

Pinkworthy and Driver Farm proposed Site of Special Scientific Interest

Grassland Fungi Assessment

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Further information

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Background

The Pinkworthy (Pinkery) and Driver Farm landholding is situated within Exmoor National Park and lies approximately 5km west of Simonsbath. It consists mainly of upland acid grassland, heath and mire and the principal land usage is rough grazing for cattle and sheep with some fields managed for silage and hay. Part of the site lies within the North Exmoor SSSI including the highest ground at 477m elevation to the south of Chains Barrow. The landholding also contains the upper stretch of the River Barle SSSI which flows south from Pinkery Pond. The OS grid reference for Driver Farm is SS73564059 and Pinkery Field Studies Centre is located at SS72294114. The landholding is within the ownership of Exmoor National Park Authority (ENPA) and is currently tenanted out to Mr Bruce Owen of Driver Farm.

The significance of the site for waxcaps and other declining grassland fungi was first highlighted by Richard Thompson whilst carrying out a series of waxcap grassland surveys for Somerset Environmental Records Centre (SERC) in the period 1997-1999. That survey focussed upon a suite of grasslands within the vicinity of the Pinkery Field Studies Centre and his findings were later detailed in an English Nature Research Report (555) on waxcap grasslands which profiled the best-known sites in England. In 2012 Thompson was later jointly commissioned by Exmoor National Park Authority and Natural England to carry out a wider survey of the landholding including the pastures in the vicinity of Driver Farm. This study fully confirmed the high conservation value of the site for grassland fungi and produced a revised total of 25 waxcap species, indicating a site of international importance for this group of fungi.

Following the surveys by Thompson the site was later submitted to Natural England as a proposed SSSI for its grassland fungi assemblage. The present survey took place in 2017 and 2018 and was carried out to ascertain whether the site fully met the recently revised SSSI criteria (JNCC 2018) for grassland fungi. The findings and current site evaluation are therefore detailed within this report.

Figure 1: Locations of survey areas

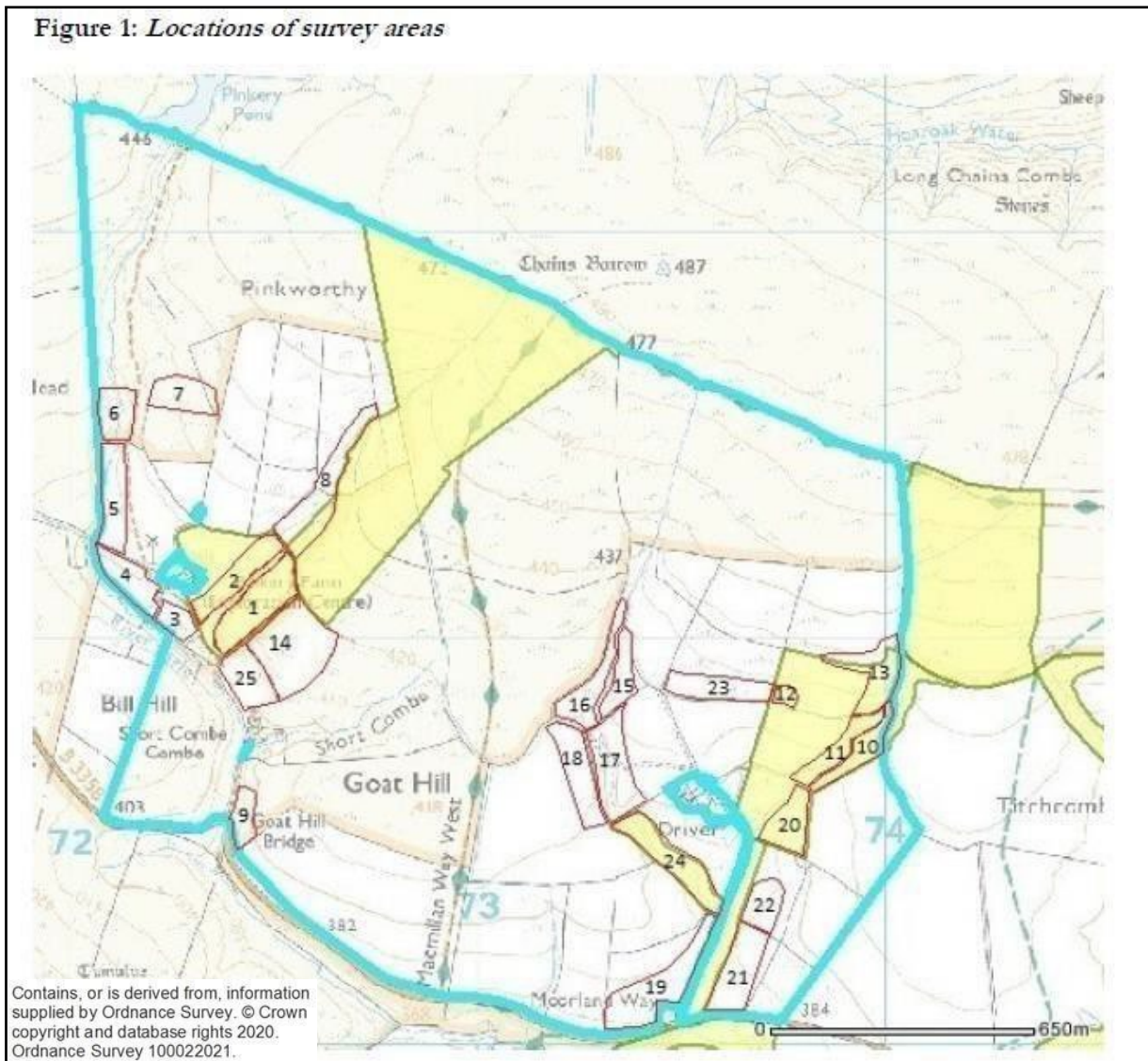


Figure 1. contains a plan of the landholding showing the principal grassland units where CHEGD fungi were recorded in 2012/13. The same field numbers were utilised during the present survey and the collective number of waxcap species for each grassland unit is listed in Appendix 1. (Source: Data from Thompson 2013. © Natural England and Exmoor National Park Authority.)

Introduction

The term “waxcap grassland” was coined relatively recently to describe semi-natural grassland habitats containing distinctive assemblages of fungi, including waxcaps (*Hygrocybe* species). Waxcaps are a group of fungi characterised by having thick waxy brittle gills, often bright colours and a preference for growing in unfertilised pastures or lawns. A waxcap grassland also frequently contains representatives of several other key grassland fungi groups, of which the clubs and corals (*Clavariaceae* family), earthtongues (*Geoglossaceae*) and pinkgills belonging to the genus *Entoloma* are the most prominent. Collectively these groups are often referred to as CHEGD fungi, an acronym derived from their initials. Additional grassland fungi representatives from the genera *Dermoloma*,

Porpoloma and *Camarophylloopsis* are also included as honorary CHEGD fungi. The common factor linking these fungi groups is their requirement for nutrient-poor soil types, i.e. agriculturally unimproved grasslands. Such grasslands have usually received little or no input from modern agricultural nitrogen-based fertilisers and frequently support a seminatural sward with fine-leaved grass species such as *Festuca ovina*, *Agrostis capillaris* and *Anthoxanthum odoratum*. A well-developed moss layer is almost always present and usually contains the widespread grassland moss species *Rhytidiadelphus squarrosus*. Waxcap grasslands usually have a well-grazed sward that is maintained by regular livestock browsing or frequent mowing.

Survey methodology

During the present assessment an attempt was made to re-survey all of the numbered grassland units previously highlighted by Thompson. Some additional fields or parts of fields were also surveyed and all areas were visited on three separate occasions. Each grassland unit was surveyed in its entirety provided that suitable habitat for CHEGD fungi was deemed to be present. Areas of wet heath, mire or excessively coarse grassland were avoided and some of the larger more intensively managed silage fields were also omitted.

All CHEGD fungal species found were recorded and their precise position noted by GPS (unless a species was present in large numbers within a small area). Notes were taken concerning the distribution and abundance of species within the grasslands and observations made with regard to habitat condition and any evident grassland management issues. A photographic record was also compiled for this report.

The fieldwork was carried out by the Natural England Field Unit on October 9th 2017 and then on September 25th and October 9th 2018. This report was compiled by Andy McLay.

Findings

A total of 24 waxcap species was recorded during the present survey and these are listed in Table 1 below. In light of recent taxonomical changes which have resulted in the splitting of the genus *Hygrocybe*, the table includes both old and new Latin names together with the common names of the species.

Latin Name (old)	Latin Name (new)	Common Name
<i>Hygrocybe calyptriformis</i>	<i>Porpolomopsis calyptriformis</i>	Pink Waxcap
<i>Hygrocybe cantharellus</i>	<i>Hygrocybe cantharellus</i>	Goblet Waxcap
<i>Hygrocybe ceracea</i>	<i>Hygrocybe ceracea</i>	Butter Waxcap
<i>Hygrocybe chlorophana</i>	<i>Hygrocybe chlorophana</i>	Golden Waxcap
<i>Hygrocybe citrinovirens</i>	<i>Hygrocybe citrinovirens</i>	Citrine Waxcap
<i>Hygrocybe coccinea</i>	<i>Hygrocybe coccinea</i>	Scarlet Waxcap
<i>Hygrocybe conica</i> var. <i>conica</i>	<i>Hygrocybe conica</i>	Blackening Waxcap

<i>Hygrocybe flavipes</i>	<i>Cuphophyllus flavipes</i>	Yellow-foot Waxcap
<i>Hygrocybe glutinipes</i>	<i>Hygrocybe glutinipes</i>	Glutinous Waxcap
<i>Hygrocybe insipida</i>	<i>Hygrocybe insipida</i>	Spangle Waxcap
<i>Hygrocybe intermedia</i>	<i>Hygrocybe intermedia</i>	Fibrous Waxcap
<i>Hygrocybe irrigata</i>	<i>Gliophorus irrigatus</i>	Slimy Waxcap
<i>Hygrocybe laeta</i>	<i>Gliophorus laetus</i>	Heath Waxcap
<i>Hygrocybe mucronella</i>	<i>Hygrocybe mucronella</i>	Bitter Waxcap
<i>Hygrocybe ovina</i>	<i>Neohygrocybe ovina</i>	Blushing Waxcap
<i>Hygrocybe pratensis</i> var. <i>pratensis</i>	<i>Cuphophyllus pratensis</i>	Meadow Waxcap
<i>Hygrocybe psittacina</i> var. <i>psittacina</i>	<i>Gliophorus psittacinus</i>	Parrot Waxcap
<i>Hygrocybe punicea</i>	<i>Hygrocybe punicea</i>	Crimson Waxcap
<i>Hygrocybe quieta</i>	<i>Hygrocybe quieta</i>	Oily Waxcap
<i>Hygrocybe reidii</i>	<i>Hygrocybe reidii</i>	Honey Waxcap
<i>Hygrocybe russocoriacea</i>	<i>Cuphophyllus russocoriaceus</i>	Cedarwood Waxcap
<i>Hygrocybe spadicea</i>	<i>Hygrocybe spadicea</i>	Date Waxcap
<i>Hygrocybe splendidissima</i>	<i>Hygrocybe splendidissima</i>	Splendid Waxcap
<i>Hygrocybe virginea</i>	<i>Cuphophyllus virgineus</i>	Snowy Waxcap

Table 1.

Grassland units 15 and 17 to the west of Driver Farm were found to be the most productive area of the site for waxcap species and a combined total of 18 species was recorded. A low treeless former hedge boundary separates the two fields but they are now effectively grazed as one large pasture. The fungal interest is mainly concentrated on and above the west-facing slopes which display little evidence of grassland improvement, unlike the larger flatter area of unit 17 which would appear to be semi-improved.



Rich habitat for CHEGD fungi

The key notable finds here were *Neohygrocybe ovina*, *Hygrocybe intermedia*, *Cuphophyllus flavipes*, *Hygrocybe splendidissima*, *Hygrocybe punicea* and *Hygrocybe spadicea*. The latter species (below) appeared in 2018 and was a welcome addition to the site list. A remarkable count of 25 fruiting specimens were present in unit 17 on September 25th and a further 2 specimens were also present in unit 11 to the east of the farm. *Hygrocybe spadicea* is a Section 41 protected species.



Hygrocybe spadicea (Date Waxcap) Photo: A. Jukes

Previous surveys here by Richard Thompson have additionally produced records of the rare waxcap species *Cuphophyllus lacmus* together with *Hygrocybe miniata*. An overall total therefore of 20 waxcap species is known to be present in this single area of the site.

Other notable finds elsewhere within the landholding include *Hygrocybe citrinovirens* which was recorded in three units (8, 20 and 22) in 2017 and additionally from four other units during previous surveys by Thompson. The pink waxcap *Porpolomopsis calyptriformis* was found on the slope above the quarry in Field 21. Thompson also recorded this species here and rather surprisingly it has not been found anywhere else on the site. The same slope also supports two other key indicator species of quality sites – *Hygrocybe splendidissima* and *H.punicea*.

Of the more frequent waxcap species, the cedarwood-scented *Cuphophyllus russocoriaceus* was an overdue addition to the site list in 2018 when it was found in unit 5 close to the Pinkery Field Studies Centre. In an exceptionally dry and generally poor year for fungi this pasture proved to be one of the more productive locations. Thompson had previously highlighted the western slopes above the River Barle as being the principal

area of interest in this grassland unit but in 2018 the majority of finds came from within the main level field area above. A well-used footpath passes through this pasture above the slopes and sheep-grazing appeared to be most concentrated alongside the track. In addition to *C.russocoriaceus* this area produced a fine crop of *C.pratensis* together with seven other waxcap species including *H.splendidissima*. This field (which contains the wind turbine behind the Outdoor Centre) together with the two neighbouring pastures (units 3 and 4) would appear to have considerable potential for further finds provided that they are appropriately grazed (see Discussion). Both of the latter pastures produced *Hygrocybe punicea* this year despite having an unsuitably long sward in October.

Thompson's grassland units 6, 7 and 8 are higher altitude moorland fringe parcels which contain a mosaic of acid grassland, heath and mire. During the present survey in units 6 and 7 above the River Barle only *Gliophorus laetus* (Heath Waxcap) was recorded. However it is in this area where Thompson previously recorded the extremely scarce *Neohygrocybe ingrata* (Dingy Waxcap). In 2017 the uppermost part of unit 8 in the adjacent valley produced a good trio of finds, namely *Hygrocybe citrinovirens*, *H.splendidissima* and *H.punicea*. Notably a number of the specimens here were growing within a recently mown grassland sward above the valley slopes where the adjacent fields are managed for silage or hay. Unit 8 is also an additional locality for *Neohygrocybe ovina*, previously recorded here by Thompson.



Neohygrocybe ovina (Blushing Waxcap) Photo: R.Large



Hygrocybe citrinovirens Citrine Waxcap) Photo: R. Large

Of the other CHEGD fungal groups, for a waxcap grassland site of this quality finds have been surprisingly few in number during the present survey. The most significant was that of *Clavaria incarnata* (Skinny Club), an uncommon member of the *Clavariaceae* family which is included on the Provisional Red-list of British Fungi (Evans 2006). This species appeared beside the footpath in unit 5 during October 2018. Apart from the widespread and frequent *Clavulinopsis helvola* (Yellow Club) the only other member of this family to be

recorded was *Clavulinopsis fusiformis* (Golden Spindles). This attractive species shows a marked preference for unimproved acidic grassland sites and in 2017 was found in two field units. Thompson however additionally recorded it in a further four grassland units during the previous surveys.

Entoloma (Pinkgill) species fared slightly better than clubs and corals during the recent survey and a total of 8 species was recorded, the more interesting finds being *E.ameides*, *E.porphyrophaeum*, *E.corvinum* (below) and *E.chalybaeum* var. *lazulinum*. Thompson recorded an additional 11 species of which the most significant find was *E.bloxamii* agg. (Big Blue Pinkgill). This striking S41 protected species was found in field unit 2 on the slope close to Pinkery Field Studies Centre.



Entoloma corvinum (Crow Pinkgill) Photo: A. Jukes

No members of the *Geoglossaceae* (earthtongues) or *Dermolomataceae* (Crazed Caps and allies) were seen during this survey but Thompson recorded two of the more frequent earthtongue species (*Geoglossum fallax* and *Trichoglossum hirsutum*) during his earlier visits. Typical associated non-CHEGD grassland fungi present included the parasitic *Cordyceps militaris* and the puffball *Lycoperdon nigrescens* with *Mycena flavoalba*, *M.pura*, *M.leptocephala*, *Psilocybe semilanceata* and *Cystoderma amianthinum*. The latter species is very characteristic of unimproved acidic grassland and was frequently found here in association with the waxcap *Gliophorus laetus*.



Figure 2. collectively shows the locations of the majority of CHEGD fungal records made during the present survey. Contains aerial photography layers from © Bluesky International Ltd/Getmapping PLC.

Site evaluation

Table 2 lists all CHEGD species recorded at Pinkworthy and Driver Farm during the three survey periods.

CHEGD species	1997-99	2012-13	2017-18
Waxcap species			
<i>Cuphophyllus flavipes</i>	P		P
<i>Cuphophyllus lacmus</i>		P	
<i>Cuphophyllus pratensis</i>	P	P	P
<i>Cuphophyllus russocoriaceus</i>			P
<i>Cuphophyllus virgineus</i>	P	P	P
<i>Gliophorus irrigatus</i>		P	P
<i>Gliophorus laetus</i>	P	P	P
<i>Gliophorus psittacinus</i>	P	P	P

<i>Hygrocybe cantharellus</i>			P
<i>Hygrocybe ceracea</i>	P	P	P
<i>Hygrocybe chlorophana</i>	P	P	P
<i>Hygrocybe citrinovirens</i>	P	P	P
<i>Hygrocybe coccinea</i>	P	P	P
<i>Hygrocybe conica</i> var. <i>conica</i>	P	P	P
<i>Hygrocybe glutinipes</i>	P		P
<i>Hygrocybe helobia</i>	P		
<i>Hygrocybe insipida</i>	P	P	P
<i>Hygrocybe intermedia</i>	P	P	P
<i>Hygrocybe miniata</i>		P	
<i>Hygrocybe mucronella</i>	P	P	P
<i>Hygrocybe punicea</i>	P	P	P
<i>Hygrocybe quieta</i>	P		P
<i>Hygrocybe reidii</i>	P	P	P
<i>Hygrocybe spadicea</i>			P
<i>Hygrocybe splendidissima</i>	P		P
<i>Neohygrocybe ingrata</i>		P	
<i>Neohygrocybe ovina</i>	P	P	P
<i>Porpolomopsis calyptriformis</i>	P	P	P
Coral and club species			
<i>Clavaria acuta</i>	P		
<i>Clavaria fumosa</i>		P	
<i>Clavaria incarnata</i>			P
<i>Clavulinopsis corniculata</i>	P	P	
<i>Clavulinopsis fusiformis</i>	P	P	P
<i>Clavulinopsis helvola</i>	P	P	P
Pinkgill species			
<i>Entoloma ameides</i>			P
<i>Entoloma anatinum</i>	P		
<i>Entoloma atrocaeruleum</i>	P		
<i>Entoloma bloxamii</i> agg.		P	
<i>Entoloma caesiocinctum</i>	P		
<i>Entoloma chalybaeum</i>		P	P

<i>Entoloma conferendum</i>	P	P	P
<i>Entoloma corvinum</i>			P
<i>Entoloma hirtipes</i>		P	
<i>Entoloma lividocyanulum</i>	P		
<i>Entoloma lucidum</i>		P	
<i>Entoloma ortonii</i>		P	
<i>Entoloma papillatum</i>	P	P	P
<i>Entoloma poliopus</i> var. <i>poliopus</i>		P	
<i>Entoloma porphyrophaeum</i>		P	P
<i>Entoloma prunuloides</i>		P	
<i>Entoloma sericellum</i>	P	P	
<i>Entoloma sericeum</i>			P
<i>Entoloma serrulatum</i>	P	P	P
Earthtongue species			
<i>Geoglossum fallax</i>	P	P	
<i>Trichoglossum hirsutum</i>		P	

Table 2.

The CHEGD outcomes for each species group are summarised below in Table 3.

- **C** – *Clavariaceae* (Fairy Clubs)
- **H** – *Hygrocybe* (Waxcaps)
- **E** – *Entoloma* (Pinkgills)
- **G** – *Geoglossaceae* (Earthtongues)
- **D** – *Dermoloma* (Crazed Caps), including *Camarophyllopsis* and *Pseudoporpoloma*

Site	C	H	E	G	D	Total
Pinkworthy and Driver Farm	6	28	19	2	0	55
JNCC group thresholds	7	19	15	5	3	

Table 3.

In response to the continuing widespread decline of waxcap grassland habitat throughout Northern Europe (Boertmann 1995), increased survey effort has taken place in recent years in an attempt to identify and conserve important grassland sites in the UK. In 2009 guidelines were first published by the JNCC outlining the required group thresholds for

potential SSSI notifications of grasslands with significant mycological interest. These guidelines were revised in 2018 and the updated CHEGD thresholds for sites of national importance are shown above in Table 3.

Any site which meets or exceeds one or more of the group thresholds shown in Table 3 would be eligible for SSSI notification. It can be seen that the count of 28 waxcap species (H) greatly exceeds the specified threshold of 19 required for a site of national importance. The table also shows that Pinkworthy and Driver Farm is nationally important for its *Entoloma* populations (E), with 19 species of pinkgill recorded so far. The *Clavariaceae* (C) were very thin on the ground during the present survey but the current overall count of 6 species might suggest that the site is also significant for this group. Furthermore, the records of *Clavaria incarnata* and *Clavaria fumosa* would suggest that additional finds are likely as both of these species tend to be confined to the richer fungal grassland sites (A.McLay pers.obs). No earthtongue species (G) were seen during either year of the present survey but in 2018 this situation was mirrored throughout the country due to the extreme dry conditions.

An additional simplified method of site assessment has also been devised solely for waxcap species. The following table (known as “Rald’s Scale”) can be used to evaluate the conservation importance of sites based upon their waxcap species counts;

Conservation value	Total number of waxcap species
Of international importance	22+ (17+ during a single visit)
Of national importance	17-21 (11-16 during a single visit)
Of regional importance	9-16 (6-10 during a single visit)
Of local importance	4-8 (3-5 during a single visit)
Of no importance	1-3 (1-2 during a single visit)

Interpretation of this table would clearly indicate that the grasslands at Pinkworthy and Driver Farm are of **international importance** for their waxcap populations. The single visit count of 21 waxcap species in 2017 was also highly indicative in this respect.

The revised JNCC guidelines for grassland fungi also recognises a suite of CHEGD species considered to be strongly indicative of the better quality grassland sites. The majority of these “High Diversity Indicator” (HDI) species by default are now uncommon to rare due to the widespread loss of quality sites but a small number remain relatively frequent within the UK. Examples include *Hygrocybe punicea* and *H.splendidissima* which can both still be found in quantity on some English grassland sites but have nevertheless declined considerably in numbers. The actual count of HDI species present within a site can be used as a good indication of its conservation value and sites supporting five or more species are almost invariably of national importance (A.McLay pers.obs). The following HDI species recorded from within this site are listed below;

Latin Name (old)	Latin Name (new)	Common Name
<i>Entoloma bloxamii</i>	<i>Entoloma bloxamii</i> agg.	Big Blue Pinkgill
<i>Hygrocybe calyptriformis</i>	<i>Porpolomopsis calyptriformis</i>	Pink Waxcap
<i>Hygrocybe citrinovirens</i>	<i>Hygrocybe citrinovirens</i>	Citrine Waxcap
<i>Hygrocybe flavipes</i>	<i>Cuphophyllus flavipes</i>	Yellow-foot Waxcap
<i>Hygrocybe ingrata</i>	<i>Neohygrocybe ingrata</i>	Dingy Waxcap
<i>Hygrocybe intermedia</i>	<i>Hygrocybe intermedia</i>	Fibrous Waxcap

<i>Hygrocybe lacmus</i>	<i>Cuphophyllus lacmus</i>	Grey Waxcap
<i>Hygrocybe ovina</i>	<i>Neohygrocybe ovina</i>	Blushing Waxcap
<i>Hygrocybe punicea</i>	<i>Hygrocybe punicea</i>	Crimson Waxcap
<i>Hygrocybe spadicea</i>	<i>Hygrocybe spadicea</i>	Date Waxcap
<i>Hygrocybe splendidissima</i>	<i>Hygrocybe splendidissima</i>	Splendid Waxcap

Table 4.

Future conservation effort at Pinkworthy and Driver Farm should aim to maintain populations of all the above listed species.



Hygrocybe punicea (Crimson Waxcap) – a High Diversity Indicator Species

Discussion

Figure 1 clearly shows that the majority of CHEGD fungi records made during the present survey were located on the grassland slopes of a series of small stream valleys which dissect the landholding. This correlates well with those areas identified by Thompson as being the richest localities within the site for grassland fungi. Remnant pockets of steeply sloping and often uneven ground are least likely to have been agriculturally “improved” and can often support semi-natural vegetation of conservation value. As previously mentioned the floristic content of the grasslands here was also surveyed in 2018 and the findings are detailed in a separate report. This study unsurprisingly confirmed that floristic richness was highest on the unimproved slopes and that much of the flatter higher ground displayed evidence of former agricultural improvement. However, it is recognised that waxcaps and other CHEGD fungi can sometimes persist in semi-improved swards provided that there has been minimal or no recent fertiliser applications and if the pastures are regularly grazed or cut, assisting with nutrient depletion. At both Pinkworthy and Driver Farm it was interesting and encouraging to see good numbers of CHEGD fungi fruiting in several such areas in 2018, including some notable finds within fields apparently managed for silage.

With the exception of the well-grazed pasture in units 15 and 17 the significance of the unimproved slopes for CHEGD fungi was less apparent during the present survey due to a

pronounced reduction of livestock grazing in many of the fields. Undergrazing was evident in some of the units in 2017 (F.Ulf-Hansen pers.com) but far more obvious the following year when much of the sloping pasture remained ungrazed in favour of the more accessible (and palatable) flatter ground. In the event 2018 turned out to be one of the most barren seasons for grassland fungi in living memory and on many sites the soils remained parched throughout the autumn following an exceptionally long hot summer. Undergrazing was particularly evident on the valley slopes near the Pinkery Field Studies Centre including the pastures alongside the river Barle where Thompson had recorded a number of notable species previously. Small episodes of undergrazing should have little or no impact upon grassland fungal populations here in the long term but it is of concern that this issue is increasingly impacting upon waxcap grasslands nationally.

It should be noted that during the present survey the majority of finds and all records of notable species were made within the grassland units outside of the existing SSSI parcels. Most of the land within the North Exmoor SSSI including the upper Barle valley and Goat Hill contains a mosaic of heath and mire habitat with localised pockets of grazed acidic grassland. Few CHEGD species were found in this survey in any of the four SSSI grassland units identified by Thompson and it is apparent that these areas must have been more intensively grazed at that time. A reduction in grazing intensity within these open heathland habitats is no bad thing and should be generally welcomed. Small pockets of acidic grassland may revert to heath in the long term but the key areas of enclosed waxcap grassland within the landholding should remain unaffected.



Grassland slope in unit 11 – somewhat undergrazed in October 2018



Unit 3, below Pinkery Field Studies Centre – evidently undergrazed in 2018

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Appendices

Appendix 1. Number of waxcap species recorded per grassland unit.

Grassland unit number	No of waxcap species
1	7
2	9
3	6
4	7
5	16
6	5
7	2
8	13
9	8
10	5
11	8
12	3
13	8
14	1
15	11
16	4
17	18
18	1
19	8
20	6
21	9
22	7
23	4
24	4
25	9

Appendix 2. Grid locations for notable species.

Species	Grid reference
<i>Clavaria incarnata</i>	SS7214941428
<i>Clavulinopsis fusiformis</i>	SS7336240618
<i>Clavulinopsis fusiformis</i>	SS7393240715
<i>Clavulinopsis fusiformis</i>	SS7362740249
<i>Cuphophyllus flavipes</i>	SS7335440724
<i>Entoloma ameides</i>	SS7379140618
<i>Entoloma porphyrophaeum</i>	SS7340940116
<i>Entoloma porphyrophaeum</i>	SS7359840180
<i>Entoloma porphyrophaeum</i>	SS7397340949
<i>Entoloma porphyrophaeum</i>	SS7271041537
<i>Hygrocybe citrinovirens</i>	SS7278541606
<i>Hygrocybe citrinovirens</i>	SS7379540565
<i>Hygrocybe intermedia</i>	SS7333940748
<i>Hygrocybe intermedia</i>	SS7333640797
<i>Hygrocybe punicea</i>	SS7278541606
<i>Hygrocybe punicea</i>	SS7253241151
<i>Hygrocybe punicea</i>	SS7214041280

<i>Hygrocybe punicea</i>	SS7362740249
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<i>Hygrocybe punicea</i>	SS7335040835
<i>Hygrocybe punicea</i>	SS7210441202
<i>Hygrocybe spadicea</i>	SS7333840798
<i>Hygrocybe spadicea</i>	SS7390840753
<i>Hygrocybe spadicea</i>	SS7339340624
<i>Hygrocybe spadicea</i>	SS7338140604
<i>Hygrocybe spadicea</i>	SS7333640797
<i>Hygrocybe splendidissima</i>	SS7264041411
<i>Hygrocybe splendidissima</i>	SS7335340679
<i>Hygrocybe splendidissima</i>	SS7362740249
<i>Hygrocybe splendidissima</i>	SS7215941211
<i>Hygrocybe splendidissima</i>	SS7274941560
<i>Neohygrocybe ovina</i>	SS7333640824
<i>Porpolomopsis calyptriformis</i>	SS7360040191

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