



RUSHLAKE GREEN VILLAGE GREEN, EAST SUSSEX

Biodiversity Enhancement Strategy Report

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SUMMARY

- A grassland assessment has been undertaken at Rushlake Green village green in November 2020.
- The aims of the survey were to record and evaluate the plant species and other communities present in order to inform a grassland management regime to enhance biodiversity.
- A waxcap grassland community of Regional Importance has been identified. The grassland fungi community should continue to be monitored in order to provide data from multiple seasons. Subject to further consultation with the relevant authorities, it is possible the Site will be designated a Local Wildlife Site.
- The majority of the green should be managed for its grassland fungi community. The current management regime is sympathetic to the fungi community and should continue to be implemented; therefore basic principles of this management have been outlined.
- Four areas of the green with lower interest for fungi could be managed for their botanical interest: the mowing regime in these areas will be relaxed in order to allow the grasses and herbaceous species to flower and set seed, with the aim of enhancing floral diversity. Arisings will need to be removed after cutting.
- Native, nectar rich planting is recommended for the existing flower beds on the main green.
- Additional recommendations have been made: bird boxes and insect boxes can be installed, and basic advice has been provided in relation to the new access points onto the main green.

1.0 INTRODUCTION

1.1 Corylus Ecology has undertaken an assessment of the grassland at Rushlake Green village green in order to inform a biodiversity enhancement strategy. The village green is centred at Ordnance Survey grid reference TQ 62713 18419 and is hereinafter referred to as 'the Site'. The Site comprises the main village green, which is triangular in shape, and there are a number of small outliers to the north and south, separated by roads and footpaths.

1.2 The objectives of the botanical assessment were to:

- Record and evaluate the plant species and communities present in the grassland;
- Assess whether the grassland supports a plant community or other community of conservation value;
- Recommend a grassland management regime to enhance biodiversity;
- Suggest additional ecological enhancements for the area; and
- Identify educational opportunities and recommend measures to benefit the local community.

2.0 METHODOLOGY

2.1 Grassland Assessment

- 2.1.1 A grassland assessment was undertaken on 5th November 2020 by Jenny Passmore and Becky Clover of Corylus Ecology. The locations of the surveyed areas are shown on Figure 1. The survey included a walkover of all areas of the Site, listing the species seen and their relative frequency and abundance (using the DAFOR scale). Note was also made of the general features of the grassland, such as sward height and management. A dedicated NVC quadrat survey was not undertaken; species lists of each area were appropriate and sufficient to inform the aims of the survey.
- 2.1.2 On the basis of the species recorded, their frequency and abundance, the grassland was referred to the most appropriate habitat type and, where possible, NVC community. The Farm Environment Plan (Natural England, 2010) manual was used to assess the grassland type based on the presence and frequency of any indicator species.
- 2.1.3 The species lists for all of the grassland areas surveyed is presented in Appendix 1. All common and scientific names follow Stace (2019) and Hubbard (1992). Plant identification was made using a variety of identification keys. The principal keys used were Stace (2019), Rose (2006) and Hubbard (1992).

2.2 Grassland Fungi Survey

- 2.2.1 During the grassland assessment on 5th November 2020 several species of grassland fungi were recorded, including waxcaps. A follow-up walkover fungi survey was therefore undertaken by Martin Allison (an experienced mycologist) and Becky Clover of Corylus Ecology on 26th November 2020.

Evaluating the Importance of a Site for Grassland Fungi

Site of Special Scientific Interest (SSSI) Designation

- 2.2.2 There are two approaches to site evaluation for grassland fungi assemblages: a) a scoring system based on weighted indicator species, and b) simple species counts (Genney et al, 2009). Although indicator species are useful for identifying potentially good sites when only one or two visits have been undertaken, it is generally true that the information should be supplemented by all available species lists to inform a judgement as to the importance of the site. Species totals over at least three years are the most reliable way of identifying high quality sites. However, a high count on a single site visit can indicate a site of high conservation value for grassland fungi. While a minimum recording period is not stipulated, e.g. a site may qualify after a single visit, the persistence of populations is important and carrying out several targeted species/assemblage surveys is advisable (Bosanquet et al, 2018).

- 2.2.3 A site should be considered for notification if the total count of waxcap species reaches or exceeds 19 (Bosanquet et al, 2018). Sites that fail to reach this threshold but have records of 12-18 taxa should be prioritised for resurvey with multiple visits; regional importance may also be a consideration.
- 2.2.4 Sites may not meet the suggested thresholds for waxcap species but, if they contain the suggested number of species in the fungi groups below based on accumulated species counts, they are likely exceptional for these fungi groups (Bosanquet et al, 2018):
- Clubs, spindles and corals *Clavarioid* fungi – 7
 - Pinkgills *Entoloma* – 15
 - Earth tongues *Geoglossoid* fungi – 5
 - Crazy caps, fanvaults and meadowcaps *Dermoloma*, *Camarophylloopsis*, *Hodophilus*, *Porpoloma* (*Pseudotracholoma metapodium* – 3
- 2.2.5 Certain species of grassland fungi tend to be recorded at sites that support a high overall grassland fungal diversity, and are referred to as 'high diversity indicators'. The 'high diversity indicator' list for waxcap fungi is included as Appendix 2 of this report (Bosanquet et al, 2018). If a site fails to reach the selection thresholds but supports any of the 'high diversity indicator' waxcap species, and/or other 'high diversity indicator' fungi (not included in Appendix 2), the site should be prioritised for resurvey with multiple visits. These species have been chosen on grounds of their rarity or scarcity, strong association with ancient grassland sites, UK-wide distribution and international status.
- 2.2.6 It should be noted that these threshold values are for guidance only and can indicate when a site should be considered for SSSI designation. Regional variation and the actual species recorded in relation to their known distribution are important factors which need to be taken into account. Local expert knowledge is therefore also key in evaluating whether a site should be considered for SSSI status.

Conservation Value Classification

- 2.2.7 The Danish mycologist Rald's (1995) classification of grassland quality based on the number of waxcaps is widely accepted as applicable to all parts of north-western Europe, including the UK. Rald's classification is as follows (Genney et al, 2009):

Table 1 – Waxcap assessment of Rald (1995)

Conservation value	Single visit <i>Hygrocybe</i> (waxcap) taxa	Total <i>Hygrocybe</i> taxa
Internationally important	15 +	22 +
Nationally important	11 – 14	17 – 21
Regionally important	6 – 10	9 – 16
Locally important	3 – 5	4 – 8
Of no importance	1 - 2	1 - 3

3.0 RESULTS

- 3.1 The areas surveyed are shown on Figure 1. Each of the areas are described below, with a general species list provided. The full species lists for each area are in Appendix 1.

3.2 Area A

- 3.2.1 The main village green (area A) measures approximately 0.8ha and is triangular in shape. It is all mown to a short sward height (approximately 25mm), with no longer areas of grassland present. There is a steep bank on the north-eastern edge of the green which is also mown short. Small ornamental flower beds are present in the north and south of the green. The area is occasionally used for recreation, with the annual horticultural show taking place here: a marquee is erected in the northern part of the green for the duration of this event.
- 3.2.2 All grassland and herbaceous species recorded in area A, and their relative abundance, are shown in Appendix 1. The most abundantly occurring grass and herbaceous species on the green are common bent *Agrostis capillaris*, creeping bent *Agrostis stolonifera* and common cat's-ear *Hypochaeris radicata*. Other grass species present are frequent red fescue *Festuca rubra*, occasional rough meadow-grass *Poa trivialis*, annual meadow-grass *Poa annua* and perennial rye-grass *Lolium perenne*, with cock's-foot *Dactylis glomerata* and Yorkshire-fog *Holcus lanatus* occurring rarely. Frequently occurring herbaceous species are creeping buttercup *Ranunculus repens* and yarrow *Achillea millefolium*, with abundant mouse-ear hawkweed *Pilosella officinarum* in patches. The margins of the green, adjacent to the surrounding roads, are subject to a higher level of disturbance due to footfall. They contain a range of species indicative of this, including groundsel *Senecio vulgaris*, common knotgrass *Polygonum aviculare*, creeping thistle *Cirsium arvense* and pineapple-weed *Matricaria discoidea*.

3.3 Area B

- 3.3.1 To the north of the main green, across the road and in front of residential properties, are four grass verges (areas B1 – B4). These are predominantly managed to a short sward height, although the western section (B4) contains slightly longer grass and herbaceous species. The most abundant grass species in these areas is red fescue, with frequent Yorkshire-fog and common bent and occasional false oat-grass *Arrhenatherum elatius* and cock's-foot. Abundant and frequently occurring herbaceous species include mouse-ear hawkweed (which is locally dominant in patches), creeping buttercup and common cat's-ear. Occasionally or rarely occurring species in area B, which were not recorded in area A, include meadow vetchling *Lathyrus pratensis*, agrimony *Agrimonia eupatoria* and Lords-and-Ladies *Arum maculatum*.
- 3.3.2 Areas B1 – B3 are open and relatively sunny, with a gentle south facing slope. Area B4 is slightly more shaded by the adjacent trees (with leaf litter across this grassland) and contains shade-tolerant species

such as broad-leaved dock, cow parsley *Anthriscus sylvestris* and common hogweed *Heracleum sphondylium*.

3.4 **Area C**

- 3.4.1 To the south of the main green are seven small grass verges. Three of these (C1 – C3) are narrow roadside verges which comprise short mown grassland. Area C1 is dominated by common bent, with frequent dandelion *Taraxacum officinale* and ribwort plantain *Plantago lanceolata* and occasional perennial rye-grass, red fescue, creeping buttercup and common cat's-ear. Herbaceous species including white clover *Trifolium repens*, red clover *Trifolium pratense* and common bird's-foot trefoil *Lotus corniculatus* occur rarely. Area C2 contains abundant red fescue, frequent ribwort plantain, common cat's-ear, yarrow and occasional common mouse-ear *Cerastium fontanum* and selfheal *Prunella vulgaris*. Area C3 has also been managed as a short lawn: it contains abundant perennial rye-grass, frequent common bent, creeping buttercup, white clover and daisy, as well as occasional common sorrel *Rumex acetosa* and common knapweed *Centaurea nigra*.
- 3.4.2 Areas C4 – C7 are on a slight bank sloping down to the west. They contain similar species to those within C1 – C3, with abundant red fescue and frequent common bent, creeping bent, Yorkshire-fog, yarrow, common knapweed and common cat's-ear. Occasional heath speedwell *Veronica officinalis* is present in area C5, as well as frequent springy turf-moss *Rhytidiadelphus squarrosus*.
- 3.4.3 Area C6 is predominantly shaded by a mature lime *Tilia x europaea* tree, with leaf litter throughout the grass. It contains abundant red fescue, with frequent Yorkshire-fog and common bent, and occasional herbaceous species including common cat's-ear, cow parsley and creeping buttercup, as well as springy turf-moss. Area C7 has a steep cut bank in the south, adjacent to a driveway: wild marjoram *Origanum vulgare* and common bird's-foot trefoil are present on this bank. There is also a thin strip (<1m wide) of unmanaged, long grassland alongside Cow Beech Road in area C7. The longer grassland contains rough meadow-grass, red clover, common knapweed, common sorrel, creeping buttercup, ribwort plantain, dandelion and common ragwort *Senecio jacobaea*.

3.5 **Fungi Species**

- 3.5.1 Throughout the green, multiple grassland fungi species, predominantly waxcaps, were recorded:

Waxcaps (*Hygrocybe*)

1. Scarlet waxcap *Hygrocybe coccinea*
2. Golden waxcap *Hygrocybe chlorophana*
3. Snowy waxcap *Hygrocybe virginea*

-
4. Parrot waxcap *Hygrocybe psittacina*
 5. Spangle waxcap *Hygrocybe insipida*
 6. Cedarwood waxcap *Hygrocybe russocoriacea*
 7. Crimson waxcap *Hygrocybe punicea* (a 'high diversity indicator' in Bosanquet et al, 2018)
 8. Meadow waxcap *Hygrocybe pratensis*
 9. Butter waxcap *Hygrocybe ceraceais*
 10. Slimy waxcap *Hygrocybe irrigata*
 11. Blackening waxcap *Hygrocybe conica*

Other fungi: *Clavariaceae*, *Entoloma*, *Galerina*, *Mycena*

12. Apricot club *Clavulinopsis luteoalba*
13. Mealy pink gill *Entoloma prunuloides*
14. *Galerina* sp.
15. Drab bonnet *Mycena aetites*

- 3.5.2 Waxcaps were recorded in almost all areas of the grassland, with the exception of area B4. The areas with the greatest diversity of waxcaps (with three or more species present) were area A, B1 – B3, and C4 – C7.

4.0 EVALUATION

4.1 Grassland Assessment

- 4.1.1 The grassland across all areas of the village green is relatively similar in species composition and management. The herbaceous species and their cover are indicative of semi-improved grassland habitats (Natural England, 2010), with common cat's ear, common sorrel, field wood-rush, germander speedwell, ribwort plantain, red clover, selfheal and yarrow all occurring. The grass species present are also consistent with semi-improved grassland: common bent, creeping bent, false oat-grass, red fescue and Yorkshire-fog; perennial rye grass occurs, but covers less than 25% of the sward. There are a number of species associated with unimproved grassland present, but they only occur rarely or are localised in the sward. For example, oxeye daisy and wild marjoram can be indicators of calcareous grassland, whilst agrimony, common bird's-foot trefoil, meadow vetchling, oxeye daisy and glaucous sedge can be indicators of neutral grassland / lowland meadow. None of these indicators occur regularly throughout the village green: they occur in localised areas and only rarely overall.
- 4.1.2 The soil in this location is 'slightly acid loamy and clayey soils with impeded drainage' (Cranfield Soil and Agrifood Institute, 2020). This is reflected in the species assemblage which does not have a strong association with calcareous or acidic soil, but is tending towards those species that prefer more acidic soils. The grassland type appears to be semi-improved, but it is tending towards lowland dry acid grassland or NVC community U1 *Festuca ovina* - *Agrostis capillaris* - *Rumex acetosella* acid grassland (Natural England, 2010): mouse-ear hawkweed is locally abundant, there is abundant common bent and a high frequency of moss, particularly on the main green (area A). Heath speedwell is also an indicator of acid grassland, and this occurs occasionally in area C. To qualify as lowland dry acid grassland, the Site would need to contain at least one frequent and three occasional indicators throughout the sward. No other indicator species, such as heathers, were present at the time of the survey. However, it is noted that the survey was undertaken in November and a dedicated NVC quadrat survey has not yet been undertaken in the appropriate season, so further surveys may alter this evaluation.
- 4.1.3 Although the botanical species are typical of semi-improved grassland, the frequency of waxcaps and other grassland fungi indicate that the grassland is semi-natural and unimproved: it has not been enriched with fertiliser and is relatively nutrient-poor.

Current Management

- 4.1.4 The village green and outlying areas of grassland are mown regularly (16 visits per year) and the cuttings are removed. The contractor also deep tine aerates and scarifies the main green annually. Areas A, B and C1 – C3 were very short at the time of survey, with a relatively tight sward. Areas C4 – C7 appeared less regularly or intensively managed, with a looser sward and one area of unmanaged grassland in area

C7. In these areas, mouse-ear hawkweed occurs less frequently, but the general species composition is similar to the rest of the village green.

4.2 Fungi Species

- 4.2.1 Waxcap grassland fungi are of conservation interest as indicators of semi-natural, mycologically-rich unimproved grasslands: a habitat which is seriously threatened throughout the UK and Europe. The species concerned are strongly associated with unfertilised, unimproved, nutrient-poor grasslands. They often thrive in short, moss-rich, often highly grazed swards, which may be of low interest for other organisms such as flowering plants (English Nature, 2003).
- 4.2.2 The current management of the village green and outliers is sympathetic to the waxcap community as it keeps the sward low and tight throughout the year; this allows the fruits of the fungi to establish and distribute spores during the autumn.
- 4.2.3 A total of 11 waxcap *Hygrocybe* species, one *Clavariaceae* and one *Entoloma* species were recorded in November 2020. For the Site to be considered as a SSSI, the number of waxcap species present would need to exceed 19 (Bosanquet et al, 2018). Based on Rald's classification, the Site is of Regional Importance (9-16 *Hydrocybe* species from the two visits) for waxcaps and therefore is likely to be eligible for consideration as a Local Wildlife Site, subject to further consultation. One 'high diversity indicator' was recorded: crimson waxcap. Surveys in 2021 and beyond, especially for *Entoloma* and the *Clavariaceae* species, should be carried out to add to historic records, inform management and any designation.
- 4.2.4 As a comparison, at the local St Dunstan's Farm Meadows SSSI, located 1.9km to the north-west, 23 species have been recorded (Russell, 2004). It is the second richest site in England and of international importance. The SSSI supports unimproved grassland fields managed using traditional techniques.
- 4.2.5 As the village green is of Regional Importance for its waxcap community, it is recommended that the Site is notified to the Sussex Wildlife Trust and Sussex Biological Records Centre. This is in the interest of biological recording and long-term management and protection. The Site potentially fulfils the criteria to be designated as a Local Wildlife Site and work is ongoing to establish the status of the Site in this regard.

5.0 BIODIVERSITY ENHANCEMENT STRATEGY

5.1 Aims of Enhancement Strategy

- 5.1 The community of highest ecological value within the Site is the waxcap community, which is of Regional Importance. The management of the grassland to continue to benefit the grassland fungi is therefore the main aim of this strategy. However, selected areas of grassland can be managed differently in order to improve their floristic diversity and provide an improved source of nectar for pollinators. The recommended management regimes, as well as general biodiversity enhancements, are set out below and in Appendices 3 and 4. Additional advice has been provided in relation to the proposed new accessible entranceways onto the main green.

5.2 Management Strategy for Grassland Fungi

- 5.2.1 It appears that the current management of the village green is working well for the grassland fungi community in most areas. Waxcaps were recorded in almost all areas of grassland, with the exception of area B4 in the north. Fewer species were recorded in areas C1 – C3, and it is considered that these areas (B4, C1 – C3) could be managed for wildflowers rather than the grassland fungi in order to achieve the second aim of this enhancement strategy. Figure 2 shows which areas will be managed for each target aim.
- 5.2.2 The management principles for waxcap grasslands are provided in **Appendix 3** and should continue to be implemented in and around the village green for areas **A, B1 – B3 and C4 – C7** (highlighted in yellow on Figure 2).

5.3 Management Strategy for Botanical Interest and Pollinators

- 5.3.1 Areas **B4 and C1 – C3** (marked in **pink** on Figure 2) will be managed for their botanical interest in order to benefit pollinators. These areas can be cut less often in order to increase their biodiversity. It should be noted that the recommendations have not taken into account visibility splays for the roads around these areas; the Highways Agency or local council may need to be consulted. The management principles for botanical enhancements are provided in **Appendix 4**.

5.4 Additional Recommendations

- 5.4.1 In addition to the grassland management, the following biodiversity enhancements are recommended:
- **Bird Boxes:** Two bird boxes could be installed on the mature lime tree in area C6. These could include nest boxes favoured by tits (*Schwegler 1B Nest Box* or similar), open-fronted boxes that are attractive to blackbirds and thrushes (*Vivara Pro Woodstone oval open nest box* or similar) or smaller

nesting boxes favoured by robins or wrens and smaller birds (*Schwegler 2H Robin Box* and *Schwegler 1ZA wren roundhouse* or similar).

- **Insect Boxes:** In the areas where mowing is to be relaxed, insect boxes could be installed on small posts. 'Bee bricks' and 'insect towers' provide habitat for solitary bees, lacewings and ladybirds. Leaving small log piles in these areas will also provide dead wood habitat for a range of invertebrates.
- **Planting:**
 - Native, nectar rich planting can be added to area B4, as well as the existing flower beds on the main green (area A). Area B4 is shaded by the overhanging trees to the east. In this area, native shade tolerant planting such as foxglove *Digitalis purpurea*, betony *Stachys officinalis*, herb Robert *Geranium robertianum*, primrose *Primula vulgaris* and greater stitchwort *Stellaria holostea* would be suitable.
 - In the two existing flower beds on the main green (area A), plants which flower throughout the season should be planted in order to provide a source of nectar from spring to autumn. Species such as heathers *Calluna vulgaris* or *Erica* sp., as well as lavenders *Lavandula* sp. would be suitable.

5.4.2 Additional access points onto the main green for visitors with limited mobility are required. When these are installed, care should be taken to avoid damaging surrounding areas of the grassland. Any materials or spoil should be taken away promptly.

REFERENCES

English Nature. March 2003. *Waxcap-grasslands - an assessment of English sites. Report 555*

Bosanquet, S.D.S., Ainsworth, A.M., Cooch, S.P., Genney, D.R., & Wilkins, T.C. 2018. *Guidelines for the Selection of Biological SSSIs. Part 2: Detailed Guidelines for Habitats and Species Groups. Chapter 14 Non-lichenised Fungi*. Joint Nature Conservation Committee, Peterborough.

Cranfield Soil and Agrifood Institute. 2020. *Soilscapes*. Website Accessed November 2020

Genney, D.R., Hale, A.D., Woods, R.G. and Wright, M. 2009. *Guidelines for Selection of Biological SSSIs Chapter 18 Grassland Fungi*. Joint Nature Conservation Committee, Peterborough.

Natural England. 2010. *Higher Level Stewardship: Farm Environment Plan (FEP) Manual. Third Edition*

Plantlife. 2014. *Waxcaps and grassland fungi: A guide to identification and management*. Cardiff

Plantlife. 2016. *The Good Verge Guide: a different approach to managing our waysides and verges*. Salisbury.

Rald, E. 1995. *Vokshatte som indikatorarter for mykologisk verifulde overdrevslokaliteter*. Svampe 11:57-65

Russell, P. 2004. *A Review of Wildlife Recording in East and West Sussex in 2004: Fungi*. Published by Sussex Biological Records Centre

Russell, P. 2005. *Grassland Fungi and the Management History of St Dunstan's Farm*. Field Mycology. Vol 6, Issue 3, pp 85-91

Stace, C. 2019. *New Flora of the British Isles. 4th Edition*. Cambridge University Press.

FIGURES



Key



Area A

OS Licence Number:
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revision	description			date	checked by			
	<p>Corylus Ecology Ltd, Unit A3, Speldhurst Business Park, Went Farm, Langton Road, Speldhurst, Kent TN3 0NR. Corylus Ecology is the trading name of Corylus Ecology Ltd registered in England. No 2005503. Registered Office: Harwood House, Harwood, Ashford, Kent TN24 8DT</p> 							
Project: 20138 Rushlake Green Village Green								
Title: Map of Areas Surveyed								
drawing no.			Figure 1					
scale	NTS	size	A3	date	30/11/2020			
CAD filename				drawn	BC			
				checked	JP			
Figure_1.dwg								

Figure 3 - Annotated Photographs of Areas Surveyed



Area A (main green) - photograph looking north



Area A (main green) - photograph looking south



Area B2



Areas B2 (in foreground) and B1



Area C1



Areas C5 (in foreground) and C4



Longer grass in Area C7



Areas C7, C6 and C5 as seen from the road



Area C3

Figure 4 - Annotated Photographs of Fungi Recorded, November 2020 (NB. Not all species are shown here)



Scarlet waxcap



Snowy waxcap



Blackening waxcap



Meadow waxcap



Scarlet waxcap



Meadow waxcap



Golden waxcap



Meadow waxcap



Parrot waxcap



Scarlet waxcap



Meadow waxcap



Parrot waxcap

APPENDICES

Appendix 1 – Species Lists for Rushlake Green Village Green

Area A

	Common name	Latin name	Frequency
Grasses / graminoids	Common bent	<i>Agrostis capillaris</i>	Abundant
	Creeping bent	<i>Agrostis stolonifera</i>	Abundant
	Red fescue	<i>Festuca rubra</i>	Frequent
	Rough meadow-grass	<i>Poa trivialis</i>	Occasional
	Annual meadow-grass	<i>Poa annua</i>	Occasional
	Perennial rye-grass	<i>Lolium perenne</i>	Occasional
	Cock's-foot	<i>Dactylis glomerata</i>	Rare
	Yorkshire fog	<i>Holcus lanatus</i>	Rare
	Glaucous sedge	<i>Carex flacca</i>	Rare
Herbs / forbs	Common cat's-ear	<i>Hypochaeris radicata</i>	Abundant
	Creeping buttercup	<i>Ranunculus repens</i>	Frequent
	Yarrow	<i>Achillea millefolium</i>	Frequent
	Mouse-ear hawkweed	<i>Pilosella officinarum</i>	Frequent (but locally abundant)
	Ribwort plantain	<i>Plantago lanceolata</i>	Occasional
	White clover	<i>Trifolium repens</i>	Occasional
	Dandelion	<i>Taraxacum officinale</i>	Occasional
	Common sorrel	<i>Rumex acetosa</i>	Occasional
	Daisy	<i>Bellis perennis</i>	Rare
	Oxeye daisy	<i>Leucanthemum vulgare</i>	Rare
	Fox and cubs	<i>Pilosella aurantiaca</i>	Rare
	Groundsel	<i>Senecio vulgaris</i>	Rare
	Creeping thistle	<i>Cirsium arvense</i>	Rare
	Common knotgrass	<i>Polygonum aviculare</i>	Rare
	Common mouse-ear	<i>Cerastium fontanum</i>	Rare

Herbs / forbs	Pineapple-weed	<i>Matricaria discoidea</i>	Rare
	Mullein	<i>Verbascum</i> sp.	Rare
	Silverweed	<i>Potentilla anserine</i>	Rare
	Selfheal	<i>Prunella vulgaris</i>	Rare
	Common knapweed	<i>Centaurea nigra</i>	Rare
	Barren strawberry	<i>Potentilla sterilis</i>	Rare
	Thyme-leaved speedwell	<i>Veronica serpyllifolia</i>	Rare
	Common bird's-foot trefoil	<i>Lotus corniculatus</i>	Rare
	Moss		Frequent
Fungi	Scarlet waxcap	<i>Hygrocybe coccinea</i>	Rare
	Golden waxcap	<i>Hygrocybe chlorophana</i>	Rare
	Meadow waxcap	<i>Hygrocybe pratensis</i>	Rare
	Snowy waxcap	<i>Hygrocybe virginea</i>	Rare
	Cedarwood waxcap	<i>Hygrocybe russocoriacea</i>	Rare
	Crimson waxcap	<i>Hygrocybe punicea</i>	Rare
	Butter waxcap	<i>Hygrocybe ceraceais</i>	Rare
	Spangle waxcap	<i>Hygrocybe insipida</i>	Rare
	Slimy waxcap	<i>Hygrocybe irrigata</i>	Rare
	Parrot waxcap	<i>Hygrocybe psittacina</i>	Rare
	Apricot club fungus	<i>Clavulinopsis luteoalba</i>	Rare
	Mealy pink gill	<i>Entoloma prunuloides</i>	Rare

Area B

	Common name	Latin name	Frequency
Grasses / graminoids	Red fescue	<i>Festuca rubra</i>	Abundant
	Common bent	<i>Agrostis capillaris</i>	Frequent
	Yorkshire fog	<i>Holcus lanatus</i>	Frequent
	False oat-grass	<i>Arrhenatherum elatius</i>	Occasional
	Cock's-foot	<i>Dactylis glomerata</i>	Occasional
	Field wood-rush	<i>Luzula campestris</i>	Occasional
Herbs / forbs	Mouse-ear hawkweed	<i>Pilosella officinarum</i>	Abundant (and locally dominant)
	Common cat's-ear	<i>Hypochaeris radicata</i>	Frequent
	Creeping buttercup	<i>Ranunculus repens</i>	Frequent
	Yarrow	<i>Achillea millefolium</i>	Occasional
	Slender speedwell	<i>Veronica filiformis</i>	Occasional
	Ribwort plantain	<i>Plantago lanceolata</i>	Occasional
	Red clover	<i>Trifolium pratense</i>	Occasional
	Dandelion	<i>Taraxacum officinale</i>	Occasional
	Daisy	<i>Bellis perennis</i>	Occasional
	Silverweed	<i>Potentilla anserine</i>	Occasional
	Common knapweed	<i>Centaurea nigra</i>	Occasional
	Oxeye daisy	<i>Leucanthemum vulgare</i>	Rare
	Agrimony	<i>Agrimonia eupatoria</i>	Rare
	Broad-leaved dock	<i>Rumex obtusifolius</i>	Rare
	Common hogweed	<i>Heracleum sphondylium</i>	Rare
	Cow parsley	<i>Anthriscus sylvestris</i>	Rare
	Selfheal	<i>Prunella vulgaris</i>	Rare
	Common bird's-foot trefoil	<i>Lotus corniculatus</i>	Rare
	Meadow vetchling	<i>Lathyrus pratensis</i>	Rare
	Common ragwort	<i>Senecio jacobaea</i>	Rare

Herbs / forbs	Lords-and-Ladies	<i>Arum maculatum</i>	Rare
	Moss		Occasional
Fungi	Scarlet waxcap	<i>Hygrocybe coccinea</i>	Rare
	Meadow waxcap	<i>Hygrocybe pratensis</i>	Rare
	Snowy waxcap	<i>Hygrocybe virginea</i>	Rare
	Cedarwood waxcap	<i>Hygrocybe russocoriacea</i>	Rare
	Crimson waxcap	<i>Hygrocybe punicea</i>	Rare
	Apricot club fungus	<i>Clavulinopsis luteoalba</i>	Rare
	Blackening waxcap	<i>Hygrocybe conica</i>	Rare

Area C

	Common name	Latin name	Frequency
Grasses / graminoids	Red fescue	<i>Festuca rubra</i>	Abundant
	Common bent	<i>Agrostis capillaris</i>	Abundant
	Yorkshire fog	<i>Holcus lanatus</i>	Frequent
	Perennial rye-grass	<i>Lolium perenne</i>	Occasional
	Cock's-foot	<i>Dactylis glomerata</i>	Rare
	Rough meadow-grass	<i>Poa trivialis</i>	Rare
Herbs / forbs	Common cat's-ear	<i>Hypochaeris radicata</i>	Frequent
	Yarrow	<i>Achillea millefolium</i>	Frequent
	Ribwort plantain	<i>Plantago lanceolata</i>	Frequent
	Dandelion	<i>Taraxacum officinale</i>	Frequent
	Creeping buttercup	<i>Ranunculus repens</i>	Occasional
	Heath speedwell	<i>Veronica officinalis</i>	Occasional
	Mouse-ear hawkweed	<i>Pilosella officinarum</i>	Occasional
	Common sorrel	<i>Rumex acetosa</i>	Occasional
	Common bird's-foot trefoil	<i>Lotus corniculatus</i>	Occasional
	Red clover	<i>Trifolium pratense</i>	Rare
	White clover	<i>Trifolium repens</i>	Rare
	Daisy	<i>Bellis perennis</i>	Rare
	Cow parsley	<i>Anthriscus sylvestris</i>	Rare
	Wild marjoram	<i>Origanum vulgare</i>	Rare
	Agrimony	<i>Agrimonia eupatoria</i>	Rare
	Wild carrot	<i>Daucus carota</i>	Rare
	Greater plantain	<i>Plantago major</i>	Rare
	Broad-leaved dock	<i>Rumex obtusifolius</i>	Rare
	Germander speedwell	<i>Veronica chamaedry</i>	Rare
	Perforate St John's-wort	<i>Hypericum perforatum</i>	Rare

Herbs / forbs	Common mouse-ear	<i>Cerastium fontanum</i>	Rare
	Selfheal	<i>Prunella vulgaris</i>	Rare
	Common ragwort	<i>Senecio jacobaea</i>	Rare
	Springy turf-moss	<i>Rhytidiadelphus squarrosus</i>	Frequent
Fungi	Scarlet waxcap	<i>Hygrocybe coccinea</i>	Rare
	Meadow waxcap	<i>Hygrocybe pratensis</i>	Rare
	Snowy waxcap	<i>Hygrocybe virginea</i>	Rare
	Spangle waxcap	<i>Hygrocybe insipida</i>	Rare
	Golden waxcap	<i>Hygrocybe chlorophana</i>	Rare
	Crimson waxcap	<i>Hygrocybe punicea</i>	Rare
	Parrot waxcap	<i>Hygrocybe psittacina</i>	Rare
	Apricot club fungus	<i>Clavulinopsis luteoalba</i>	Rare
	Blackening waxcap	<i>Hygrocybe conica</i>	Rare
	Drab bonnett	<i>Mycena aetites</i>	Rare
	<i>Galerina</i> sp.	<i>Galerina</i> sp.	Rare

Appendix 2 – Grassland Waxcap High Diversity Indicator Species

(From Bosanquet et al, 2018)

Table 9. Grassland waxcap (*Hygrocybe* s.l.) assemblage based on taxa described in Boertmann (1995, 2010), with current names and high diversity indicator species.

Taxon for scoring (as defined in Boertmann, 2010 unless otherwise stated)	Current name ^a (following Ainsworth & Henrici, 2016; Ainsworth, 2017b)	High diversity indicator?
<i>Hygrocybe acutoconica</i> var. <i>acutoconica</i> (excl. <i>H. aurantiolescens</i> , a sand dune sp.)	<i>Hygrocybe acutoconica</i> var. <i>acutoconica</i>	
<i>Hygrocybe acutoconica</i> var. <i>konradii</i> (incl. f. <i>subglobispora</i>)	<i>Hygrocybe acutoconica</i> var. <i>konradii</i>	
<i>Hygrocybe aurantia</i>	<i>Cuphophyllus aurantius</i>	
<i>Hygrocybe aurantiosplendens</i>	<i>Hygrocybe aurantiosplendens</i>	Y
<i>Hygrocybe calciphila</i>	<i>Hygrocybe calciphila</i>	
<i>Hygrocybe calyptriformis</i>	<i>Porpolomopsis calyptriformis</i>	Y
<i>Hygrocybe canescens</i>	<i>Cuphophyllus canescens</i>	Y
<i>Hygrocybe cantharellus</i>	<i>Hygrocybe cantharellus</i> (s. Boertmann and British authors)	
<i>Hygrocybe ceracea</i>	<i>Hygrocybe ceracea</i>	
<i>Hygrocybe chlorophana</i>	<i>Hygrocybe chlorophana</i>	
<i>Hygrocybe citrinovirens</i>	<i>Hygrocybe citrinovirens</i>	Y
<i>Hygrocybe coccinea</i> (excl. <i>H. marchii</i> s. Boertmann, 1995)	<i>Hygrocybe coccinea</i>	
<i>Hygrocybe colemanniana</i>	<i>Cuphophyllus colemannianus</i>	Y
<i>Hygrocybe conica</i> var. <i>conica</i>	<i>Hygrocybe conica</i>	
<i>Hygrocybe constrictospora</i>	<i>Hygrocybe constrictospora</i>	
<i>Hygrocybe flavipes</i> (excl. <i>H. radiata</i>)	<i>Cuphophyllus flavipes</i>	Y
<i>Hygrocybe fornicata</i> var. <i>fornicata</i>	<i>Cuphophyllus fornicatus</i>	
<i>Hygrocybe fornicata</i> var. <i>lepidopus</i>	<i>Cuphophyllus lepidopus</i>	
<i>Hygrocybe glutinipes</i>	<i>Hygrocybe glutinipes</i>	
<i>Hygrocybe helobia</i>	<i>Hygrocybe helobia</i>	
<i>Hygrocybe ingrata</i>	<i>Neohygrocybe ingrata</i>	Y
<i>Hygrocybe insipida</i>	<i>Hygrocybe insipida</i>	
<i>Hygrocybe intermedia</i>	<i>Hygrocybe intermedia</i>	Y
<i>Hygrocybe irrigata</i>	<i>Gliophorus irrigatus</i>	

<i>Hygrocybe lacmus</i>	<i>Cuphophyllus lacmus</i>	Y
<i>Hygrocybe laeta</i>	<i>Gliophorus laetus</i>	
<i>Hygrocybe marchii</i> (s. Boertmann, 1995)	<i>Hygrocybe marchii</i> (s. Boertmann, 1995)	
<i>Hygrocybe miniata</i>	<i>Hygrocybe miniata</i>	
<i>Hygrocybe mucronella</i>	<i>Hygrocybe mucronella</i>	
<i>Hygrocybe nitrata</i>	<i>Neohygrocybe nitrata</i>	Y
<i>Hygrocybe ovina</i>	<i>Neohygrocybe ovina</i>	Y
<i>Hygrocybe phaeococcinea</i>	<i>Hygrocybe phaeococcinea</i>	
<i>Hygrocybe pratensis</i> var. <i>pratensis</i>	<i>Cuphophyllus pratensis</i>	
<i>Hygrocybe pratensis</i> var. <i>pallida</i>	<i>Cuphophyllus pratensis</i> var. <i>pallidus</i>	
<i>Hygrocybe psittacina</i> var. <i>psittacina</i>	<i>Gliophorus psittacinus</i>	
<i>Hygrocybe psittacina</i> var. <i>psittacina</i> unnamed form	<i>Gliophorus reginae</i>	
<i>Hygrocybe psittacina</i> var. <i>perplexa</i>	<i>Gliophorus europaerplexus</i> , <i>G. perplexus</i> aff.	
<i>Hygrocybe punicea</i>	<i>Hygrocybe punicea</i>	Y
<i>Hygrocybe quieta</i>	<i>Hygrocybe quieta</i>	
<i>Hygrocybe radiata</i> (s. Boertmann, 1995)	<i>Cuphophyllus radiatus</i>	
<i>Hygrocybe reidii</i>	<i>Hygrocybe reidii</i>	
<i>Hygrocybe russocoriacea</i>	<i>Cuphophyllus russocoriaceus</i>	
<i>Hygrocybe spadicea</i>	<i>Hygrocybe spadicea</i>	Y
<i>Hygrocybe splendidissima</i>	<i>Hygrocybe splendidissima</i>	Y
<i>Hygrocybe subpapillata</i>	<i>Hygrocybe subpapillata</i>	Y
<i>Hygrocybe substrangulata</i>	<i>Hygrocybe substrangulata</i>	
<i>Hygrocybe turunda</i>	<i>Hygrocybe turunda</i>	Y
<i>Hygrocybe virginea</i>	<i>Cuphophyllus virgineus</i>	
<i>Hygrocybe vitellina</i>	<i>Gloioxanthomyces vitellinus</i>	

Appendix 3

Management Strategy for Grassland Fungi:

- Waxcap grassland fungi thrive in short, nutrient-poor, moss-rich swards: the basis for successful habitat management at existing sites is simply to maintain these conditions.
- Maintain a short grassland sward by mowing on a similar schedule to that which currently is in place.
- The removal of grass cuttings and discarding in an appropriate composting area is important. This will reduce the nutrient content of the soil and enhance the conditions for grassland fungi.
- Avoid the use of pesticides, fungicides or proprietary lawn treatments. The scarifying and deep tine aeration treatments can continue but, following additional monitoring, some areas could be left for a year or so to see whether this benefits the waxcaps and to inform future management.
- Do not reseed or carry out other actions which significantly damage the soil structure or affect drainage; compaction by vehicles can be especially damaging to the soil structure and trampling, especially in late summer/autumn, can damage young fungi and reduce fruiting.
- Avoid frequent and excessive physical disturbance such as vehicle rutting, dumping of spoil, bike riding or construction work. It is noted that the fungi have coped well despite the use of the green and erection of the marquee for the annual horticultural show; this has not impacted their abundance and distribution and it should therefore continue as it always has done. Some of the more valuable sites for waxcaps are habitats subject to moderate trampling and use (English Nature, 2003).
- The grassland fungi community should continue to be monitored annually, where possible, to note which areas are responding well to management and inform future changes.
- Information boards could be placed on or around the green to educate local people about the grassland fungi community. The British Mycological Society, Association of British Fungus Groups, Sussex Wildlife Trust and Sussex Biodiversity Records Centre are likely to be able to assist with this and potentially with designating the Site for its grassland fungi community. Plantlife's waxcap ID guide would be a useful template for an information board; permission to reproduce it could be sought.

Appendix 4

Management Strategy for Botanical Interest

- It is recommended that the grassland in these areas is cut no more than two times a year: a single cut between August and the end of September and a second cut before the end of December. This is the ideal option to conserve and enhance wild flowers, as it mimics the pattern of traditional meadow management (Plantlife, 2016).
- The grass will be cut no lower than 100mm in height and all arisings will be taken away in order to keep the nutrient levels low, as well as allowing seeds to have light and bare ground for germination.
- These small areas of the Site will be allowed to establish, grow long, flower and seed, which will bring an increase in Site biodiversity. Many species of bumblebees, moths and butterflies, grasshoppers, flies, wasps and beetles are associated with, or depend on, a continuation of grassland flowering plants for at least a part of their life-cycle.
- After the first season with the new management regime, the Site will need to be reviewed to ascertain the success of the new management and identify any changes that will be required. For example, if problems start to arise with aggressive species becoming dominant, an earlier cut (July - August) may be required to prevent this. There may also be the opportunity to cut different areas of the grassland at different times of the year to create a more diverse mosaic; this can help recreate the uneven nature of animal grazing where smaller sub-communities of grassland can establish.
- If any scrub species, such as bramble or tree saplings, establish in these areas, they will be removed by hand or cut back as appropriate.