks of field systems on the South Downs shown to follow the winter-sunrise – midsummer-sunset alignment which may indicate that Early Bronze Age cosmological beliefs prevailed into the time when the first field systems were laid out.

Late Bronze Age
Cross Dykes

Barrows were mainly built in the Early Bronze Age while the earliest prehistoric field systems are traditionally associated with the Middle Bronze Age and cross dykes are ascribed to the Late Bronze Age.

Field systems and cross dykes are difficult to date. Besides the barrows next to and on Tegleaze land, two cross-ridge dykes respectively delineate the west as well as the east while the south of Grass Tegleaze is marked by the parish and ecclesiastical boundary between Graffham and East Dean on a prehistoric lynchet (man made ridge), along which possibly the bounds were beaten (groups of people memorising precise boundaries), a tradition which goes back to the Anglo Saxon times.



ASSET AUDIT
CULTURAL HERITAGE

Bronze Age
Guided by the sun, moon, stars...

The midwinter sunrise-midsummer sunset axes projecting through the twin golden barrows at Tegleaze also meet the midsummer sunrise-midwinter sunset axes over Trotton and Iping common to the north west. The field system block below and at Grass Tegleaze then aligns with the midwinter sunrise-midsummer sunset axis and passes exactly through the middle of the golden barrows. It is therefore argued that these field systems represent an early phase in their construction and are cosmologically associated with an Early Bronze Age belief system.

Bronze Age peoples were deeply connected to the Cosmos and the atmospheric phenomena at the time. They buried their dead, gathered food, planted and harvested fields and navigated under the rising and setting sun, moon and stars. Their understanding of the stars and the movement of the sun and moon were intrinsically part of their dealings in life and death. They must have felt part of the Cosmos, needing to sustain their environment in their everyday dealings to be able to survive and thrive.

The scheduled monuments on the South Downs and in the Rother valley are the last vestiges of this life which would have included a huge diversity of organic material which has long since perished.

These peoples were therefore inextricably linked with nature and the natural cycles and rhythms of life, but now, largely over the last 100 years, so many of us have become detached from nature and its life-giving benefits.

It is hard to overstate how much good nature does for our wellbeing. Study after study documents the psychological and physical benefits of being in and connecting to nature and we are now using Westerlands and Tegleaze as platforms to help come full circle with our Bronze Age forefathers by reconnecting as many as possible back to nature.

Appendix 7.

Acknowledgment and thanks to Sabine Stevenson PhD whose boundless enthusiasm and passion for this subject has inspired us all.

ASSET AUDIT
CULTURAL HERITAGE

Built Heritage

Westerlands' built heritage includes one listed building (Westerlands Farmhouse) as well as reminders of the recent equine past, in the shape of stable yards and post and rail fencing.

At one point called Waterlands Farm, Westerlands House has a Grade 2 listed designation. There is a conical stone in the kitchen floor of the farmhouse. This historic stone supports a 17th century oak pillar which marks the spot where three parishes of Burton, Lavington and Duncton originally met.

Westerlands Farmhouse

Equine Built Heritage

A 120-year period associated with both horse racing (Lord Woolavington's East Lavington Stud, then home to first female Jockey Club recognised trainer – Florence Nagle) and polo (home to former Chair of Cowdray Polo Club).

Our Top Stable Yard, seen in this 1966 video, once the home of Mrs Nagle's Stud, still welcomes horses today, albeit those who are on holiday with their owners.

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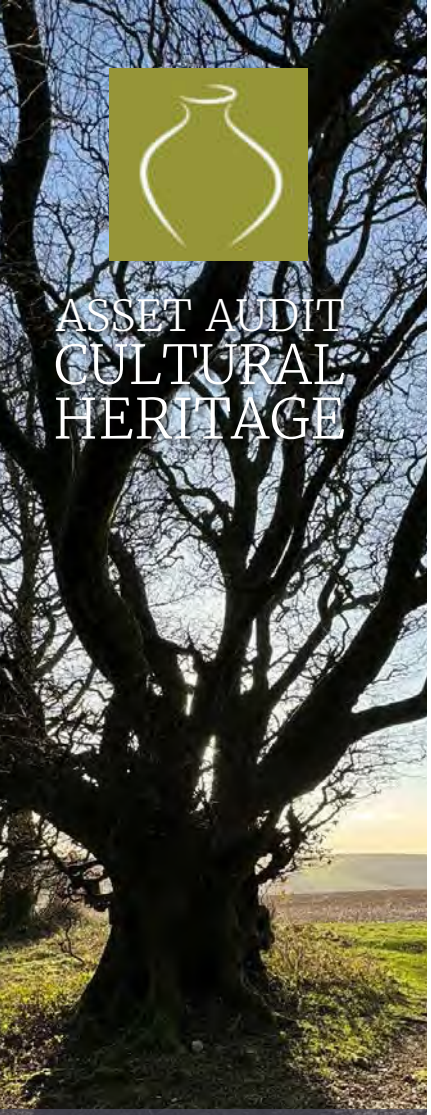
Racehorses led around the Top Yard



ASSET AUDIT
CULTURAL HERITAGE

Tegleaze Stories – from Sargent's Tree to the Beatles

During the winter months of 1807 there had been many rumours locally of coaches being attacked and robbed on the roads between Chichester and the Petworth and Midhurst area. Suspicion had been centred on a deserter from the Sussex Militia, the 13th Dragoons whose father lived in Graffham, but police found the house locked and empty. Captain George Sargent, recently returned from service in the French War, was keen to join the search and together they rode along the top of the Downs where they met a shepherd who answered their enquiry saying that a man had just passed him. The riders separated, agreeing to shout if they found any trace. Captain Sargent, riding ahead, caught sight of a fleeing figure carrying a gun who disappeared into thick bushes by the tree now called Sargent's Tree (between Tegleaze Farm and Goodwood's Charlton Forest). A moment later a shot rang out, and as his companions reached George Sargent, they realised that he was dead and the footpad had escaped once more.

In a different era, some 150 years later, English mega group The Beatles visited Tegleaze Farm looking for a quiet place to site a recording studio.

Penny Journey, the 1938 'Story of a Post Card from Manchester to Graffham', to give the film its full title, contrasts urban and rural English life, while tracking a postcard sent by a boy in a street of two-up-two-downs to his aunt – Mrs Thorpe, Tegleaze Farm, Graffham, Nr Goodwood, Sussex. His message to her is short and sweet: "Dear Auntie, Thank you very much for your letter. It must be nice to be in the countryside."

The film is short and sweet, while delivering detailed information with the same admirable efficiency displayed by the Post Office.

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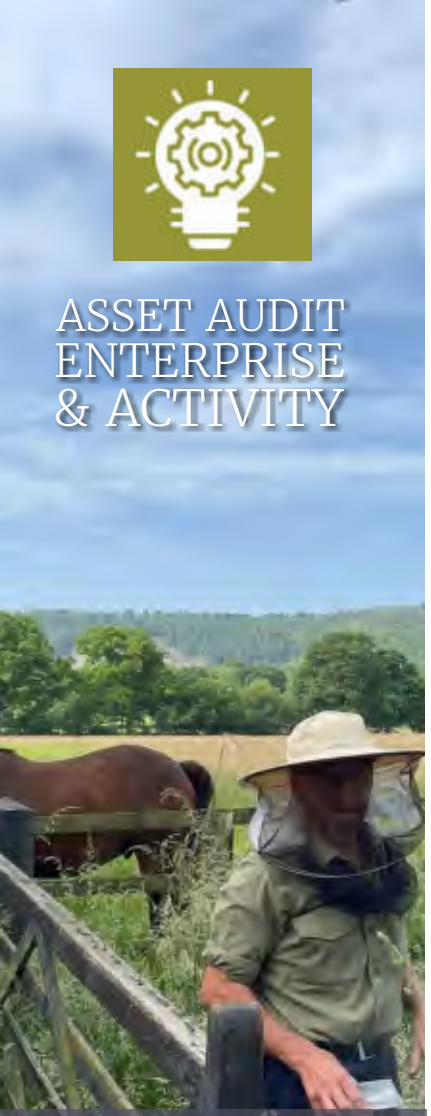
Monuments at Crown Tegleaze

Crown Tegleaze is one of the highest points in the South Downs. Commanding views can be enjoyed by all with views over Petworth and Black Down to the north and views of the coast and the Isle of Wight to the South. Benches can be found along the South Downs Way for those wanting to rest or pause or just be in nature.

Just outside Crown Tegleaze can be found a memorial plaque and more recently a cairn made of flints to remember the crew of a Lancaster bomber that clipped the top of the hill and crashed, whilst on the way back from France during WW2. The ranks of those who perished suggest an important group of men were lost.

ASSET AUDIT ENTERPRISE & ACTIVITY



ASSET AUDIT ENTERPRISE & ACTIVITY

Nature

Bob Liles, Chris and Kristy Wiggins, Ben Marks
Deer Stalking / venison production

South Downs Venison
Venison processing / wholesaler

Martin Hill, Daisy Day
Bees / Hive management

Martina Schneiderova
Horticulture / gardener

Mill Farm Plants
Supply of hedge whips

Arundel Arboretum
Supply of tree stock

Apples and Pears
Garden services

Simon Taylor
Master Butcher, Surrey Hills

Downland Traditional Meats
Slaughterhouse

We work in partnership with many local, small business owners who are aligned with our strategic pillars.

Simon Taylor

Our meat is prepared by the talented Simon Taylor of Surrey Hills Butchers. Simon is an accredited master butcher and captain of the GB butchery team. He believes that every step of our food's journey is important, from how an animal is fed to how it is slaughtered, butchered and cooked. He sources from local farmers such as Westerlands who are aligned with the same vision and who he can visit and see for himself how animals are cared for.

ASSET AUDIT ENTERPRISE & ACTIVITY

Access

Woodfire Camping
Provides affordable camping accommodation and catering

South Downs Marquees
Provide marquees for events and groups who come to visit

Loam Kitchen
Catering services to our corporate events

Gelato Gusto
Producers of award winning gelato / artisan ice cream

Edgecumbes
Coffee Roasters & Tea Merchants

Marsha Watson-Cooke
In-house chef

Our partners create products or services which use natural ingredients from ethical, sustainable sources.

Loam Kitchen

Loam Kitchen provide the catering for our corporate events. Based on the Sussex coast just outside Brighton, Loam sources all of their produce as locally and seasonally as possible, and their dairy, meat, and eggs are organic and free-range. They use locally caught fish and locally reared meat, and all of their dishes are made from scratch. They also make their own vinegars, chutneys, and kimchi.

ASSET AUDIT ENTERPRISE & ACTIVITY

Community

SoPilatesandBarre
Social runs with Pilates advertised to the local community

She Runs Outdoors
Organised trail running on the South Downs, meeting at our Horsebox Café

Freedom Racing
Half and Ultra marathon organisers operate their Five Trails Run from Westerlands every September

Our partners believe in the benefits of spending time outdoors and supporting a community of other enthusiasts.

Freedom Racing

Westerlands hosts the annual Five Trails 50k Ultra & Three Trails Half Marathon organised by Freedom Racing. Their ethos is about encouraging the joy & freedom of getting outdoors and appreciating the natural environment, escaping everyday life through challenging, memorable and enjoyable experiences.

ASSET AUDIT ENTERPRISE & ACTIVITY

Healing

Elly Middleton
Equestrian Coach, Equine Behaviourist, Reiki Practioner

Gemma Peterson
Personal Trainer, Reiki Practitioner
Life Coach

Nina Tallyeux-Rowden
Personal Trainer

Gareth Coombs
Gym Instructor

Kate Harvey
Yoga Instructor

Sophie White
Yoga Instructor, Reiki Practitioner

Louisa Hooper
Massage Therapist, Reflexologist

Louise Dignand
Reflexologist

Sara Prior
Spiritual Coach & Medium

Our instructors design sessions that harness the restorative power of nature to support physical and mental health.

Elly Middleton

Elly manages Westerlands Equestrian and has over 30 years experience taking care of horses and teaching riders of all ages and abilities. She also specialises in natural complimentary equine therapies and manages our 'Healing with Horses' wellness series and Equine Wellbeing workshops. From September 2025, Elly will be running our BHS 'Changing Lives Programme' which supports children who have struggled to have their educational needs met in traditional settings.

ECOSYSTEM SERVICES

Ecosystem Services

CONTENTS

Ecosystem services are the various benefits that are provided to people (and all living things) by the natural environment, often described as direct and indirect benefits.

The services are grouped into four broad categories: Supporting, Provisioning, Regulating & Cultural.

Introduction

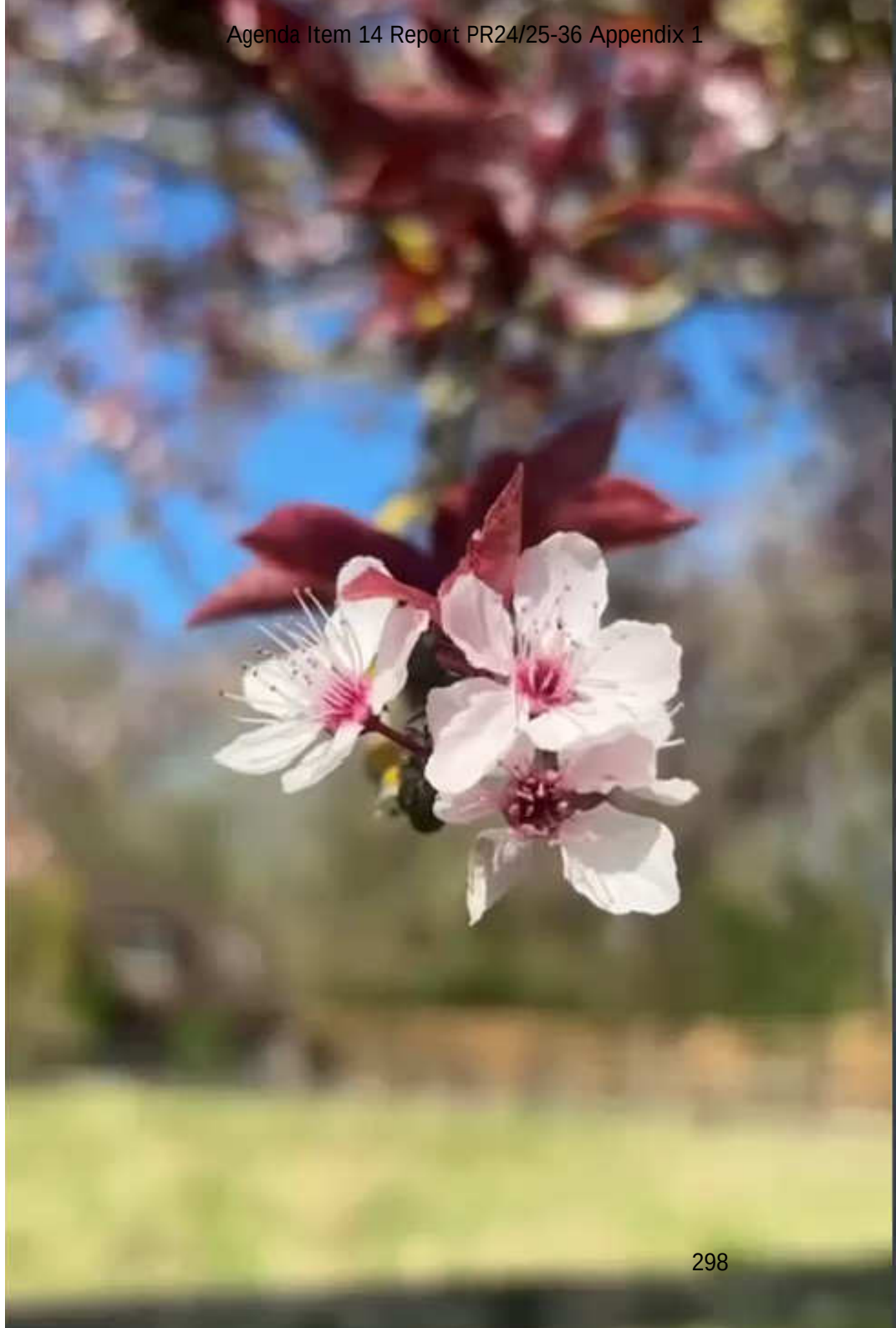
ECOSYSTEM SERVICES

In transforming from an equine focused monoculture, to a diverse environment, by encouraging new habitats and connecting people with nature and the land, Westerlands is rapidly broadening the range of ecosystem services it delivers.

Westerlands' investment in natural capital is generating outputs across each of the four ESS categories. This creates benefits to the land, to residents, to the local community, visitors and the people who work at Westerlands. It also represents a positive gain for neighbouring farms and estates.

The owners and managers of the estate work hard to consider the impact their farming system and diversification initiatives have in terms of Ecosystem Services in both daily operation and longer-term investment plans.

The following pages provide an insight into the way in which the estate generates and contributes to Ecosystem Services. This is an evolving process and we are constantly monitoring and assessing how we can improve our ecosystem value as part of our future management and action plans.



SUPPORTING
ECOSYSTEM SERVICES

SUPPORTING ECOSYSTEM SERVICES

SUPPORTING PROVISIONING REGULATING CULTURAL

Supporting Services

Supporting services are the underlying natural processes, the foundations that ecosystems cannot be sustained without, such as soil formation, nutrient / mineral cycling and the water cycle. These sustain all life on earth and are fundamental to healthy ecosystems.

Service	> Input	Output >
SOIL FORMATION	Change in land use from 100% equine to out-wintered small, native breed Dexter cattle, Romney ewes and Badger Face Welsh Mountain sheep. Cessation of all synthetic fertilisers and agro-chemical applications. 'Mob' / adaptive grazing techniques. High intensity grazing, mimicking the predator - prey relationship. Conservation grazing at Tegleaze / Graffham Down Trust areas New planting of hedgerow and trees / woodland. Field margins, edges, corners scrub and verges left undisturbed. Leaving fallen ash trees in situ.	Restoration of soil structure, nutrients and organic matter alongside reduced ground compaction. Improved water infiltration and holding capacity. Improved microbiological life from greater sward diversity, removal of agro-chemicals, access to livestock dung, creation of woody biomass and rotting timber. Longer rest periods. Increased abundance and distribution of biodiversity in soils. New habitat creation. Cover for a myriad different life forms. Support for ground nesting birds. Soil left undisturbed too An ecosystem in itself. Returns to earth.

SUPPORTING ECOSYSTEM SERVICES

SUPPORTING PROVISIONING REGULATING CULTURAL

Service	> Input	Output >
PRODUCTION	Regenerative model, grass-fed beef and lamb enterprise. Red Tractor farm assurance accreditation and membership of 'Pasture for Life'. 5 Bee hives. Deer management. Sustainably managed woodland.	High quality and nutrient dense beef and lamb for direct to consumer boxed schemes, local butchers. Gastro camping at Woodfire. Supports self regulation Honey sold on site. Proceeds to new hedge planting Venison for local box schemes and London markets Wood fuel / woodchip, mostly managing diseased ash trees
NUTRIENT CYCLING	Use of natural fertilisers from the regenerative grazing system. Conservation grazing to ensure extended pasture rest and strong plant cover. Legume & herb mixes. Mycorrhizal networks from wildlife corridors, hedgerow networks, plants, trees and natural field margins.	Enhanced soil health, structure, nutiients and microbiological life. Stronger, more diverse, climate resilient sward and cover for insects, invertebrates and small mammals. Healthy flows of nutrients, minerals, energy and vibrancy in our natural ecosystem networks. Reduced water run off.

SUPPORTING ECOSYSTEM SERVICES

SUPPORTING PROVISIONING REGULATING CULTURAL

Service	> Input	Output >
BIO DIVERSITY	Transition of land use and management pivot from equine monoculture.	Increased habitat diversity across Westerlands and Tegleaze
	New hedgerows, habitats and wildlife corridors, insect and bug hotels.	New habitats suitable to attract and retain a diverse range of flora and fauna. Improved interconnections.
	Leaving be verges. field margins and headlands. Woodland sustainably managed.	Enhanced species diversity and abundance.
	Pollinator strips alongside hedgerows and in field margins.	Ability to protect and attract some red list species.
	Not cutting hedges or scrub.	More and better interactions between people and nature.
	Light management of water bodies and waterways.	More growth links to sequestering more carbon and promoting life.
	'Pop up' ponds on the heavier clay soils after heavy rain,	Encouragement of flora and fauna species which depend on water flow, bodies of water or thrive in and around watercourse habitats.
	Conservation grazing with fit for purpose cattle and sheep.	A natural tool for the management of sensitive, protected and special areas.
	Bees on site as pollinator resource.	Allows all flora to flourish and thrive.

SUPPORTING ECOSYSTEM SERVICES

SUPPORTING PROVISIONING REGULATING CULTURAL

Service	> Input	Output >
THE WATER CYCLE	Use of 'exclosures' to provide natural buffers to chalk streams. Cessation of use of agro chemicals. Ongoing repair to soil and soil cover. Allowing seasonal clean water ponds supporting aquatic insects, invertebrates and birds. Borehole water supply for stock reducing ingestion of chemicals from treated mains water.	Improved water quality and retention. Improved water quality for natural water attenuation. Penetration and holding capacity improved. Positive for plant growth. Habitat and food chain enhancement and protection Healthier livestock and people aswell as birds and animals which also drink from field troughs.

PROVISIONING
ECOSYSTEM SERVICES

SUPPORTING PROVISIONING REGULATING CULTURAL

Provisioning Services

Provisioning services are the benefits that can be extracted from nature such as wood, timber, water, plants.

Service	> Input	Output >
FOOD PRODUCTION	Dexter cows and Romney sheep for meat. Collaboration with neighbours to manage the deer population in the National Park. Hives x 5 x 50,000 bees. Locally foraged wild garlic, mushrooms etc	Supplying local butchers / box schemes, in house economy. Population control for biodiversity protection and drive the wild venison market in the UK. Delicious honey, proceeds from which go towards new hedgerow planting. Delicious natural products for cooking with and bringing people closer to nature via foraging.

PROVISIONING ECOSYSTEM SERVICES

SUPPORTING PROVISIONING REGULATING CULTURAL

Service	> Input	Output >
WATER SUPPLY	Two boreholes to supply residents, visitors, livestock and others. Water movement via trenched links, to all parts of Tegleaze including Graffham Down Trust reserves. Rainwater harvesting into large decommissioned cesspits. Underground tanks for storage during the drier months.	Clean water supply from aquifer to replace mains water at Westerlands. Increases self sufficiency. Facilitates chalk downland and conservation grazing in all areas. Repurposing old infrastructure to use rainwater when needed to increase resilience during drought. Back up water supply if needed. Clean run off to nearby watercourse.
GENETIC DIVERSITY	Positive management of newly created and established habitats.	A range of habitat types across the estate support all native UK life Habitats for migrating birds as well as red list species

PROVISIONING ECOSYSTEM SERVICES

SUPPORTING | PROVISIONING | REGULATING | CULTURAL

Service	> Input	Output >
RENEWABLE ENERGY PRODUCTION	Two biomass boilers at Westerlands to generate energy for hot water and radiators and serving all residences. Potential for Photovoltaic panels on barns and other roofs. Solar energy used to power the bore hole water pump at Tegleaze. General woodland management. A light and sustainable approach for protection of these important habitats.	Displaces oil, gas and electricity for hot water and space heating with woodchip from local ash trees. Harness solar energy from PV panels on large shed roofs and some other properties. Export back to the grid. Reduced carbon footprint in line with our 2045 net zero target. PV used to pump water from the Tegleaze bore hole, 120m below the surface of the South Downs. Firewood from managed woodland, whilst creating / improving habitats

REGULATING
ECOSYSTEM SERVICES

REGULATING ECOSYSTEM SERVICES

SUPPORTING PROVISIONING REGULATING CULTURAL

Regulating Services

Regulating services are the result of natural processes such as pollination, erosion and flood control, carbon sequestration and storage, water purification, air filtration which work to make ecosystems clean, sustainable, functional and resilient to change.

Service	> Input	Output >
POLLINATION	Creation and management of new wildlife corridors to attract pollinators. Establish herbal leys. Maintenance of bee hives and creation of habitat piles and hotels created from fallen trees and debris. No mow May initiative. Some meadows are left uncut over the summer to harbour insects and support birdlife.	Encourage a bigger variety of pollinators across mixed habitats. Support all pollinators, not just honey making bees. Increased care for insects and invertebrates. Especially dandelion promotion, supports pollinators. Resilience built and improved integrity of the food chain.
AIR QUALITY	Conservation of species rich grassland and woodland extension. New habitat creation and allowing unencumbered growth. Low use of farm vehicles on site	Increasing the air purification capacity across the landscape and for the benefit of residents and neighbours. Air purification for all flora & fauna. Fuel emissions low. Reduces air pollution for healthier lungs and clearer skies.

REGULATING ECOSYSTEM SERVICES

SUPPORTING PROVISIONING REGULATING CULTURAL

Service	> Input	Output >
CARBON STORAGE	No tillage / no ploughing Livestock (cows and sheep) rotation on the land. Woodland extension. Trackside verges, field headlands and margins, existing hedges and woodland are being left with minimal management.	Decreases soil erosion, increases water infiltration, retention of organic matter and nutrient cycling. Increasing possibilities to sequester carbon / storage across Westerlands and Tegleaze. Aids transition to carbon neutrality and to net zero.
WATER AND FLOOD	Managing water courses and low-lying areas. Cloven hoofed grazers have been introduced to improve in situ water storage and soil infiltration. Regenerative farming practices and no tillage management.	Natural water storage and flood management. Soil is less compacted therefore reducing runoff and increasing infiltration and retention. Overall improved functioning of the water cycle and flow to watercourses surrounding our community.

REGULATING ECOSYSTEM SERVICES

SUPPORTING PROVISIONING REGULATING CULTURAL

Service	> Input	Output >
EROSION	Leaving fallen trees in situ. Planting new trees, hedgerows and wildlife corridors. Leaving track verges, field corners and scrub unmanaged. Livestock grazing to protect the permanent grassland.	Stopping the movement of soil from weather and water. Increased ground cover and thicker sward to slow harmful processes. Slows the movement of soils in periods of heavy rain and on exposed or steep areas on the hill. Good soil structure prevents erosion.
DISEASE	Managing diseased trees in the woodland. Management of invasive species.	Some woodland management to ensure safety from falling diseased trees. Encouraging natural biodiversity also encourages parasites and predators to regulate disease and pests.

CULTURAL
ECOSYSTEM SERVICES

CULTURAL ECOSYSTEM SERVICES

SUPPORTING PROVISIONING REGULATING CULTURAL

Cultural Services

Cultural services are 'non-material' benefits for people from interaction with the natural environment and which contribute to development and cultural advancement. Examples of cultural services are greater access to nature, leisure, recreation, cultural heritage and wellbeing from an engagement with outdoor spaces.

Service	> Input	Output >
LEISURE & HOSPITALITY	A differentiated, short stay accommodation offer, from cottages, to cabins, shepherd's huts, yurts and camping, with price points set to attract a range of visitors to help in democratising access to nature.	Increased social diversity is targeted to encourage a broader range of visitors to Westerlands, Tegleaze and to the National Park, and which helps to reconnect people with nature. Full immersion is recommended, hence beds are provided.
WELL BEING	Using available natural capital to create a wellness in nature offering, retreats, spa, fitness etc, for both mind, body and soul .	Creating an environment for day and overnight visitors to experience the benefits of the Westerlands and Tegleaze natural capital assets. An offer to encourage visitors to stay longer in the National Park. Packages available for different experiences. Experiential visits for physical and mental health.

CULTURAL ECOSYSTEM SERVICES

SUPPORTING PROVISIONING REGULATING CULTURAL

Service	> Input	Output >
RECREATION & ACTIVITIES	Attracting a younger and more diverse audience to the countryside. Maintaining a connection with our cultural history through riding and equine wellness series programme. Encouraging the local community to the estate and who will mix with staying guests through physical activities such as WildFit / WildSpa and wellness retreats. Maintaining the footpaths through the farm from Graffham or Duncton to Lavington Plantation and Common, linking to the Serpent Trail, South Downs Way or on to Selham and Heyshott. Attracting business visitors to the estate for team building days or as a location for business planning workshops to help creative and strategic thinking from proximity to the natural environment.	Facilitating access to the countryside to encourage learning and appreciation. Encouraging physical activity which helps with mental health out in nature. Westerlands takes on a greater role as a community hub, a place for local residents to want to come and spend time. Ensuring connectivity along footpaths through and around Westerlands and Tegleaze to promote movement, access, enjoyment and therefore wellbeing in nature. Again, adds diversity to the mix of visitors to the National Park, but with a corporate budget. Time in nature helps to loosen thoughts and unlock complex business issues.

CULTURAL ECOSYSTEM SERVICES

SUPPORTING PROVISIONING REGULATING CULTURAL

Service	> Input	Output >
EDUCATION	Workshops for staying guests and day visitorsand students. Teaching visitors to engage and connect with nature on all levels Farm Tours around Westerlands and Tegleaze	Maintains and encourages the appeal of visiting the countryside and the importance of caring for it. Explain conservation and enhancement to encourage others to learn and become custodians. Corporate groups and mental health charities are invited to visit to benefit from the tranquillity.
SENSE OF PLACE	Reversion to traditional pastoral land use and management to conserve heritage and landscape character. Protecting Dark Skies and the sense of tranquillity.	Repeat visits and the benefits of seeing the landscape at different times of the year and being connected to it. Encouraging people to visit who would not usually have the opportunity. Sense of belonging. Support stargazing visitors.

CULTURAL ECOSYSTEM SERVICES

SUPPORTING PROVISIONING REGULATING CULTURAL

Service	> Input	Output >
LOCAL COMMUNITY	Creation of employment and volunteering opportunities. Using local suppliers to support the activities on the estate. Super-fast fibre broadband* installed to allow for hot desk or remote working in a natural environment. Support for and work with the Graffham Down Trust and its 6 parcels of land for wildlife and chalk downland conservation. Benches positioned in strategic places, to 'simply be' in nature. *Appendix 10	Encouraging engagement with the local community and attracting visitors to a place that was previously 'closed' to the public. Supporting local suppliers and businesses, which are part of a rural ecosystem. Creation of volunteer opportunities via charity relationships, e.g. St Ethelburga's. Maintenance work parties in the Spring and Summer. Dexter burger bbq for volunteers. Significantly improved wellness and peace of mind for all who visit Westerlands and Tegleaze.

REALISING OUR VISION

HOW WILL WE GET THERE?

A huge amount of work lies ahead and in being clear about our Vision and the role we wish to play in the South Downs National Park, we need to imagine what success looks like.

As guardians and custodians of a special area, simply passing through time, we intend that our actions will lead to our land and the wider landscape being conserved and enhanced for future visitors to benefit from and enjoy.

Our modest farming enterprise will operate in concert with a flourishing and thriving biodiverse natural world which has witnessed impressive net gains, as measured by independent third parties using internationally recognized methodologies.

Milestones will be reached in finding ways to help mitigate climate change risk and Westerlands and Tegleaze will be working alongside businesses which are genuinely interested in doing good for the planet and which share the same ideologies and blueprint for success as ours. We are now ready for those relationships and those high integrity environmental markets which value natural capital.

Left: Livestock Manager, Zak working with the sheep.

Seasonal challenges

In the UK, there has always been a marked difference between Summer and Winter. The British tend to hunker down as days get shorter and weather deteriorates and this only serves to play into the hands of a Natural Deficit Disorder. A call to action.

Your natural world is still out there between October and April and our aim is to hone our communications and messaging strategy to encourage stays throughout the whole year by offering season specific activities and experiences to boost visitor occupancy.

These will include amongst others, seasonal walks, “art in nature” sessions, creative writing workshops, stargazing, outdoor film nights and retreats and events of different kinds, which we hope will attract new people, both locally, nationally and internationally.

More resources, effort, ideas and marketing are needed to increase occupancy in Autumn and Winter and to drive traffic to the National Park in these leaner months.

Our 2025/26 forecast for overall accommodation occupancy shows a significant drop in the Autumn and Winter months, so there is now a big opportunity to address this and find ways to close the gap. Moreover, post the pandemic, we have seen a definite shift to last minute bookings, which adds pressure to running the business.

Right: The team from OTO enjoying a farm tour.

Funding the next 20 years

In order to realise the ambitious, environmental initiatives we are putting in place and to evolve the current position to build out the platform for people as a Social Enterprise, we need to generate more revenue, urgently and find new ways to fund the enterprise. We have identified a demand from corporate groups, however, there is currently a limited capacity to service this client base, given a lack of overnight accommodation (usually single occupancy for business people) as well as a limitation on indoor spaces for meetings, presentations, workshops, conferences etc. Working, walking and talking and meetings outside in nature is encouraged, especially in summer, but a blend of indoor spaces, facilities and infrastructure, supported by our experiences would help to convert more leads on a year round basis.

Additionally, private sector finance will likely play a big part in funding future nature recovery in different ways, with bigger corporate businesses having bigger budgets to cement their relationships with nature in the public eye. We need to be having those conversations at Westerlands, now and be in a position to welcome executives to our home to engage in a wide range of discussions, which might include funding development, nature based solutions, sponsorship or other types of collaboration. Our business backgrounds also allow us to engage corporates and institutions as a professional counterparty and we look forward to these discussions in the heart of the South Downs National Park.

Left: Unrooted Drinks completed a team building activity of constructing a beehive.

AN ASSESSMENT
of our Farm, Estate and Business

STRENGTHS

Location in the middle of the National Park, close to London, airports and the coast

Geology, a mix of chalk, sand and clay offering optionality alongside diverse habitats

Water self sufficiency via boreholes x2 and stream network across Westerlands

Natural capital that offers a range of ecosystem services across all four pillars of our vision

Renewable Energy - biomass for space heating, PV for power generation

Access via public rights of way is not directly across any field

An A Team working cohesively together and which is wholly committed to our vision

A supportive, local community which backs our initiatives and our alignment with the SDNP (according to Survey)

Diverse built capital which enables varied cultural services (art/leisure/recreation etc)

WEAKNESSES

Short stay accommodation is the engine of the business and in order to make Westerlands financially sustainable, an increased number of beds is needed

Budget needed to address soil health and structure issues

Large budget needed to transition from a monoculture couch / rye grass to species rich at Westerlands

Soil pH is low and soil is deficient in calcium, magnesium, sodium and potassium as well as most trace elements

Compacted Ground at Westerlands causing issues with water infiltration and very high iron levels

Drainage needs addressing at Westerlands, land drains and ditches blocked, no maintenance during the stud years

Continued overreliance on Oliver Hancock and Antonia Jamison with only one full time employee

Lack of indoor space to offer educational workshops, corporate away days and cultural / community activities and events

Lack of on-site butchery and chiller hampers our ability to harness supply chain value and sell our beef, lamb, venison locally

Infrastructure 100% set up for horses, not cattle or sheep, need for mobile livestock handling systems

OPPORTUNITIES

Unused built assets which lie vacant and deteriorating and which could be repurposed to support the business model

Unused outdoor spaces for habitat creation or revenue generation

Expand the business model to be in a position to harness the growing demand from the corporate market

Full restoration of all soils at Westerlands over 5-10 years to help improve biodiversity at sward level and above

Replanting of Dominies wood in the mid term to restore a woodland habitat at Westerlands

More renewables, Solar power (PV) on barn roofs to reduce power bills and be in a position to export back to the grid

Mobile slaughter unit to reduce reliance on remaining, limited, at risk supply chain infrastructure

Find ways to grow the UK venison market and to improve supply chain capacity and infrastructure

Social Enterprise status unlocks Nature Based Solutions deals and infrastructure funding

THREATS

Loss of the only local abattoir (Henfield) effectively puts the livestock enterprise out of business

Change of government tax, land and property policy, IHT / death duties

Economic woes, cost of living, recession, pandemic, war cause a significant downturn in visitors to Westerlands over the next 20 years.

Climate Change yields more extreme weather patterns also hampering nature recovery and restoration and general land management

Current, small, part time team leaves no contingent capacity, meaning no cover for staff absence or holiday

Westerlands needs to be sold as the business model is not sustainable or financially viable long term

A growing deer population continues to hamper all nature recovery and restoration projects, especially woodland

Disease affects livestock enterprise e.g. bovine tuberculosis

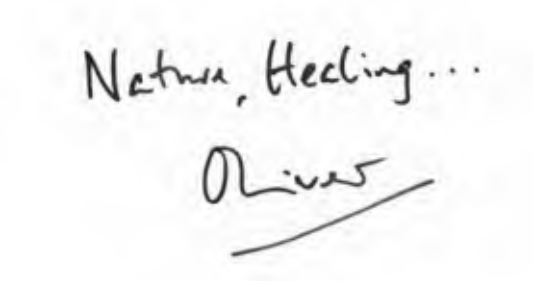
Closing thoughts

Human beings should live as part of nature. In my mind, there is a direct link between our detachment from nature over the last 100 years and the damage done in that time. Not all the damage done is irreversible, however. There is a huge amount of repair and remedial work needed, now, but if we give Mother Nature the space and the time, she can recover quickly and we saw evidence of this during the pandemic. We must reverse biodiversity loss and increase abundance.

At Westerlands and Tegleaze, we are committed to nature recovery and restoration over the next 20 years and which will help to stabilise the effects of climate change. For me, there is a direct link between biodiversity loss and climate change, but we also need to find ways to increase revenues to make this happen in time and to make our model sustainable, long term. We invite people to our home, to come and visit, to stay and to see and experience what we are doing here. Everyone can play a part and make a difference. It is hard to overstate how much good nature does for our wellbeing. Study after study documents the psychological and physical benefits of connecting back to and with nature and we are using Westerlands and Tegleaze as platforms to come full circle with our Bronze Age forefathers by reconnecting as many people as possible.

Closing thoughts

We look forward to operating as a fully-fledged Social Enterprise, to welcoming back those who already know us as well as those visiting for the first time. Everyone is welcome and there is something for everyone. Come and experience first hand the healing benefits our natural world at Westerlands and Tegleaze can offer your mind, body and soul. Come and work, rest, play or simply be...in nature.



FOR MORE INFORMATION PLEASE CONTACT

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APPENDICES

1 14

APPENDIX

APPENDICES

Appendix 1
South Downs National Park - Purposes and Duty
South Downs National Park - 10 Outcomes of the Partnership Management Plan
South Downs National Park - 7 Special Qualities

Appendix 2
United Nation's 17 Sustainable Development Goals

Appendix 3
Tegleaze Botanical Species Summary May 2024 - Farming & Wildlife Advisory Group South East.

Appendix 4
Westerlands Community Survey Responses April 2024

Appendix 5
Soil Analysis Report April 2024 - Clyde Jones Consultancy

Appendix 6
Chirrup, Robot Ecologist, bird species List February & June 2024

Appendix 7
Sabine Stevenson PhD Feb 2023 Summary

1 14

APPENDIX

APPENDICES

Appendix 8
Bat Survey

Appendix 9
Deer Survey
Deer Impact Report
Deer Count Summary

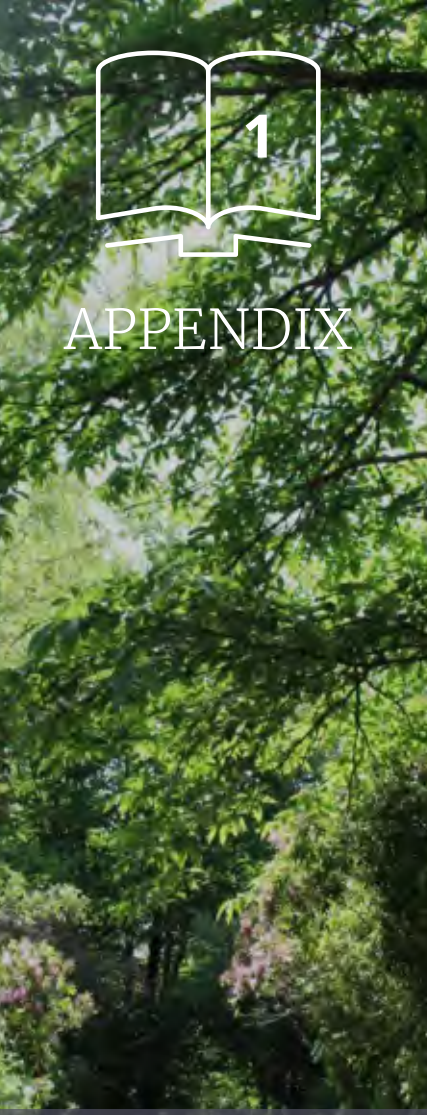
Appendix 10
Press & Media Coverage

Appendix 11
Dung Beetles

Appendix 12
University of Sussex, Nature Sense

Appendix 13
The Guardian: Article - Britain ranks bottom in Europe for nature connectedness.

Appendix 14
Weald to Waves: Scrubland Superheroes Project



APPENDIX 1

South Downs National Park

Purposes and Duty

Purpose 1: To conserve and enhance the natural beauty, wildlife and cultural heritage of the area.

Purpose 2: To promote opportunities for the understanding and enjoyment of the special qualities of the National Park by the public.

Duty: To seek to foster the social and economic wellbeing of the local communities within the National Park in pursuit of our purposes.

10 Outcomes of the PMP

Outcome 01: Landscape & Natural Beauty
Outcome 02: Increasing Resilience
Outcome 03: Habitats and Species
Outcome 04: Arts and Heritage
Outcome 05: Outstanding Experiences
Outcome 06: Lifelong Learning
Outcome 07: Health and Wellbeing
Outcome 08: Creating Custodians
Outcome 09: Great Places to Live
Outcome 10: Great Places to Work

7 Special Qualities

1. Diverse, inspirational landscapes and breathtaking views;
2. A rich variety of wildlife and habitats including rare and internationally important species;
3. Tranquil and unspoilt places;
4. An environment shaped by centuries of farming and embracing new enterprise;
5. Great opportunities for recreational activities and learning experiences;
6. Well-conserved historical features and a rich cultural heritage;
7. Distinctive towns and villages, and communities with real pride in their area.

APPENDIX 2

United Nation's 17 Sustainable Development Goals

APPENDIX

APPENDIX 3

Tegleaze Botanical Species Summary

Walkover Survey 16/5/24

Field - 0659

Meadow Foxtail	*Alopecurus pratensis*	D	Grass/Sedges//Rushes
Perennial Ryegrass	*Lolium perenne*	O	
Yorkshire Fog	*Holcus lanatus*	O	
Soft Brome	*Bromus hordeaceus*	O	
Germander Speedwell	*Veronica chamaedrys*	O	Herbaceous Species
Bird's-foot Trefoil	*Lotus corniculatus*	D	
Ribwort Plantain	*Plantago lanceolata*	O	
Lesser Stitchwort	*Stellaria graminea*	D	
Red Clover	*Trifolium pratense*	D	
Common Knapweed	*Centaurea nigra*	R	
Nettle	*Urtica dioica*	R	
Spear Thistle	*Cirsium vulgare*	O	
Creeping Buttercup	*Ranunculus repens*	F	
Bulbous Buttercup	*Ranunculus bulbosus*	F	
Meadow Buttercup	*Ranunculus acris*	F	
Common Sorrel	*Rumex acetosa*	R	
Common Mouse Ear	*Cerastium fontanum*	O	
Black Medic	*Medicago lupulina*	R	
Selfheal	*Prunella vulgaris*	R	
Common Knapweed	*Centaurea nigra*	R	
Bluebell	*Hyacinthoides non-scripta*	R (by north gate)	
Wild Garlic	*Allium ursinum*	R (by north gate)	

APPENDIX 3

Tegleaze Botanical Species Summary

Walkover Survey 16/5/24

Field - 8174

Meadow Foxtail	*Alopecurus pratensis*	D	Grass/Sedges//Rushes
Yorkshire Fog	*Holcus lanatus*	F	
Brome sp.	*Bromus* sp.	O	
Field Wood-rush	*Luzula campestris*	R	
Cinquefoil sp.	*Potentilla* sp.	R	Herbaceous Species
Red Clover	*Trifolium pratense*	D	
Ragwort	*Jacobaea vulgaris*	D	
Ribwort Plantain	*Plantago lanceolata*	O	
Silverweed	*Potentilla anserina*	O	
Germander Speedwell	*Veronica chamaedrys*	D	
Bird's-foot Trefoil	*Lotus corniculatus*	R	
Common Knapweed	*Centaurea nigra*	R	
White Clover	*Trifolium repens*	F	
Meadow buttercup	*Ranunculus acris*	F	
Greater Plantain	*Plantago major*	O	
Germander Speedwell	*Veronica chamaedrys*	O	
Common Mouse-ear	*Cerastium fontanum*	F	

APPENDIX 3

Tegleaze Botanical Species Summary

Walkover Survey 16/5/24

Field - 5784

Perennial Ryegrass	*Lolium perenne*	F
Cock's-foot	*Dactylis glomerata*	F
Fescue sp.	*Festuca* sp.	F
Meadow Foxtail	*Alopecurus pratensis*	F
Yorkshire Fog	*Holcus lanatus*	O
Meadow Buttercup	*Ranunculus acris*	D
Lesser Stitchwort	*Stellaria graminea*	R
Blue Field Madder	*Sherardia arvensis*	O
Yellow Rattle	*Rhinanthus minor*	R
Common Mouse-ear	*Cerastium fontanum*	D
Bird's-foot Trefoil	*Lotus corniculatus*	O
Red Clover	*Trifolium pratense*	D
Ribwort Plantain	*Plantago lanceolata*	O
Crosswort	*Cruciata laevipes*	R
Bulbous Buttercup	*Ranunculus bulbosus*	O
Germander Speedwell	*Veronica chamaedrys*	O
Yarrow	*Achillea millefolium*	R
Dove's-foot Crane's-bill	*Geranium molle*	R
Tufted Vetch	*Vicia cracca*	R

Grass/Sedges//Rushes

Herbaceous Species

Heavy rain started up at this point so level of detail for remaining fields is low:
Field – 2002: Cinquefoil sp., Red Clover, White Clover, Meadow Foxtail, Yorkshire Fog, Perennial Ryegrass, Creeping Buttercup, Annual Bluegrass (Poa annua), Cock's-foot grass.
Field – 9299: low species diversity, White Clover, Greater Plantain, close grazed grasses.
Field – 7663: Cowslip (Primula veris), Bracken (Pteridium), Pignut (Conopodium majus), scrub developing

4

APPENDIX

APPENDIX 4
Community Survey Responses

1. Have you heard of Westerlands?

More Details

Yes	41
No	2

2. Have you been to / visited Westerlands?

More Details

Yes	28
No	15

APPENDIX 4
Community Survey Responses

3. When you think of Westerlands what comes to mind?

More Details

40
Responses

Latest Responses
"Camping"
"Farm"
"Only walked through over the winter and not much going on. "

4. Did you know that Westerlands offers the following: accommodation, horse-riding, fitness classes, yoga classes, art classes, nature walks, healing therapies and a horsebox café?

More Details

Yes	23
No	12
Other	4

APPENDIX 4
Community Survey Responses

5. How would you like to benefit from the Westerlands Whole Estate Plan? Select all that apply.

More Details

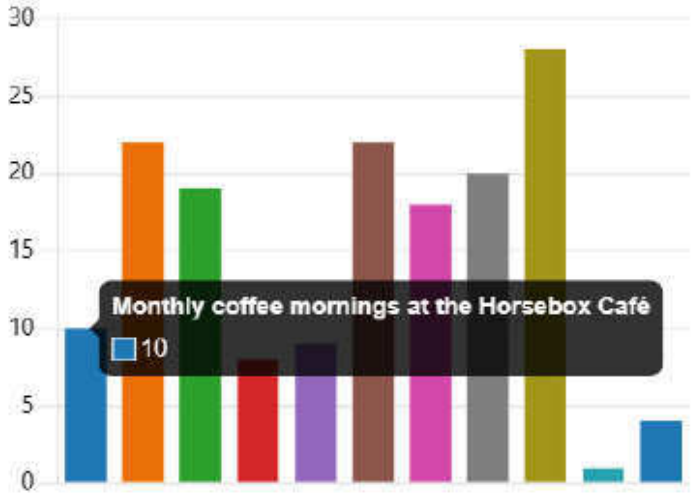
Access to the experiences the es...	17
Increased opportunities for lear...	18
Enhanced sense of community a...	18
Other	12

APPENDIX 4
Community Survey Responses

6. In what ways would you like to see Westerlands play a greater role in local community life? Select all that apply.

More Details

Monthly coffee mornings at the ...	10
Hosting fairs and markets eg: Ea...	22
Arts, music, theatre events	19
As a celebration venue	8
Accommodation overflow / spar...	9
Sports / fitness / recreational ac...	22
Education / schools / lifelong le...	18
Beef and lamb farm to fork, box...	20
Creation of habitats and protect...	28
Other	1
Other	4



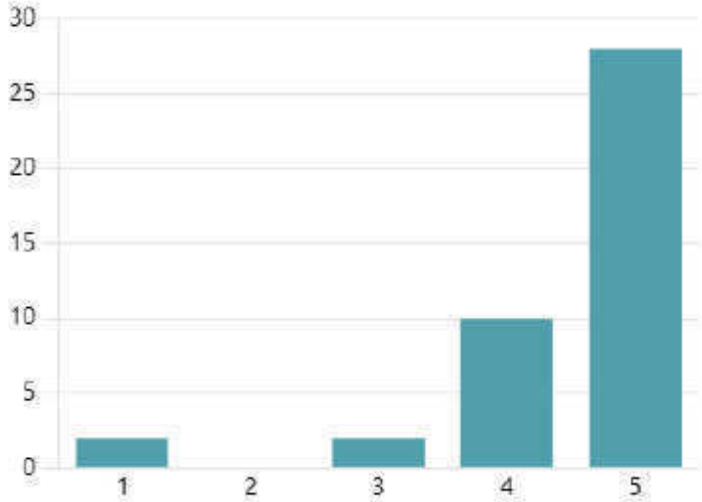
APPENDIX 4

Community Survey Responses

7. How important is it for you that Westerlands aligns its vision and actions with the special qualities of the South Downs National Park?

More Details

4.48
Average Rating

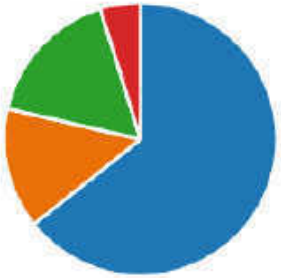


APPENDIX 4
Community Survey Responses

8. The South Downs National Park has certain purposes and duties as below. What for you is the most important element that you'd like to see Westerlands embrace? (Select one).

More Details

To conserve and enhance the na...	27
To prioritise opportunities for th...	6
To seek to foster the social and ...	7
Other	2



9. How concerned are you about the loss of different species (plant, insect, animal) and the effects of climate change on our local landscape within the South Downs National Park?

More Details

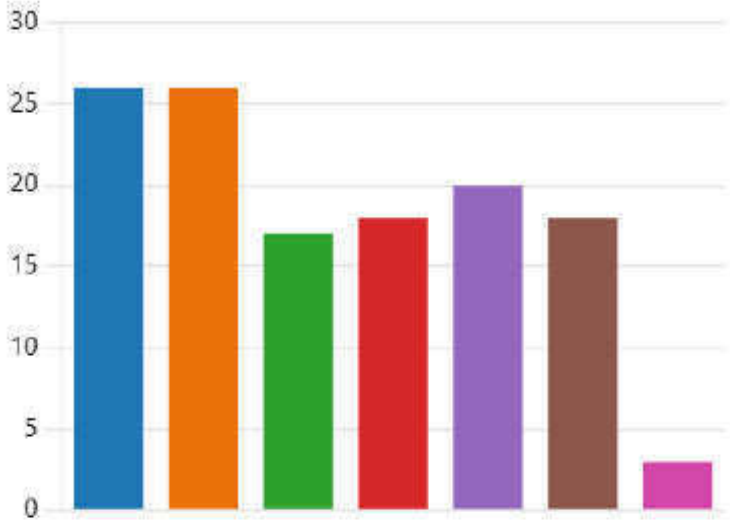
Very concerned	26
Somewhat concerned	13
Neither concerned nor unconce...	2
Somewhat unconcerned	1
Very unconcerned	0

APPENDIX 4
Community Survey Responses

10. Nature Recovery and Restoration is an important focus for both Westerlands and the South Downs National Park. Please indicate which areas of focus that you feel are most important (Choose three.)

More Details

Biodiversity loss and climate cha...	26
Soil, air, and water quality	26
Educating the public about rege...	17
Providing opportunities to the p...	18
Replanting lost woodland areas	20
Rewilding grazing pastures	18
Other	3



APPENDIX 4
Community Survey Responses

11. In which ways would you be interested to see biodiversity being enhanced at Westerlands? (Select all that apply).

More Details

Creating or restoring habitats su...	37
Planting or protecting native sp...	32
Encouraging or supporting wildl...	35
Reducing or avoiding the use of...	35
Participating or collaborating in ...	23

12. At Westerlands we already use Biomass renewable energy and use sustainable farming and land use practices (regenerative farming) to reduce greenhouse gas emissions. We want to go further. Which of the following additional ways we could reduce our carbon footprint do you feel will make the greatest difference? (Choose one)

More Details

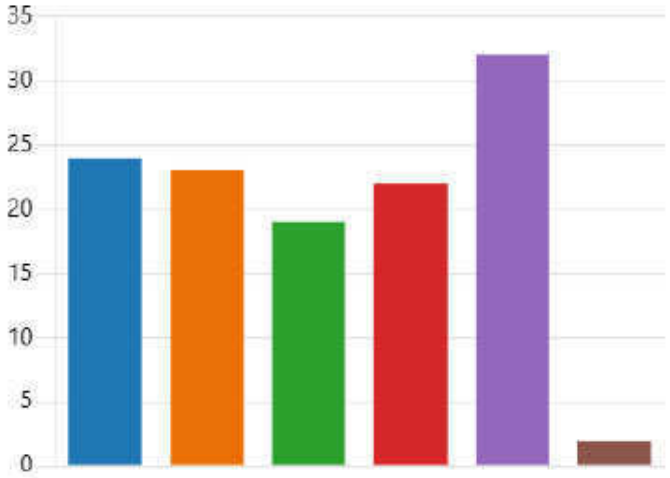
Improving energy efficiency and...	14
Adopting and encouraging low-...	5
Reducing, reusing, and recycling...	14
Exploring further renewable ene...	10
Other	1

APPENDIX 4
Community Survey Responses

13. At Westerlands, we feel strongly that nature should be accessible to everyone. What do you feel are the best ways for Westerlands to promote opportunities for the understanding and enjoyment of nature by the public? (Choose three.)

More Details

Providing information and educ...	24
Offering guided tours, walks, or ...	23
Supporting or partnering with l...	19
Creating or improving access an...	22
Inviting or involving volunteers, ...	32
Other	2



APPENDIX 4
Community Survey Responses

14. How do you think the local area can benefit from promoting opportunities for the understanding and enjoyment of nature by the public? (Choose all that apply)

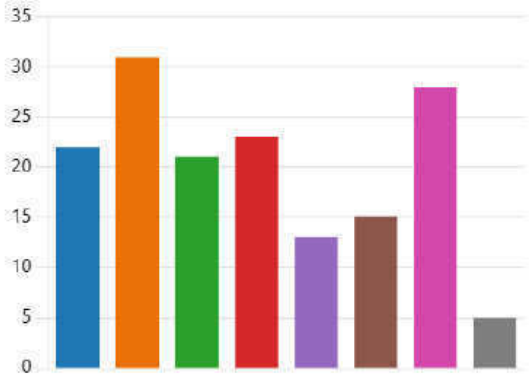
More Details

Better awareness of the area's n...	26
Enhanced reputation of the area...	25
More social and economic oppo...	20
Strengthened community spirit ...	33
Other	5

15. At Westerlands, we are crafting experiences for our guests which promote healing and a connection with nature, to support mental, emotional and physical health. Which of the following offerings do you feel that people in our modern and hectic world would benefit from most in order to achieve overall health and balance? (Select all that apply).

More Details

Wellbeing retreats and worksho...	22
Physical exercise outdoors - fro...	31
A short break in off-grid accom...	21
Spending time with animals as t...	23
Access to a wide range of afford...	13
Enjoying cold/heat therapy with...	15
Stargazing experiences in our d...	28
Other	5



APPENDIX 4

Community Survey Responses

16. If you would like to comment further on any aspect of the questions above please do so below.

ID ↑	Name	Responses
1	anonymous	Happy to see Westerlands consulting local community
2	anonymous	This took me 4mins (second time around). I estimate it will take most people around 10mins to fully understand all the questions and consider their response.
3	anonymous	How about a child/parent cycling safe area Vintage classic car meetings Tractor driving lessons and trailer reversing lessons tractor driving lessons on say a classic mf tractor for teenagers wanting to learn to drive so they can see clearly where each wheel is and understand driving reverseing before lessons

APPENDIX 4
Community Survey Responses

4	anonymous	Graffham is an active village and already holds regular events including Christmas Fair, Easter Market and Aummer fete to fund its existing facilities such as the village hall and the recreation ground. I would not see Westerlands replicating such events as useful for a small village. Would rather see Westerlands focus on activities we don't already have in the village.
5	anonymous	
6	anonymous	Thanks for inviting us to pparticipate.
7	anonymous	The only caution to all of this is how to balance the throughput of people and traffic and the associated disruption with the current serenity of the area. A couple of years ago the new owners of Parsons Meadow at the end Norwood Lane held a wedding on the land, resulting in loud music late into the night and a stream of cars down the single track lane. It caused a great deal of distress locally and there is understandable concern that anything like this should happen again.
8	anonymous	Great idea and I hope you get some great data and feedback
9	anonymous	I hope any market events you run will be with consideration of similar events run in Graffham - ie, ideally avoid competing with them!
10	anonymous	Would like to see a map of the estate on the website

APPENDIX 4
Community Survey Responses

11	anonymous	It would be fabulous to have an outdoor sauna and cold water plunge...
12	anonymous	Would you consider giving up a field and making it a solar panal area to power the estate and put energy back into the grid
13	anonymous	Please avoid forms of rewilding which result in deserts/monocultures of nettles and brambles. These can smother primroses, bluebells, foxgloves and orchids etc. I have cleared some areas of brambles in my own garden which allows snowdrops, foxgloves and bluebells to thrive. I know nettles and brambles are essential food for some insects but too much of them seems to reduce biodiversity
14	anonymous	The climate emergency isn't being treated as such by those in power. We need to become leaders ourselves.

es for question 17

5

APPENDIX

CJC
Lay the foundations of your farm

SOIL ANALYSIS REPORT

APPENDIX 5

Soil Analysis Report

Westerlands Estate 28/03/24

Improving and maintaining soil fertility to ensure soils have the capability to supply available nutrients to plants in a sustainable way is dependent on the three fundamental aspects of soils (Physical – Chemical – Biological) working together in an effective manner. If any one of the 3 fundamentals is ineffective then soil fertility is compromised.

The following action plan is designed to ensure that the Physical – Chemical – Biological aspects of soil are not limiting soil fertility and thus production.

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SOIL ANALYSIS REPORT

APPENDIX

APPENDIX 5

Soil Analysis Report

Westerlands Estate 28/03/24

PHYSICAL

The key objective of improving the PHYSICAL aspect of soil is to allow AIR penetration to soils in support of biological life. All the positive life forms in the soil breath air and when soils become compacted the air is squeezed out and the soil becomes anaerobic. Then the microbiology suffers and the soils effectively die. Aerate soils at least twice a year, Spring and Autumn, when cultivation conditions are good. Avoid aerating when soils are wet as this could lead to surface smearing which caps the surface and prevents air penetration. Dig a hole to access the extent and level of compaction. Develop a strategy to break up compaction through use of firstly aerators then use a flat lifters dependent on the depth of the compacted layer. This will improve drainage and allow deep rooting to the benefit of nutrient uptake.

Actions

- Use the Aerator over the whole farm spring and autumn
- In Wetter fields down in the lower areas use sward lifter when passable
- High Iron content found in all of the soils, high enough to indicate compaction, which can lock out oxygen and lock up trace elements.
- Always investigate minimum tillage methods of reseeding, stitching in for example. Try two passes with the aerator on the over wintered areas and consider stitching into the “roughed” up sward.

APPENDIX

CJC
Lay the foundations of your farm

SOIL ANALYSIS REPORT

APPENDIX 5

Soil Analysis Report

Westerlands Estate 28/03/24

CHEMICAL

Chemical, primarily the Calcium and Magnesium balance in soils (The Albrecht principle). It has been known for many years that Calcium tends to open up soils whereas Magnesium makes them more sticky and clumpy, which can increase compaction. Through analysing the Calcium and Magnesium balance on a "Total Exchange Capacity" basis we obtain a measure as to how stable the soil structure is and its relative resistance to compaction. Taking action to correct the Calcium: Magnesium balance through the use of Lime and Magnesium salts will stabilize soils and allow AIR penetration in support of biological life. The chemical aspect of soils also includes their need for fertiliser nutrients supplied primarily by manures and bagged fertiliser. This action should be done in a balanced way which recognises available nutrient levels inherent in the soil and the requirements of crops.

Actions

- Apply Kieserite at 125kg/ha in two applications (250kg/ha total year) as there is shortage
- Also apply lime at 2.5t/ha per year over two years.
- Sodium levels slightly low, increasing levels by an application of 100 kg/ha of salt in the autumn will improve palatability in wet conditions.

APPENDIX

CJC
Lay the foundations of your farm

SOIL ANALYSIS REPORT

APPENDIX 5

Soil Analysis Report

Westerlands Estate 28/03/24

BIOLOGY

Life exists in soils in a myriad of forms and concentrations, from earthworms at the large end of the scale to bacteria at the microscopic end. They are all interdependent and have a symbiotic role with the roots of plants to provide nutrients from soil reserves for growth and also complex compounds which are vital for plant health. In turn nutrients are exuded by roots to feed and stimulate microbial life. Such is the fundamental role of biology in the soil. The majority of the positive life forms in the soil require AIR, WATER and FOOD to thrive. While WATER and FOOD are usually not a problem, AIR is often the limiting factor because of compacted soils.

Actions

- Soil Organic Matter levels surprisingly lower than expected in the sandier fields, this maybe down to the cation capacity being low ie being a sandy soil it doesn't hang on to the nutrients. Clay soils are naturally better at this than sandy soils.
- Apply well composted manure and the diversity from the Horses, cows and sheep will enhance soil biology.
- Consider using microbes to treat manures. Hopefully the Bokashi method has been used in food waste and will illustrate good biology.
- Long rotations will increase root development and root exudates for better soil/root association.
- Include herbal leys into any grass swards to increase rooting depth and soil health.

APPENDIX

APPENDIX 5

Soil Analysis Report

Westerlands Estate 28/03/24

SOIL ANALYSIS REPORT

BIOLOGY

These tests give an idea of soil texture illustrating sands, silts and clays.

Helicopter & Mid sandy: These first two samples to the right of the photo, show dark soil full of nutrients, with high sand content and reasonable amount of silt. The clay content is low, shown sitting near the surface with organic matter on top. The fields are compacted, and this would hamper its ability to repair, it will need aeration but not as much as the other fields in the lower part.

Bonfire and Rape field: These samples are less defined and are a more homogenized assortment of mixed up sands, silts, clays, humus and organic debris. This would have been from times when the fields were cultivated.

The above actions should restore soil health and allow the fields to function, drawing in nitrogen from the air and carbon by photosynthesis and this in turn will feed the soil microbes. Enabling the land to not require fertilisers outside of the restorative compounds we are delivering.

APPENDIX

CJC
Lay the foundations of your farm

SOIL ANALYSIS REPORT

APPENDIX 5

Soil Analysis Report

Westerlands Estate 28/03/24

BIOLOGY

APPENDIX

CONTENTS

OUR VISION
ASSET AUDIT
ECOSYSTEM SERVICES
REALISING OUR VISION

APPENDICES

CJC
Lay the foundations of your farm

SOIL ANALYSIS REPORT

Soil Report

Job Name: Clyde Jones Date: 4/15/2024

Company: T.I. Soil Ecology Laboratory Submitted By:

Sample Location			RapeField				
Sample ID			Clay No Frt				
Lab Number			41				
Sample Depth in Inches			6				
Total Exchange Capacity (M. E.)			4.68				
pH of Soil Sample			5.3				
Organic Matter, Percent			3.07				
ANIONS	SULFUR:	p.p.m.	10				
	Mehlich III Phosphorous:	ppm	18				
EXCHANGEABLE CATIONS	CALCIUM: ppm	Desired Value	635				
		Value Found	451				
		Deficit	-183				
	MAGNESIUM: ppm	Desired Value	100				
		Value Found	36				
		Deficit	-64				
	POTASSIUM: ppm	Desired Value	100				
		Value Found	31				
		Deficit	-69				
	SODIUM:	ppm	10				
BASE SATURATION %	Calcium (60 to 70%)		48.29				
	Magnesium (10 to 20%)		6.33				
	Potassium (2 to 5%)		1.70				
	Sodium (.5 to 3%)		0.91				
	Other Bases (Variable)		6.80				
	Exchangable Hydrogen (10 to 15%)		36.00				
TRACE ELEMENTS	Boron (p.p.m.)		0.4				
	Iron (p.p.m.)		442				
	Manganese (p.p.m.)		28				
	Copper (p.p.m.)		0.4				
	Zinc (p.p.m.)		1.23				
	Aluminum (p.p.m.)		370				
OTHER	Cobalt ppm		0.197				
	Molybdenum ppm		< 0.02				
	Ammonium (p.p.m.)		0.3				
	Nitrate (p.p.m.)		1				
	Selenium ppm		0.17				
	Silicon ppm		2.9				
	Estimated Nitrogen Release lbN/Acre		81				
	EC mmhos/cm		0.04				
	Bulk Density g/cm		0.76				

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APPENDIX

CJC
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SOIL ANALYSIS REPORT

Soil Report

Job Name: Clyde Jones Date: 4/15/2024

Company: T.I. Soil Ecology Laboratory Submitted By:

Sample Location			Bonfire				
Sample ID			Clay				
Lab Number			42				
Sample Depth in Inches			6				
Total Exchange Capacity (M. E.)			6.91				
pH of Soil Sample			5.6				
Organic Matter, Percent			7.73				
ANIONS	SULFUR:	p.p.m.	9				
	Mehlich III Phosphorous:	ppm	27				
EXCHANGEABLE CATIONS	CALCIUM: ppm	Desired Value	939				
		Value Found	833				
		Deficit	-106				
	MAGNESIUM: ppm	Desired Value	100				
		Value Found	37				
		Deficit	-62				
	POTASSIUM: ppm	Desired Value	107				
		Value Found	39				
		Deficit	-68				
	SODIUM:	ppm	9				
BASE SATURATION %	Calcium (60 to 70%)		60.23				
	Magnesium (10 to 20%)		4.52				
	Potassium (2 to 5%)		1.45				
	Sodium (.5 to 3%)		0.60				
	Other Bases (Variable)		6.20				
	Exchangable Hydrogen (10 to 15%)		27.00				
TRACE ELEMENTS	Boron (p.p.m.)		0.52				
	Iron (p.p.m.)		539				
	Manganese (p.p.m.)		12				
	Copper (p.p.m.)		0.21				
	Zinc (p.p.m.)		2.62				
	Aluminum (p.p.m.)		290				
OTHER	Cobalt ppm		0.067				
	Molybdenum ppm		< 0.02				
	Ammonium (p.p.m.)		0.3				
	Nitrate (p.p.m.)		1.6				
	Selenium ppm		0.25				
	Silicon ppm		4.6				
	Estimated Nitrogen Release #N/Acre		114				
	EC mmhos/cm		0.02				
	Bulk Density g/cm		0.59				

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APPENDIX

CJC
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SOIL ANALYSIS REPORT

Soil Report

Job Name: Clyde Jones Date: 4/15/2024

Company: T.I. Soil Ecology Laboratory Submitted By:

Sample Location			Midsandy				
Sample ID			Sandy				
Lab Number			43				
Sample Depth in Inches			6				
Total Exchange Capacity (M. E.)			4.18				
pH of Soil Sample			5.9				
Organic Matter, Percent			3.55				
ANIONS	SULFUR:	p.p.m.	7				
	Mehlich III Phosphorous:	ppm	88				
EXCHANGEABLE CATIONS	CALCIUM: ppm	Desired Value	568				
		Value Found	537				
		Deficit	-31				
	MAGNESIUM: ppm	Desired Value	100				
		Value Found	37				
		Deficit	-63				
	POTASSIUM: ppm	Desired Value	100				
		Value Found	68				
		Deficit	-31				
	SODIUM:	ppm	6				
BASE SATURATION %	Calcium (60 to 70%)		64.19				
	Magnesium (10 to 20%)		7.37				
	Potassium (2 to 5%)		4.20				
	Sodium (.5 to 3%)		0.60				
	Other Bases (Variable)		5.60				
	Exchangable Hydrogen (10 to 15%)		18.00				
TRACE ELEMENTS	Boron (p.p.m.)		0.53				
	Iron (p.p.m.)		459				
	Manganese (p.p.m.)		10				
	Copper (p.p.m.)		0.42				
	Zinc (p.p.m.)		2.8				
	Aluminum (p.p.m.)		223				
OTHER	Cobalt ppm		0.031				
	Molybdenum ppm		< 0.02				
	Ammonium (p.p.m.)		0.2				
	Nitrate (p.p.m.)		1				
	Selenium ppm		0.25				
	Silicon ppm		2.6				
	Estimated Nitrogen Release lbN/Acre		85				
	EC mmhos/cm		0.04				
	Bulk Density g/cm		0.78				

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APPENDIX

CJC
Lay the foundations of your farm

SOIL ANALYSIS REPORT

Soil Report

Job Name: Clyde Jones Date: 4/15/2024

Company: T.I. Soil Ecology Laboratory Submitted By:

Sample Location			Helicopter				
Sample ID			Sandy				
Lab Number			44				
Sample Depth in Inches			6				
Total Exchange Capacity (M. E.)			4.57				
pH of Soil Sample			5.8				
Organic Matter, Percent			2.91				
ANIONS	SULFUR:	p.p.m.	8				
	Mehlich III Phosphorous:	ppm	79				
EXCHANGEABLE CATIONS	CALCIUM: ppm	Desired Value	621				
		Value Found	565				
		Deficit	-56				
	MAGNESIUM: ppm	Desired Value	100				
		Value Found	37				
		Deficit	-63				
	POTASSIUM: ppm	Desired Value	100				
		Value Found	71				
		Deficit	-29				
	SODIUM:	ppm	7				
BASE SATURATION %	Calcium (60 to 70%)		61.82				
	Magnesium (10 to 20%)		6.66				
	Potassium (2 to 5%)		3.98				
	Sodium (.5 to 3%)		0.69				
	Other Bases (Variable)		5.80				
	Exchangable Hydrogen (10 to 15%)		21.00				
TRACE ELEMENTS	Boron (p.p.m.)		0.41				
	Iron (p.p.m.)		425				
	Manganese (p.p.m.)		23				
	Copper (p.p.m.)		0.72				
	Zinc (p.p.m.)		2.02				
	Aluminum (p.p.m.)		352				
OTHER	Cobalt ppm		0.08				
	Molybdenum ppm		< 0.02				
	Ammonium (p.p.m.)		0.3				
	Nitrate (p.p.m.)		1.9				
	Selenium ppm		0.25				
	Silicon ppm		2.7				
	Estimated Nitrogen Release #N/Acre		78				
	EC mmhos/cm		0.05				
	Bulk Density g/cm		0.8				

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APPENDIX

APPENDIX 5

Soil Analysis Report

Westerlands Estate 28/03/24

SOIL ANALYSIS REPORT

	sand/silt/clay %	58/35/20	61/28/11	48/25/27	53/26/21	
Standard Soil Test	**Ideal**					
Soil pH	6.5	5.8	5.9	5.6	5.3	5.7
Bulk Density	1	0.8	0.78	0.59	0.76	0.7
Soil Organic Matter %	5-10%	2.9	3.55	7.73	3.07	4.3
Computed Base Saturation						
Total Exchange Capacity	6 to 30	4.6	4.18	6.91	4.68	5.1
Calcium %	60 to 70%	61.8	64.1	60.2	48	58.6
Magnesium %	10 to 20%	6.7	7.4	4.5	6	6.2
Ca: Mg Ratio	7.00	9.3	8.7	13.3	7.6	9.7
Potassium %	2 to 5%	4.0	4.2	1.5	1.7	2.8
Sodium %	1%	0.69	0.60	0.60	0.91	0.7
Trace elements						
Phosphorous	30 to 50	79	88	27	18	53.0
Sulphur	15-25	8	7	9	10	8.5
Boron	1.2 to 2.4	0.41	0.53	0.52	0.4	0.5
Iron	18 to 189	425	459	539	442	466.3
Manganese	18 to70	23.0	10	12	26	17.8
Copper	2.5 to 7	0.72	0.42	0.21	0.4	0.4
Zinc	4 to 10	2.02	2.8	2.6	1.2	2.2
Cobalt	0.5 to 2.00	0.8	0.03	0.03	0.197	0.3
Molybdenum	0.5 to 0.7	<0.2	<0.2	<0.02	<0.02	0.1
Selenium	>0.2	0.25	0.25	0.25	0.17	0.2

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BIRD
SPECIES LIST

APPENDIX 6

Chirrup Report

Westerlands February & June 2024

The Chirrup Nature Services App is an innovative tool designed to assist farmers, land managers, and food businesses in monitoring and enhancing biodiversity on their land. By leveraging AI-driven birdsong analysis, Chirrup provides real-time, science-based insights that help users comply with environmental regulations and qualify for government incentives.

AI-Powered Birdsong Analysis: Chirrup utilizes advanced AI technology to analyze birdsong recordings, offering accurate identification of bird species present in a given area.

Real-Time Biodiversity Monitoring: The app delivers immediate insights into the biodiversity of the land, enabling users to make informed decisions about land management and conservation efforts.

Regulatory Compliance Support: By providing detailed biodiversity data, Chirrup aids users in meeting environmental regulations and accessing related government incentives.

Red List: Birds of conservation concern as defined by BTO.
Unique species: Species not recorded at any other sites in the benchmark group, during the selected dates.
Indicated with an asterisk* on species list.
Birds of prey: Owls, kestrels and other raptors are indicators of a productive ecosystem and marked by a †.

Bird presence: Shows the number of days when each species was audibly present during the recording period, as a proportion of the total presence of all species.
Chart wedges: Birds identified by the chirrup.ai algorithm, represented by 5+ recordings/day.

Threatened species: **Red list species** have suffered severe declines across the UK.
Birdsong audio: Click on the names to hear a clip.

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BIRD
SPECIES LIST

APPENDIX 6

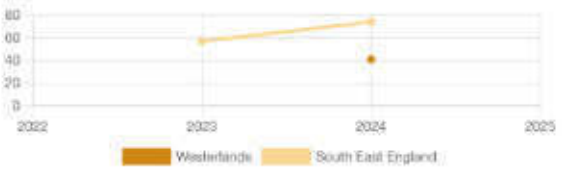
Chirrup Report
Westerlands February 2024

Westerlands Farm
Graffham Nr Petworth
West Sussex
GU28 0QJ
UNITED KINGDOM

Chirrup rating

Monitoring
Top quartile
Improved

Trend



Recording site(s):
Pallets Pallets 24/7 Bees Bees 24/7

Selected recording site(s)

46	Species
7	Red list species
46	Species not found elsewhere in the benchmark group of farms
62 %	Total species, as a percentage of all species within benchmark group of farms

Species days

Species Details

- Blue Tit
- Great Spotted Woodpecker
- Dunnock
- Wren
- Goldfinch
- Robin
- Full list of species ↓

6

APPENDIX

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BIRD SPECIES LIST

1	Cyanistes caeruleus*	Blue Tit	42	♪	★★★
2	Dendrocopos major*	Great Spotted Woodpecker	38		★★★
3	Prunella modularis*	Dunnock	38	♪	★★★
4	Troglodytes troglodytes*	Wren	37		★★★
5	Carduelis carduelis*	Goldfinch	31	♪	★★★
6	Erithacus rubecula*	Robin	30	♪	★★★
7	Aegithalos caudatus*	Long-tailed Tit	22		★★★
8	Regulus regulus*	Goldcrest	17		★★★
9	Corvus corone*	Carrion Crow	14		★★★
10	Parus major*	Great Tit	13	♪	★★★
11	Loxia curvirostra*	Red Crossbill	12		★★★
12	Corvus monedula*	Jackdaw	10		★★★
13	Lullula arborea*	Wood Lark	10		★★★
14	Phoenicurus phoenicurus*	Common Redstart	10		★★★
15	Regulus ignicapilla*	Common Firecrest	10		★★★

6

APPENDIX

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BIRD SPECIES LIST

16	Certhia familiaris*	Treecreeper	9		★★
17	Tyto alba*†	Barn Owl	8		★
18	Phasianus colchicus*	Ring-necked Pheasant	7		★★★
19	Turdus iliacus*	Redwing	7		★★
20	Garrulus glandarius*	Jay	6		★★★
21	Linaria cannabina*	Linnet	6	♪	★★★
22	Turdus philomelos*	Song Thrush	6		★★★
23	Anthus trivialis*	Tree Pipit	5		★★
24	Corvus frugilegus*	Rook	5	♪	★★★
25	Motacilla alba*	White Wagtail	5	♪	★★
26	Pica pica*	Magpie	5		★★
27	Alectoris rufa*	Red-legged Partridge	4		★★
28	Charadrius dubius*	Little Ringed Plover	4		★
29	Scolopax rusticola*	Woodcock	4		★★★
30	Psittacula krameri*	Rose-ringed Parakeet	3		★
31	Strix aluco*†	Tawny Owl	3		★★

6

APPENDIX

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BIRD SPECIES LIST

32	Oenanthe oenanthe*	Northern Wheatear	2		★★
33	Picus viridis*	Green Woodpecker	2		★★★
34	Saxicola rubicola*	Stonechat	2		★★★
35	Spinus spinus*	Siskin	2		★★★
36	Sturnus vulgaris*	Starling	2	♪	★★★
37	Alauda arvensis*	Skylark	1	♪	★★★
38	Alcedo atthis*	Common Kingfisher	1		★★★
39	Anthus pratensis*	Meadow Pipit	1		★★★
40	Athene noctua*	Little Owl	1		★★★
41	Chloris chloris*	Greenfinch	1		★★★
42	Chroicocephalus ridibundus*	Black-headed Gull	1		★★★
43	Columba palumbus*	Common Wood-Pigeon	1	♪	★★★
44	Corvus corax*	Common Raven	1		★★★
45	Emberiza calandra*	Corn Bunting	1	♪	★★★
46	Fringilla coelebs*	Common Chaffinch	1		★★★

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BIRD
SPECIES LIST

APPENDIX 6

Chirrup Report
Westerlands June 2024

Westerlands Farm
Graffham Nr Petworth
West Sussex
GU28 0QJ
UNITED KINGDOM

Chirrup rating

Monitoring
Top quartile
Improved

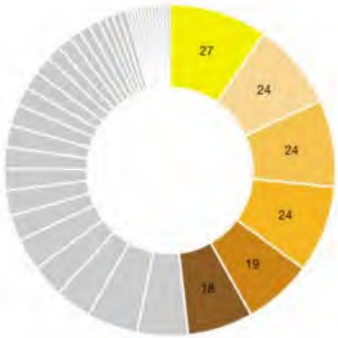
Trend

Recording site(s):
Pallets Pallets 24/7 Bees Bees 24/7 Crown Tegleaze
Bowley's Oliver's Woodland Westerland's Woodland

Selected recording site(s)

41	Species
5	Red list species
41	Species not found elsewhere in the benchmark group of farms
62 %	Total species, as a percentage of all species within benchmark group of farms

Species days



Species Details

- Blue Tit
- Great Spotted Woodpecker
- Dunnock
- Wren
- Robin
- Goldfinch
- Full list of species ↓

6

APPENDIX

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BIRD SPECIES LIST

	Latin name	English name	Species in selected days	Bird song	Rating
1	Cyanistes caeruleus*	Blue Tit	27	♪	★★★
2	Dendrocopos major*	Great Spotted Woodpecker	24		★★★
3	Prunella modularis*	Dunnock	24	♪	★★★
4	Troglodytes troglodytes*	Wren	24		★★★
5	Erithacus rubecula*	Robin	19	♪	★★★
6	Carduelis carduelis*	Goldfinch	18	♪	★★★
7	Aegithalos caudatus*	Long-tailed Tit	14		★★★
8	Regulus regulus*	Goldcrest	14		★★★
9	Lullula arborea*	Wood Lark	10		★★★
10	Corvus corone*	Carrion Crow	9		★★★
11	Regulus ignicapilla*	Common Firecrest	9		★★★
12	Certhia familiaris*	Treecreeper	7		★★★
13	Turdus iliacus*	Redwing	7		★★★
14	Loxia curvirostra*	Red Crossbill	6		★★★
15	Phasianus colchicus*	Ring-necked Pheasant	6		★★★
16	Turdus philomelos*	Song Thrush	6		★★★
17	Tyto alba*†	Barn Owl	6		★★★
18	Corvus frugilegus*	Rook	5	♪	★★★

6

APPENDIX

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BIRD SPECIES LIST

	Latin name	English name	Species in selected days	Bird song	Rating
19	Corvus monedula*	Jackdaw	5		★★★
20	Motacilla alba*	White Wagtail	5	♪	★★★
21	Parus major*	Great Tit	4	♪	★★★
22	Scolopax rusticola*	Woodcock	4		★★★
23	Alectoris rufa*	Red-legged Partridge	3		★★★
24	Linaria cannabina*	Linnet	3	♪	★★★
25	Strix aluco*†	Tawny Owl	3		★★★
26	Garrulus glandarius*	Jay	2		★★★
27	Pica pica*	Magpie	2		★★★
28	Saxicola rubicola*	Stonechat	2		★★★
29	Spinus spinus*	Siskin	2		★★★
30	Alauda arvensis*	Skylark	1	♪	★★★
31	Alcedo atthis*	Common Kingfisher	1		★★★
32	Anthus pratensis*	Meadow Pipit	1		★★★

6

APPENDIX

chirrup.a

BIRD SPECIES LIST

	Latin name	English name	Species in selected days	Bird song	Rating
33	Athene noctua*	Little Owl	1		★★★
34	Chloris chloris*	Greenfinch	1		★★☆
35	Chroicocephalus ridibundus*	Black-headed Gull	1		★★★
36	Columba palumbus*	Common Wood-Pigeon	1	♪	★★★
37	Corvus corax*	Common Raven	1		★★☆
38	Emberiza calandra*	Corn Bunting	1	♪	★★☆
39	Fringilla coelebs*	Common Chaffinch	1		★★★
40	Oenanthe oenanthe*	Northern Wheatear	1		★☆☆
41	Picus viridis*	Green Woodpecker	1		★★★

SABINE STEVENSON PHD

7

APPENDIX

APPENDIX 7

Sabine Stevenson PHD

Prehistoric archaeological assessment

Westerlands in the Rother valley and on the South Downs upland in prehistoric context

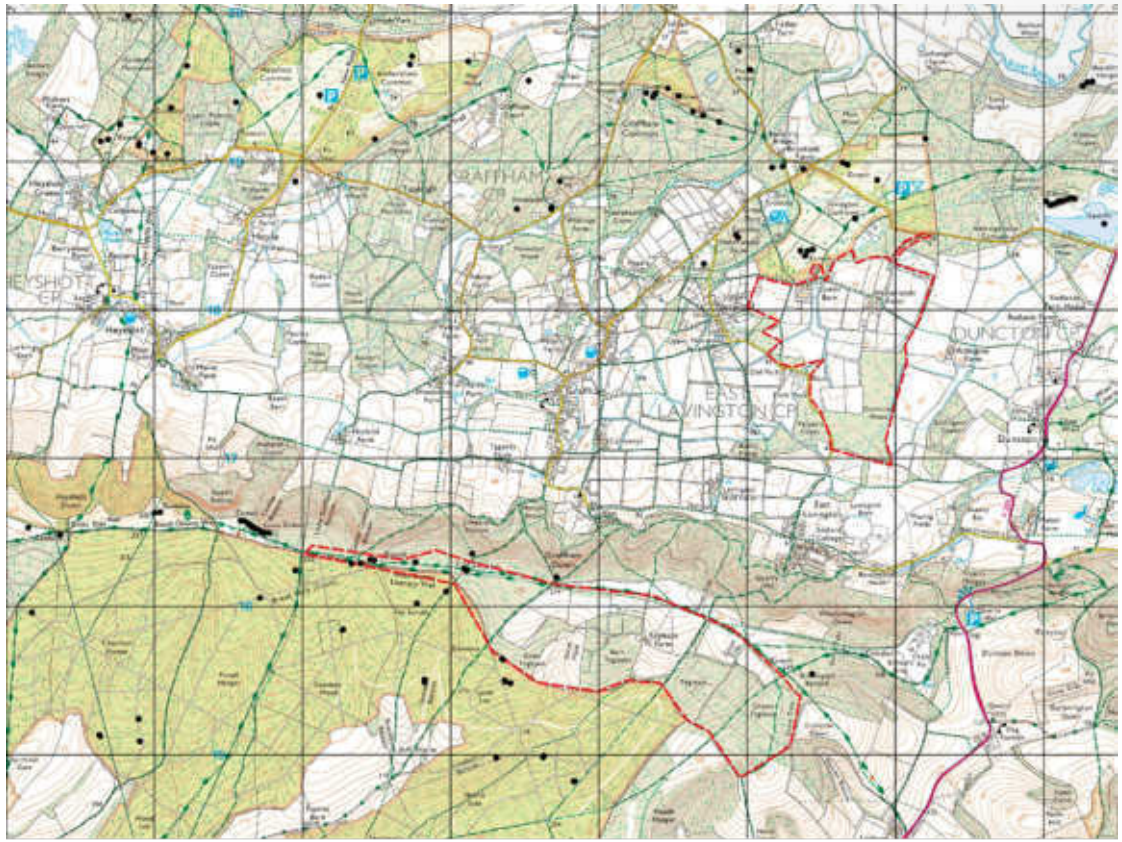
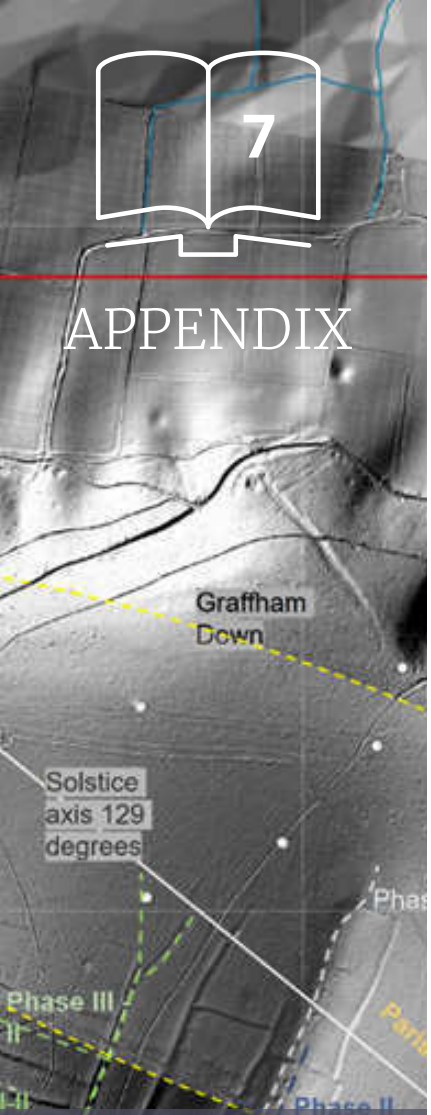


Figure 1 Westerlands valley and Downland (red dotted outline) within the Bronze Age barrows scape of the Rother valley and environs. Contains OS data © Crown copyright and database rights 2022 (100025252; Digimap licence 656865) Map: Sabine Stevenson

Westerlands is situated in the middle Rother valley between Midhurst and Petworth. It occupies two landscapes, namely the lowlands of the River Rother valley and the uplands of the South Downs ridge (Fig 1).



APPENDIX 7

Sabine Stevenson PHD

Prehistoric archaeological assessment

Climate and vegetation

The climate in the British Isles during prehistory was generally colder and dryer in the Early Bronze Age (c2200 – 1500BC) with a wet phase in southern England around the middle Bronze Age at 1450BC which may suggest that there was an increase of wetland in the Rother valley, particularly as the Rother valley is well supplied by tributaries as seen above. Eight pollen cores on Lower Green Sand have yielded evidence for the vegetation in the Bronze Age in the Rother valley and two mollusc examinations on the Chalk of the South Downs. What is important to bear in mind is that over this long time the picture across the valley and uplands would have been a changing mosaic of vegetation with local clearances and following regeneration. Pollen seems to be less preserved in alkaline environments (Dimbleby 1957) such as the Chalk upland of the South Downs while molluscs don't survive in the acid soils of the Rother valley. One mollusc sample at North Marden Down indicated short, tufted grassland in the Neolithic at c 3500BC and regeneration of woodland during the Bronze Age (Thomas and Carter, 1986). A further mollusc investigation above South Harting at Forty Acre Lane showed woodland from the Neolithic to the Middle Bronze Age, which shows that the three barrows there were built within woodland or a clearing, which changes our understanding that barrows were built only on previously cleared ground (Needham, Escott and Bell, 2023).

From a geological perspective Westerland occupies both the Chalk and Flint of the upland as well as Sandstones in the Rother valley. The Chalk upland of the South Downs acts as aquifer with springs emerging between the several diHerent lithologies namely between the Chalk and Upper Green Sand which provide tributaries to the River Rother and create wetlands in the valley (Fig 2).

SABINE STEVENSON PHD

7

APPENDIX

APPENDIX 7

Sabine Stevenson PHD

Prehistoric archaeological assessment

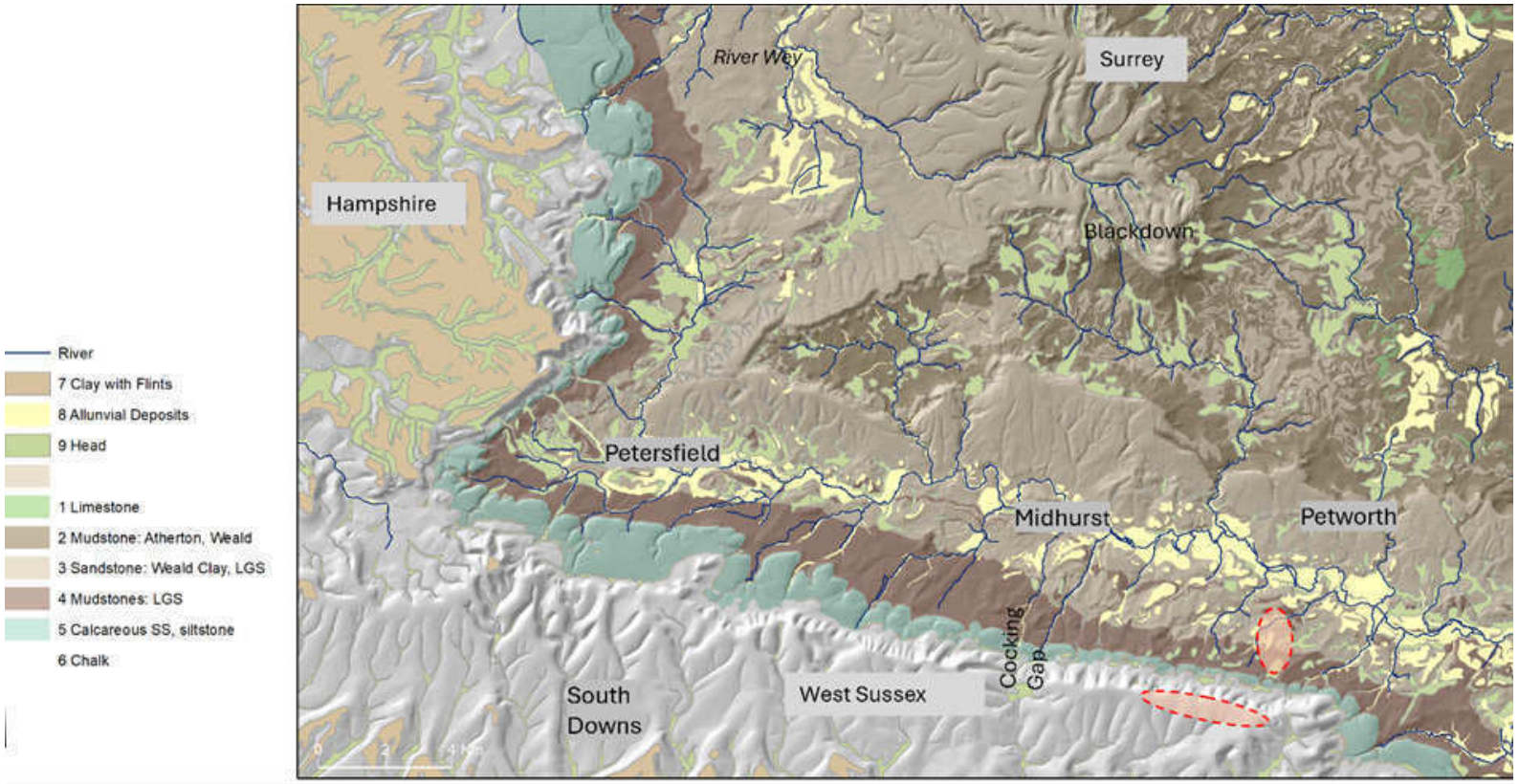


Figure 2 Westerlands valley and Downland (red dotted outline) within the Geology of the Rother valley and environs. Contains OS data © Crown copyright and database rights 2021 (100025252) & Geological Map data BGS © UKRI 2021 (Digimap license 656865)(after Stevenson, 2023:Fig 4.1)

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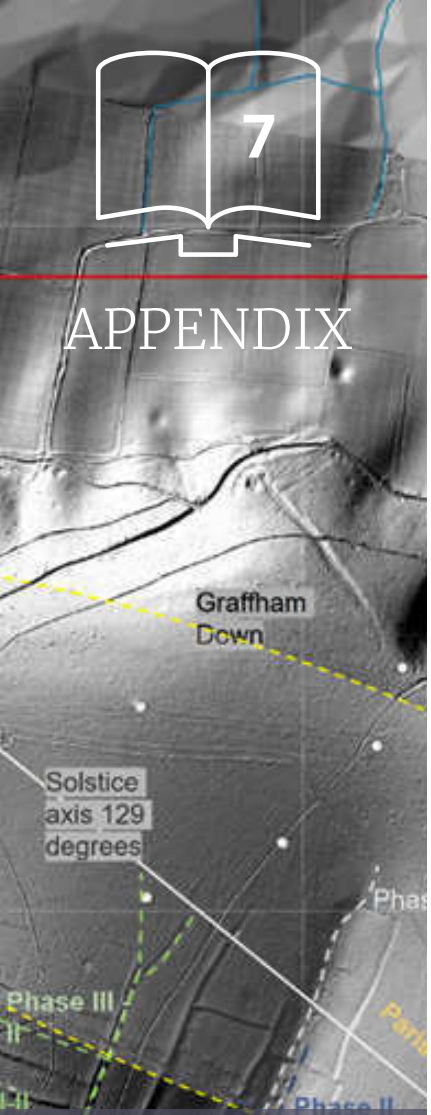


APPENDIX 7

Sabine Stevenson PHD

Prehistoric archaeological assessment

Before agricultural activities impacted on the vegetation, the characteristic 'climax' primary woodland consisted of mixed deciduous trees consisting of birch, oak, hazel and lime. Elm preferred richer soils, and alder favoured wetter areas and can be found albeit at different proportions at all the areas which were investigated. All eight pollen cores from boreholes in the Rother valley show the presence of heathlands manifested by heather (calluna) during the Early Bronze Age with Alder Carr nearby indicating marshes during the Early Bronze Age and Middle Bronze Age (Fig 3).

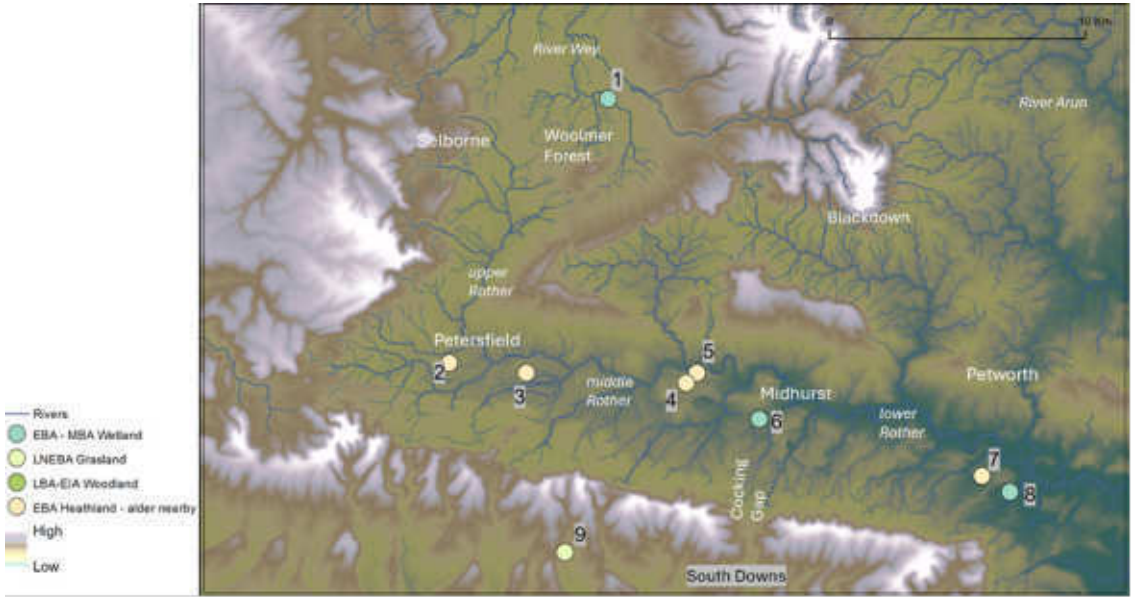
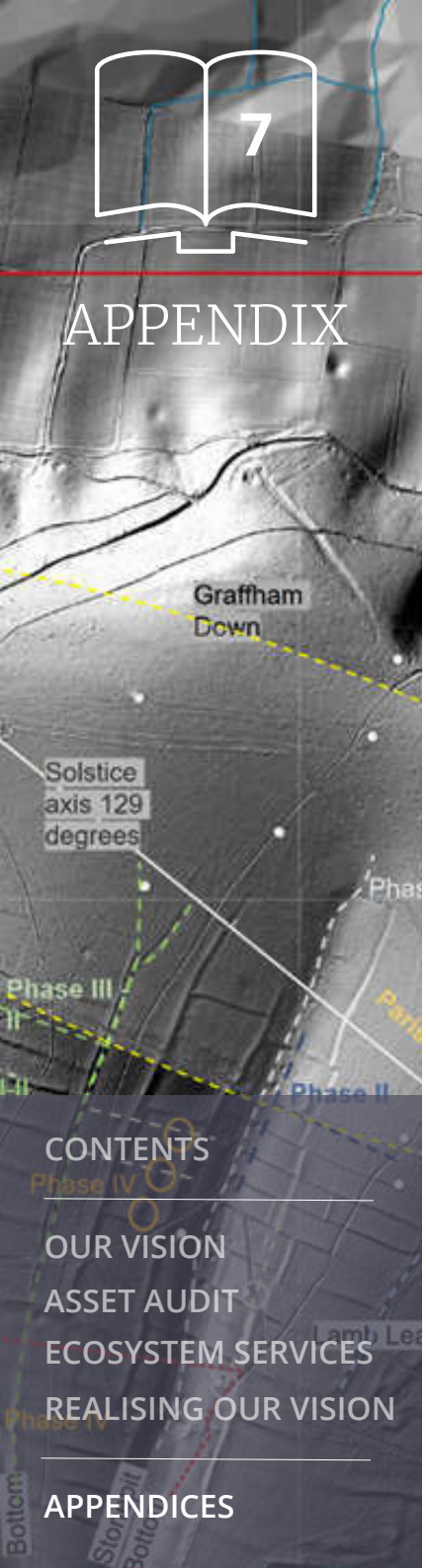


Figure 3 Palaeo-environmental evidence from sites in the Rother Region:1-Conford, 2-Petersfield Heath, 3-West Heath, 4 Iping Common, 5-Minsted, 6-Midhurst, 7-Duncton, 8-Burton Mill pond, 9-North Marden. Contains OS data © Crown copyright and database rights 2021 (100025252), Open Government License (Digimap license 656865) (Stevenson, 2023 Fig 4.4)



SABINE STEVENSON PHD

APPENDIX 7

Sabine Stevenson PHD

Prehistoric archaeological assessment

On some sites there is evidence that heathland had become established before the Early Bronze Age barrow building phase, for example at Petersfield Heath, West Heath, Minsted, Heath End, Duncton and possibly also at Trotton and Iping common. Grassland and heather could colonise the sandy soils, which became more nutrient depleted with opening of woodland (Needham and Stevenson, 2021d: 581-3).

The prehistory of the Rother valley and environs which occupy three counties had not been comprehensively explored until more recently. Two major projects namely The South Downs National Park (SDNP) Secrets of the High Woods project (2014-16), undertook a high resolution LiDaR survey while the People of the Heath project (2014 – 2018), excavated Petersfield Heath and surveyed the prehistoric monuments in the Rother valley and on the South Downs and brought together portable material culture from a great number of records. Mesolithic and Neolithic evidence is recorded along the valley and the Downs upland to a varying degree. Mesolithic hunter gatherer groups clearly moved through the uplands and heathlands as flints were found in a great number on the Hangers in the west, at Petersfield Heath, Trotton and Iping common and GraHham. Neolithic monuments have been found in the Rother valley and the South Downs and to a greater extent flint work and specifically flint axes. Bronze Age flint as well as metalwork has been recorded (Needham and Stevenson 2021; Stevenson 2023).

SABINE STEVENSON PHD

7

APPENDIX

APPENDIX 7

Sabine Stevenson PHD

Prehistoric archaeological assessment

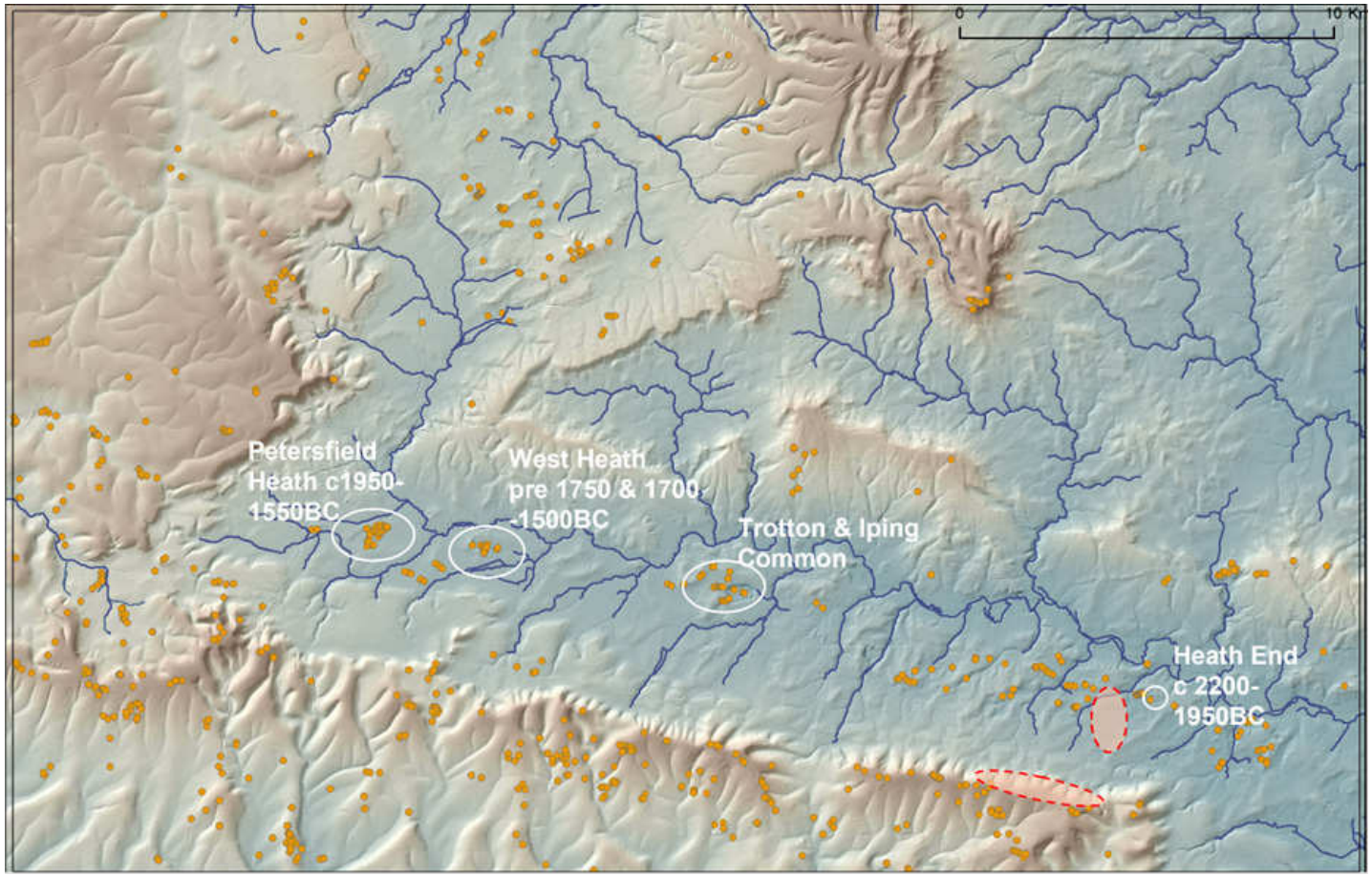


Figure 4 Westerlands valley and Downland (red dotted outline) within the topography and dated Bronze Age cemeteries and barrow scape of the Rother valley and environs. Contains OS data © Crown copyright and database rights 2021 (100025252) (Digimap license 656865), after Stevenson, 2013:Fig4.9.

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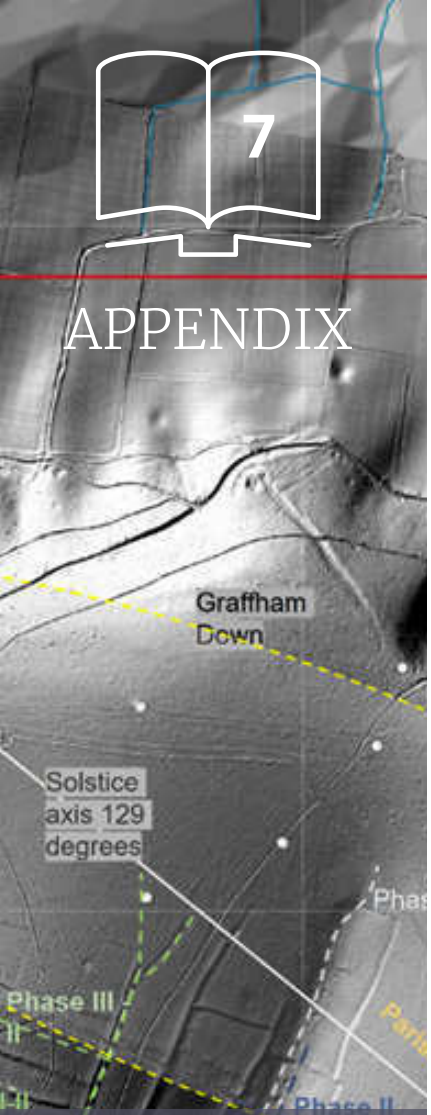

APPENDIX 7

Sabine Stevenson PHD

Prehistoric archaeological assessment

Looking at the prehistoric occupation in the valley, Westerlands Farm sits within a well recorded prehistoric landscape. To demonstrate at Petersfield Heath, 14 barrows of a barrow cemetery of up to 31 barrows has been excavated as part of People of the Heath (PotH) project 2014 – 2018, funded by the National Lottery, the SDNP Petersfield Museum and East Hampshire District Council. This groundbreaking project also showed the relationship between burial mounds and field systems connected by the cosmology which placed Petersfield Heath Bronze Age cemetery at the center of a cosmographical network which connected Bronze Age Communities across the Rother valley and South Downs landscape (Needham, 2021). Besides Petersfield Heath, West Heath barrow cemetery had 13 barrows, Trotton and Iping common homes several groups of barrows totalling 30 barrows, and further east of Midhurst 10 barrows are at Gallows Hill near Selham and 14 barrows are situated on Lavington common. The closest lies 100m to the northeast of Westerlands Farm boundary, while 800m to the east the impressive linear barrow group of 14 barrows is found at Duncton Quarry (Needham, 2021). This barrow scape in the Rother valley is juxtaposed to the barrows on the South downs where the Westerlands upland property extends also within a well-researched Bronze Age landscape (Fig 5).

SABINE STEVENSON PHD

7

APPENDIX

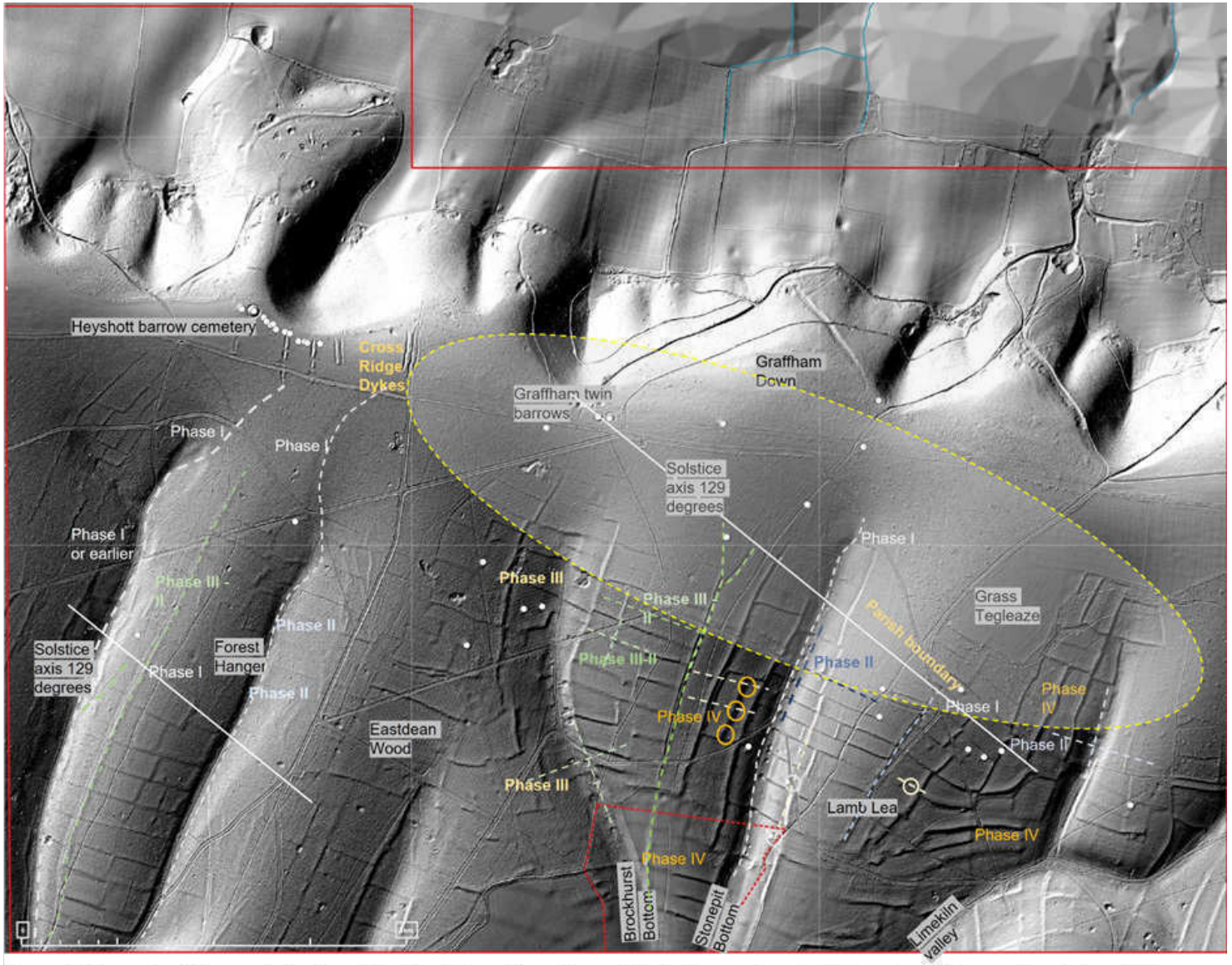

Figure 5 Characteristics and phasing of field relationships. Phase I Early Bronze Age to IV Iron Age / Roman. Lamb Lea (HER 1005820) red outline. Yellow dotted outline represents appr. Westerlands upland extent LiDAR ASCI files courtesy of Fugro Geospatial & South Downs National Park Authority, processed DTM lit 315° – 45, after Stevenson, 2023:Fig 7.43.

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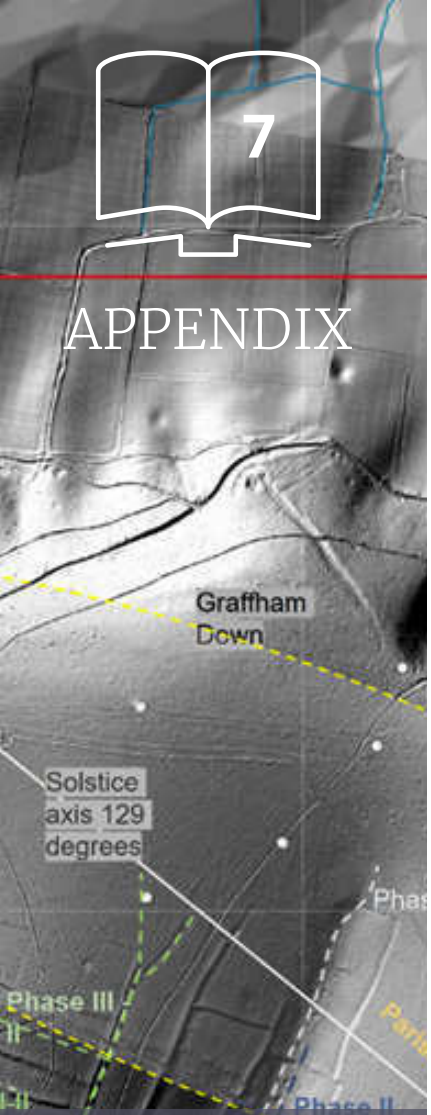


APPENDIX 7

Sabine Stevenson PHD

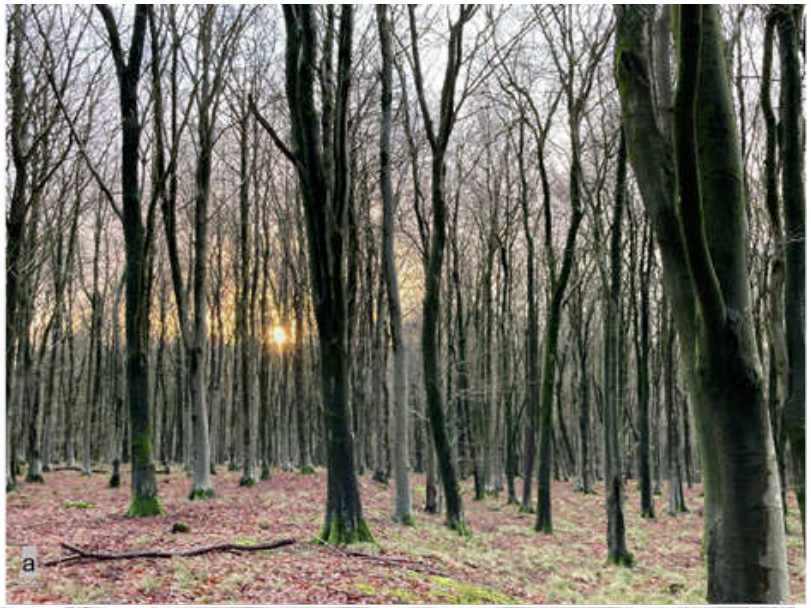
Prehistoric archaeological assessment

There are several individual barrows as well as groups on Westerland upland (white dots) and just outside (see Fig 5). Of note is certainly the Heyshott linear barrow cemetery (just to the west) and the twin barrows referred to as golden barrows. This was prompted by the name on the OS map 'golden Combe Bottom' where incidentally the sun sets behind the ridge on Midsummers Day. According to Needham (2021:454) the golden barrows are a type of dished barrow which are unusual and only occurs on three locations on the Downs. Looking at where possible Bronze Age communities in the Rother valley might have lived and been able to access the multitude of resources, he believes the benefit for the possible community at Heyshott, which now extends across Westerlands would have been the transect from high Chalk Downland to valley bottom where water and other resources would have been available (Needham 2021:632).

SABINE
STEVENSON
PHD

7

APPENDIX



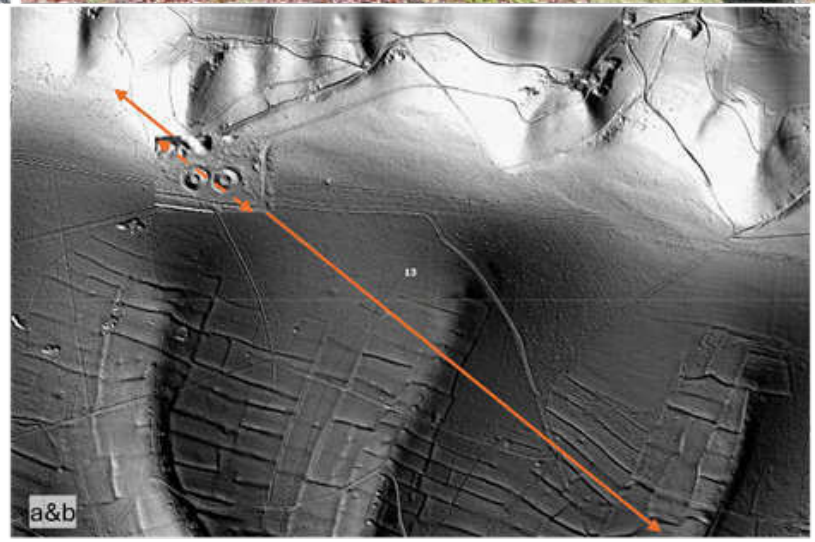
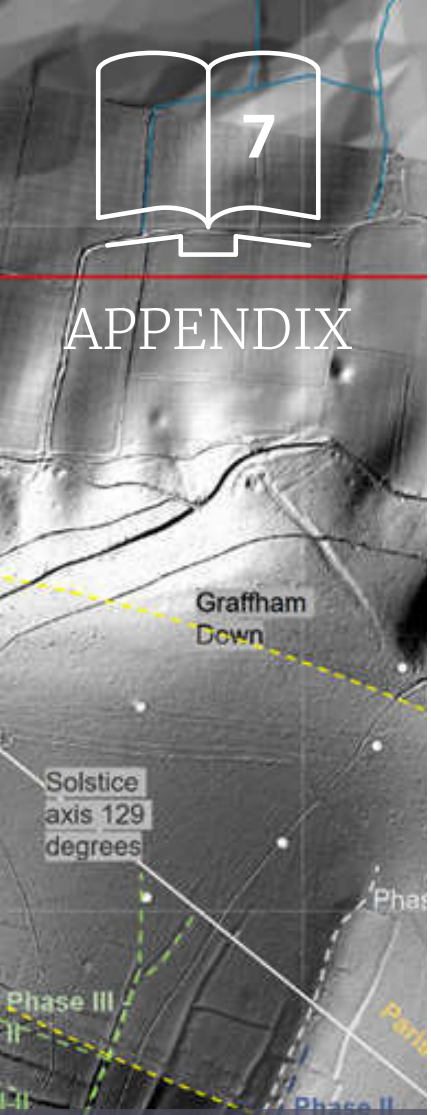


Fig 6a Mid-winter sunrise over the field systems at the Tegleaze block, b: solstice axis passing through the 'golden barrows'. Image; Sabine Stevenson



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APPENDIX 7

Sabine Stevenson PHD

Prehistoric archaeological assessment

Barrows were mainly built in the Early Bronze Age while the earliest prehistoric field systems are traditionally associated with the Middle Bronze Age and cross dykes are ascribed to the Late Bronze Age. Field systems and cross dykes are diHicult to date. Besides the barrows next to and on Westerlands land, two cross-ridge dykes respectively delineate the west as well as the east while the south of Grass Tegleaze is bounded by the parish and ecclesiastical boundary between GraHham and East Dean on a prehistoric lynchet, along which possibly the bounds were beaten, a tradition which goes back to the Anglo Saxon times (see Fig 5) (Stevenson, 2023:p238).

In this area to the south, we have the HER designated area of field systems at Lamb Lea (HER 1005820) just below Grass Tegleaze (Fig 5). This was designated in 1969 and the designation enhanced in 2014 states, that the further archaeological sites in the vicinity were at this point not included as they had not been formally assessed. The nature of the field systems at Grass Tegleaze and Lamb Lea outside the scheduled area show the same characteristics and have since 2014 been investigated by the PotH project (2014 – 2018) in general and specifically between 2021-2 (Stevenson, 2023).

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7

APPENDIX

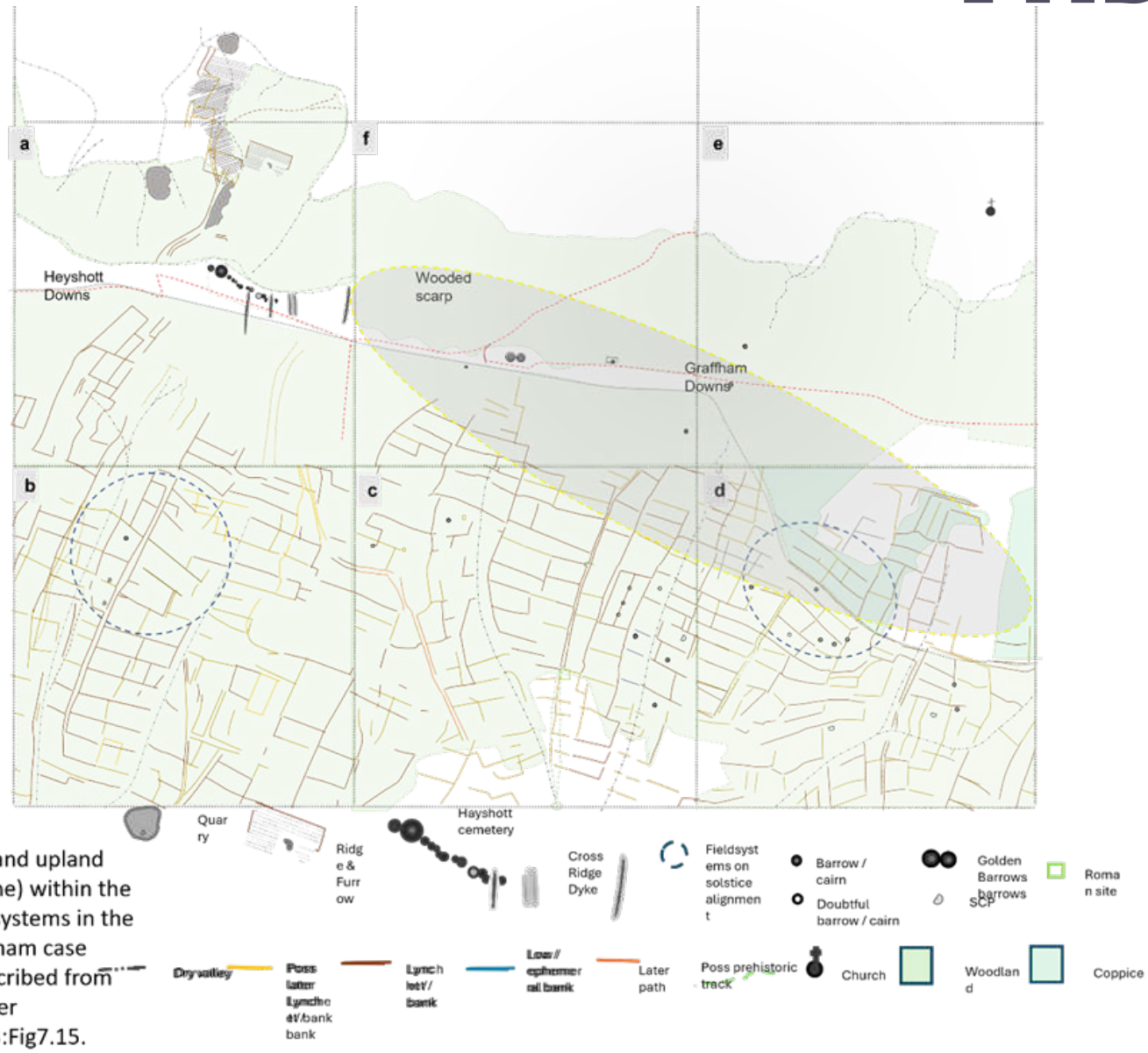
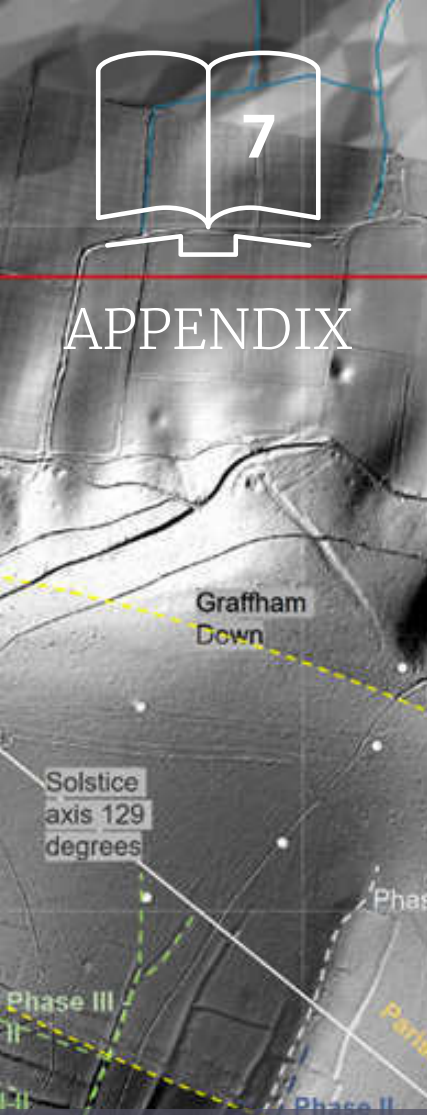


Figure 7 Westerland upland (yellow dotted line) within the prehistoric field systems in the Heyshott – Graffham case study area, transcribed from LiDAR images after Stevenson,20123:Fig7.15.



APPENDIX 7

Sabine Stevenson PHD

Prehistoric archaeological assessment

The seemingly mutually exclusive occurrence of barrows and field systems has traditionally led to the understanding, that the preoccupation of the Early Bronze Age society changed from a spiritual to agricultural concerns in the Middle Bronze Age. This has been challenged in the last few years but for the Rother valley the PotH project could demonstrate a cosmological connection between the Early Bronze Age barrows both at Petersfield Heath and the linear cemetery at the Devils Jumps (Needham 2021:664). It could also be shown that some blocks of field systems on the South Downs followed the winter-sunrise – midsummer-sunset alignment which may indicate that Early Bronze Age cosmological beliefs prevailed into the time when the first field systems were laid out in places across the South Downs (Needham and Stevenson 2021:594; Stevenson, 2023).

A recent doctoral study (Stevenson, 2023) found that two more Early Bronze Age barrow cemeteries in the Rother valley are in the conjuncture of the midwinter sunrise – midsummer sunset axis, namely at West Heath and Trotton and Iping common. The the midwinter sunrise and midsummer sunset axis passes through Heyshott linear barrow cemetery (Fig 8) and crosses Trotton and Iping common linear barrow group aligned to the midsummer sunrise – midwinter sunset thus forming a conjuncture.

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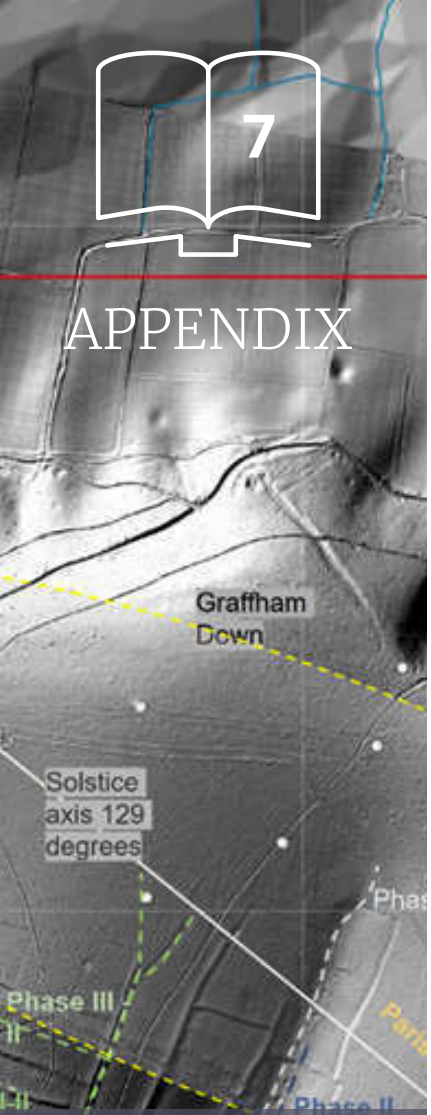
7

APPENDIX

Figure 8 midwinter sunrise over Heysho4 linear barrow cemetery. Image Sabine Stevenson



APPENDIX 7

Sabine Stevenson PHD

Prehistoric archaeological assessment

Similarly the midwinter sunrise-midsummer sunset axes projecting through the golden barrow twin group on Westerland land meet the midsummer sunrise-midwinter sunset axes over Trotton and Iping common. The field system block below and at Grass Tegleaze aligns in direction with the midwinter sunrise-midsummer sunset axis and passes exactly through the middle of the golden barrows (Fig 6a&b). It is therefore argued that these field systems represent an early phase of their construction and cosmologically associated with an Early Bronze Age belief system (Stevenson,2023).

People in the Bronze Age were deeply connected to the Cosmos and the atmospheric phenomena in what we now term a ‘more than human’ world, including rising or falling mist obscuring landscape features and the diHerent quality of light generated by the sun, which revealed part of their landscape and was central to the growth cycle of life and death. They buried their dead, gathered food, planted and harvested fields and navigated under the rising and setting sun, moon and stars. On the Downs they straddled the realm of the sky whereas the marshes of the Rother valley and the fluctuating water level connected them to the underworld. It is believed, that for northern Europe their worldview was a form of animism (Goldhahn, 2013, 2019) and their cosmology embodied in social landscapes in a similar way in Britain and Ireland (Brück 2019:176-78). Their understanding of the stars and the movement of the sun and moon were intrinsically part of their dealings in life and death. They felt themselves as part of this Cosmos and needed to sustain their environment in their everyday dealings to be able to survive and thrive. The monuments on the Downland and in the Rother valley are the last vestiges of this life which would have included a huge diversity of organic material which has since perished.

SABINE STEVENSON PHD

7

APPENDIX

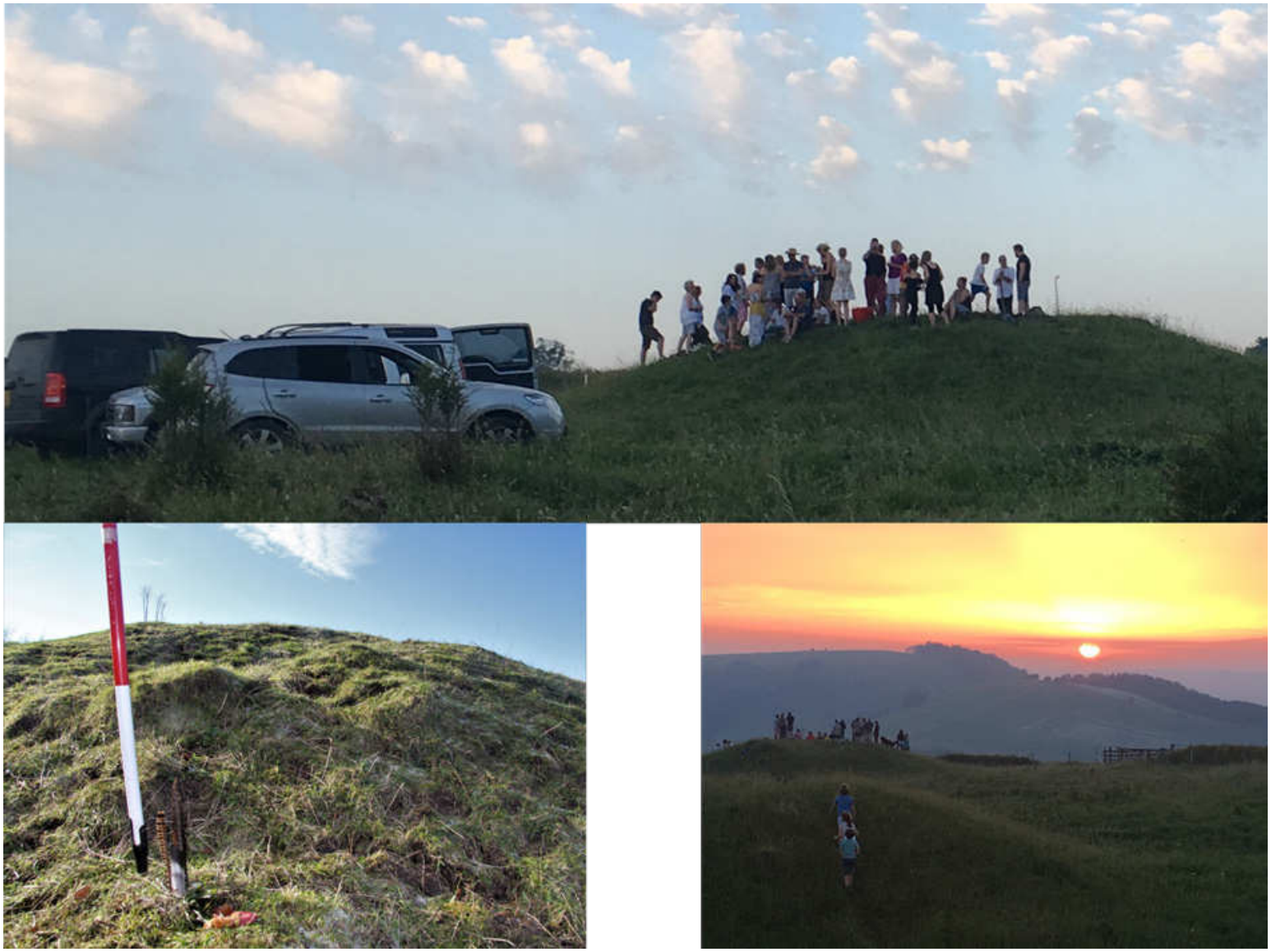
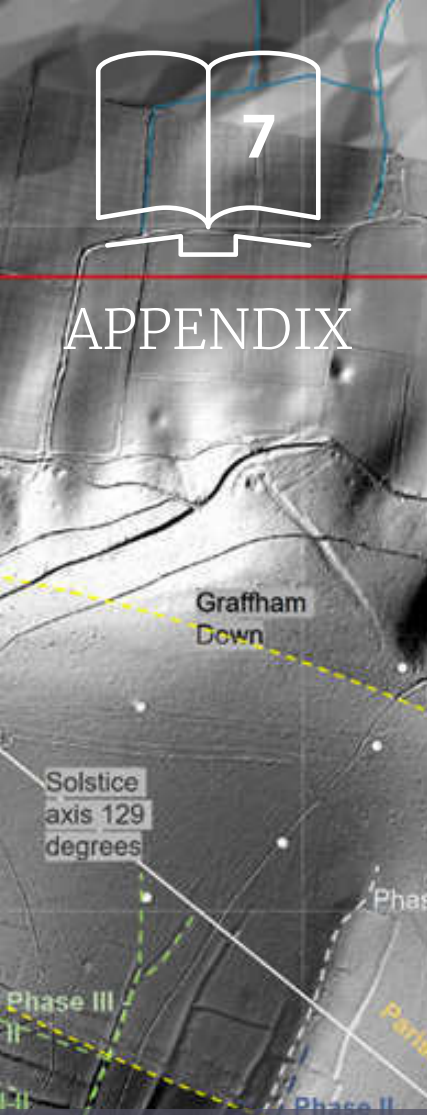


Figure 9 Encountering visitors at the Midsummer sunset at the Devils Jumps during a barrow survey. Image: Sabine Stevenson



SABINE STEVENSON PHD

APPENDIX 7

Sabine Stevenson PHD

Prehistoric archaeological assessment

Westerlands Farm both in the marshes of the River Rother as well as on the South Downs lies in a preserved, significant yet to date little known prehistoric landscape. This landscape bears the vestiges of the lifeways and the worldview of the Bronze Age and is still visited by people who seek to connect to this landscape and relate to this intangible Cultural Heritage as could be seen at The Devils Jumps above Treyford to the west during a field survey in 2017.

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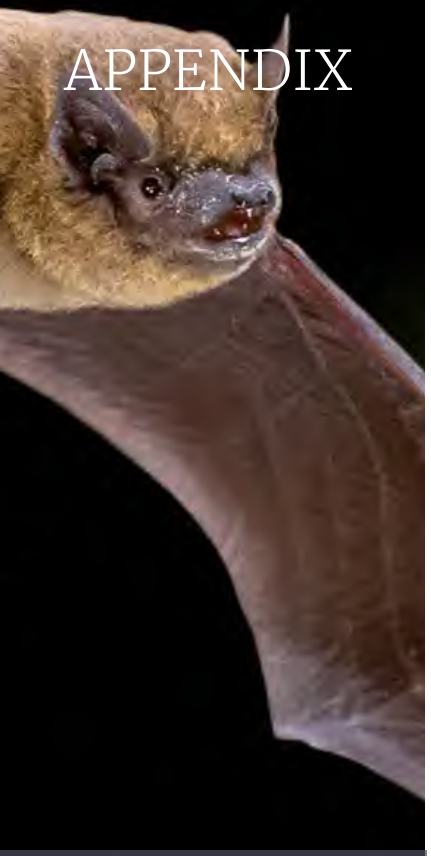


APPENDIX

APPENDIX 8

Bat Activity Survey Report

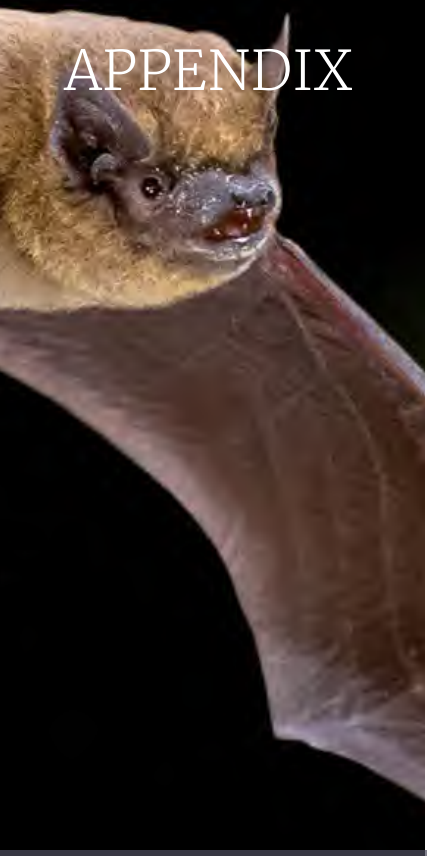
Tegleaze 27 June - 18 August 2024

Introduction

Between June 27th and August 18th, a static bat detector was deployed within the Westerlands Estate (at grid reference location: SU 92878 15551) for 53 days to record bat activity. The purpose of this deployment was to gather insights into the presence and activity of bats in the area during this period. Bats are fascinating creatures and an important part of our natural ecosystems, acting as natural pest controllers and contributing to biodiversity

The bat activity survey recorded a diverse range of species, with the common pipistrelle being the most frequently detected. Other species, such as Myotis bats, barbastelle, serotine, long-eared bats and Nyctalus bats, were also identified in lower densities. The data also suggests that bats may be roosting in the local area, with peaks in activity around dusk (when bats typically emerge from roosting sites).

These findings provide valuable insights into bat distribution and activity, supporting conservation efforts to protect their habitats.



APPENDIX

APPENDIX 8

Bat Activity Survey Report

Tegleaze 27 June - 18 August 2024

Species Recorded

Pipistrelle Bats

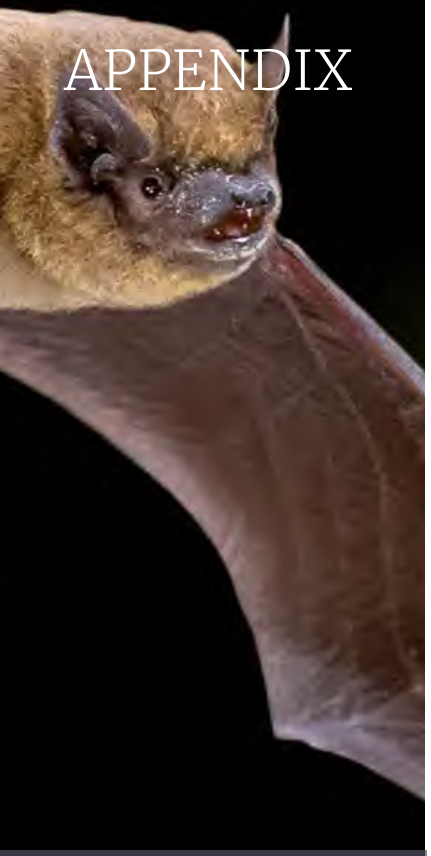
This survey recorded three species of Pipistrellus bats: the common pipistrelle (Pipistrellus pipistrellus), soprano pipistrelle (Pipistrellus pyg- maeus), and Nathusius' pipistrelle (Pipistrellus nathusii). Pipistrelles are the UK's most widespread bats, often seen flitting around gardens and parks at dusk. The common and soprano pipistrelles are par- ticularly abundant, with the latter favouring habitats near water. Nathu- sius' pipistrelle is rarer but known for its impressive migrations across Eu- rope, sometimes covering over 2,000 km.

Common Pipistrelle (Bat Conservation Trust)

Myotis Bats

Four species of Myotis bats were detected: Natterer's bat (Myotis nat- tereri), Daubenton's bat (Myotis daubentonii), Brandt's bat (Myotis brandtii), and the whiskered bat (Myotis mystacinus). Myotis bats are typically associated with woodland and wetland habitats. Daubenton's bat, often called the "water bat," is commonly seen skim- ming over water surfaces for insects. Natterer's bat is known for its di- verse diet, even plucking spiders directly from webs. Brandt's and whisk- ered Bats are less common and closely resemble each other, making them difficult to differentiate without specialist equipment.

Brandt's bat (Bat Conservation Trust)



APPENDIX 8

Bat Activity Survey Report

Tegleaze 27 June - 18 August 2024

Species Recorded

Long-Eared Bats (Plecotus)

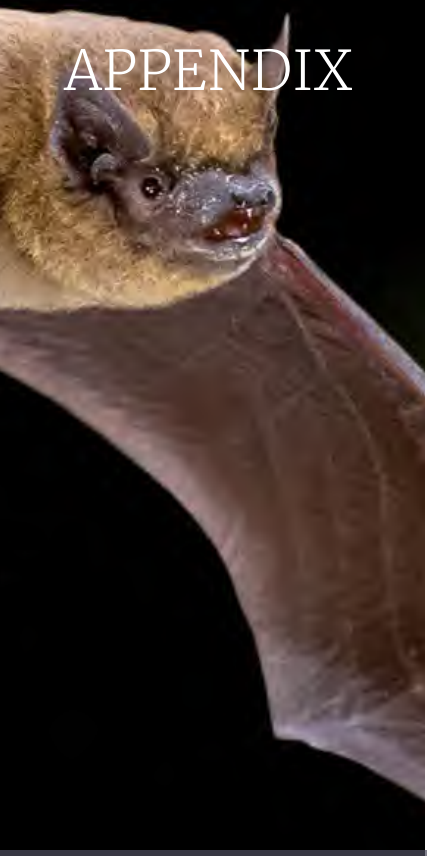
Two species of Plecotus bats were identified: the brown long-eared Bat (Plecotus auritus) and the grey long-eared bat (Plecotus austriacus). These bats are named for their distinctive long ears, which help them de- tect faint sounds. The brown long-eared bat is widespread and often for- ages in woodlands, while the grey long-eared bat is much rarer, with only a few colonies in southern England.

Grey Long-Eared bat (Bat Conservation Trust)

Barbastelle

The Barbastelle (Barbastella barbastellus) is one of the UK's rarer bats, strongly associated with ancient woodlands. The Barbastelle has a er- ratic, fluttering flight and is highly adapted for foraging in dense forested areas. Its distinctive "pug-like" face and preference for roosting in tree crevices make it an elusive species, rarely encountered in high numbers.

Barbastelle (Bat Conservation Trust)



APPENDIX 8

Bat Activity Survey Report

Tegleaze 27 June - 18 August 2024

Species Recorded

Nyctalus Bats

Leisler's bat (Nyctalus leisleri) was recorded during the survey. Leisler's bat calls have a significant overlap with another species in the genus, noc- tule (Nyctalus noctule), and a significant number of calls could not be as- signed to either species (included as Nyctalus sp.). No confirmed calls for noctule were recorded, however. Leisler's Bat is typically a forest-dwelling species, roosting in damage and decay features within trees. It is a relatively uncommon species, with a scattered distribution across the UK. It has a fast, direct flight and is often seen foraging at tree top level or below with shallow dives.

Leisler's Bat (Bat Conservation Trust)

Serotine

Serotine (Eptesicus serotinus) is one of the UK's largest bat species and is one of the first bats to emerge, often seen in the early evening daylight. The serotine is an uncommon species, mainly restricted to the southern half of England and Wales, with isolated populations found in North Wales and Cheshire/South Lancashire.

Serotine (Bat Conservation Trust)

8

APPENDIX

Full Survey Results

The data collected from the static bat detector was processed and analysed using Kaleidoscope Pro Analysis Software. The recorded sound characteristics were then matched to various bat species, as shown in the re- sults below. When specific species could not be identified, the recordings were classified at the genus level. **Full results are detailed in Table 1 and are visualised in Figures 1 & 2 below.**

Common pipistrelle was by far the most actively present bat, making up over 83% of the total observations. Other species like barbastelle, so- prano pipistrelle, and serotine were also recorded, each contributing between 2.9% and 3.5%. A few less com- mon bats, such as Nathusius' pipistrelle, brown long-eared bat, grey-long eared bat, Leisler's bat and Myotis bats were also recorded, though in much lower numbers. However, some recordings could only be identified to genus level, like Nyctalus species, Plecotus species, and Myotis species, meaning we could tell which genus they belonged to but not the exact species. Therefore, these species may have been present in higher densi- ties.

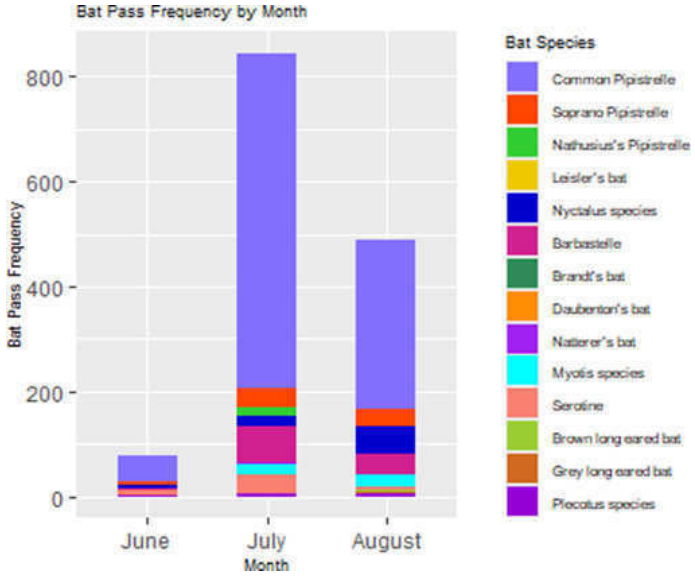


Figure 1 – Bar chart showing the frequency of bat passes recorded for each species within in each month

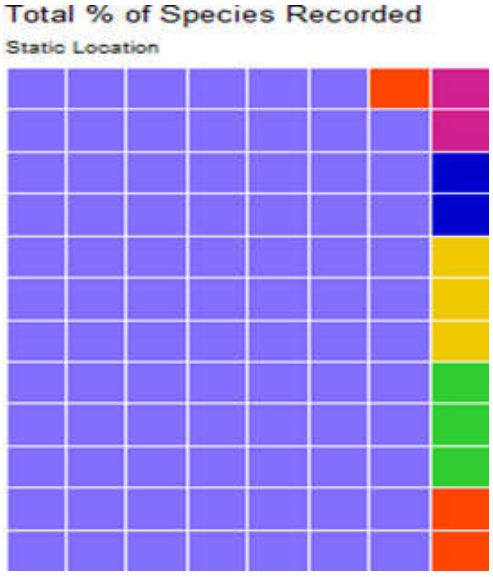
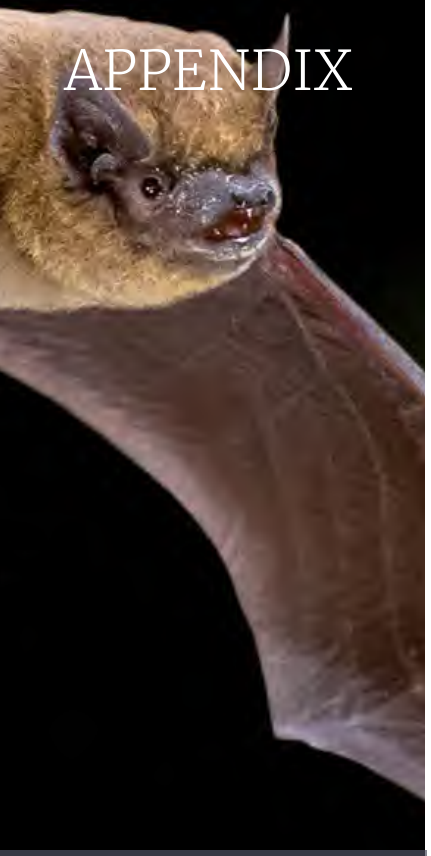


Figure 2 – Waffle plot showing the total percentage of each species recorded over the entire period. One block = 1%.



APPENDIX 8

Bat Activity Survey Report

Tegleaze 27 June - 18 August 2024

Table 1- Bat Species Activity and Distribution

Species	Total Bat Pass Count	Percentage of Total Observations
Common Pipistrelle (*Pipistrellus*)	6,951	83.20%
Myotis species (*Myotis*)	296	3.50%
Barbastelle (*Barbastella*)	278	3.30%
Soprano Pipistrelle (*Pipistrellus*)	262	3.10%
Serotine (*Eptesicus*)	246	2.90%
Nyctalus species (*Nyctalus*)	185	2.20%
Plecotus species (*Plecotus*)	79	1.00%
Nathusius' Pipistrelle (*Pipistrellus*)	37	0.40%
Brown Long-Eared Bat (*Plecotus*)	8	0.10%
Natterer's Bat (*Myotis*)	4	0.05%
Grey Long-Eared Bat (*Plecotus*)	4	0.05%
Leisler's Bat (*Nyctalus*)	3	0.04%
Brandt's Bat (*Myotis*)	1	0.01%
Daubenton's Bat (*Myotis*)	1	0.01%

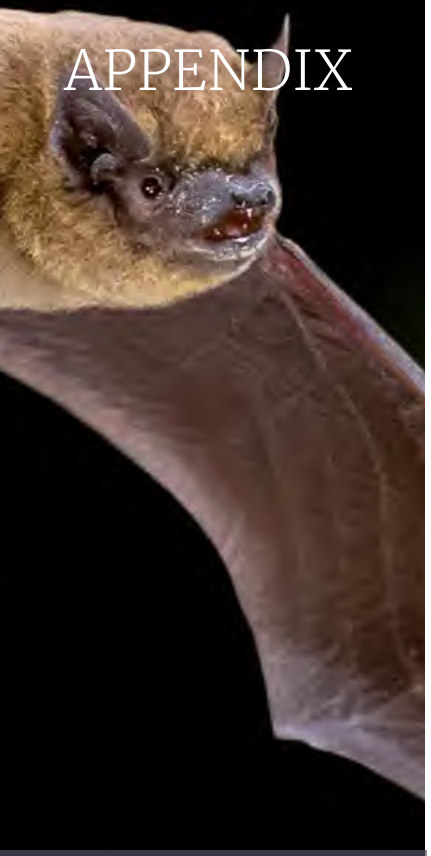


Figure 3 below illustrates the average bat pass frequency during the daily hours of each month. The sharp increase in bat passes between 8 pm and 10 pm (roughly around dusk) indicates that there are potential roosts close to where the survey took place, although without further investigation this cannot be confirmed. If roosts are present, they are most likely occupied to be occupied by common pipistrelle. However, given the high activity levels in July and August, it is possible that any of the recorded species may be roosting in the local area.

The bat activity survey conducted within the Westlands Estate, revealed a diverse range of bat species, with the common pipistrelle being the most abundant. Rare species such as barbastelle and grey-long eared bat were recorded, indicating that the site may have significant value on a regional bat scale (and potentially, a national scale, if significant roosts for these species are present). The presence of the species recorded under- scores the importance of conserving local bat habitats and ensuring minimal disruption to their activities.

These findings provide valuable insights into bat distribution and activity, supporting efforts to protect and maintain their populations in the area.

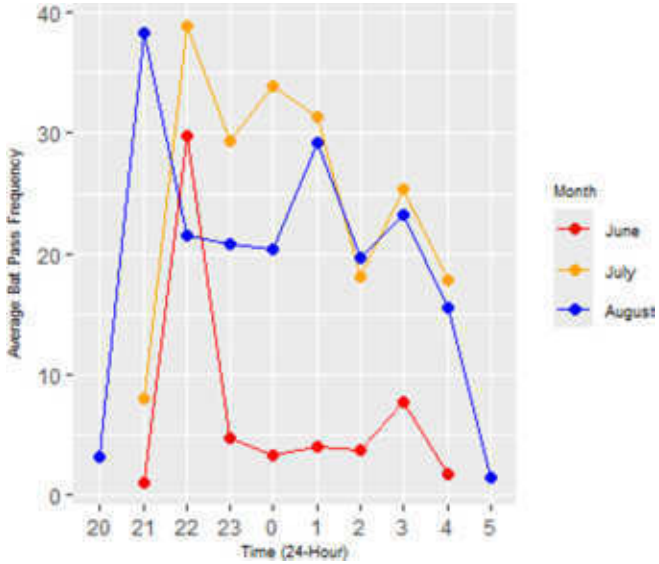
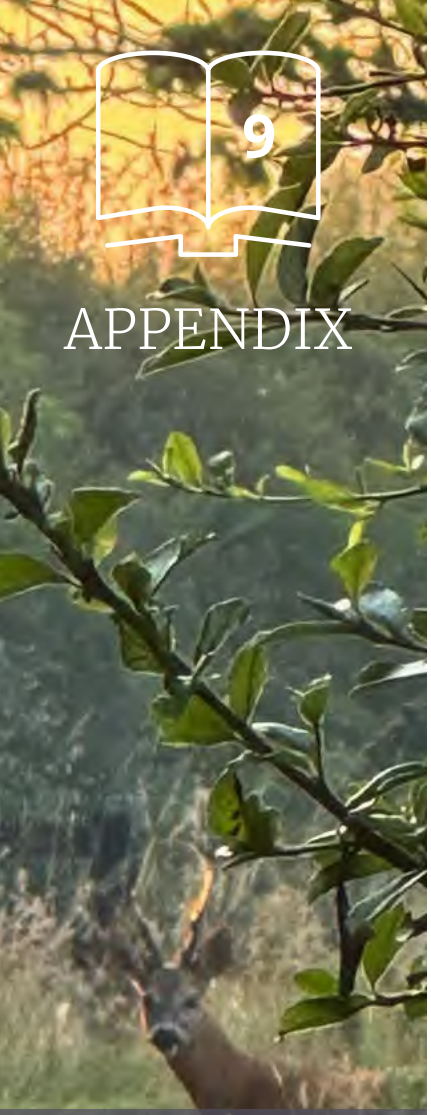


Figure 3 – Line chart showing the average daily bat passes recorded at each hour of the daily recording period, during each month.

References:
Bat Conservation Trust. (2025) UK Bats. Available at: https://www.bats.org.uk/about-bats/what-are-bats/uk- bats

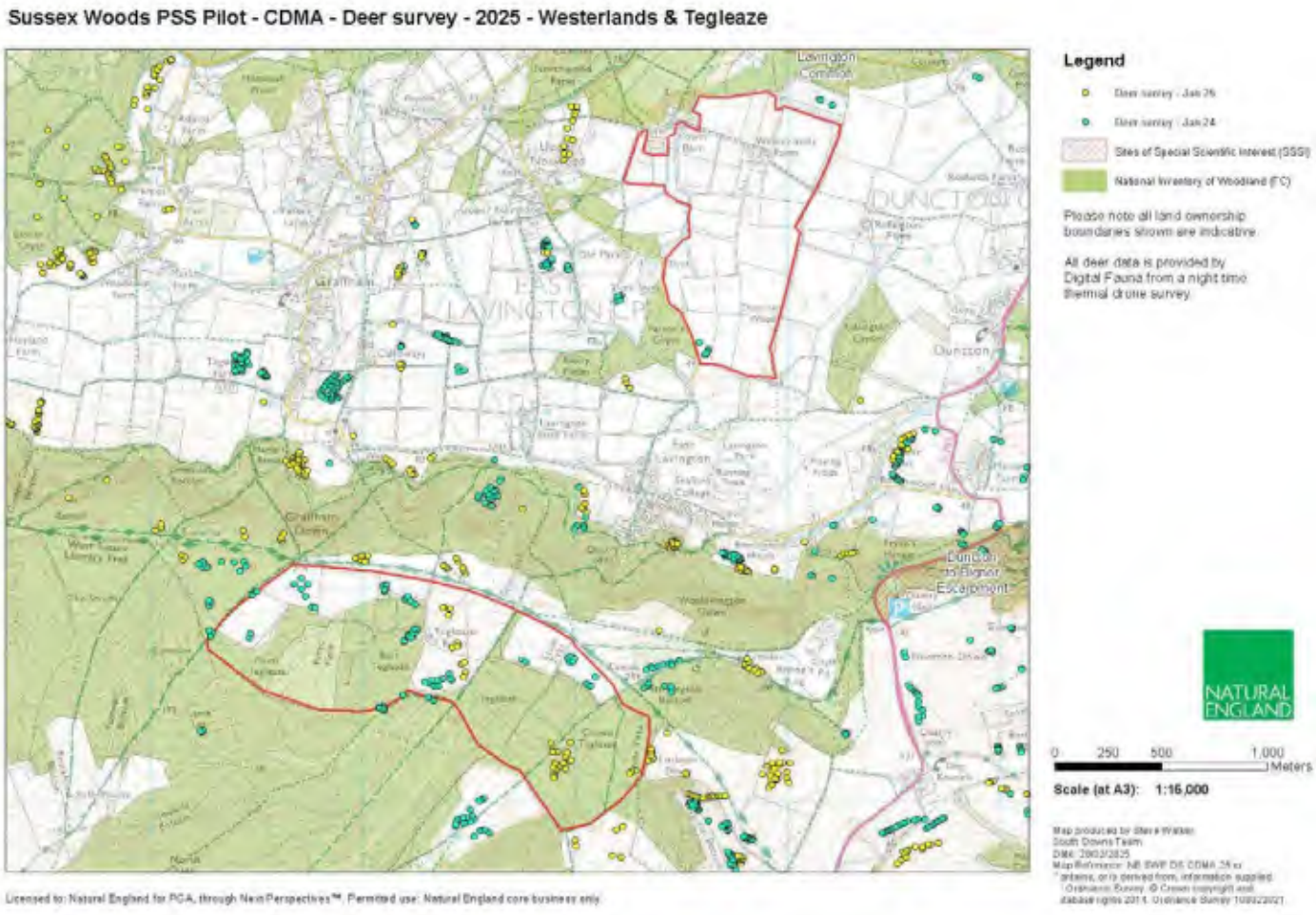


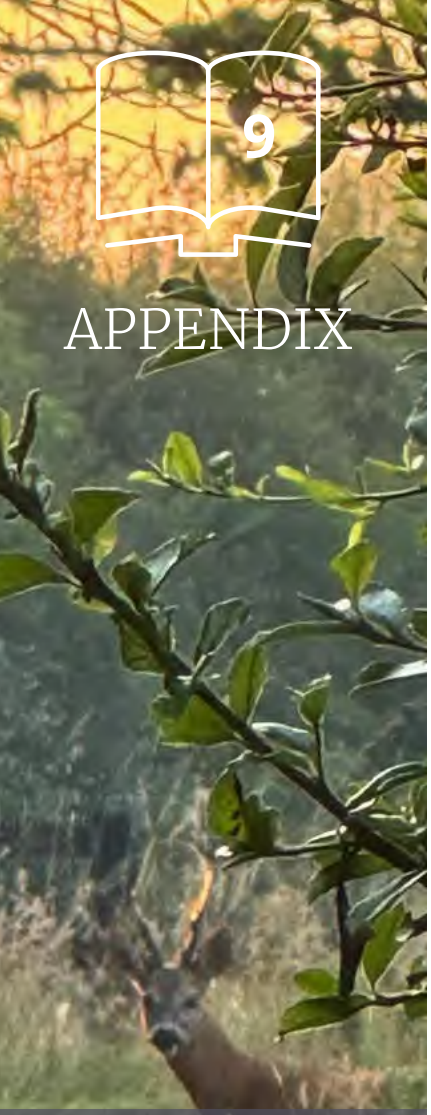
APPENDIX

APPENDIX 9

Deer Impact Assessment

Westerlands & Tegleaze 2025



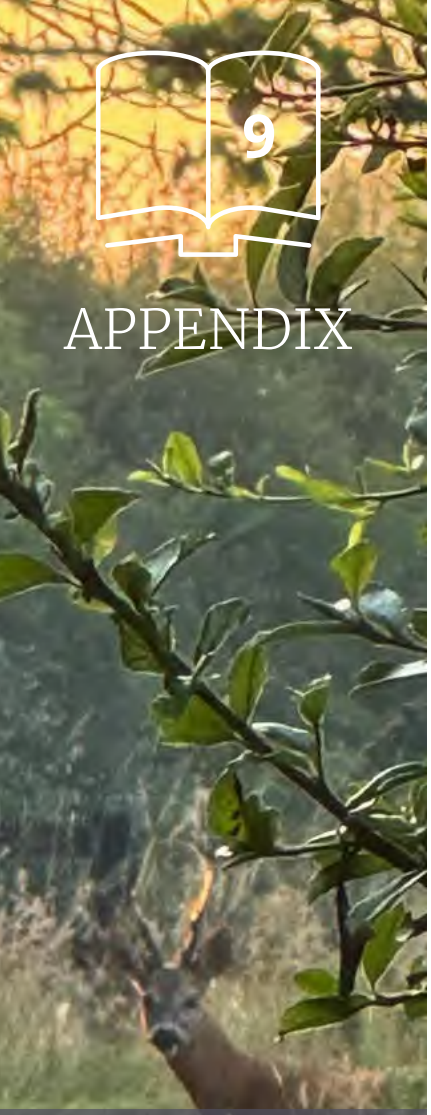


APPENDIX 9

Deer Impact Assessment

Westerlands & Tegleaze 2024-2025

2024	Deer Count	Coverage km2	Deer density / km2
WDMA	4445	210	21
CDMA	2583	91	28.3
EDMA	1362	40	34
Total	8390	331.76	**25.3**
2025	Deer Count	Coverage km2	Deer density / km2
WDMA	2725	156.76	17.4
CDMA	1760	124	14.2
EDMA	638	41.52	15.4
Total	5123	322.28	**15.9**



APPENDIX 9

Deer Impact Assessment

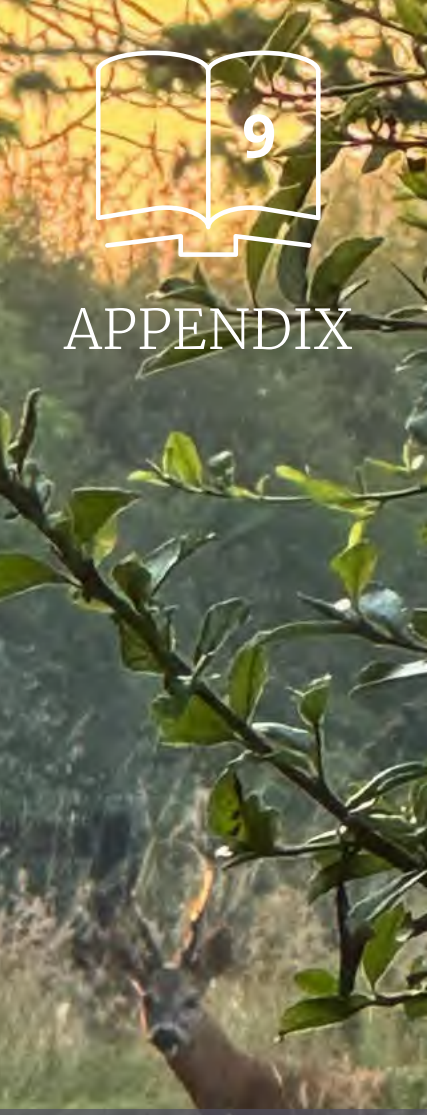
Tegleaze 20/03/25

With thanks to Martin Boxall at Woodland Impact

	Activity				Impact			
	2025	2026	2027	2028	2025	2026	2027	2028
	HIGH				HIGH			
Trend								

Impression

These woods have unfortunately been victims of the perfect storm of Ash dieback, allowing a huge amount of light on the ground, allowing the bramble to do very well. This has created areas of impenetrable harbour for deer, which are now very difficult to manage due to the thicket effect. The age of the hazel in the area is proof that the deer numbers have risen sharply over the last few years, preventing any natural regeneration from getting away, and all basal shoots have been browsed off.



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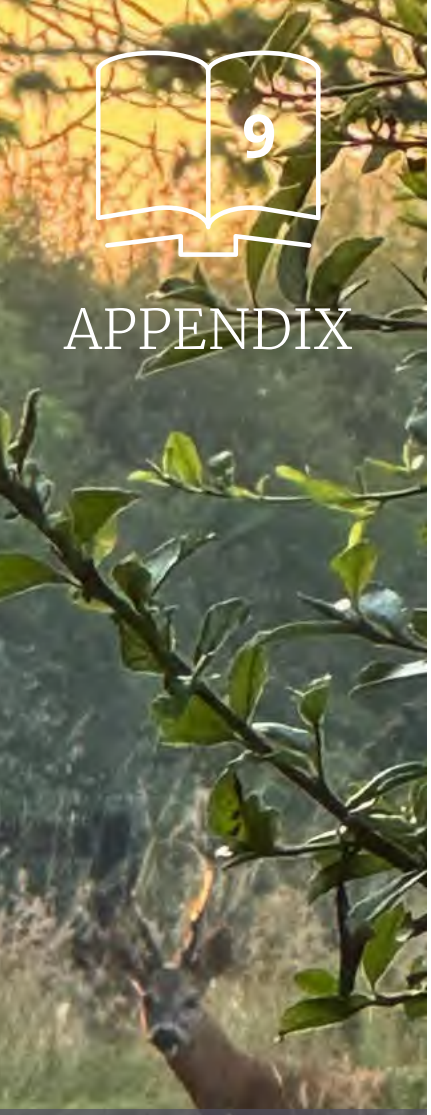
Deer Impact Assessment

Tegleaze 20/03/25

With thanks to Martin Boxall at Woodland Impact

Conclusion/Recommendations

On the wider tracks, the bramble is doing well in the light, but the shaded side is not getting away due to the browse pressure, the highseats seen, and the overall nervousness of the fallow seen suggest that deer management is undertaken. The width of the rides does rather hamper the stalkers' opportunity for a shot; some ride widening to create 3-tier rides would not only help the stalkers but also help with the diversity within the woodland blocks and future management plans.



APPENDIX

APPENDIX 9

Deer Impact Assessment

Tegleaze 20/03/25

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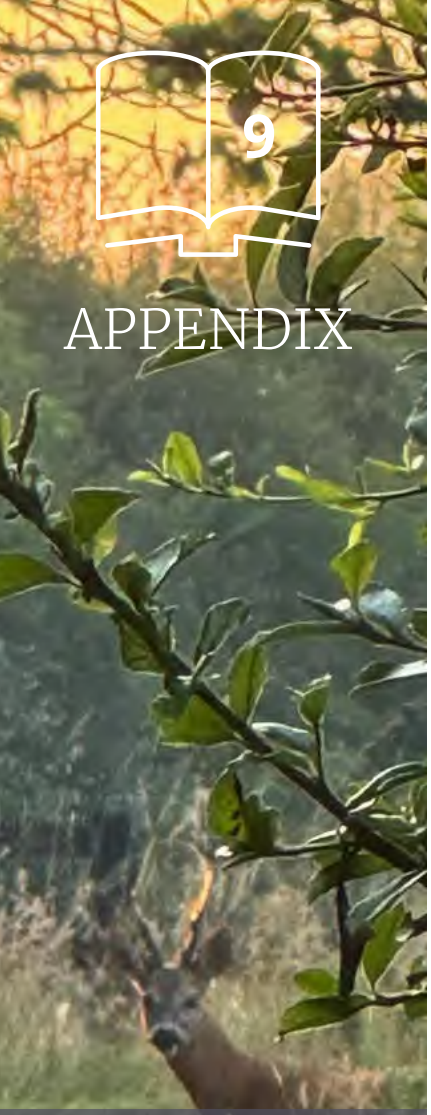
Bramble alongside a path showing light browsing, several of the young trees within the guards show browse damage where they have poked out.

15 meters off the path the Bramble and Hawthorn seedlings are heavily browsed



APPENDIX

APPENDIX 9

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Tegleaze 20/03/25

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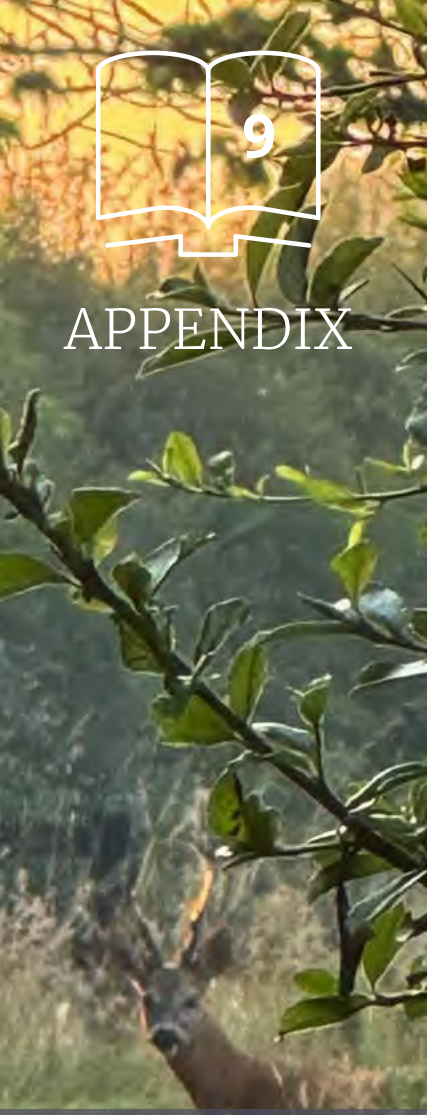
Basal shoots all killed by browsing.

Heavily used rack with bramble heavily browsed along it.



APPENDIX 9

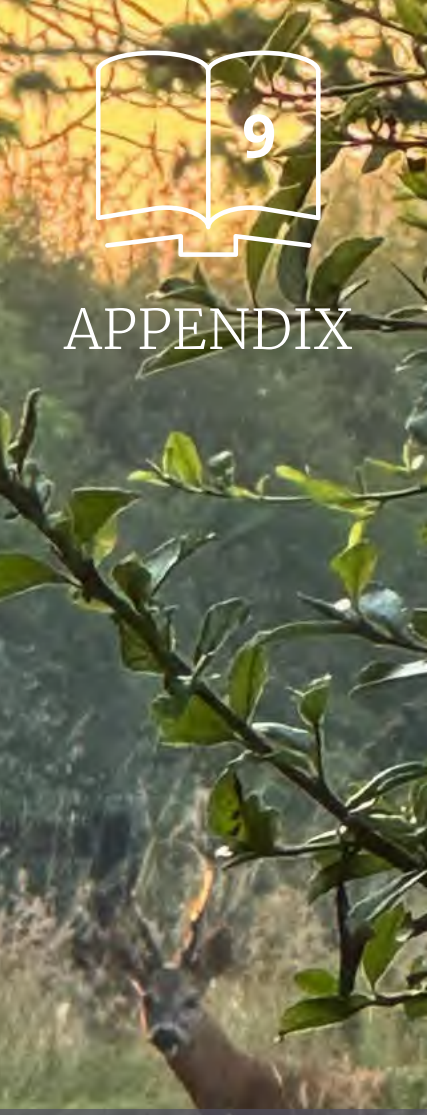
Deer Impact Assessment

Tegleaze 20/03/25

With thanks to Martin Boxall at Woodland Impact

Bramble growing in areas of high light heavily browsed where the deer can reach it, where tall enough the deer are creating tunnels.

A fallen Ash providing a structure for Bramble and protection for coppice growth.



APPENDIX

APPENDIX 9

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Tegleaze 20/03/25

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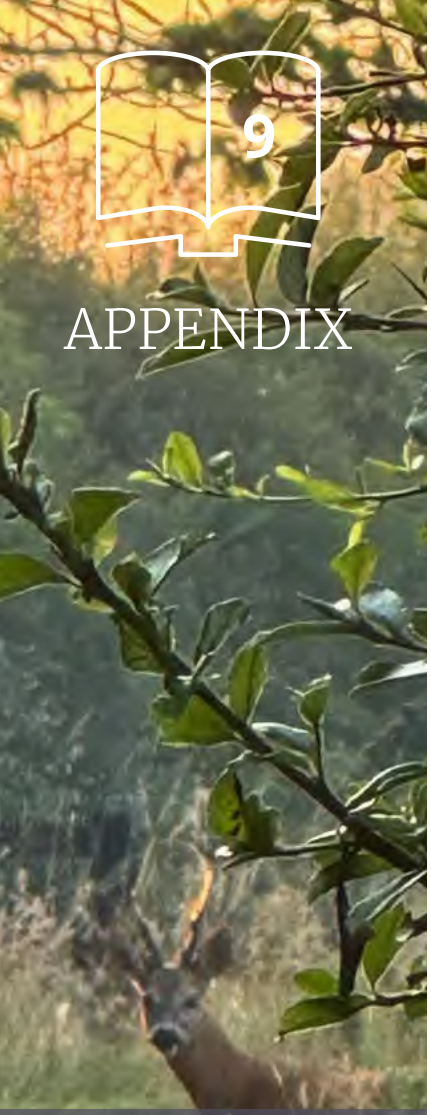
This shows a browse line in the fallen ivy and also give a good demonstration of how impenetrable areas are becoming this is going to cause issues for the stalkers.

The ground heavily trod path past a hazel stool which shows lots of basal growth which is not particular old suggesting the deer pressure has risen sharply over the last 5 or so years.



APPENDIX 9

Deer Impact Assessment

Tegleaze 20/03/25

With thanks to Martin Boxall at Woodland Impact

No under story left due to browsing.

Bramble growing in the open which is short but quite dense with limited browse, not far from a Highseat suggesting the deer are under particular pressure in this area.

9

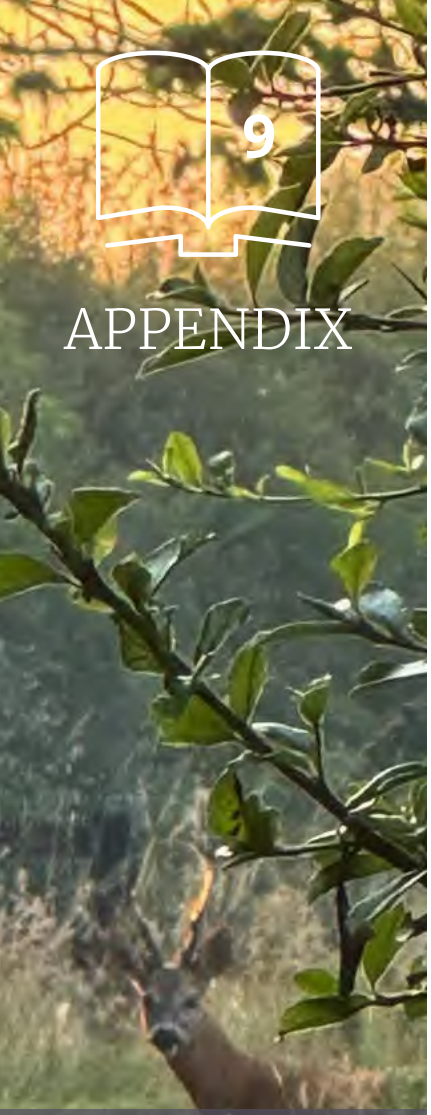
APPENDIX

Tegleaze Deer Count Summary

DIGITAL FAUNA

Sussex PSSP CDMA Night Deer Count

2024: 2583
2025: 1760



APPENDIX

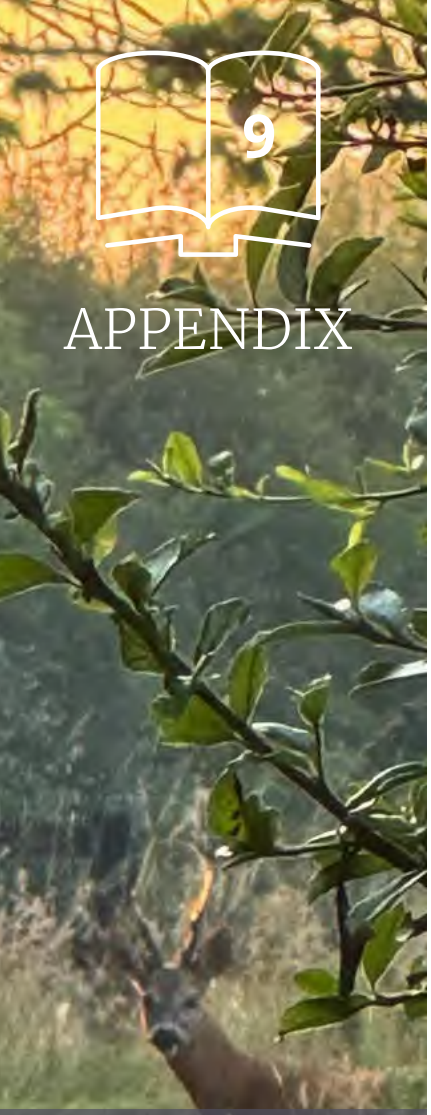
APPENDIX 9

Deer Exclosures

Deer exclosures installed to keep deer out of an area, so that we can measure impact over time.

Exclosure at Tegleaze - installed 19th Oct 2024

Same Exclosure at Tegleaze - 4th May 2025



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Deer Exclosures

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Exclosure at Westerlands- installed 19th October 2024

Same Exclosure at Westerlands - 4th May 2025

APPENDIX 10

The Guardian

How I learned to 'be more horse' on a wild Sussex retreat
by Jane Dunford

"Riding and equestrian wellness sessions gave me the chance to connect with these deeply intuitive animals in the beautiful South Downs national park."
"We can learn a lot from horses, they are masters of mindfulness and deeply intuitive," says Elly. "The farm's whole ethos is about healing in nature. Just being with a horse can have therapeutic benefits, teaching us wellbeing techniques, such as how to be in the moment."

Read full article >

To open link in new tab hold CTRL or COMMAND key when you CLICK

Participants are encouraged to 'touch, feel and smell' the horses

APPENDIX 10

The Guardian

Happy new you! 10 of the best UK wellbeing retreats for 2025 by Jane Dunford

"Get the year off to a positive start by booking a restorative break. We pick the best wellness retreats, with yoga, swimming, walking and more in pretty settings from the Highlands to Essex."

Read full article >

To open link in new tab hold CTRL or COMMAND key when you CLICK

Wellbeing on the farm, Sussex

Photograph: Andy Hannant

In the heart of the South Downs national park, Westerlands is a regenerative farm with cabins, huts, barns and cottages - perfect for getting away from it all. Guests can tailor their own wellbeing experience by making use of the WildSpa and sauna (treatments range from massage to reiki), and the WildFit outdoor gym, plus private and regular classes in everything from boxercise to yoga. There's a stable on-site too, with the option to go riding and workshops in "equestrian wellness", a type of equine healing therapy.

• *Cabins from £79 a night, activities extra, westerlands.com*

10

APPENDIX

PRESS & MEDIA

APPENDIX 10

openreach

In January 2024, Westerlands featured in the BT Openreach Campiagn for Rural Businesses.


openreach

Full Fibre broadband essential for supporting rural businesses

Running any rural business can be tough. In the case of Westerlands Farm in the South Downs, Antonia Jamison runs a hospitality business as a second revenue stream, thanks to her access to ultrafast, ultra-reliable Full Fibre broadband.

Andrew Griffith MP in Graffham for completion of ultrafast broadband project

Post

Tuesday, 30 January, 2024

Local News

To open link in new tab hold CTRL or COMMAND key when you CLICK

Read full article >

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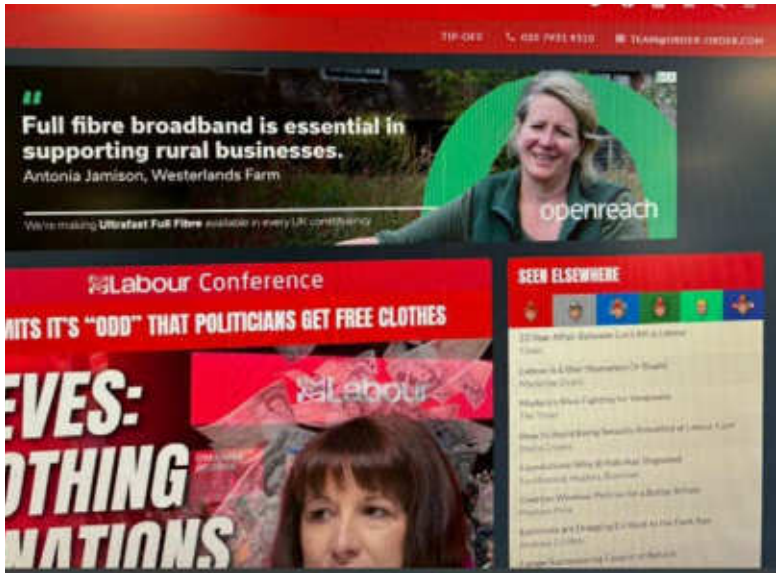
Openreach video featuring interview with Antonia



Internet banner advert featuring Antonia

APPENDIX 11

Dung Beetles

Cheat Sheet

Geotrupidae

Common name: Dor beetles
Number of species: 8
Size Range: 11-26mm
Tarsi: 5-5-5

Description

The Geotrupidae have eight British representatives, seven in the subfamily Geotrupinae and one species, Odonteus armiger(Scopoli) in subfamily Bolbatocerinae, often raised to family level. This species is thought to feed on hypogeal (underground) fungi and is found mostly in the south and southeast, here it is often caught at light. Males have prominent thoracic horns.

The Geotrupinae are large black heavily-built beetles (10-26mm), often with green or blue metallic reflections. Like O. armiger, they are strong fliers and often come to light. The minotaur beetle Typhaeus typhoeus (L.) is our only member of the 'roller' guild of dung beetles: males have three large thoracic horns. Both sexes can occasionally be seen rolling rabbit droppings towards their deep (1-1.5m) burrows, but can be more often located by the spoil heaps their tunnelling leaves in open sandy areas. The other species excavate shorter (5-60cm) burrows beneath or directly beside dung.

APPENDIX 11

Dung Beetles

Cheat Sheet

Trogidae

Common name: Hide beetles
Number of species: 3
Size Range: 5-10mm
Tarsi: 5-5-5

Description

Three species in Britain, all 5-10mm long and one of which, Trox perlatus Geoffroy, has not been seen in the country since the 1930s. As the common name suggests, these beetles are mainly found in association with dry carcasses, although they are also found in large birds nests, particularly hole-nesting species such as jackdaws Corvus monedula (L.). The elytra have a distinctively granulate appearance.

APPENDIX

APPENDIX 11

Dung Beetles

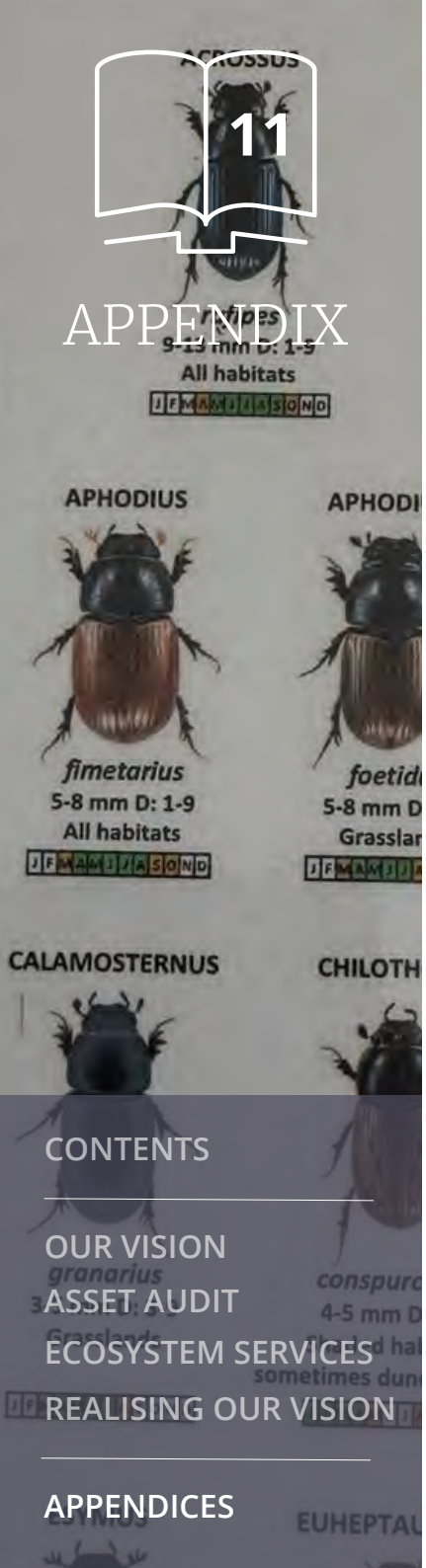
Cheat Sheet

Lucanidae

Common name: Stag beetles
Number of species: 4
Size Range: 10-66mm
Tarsi: 5-5-5

Description

There are four species of Lucanidae in Britain, all of which feed in decaying wood although one, the blue stag Platycerus caraboides(L.) has not been seen since before 1900 and is presumed extinct in the country. Lucanus cervus (L.), the stag beetle, is the largest (to 66mm) and perhaps the most recognisable beetle in Britain, especially the male which has long extended mandibles (the 'antlers' that give the species its name).



APPENDIX 11

Dung Beetles

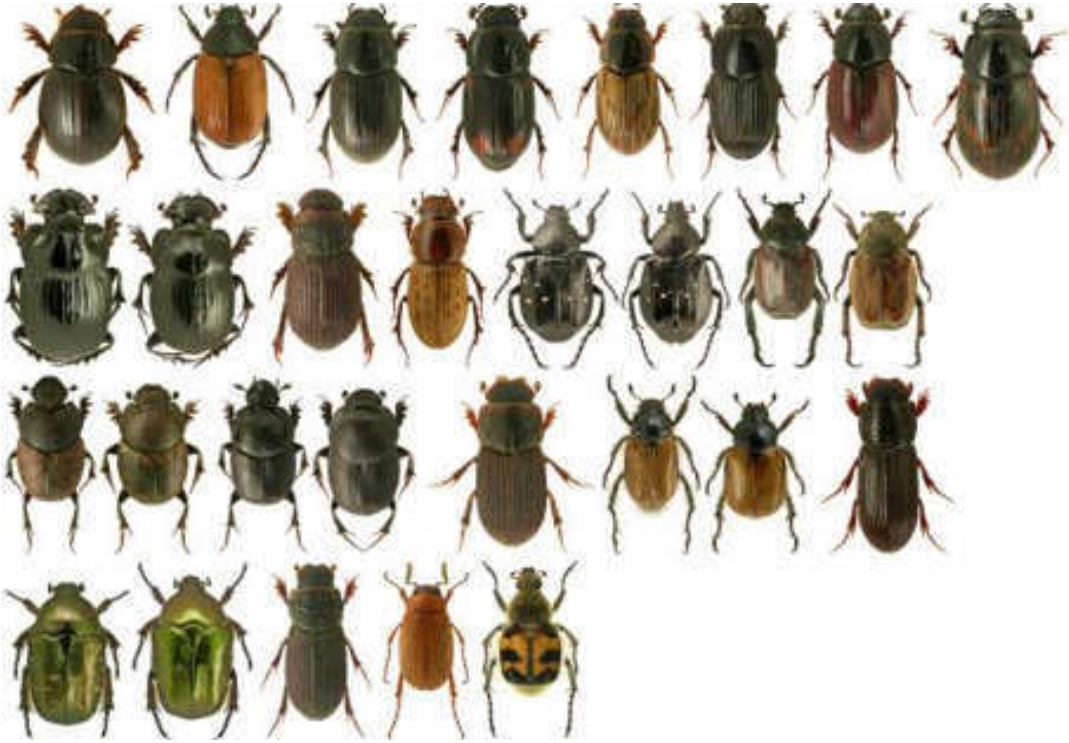
Cheat Sheet

Scarabaeidae

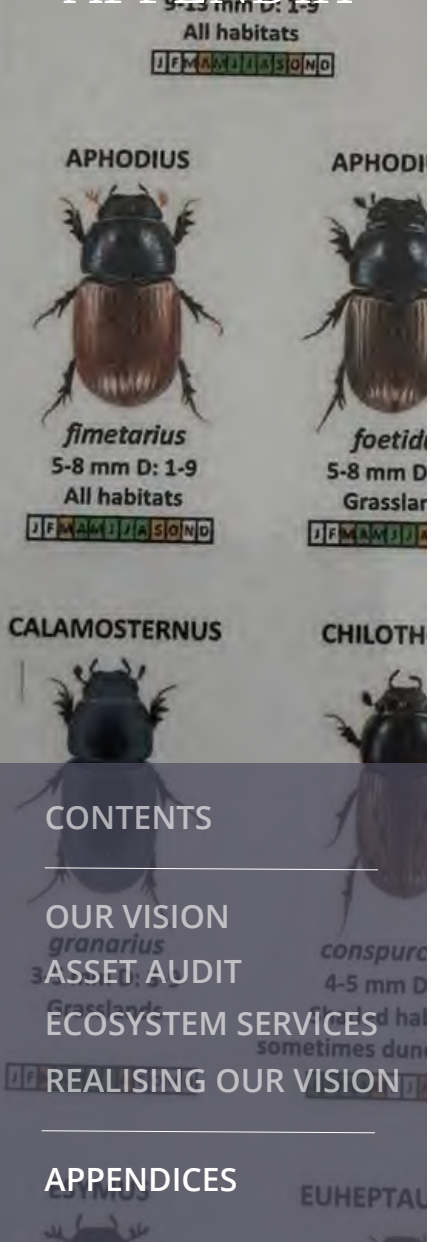
Common name: Scarab beetles
Number of species: 88
Size Range: 2-20mm
Tarsi: 5-5-5

Description

The largest family within Scarabaeoidea, Scarabaeidae has 83 British representatives in six subfamilies, and includes the chafers, scarab beetles and the majority of the dung beetles. Small to large species (3-20mm), most are powerfully built beetles with fossorial legs and some can swarm in large numbers. Subfamily Aegialiinae has three British species, all small (4-5mm), elongate and associated with decaying vegetation in dry, sandy areas.



Psammoporus sabuleti (Panzer) is a local species of sandy river banks: both Aegialia species are locally-distributed maritime beetles. Aphodiinae is the largest subfamily with 55 species, the majority of which are dung beetles in the genus Aphodius. Built like scaled-down Geotrupidae, Aphodiinae very rarely excavate tunnels and larvae are instead found in surface dung or decaying vegetable matter. Adults generally have a smooth, black, rounded pronotum and black, brown or red striate elytra.



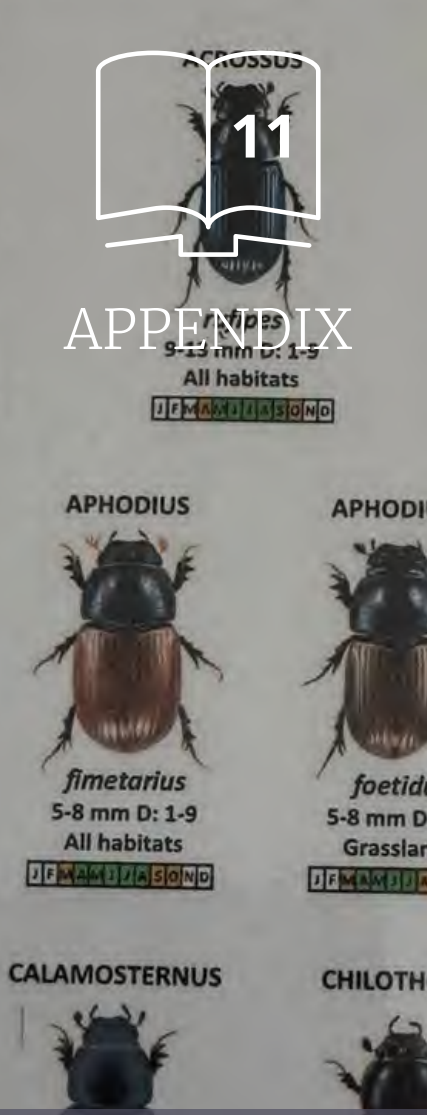
APPENDIX 11

Dung Beetles

Cheat Sheet

Scarabaeidae

The subfamily Aphodiinae also includes two introduced species of Saprosites, S. mendax (Blackburn) and S. natalensis (Peringuey) which are often elevated to subfamily level as the Eupariinae. These are 3mm shining black species with strongly punctured striate elytra and red appendages, found under bark or from the burrows of Lucanidae species. Tribe Psammodiini is also often elevated to subfamily level: of these, Brindalus porcicollis (Illiger) is extinct in Britain, Pleurophorus caesus (Creutzer) and Rhyssemus germanus (L.) are known from old records, and the remaining four species - Diastichus vulneratus (Sturm), Psammodius asper (Fabricius), Tesarius caelatus (LeConte) and T. mcclayi (Cartwright) – are rare or very local. Small (2.5-4.5mm) beetles, they have obviously-ridged pronotums. Subfamily Scarabaeinae includes nine British species, eight 4-11mm Onthophagus species and the probably-extinct Copris lunaris L. (14-20mm). Primarily associated with dung, these species can also be found in carrion and rotting fungi. They are black beetles, some species with paler elytra, and dig vertical burrows beneath dung. The subfamily Melolonthinae are chafers, rather than dung beetles, and larvae of the eight British species can be found feeding on plant roots while the large brown adults fly strongly, often coming to light. Polyphylla fullo (L.) is included on the British list but is thought to be largely adventitious. The large brown chafer Melolontha melolontha (L.) (cockchafer or maybug) is a member of this subfamily and can occasionally swarm in large numbers. Rutelinae is a small subfamily, with just two British representatives. Both have a bottle-green metallic pronotum and brown elytra: Anomala dubia (Scopoli) is a local, coastal species mainly found in the south, while Phyllopertha horticola (L.) is widespread and often common, particularly in the south. Cetoniinae (including the tribe Trichiini, often promoted to family level) has six British members, mostly bright metallic species although Trichius fasciatus (L.) is a black and yellow bee mimic. None are particularly common: the most widespread is probably the rose chafer Cetonia aurata (L.) which can be found visiting flowers, particularly in southern England.



APPENDIX 11

Dung Beetles

Cheat Sheet

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ISSN 1819-544X
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ORIGINALARTICLES

Corresponding Author: Hamdy E.M. Hanafy, Department of Plant Protection, Faculty of Agriculture, Ain Shams, University, Shoubra El-Kheima, Cairo, Egypt.
E-mail:drhamdy25@yahoo.com

Soil nutrient as affected by activity of dung beetles, Scarabaeus sacer (Coleoptera: Scarabaeidae) and toxicity of certain herbicides on beetles

Hamdy E.M. Hanafy and Walaa El-Sayed
Department of Plant Protection, Faculty of Agriculture, Ain Shams University, Shoubra El-Kheima, Cairo, Egypt.

https://www.researchgate.net/publication/235975390_ORIGINAL_ARTICLES

12

APPENDIX

APPENDIX 12

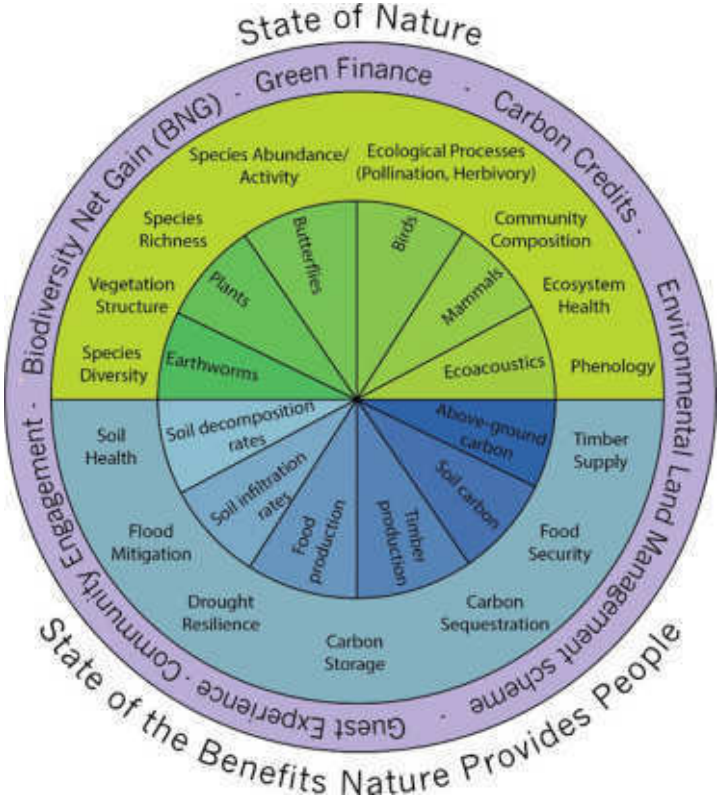
Nature Sense

University of Sussex

Nature Sense is a University of Sussex land use and biodiversity monitoring initiative. It is designed to help land managers across southeast England make evidence-based management decisions that support food and timber production, biodiversity, and climate resilience. With an extensive approach to data collection,

Nature Sense explores key indicators of ecosystem health and productivity above- and below- ground. By presenting ecological alongside productivity data, Nature Sense provides an overall picture of the state of nature and the state of the benefits nature provides people across different land use and management. The data gathered by Nature Sense can be powerful evidence for land managers who wish to unlock revenue streams including carbon and biodiversity credits, biodiversity net gain (BNG), and green finance. The data and media produced can also be used to help engage site guests, visitors and local communities.

Nature Sense is a not-for-profit enterprise, and as such we ask members to cover operational costs of monitoring sites situated on their land. By becoming a member of the Nature Sense network, land managers connect with a growing group of regional land owners and managers members, such as William Robinson Gravetye Charity and Knepp Wildland Foundation.



APPENDIX 12

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University of Sussex

How it Works

(1) Establishing monitoring sites

Working closely with the land manager, the Nature Sense team select two monitoring locations on the property of contrasting land use or management. These monitoring sites consist of a central fixed-point monitoring station equipped with a camera trap and passive acoustic monitoring device, as well as ecological and land use monitoring conducted in the habitats in a 200m radius area from the monitoring station (covering ~12ha).

(2) Quarterly surveys and data collection

Once per quarter, the Nature Sense team visit the monitoring locations to conduct intensive surveys and collect data from the camera trap and acoustic equipment. The surveys use techniques including LiDAR scanning, drone monitoring, plant, butterfly, earthworm and soil surveying. Food and timber production will also be recorded. See below for a full list of what will be monitored.

(3) Bespoke ecological reporting

Following intensive analysis by the Nature Sense team, the land manager is provided with a quarterly report on the state of nature on their land, as well as the benefits nature is providing people. An annual report is provided to summarise key findings from the year and trends from previous years.

12

APPENDIX

APPENDIX 12

Nature Sense

University of Sussex

Benefits of partnering with Nature Sense

Gain a deeper understanding of your land: By establishing paired monitoring sites, Nature Sense data provides you with a deeper understanding of the costs and benefits of applying different land uses and management. For example, if you want to assess the costs and benefits of applying nature-friendly farming, we can establish a monitoring station where the new management is being tested and another in an area that remains under more intensive production. We can look at the impacts on yield, management costs, biodiversity, soil health, above- and below-ground carbon, and soil infiltration rates. By assessing multiple factors, the short- and long-term costs and benefits of a management decision can be weighed from multiple perspectives, including the potential financial implications of changing land management.

Unlock revenue streams: Nature Sense data can be used to monitor progress and outcomes for funding schemes such as Environment Land Management scheme subsidies, Biodiversity Net Gain (BNG), carbon credits and green finance. The funding landscape for farming, forestry, and conservation is changing, diversifying, and has become increasingly unpredictable. Nature Sense can help meet these challenges by capturing a full breadth of data to address the variety of monitoring requirements across multiple schemes.

Engage local communities and visitors: Nature Sense data can also be used to demonstrate the benefits of land management being undertaken on site. Data can be used to demonstrate the biggest benefits a site is providing to people and nature, or how certain land has particularly multi-functional benefits. The data can be supported by engaging people with a variety of evocative Nature Sense media from camera trap videos and drone footage to soundscape recordings.

Join a regional network: The Nature Sense network is coordinated by the University of Sussex and is currently expanding across the southeast of England. Each member benefits from the expansion of this network thanks to the large bank of ecological and land use data generated and the connections it facilitates. Current members include the Knepp Wildland Foundation and William Robinson Gravetye Charity. Nature Sense also provides outreach and public engagement opportunities, helping partners to boost their profile and demonstrate to the local community their ambition to care for the environment.

APPENDIX 12

Nature Sense

University of Sussex

What Nature Sense Monitors

Earthworms: Earthworms have a substantial impact on soil and its microbial and invertebrate inhabitants. As they pass through the soil, earthworms create casts which improve soil structure and redistribute organic matter from the surface to the subsoil. In doing so, they accelerate nutrient cycling and increase the amount of carbon which ecosystems can absorb. Using established earthworm surveying techniques, Nature Sense monitors earthworm community composition, species richness and abundance, as well as functional diversity. This provides insight into how land management is influencing a group of species strongly associated with creating healthy soil.

Plants: Using a combination of ecological surveys, LiDAR scanning, and high-precision drone mapping, Nature Sense monitors plant community composition, species richness and abundance, habitat area and condition, and vegetation structure. These data allow the monitoring of the biodiversity of plants in their own right, but also as the basis of the rest of the ecosystem. Vegetation structure is vitally important for maintaining biodiversity and is a powerful indicator of the state of nature in any given location. Vegetation provides niches for other organisms by providing refuge and sustenance to birds, invertebrates and mammals. By combining thisevidence with camera-trap monitoring of herbivores, it is possible to gauge the impact of browsing on monitoring locations. The evidence gathered by Nature Sense can signal the success of land management decisions in terms of promoting biodiversity. Indeed, structural diversity can be used as evidence in support of woodland or habitat restoration funding bids. Further, monitoring habitat area and condition also serves as a means to monitor funding schemes such as Biodiversity Net Gain.

APPENDIX 12

Nature Sense

University of Sussex

What Nature Sense Monitors

Butterflies: Southeast England is home to rare species of butterfly including species such as the Silver spotted skipper, whose range can extend for only a few hundred meters. Nature Sense surveys butterfly populations to track not only these rare species, but also common varieties, giving an overview of the ability of the habitat to support insect diversity. The monitoring will provide information on the community composition, species richness and abudance, as well as monitoring an important pollinator group. Butterfly-rich habitats can be eligible for targeted conservation funding and BNG scoring.

Birds: Nature Sense uses passive acoustic monitoring equipment paired with advanced machine- learning software to create year-round datasets of bird community composition, species richness and activity, and functional diversity. Thanks to automated methods, bird species can be tracked continuously, giving insights into habitat usage and migratory patterns. Given the recent reintroduction of iconic bird species, such as the White Stork and White-Tailed Eagle, it is an exciting time for land managers to learn how bird populations on their land are responding to management practices and climate change. Evidence of populations of threatened birds can strengthen funding applications for species recovery or habitat enhancement projects.

Mammals: Nature Sense explores mammal diversity and behaviour at monitoring sites using a camera trap and cutting-edge AI image-recognition software. Thanks to these new analytical tools Nature Sense can analyse large datasets spanning months of observations at a time. Camera traps allow animals to be observed without human presence impacting their behaviour. The metrics generated are important for understanding how local habitats support biodiversity and understanding the ecological processes they are driving. For example, we can look at the intensity of deer grazing and browsing and its impact on the plant community. Nature Sense provides the hard evidence and guidance to help make important management decisions. This helps support farming, forestry, conservation and nature recovery projects.

If you want to learn more about the Nature Sense scheme, please get in touch by emailing Dr James Whitehead at nature.sense@sussex.ac.uk. Partnerships are developed on a rolling basis and all enquiries are welcome.

APPENDIX 12

Nature Sense

University of Sussex

What Nature Sense Monitors

Soil health: The soils in southeast England vary hugely in their physical and chemical properties across relatively small distances. Changes in these properties determine important aspects of soil functioning such as the availability of nutrients and how fast water drains through. Soil pH is largely governed by the parent material of the soil but can fluctuate even within a small area due to spatially variable rainfall and weathering. Nature Sense records the pH of soils to understand the plant communities they can be expected to support. The team also record water infiltration rates and soil densities, which are particularly relevant in determining soil hydrological properties. The flow of water through soil not only determines risks of flood and run-off (the removal of topsoil due to water washing it away) but also controls how rapidly nutrients leech out of the soil. In the varied landscape of southeast England, where clayey arable soils (prone to flooding) can be found near calcareous grassland (prone to rapid drying), Nature Sense helps land managers identify risks before they occur. Taking carbon out of the atmosphere is relatively straightforward, all photosynthesising plants perform this action. However, for this to have a long-term positive impact on the climate, the carbon must be sequestered underground or as wood. Nature Sense records the presence of organic carbon in the soil to gauge the amount of carbon-capture potential of ecosystems. This data not only gives the land management an insight into their land's role in combating climate change but can also be used to enrol in carbon credit schemes.

Food and timber production: The landscape of southeast England is a functional one; the vast majority of land is employed in food production with some also given over to timber plantations. When it comes to making space for nature, Nature Sense can use all of the above-mentioned data, in concert with productivity metrics from land managers, to identify less productive but ecologically promising locations where conservation or rewilding efforts can be concentrated. This is particularly relevant for land managers who are considering assigning portions of their land to BNG or other restorative practices.

APPENDIX 13

The Guardian

Britain ranks bottom in Europe for nature connectedness.

23rd June 2022

"...The study examines which countrywide factors influence the degree of individual closeness to nature, finding the strongest association between biodiversity and nature connectedness, with individuals living in countries where wild species and landscapes are still intact enjoying a closer relationship with nature. Britain is bottom of the 14 nations for biodiversity, having lost more wildlife than any other G7 country and been shown to be one of the most nature-depleted countries on the planet"

Read full article >

To open link in new tab hold CTRL or COMMAND key when you CLICK

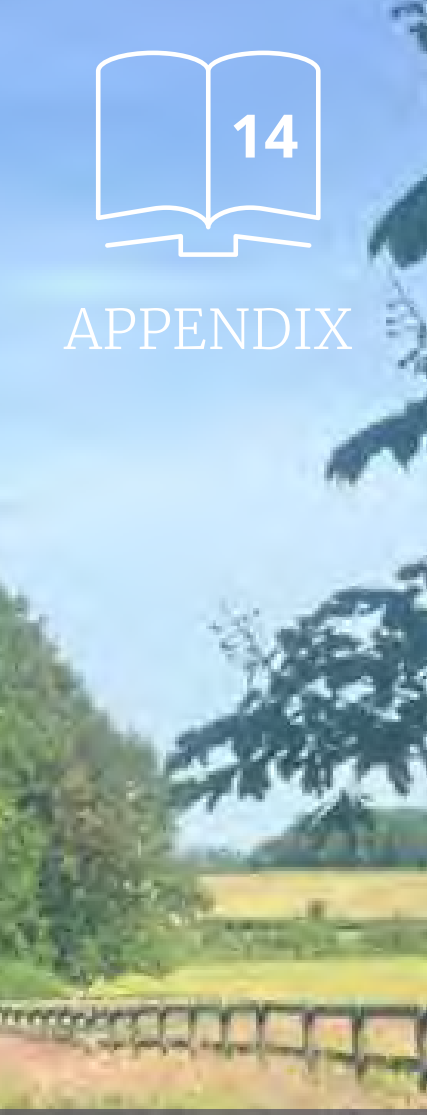
UK ranks lowest of 14 European countries for 'nature connectedness' and wellbeing

Numbers are scores given to each country based on the study

	Nature Connection		Biodiversity		Wellbeing	
Italy		4.67		0.51		61
Portugal		4.63		0.51		65.13
Czech R		4.47		0.5		62.35
Bulgaria		4.43		0.49		63.94
France		4.36		0.42		61.97
Greece		4.35		0.55		63.45
Estonia		4.29		0.44		56.45
Spain		4.29		0.49		67.55
Germany		4.27		0.37		58.23
Netherlands		4.21		0.41		61.52
Finland		4.17		0.29		60.61
Sweden		4.05		0.3		58.97
Ireland		3.96		0.28		58.97
UK	14th	3.71	11th	0.32	14th	54.13

Guardian graphic. Source: Country-level factors in a failing relationship with nature, Miles Richardson, Iain Hamlin, Lewis R Elliott & Mathew P White, Ambio (2022)

A greenbelt boundary in Bradford, West Yorkshire. Photograph: kelvinjay/Getty Images/iStockphoto



14

APPENDIX

CONTENTS

Scrubland Superheroes Westerlands

Ecology monitoring summaries and site habitat plans 2024 - 2025

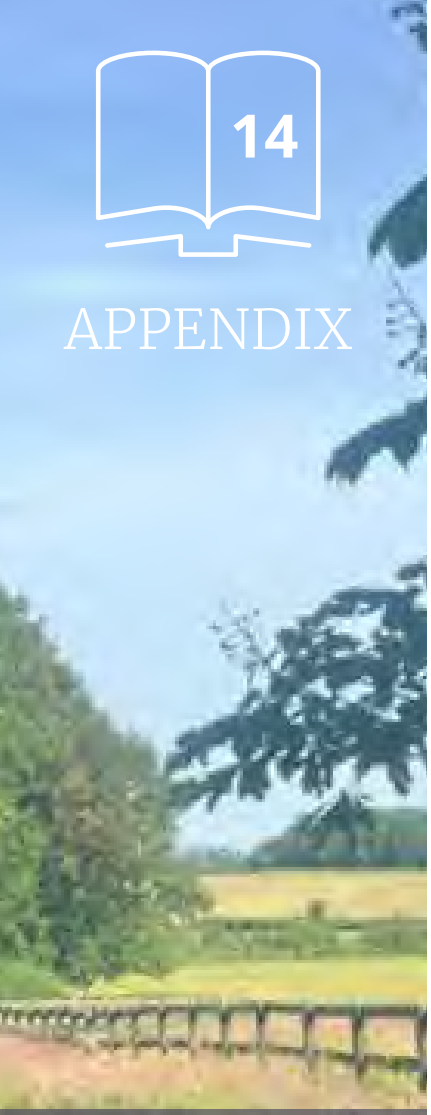
Authored by Rachel Bicker - Scrubland Project Officer
Data summaries and figures by Sam Joy - Weald to Waves Project Support

SCRUBLAND SUPERHEROES PROJECT

APPENDIX 14

Weald to Waves

2024-2025



14

APPENDIX

CONTENTS

OUR VISION
ASSET AUDIT
ECOSYSTEM SERVICES
REALISING OUR VISION

APPENDICES

Contents

Blackthorn *Prunus spinosa* with fruit commonly known as 'sloes'

SCRUBLAND SUPERHEROES PROJECT

APPENDIX 14

Weald to Waves

2024-2025

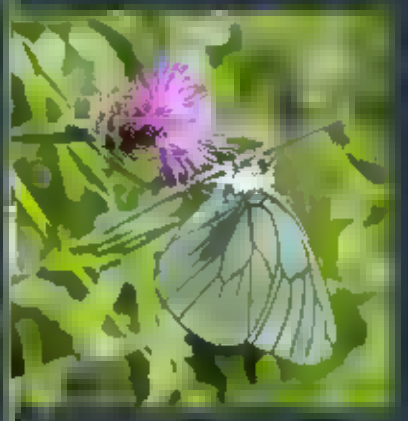
14

APPENDIX

CONTENTS

Project summary

Red-backed Shrike *Lanius collurio*
©Laurie Jackson



Black-veined White *Aporia crataegi*
©Laurie Jackson

Scrubland Superheroes is a Knepp Wildland Foundation (KWF) project, awarded funding in 2023 by Natural England Species Recovery Programme Capital Grant Scheme, which ran for an 18 month period. The aim was to restore scrubland habitat and create new mosaics to rejuvenate threatened species through the provision of advisory and monitoring support for creating and managing scrub, along with delivering capital works such as planting and protective fencing. Key sites were selected within the Weald to Waves corridor to focus effort on increasing availability of habitats for scrubland species such as Nightingale, Common Lizard and the Brown Hairstreak Butterfly. KWF continues to work with Natural England to progress plans for the reintroduction of both the Black-veined white butterfly (BVW) and red-backed shrike (RBS) in Sussex, with this project contributing toward organisation, networking and appropriate land management. Both RBS and BVW act as flagship species to target habitat improvement contributing to the conservation of other species living in the same habitat.

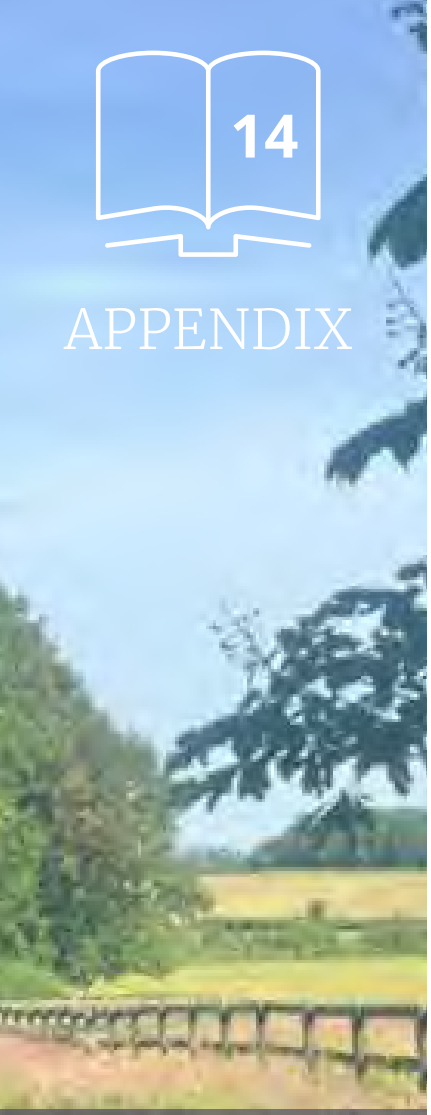
Collecting information through baseline ecology surveys and studies is key for informing appropriate habitat enhancements prior to making changes to a site. Wildlife surveys began in March 2024 with setting up survey transects and the recruitment of volunteers. These surveys covered the breeding season for key species groups, and were completed by October 2024. The project officer and volunteers submitted data via the biological recording tool iRecord, to be received and collated by the Sussex Biodiversity Record Centre. Habitat management plans were drawn up at the end of the survey season based on recommendations made by the surveyors. Practical works were then implemented in the final autumn and winter season of the project. This included contracted habitat works, conservation grazing, and practical volunteering days with our project collaborators. Suggested ongoing management plans have been provided which extend beyond 2025.

SCRUBLAND SUPERHEROES PROJECT

APPENDIX 14

Weald to Waves

2024-2025



APPENDIX

Project site statistics

Overview of the ecology monitoring results and site statistics

7500m2 New scrubland regeneration area

24 Visiting volunteers and task leaders

143 Habitat volunteering hours

870 Native shrubs planted

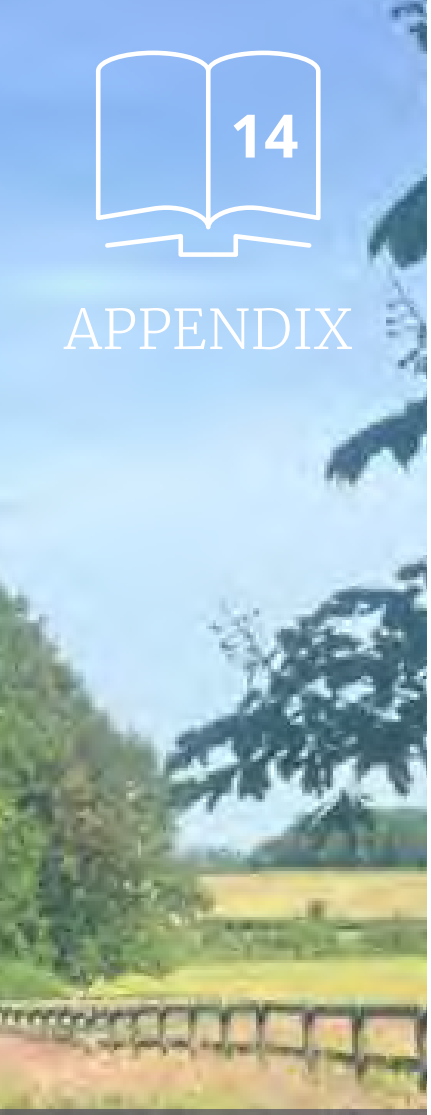
142m New hedgerow planted

SCRUBLAND SUPERHEROES PROJECT

APPENDIX 14

Weald to Waves

2024-2025



14

APPENDIX

CONTENTS

Site summary - Westerlands

Westerlands is a a low-lying site at the foot of the northern escarpment of the South Downs. It is situated within a landscape of pasture and arable farmland, fragments of ancient semi-natural woodland and sloping downland. Immediately to the north is Lavington Common SSSI and the lowland heathland. To the south is Graffham Down SNCI and Tegleaze, an elevated mosaic of semi-natural habitats including herb-rich grassland, grazed pasture, scrubland and woodland.

Open aspect low-lying grasslands at Westerlands

This site was formerly a racehorse stud farm, with a largely open aspect and a complex of large grassy fields which have been out of horse grazing for around 10 years. They are divided by stock proof fencing, with the outer field boundaries made up of mature outgrown hedgerows and lines of trees, providing good connectivity to the wider landscape. A network of old ditches within the hedgerows are flowing during the winter with some spill over and localised flooding in lower-lying fields. The maintenance regimes on the site are relaxed, with grassland areas being left to grow longer and some tussocky areas beginning to develop. Specific wildflower areas are evident around the camping site bell tents, along with recently planted hedgerows along the farm tracks comprising of a diverse mix of native shrub species. Opportunities identified by the visiting project officer include implementing a mob grazing scheme on the open grasslands to encourage diversity in sward structure and wildflower species. Further division of the open fields into smaller grazing units through the use of electric fencing and hedgerow planting would allow for the easy rotation of livestock. Installing deer and stock-proof fencing around a patch of land within the open areas to the south would reduce pressure from herbivores and encourage the establishment of native species-rich scrub, an important habitat type for many declining species in Sussex. Digging of permanent wetland areas would be a further draw for wildlife, particularly where fields are already prone to flooding.

Lines of mature trees a outgrown he gerows

SCRUBLAND SUPERHEROES PROJECT

APPENDIX 14

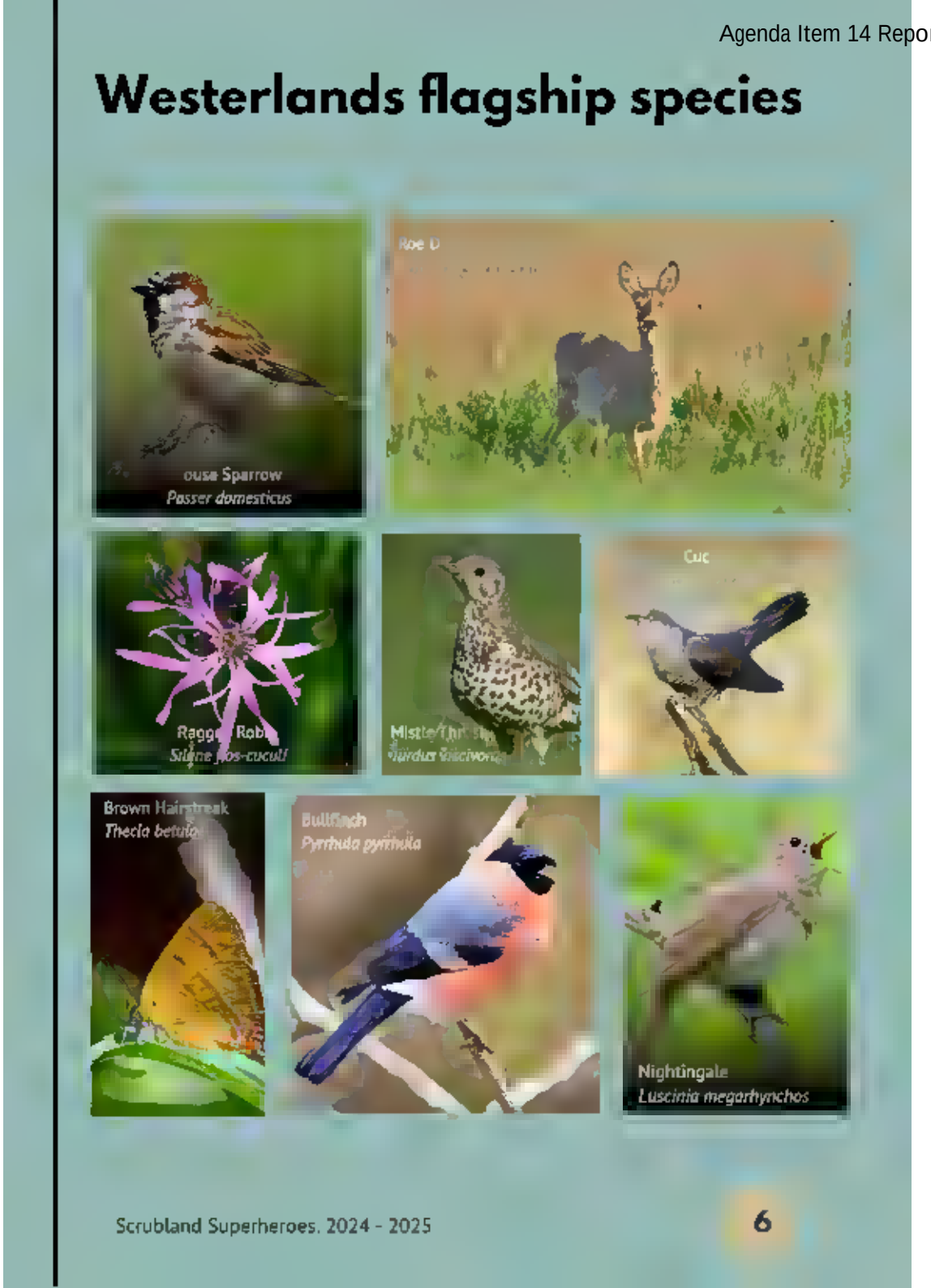
Weald to Waves

2024-2025

14

APPENDIX

CONTENTS

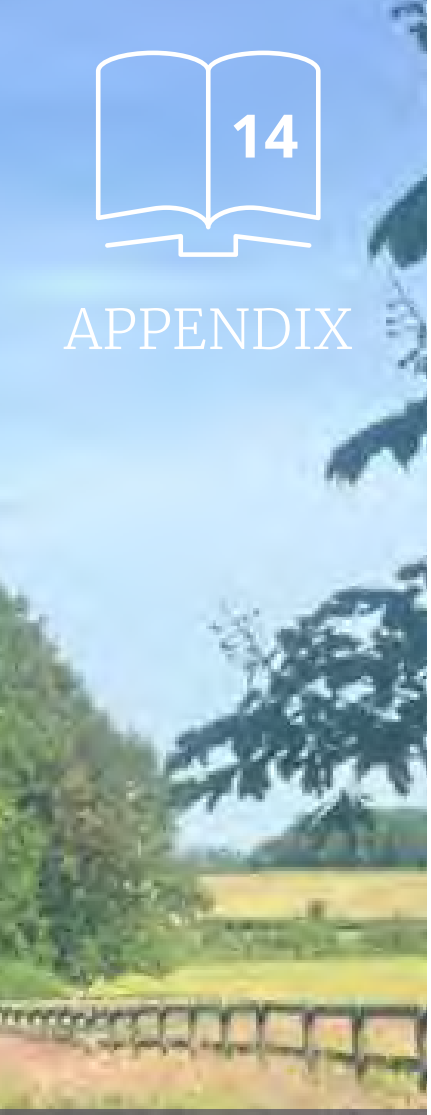


SCRUBLAND SUPERHEROES PROJECT

APPENDIX 14

Weald to Waves

2024-2025



14

APPENDIX

Sussex Biodiversity Record Centre summary

These summaries have been created with data supplied through the Sussex Biodiversity Record Centre (SxBRC) and Weald to Waves project partnership.
Date request date: 03/03/25

Total number of species recorded for Westerlands = **1033**

Notable species or with conservation designation = **49**

Flagship species present: **Nightingale, Mistle Thrush, Cuckoo, Bullfinch, Roe Deer, House Sparrow, Brown Hairstreak butterfly, Ragged Robin**

Other target scrubland species: **Turtle Dove, Hazel Dormouse, Grey Long-eared bat, Grass Snake, Glow Worm, Sloe Carpet moth, White Admiral butterfly**

Invasive species in the vicinity include: **Rhododendron (*Rhododendron ponticum*), Himalayan Balsam (*Impatiens glandulifera*) and Montbretia (*Crocosmia x crocosmiiflora*)**

Sussex Biodiversity Record Centre

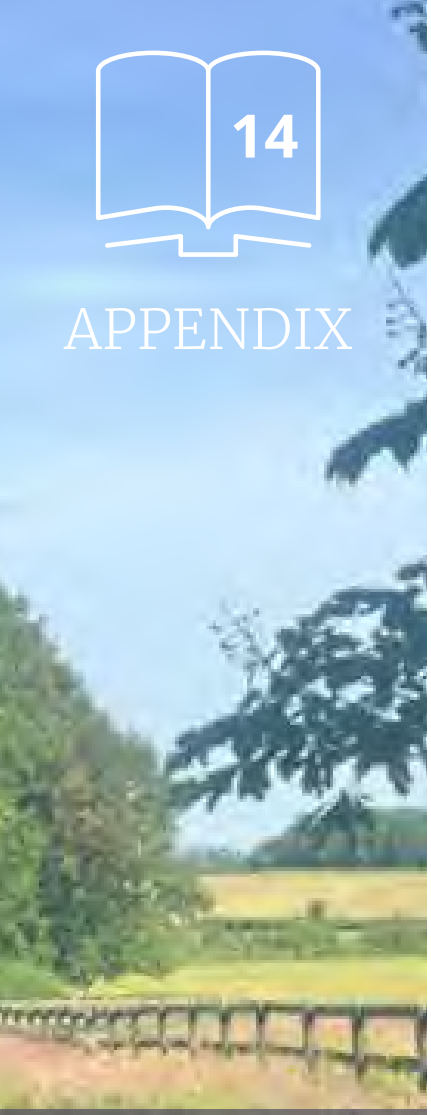
iRecord

SCRUBLAND SUPERHEROES PROJECT

APPENDIX 14

Weald to Waves

2024-2025



14

APPENDIX

Bird species records

Birds require a variety of conditions and habitat elements to meet their needs, including reliable food sources (largely insects, seeds and berries), suitable nesting sites, minimal disturbance and shelter from predators and adverse weather. Specialist species can be effective as indicators of habitat condition, such as those adapted to scrubland habitat. Successful breeding in relatively high numbers acts as a positive indicator for the habitat, particularly with species which have been declining more widely. Being highly mobile, birds are also indicative of the wider environmental conditions.

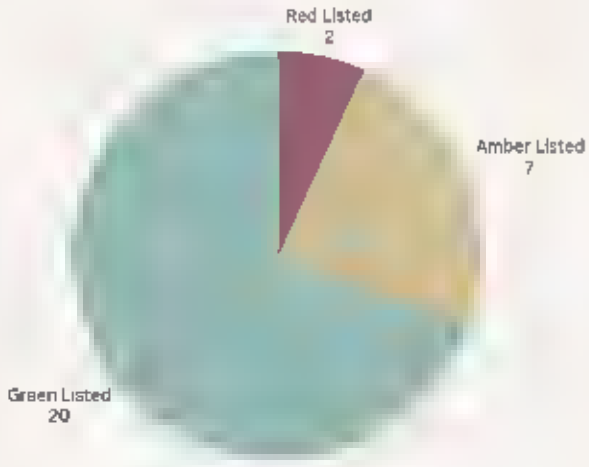


Figure 1. Proportion of Song Meter bird species by conservation status for Tegleaze during 2024. Based on Birds of Conservation Concern 5 (BOCC5) 2021.

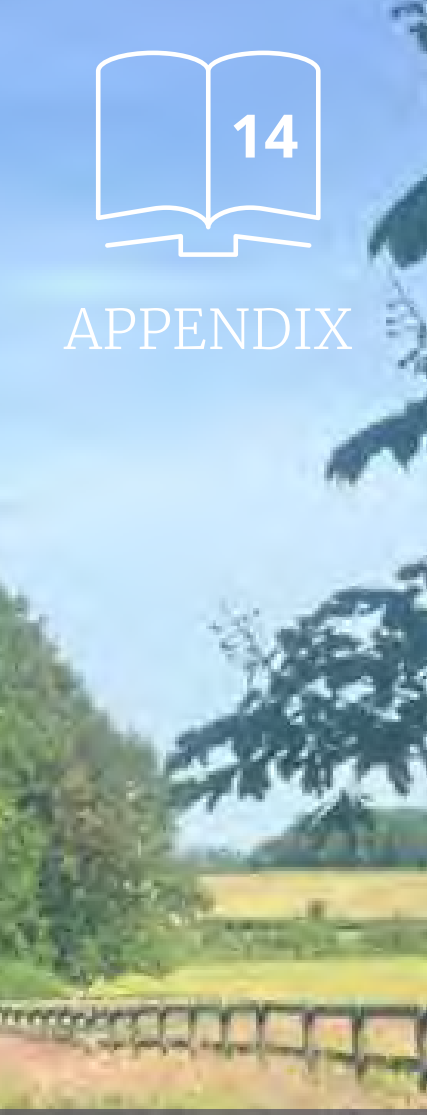
Linnet
Linaria cannabina (GB Red-listed)

SCRUBLAND SUPERHEROES PROJECT

APPENDIX 14

Weald to Waves

2024-2025



14

APPENDIX

Song Meter Micro results

To detect bird species activity, Song Meter Micro acoustic recording devices were placed out at the both the Westerlands and Tegleaze sites from 17/06/24 - 04/07/24. Unfortunately a technical issue with the recorder at Westerlands resulted in no data captured. Below is a summary list of 29 species for Tegleaze, produced by the Wilder Sensing analytic service with any unusual or rare species verified by the Project Officer manually checking the recordings.

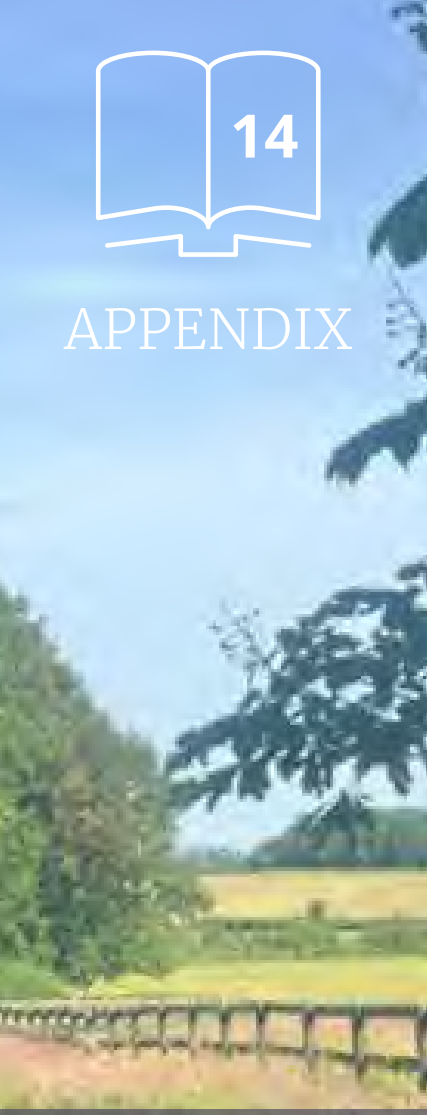
Common name	Taxon	Status
Blackbird	*Turdus merula*	Green listed
Blackcap	*Sylvia atricapilla*	Green listed
Blue Tit	*Cyanistes caeruleus*	Green listed
Bullfinch	*Pyrrhula pyrrhula*	Amber listed
Buzzard	*Buteo buteo*	Green listed
Carrion Crow	*Corvus corone*	Green listed
Chiffchaff	*Phylloscopus collybita*	Green listed
Coal Tit	*Periparus ater*	Green listed
Dunnock	*Prunella modularis*	Amber listed
Firecrest	*Regulus ignicapilla*	Green listed
Garden Warbler	*Sylvia borin*	Green listed
Goldcrest	*Regulus regulus*	Green listed
Goldfinch	*Carduelis carduelis*	Green listed
Great Spotted Woodpecker	*Dendrocopos major*	Green listed
Great Tit	*Parus major*	Green listed
Green Woodpecker	*Picus viridis*	Green listed
Jay	*Garrulus glandarius*	Green listed
Long-tailed Tit	*Aegithalos caudatus*	Green listed
Marsh Tit	*Poecile palustris*	Red Listed
Nuthatch	*Sitta europaea*	Green listed
Robin	*Erithacus rubecula*	Green listed
Song Thrush	*Turdus philomelos*	Amber Listed
Stock Dove	*Columba oenas*	Amber Listed
Tawny Owl	*Strix aluco*	Amber Listed
Treecreeper	*Certhia familiaris*	Green listed
Tree Pipit	*Anthus trivialis*	Red Listed
Woodpigeon	*Columba palumbus*	Amber Listed
Wren	*Troglodytes troglodytes*	Amber Listed
Wood Lark	*Lullula arborea*	Green listed

SCRUBLAND SUPERHEROES PROJECT

APPENDIX 14

Weald to Waves

2024-2025



14

APPENDIX

CONTENTS

Habitat tasks completed 2024 - 2025

Date	Action	Action owner	Organisation	Method
01/03/25 and 02/03/25	New hedgerow planting	Volunteers	St Ethelburgers	Slot planting of bare rooted whips. Crab apple Hazel Elder Dogwood Hawthorn Blackthorn Dog Rose Silver Birch Oak Beech Alder Hornbeam Field Maple Rowan
01/03/2025	Fencing of scubland enclosures	Contractor	Haselmere Fencing	Clipper fencing installation using tracked machine to minimise poaching of damp ground

SCRUBLAND SUPERHEROES PROJECT

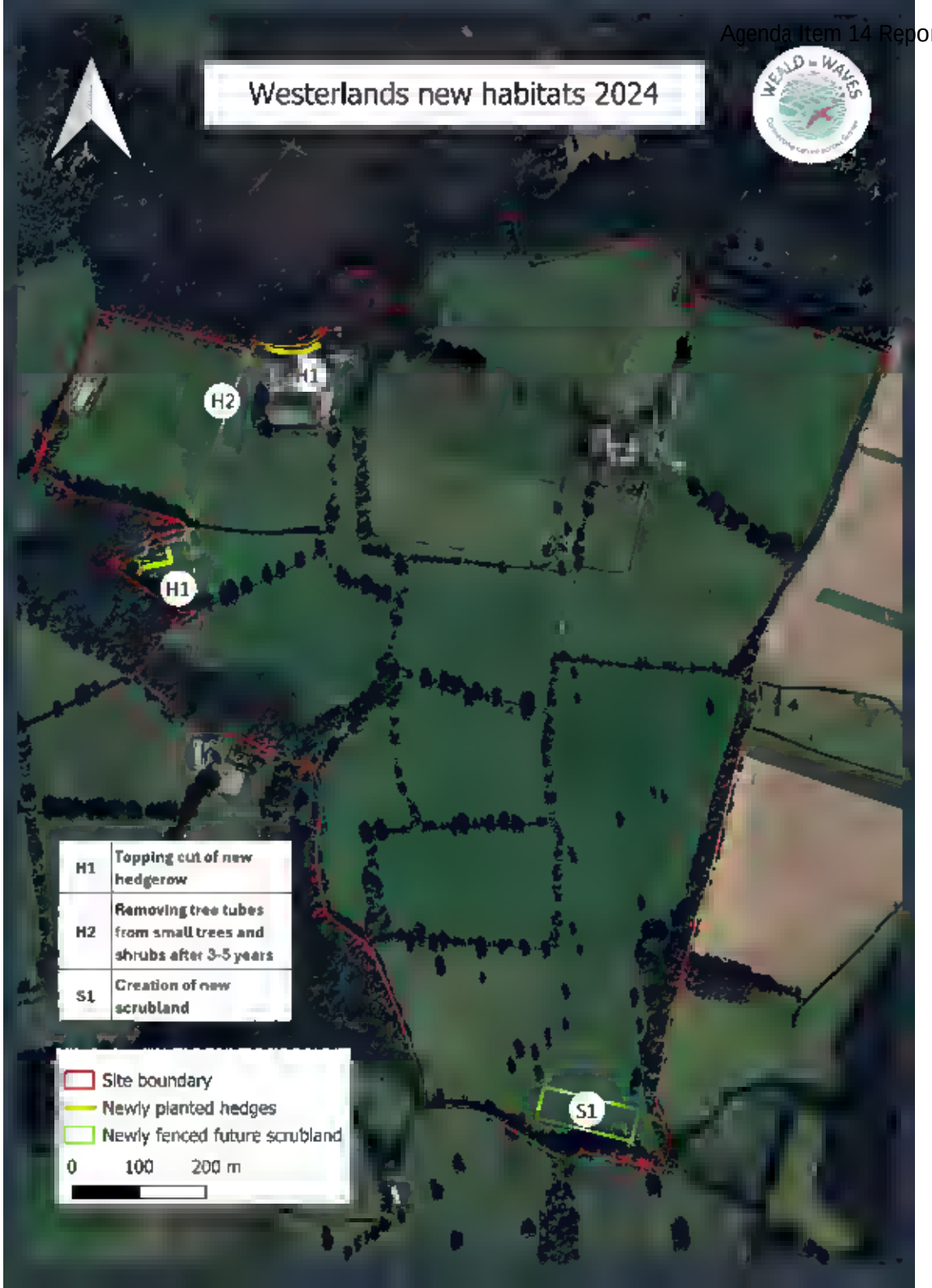
APPENDIX 14

Weald to Waves

2024-2025

14

APPENDIX



SCRUBLAND SUPERHEROES PROJECT

APPENDIX 14

Weald to Waves

2024-2025

14

APPENDIX

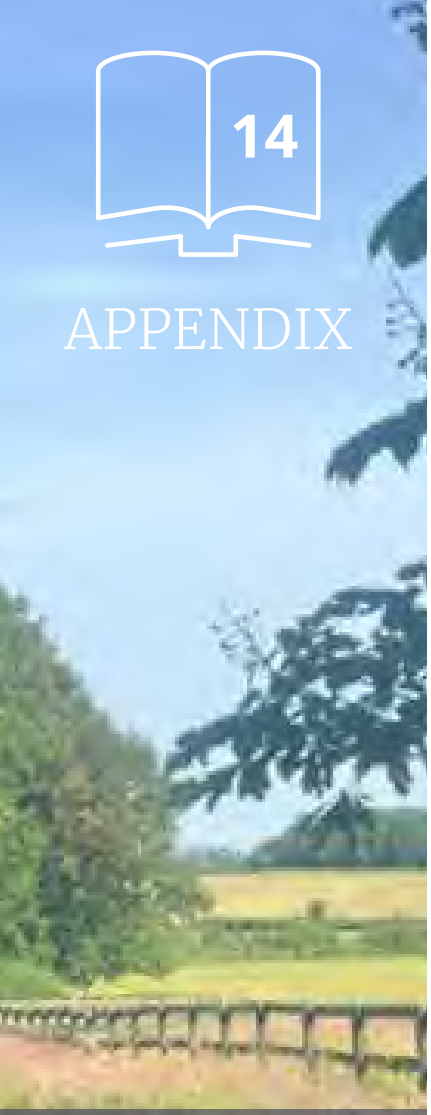
CONTENTS

SCRUBLAND SUPERHEROES PROJECT

APPENDIX 14

Weald to Waves

2024-2025



14

APPENDIX

Management plan table

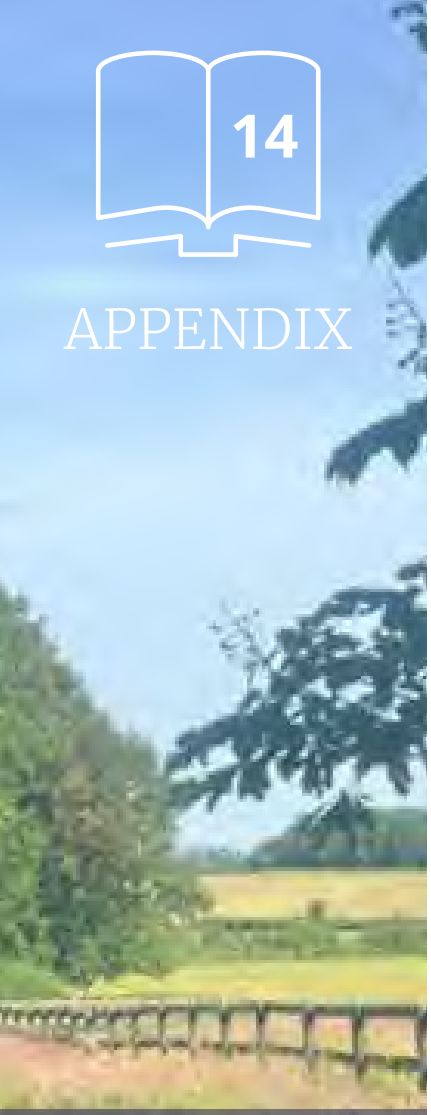
Target ref	Habitat type	Action	Timing	Action owner	Method
D1	Deadwood and refuge	Grass cutting piles	Spring to late autumn	Contractor	In edge habitats, discreet piles of cuttings or hay bales mixed with cut wood. Site them in partial or dappled sun, select areas where scrub meets grassland. Create dense stacks and continually top them up each season.
D2	Deadwood and refuge	Building a log pile hibernaculum	Year round	Volunteers	Partially burying logs, woody materials and/or rubble to create a hibernation space away from flood zones on higher drier ground. Sunny south-facing edge of remnant woodland, planting bramble and dog rose into or adjacent to them, creating further microhabitats
G1	Grassland	Initial mowing and baling or raking, repeated mowing of paths and rides	Annual basis (Late July to August, and again in spring March - April)	Contractor or volunteers	Cut and collect at a low height of grass at herb dominant areas with a tractor mower and mini baler or collection unit. Stack the cuttings in discrete piles at edge of scrub areas. Leave pre-defined uncut areas aside to act as refuges for wildlife, ideally at least one third of a herb-rich area, rotating the areas around between years
G2	Grassland	Longer-term mob grazing on a rotational basis	Having the herd round (as natural a system as possible)	Contractor	Sub-dividing up the site with either permanent or temporary fencing, then implementing controlled grazing to create different vegetation heights and stages, such as areas of very tight and short sward, encouraging wildflower patches and longer areas of recovering grasses. It is important to move animals around on a rotational basis, and to be reactive if issues start to arise around over grazing. Consider using different types of livestock (cattle, sheep, ponies and pigs)
G3	Grassland	Creating bare ground and topographical variation	Anytime	Contractor or volunteers	Scraping off top soil layers to create bare ground patches and shallow scrapes. Using a small excavating machine to break up the tight grassland sward or scrape back turf in such areas. Working on a smaller scale with volunteers using hand tools (spades, rakes and mattocks) in the damper autumn and winter months. Choose many, sheltered areas and consider creating slopes or mounds of irregular shapes and sizes for microhabitat diversity. Alternatively, a temporary fenced enclosure with a group of pigs (preferably a Tamworth breed) will result in localised poaching of ground.

SCRUBLAND SUPERHEROES PROJECT

APPENDIX 14

Weald to Waves

2024-2025



14

APPENDIX

CONTENTS

Management plan table continued

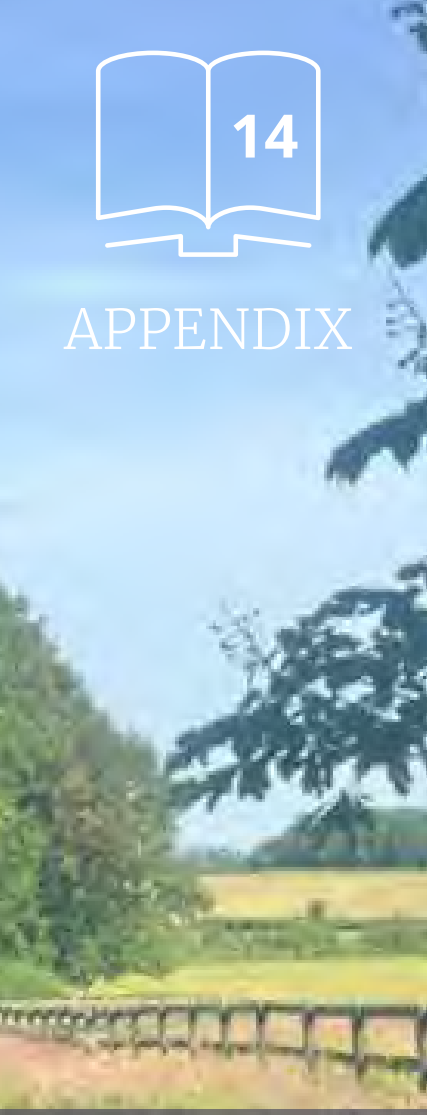
H1	Newly planted hedgerow	Topping cut of new hedgerow	In the second or third year, Late October - February	Volunteers	Use shears to snip off the top growing tips of new hedgerow for two or three years
H2	Newly planted hedgerows and scrubland	Removing tree tubes from small trees and shrubs after 3-5 years	In 3-5 years at anytime of year	Volunteers	Remove spiral guards by unwrapping around the shrub carefully. For tubes guards, they can be opened up and pulled away.
N1	Information board / leaflet	Installing wildlife information boards on publicly accessible sites	Anytime (mid-Capitol works)	Contractor	Install an information board featuring images of flagship species for the site, including a few with high likelihood of occurrence. A board should be installed near a place with high footfall for maximum effect. If a nature trail exists, then multiple smaller signs may help to highlight key features along the trail (ponds, bee and butterfly banks, beetle bogpiles, hibernacula).
S1	Scrubland	Creation of new scrubland	October - March	Volunteers	Planting of native shrubs and trees (protecting with tree guards or deer fencing as needed). Select native thorny and understory shrubs suitable for wealden clay soils (see recommended species list below). With appropriate ground preparation, plant stands of varying density and spacing where two hedgerows intersect, or irregular-shaped stands in the open. Stacking cut brash and deadwood in corrals around newly planted shrubs help to provide shelter and beneficial growing conditions
W1	Wetland	Pond and wet scrape creation	September - April	Contractor or volunteers	Dig out a pond and /or a series of shallow scrapes with the use of small machinery, piling earth nearby and on top of woody debris. For a permanently wet wildlife pond, consider a good grade of UV resistant pond liner alternatively line with puddled clay to create a water-tight seal to the bottom.

SCRUBLAND SUPERHEROES PROJECT

APPENDIX 14

Weald to Waves

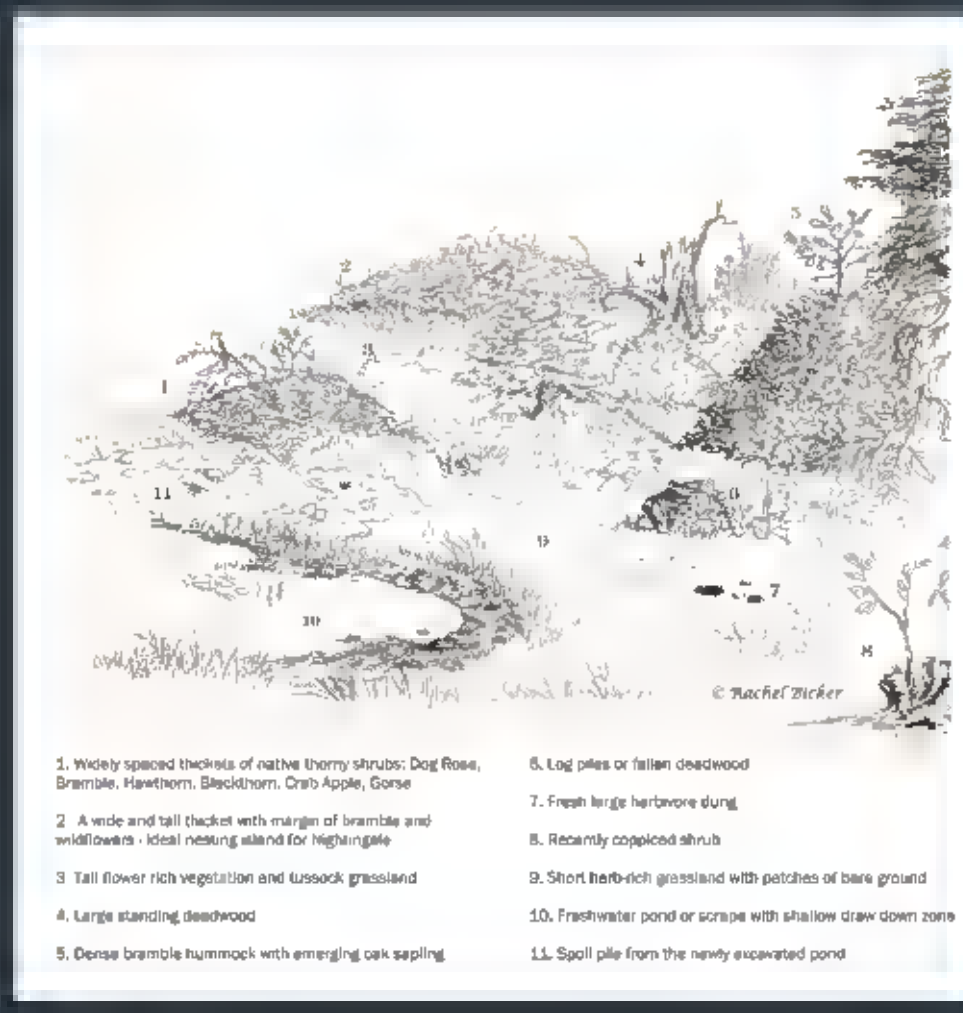
2024-2025



14

APPENDIX

Shrike shrubland



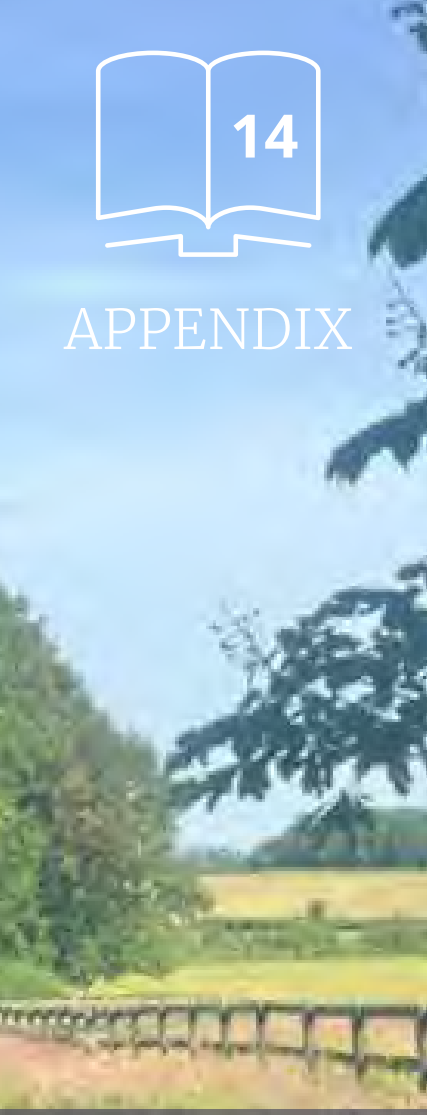
A conceptual image of an ideal 'Shrike Shrubland', based on the book of the same name authored by Steve Jones, 2023.

SCRUBLAND SUPERHEROES PROJECT

APPENDIX 14

Weald to Waves

2024-2025

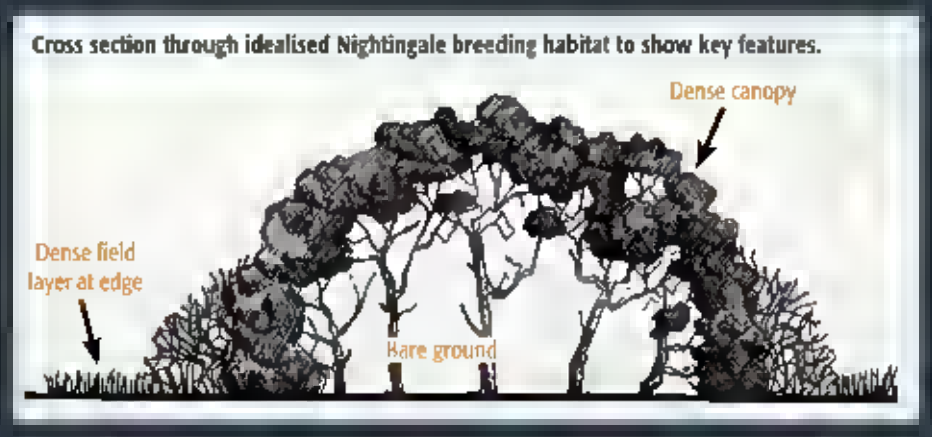


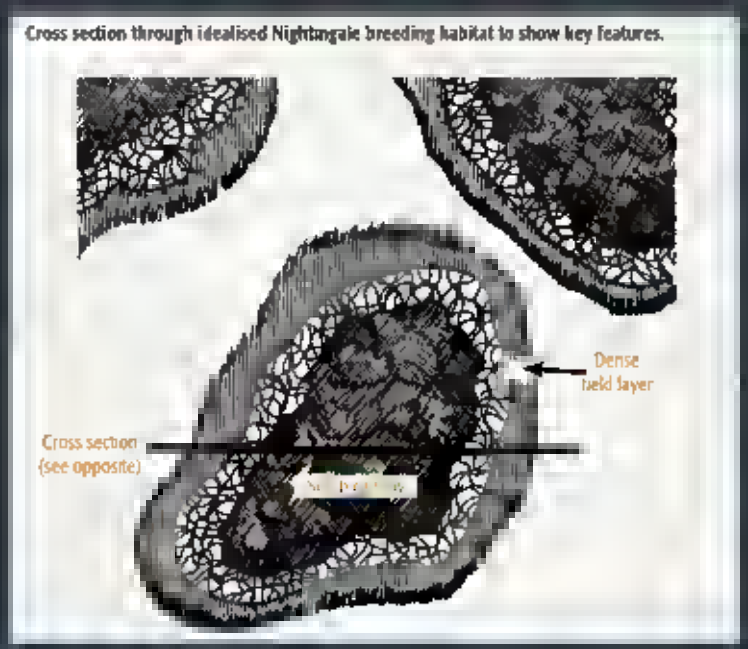
14

APPENDIX

Suggested habitat features

The images below are taken from the BTO Guide - Managing Scrub For Nightingales. The aim is to create a scrubland containing a variety of stages of successional growth, then re-setting by flailing once the integrity has passed beyond the denser 'Nightingale stage'. Occassional trimming or browsing by herbivores will help to prolong this denser stage.



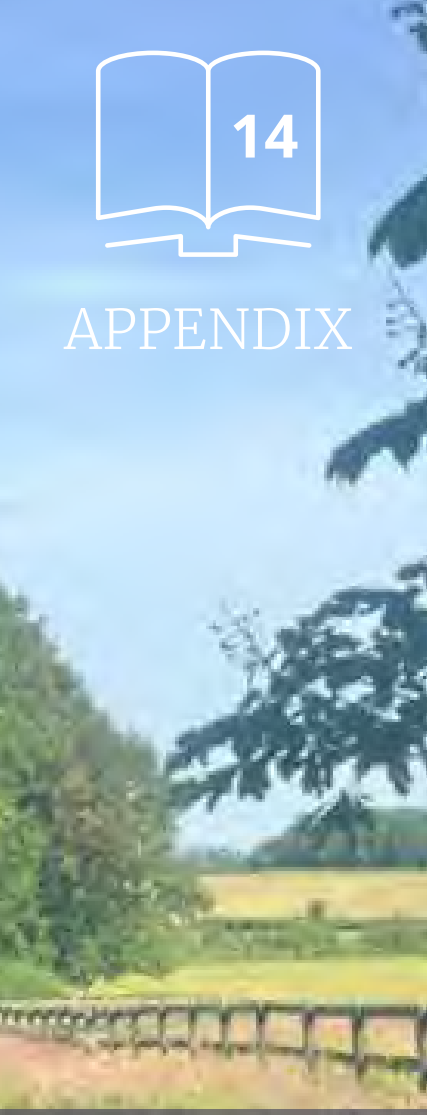


SCRUBLAND SUPERHEROES PROJECT

APPENDIX 14

Weald to Waves

2024-2025



14

APPENDIX

Suggested habitat features

The designs below aim to maximise available habitat niches and microclimates for amphibians, reptiles, invertebrates and cover for small mammals.

© Larry Eifert

A reptile hibernaculum provides a hibernation space for a variety of small animals. By mounding inert materials and capping off with topsoil and short turf, this creates early spring basking opportunities for newly emerging reptiles. Aim for minimum dimensions of 2m x 1m x 1m, situate well out of flood zones, ideally on free draining substrate, or mounding up on poorly-draining soils.

(Source: London Wildlife Trust)

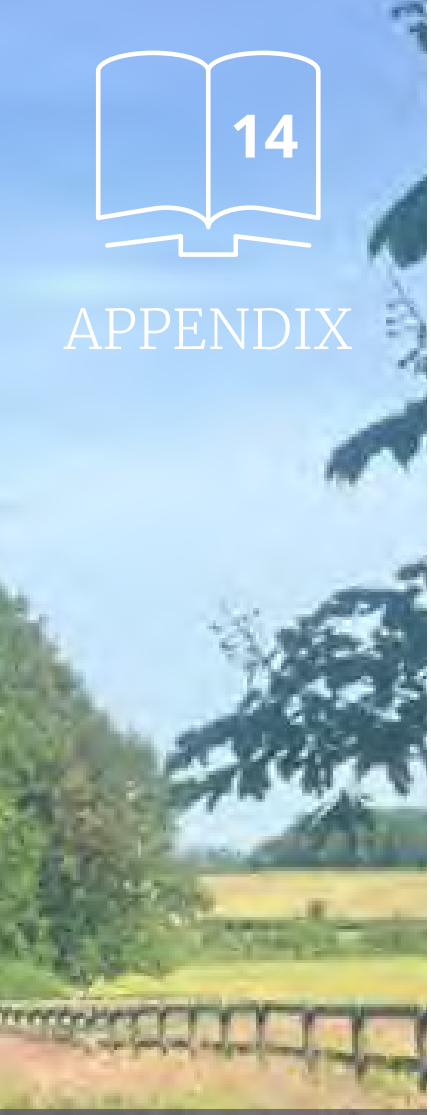
A beetle loggery of partially buries stands of logs of varying thickness helps to create microhabitats as the wood decays over time at varying rates. It also provides a hunting perch for predatory birds. Best situated in an area of partial or dappled shade, avoiding full sun or deep shade.

SCRUBLAND SUPERHEROES PROJECT

APPENDIX 14

Weald to Waves

2024-2025



14

APPENDIX

CONTENTS

Suggested habitat features

Open areas of fresh water act as wildlife attractants within the landscape, and a newly created body of water will be rapidly colonised and utilised by a wide variety of species. They can be any shape or size, and a variety within one site is the best.

Shallow wetland scrapes (with irregular edges to maximise microhabitats) are water bodies which dry out seasonally, largely benefitting bird, amphibian and invertebrate species during the spring. Very shallow gradients are important for ease of access and reducing dominant vegetation growth. On average a scrape should be only a few centimetres in depth to a maximum of around 50cm.

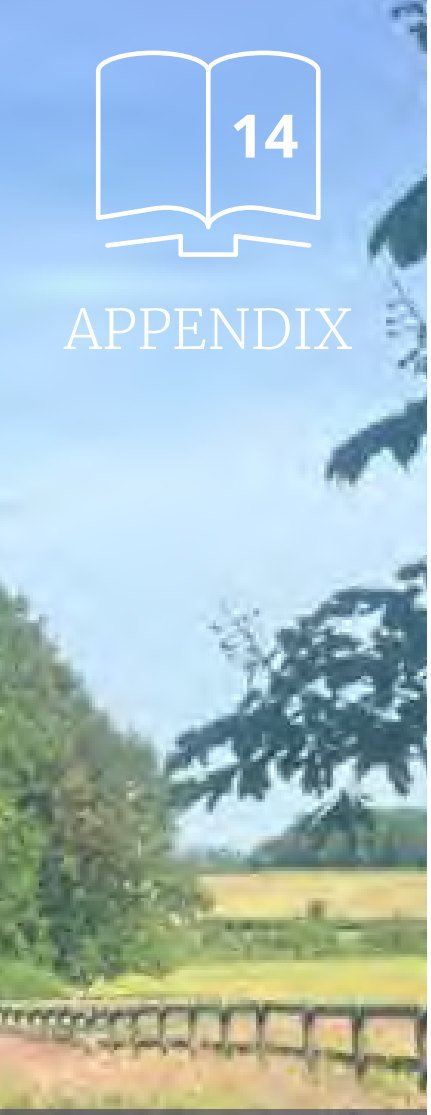
This newly dug wildlife pond contains zones of deeper, permanently wet areas, providing an important water source through summer months. Note there are still extensive 'drawdown' zones of damp muddy shoreline, which will slowly colonise with marginal plant species. Aim for minimum dimensions of 4m x 4m in size.

SCRUBLAND SUPERHEROES PROJECT

APPENDIX 14

Weald to Waves

2024-2025



APPENDIX

CONTENTS

Suggested habitat features

Butterfly or bee banks are open sunny areas of sloping bare ground, which tend to be well draining and encourage growth of the early successional wild flowers. Creating south-facing mounds ideally a minimum of 2 metres wide by 1 metre high, of soil through scraping back of sloping ground, or piling spoil from digging out wetland scrapes. This will provide important bare ground habitats for invertebrates, which can last several years before closing over with vegetation.

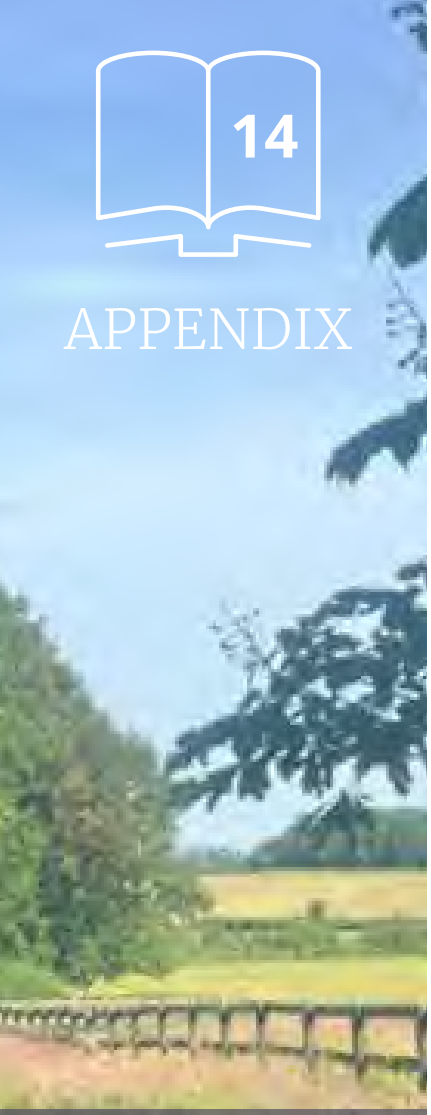
A bee bank with purposely cut small steep vertical faces to benefit a variety of mining bees, solitary wasps and cuckoo bees.

SCRUBLAND SUPERHEROES PROJECT

APPENDIX 14

Weald to Waves

2024-2025



14

APPENDIX

Suggested planting lists

A list of recommended species was drawn up by surveyors Laurie Jackson and Neil Hulme, targeting the nectar and larval foodplant preferences by Black-veined White butterfly.

Wildflowers:
Betony - *Stachys officinalis*
Bugle - *Ajuga reptans*
Common Centaury - *Centaurium erythraea*
Common Knapweed - *Centaurea nigra*
Common Restharrow - *Ononis repens*
Common Vetch - *Vicia sativa*
Ground Ivy - *Glechoma hederacea*
Hedge Woundwort - *Stachys sylvatica*
Musk Mallow - *Malva moschata*
Marsh Woundwort - *Stachys palustris*
Purple Loosestrife - *Lythrum salicaria*
Red Bartsia - *Odontites vernus*
Red Campion - *Silene dioica*
Red Clover - *Trifolium pratense*
Red Dead-nettle - *Lamium purpureum*
Saw-wort - *Serratula tinctoria*
Thistles - *Cirsium* sp.
Tufted Vetch - *Vicia cracca*
Wild Marjoram - *Origanum vulgare*

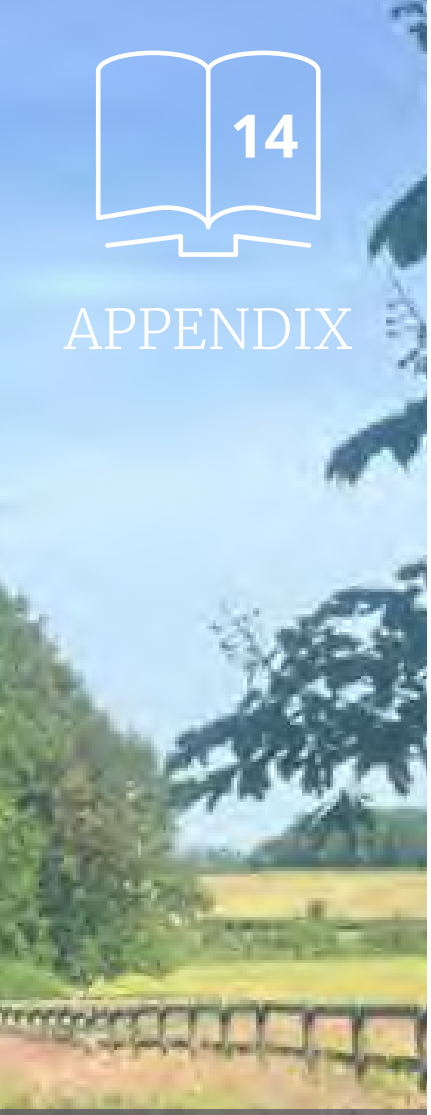
Shrubs:
Bird Cherry - *Prunus padus*
Blackthorn - *Prunus spinosa*
Bramble - *Rubus fruticosus agg.*
Crab Apple - *Malus sylvestris*
Dog Rose - *Rosa canina*
Hawthorn - *Crataegus monogyna*
Wild Cherry - *Prunus avium*
Wild Plum - *Prunus domestica*

SCRUBLAND SUPERHEROES PROJECT

APPENDIX 14

Weald to Waves

2024-2025



14

APPENDIX

CONTENTS

Acknowledgments

The project work at Westerlands was made possible thanks to the collaboration and efforts of volunteers and task leaders from the St Ethelburgas Lifelines Programme, Revoke CIC and Putney Community Gardens. We would like to thank the site owner and manager Oliver Hancock for his enthusiasm and dedication to the Scrubland Superheroes Project.

SCRUBLAND SUPERHEROES PROJECT

APPENDIX 14

Weald to Waves

2024-2025

ACKNOWLEDGEMENTS

Thank you to Sara Prior and Jo Hutchinson for their enthusiasm, time and invaluable contributions. Their involvement exemplifies the spirit of collaboration and shared purpose we value so highly at Westerlands.

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