MANAGEMENT PLAN

CONTENT FARM HABITAT BANK, ST MARY'S, ISLES OF SCILLY

Client: *Duchy of Cornwall*

Our reference: *24-8-2*

Planning reference: *N/A*

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1. Introduction

1.1. Overview

This Management Plan relates to the ecological enhancements and management of the Content Farm Habitat Bank on St Mary's in the isles of Scilly.

The baseline report including habitat descriptions, calculations of Biodiversity Net Gain (BNG) enhancement measures and habitat targets is provided in the BNG Baseline and Proposals document (IOS Ecology, October 2024). This document should be read alongside this Management Plan for context and background information.

The purpose of this report is to outline measures which would secure the habitat creation and enhancement identified in the BNG Baseline and Proposals document.

1.2. Site Description

The site is approximately 2.62 hectares (ha) in size and is identified in Map 01 below. The central grid reference of the site is SV 91484 11940.

Map 01 – Showing the redline boundary of the survey site with key habitat areas identified as HA1 – HA3. No management proposals are outlined for HA4 – HA6 which would either be retained (in the case of HA4 and HA5) or replaced (in the case of HA6).

1.3. Property Details

The Plan Period does not yet have a specified start date, but will run for a period of 30 years following commencement of the Management Plan. This may be sequential, with management of specific parcels or components commencing at different times in relation to requirements for BNG offset habitat on the islands.

The Management Plan will be subject to ongoing review and revision on an routine basis responding to changes in condition or circumstance. The first formal assessment and review of the Management Plan will occur five years after the commencement of the plan.

The habitats will remain within the ownership of the Duchy of Cornwall who will be responsible for the enactment of the Management Plan. External contractors to undertake the works outlined will be identified and details added to the Management Plan upon commission.

1.4. Area Credits

The Management Plan is broken down into the key habitat areas identified within the BNG Baseline and Proposals report. These are briefly summarised as follows:

1.4.1. HA1 – Content Farm Woodland (Section 2)

Description: Elm-dominated woodland (0.4ha) with mature and sapling trees. The dense ground layer is currently dominated by non-native species such as three-cornered leek. Two distinct age classes of elm occur; those mature specimens associated with historic field boundaries and those whips and saplings which have established upon abandoned agricultural land within these boundaries.

Current Condition: Poor, due factors including dominance by a single tree species, presence of invasive plants, and lack of structural diversity.

Enhancement Potential: Moderate condition can be achieved by measures including thinning dense areas, removing invasive species, creating deadwood piles, and planting additional native tree species.

1.4.2. HA2 – Content Farm Scrub (Section 4)

Description: Dense scrub (0.9ha) which comprises primarily elm saplings and bramble with remnant grassland glades. Some invasive species like montbretia and three-cornered leek are present.

Current Condition: Poor, largely due to lack of diversity in age classes and dominance by a small number of species.

Enhancement Potential: Moderate condition achievable by managing scrub density, introducing further native shrub species, and removing non-native species.

1.4.3. HA3 – Content Farm Grassland (Section 3)

Description: Heavily grazed grassland (1.1ha) with a composition leaning towards MG5/MG6 swards with some acid indicators. Nutrient levels are currently suboptimal for species-rich grassland.

Current Condition: Poor, due to factors including low plant species diversity and signs of overgrazing.

Enhancement Potential: Conversion to moderate condition species-rich lowland hay meadow by reducing nutrient levels, introducing native seed, and implementing controlled grazing and hay cut regimes.

1.5. Linear Credits

The Management Plan details hedgerow creation proposals identified within the BNG Baseline and Proposals report. These can be briefly summarised as follows:

1.5.1. Hedgerow Creation and Management (Section 5)

Description: The creation of species-rich hedgerows with native trees to be planted along existing boundary features of the Content Farm Grassland which are lacking native hedgerows or tree lines.

Current Condition: These hedgerows are proposed in areas either dominated by bracken scrub at present; or along the boundaries of the Content Farm Grassland habitat.

Enhancement Potential: Habitat creation and moderate condition can be achieved by measures provided successful establishment and management are secured.

1.6. Stakeholder Engagement:

The project is designed as a habitat bank on private land with no current intention to permit public access.

The presence of various organisations involved in habitat and wildlife enhancement would provide opportunities for engagement in the development and implementation of the Management Plan including:

- Isles of Scilly Wildlife Trust;
- Small is Beautiful (Scilly Landscape Recovery project);
- Cornwall and Isles of Scilly Local Nature Partnership;

- Council of the Isles of Scilly including the Tree Officer.

The high level of interest in Natural History on the islands would also provide a rich source of potential citizen science volunteers who might be interested in undertaking monitoring or surveying activities on the site. This could include:

- Isles of Scilly Bat Group;
- Isles of Scilly Bird Group;
- Local specialists with an interest in moth trapping or botanical surveys.

1.7. Biosecurity

The Isles of Scilly are currently free of Dutch Elm Disease which would threaten the elm-dominated woodlands across the islands if it were to become established.

There are various actions within this management plan which could potentially introduce pathogens such as Dutch Elm Disease to the habitat if measures are not taken to guard against this.

The sourcing of materials including seeds, saplings and rhizomes, must be undertaken with due care and diligence to ensure that suppliers have robust biosecurity systems in place to eliminate the risk of accidental introduction of known or novel pathogens.

1.8. Adaptive Management

The strategy outlined in this document provides a summary of initial intervention work alongside ongoing monitoring and management.

It is critical that the management plan is reviewed on a regular basis and updated every five years at a minimum to ensure that new priorities, threats and opportunities are identified and integrated into the strategy.

In addition, adaptive management should be deployed during routine monitoring and maintenance works to ensure that additional opportunities for enhancements or evolving threats and challenges are not overlooked in the short term.

1.9. Habitat Mosaic

This document treats individual habitat areas as discreet components subject to targeted interventions; establishment protocols; and management strategies.

This is necessary due to the restrictive structure of the BNG protocol and in acknowledgement of the fact that enhancements may be piecemeal as the habitat bank development will be responsive to requirements for offset within the island and may therefore be implemented in a staged manner.

Notwithstanding the discrete consideration of habitats by type, the overall enhancement of the habitat bank would result in a mosaic of high quality habitat from grassland through to scrub and woodland with measures to boost connectivity and ecotones built into the overall strategy.

2. Woodland Management Plan

2.1. Property Details

The woodland is designated as Content Farm Woodland for the purposes of this management plan and for future reference. The woodland is 0.4 hectares in size and is identified as HA3 in Map 01.

2.2. Vision and Objectives:

2.2.1. Vision

The overall vision for the future state of Content Farm Woodland to be achieved through the actions outlined in the Management Plan is:

> *To enhance the ecological condition and biodiversity value of Content Farm Woodland, transforming it from a single-species stand into a more diverse, resilient, and structurally complex woodland with characteristics of Atlantic forests. This would be achieved while safeguarding existing features of ecological value such as protected species, as well as respecting the unique characteristics of a Scillonian secondary woodland. Over the Management Plan period, this would result in the woodland habitat achieving Moderate Condition.*

2.2.2. Objectives

The following objectives have been identified in order to achieve the vision outlined above. These draw from good ecological practice, as well as with specific reference to condition criteria where realistic and meaningful enhancements can be achieved:

- Enhance structural diversity by creating a more varied age distribution of trees over time through selective thinning;
- Increase native tree and shrub species richness to at least 5 species characteristic of Cornish Atlantic woodland;
- Control woody invasive species, particularly karo and hedge bedstraw;
- Increase the amount of deadwood within the woodland including diversity of size, stage of decay, position and structure;
- Enhance the utility of the woodland for roosting bats through provision of new features (installation of bat boxes) whilst protecting and retaining existing bat roosting features;
- Develop a ground flora with characteristics of a woodland community appropriate to a Cornish Atlantic woodland;
- Manage retained trees appropriately and create conditions which would allow the development of trees with veteran characteristics in the long term.

2.3. Woodland Survey:

A detailed description of Content Farm Woodland is provided in the BNG Baseline & Proposals report which accompanies this Management Plan and is not repeated in full here, for brevity.

Key characteristics or features of Content Farm Woodland relevant to the Management Plan are outlined below:

Elevation:	42m AOD
Woodland context:	A contiguous stand of secondary elm woodland within an agricultural landscape of pasture and small-scale horticultural/agricultural fields.
Designations:	Situated within the Isles of Scilly National Landscape.
Soil Types:	Freely draining acid loamy soils over rock
Characteristics:	Elm-dominated, mixed age class, secondary woodland arising from abandoned farmland;
Notable Features:	Mature elm tree lines along old field boundaries, Defunct pond, Cornish hedge on northern boundary, potential bat roosting features in mature trees.
Protected/Rare Species:	Potential for bat roosts; breeding birds.
Management History:	Self-set elm woodland suckering from mature tree lines across abandoned farmland, some evidence of historic pollarding of mature trees, no evidence of recent management.
Public Access:	No public access
Recreational Activity:	No recreational use
Habitat Types:	The woodland is defined as 'Other Broadleaf Woodland' within the UKHab[1] and BNG framework[2].
Structure:	The mature tree lines within and around the woodland are dominated by mature elm trees of a single age class – suckering elm also present. The secondary woodland which has arisen from agricultural abandonment is dense and of mixed age class including young, semi-mature trees as well as suckering saplings. Mature trees including elm and sycamore surround the pond to the south of the woodland.

[1] UKHab Ltd. (2023). *UK Habitat Classification Version 2.0*
[2] Department for Environment, Food & Rural Affairs (Defra). (2024). *Biodiversity Metric 4.0: User Guide*

2.4. Woodland Protection

The following threats to the woodland are considered and will inform the overall Management Plan:

Plant Health Risks	The Isles of Scilly are currently free from Dutch elm disease – however the dominance of elm within the stand results in low resilience of the woodland if this disease were to occur.
Deer, Livestock and Other Mammals:	No impacts of grazing or browsing are identified in the baseline surveys – there are no squirrels or deer on St Martin's which would negatively affect woodland regeneration
Climate Change Resilience:	The low diversity of the woodland results in low resilience to climate change if conditions change as the species composition cannot rebalance to adjust to these changes.
Environmental Risks	None identified

2.5. Strategy

The following section outlines the strategy proposed for each management objective outlined in Section 2.2.2.

2.5.1. Structural Diversity

Structural Diversity	
Objective	Enhance structural diversity by creating a more varied age distribution of trees through selective thinning;
Baseline Assessment	A comprehensive woodland survey would map all tree species present, including their age, size, and health. Trees would be grouped where a number of trees of similar size, structure or condition are present.
Protected Species - Bats	A Ground-Level Tree Assessment (GLTA) would be carried out in order to identify those trees which provide Potential Roosting Features (PRF) for bats. Impacts to such trees would be avoided where possible – otherwise further surveys such as aerial inspection or dusk emergence surveys may be required prior to thinning or felling works in close proximity to these trees.
Felling Licence	The requirement for a Felling License would be determined based upon the proposed thinning strategy prior to any works taking place. See Section 2.6 for further discussion.
Thinning Strategy	The thinning strategy would be developed to target dense stands of young elm. Mature elms and sycamore with valuable habitat features, such as cracks, knot holes, and deadwood would be retained where appropriate, but removal of individual trees within the mature tree-lines should be targeted to improve the spacing and enhance the condition of retained trees. Pollarding or coppicing could be used as an alternative to wholesale removal. Key aims of the strategy would include: • create gaps in the understory and lower canopy; • create planting opportunities for new native species in a manner which avoids a plantation design but rather replicates a natural woodland spacing; • create minor glades and potentially a woodland ride which would remain open in the long term and allow development of woodland flora; • create conditions for the long-term health and development of retained trees. The precise thinning strategy and specimens to be removed should be developed based on the results of the woodland assessment and developed by the ecologist. A moderate thinning intensity is likely to be appropriate for this site, creating gaps in the canopy while avoiding drastic alterations to the woodland's character. A combination of appropriate hand tools including brush-cutters and chainsaws are likely to be required to undertake the thinning works, dependent on the size and accessibility of the trees to be managed.

Bark Ringing	In individual cases, bark ringing could be considered to cause the death of the tree without removing it structurally from the woodland. This could be achieved on selected specimens and would be well-suited to any larger trees targeted for removal, such as those associated with the defunct boundaries where thinning would be desirable to enhance the health and condition of retained mature trees. Limbs and branches could be removed from the standing tree which would avoid the risk of these falling in the future, and provide space for the canopies of adjacent trees to extend into the newly created space. The standing deadwood would be retained on site as a valuable resource for invertebrate species, fungi, lichens, bats and birds which require standing deadwood as part of their life cycle.
Deadwood & Arisings	Deadwood arisings would be retained on site – see Section 2.5.4 for detailed consideration of this below.
Timing of Works	Thinning works would be key to creating the conditions and opportunities for further enhancements detailed in this Management Plan and would therefore represent the first phase of works upon commencement of the Plan. Works would be undertaken outside of the bird nesting period which runs from March – September inclusive.

2.5.2. Species Composition

Woody Species Composition	
Objective	Increase native tree and shrub species richness to at least 5 species characteristic of Atlantic forests.
Species Selection	The objective would be met through the planting of a minimum of 4x native tree species that are characteristic of W11 (*Quercus petraea - Betula pubescens - Oxalis acetosella*)[3] and are on the approved planting list developed by the Duchy of Cornwall for the Isles of Scilly. These would include: • Silver birch (*Betula pendula*); • Downy birch (*Betula pubescens*); • Hawthorn (*Crataegus monogyna*); • Beech (*Fagus sylvatica*); • Sessile oak (*Quercus petraea*); • Pedunculate oak (*Quercus robur*); • Rowan (*Sorbus aucuparia*); • Hazel (*Corylus avellana*); • Holly (*Ilex aquifolium*). Planting stock would be sourced from a reputable supplier, ensuring genetic diversity within each species where possible in order to increase the new planting's resilience to pests, diseases, and climate change. Trees would be sourced as 2-3 year old bare-root saplings.
Planting Design	New trees would be planted in glades created by the removal of elm saplings within the main woodland area (see Section 2.5.1). It is not proposed to plant any new species within the mature elm lines which represent the most ecologically valuable portion of the woodland due to their age and establishment. Spacing would aim for a naturalised distribution akin to a natural woodland rather than a plantation, and the selection of areas of elm saplings to thin or remove would be guided by this principle.
Tree Establishment and Protection	Mulch would be used to maintain a vegetation-free space around the new saplings to aid initial establishment – this

[3] Rodwell, J.S. (Ed.). (1991). *British Plant Communities: Volume 1. Woodlands and Scrub*. Cambridge University Press.

	would be topped up routinely on a 6-monthly basis to maintain its efficacy. The suckering habit of elm means that it is highly likely that new shoots will appear within the cleared areas of the woodland and ongoing management through use of a brushcutter or similar tools to maintain the open growing space of the new saplings must be undertaken annually. The most significant threats to woodland establishment in mainland UK come from species such as deer and squirrels which are not present on St Mary's. Whilst there was no evidence of rabbits affecting natural regeneration within the existing woodland stand, tree guards would be used to protect against this risk in the early years of establishment. Supplemental watering may be required during the first growing seasons to ensure establishment of the new saplings – this would be monitored and undertaken on a responsive basis depending on requirement.
Replacement	Any saplings which do not establish would be replaced like-for-like in the next appropriate planting season.
Timing	The planting of new bare-root trees should be undertaken at the first opportunity during an autumn period, if possible whilst the soil is still warm. The planting window continues until spring (March) if the optimal autumn window cannot be achieved for logistic or supply reasons. The planting of new species is contingent on the completion of clearance and thinning operations outlined in Section 2.5.1.
Monitoring	Newly planted saplings would be monitored on annually in years 1-5 to ensure successful establishment.

2.5.3. Control of Invasive Species

Control of Invasive Species	
Objective	Remove woody invasive species within the woodland
Target Species	The proposals are focussed on eradication of woody invasive species which can be targeted and removed with a high degree of confidence – these are karo and hedge bedstraw. There are no non-chemical controls for species such as three-cornered leek which would be feasible without significant expenditure of time and resources and the prevalence of these species in the local environs would make recolonisation highly likely. Options would include smothering using landscaping membrane or equivalent; or soil solarisation. Alternative longer-term options might involve reduction through competition as desirable species become established – this is detailed in Section 2.5.6 with regards to ground flora establishment in small areas initially. It is possible that suitable bio-control methods would become available in the future.
Eradication Technique (Initial Intervention)	Karo and pittosporum plants would be eradicated by hand. This could involve pulling of seedlings whilst larger shrubs would require removal with a chainsaw or appropriate hand tools, followed by digging out of the roots to prevent re-growth. It is critical that root arisings are removed from site to prevent re-establishment, and appropriate monitoring and maintenance is put in place to identify any re-growth or new establishment. Deadwood can be managed alongside the remainder of the arisings as identified in Section 2.5.4.
Monitoring	The site should be walked annually to identify any re-growth (especially in the first few years after the initial intervention) or new seedlings/saplings. These should be removed immediately following the methodology outlined for eradication above. This action should be undertaken during the winter period when the evergreen nature of the target species would make them easiest to identify in a comprehensive manner within the woodland.

2.5.4. Deadwood

Deadwood	
Objective	Increase the quantity and variety of deadwood within the woodland to 12-20m^3 (30-50m^3/ha[4] equivalent) with different stages of decay (freshly dead, intermediate and advanced) present.
Source Material	The primary source of deadwood would be derived from the felling and thinning operations outlined in Section 2.5.1. As a rough indication - the recommended deadwood volume is equivalent of 12-20 elm trees with a DBH of around .35m and a height of around 15m, characteristic of those found around the dense defunct boundaries within the woodland. Smaller trees and saplings would represent a proportional contribution. Future deadwood would be generated through ongoing thinning operations, eradication of non-native species as part of annual management, and natural shedding of branches in time.
Form and Management	The distribution of arisings should aim for a range of different forms and conditions to provide the maximum range of suitable habitat for invertebrates, saprophytic fungi and lichens as well as bird and mammal species. These would include: • Standing Deadwood: *Retain entire standing dead trees where safe – to be created by ring-barking selected trees (see Section 2.5.1).* • Lying Deadwood: *Leave fallen trunks and large branches from felling/thinning operations in situ on the woodland floor to allow the long-term natural decay processes to occur.* • Log piles *Where further processing is required, for example to maintain access or allow other woodland management or enhancements to take place, logs should be cut in a variety of lengths and moved to an appropriate location. Position logs in both shaded and sunlit areas to cater to different*

[4] Cathrine, Chris, and Andy Amphlett. 2011. "Deadwood: Importance and Management." *In Practice* 73: 20–25

	invertebrate life cycle requirements. Partially bury some logs to create subterranean deadwood habitats. • Stumps *Where practical to do so, stumps can be left in situ as these provide another key resource for invertebrates. The desirability of this action would need to be balanced against the potential for coppice regrowth and, where this would significantly increase management requirements in the long term, grinding out of stumps may be more desirable.* • Brash Piles/Dead Hedging *Smaller brash and arisings from sapling removal could be used to create brash piles or dead hedges which would break down over time whilst providing habitat for a range of species.*
Protection and Safety	Deadwood, especially partially processed logs, can be considered a resource by those looking for firewood. Measures to guard against this should be considered – these might include: • Signage identifying the importance of the deadwood in the habitat; • Restrictions on access to prevent the logs being identified and removed; • Use of dead hedging and other measures to conceal or constrain access to log piles.
Topping Up	The introduction of deadwood to a woodland should be an ongoing operation to ensure the provision of a wide range of decay stages in the woodland. Once a natural cycle is established, this would be self-generating. In the timeframe of the management plan, this should be supplemented by following the guidance above with regards to any new arisings generated by management work or control of invasive species.
Monitoring	The site should be walked annually to confirm the deadwood is in situ and in the desired condition. This could be combined with other annual management activities. A particular note should be made on any change in condition, circumstances and access around standing deadwood which might impact upon the safety of its retention.

2.5.5. Bat Habitat

Bat Habitat	
Objective	Increase the range of roosting opportunities within the woodland by targeting retention of trees with existing features and installation bat boxes in key locations.
Retention of Existing Features	The existing features suitable for use by roosting bats should be identified by the GLTA undertaken in advance of the felling and thinning operations outlined in Section 2.5.1.
Bat Boxes	The two species most likely to make use of roosting habitat within the woodland are common pipistrelle and brown long-eared bats[5]. Kent bat boxes have excellent uptake by common pipistrelle bats[6] and are easy to make or purchase for installation in the woods. The Improved Cavity Bat Box design would be suitable for brown long-eared bats. The following boxes would be installed: • 5x Kent Bat boxes; • 3x Improved Cavity Bat Boxes. These should be installed securely on mature trees at a height of between 3-6m above the ground with a clear, un-cluttered fly-in below the box. The boxes should face a number of orientations to provide different microclimates, but at least 2x should face east/south-east to catch the morning sun where practicable.[7]
Monitoring	The boxes should not require maintenance, but the design of the boxes would permit a non-intrusive method of monitoring by the local Bat Group – either using a torch and binoculars, or a ladder and endoscope. If possible, this monitoring should be conducted annually when the condition and position of the boxes would also be checked to identify any requirements for replacement or re-positioning.

[5] Isles of Scilly Wildlife Trust (2023) *Big Scilly Bat Survey Report 2023*.
[6] https://www.bedsbatgroup.org.uk/wordpress/wp-content/uploads/2011/08/Bat-Boxes-at-Priory-Country-Park.pdf
[7] Billston, H. (2014) *Maximising occupation of bat boxes in an ancient woodland in Oxfordshire*. BSG Ecology.

2.5.6. Woodland Flora

Woodland Flora	
Objective	Create a woodland flora with characteristics of the W11 NVC community.
Floral Composition	The selection of species targeted for establishment is based on the W11 species list. There is no NVC community associated with the elm-woodlands which have established on Scilly[8] but it is proposed to generate an assemblage characteristic of W11 (*Quercus petraea - Betula pubescens - Oxalis acetosella*) woodland found in Cornish Atlantic woodland.. The W11 species table has been cross-referenced with those species already recorded on site, and those species known to be currently or historically present on the Isles of Scilly. This table is provided in Appendix 1. It is proposed to target the establishment of those species already present on Scilly, alongside selected desirable species which, by their nature, can be introduced with a high confidence that they would not become invasive. Examples include the wood anemone which propagates through underground rhizomes and takes many years to spread.
Site Preparation	Areas targeted for ground flora establishment would be cleared of invasive species such as three-cornered leek prior to sowing. This would be achieved using hand tools in specified areas. The prevalence of three cornered leek within the woodland is likely to make wholesale clearance and over-sowing unfeasible – therefore restricted areas in glades or where light levels are higher would be selected for intensive removal of invasivebulbs prior to sowing of W11 species. Here the establishment of ground flora might subsequently reduce the vigour of the invasive species through competition, and provide a seed source for natural colonisation of other areas of the wood over time.
Seeding and Planting	Seed for key selected species could be sourced from a suitable UK-based supplier. The ground would be scarified using a rake or similar, before seeds are sown in autumn allowing stratification to occur over the winter.

[8] Parslow, R., & Bennallick, I. (2017). *New Flora of the Isles of Scilly*. Parslow Press

	Sowing should be done by hand – seed can be mixed with sand to allow an appropriate application rate whilst ensuring an even distribution. Seeds should be lightly pressed into the bare ground by walking over the area after sowing. Some species would require introduction via rhizomes – for example wood anemone. These can be sourced from UK-based suppliers. An alternative means of establishment might be translocation of turves from a suitable woodland donor site – this could be one of the woodlands owned and managed by the Duchy of Cornwall on the mainland. This approach would have the benefit of proximate providence ensuring genetic varieties locally adapted to Cornish conditions, though additional concerns around biosecurity and the potential to introduce further non-target species would need to be considered and addressed if this approach were taken.
Monitoring	The establishment of the flora would be monitored by spring surveys in the initial years following sowing. This would focus on: • Species diversity – identifying which species have established; • Species cover – quantifying the frequency (DAFOR) within the sown plots; • Species spread – identifying whether the target species are naturally colonising other areas of the woodland; • Threats – identifying issues such as over-shading or invasive species re-establishment which would threaten the establishment of the W11 flora and confirming management actions required to address this.

2.5.7. Future Veterans

Future Veterans	
Objective	Identify 10x mature trees which are likely to become future veterans and undertake actions to support their health and development.
Timing	The appropriate management actions to support and develop future veterans is connected with thinning and management of the broader woodland – this should therefore be undertaken prior to the actions to address Structural Diversity in Section 2.5.1.
Selection for Future Veterans	The trees should be selected with regards to the following criteria: • Maturity – these should be semi-mature or mature specimens at present; • Position – these should be in locations where their immediate surroundings are within the full control of the landowner, to ensure protection from outside risks such as unfavourable adjacent land management; • Features – well-structured maiden trees are ideal but multi-stemmed or pollarded trees can be considered as these have a higher capacity to compartmentalise decay and damage features whilst retaining long-term growth; • Creation of new pollards could be considered as a means to develop future veterans, especially if sufficient trees in suitable condition or with suitable growth forms cannot be identified[9]. The identified trees should be marked on a management map and given a unique reference for management purposes.
Management	A bespoke management strategy should be identified for each tree, based around initial interventions (thinning and competition management) and ongoing threats (monitoring and response). The priorities are broadly outlined below: • Protection – ensure any necessary measures are in place to address risks of damage from humans, livestock, wildlife or machinery. This is unlikely to be a concern for this woodland but should be confirmed on a case-by-case basis, for example

[9] Read, H. (2000). *Veteran Trees: A Guide to Good Management*. Peterborough: English Nature. Chapter 8: The Next Generation of Veteran Trees

	ensuring wind blow is not a risk if thinning operations are undertaken nearby; • Competition – thinning operations should aim to provide sufficient space and light for these trees to develop a good structure and form; • Deadwood – any deadwood within the tree should be retained in situ; • Pollarding or veteranisation – if these operations would be desirable to enhance the structure or expediate the development of ecologically desirable veteran characteristics, targeted actions should be developed for each tree.
Monitoring	The health and development of these trees should be reviewed annually, and the priorities above considered to identify any threats or opportunities for management to safeguard the development of the specimen.

2.5.8. Annual Management Actions

Annual Management Plan

Management Aspect	Action	Frequency	Notes/Triggers
Structural Diversity	Monitor and maintain gaps created during thinning.	Annually during establishment (~Years 1 – 5)	Use brushcutter or manual removal to manage regrowth; arisings retained on site as deadwood
	Check for safety of standing deadwood.	Annually	Remove unsafe limbs; arisings retained on site as deadwood
Species Composition	Reapply mulch around newly planted saplings.	Annually during initial establishment (~Years 1 – 5)	Mulch should suppress competition and aid sapling establishment
	Replace failed saplings from the previous planting.	Annually during initial establishment (~Years 1 – 5)	Monitor survival rates to trigger replanting.
Invasive Species	Remove invasive species detected during monitoring.	Annually	Focus on manual removal and follow best practices detailed in this plan.
Deadwood Management	Supplement deadwood with natural arisings from thinning or other actions.	As required	Retain standing, lying, or buried forms based on habitat needs.
Bat Habitat	Replace or repair bat boxes if damage is identified during monitoring	As required	
Woodland Flora	Repeat sowing if monitoring identifies issues with establishment; manually remove three-cornered leek within W11 planting areas.	As required	
Future Veteran Trees	Manage competition around future veteran trees.	Annually	Thin vegetation around selected trees as needed.

2.5.9. Monitoring Regime

Monitoring Regime

Component	Monitoring Approach	Frequency	Thresholds for Success	Triggers for Intervention
Structural Diversity	Visual Inspection	Years 1, 2, 3, 5, 10, 15, 20, 30.	Visible age diversity; canopy gaps present; new native trees observed.	Lack of canopy gaps after thinning; no new tree recruitment.
Species Composition	Species establishment surveys; health check of planted saplings.	Years 1, 2, 3, 5, 10, 15, 20, 30.	≥5 native woody species established	Any dead saplings in the first 5 years; <80% survival rate of planted saplings subsequently
Deadwood Quantity	Estimate deadwood volume (standing and lying); evaluate diversity in decay stages.	Years 1, 2, 3, 5, 10, 15, 20, 30.	Deadwood volume maintained at 12-20m^3; variety of decay stages observed.	Total deadwood <12m^3; no recruitment of new standing or lying deadwood
Invasive Species Control	Walkover surveys for karo, hedge bedstraw or other species regrowth.	Years 1, 2, 3, 5, 10, 15, 20, 30 with a focus in winter.	Target species reduced by 90% within 3 years; no substantial re-growth observed.	Presence of re-growth or new saplings of invasive species.
Bat Habitat	Inspect bat boxes using endoscope or visual checks.	Annually	≥10% of bat boxes in use; bat boxes intact and well-positioned	Damage or loss of boxes requiring replacement
Woodland Flora	Quadrat-based ground flora surveys to assess species diversity and coverage.	Annually in spring.	W11 species dominate selected glades; visible spread beyond initial establishment plots.	Low species presence (<30% of target species established).
Future Veterans	Visual health checks of designated future veteran trees.	Years 1, 2, 3, 5, 10, 15, 20, 30.	≥10 trees identified and healthy; sufficient light and space; free from threats	Signs of stress, disease, or competition.

2.6. Felling Licence

A felling licence may be required depending on the scope and programming of initial intervention works to ensure compliance with the Forestry Act 1967.

The target for deadwood within the woodland would require the production of 12-20m^3 of wood, but a greater level may be required to meet other requirements including space for planting new trees; open areas for native flora; and management of competition around future veterans.

If more than 5m^3 per quarter is proposed for removal then a felling licence would be required. Removal of saplings with a DBH of less than 10cm[10] does not count towards this quota when felling, nor would branches or other upper limbs which are less than 5cm.

[10] Forestry Commission. (2023). *Tree felling: Getting permission*.

3. Lowland Meadow Creation & Management Plan

3.1. Habitat Details

The habitat is designated as Content Farm Grassland for the purposes of this management plan and for future reference. The grassland fields occupy 1.1 hectares and are identified as HA3 in Map 01.

3.2. Vision and Objectives:

3.2.1. Vision

The overall vision for the future state of Content Farm Grassland to be achieved through the actions outlined in the Management Plan is:

> *To create a lowland meadow with a diverse wildflower assemblage which in turn provides habitat for a range of native Scillonian species. The wildflower assemblage would be based on those native meadow species which are currently or historically found on the islands with any additions based upon sound ecological reasoning. Over the Management Plan period, this would result in the lowland meadow habitat achieving Moderate Condition.*

3.2.2. Objectives

The following objectives have been identified in order to achieve the vision outlined above. These draw from good ecological practice, as well as with specific reference to BNG condition criteria where realistic and meaningful enhancements can be achieved:

- Reduce nutrient status (especially phosphorus and potassium) to levels conducive to the establishment and sustainment of a species-rich wildflower grassland;
- Remove non-native invasive species where present and practicable;
- Increase floral diversity and create a species-rich lowland meadow sward;
- Establish a sustainable grazing and cutting regime to support the maintenance of a diverse sward in the long term;
- Prevent encroachment of scrub species and maintain the grassland structure
- Enhance ecological value for invertebrates and other fauna by creating structural and floral diversity within the grassland.

3.3. Grassland Baseline

A detailed description of Content Farm Grassland is provided in the BNG Baseline & Proposals report which accompanies this Management Plan and is not repeated in full here for brevity.

Key characteristics or features of Content Farm Grassland relevant to the Management Plan are outlined below:

Elevation:	42m AOD
Woodland context:	A series of three horse-grazed pasture fields set within a wider landscape of small-scale horticultural/agricultural fields.
Designations:	Situated within the Isles of Scilly National Landscape.
Soil Types:	Freely draining acid loamy soils over rock
Characteristics:	Species poor; composition characteristic of MG5/6 grassland with some acid indicators; high nutrient status (especially P); over-grazed.
Notable Features:	None
Protected/Rare Species:	Potential for breeding birds in longer vegetation.
Management History:	Historic habitat use unknown – currently intensively grazed by horses.
Public Access:	No public access
Recreational Activity:	No recreational use
Habitat Types:	The woodland is defined as 'Other Neutral Grassland within the UKHabs and BNG framework.

3.4. Strategy

The following section outlines the strategy proposed for each management objective outlined in Section 3.2.2.

3.4.1. Nutrient Levels and Invasive Species

Nutrient Status and Invasive Species	
Objective	Reduce phosphorus (P) to Level 0-1 and potassium (K) to Level 0-1; remove or significantly reduce non-native invasive species where present and practicable.
Baseline Assessment	The current P-levels are 3-4 with K levels of low-2. The P-level is considered unsuitable for establishment of a species-rich wildflower grassland without significant intervention; whilst the K-level, whilst acceptable for wildflower grassland creation, would benefit from further reduction.
Approach	The extent to which P-levels are elevated makes it unlikely that methods such as grazing or mowing/arising removal would reliably reduce these levels to a sufficient degree in the timeframe of the management plan. For this reason, topsoil removal would be required[11] to generate a suitable substrate for the establishment of a species-rich wildflower grassland. The status of invasive species such as three-cornered leek is unknown but suspected due to its ubiquity in similar fields in the local environs. The removal of topsoil would represent an effective chemical-free means of removing this species from the sward.
Timing	The removal of topsoil should be targeted to the autumn period in late-September/early-October after the end of the bird nesting season. This timing would minimise disturbance to invertebrates and grassland fauna; avoid wet periods when compaction and damage to the exposed subsoil could occur; and coincide with the optimal timing for sowing wildflower seeds to ensure their establishment on the newly exposed seedbed.
Topsoil Removal Strategy	The topsoil should be removed with a mechanical excavator with spoil removed offsite or used to create limited bunds and banks at the edges of the grassland to enhance the topographic diversity of the site. If the latter option were considered, careful management would be required to ensure nutrients would not leach back into the grassland habitat – measures such as capping with subsoil could be considered to limit this risk. The depth would be determined through initial trial excavations to reach a depth which removes the existing topsoil but does not reach a level of subsoil which is unlikely to support the establishment of the new wildflower grassland.

[11] Resch MC, Schütz M, Graf U, Wagenaar R, van der Putten WH, Risch AC. Does topsoil removal in grassland restoration benefit both soil nematode and plant communities? J Appl Ecol. 2019;56:1782–1793.

	A depth of approximately 10cm would have the benefit of removing the vast majority of invasive bulbs such as Bermuda buttercup and three-cornered leek, if present. The removal strategy would need to consider haul routes and access, working sequentially back from the furthest corner of the site to the entrance to ensure that plant does not track over the newly exposed subsoil and cause damage or compaction. If species such as three-cornered leek are present within the topsoil to be removed, the destination for the spoil would need to take appropriate measures to prevent the introduction of the species to a location where it is not already well-established in accordance with the WCA (1981, as amended)[12]. After the topsoil has been removed, the site should be allowed to 'green up' for a period of 2-3 weeks to allow the first flush of annual species from the seedbed to germinate. These should then be removed through mechanical means such as light cultivation to reduce competition for the selected wildflower seed mix.
Monitoring	No specific monitoring is proposed in this section of the report as the subsequent sowing of wildflower seed (outlined in Section 3.4.2 below) immediately succeed the operation and will form the basis of monitoring work.

[12] UK Parliament. (1981). *Wildlife and Countryside Act 1981*.

3.4.2. Species-Rich Wildflower Sward Establishment

Species-Rich Wildflower Sward Establishment	
Objective	Create a species-rich grassland flora with characteristics of MG5/U1 NVC communities with a focus on species native or already established on Scilly.
Seed Mix	The selection of species targeted for establishment is based on the MG5 and U1 floristic tables. Both of these grasslands are found on the islands[13] and, whilst the MG5 community is perhaps more typical of the lowland meadow character, the inclusion of species within the U1 assemblage is likely to establish successfully given the slightly acidic soil conditions. The MG5 and U1 species tables[14] have been cross-referenced with those species already recorded on site (as detailed in the BNG Baseline & Proposals document), and those species known to be currently or historically present on the Isles of Scilly. This table is provided in Appendix 2. It is proposed to target the establishment of those MG5 and/or U1 species already present on Scilly, alongside selected desirable species which are likely to benefit the long-term diversity and condition of the grassland such as yellow rattle[15] which, though not currently listed in the Flora, can be found in some locations on the islands following introductions since its publication.
Seed Source	It is unlikely that a sufficient quantity of an appropriate seed mix or green hay can be sourced on the island within the timeframe in which sowing is likely to be proposed. The species proposed for sowing are present in disparate locations across the islands and no single meadow source with a significant number or volume of these species is known. For this reason, a bespoke seed mix would be sourced from an appropriate specialist retailer based upon the selected species composition within the table provided in Appendix 1.
Sowing	The seed mix would be sown in autumn, immediately following the removal of the flush of annual species through light cultivation. Seed should be sown either by hand or using an appropriate mechanical broadcasting method. Seed can be mixed with sand to allow an appropriate application rate whilst ensuring an even distribution. A sowing rate of 4–5 grams per square metre would be used across the site.

[13] Parslow, R., & Bennallick, I. (2017). *New Flora of the Isles of Scilly*. Parslow Press
[14] Rodwell, J.S. (Ed.). (1992). *British Plant Communities: Volume 3. Grasslands and Montane Communities*. Cambridge University Press
[15] Natural England. (2010). *The use of yellow rattle to facilitate grassland diversification in agri-environment schemes*. Technical Information Note TIN060.

	A roller can then be used to ensure good seed-soil contact following broadcast sowing.
Monitoring & Aftercare	The management of the sward in the first season would require regular monitoring, targeted interventions where required, and adaptive management. The sward would be monitored on a monthly basis over the first season to identify any threats to establishment such as: • The development of aggressive perennial or annual species which might out-compete the establishing sward – manual removal or targeted mowing may be deployed to address this. • Failure of sward to germinate or establish – if these causes are temporary eg. waterlogging in a portion of the site over the first winter, then additional spring sowing is likely to result in successful establishment. Further soil tests or other investigations may be required to inform appropriate remedial actions if the cause is not apparent. • Species such as rabbits can pose a threat to establishment through browsing of new shoots. Whilst this is not anticipated to be a concern on St Mary's, measures such as electric fencing could be used to temporarily exclude this species during the establishment period. • The winter conditions on Scilly can be harsh with strong winds – erosion or wind-blow of bare soil could potentially restrict establishment. It is anticipated that the proposed timing of sowing would allow a cover of green vegetation to be established before significant onset of winter storms, but if early storms occur, consideration may need to be given to use of a temporary nurse crop (eg. annual grasses) whilst the wildflower sward establishes. The first cut of the grassland would not take place until after the wildflower seeds have set in the first season – monitoring would subsequently take place as outlined in the Meadow Management Plan in Section 3.4.2 below.

3.4.3. Meadow Management

Meadow Management	
Objective	Introduce a meadow management regime which will secure the establishment of a species-rich lowland meadow sward with a high proportion of desirable indicator species and an average of >15 vascular plants per m^2. Scrub would be maintained at a level of 2% or less with bare ground between 1-5%.
Hay Cut	A hay cut management protocol would be key to encouraging recruitment and establishment of new wildflower seeds (especially annuals) whilst managing nutrient levels through removal of arisings. Hay should be cut in late summer (typically between late-July and September) though optimal management might involve different portions of the sward being cut at different times to generate variation which would benefit a range of different species' lifecycles. The timing should ensure that wildflower seeds have set before the cut is undertaken. Arisings should be allowed to dry on the surface for several days, maximising release of wildflower seeds, before the hay is gathered and removed from the site to prevent build-up of nutrients and domination by grass species. A scythe-mower or small tractor with a drum or sickle-bar mower attachment should be used to undertake the hay cut to ensure a clean cut with minimal impact to the ground and root systems of the grassland.
Grazing	Aftermath and winter grazing should be deployed. This has the benefit of controlling the first flush of grass regrowth after the hay cut has been removed; controlling thatch and build-up of dead plant materials which favour established perennial grass species; introducing variation in the sward height and structure; and boosting soil health through dispersal of nutrients. Livestock should comprise cattle or sheep, with smaller breeds favoured to reduce damage and compaction to the ground. Stocking levels should be targeted to conservation requirements rather than agricultural production and are likely to be low and/or short-term in their duration to avoid over-grazing. A variety of studies have identified stocking densities in the range of 0.2-0.5LU/ha[16] to be suitable for conservation projects. This is equivalent to one cow or two-three sheep depending on the age, size

[16] Natural England. (2014). *Re-introducing natural grazing: Natural England evidence*. Access to Evidence EIN002, First Edition, 10 July 2014

	and breed[17]. A single horse represents an equivalent of 1LU and so would not be suitable to achieve appropriate conservation grazing on this site unless this was for a restricted period of time. Livestock can be present where desirable for sward health in the period between the hay cut and end-February at the latest. They should be removed before March to ensure germination and establishment of wildflowers is not impacted – this timeframe accounts for the mild winters and early springs experienced on Scilly. The current layout of the three fields, along with the proposals for hedgerow planting, would allow rotational grazing to be employed with livestock moving between fields in a controlled manner to vary grazing timing and intensity and generate further structural and floristic diversity. Temporary electric fencing is likely to be required to prevent the livestock grazing on the newly planted hedges as detailed in Section 5 of this report during the establishment phase. The requirement to restrict the grazing to the aftermath and winter period would require cooperation with a local livestock farmer to facilitate temporary residence on the Content Farm Grassland during the desired period, whilst being housed elsewhere during the remainder of the year.
Scrub Management	It is anticipated that the proposed management scheme would limit scrub encroachment through annual cutting followed by aftermath grazing. Annual monitoring would be undertaken in order to identify any areas where scrub development presents a concern and manual removal would be implemented to address this if required.
Bare Ground	It is anticipated that the proposed management scheme would achieve an optimal level of bare ground within the sward through the actions of grazing, cutting and removal of woody shrubs (where necessary). It is also likely that rabbits would utilise the sward if it is maintained in good condition and this would further provide a natural means of ensuring bare ground patches in a dynamic system. If this does not transpire, additional means such as mechanical disturbance or raking may be required to maintain bare ground in places to ensure the sward meets the necessary metric for the Condition Assessment criteria. The need for this would be kept under review and appropriate management implemented if required.

[17] Mitchell, G., & McIntyre, S. (2007). *Conservation Grazing of Semi-natural Habitats*. Technical Note TN586. Scotland's Rural College (SRUC)

Monitoring	The condition of the sward would be monitored annually during the first years of development to characterise the sward and identify trends in species composition and dominance. This would take the form of an NVC quadrat survey of 10x plots across the Content Farm Grassland which would be completed prior to the hay cut each year in order to best characterise the botanical composition. This information would be used to assess the quality of the grassland against the Condition Criteria outlined for grasslands within the BNG metric in order to describe its condition. It would also provide data which could be used to assess trends and threats to inform management, for example if the proportion of course grass species or herbaceous components characteristic of high nutrient status were increasing. Additional measures of scrub levels, bare ground and other metrics key to achieving a Moderate Condition would be undertaken alongside these NVC quadrat surveys.

3.4.4. Annual Management Plan

Annual Management Plan

Management Aspect	Action	Frequency	Notes/Triggers
Hay Cut	Late summer hay cut	Annual (late July to September)	Ensure seeds have set before cutting; allow arisings to dry for seed dispersal before removal to manage nutrient levels.
Aftermath and Winter Grazing	Controlled grazing with cattle or sheep	Annual (post-hay cut to February)	Use low-density stocking; rotate grazing areas to support structural diversity; cease grazing by February to avoid disturbing wildflower germination.
Invasive Species Control	Monitor and remove invasive species as required	Annual	Conduct checks for species such as three-cornered leek; removal can involve manual or mechanical means.
Scrub Management	Manual removal	Annual	Keep scrub cover below 2% and bracken cover below 20%; assess during annual monitoring and remove as needed.
Bare Ground Maintenance	Monitor and maintain patches of bare ground	Annual (as needed)	Encourage through grazing, cutting, or raking if natural processes eg rabbit activity are insufficient; adjust management based on monitoring results.

3.4.5. Establishment-Phase Monitoring Regime

Establishment Phase Monitoring Regime

Criteria	Indicator	Method	Frequency	Thresholds for Success	Triggers for Intervention
Germination & Establishment	Proportion of cover	Visual Estimation	Monthly (first season)	Establishment of vegetation across >90% of the area	Significant localised patches of failure (contiguous area of failure >2% of total area) or dispersed failure totalling >10% of the area.
Weeds/Dominance	% cover of dominant weeds	Visual estimation	Monthly (first season)	<5% cover of docks, thistles, nettles	>10% weed cover; visible spread of aggressive species.
Bare Ground	% bare ground	Visual estimation	Monthly (first season)	<5% bare ground across grassland	Bare ground >10% (indicating erosion risk).
Erosion	Soil stability, presence of gullies	Visual inspection	Monthly (first season)	No visible erosion or areas of windblow	Erosion observed; >10% area of bare soil vulnerable to water or wind damage.
Wildlife Impact	Signs of grazing	Visual inspection	Monthly (first season)	Grazing limited to discrete areas and not impacting establishment	Excessive rabbit grazing limiting establishment across >10% of the area.

3.4.6. Long-Term Monitoring Regime

Long-term Monitoring Regime

Component	Indicator	Method	Frequency	Thresholds for Success	Triggers for Intervention
Vegetation Composition	Proportion of wildflowers vs. grasses	Quadrat surveys (10x 1m^2 plots)	Annually (before hay cut)	>15 vascular plant species/m^2 on average	<12 species/m^2; dominance of grasses (>70% of sward).
	Presence of indicator species			4+ species listed in G3a Species List (see Table 02) in >50% of plots	<4 species listed in G3a Species List; signs of nutrient-favouring plants (e.g., docks).
Nutrient Levels	Phosphorus and potassium (P & K) levels	Soil testing (3x compositive samples from each of the 3x fields)	Years 1, 2, 5, 10, 15, 20, 30.	P: 0–1; K: 0–1	P remains >2 after topsoil removal; K >low 2 over multiple seasons.
Invasive Species	Proportion of cover	Field walkover surveys	Annually (spring to target key season for likely species)	No invasive species observed (0% cover)	Presence of invasive species (e.g., three-cornered leek, Bermuda buttercup) in >1% of sward.
Weeds/Dominance	% cover of dominant weeds	Quadrat surveys (10x 1m^2 plots)	Annually (before hay cut)	<5% cover of docks, thistles, nettles	>5% weed cover; visible spread of aggressive species.
Bare Ground	% bare ground	Visual estimation	Annually (spring)	1–5% bare ground across grassland	Bare ground <1% or >5%
Scrub Encroachment	% scrub cover	Visual estimation	Annually (spring)	Bracken <10% of sward; <2% scrub cover	>20% bracken cover; >2% scrub cover

4. Mixed Scrub Enhancement and Management Plan

4.1. Habitat Details

The habitat is designated as Content Farm Scrub for the purposes of this management plan and for future reference. The habitat occupies 0.9 hectares and is identified as HA2 in Map 01.

4.2. Vision and Objectives:

4.2.1. Vision

The overall vision for the future state of Content Farm Scrub to be achieved through the actions outlined in the Management Plan is:

> *To create a well-structured mixed scrub habitat with a diverse native plant assemblage and functional ecotones which provides habitat for a range of local fauna. Over the Management Plan period, this would result in the mixed scrub habitat achieving moderate condition.*

4.2.2. Objectives

The following objectives have been identified in order to achieve the vision outlined above. These draw on good ecological practice, as well as with specific reference to BNG condition criteria where realistic and meaningful enhancements can be achieved:

- Increase structural variation by developing open rides and varied scrub density whilst maintaining existing ecotones with remnant grassland swards and adjacent woodland;
- Increase species diversity through the introduction of native shrub and woody species;
- Remove non-native invasive species where practicable;
- Establish a sustainable management regime to support the maintenance of the habitat in the long term.
-

4.3. Scrub Baseline

A detailed description of Content Farm Scrub is provided in the BNG Baseline & Proposals report which accompanies this Management Plan and is not repeated in full here, for brevity.

Key characteristics or features of Content Farm Scrub relevant to the Management Plan are outlined below:

Elevation:	42m AOD
Scrub context:	An area of dense scrub with remnant grassland glades reflecting the habitat from which it originally developed. The area is bounded to the north and west by high elm tree-lines and by the Content Farm Woodland to the south and east.
Designations:	Situated within the Isles of Scilly National Landscape.
Soil Types:	Freely draining acid loamy soils over rock
Characteristics:	Species poor; elm-dominated; limited diversity of age and structure; invasive species present.
Notable Features:	Well-structured existing ecotones with surrounding woodland and grassland.
Protected/Rare Species:	High suitability for use by breeding birds.
Management History:	The scrub appears to have developed following the cessation of management. The underlying grassland habitat is apparent both in retained glades and in the ground-layer species beneath the woody vegetation but it is likely (based on remnant plants) that this was historically used for bulb and flower growing prior to abandonment.
Public Access:	No public access
Recreational Activity:	No recreational use
Habitat Types:	The woodland is defined as 'Dense Scrub' and 'Mixed Scrub' within the UKHabs and BNG frameworks respectively.

4.4. Strategy

The following section outlines the strategy proposed for each management objective outlined in Section 4.2.2.

4.4.1. Structural Variation

Structural Variation	
Objective	Retain and manage existing desirable ecotones between the scrub and the grassland, whilst introducing identifiable rides and glades to the scrub.
Management of Ecotone with Remnant Grassland	The existing ecotone between the scrub and the remnant grassland is well-structured though ongoing succession would result in the loss of this feature over time in the absence of appropriate management. The area of grassland is too small to allow meaningful grazing; therefore mechanical mowing using a brushcutter or scythe mower would be used to cut the sward annually (following the timing outlined for the Content Farm Grassland in Section 3) with arisings removed where practicable. The extent of retained grassland would be marked and maintained annually with a staggered ecotone achieved through selective, intermittent or adaptive cutting of scrub where the two habitats meet. A brush-cutter would be the optimal tool for this job, allowing more tussocky grass to be retained along the ecotone whilst still removing encroaching scrub, maximising the structural diversity within the habitat. The ecotone from open grassland to dense scrub should be maintained over an average distance of 5m, although appropriate variation around this target would be desirable.
Management of Ecotone with Content Farm Woodland	The ecotone between the scrub and Content Farm Woodland should be managed in such a way as to encourage a graded transition between the dense scrub and mature tree habitats. This would involve the identification of boundary shrubs or small trees within the scrub habitat which could be encouraged to reach maturity through selective thinning of surrounding saplings and whips. This should be undertaken within the 5m band of scrub closest to the mature elm tree line which constitutes the western and northern boundaries of the Content Farm Woodland. See notes below on thinning operations.
Creation of a New Ride	A new ride should be created running through the scrub. This would be for ecological function rather than access per se; however an arc beginning in the south-east corner and terminating in the north-west would allow access through the scrub for inspection and provide a wider range of different microclimates with differing aspects. The ride should be 2-3m in width throughout its length. See noted below on thinning operations.
Creation of	Areas of the elm-dominated scrub would be targeted for clearance.

Sapling Planting Areas	In some instances, this might include glades for new planting which can be maintained as open space and facilitate the inspection and monitoring of newly planted saplings. A total area of approximately 30-40% of the existing scrub should be removed for this purpose.
Thinning	The density of the existing elm sapling vegetation is significant and will result in over-crowding and poor development of saplings in time and preclude natural recruitment of younger saplings in the long term. Whilst some areas of naturally dense saplings should be allowed to remain for structural diversity, other retained areas should be thinned to allow healthy development of retained saplings which should be selected for good growth form and existing structure. The precise level of thinning should be responsive to the conditions on site.
New Glades	New permanent glades are not proposed due to the small size of the habitat area available; the scope to retain open habitat through management of the existing remnant grassland areas; and the creation of a new ride which would achieve the key functions of structural diversity; and microclimate variation. Glades would only be created in order to provide suitable planting areas of new native whips and saplings.
Thinning Operations	This work should be undertaken with hand tools including chainsaws or brushcutters as required. Brash arisings could be stacked within the scrub habitat to create further diversity of habitat and increase deadwood resources.
Timing	Thinning works should be undertaken outside of the bird nesting season which runs from March – September inclusive.

4.4.2. Woody Species Composition and Diversity

Woody Species Composition and Diversity	
Objective	Increase native tree and shrub species richness to at least 5 species, native to Scilly.
Species Selection	The objective would be met through the planting of native shrub and tree already established on the Isles of Scilly and are on the approved planting list developed by the Duchy of Cornwall. These would include: • Hawthorn (*Crataegus monogyna*); • Hazel (*Corylus avellana*); • Holly (*Ilex aquifolium*); • Elder (*Sambucus nigra*) and; • Guelder rose (*Viburnum opulus*). Individual small trees could also be planted to further increase structural diversity in time – species appropriate for this purpose would include: • Rowan (*Sorbus aucuparia*) and; • Bird cherry (*Prunus padus*). Species are selected with regard to their ecological function, prioritising those bearing fruit and nuts which would support a range of native fauna including migrant bird species in the autumn. Planting stock would be sourced from a reputable supplier, ensuring genetic diversity within each species where possible in order to increase the new planting's resilience to pests, diseases, and climate change. Shrubs would be sourced as whips, and trees would be sourced as 2-3 year old bare-root saplings.
Planting Design	New shrubs and trees would be planted in glades created by the removal of elm saplings, the size and shape of which would be guided by appropriate clearance measures with regards to good ecological practice. Whips and small trees would be planted at 1.5-2m distances to ensure sufficient space for establishment and development. Individual small trees would grow above the scrub layer in time and provide an over-canopy, hence the relatively close recommended spacing for the saplings as well as the whips.

Whip & Sapling Establishment and Protection	Mulch would be used to maintain a vegetation-free space around the new whips and saplings to aid initial establishment – this would be topped up routinely on a 6-monthly basis to maintain its efficacy. The suckering habit of elm means that it is highly likely that new shoots will appear within the cleared areas of the woodland. Ongoing management using a brushcutter or similar tools would be required to maintain the open growing space of the new whips/saplings. The most significant threats to woodland establishment in the mainland come from species such as deer and squirrels which are not present on St Mary's. Whilst there was no evidence of rabbits affecting natural regeneration within the existing scrub habitat, tree guards would be used to protect against this risk in the early years of establishment. Supplemental watering may be required during the first growing season to ensure establishment of the new whips/saplings – this would be monitored and undertaken on a responsive basis depending on requirement.
Replacement	Any whips or saplings which do not establish would be replaced like-for-like in the next appropriate planting season.
Management	Ongoing management would be focussed on retaining cleared areas through mechanical removal of re-growth. This is only likely to be required in cleared/thinned areas until the new shrubs and trees have established, however ongoing maintenance of the ride is likely to be required in perpetuity alongside management of the grassland ecotone described in Section 4.4.1.
Timing	The planting of new whips and bare-root trees should be undertaken at the first opportunity during an autumn period if possible whilst the soil is still warm. The planting window continues until spring (March) if the optimal autumn window cannot be achieved. The planting of new species is contingent on the completion of clearance and thinning operations outlined in Section 4.4.1.
Monitoring	Newly planted whips/saplings would be monitored on annually in years 1-5 to ensure successful establishment.

4.4.3. Control of Invasive Species

Control of Invasive Species	
Objective	Remove woody invasive species within the scrub
Target Species	The proposals are focussed on eradication of woody invasive species which can be targeted and removed with a high degree of confidence – these include karo, yucca and hedge bedstraw. There are no non-chemical controls for species such as three cornered leek which would be feasible without significant expenditure of time and resources; therefore eradication of this species is not targeted at present.
Eradication Technique (Initial Intervention)	Invasive species plants would be eradicated by hand and arisings removed from the site. This could involve pulling of seedlings whilst larger shrubs would require removal with a chainsaw or appropriate hand tools, followed by digging out of the roots to prevent re-growth. It is critical that root arisings are removed from site and appropriate monitoring and maintenance is put in place to identify any re-growth or new establishment. Woody arisings can be retained onsite as deadwood.
Monitoring	The site should be walked annually to identify any re-growth (especially in the first few years after the initial intervention) or new seedlings/saplings. These should be removed immediately following the methodology outlined for eradication above. This action should be undertaken during the winter period when the evergreen nature of the target species would make them easiest to detect within the scrub habitat.

4.4.4. Annual Management Plan

Annual Management Plan

Management Aspect	Action	Frequency	Notes/Triggers
Grassland Ecotone Management	Mowing remnant grassland glade with brush cutter or scythe mower, arisings removed.	Annually (alongside Content Farm Grassland hay cut)	Maintain sinuous, staggered and irregular ecotone with scrub; gradation over ~5m from grassland to dense scrub
Scrub Thinning	Selective thinning of saplings to promote structural diversity and healthy growth.	Annually (responsive)	Conducted outside bird nesting season (March–September). Hand tools eg. chainsaws preferred.
Ride Maintenance	Clearing vegetation and maintaining the width of the ride.	Annually	Use brushcutter or similar hand tools. Scythe mower could also be considered.
Sapling Establishment	Mulching around saplings to maintain vegetation-free space.	Annually during initial establishment (~Years 1 – 5)	
Invasive Species Control	Removal of non-native invasive species through cutting or selective extraction.	Annually	Responsive to monitoring.
Replacement Planting	Replacing failed saplings like-for-like during the planting season.	Annually during initial establishment (~Years 1 – 5)	Conducted in autumn or early spring.
Maintaining Clearings around New Planting	Using brushcutters or similar tools to prevent encroachment or re-growth in cleared or thinned areas.	Annually during initial establishment (~Years 1 – 5)	Focused on regrowth control in managed areas.

4.4.5. Long-Term Monitoring Regime

Long-term Monitoring Regime

Component	Indicator	Method	Frequency	Thresholds for Success	Triggers for Intervention
Vegetation Structure	Structural diversity (e.g., density of scrub, presence of ecotones, ride quality).	Visual assessment	Annually	Presence of well-graded ecotones across 5m; rides maintained at 2–3m width.	Ecotones narrowing; excessive woody vegetation along rides.
Plant Species Diversity	Presence and abundance of native species, including planted saplings.	Visual inspection of newly planted stock; monitoring for subsequent natural regeneration	Annually	At least 5 native shrub/tree species established;	Decline in species diversity; sapling survival below threshold
Woody Invasive Species	Coverage and spread of non-native woody invasive species.	Visual assessment.	Annually (winter)	Invasive species absent or controlled within <5% of total area.	Invasive species presence exceeds 5% coverage.
Sapling Establishment	Newly planted saplings have established in healthy condition	Species establishment surveys; health check of planted saplings.	Years 1, 2, 3, 5, 10, 15, 20, 30.	Whips & saplings with 100% survival rate.	Any dead saplings replaced in the first 5 years; <80% survival rate of planted saplings subsequently
Grassland Clearing	Proportion of scrub within grassland glade	Visual assessment	Annually	Scrub absent or controlled within <2% of total area.	Scrub exceeds 2% coverage.
Grassland Ecotone	Structural gradation from grassland to scrub.	Visual assessment	Annually	Presence of well-graded ecotone; within target width (average 5m with variation).	Ecotone quality reducing; sharp distinction between habitat types; narrowing of ecotone width

5. Hedgerow Creation and Management Plan

5.1. Vision and Objectives:

5.1.1. Vision

The overall vision for the future state of Content Farm Hedgerows to be achieved through the actions outlined in the Management Plan is:

> *To create native species-rich hedgerows with trees, providing ecological connectivity and biodiversity value while integrating into the existing agricultural landscape*

5.1.2. Objectives

The following objective have been identified in order to achieve the vision outlined above. These draw from good ecological practice, as well as with specific reference to BNG condition criteria where realistic and meaningful enhancements can be achieved:

- Select species which are suitable for inclusion within a native hedgerow in the Isles of Scilly;
- Establish the new planting with a combination of whips and saplings;
- Implement a management plan which will encourage the establishment and long-term health of the hedgerows.

5.1.3. Location and Extent

The hedgerows would be established along the southern and eastern boundaries of the Content Farm Grassland, along with a single hedgerow which would bisect the two most easterly fields.

These hedgerows combined would represent 250m of new species-rich native hedgerow with trees.

The selected locations are designed to provide additional habitat connectivity along existing physical boundaries in the form of drystone walls, and provide a traditional hedgerow habitat to complement the lowland meadow creation.

On the most easterly boundary, the offsite karo hedge would be retained and the new species-rich native hedge would be grown alongside it on the site side.

Map 02 – Showing the redline boundary of the survey site with existing treelines shown with black/green dashes. The hedgerows to be created are illustrated with the yellow/purple dashes. The map illustrates how the selected locations will significantly improve the ecological connectivity of the overall habitat mosaic through the establishment of native woody vegetation along boundaries to the east of the site.

5.2. Strategy

The following section outlines the strategy proposed for each management objective outlined in Section 5.1.2.

5.2.1. Hedgerow Planting and Establishment

Hedgerow Planting and Establishment	
Objective	Establish native species-rich hedgerows with trees totalling 250m length
Species Selection	The objective would be met through the planting of native shrub and tree which are already established on the Isles of Scilly and are on the approved planting list developed by the Duchy of Cornwall. These would include: • Hawthorn (*Crataegus mon*ogyna) • Hazel (*Corylus avellana*) • Holly (*Ilex aquifolium*) • Blackthorn (*Prunus spinosa*) • Elder (*Sambucus nigra*) • Guelder-rose (*Viburnum opulus*) Individual small trees would be planted to further increase structural diversity in time – these would be drawn from the same planting list and would include: • Field maple (*Acer campestre*) • Wild crab (*Malus sylvestris*) • Wild cherry (*Prunus avium*) • Bird cherry (*Prunus padus*) • Sessile oak (*Quercus petraea*) • Pedunculate oak (*Quercus robur*) Planting stock would be sourced from a reputable supplier, ensuring genetic diversity within each species where possible in order to increase the new planting's resilience to pests, diseases, and climate change. Shrubs would be sourced as whips, and hedgerow trees would be sourced as 2-3 year old bare-root saplings.
Planting Design	The whips would be planted as a staggered, double-row hedge for denser growth. Whips would be spaced 30–45 cm apart, alternating between rows. Species selection would be random to ensure a good distribution of species throughout the length whilst also allowing for patchy and incidental concentrations of particular species to arise. Saplings to be grown into hedgerow trees planted at

	intervals of 10m.
Ground Preparation	The ground would be cleared prior to planting using mechanical means with arisings mulched and retained in situ where practicable to boost soil organic matter and help conserve water in the planting substrate. The use of a brushcutter would facilitate this. Planting would be along the on-site side of each wall with the exception of the central hedgerow which separates the two more easterly fields. In this case, the hedge would be planted on the eastern side in order to maximise the shelter provided by the wall from prevailing south-westerly winds. Woodchip would be used to mulch the ground and minimise growth of weeds and other species which would compete with the whips in their initial establishment phase. The use of herbicides and landscape membranes should be avoided.
Planting	A slot planting method should be used for the whips and saplings where appropriate – this would involve the use of a spade to create a V-shaped hole by inserting to a depth of 25-30cm and moving back and forth to create the planting aperture. Bare root whips and saplings can then be inserted and the slot back-filled or pressed back into place to seal the surface. The most significant threats to whip and sapling establishment on the mainland come from species such as deer and squirrels which are not present on St Mary's. Whilst there was no evidence of rabbits affecting natural regeneration within the adjacent woodland and scrub habitats, tree guards would be used to protect against this risk in the early years of establishment.
Establishment and Protection	Supplemental watering may be required during the first growing seasons to ensure establishment of the new saplings – this would be monitored and undertaken on a responsive basis depending on requirement. Hedgerow trees should be staked if necessary for stability, ensuring ties are checked regularly to prevent constriction. Whips are unlikely to required supports.
Nutritional Supplementation	It is considered unlikely that nutrient deficiencies would preclude successful establishment of the hedge; however whip/sapling health should be monitored and the use of organic compost or slow-release fertiliser could be considered if necessary to secure establishment.

Replacement	Any whips or saplings which do not establish would be replaced like-for-like in the next appropriate planting season.
Timing	The planting of new whips and bare-root trees should be undertaken at the first opportunity during an autumn period if possible whilst the soil is still warm. The planting window continues until spring (March) if the optimal window cannot be achieved.
Monitoring	Newly planted whips/saplings would be monitored on annually in years 1-5 to ensure successful establishment.

5.2.2. Hedgerow Management

Hedgerow Management	
Objective	Introduce a hedgerow management regime which will secure the establishment of a species-rich native hedgerow, encouraging the growth of hedgerow trees which would form a higher canopy in time.
Establishment Phase	Ongoing management would be required to retain clear ground beneath the new planting through mechanical removal of vegetation for the first three years. If mulch is used beneath the newly planted whips, this should be topped up on a 6-monthly basis to retain its efficacy. The hedgerow trees should be marked and identified in such a way as to ensure that they are not cut along with the whips– this is critical in the early stages before they develop a larger and more prominent presence within the hedgerow. The whips should be lightly trimmed in years 2-4 to encourage bushy growth.
Cutting regime	A standard cutting cycle should be implemented to manage the hedgerow once it has established – likely year 5+ but this would be dependent on speed of growth. Hedges should only be cut outside of the bird nesting season which runs from March – September inclusive. Once established, hedges should be cut with a disc-cutter or similar tools to minimise damage to the woody structure. A flail should be avoided where possible. Cutting should be on a rotation to maximise berry provision and habitat continuity across several seasons – cutting could be on one face each year for example, leaving the other face uncut. Further diversity could be introduced by leaving some hedge sections uncut in particular years, effectively introducing a three-year cycle of cutting. Care must be taken not to cut the hedgerow trees which should be allowed to establish into maiden specimens in time. The hedge height should be between 2-3m (accounting for likely limits on growth associated with the relatively exposed location) and 2-3m in width with an A-shaped structure.
Invasive Species	The hedge should be monitored annually for the encroachment of invasive woody species such as karo and hedge bedstraw. These should be removed mechanically if identified.
Monitoring	The condition of the hedgerows would be monitored annually to confirm species establishment and health; habitat and structural

diversity; and the presence of invasive species.

Additional visits would be required during the establishment phase to identify threats such as drought stress and implement appropriate actions to remedy these at an early stage.

5.2.3. Annual Management Plan

Annual Management Plan

Management Aspect	Action	Frequency	Notes/Triggers
Weed Control	Remove weeds manually using strimmer or similar	Establishment phase (~Years 1-4) bi-annually – once in spring, once in mid-summer	Inspect for competing vegetation; avoid herbicides to protect soil health.
	Apply woodchip mulch around base of plants	Bi-annually in early spring and early-Autumn	Ensure mulch layer is 5–7 cm thick to suppress weeds and retain soil moisture.
Watering	Provide supplemental watering if required	Weekly during drought periods during first two years of establishment	Triggered by prolonged dry weather in the first two years.
Fertility	Apply organic compost or slow-release fertiliser	If required, in late winter/early spring	Only if plants show signs of nutrient deficiency (e.g., poor growth, yellowing leaves).
Tree and Shrub Protection	Inspect tree guards and stakes	Establishment phase (~Years 1-4) bi-annually in early spring and early-autumn	Replace damaged or missing guards; adjust ties to prevent constriction as trees grow.
Replacement	Replace failed whips or saplings	Establishment phase (~Years 1-4) in planting season (autumn to early spring)	Check survival rates; replace with like-for-like species.
Hedgerow Management and Cutting	Light trimming of hedgerows to encourage bushy growth	Establishment phase (~Years 1-4) annually in late winter (before nesting season)	Avoid excessive trimming to allow establishment.
	Hedge trimming to maintain shape and size	One side every 2–3 years (autumn/winter)	Post-establishment phase; ensure work is outside nesting season (March–September inclusive).
	Consider requirement to coppice or lay sections of the hedge	Every 10–15 years	Rotate sections to maintain structural diversity and prolong hedge lifespan.
Ground Cover Management	Maintain wildflower or grass buffer alongside hedge	As part of Content Farm Grassland management (see Section 3)	

5.2.4. Long-Term Monitoring Regime

Long-term Monitoring Regime					
Component	**Indicator**	**Method**	**Frequency**	**Thresholds for Success**	**Triggers for Intervention**
Plant Survival	Newly planted whips & saplings have established in healthy condition	Species establishment surveys; health check of planted saplings.	Years 1, 2, 3, 5, 10, 15, 20, 30.	Whips & saplings with 100% survival rate.	Any dead saplings replaced in the first 5 years; <80% survival rate of planted saplings subsequently
Growth and Vigour	Growth rate (height, foliage density)	Visual Assessment	Annually during establishment period (~ Years 1 – 4) in autumn	Visible annual growth; dense and healthy foliage	Stunted growth or sparse foliage indicating stress or poor conditions.
Tree Guard Condition	Intactness and position of tree guards	Visual inspection	Annually during establishment period (~ Years 1 – 4) in autumn	Guards intact and appropriately positioned	Damaged, missing, or constrictive tree guards.
Watering Needs	Signs of drought stress	Visual observation	Years 1 & 2 - monthly during dry periods in the summer	Absence of indicators of drought stress such as wilting	Visible signs of drought stress
Weed Control	Presence of weeds near hedge base	Visual inspection	Establishment phase (~Years 1-4) biannually – once in spring, once in mid-summer	Minimal weed presence around plants	High weed density which can be seen as competing with plants for resources.

Appendix 1 – Woodland W11 Species List

Species Name		Status	
Latin name	**Common name**	**Recorded On Site**	**Recorded On Scilly**
Agrostis capillaris	Common Bent	Yes	Yes
Digitalis purpurea	Foxglove	Yes	Yes
Galium aparine	Cleavers	Yes	Yes
Holcus lanatus	Yorkshire fog	Yes	Yes
Hyacinthoides non-scripta	Bluebell	Yes	Yes
Pteridium aquilinum	Bracken	Yes	Yes
Ranunculus repens	Creeping Buttercup	Yes	Yes
Rubus fruticosus agg.	Bramble spp.	Yes	Yes
Agrostis vinealis	Brown Bent	No	Yes
Ajuga reptans	Bugle	No	Yes
Angelica sylvestris	Wild Angelica	No	Yes
Anthoxanthum odoratum	Sweet Vernal grass	No	Yes
Athyrium filix-femina	Lady Fern	No	Yes
Blechnum spicant	Hard Fern	No	Yes
Brachypodium sylvaticum	False brome	No	Yes
Calluna vulgaris	Heather	No	Yes
Carex pilulifera	Pill Sedge	No	Yes
Cerastium fontanum	Common Mouse ear	No	Yes
Conopodium majus	Pignut	No	Yes
Dryopteris affinis	Scaly Male Fern	No	Yes
Dryopteris dilatata	Broad Buckler Fern	No	Yes
Dryopteris filix-mas	Male Fern	No	Yes
Erica cinerea	Bell Heather	No	Yes
Galium saxatile	Heath Bedstraw	No	Yes
Geranium robertianum	Herb Robert	No	Yes
Holcus mollis	Creeping Soft grass	No	Yes
Hypericum pulchrum	Slender St Johns wort	No	Yes
Luzula campestris	Field Wood rush	No	Yes
Luzula multiflora	Heath Wood rush	No	Yes
Lysimachia nemorum	Yellow Pimpernel	No	Yes
Oxalis acetosella	Wood sorrel	No	Yes
Poa trivialis	Rough Meadow grass	No	Yes
Potentilla erecta	Tormentil	No	Yes
Primula vulgaris	Primrose	No	Yes
Prunella vulgaris	Selfheal	No	Yes
Ranunculus acris	Meadow Buttercup	No	Yes
Stellaria holostea	Greater Stitchwort	No	Yes
Teucrium scorodonia	Wood Sage	No	Yes
Veronica chamaedrys	Germander Speedwell	No	Yes
Veronica officinalis	Heath Speedwell	No	Yes

Species Name		Status	
Latin name	**Common name**	**Recorded On Site**	**Recorded On Scilly**
Viola riviniana	Common Dog violet	No	Yes
Anemone nemorosa	Wood Anemone	No	No
Campanula rotundifolia	Harebell	No	No
Convallaria majalis	Lily of the valley	No	No
Deschampsia cespitosa	Tufted Hair grass	No	No
Deschampsia flexuosa	Wavy Hair grass	No	No
Lathyrus linifolius	Bitter vetch	No	No
Luzula pilosa	Hairy Wood rush	No	No
Luzula sylvatica	Great Wood rush	No	No
Melampyrum pratense	Common Cow wheat	No	No
Oreopteris limbosperma	Lemon Scented Fern	No	No
Pyrola minor	Common Wintergreen	No	No
Rubus idaeus	Raspberry	No	No
Rubus saxatilis	Stone Bramble	No	No
Succisa pratensis	Devils bit Scabious	No	No
Trientalis europaea	Chickweed wintergreen	No	No
Vaccinium myrtillus	Bilberry	No	No
Vaccinium vitis-idaea	Cowberry	No	No

Appendix 2 – Lowland Meadow MG5/U1 Species List

Species Name		Presence on Lists			
Latin name	**Common name**	**U1**	**MG5**	**G3a Indicator**	**Scilly**
Carex flacca	Glaucous Sedge	No	Yes	Yes	Yes
Carex panicea	Carnation Sedge	No	Yes	Yes	Yes
Centaurea nigra	Common Knapweed	No	Yes	Yes	Yes
Conopodium majus	Pignut	No	Yes	Yes	Yes
Filipendula ulmaria	Meadow-sweet	No	Yes	Yes	Yes
Galium verum	Lady's Bedstraw	Yes	Yes	Yes	Yes
Lathyrus pratensis	Meadow Vetchling	No	Yes	Yes	Yes
Leontodon hispidus	Rough Hawkbit	Yes	Yes	Yes	Yes
Leucanthemum vulgare	Oxeye Daisy	No	Yes	Yes	Yes
Lotus corniculatus	Bird's-foot Trefoil	Yes	Yes	Yes	Yes
Pimpinella saxifraga	Burnet-saxifrage	No	Yes	Yes	Yes
Potentilla erecta	Tormentil	Yes	Yes	Yes	Yes
Rhinanthus minor	Yellow Rattle	No	Yes	Yes	No
Achillea millefolium	Yarrow	Yes	Yes	No	Yes
Agrostis canina	Velvet Bent	Yes	No	No	Yes
Agrostis capillaris	Common Bent	Yes	Yes	No	Yes
Agrostis stolonifera	Creeping Bent	Yes	Yes	No	Yes
Aira praecox	Early Hair-grass	Yes	No	No	Yes
Alopecurus pratensis	Meadow Foxtail	No	Yes	No	Yes
Anthoxanthum odoratum	Sweet Vernal-grass	Yes	Yes	No	Yes
Anthyllis vulneraria	Kidney Vetch	Yes	No	No	Yes
Aphanes arvensis	Parsley-piert	Yes	No	No	Yes
Arabidopsis thaliana	Thale Cress	Yes	No	No	Yes
Arenaria serpyllifolia	Thyme-leaved Sandwort	Yes	No	No	Yes
Arrhenatherum elatius	False Oat-grass	No	Yes	No	Yes
Avenula pubescens	Downy Oat-grass	No	Yes	No	Yes
Bellis perennis	Daisy	No	Yes	No	Yes
Bromus hordeaceus	Soft-brome	Yes	Yes	No	Yes
Bromus sterilis	Barren Brome	Yes	No	No	Yes
Calluna vulgaris	Heather	Yes	No	No	Yes
Cardamine pratensis	Cuckoo Flower	No	Yes	No	Yes
Carex arenaria	Sand Sedge	Yes	No	No	Yes
Centaurium erythraea	Common Centaury	Yes	No	No	Yes
Cerastium fontanum	Common Mouse-ear	Yes	Yes	No	Yes
Cirsium arvense	Creeping Thistle	No	Yes	No	Yes
Crepis capillaris	Smooth Hawk's-beard	No	Yes	No	Yes
Cynosurus cristatus	Crested Dog's-tail	No	Yes	No	Yes
Dactylis glomerata	Cock's-foot	Yes	Yes	No	Yes
Danthonia decumbens	Heath-grass	No	Yes	No	Yes
Epilobium angustifolium	Rosebay Willowherb	Yes	No	No	Yes
Erodium cicutarium	Common Stork's-bill	Yes	No	No	Yes
Festuca ovina	Sheep's Fescue	Yes	Yes	No	Yes

Species Name		Presence on Lists			
Latin name	**Common name**	**U1**	**MG5**	**G3a Indicator**	**Scilly**
Festuca rubra	Red Fescue	Yes	Yes	No	Yes
Galium saxatile	Heath Bedstraw	Yes	No	No	Yes
Geranium molle	Dove's-foot Cranesbill	Yes	No	No	Yes
Glechoma hederacea	Ground-ivy	Yes	No	No	Yes
Heracleum sphondylium	Hogweed	No	Yes	No	Yes
Holcus lanatus	Yorkshire-fog	Yes	Yes	No	Yes
Hypochoeris radicata	Cat's-ear	Yes	Yes	No	Yes
Juncus articulatus	Jointed Rush	No	Yes	No	Yes
Juncus effusus	Soft-rush	No	Yes	No	Yes
Juncus inflexus	Hard Rush	No	Yes	No	Yes
Koeleria macrantha	Crested Hair-grass	Yes	Yes	No	Yes
Leontodon autumnalis	Autumnal Hawkbit	No	Yes	No	Yes
Lolium perenne	Perennial Rye-grass	No	Yes	No	Yes
Luzula campestris	Field Wood-rush	Yes	Yes	No	Yes
Myosotis ramosissima	Early Forget-me-not	Yes	No	No	Yes
Ophioglossum vulgatum	Adder's-tongue	No	Yes	No	Yes
Ornithopus perpusillus	Bird's-foot	Yes	No	No	Yes
Phleum pratense	Timothy	Yes	Yes	No	Yes
Plantago coronopus	Buck's-horn Plantain	Yes	No	No	Yes
Plantago lanceolata	Ribwort Plantain	Yes	Yes	No	Yes
Poa annua	Annual Meadow-grass	Yes	No	No	Yes
Poa pratensis	Smooth Meadow-grass	No	Yes	No	Yes
Poa trivialis	Rough Meadow-grass	No	Yes	No	Yes
Potentilla reptans	Creeping Cinquefoil	Yes	Yes	No	Yes
Prunella vulgaris	Selfheal	No	Yes	No	Yes
Pteridium aquilinum	Bracken	Yes	No	No	Yes
Quercus robur	Pedunculate Oak/English Oak	Yes	No	No	Yes
Ranunculus acris	Meadow Buttercup	No	Yes	No	Yes
Ranunculus bulbosus	Bulbous Buttercup	No	Yes	No	Yes
Ranunculus repens	Creeping Buttercup	No	Yes	No	Yes
Reseda lutea	Wild Mignonette	Yes	No	No	Yes
Rubus fruticosus agg.	Bramble	Yes	No	No	Yes
Rumex acetosa	Common Sorrel	Yes	Yes	No	Yes
Rumex acetosella	Sheep's Sorrel	Yes	No	No	Yes
Sagina apetala	Annual Pearlwort	Yes	No	No	Yes
Sagina procumbens	Procumbent Pearlwort	Yes	No	No	Yes
Sedum acre	Biting Stonecrop	Yes	No	No	Yes
Sedum album	White Stonecrop	Yes	No	No	Yes
Sedum anglicum	English Stonecrop	Yes	No	No	Yes
Senecio jacobaea	Common Ragwort	Yes	Yes	No	Yes
Senecio vulgaris	Groundsel	Yes	No	No	Yes
Spergularia rubra	Sand Spurrey	Yes	No	No	Yes
Stachys betonica	Betony	No	Yes	No	Yes
Stellaria media	Chickweed	Yes	No	No	Yes

Species Name		Presence on Lists			
Latin name	**Common name**	**U1**	**MG5**	**G3a Indicator**	**Scilly**
Taraxacum officinale agg.	Dandelion	No	Yes	No	Yes
Teucrium scorodonia	Wood Sage	Yes	No	No	Yes
Trifolium campestre	Hop Trefoil	Yes	No	No	Yes
Trifolium dubium	Lesser Trefoil	Yes	Yes	No	Yes
Trifolium pratense	Red Clover	No	Yes	No	Yes
Trifolium repens	White Clover	Yes	Yes	No	Yes
Trisetum flavescens	Yellow Oat-grass	No	Yes	No	Yes
Ulex europaeus	Gorse	Yes	No	No	Yes
Ulex minor	Dwarf Gorse/Western Gorse	Yes	No	No	Yes
Umbilicus rupestris	Navelwort	Yes	No	No	Yes
Urtica dioica	Common Nettle	Yes	No	No	Yes
Veronica agrestis	Green Field-speedwell	Yes	No	No	Yes
Veronica arvensis	Wall Speedwell	Yes	No	No	Yes
Veronica chamaedrys	Germander Speedwell	Yes	Yes	No	Yes
Veronica polita	Grey Field-speedwell	Yes	No	No	Yes
Vicia cracca	Tufted Vetch	No	Yes	No	Yes
Vicia sativa	Common Vetch	Yes	No	No	Yes
Viola tricolor	Field Pansy	Yes	No	No	Yes