The White Helleborines and Fungi of Friston Forest, 2020

Janet & Jim Howell







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This is an expanded version of an article submitted to the Sussex Biodiversity Records Centre for the Adastra 2021 Magazine

This Spring, we decided to make the best of the 'lockdown' by undertaking a survey of the White Helleborine Orchids (*Cephalanthera damasonium*) in Friston Forest, East Sussex. White Helleborines are associated with the ecto-mycorrhizal fungi (EMF) of Beech trees, so we also planned to survey for these in the Autumn. White Helleborines grow in areas of shade, where there is less competition from other plants. The EMF provide approximately 40% of the energy requirement of the White Helleborine, supplying the corm; photosynthesis provides the sugars needed for shoot and leaf development.

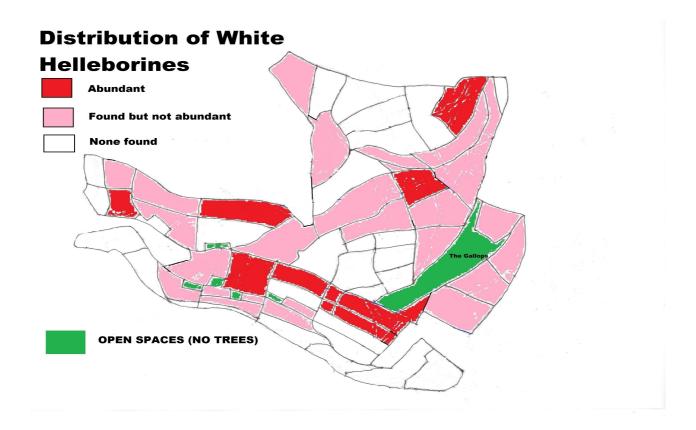
The White Helleborine is included in the British Vascular Plant Red Data List (2005) and the List of UK BAP Priority Vascular Plant Species (2007). It is a 'species of principal importance for the purpose of conserving biodiversity' under section 41 (England) of the Natural Environment and Rural Communities Act (2006). Under the Act, the Secretary of State must take 'reasonably practicable' steps to further the conservation of such species and every public authority must have regard to its conservation in the exercising of its functions.

Friston Forest is a plantation managed by Forestry England. Covering 80 ha, this mainly consists of Beech, although many compartments also have other tree species. The plantation was started in 1926, with the aim of protecting the aquifer which provides drinking water to Eastbourne. The site is close to the sea and the substrate is mainly chalk.

White Helleborine Survey

Our White Helleborine survey was undertaken between late April and mid-May 2020 with the assistance of Polly Mair, who is also a member of Seaford Natural History Society. We counted the flowering plants in each compartment and then rated the compartments according to the frequency of plants within them. In total, over 8000 plants were counted throughout the Forest. The full survey details can be found in Appendix 1.

The map below shows the Compartments where White Helleborines were abundant, and others where we found them but in lower numbers and where none were found (although of course that does not mean they were not present).



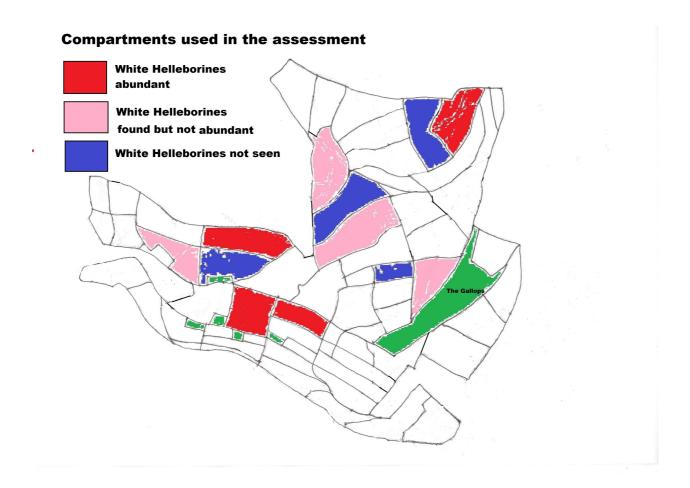
Generally speaking, White Helleborines are unable to compete with other understory plants and tend to be found where the shade is deep enough to exclude competitors. One exception to this rule was Compartment 8519, which has considerable undergrowth, and yet the White Helleborines were abundant in that compartment. We noted that the Beech trees appear to have been thinned relatively recently in this Compartment so the undergrowth might be relatively recent. We do not know whether the White Helleborine numbers will be maintained in the future.

There were other Compartments which seemed to be suitable for White Helleborines, being mainly Beech with no undergrowth, but had no or few White Helleborines present. This could be due to the seeds not having dispersed to these areas, to a lack of the ectomycorrhizal fungi which they need or some other factor. Soil compaction is known to have a negative effect on both the ecto-mycorrhizal fungi and on White Helleborines, and so could be one of the reasons for this.

Since White Helleborines are known to be dependent upon ecto-mycorrhizal fungi, we continued our survey through the rest of the year looking for these fungi.

Survey of Ectomycorrhizal Fungi

For our survey of the ectomycorrhizal fungi (EMF), we selected 12 of the compartments - four with 'Abundant' White Helleborines, four with 'Found but not abundant' and four with 'none seen'.



These compartments were mainly Beech, although other tree species were present.

These 12 compartments were each visited numerous times from early Summer until mid-December, and the ectomycorrhizal fungi found were identified. We are very grateful to Martin Allison (County Recorder for Basidiomycetes), who came out with us three times and identified many of the species we encountered. Without his expertise we would not have been able to identify many of the species we found.

53 species of ectomycorrhzal fungi from 17 genera were identified during this survey. Appendix 2 shows the mycorrhizal species found in each of our survey compartments.

Table 1 White Helleborine frequency against the number of EMF species per Compartment

Abundance of White Helleborines per Compartment					
Abundant	Forestry Compartment Number	8542	8541	8519	8506
	Number of EMF species	15	14	21	16
Found but not abundant	Forestry Compartment Number	8513	8533	8522	8508
	Number of EMF species	8	8	5	24
None seen	Forestry Compartment Number	8511	8505	8530	8523
	Number of EMF species	5	1	5	2

Table 1 shows a close association between the frequency of White Helleborines in a compartment and the number of species of ecto-mycorrhizal fungi present. One Compartment where White Helleborines were found but not abundant was an outlier in having a very large number of ectomycorrhizal fungi species. This particular compartment also had a very different range of fungi compared to anywhere else that we surveyed in the Forest.

We noted that some genera of fungi were always represented in the compartments where White Helleborines were abundant:

Clitocybe (Funnels)
Cortinarius (Webcaps)
Hebeloma (Poisonpies)
Inocybe (Fibrecaps)
Tricholoma (Knights)
Helvella (Saddles)

The table below shows the number of species from these Genera in each of the surveyed compartments.

Table 2 White Helleborine frequency against the number of EMF species of Genera always found where White Helleborines were Abundant

Abundance of White Helleborines per Compartment					
Abundant	Forestry Compartment Number	8542	8541	8519	8506
	Number of EMF species	11	12	19	12
Found but not abundant	Forestry Compartment Number	8513	8533	8522	8508
	Number of EMF species	4	7	5	7
None seen	Forestry Compartment Number	8511	8505	8530	8523
	Number of EMF species	2	1	4	1

From this, we can see what appears to be a clear association between the abundance of White Helleborines and the number of species of these genera in all the Compartments surveyed, including the one which appeared to be an outlier in Table 1. This does not prove that any of these species are directly linked to White Helleborines - it could simply be that conditions which were favourable to the Helleborines were also favourable to these fungi. In order to identify fungi directly linked to the White Helleborine plants it would be necessary to undertake DNA analysis of plant root material, which was beyond our capability and resources. In addition, the survey took place over just one season and therefore represents a snapshot of the fungal community: other species may well be present but not seen in 2020.

The White Helleborine is a generalist in terms of its association with EMF species for most of the life cycle. However, there is a 'pinch point': only a very limited number of fungi are able to facilitate seedling development (Bidartondo & Read, 2008). It is likely that the specific fungi needed for seedling development are not present in many of the Compartments of Friston Forest. Our survey is likely to have found at least some of the fungi with which the flowering plants are associated.

53 species of ecto-mycorrhzal fungi from 17 genera were identified during this survey. Martin Allison confirmed four new County records for Sussex (not all of these are mycorrhizal species): *Tomentella badia, Simocybe haustellaris, Amanita strobiliformis* and *Tricholoma sulphurescens.* In addition, Nick Aplin has advised us that one of the species we found was a genetic match for *Cortinarius castaneus*, which had previously been excluded from the British Checklist. We also found two species which were new for East Sussex: *Verpa conica* and *Amanita junquillea. Amanita echinocephala*, which we found in large numbers, has just one previous record in East Sussex (Stanmer Park, 2010). Table 3 shows the locations where we found these rare or new County records.

Table 3 Locations of Fungi which are new County Records and other rare species, 2020

Species	When first seen	Compartment(s)	Grid Ref. (1st sighting)
Amanita echinocephala	8 September	8542 8550	TV 5346 9905
Amanita junquillea	13 November	8506	TQ 5389 0050
Amanita strobiliformis	18 August	8542	TV 5378 9906
Cortinarius castaneus	21 October	8508 8541 8519 8542	TQ 5323 0006
Simocybe haustellaris	13 November	8506	TQ 539 005
Tomentella badia	13 November	8506	TQ 539 005
Tricholoma sulphurescens	25 August	8506 8530 8519 8541 8521 8542 8523	TV 5375 9940
Verpa conica	23 March	8525	TV 5391 9942

In addition to the Fungi species which are known to be ectomycorrizal, a very substantial number of other fungi species were identified during this survey. The full species list found in 2020 is set out at in in Appendix 3 to this paper.

One feature which was very noticeable is that one Compartment, 8508, has a very different fungal community to any of the other Compartments we surveyed. From our 2020 survey 18 species of Fungi were found in this Compartment but no other, as shown in Appendix 2. There is no obvious difference in terms of the tree species, soil or aspect which would seem account for this. It is possible that a different assemblage of fungi was introduced when the saplings were planted or that this reflects differences arising from previous land usage.

Other plant species observed

We also surveyed, to a limited extent, two other plant species which occur widely in Friston Forest. Broad-leaved Helleborine (*Epipactis helleborine*) occurs in many of the Compartments, but typically in much smaller numbers than the White Helleborine. The plants are usually found near the edges of compartments as it is more dependent upon photosynthesis. Nationally, this is a widespread and fairly common Orchid.

Yellow Bird's nest (*Monotropa hypopitys*) is a parasitic species, which is strongly associated with fungal mycorrhiza. Research (Leake et al 2004) has shown that *Tricholoma* species are often associated with this plant, and our survey backed this up. There is a good population of Yellow Birds-nest in Compartment 8541 and we subsequently found large numbers of *Tricholoma sciodes* (Beech Knight) in the same location. Yellow birds-nest also occurs in a few other parts of the Forest, although we did not undertake a systematic survey for this species. Yellow Birds-nest is listed as 'endangered' in the JNCC Red List.

Conservation

Friston Forest is a commercial plantation which contains a number of species of both plants and fungi of high conservation value. Our survey has shown that a few Compartments - 8541, 8542, 8519, 8506 and 8508 - stand out as being of particular importance for the species we surveyed. The distribution of fungi in Friston Forest is very uneven: some compartments have a large number of species whilst others have a dearth. From our survey, we were unable to give a reason for this. Soil compaction or excessive thinning could have a highly detrimental effect on White Helleborine numbers. Soil compaction can also have a negative effect on the ectomycorrhizal fungi on which both the White Helleborines and the Beech trees depend.

The high numbers of White Helleborines and the rich assemblage of fungi observed in Friston Forest in 2020 gives an indication of the value of this habitat.

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References

Bidartondo, M. L., & Read, D. J., (2008) Fungal specificity bottlenecks during orchid germination and development. Molecular Ecology (2008) 17, 3707–3716

Leake J. R., Mckendrick S. L., Bidartondo M. & Read D. J. 2004. Symbiotic germination and development of the myco-heterotroph *Monotropa hypopitys* in nature and its requirement for locally distributed *Tricholoma* spp. New Phytologist 163, 405-423.

Appendix 1 Friston Forest White Helleborine Count, 2020

Grid Reference	Number Counted	Date
TQ52160016	6	27/04/20
TQ52110009	86	27/04/20
TQ52230019	64	27/04/20
TQ52260026	2	27/04/20
TQ52520016	18	27/04/20
TQ52530012	29	27/04/20
TQ52620014	52	27/04/20
TQ52680015	1	27/04/20
TQ52730012	5	27/04/20
TQ52820009	7	27/04/20
TQ53000011	30	27/04/20
TQ53020012	5	27/04/20
TQ53120008	18	27/04/20
TQ53160005	106	27/04/20
TQ53200002	15	27/04/20
TQ53290004	6	27/04/20
TQ53290005	5	27/04/20
TQ53320006	3	27/04/20
TQ53390006	8	27/04/20
TQ53410005	77	27/04/20
TV53449995	55	27/04/20
TQ53520005	73	27/04/20
TQ53560002	3	27/04/20
TV53549997	13	27/04/20
TQ53550009	11	27/04/20
TQ53490009	31	27/04/20
TQ53430012	2	27/04/20
TQ53430016	14	27/04/20
TQ52350028	1	27/04/20
TQ52230022	155	27/04/20
TQ52210014	51	27/04/20
TQ52260007	38	27/04/20
TQ52240004	4	27/04/20
TQ52140007	6	27/04/20
TV55069930	87	27/04/20

TV55079935	62	27/04/20
TV55099934	15	27/04/20
TV55149937	13	27/04/20
TV55309949	6	27/04/20
TV52679939	6	29/04/20
TV52719945	26	29/04/20
TV52789926	49	29/04/20
TV52799956	2	29/04/20
TV53099923	16	29/04/20
TV53339928	26	29/04/20
TV53269933	26	29/04/20
TV53219934	218	29/04/20
TV53129943	206	29/04/20
TV53109949	8	29/04/20
TV53939954	4	29/04/20
TV54209998	2	29/04/20
TQ54940017	58	30/04/20
TQ54920020	149	30/04/20
TQ54920025	48	30/04/20
TQ54890029	256	30/04/20
TQ54890032	182	30/04/20
TQ54860027	79	30/04/20
TQ54820033	7	30/04/20
TQ54950033	71	30/04/20
TQ54990026	45	30/04/20
TQ55060019	12	30/04/20
TQ55070012	7	30/04/20
TQ55190006	1	30/04/20
TQ52280044	20	30/04/20
TV52739996	1	30/04/20
TV52619995	3	30/04/20
TQ55360132	3	01/05/20
TQ55380130	1	01/05/20
TQ55140124	5	01/05/20
TQ55150123	1	01/05/20
TQ55170126	29	01/05/20
TQ55330132	1	01/05/20

TV53609893	17	02/05/20
TV54399878	20	02/05/20
TV54409878	75	02/05/20
TV54389884	19	02/05/20
TV54409883	9	02/05/20
TV54419876	1	02/05/20
TV54469880	5	02/05/20
TV54429879	29	02/05/20
TV54399878	37	02/05/20
TV54379883	9	02/05/20
TV54409883	12	02/05/20
TV54439880	26	02/05/20
TV54449881	5	02/05/20
TV54359892	2	02/05/20
TV54379886	31	02/05/20
TV54369881	43	02/05/20
TV54389879	4	02/05/20
TV54409879	51	02/05/20
TV54439880	18	02/05/20
TV53819904	5	03/05/20
TV5376999041	4	03/05/20
TV53269952	999	03/05/20
TV53659975	12	03/05/20
TV53629997	2	03/05/20
TQ53590007	24	03/05/20
TQ53480003	22	03/05/20
TQ53460004	23	03/05/20
TQ53430001	50	03/05/20
TQ53230007	10	03/05/20
TQ53210004	19	03/05/20
TQ53200006	49	03/05/20
TQ53940006	2	03/05/20
TQ53950007	2	03/05/20
TV54199999	4	03/05/20
TV53579907	12	03/05/20
TV53569900	16	03/05/20
TV53569901	10	03/05/20

TV53629892	25	03/05/20
TQ53860064	3	03/05/20
TQ53740145	48	03/05/20
TQ53780149	34	03/05/20
TQ53710141	6	03/05/20
TQ54170071	1	03/05/20
TQ53810050	1	03/05/20
TQ54830044	1	03/05/20
TQ55150068	1	03/05/20
TQ55140070	16	03/05/20
TQ55160070	1	03/05/20
TQ55090054	8	03/05/20
TQ54370045	34	03/05/20
TQ54430049	17	03/05/20
TQ55220142	1	04/03/20
TQ55150125	14	04/03/20
TQ55130119	15	04/03/20
TQ55130117	119	04/03/20
TQ55110110	26	04/03/20
TQ55100108	7	04/03/20
TQ55070101	88	04/03/20
TQ55050095	36	04/03/20
TQ55110099	7	04/03/20
TQ55070109	58	04/03/20
TQ55150110	24	04/03/20
TQ55180113	89	04/03/20
TQ55130112	129	04/03/20
TQ55150116	33	04/03/20
TQ55140119	77	04/03/20
TQ55200122	13	04/03/20
TQ55190126	27	04/03/20
TQ55240129	3	04/03/20
TV53619893	9	05/05/20
TV53599892	3	05/05/20
TV53779933	999	05/05/20
TV53889907	14	05/05/20
TV53889910	7	05/05/20

TV53909911	62	05/05/20
TV53899914	30	05/05/20
TV53839912	5	05/05/20
TV53799908	9	05/05/20
TV53819908	8	05/05/20
TV53799903	2	05/05/20
TV52989925	1	05/05/20
TV52589936	3	05/05/20
TV53989900	34	06/05/20
TV54049902	3	06/05/20
TV54159897	1	06/05/20
TV54369884	26	06/05/20
TV54349880	5	06/05/20
TV54079906	11	06/05/20
TV54009903	58	06/05/20
TV53999900	3	06/05/20
TV54069918	56	06/05/20
TV54089913	9	06/05/20
TV54069910	221	06/05/20
TV54119912	148	06/05/20
TV54239917	18	06/05/20
TV54249920	55	06/05/20
TV54189907	137	06/05/20
TV54219903	29	06/05/20
TV54259900	41	06/05/20
TV54329897	29	06/05/20
TV54359896	18	06/05/20
TV54249919	123	06/05/20
TV54269979	21	07/05/20
TQ54750002	66	07/05/20
TQ54740011	3	07/05/20
TQ54750012	7	07/05/20
TQ54760017	5	07/05/20
TQ54890019	3	07/05/20
TQ54850010	4	07/05/20
TV55379921	2	08/05/20
TV55319913	18	08/05/20

TV55259908	5	08/05/20
TV55189900	4	08/05/20
TV54569887	14	08/05/20
TV54599883	18	08/05/20
TV54599879	25	08/05/20
TV54399887	11	08/05/20
TV54389896	6	08/05/20
TV55569980	3	08/05/20
TV54919963	2	08/05/20
TV54899966	24	08/05/20
TV54929970	3	08/05/20
TV54989989	21	08/05/20
TQ55260001	1	08/05/20
TQ54800037	11	09/05/20
TQ54890033	9	09/05/20
TQ54950034	24	09/05/20
TQ54990022	7	09/05/20
TQ54990025	33	09/05/20
TQ55000027	39	09/05/20
TQ55000029	8	09/05/20
TQ55010028	7	09/05/20
TQ54860022	11	09/05/20
TQ54800012	2	09/05/20
TQ54780068	2	09/05/20
TQ54810001	17	09/05/20
TV54799999	28	09/05/20
TV54779996	11	09/05/20
TQ55260054	1	09/05/20
TQ54300037	34	10/05/20
TQ54250035	12	10/05/20
TQ54270010	3	10/05/20
TV54189999	7	10/05/20
TQ54230001	1	10/05/20
TQ54380016	2	10/05/20
TQ54560025	4	10/05/20
Total	8144	

Appendix 2

Survey of Mycorrhizal Fungi in Friston Forest, 2020 Species found in the main survey Compartments

		W. H. abundant				W.H. found but not abundant				W.H. not found			
Compartment Species	42	41	19	06	08	13	22	33	05	11	23	30	
<i>Amanita echinocephala</i> (Solitary Amanita)	Χ												
Amanita excelsa var spissa)					Х								
Amanita junquillea (Jewelled Amanita)					Х								
Amanita phalloides var alba	Х												
Amanita rubescens (Blusher)					Х					Х			
Amanita rubescens var. annulosulphurea					Х								
Amanita strobiliformis (Warted Amanita)	Χ												
Boletus sp	Х					Х							
Boletus cisalpinus					Х								
Clavulina rugosa (Wrinkled Club)					Х								
Clavulina cristata (Crested Coral)					Х								
Clitocybe fragrans (Fragrant Funnel)					Х								
Clitocybe geotropa (Trooping Funnel)				Х									
Clitocybe metachroa (Two-toned Funnel)					Х								
Clitocybe nebularis (Clouded Funnel)				Х		Х				Х			
Clitocybe phaeophthalma (Chicken Run Funnel	X		Х					Х					
Clitocybe sp		Х											
Cortinarius castaneus	Х	Х	Х	Х									
Cortinarius alboviolaceus (Pearly Webcap)			Х										

Hebeloma cf crustuliniforme (Poisonpie)	Χ	Х	Х	Х	X	X		X				
Hebeloma radicosum (Rooting Poisonpie)			Х									
Hebeloma sinapizans (Bitter Poisonpie)		Х					Х					
Helvella crispa (White Saddle)	Х	Х	Х	Х	Х						Х	
Helvella lacunosa (Elfin Saddle)	X	X	X									
Inocybe erubescens (Deadly Webcap)			X									
Inocybe flocculosa (Fleecy Fibrecap)			Х									
Inocybe geophylla (White Fibrecap)		X	X	X	X	X	X		X	X		X
Inocybe geophylla var lilacina (White Fibrecap, lilac form)			X	X								
Inocybe griseolilacina (Lilac Leg Fibrecap)		Х	Х	Х								
Inocybe rimosa (Split Fibrecap	Х	Х	Х	Х				Х				
Inocybe sp	Х		Х					Х				
Laccaria amethystina (Amethyst Deceiver)					Х							
Lactarius blennius (Beech Miklkcap)			Х		Х							Х
Lactarius fuliginosus (Sooty Milkcap)				Х								
Lactarius subdulcis (Mild Milkcap)				Х	Х					Х		
Ramaria stricta (Upright Coral)					Х							
Russula sp	Х											
Russula emetica (The Sickener)	X							X				
Russula fellea (Geranium Brittlegill)					Х	Х						
Russula nobilis (Beechwood Sickener)		Х	Х			X						
Russula ochroleuca (Ochre Brittlegill)				Х		Х				X		
Tomentella badia					Х							
<i>Tricholoma album</i> (White Knight)		Х			Х							
<i>Tricholoma lascivum</i> (Aromatic Knight)					X							

Total	15	14	21	16	24	8	5	8	1	5	2	5
Xerocomellus porosporus					Х							
Xerocomellus cisalpinus					Х							
Tricholoma ustale (Burnt Knight)		Х			Х							
Tricholoma terreum (Grey Knight)			Х				Х					
<i>Tricholoma sulphureum</i> (Sulphur Knight)			X	X				X				X
Tricholoma sulphurescens (Yellow-staining Knight)	Х	X	X	X							X	X
Tricholoma sciodes (Beech Knight)	Х	X	X	X		X	X	X				X
Tricholoma scalpturatum (Yellowing Knight)			Х	X			X	X				

Appendix 3

Composite List of Identified Fungi for Friston Forest 2020

Note (1): For many fungal species, there is currently no definite proof of whether or not they are mycorrhizal. In such cases we have used a question mark to indicate uncertainty

Note (2): One of the Forest Compartments (8508) had very different fungi species to the other compartments we surveyed. In the "Notes" section below, we have highlighted species <u>only</u> found in this compartment.

Species	English Name	Mycorrhizal	Notes
Agaricus augustus	The Prince	No	
Agaricus impudicus		No	
Amanita echinocephala	Solitary Amanita	Yes	Only one previous record (Stannmer Park, 2010) in East Sussex
Amanita excelsa var. spissa		Yes	Comp 8508 only
Amanita junquillea	Jewelled Amanita	Yes	New record for East Sussex
			Comp 8508 only
Amanita phalloides var alba	Death Cap (Pale Form)	Yes	
Amanita rubescens	Blusher	Yes	Comp 8508 only
Amanita rubescens var. annulosulphurea		Yes	Comp 8508 only

Amanita strobiliformis	Warted Amanita	Yes	New County Record
Antrodia albida		No	
Auricularia auricula-judae	Jelly Ear	No	
Bisporella citrina		No	
Bjerkandera adusta		No	
Clavulina cinerea	Grey Coral	Yes?	
Clavulina coralloides	Crested Coral	Yes?	Comp 8508 only
Clavulina rugosa	Wrinkled Club	Yes?	Comp 8508 only
Clitocybe fragrans	Fragrant Funnel	Yes?	Comp 8508 only
Clitocybe metachroa		Yes?	Comp 8508 only
Clitocybe nebularis	Clouded Funnel	Yes?	
Clitocybe phaeophthalma	Chicken-run Funnel	Yes?	
Coprinellus micaceus	Glistening Inkcap	No	
Cortinarius alboviolaceus	Pearly Webcap	Yes	
Cortinarius castaneus		Yes	formerly excluded from GB checklist
Daldinia concentrica	Cramp Balls	No	
Entoloma rhodopolium	Wood Pinkgill	Yes	
Exidia nucleata	Crystal Brain	No	
Exidia plana		No	
Fuscoporia ferruginosa	Rusty Porecrust	No	
Geastrum fimbriatum	Sessile Earthstar	No?	
Geastrum triplex	Collared Earthstar	No?	
Gymnopilus penetrans	Common Rustgill	No	
Gymnopus confluens	Clustered Toughshank	No	
Gymnopus dryophilus	Russet Toughshank	No	
Gymnopus peronatus	Wood Woollyfoot	No	
Hebeloma cf crustuliniforme	Poisonpie	Yes	
Hebeloma pallidoluctosum	Sweet Poisonpie	Yes	
Hebeloma radicosum	Rooting Poisonpie	Yes?	
Hebeloma sinapizans	Bitter Poisonpie	Yes	
Helvella crispa	White Saddle	Yes	
Helvella lacunosa	Elfin Saddle	Yes	
Helvella sp.		Yes??	A cup-shaped fungus
Henningsomyces candidus		No	

Hypoxylon fragiformeBeech WoodwartInocybe flocculosa aggFleecy FibrecapInocybe geophyllaWhite FibrecapInocybe geophylla var. lilacinaLilac Leg FibrecapInocybe griseolilacinaLilac Leg FibrecapInocybe rimosaSplit FibrecapLaccaria amethystinaAmethyst DeceiverLaccaria laccataThe DeceiverLachnum impudicumSnowy DiscoLactarius blenniusBeech MilkcapLactarius subdulcisMild MilkcapLeotia lubricaJellybabyLepiota asperaFreckled DapperlingLepista nudaWood BlewitLycoperdon pyriformeStump Puffball	No Yes Yes Yes	
Inocybe geophylla White Fibrecap Inocybe geophylla var. lilacina Inocybe griseolilacina Lilac Leg Fibrecap Inocybe rimosa Split Fibrecap Laccaria amethystina Amethyst Deceiver Laccaria laccata The Deceiver Lachnum impudicum Lachnum virgineum Snowy Disco Lactarius blennius Beech Milkcap Lactarius subdulcis Mild Milkcap Leotia lubrica Jellybaby Lepiota aspera Freckled Dapperling Lepista nuda Wood Blewit Lycoperdon pyriforme Stump Puffball	Yes Yes	
Inocybe geophylla var. lilacina Inocybe griseolilacina Inocybe rimosa Inocybe rimosa Laccaria amethystina Laccaria laccata Lacchnum impudicum Lachnum virgineum Lactarius blennius Lactarius subdulcis Leotia lubrica Lepiota aspera Lepista nuda Inocybe griseolilacina Lilac Leg Fibrecap Amethyst Deceiver The Deceiver Snowy Disco Beech Milkcap Mild Milkcap Jellybaby Freckled Dapperling Wood Blewit Lycoperdon pyriforme Stump Puffball	Yes	
Inocybe griseolilacinaLilac Leg FibrecapInocybe rimosaSplit FibrecapLaccaria amethystinaAmethyst DeceiverLaccaria laccataThe DeceiverLachnum impudicumSnowy DiscoLactarius blenniusBeech MilkcapLactarius subdulcisMild MilkcapLeotia lubricaJellybabyLepiota asperaFreckled DapperlingLepista nudaWood BlewitLycoperdon pyriformeStump Puffball		
Inocybe rimosaSplit FibrecapLaccaria amethystinaAmethyst DeceiverLaccaria laccataThe DeceiverLachnum impudicumSnowy DiscoLactarius blenniusBeech MilkcapLactarius subdulcisMild MilkcapLeotia lubricaJellybabyLepiota asperaFreckled DapperlingLepista nudaWood BlewitLycoperdon pyriformeStump Puffball	Yes	
Laccaria amethystinaAmethyst DeceiverLaccaria laccataThe DeceiverLachnum impudicumSnowy DiscoLactarius blenniusBeech MilkcapLactarius subdulcisMild MilkcapLeotia lubricaJellybabyLepiota asperaFreckled DapperlingLepista nudaWood BlewitLycoperdon pyriformeStump Puffball	100	
Laccaria laccataThe DeceiverLachnum impudicumSnowy DiscoLactarius blenniusBeech MilkcapLactarius subdulcisMild MilkcapLeotia lubricaJellybabyLepiota asperaFreckled DapperlingLepista nudaWood BlewitLycoperdon pyriformeStump Puffball	Yes	
Lachnum impudicumLachnum virgineumSnowy DiscoLactarius blenniusBeech MilkcapLactarius subdulcisMild MilkcapLeotia lubricaJellybabyLepiota asperaFreckled DapperlingLepista nudaWood BlewitLycoperdon pyriformeStump Puffball	Yes	Comp 8508 only
Lachnum virgineumSnowy DiscoLactarius blenniusBeech MilkcapLactarius subdulcisMild MilkcapLeotia lubricaJellybabyLepiota asperaFreckled DapperlingLepista nudaWood BlewitLycoperdon pyriformeStump Puffball	Yes	
Lactarius blenniusBeech MilkcapLactarius subdulcisMild MilkcapLeotia lubricaJellybabyLepiota asperaFreckled DapperlingLepista nudaWood BlewitLycoperdon pyriformeStump Puffball	No	
Lactarius subdulcisMild MilkcapLeotia lubricaJellybabyLepiota asperaFreckled DapperlingLepista nudaWood BlewitLycoperdon pyriformeStump Puffball	No	
Leotia lubricaJellybabyLepiota asperaFreckled DapperlingLepista nudaWood BlewitLycoperdon pyriformeStump Puffball	Yes	
Lepiota asperaFreckled DapperlingLepista nudaWood BlewitLycoperdon pyriformeStump Puffball	Yes	
Dapperling Lepista nuda Wood Blewit Lycoperdon pyriforme Stump Puffball	Yes?	Comp 8508 only
Lycoperdon pyriforme Stump Puffball	No?	
	No	
Manager of the first lands	No	
Macrotyphula fistulosa Pipe Club	No	Comp 8508 only
Macrotyphula fistulosa var contorta	No	
Marasmius wynnei Pearly Parachute	No	
Marasmius setosus	No	
Mutinus caninus Dog Stinkhorn	No	
Mycena acicula Orange Bonnet	No	
Mycena adscendens	No	
Mycena arcangeliana Angel's Bonnet	No	
Mycena capillaripes Pinkedge Bonnet	No	
Mycena crocata Saffrondrop Bonnet	No	
Mycena filopes Iodine Bonnet	No	
Mycena galericulata Common Bonnet	No	
Mycena galopus var. candida	No	
Mycena haematopus Burgundydrop Bonnet	No	
Mycena pura Lilac Bonnet	No	
Mycena speirea Bark Bonnet		
Mycena vitilis Snapping Bonnet	No	

Mycoacia uda		No	
Otidea alutacea	Tan Ear	No	
Peniophora lycii		No	
Perenniporia fraxinea		No	
Phallus impudicus	Stinkhorn	No	
Pluteus cervinus	Deer Shield	No	
Pluteus chrysophaeus	Yellow Shield	No	
Pluteus romellii	Goldleaf Shield	No	
Polyporus leptocephalus	Blackfoot Polypore	No	
Postia subcaesia	Blueing Bracket	No	
Ramaria stricta	Upright Coral	Yes?	Comp 8508 only
Rhodocollybia butryacea	Butter Cap	No	
Rhodotus palmatus	Wrinkled Peach	No	Comp 8508 only
Russula emetica	The Sickener	Yes	
Russula fellea	Geranium Brittlegill	Yes	
Russula ionochlora	Oilslick Brittlegill	Yes	
Russula nobilis	Beechwood Sickener	Yes	
Russula ochroleuca	Ochre Brittlegill	Yes	
Schizopora paradoxa	Split Porecrust	No	
Simocybe haustellaris		No	New County Record Comp 8508 only
Sebacina epigaea		Yes	
Skeletocutis nivea	Hazel Bracket	No	
Stereum subtomentosum	Yellowing Curtain Crust	No	
Tomentella badia		Yes?	New County Record Comp 8508 only
Subulicystidium longisporum		??	
Subulicystidium longisporum Trametes gibbosa	Lumpy Bracket	?? No	
	Lumpy Bracket Turkeytail		
Trametes gibbosa		No	
Trametes gibbosa Trametes versicolor	Turkeytail	No No	Comp 8508 only
Trametes gibbosa Trametes versicolor Tricholoma album	Turkeytail White Knight	No No Yes	Comp 8508 only
Trametes gibbosa Trametes versicolor Tricholoma album Tricholoma lascivum	Turkeytail White Knight Aromatic Knight	No No Yes Yes	Comp 8508 only
Trametes gibbosa Trametes versicolor Tricholoma album Tricholoma lascivum Tricholoma scalpturatum	Turkeytail White Knight Aromatic Knight Yellowing Knight	No No Yes Yes	Comp 8508 only New County Record
Trametes gibbosa Trametes versicolor Tricholoma album Tricholoma lascivum Tricholoma scalpturatum Tricholoma sciodes	Turkeytail White Knight Aromatic Knight Yellowing Knight Beech Knight Yellow-staining	No No Yes Yes Yes	

Verpa conica	Thimble Morel	No?	New Record for East Sussex
Xerocomellus cisalpinus		Yes	Comp 8508 only
Xerocomellus porosporus	Sepia Bolete	Yes	Comp 8508 only
Xerula radicata	Rooting Shank	No	
Xylaria hypoxylon	Candlesnuff	No	