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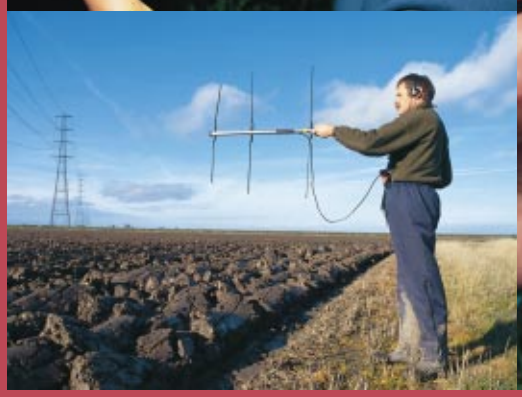

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Creolophus (= *Hericium*) *cirrhatus, Hericium erinaceus* and *H. coralloides* in England

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Summary

Creolophus (=Hericium) cirrhatus, *Hericium erinaceus* and *H. coralloides* are all included in the provisional Red Data List of British Fungi (Ing 1992), but only, *H. erinaceus* is a UK BAP priority species, being one of four fungal species on Schedule 8 of the Wildlife and Countryside Act 1981. To assess the status of these fungi the British Mycological Society database and the Hampshire data set were analysed. All surveys are based on fruit body occurrence rather than presence of fungal mycelia. Since fruit body production is erratic and dependent on a wide variety of abiotic factors as well as intrinsic factors associated with age, size and physiological state of the mycelium, monitoring them alone does not give the full picture. However, to survey mycelia within wood is impracticable. Thus, it is difficult to judge the true status of these fungi.

There are as many or more records of these three species in the last 20 years as in the previous 170 years, though this at least partly reflects recording effort, and should not be taken as indicative of population increases. *H. coralloides* is probably the rarest of the three species and should be a UK BAP priority species. All three species were most frequently recorded from the south / south east with very occasional northern or westerly records. Vice county 11 (Hampshire) has the most records, with fruiting reported in a variety of sites in the New Forest. Frequently re-surveying the New Forest/Hampshire might determine whether or not there appear to be changes in the population. The large number of records from semi-natural woodland with a long history of tree coverage, a range of tree age classes and retained dead wood, implies that they may be indicators of good habitat quality and increased nature conservation value.

There is evidence of host specificity, over 80% of each species being recorded on beech (*Fagus sylvatica*), with a further 14% of *H. coralloides* records on ash (*Fraxinus excelsior*). Few records indicate whether the host was standing or fallen. There may also be a correlation with large wood. The fruiting season of *C. cirrhatus* starts in mid-July while *H. coralloides* and *H. erinaceus* start in early September, all three continuing until late-November, with a few records at other times of the year.

Contents

1. Background

Creolophus (=Hericium) cirrhatus, Hericium erinaceus, *H. coralloides* are all included in the provisional Red Data List of British Fungi (Ing 1992). Only *H. erinaceus* is a UK BAP priority species, being one of four fungal species on Schedule 8 of the Wildlife and Countryside Act 1981. However, preliminary evidence suggests that *H. coralloides* may be rarer (Wicks 1999). Hampshire, and in particular the New Forest, is a stronghold for these species, and has been surveyed in detail recently (Wicks 1999). However, the distribution of these species across England is unknown, nor is it known whether they are stable, decreasing or increasing. This report seeks to address this by analysing the British Mycological Society database, the Hampshire data set (Wicks 1999) and data from local recorders. Emphasis is placed on locality and host characteristics.

As a background to such a survey, and as a prelude to extensive practical research it is important to have information on taxonomy and nomenclature, and what is known about the biology and ecology of these species. The published literature (though scant) has therefore also been reviewed and web-based searches made. Finally recommendations for future research, management and the possibility of re-establishing populations are made.

2. Description, taxonomy and nomenclature

2.1 Classification

Eumycota, Basidiomycotina, Agaricomycetidae, Russulales, Hericiaceae, *Hericium* and *Creolophus* (Kirk *et al*, 2001)

Common names:
Bear's head
Hedgehog fungus/mushroom
Tooth fungus
Houtou
Lion's mane
Monkey's head
Old Man's beard
Pom Pom
Satyr's beard
Sheep's head
Yamabushi-take (Japanese: Mountain priest mushroom)

Taxonomy is variable. Hall & Stuntz (1971) dealing with taxonomy of apileate Hydnaceae, suggested that the genus *Hericium* should be separated according to a subgeneric system, grouping the species into three stirps: *H. erinaceus*, *H. coralloides* and *H. ramosum*. However, *H. coralloides* from North America is not mating compatible with *H. coralloides* from Europe, and has been reclassified as *H. americanum* (Ginns 1984). It has then been suggested that *H. ramosum* be renamed *H. coralloides* (Http://www.fs.fed.us/gpnf/ama/sfp/coral.htm). In the mountains of central and southern Europe and in eastern North America, there is another closely related species – *H. alpestre* Pers. (Hallenberg 1983). According to Hall & Stuntz (1971), it is synonymous with *H. abietis*. However, North American *H. abietis* were mating incompatible with an Austrian *H.*

alpestre (Ginns 1984). *H. coralloides* and *H. alpestre* are also mating incompatible (Hallenberg 1983). Stalpers (1996) gives the latter as a synonym for *H. flagellum*.

The genus *Hericium* is now considered to contain *H. coralloides* (Scopoli: Fr.) Pers., *H. erinaceus* (Bull.: Fr.) Pers., *H. abietis* (Weir ex Hubert) K. Harrison, *H. americanum* (Ginns) and *H. flagellum* (Scop.) Pers. (Stalpers 1996). In Britain the closely related species *H. cirrhatus* is important. This species is placed in the genus *Creolophus* in the most recent taxonomic treatment, based on the fact that its abhymenial surface has strands (*Hericium* does not) and spores are smooth rather than ornamented (Stalpers 1996). Stalpers does not use the stirps system, and his classification and nomenclature are used throughout this report. Synonyms are indicated in Table 1.

There still seems to be some confusion in the taxonomy of *Hericium*, which may require molecular phylogenetic studies to resolve the relationships between species in this and closely related genera.

Table 1 Synonyms of *C. cirrhatus* (Pers.: Fr.) Karsten, *H. coralloides* Scop. and *H. erinaceus* (Bull.: Pers.) Fr.

C. cirrhatus	*H. coralloides*	*H. erinaceus*
Hydnum corrugatum Fr. *Hericium cirrhatus* *Hydnum cirrhatum* Pers. *Hydnum diversidens* Fr. *Hericium diversidens* (Fr.) Nikol.	?*Mania ramosiaaima* Scop. *Hydnum laciniatum* Leers *H. erinaceum* Retz [non Bull.] *H. coralloideum* Batsch [non Scop.] *H. stalactitum* Schrank *H. ramosum* Bull. *H. clathroides* Pallas *Clavaria cornucervi* Paulet *Hydnum abietinum* Schrader ?*H. nudicaule* Pers. *H. muscoides* Schum. *Clavaria madereporaeformis* Retz. *Hydnum ramosum* Schw. *H. reichii* Opiz *H. aciculare* Sacc. *H. caput-ursi* Fr. *H. novae-zealandiae* Colenso	*Martella echinus* Scop. *Manina cordiformis* Scop. *Hydnum hystricinum* Batsch *Clavaria caput-medusae* Bull. *C. conferta* Paulet *Hericium hystrix* Pers. *Hydnum agaricum* Hoffmann *Hericium grande* Rafin. *Steccherinum quercinum* Gray *Hericium cardium* Pers. *Hericium commune* Roques *Hydnum omasum* Panizzi *Hydnum notarisii* Inzenga *Dryodon juranus* Quél

2.2 Description

Fruit body descriptions (Table 2) are based on Stalpers (1996). Keys are provided by Stalpers (1996) and Dickson (2000).

Table 2 Description (field characteristics) of *Hericium* species found in England

Character	*C. cirrhatus*	*H. coralloides*	*H. erinaceus*
Basidiome form	Annual, soft fleshy, up to 25 cm wide, pileate, broadly attached, single or confluent. Margin curled inwards. Upper surface strigose (bristly/hairy). Long (10-15mm) hymenial spines, sterile at apex.	Annual, fleshy to brittle. Branched with spines evenly distributed and comb-like on branches. Main branches up to10cm diam., originating from a rooting base or stipe, and ramifying repeatedly and irregularly. (see Appendix 15)	Annual, fleshy, unbranched, compact or lobed tubercle, up to 20 cm diam., crowded with spines up to 25 mm long, spines in terminal tufts. (see Appendix 15)
Basidiome colour	Whitish to pale yellow when young, becoming brownish with age	Whitish	White to cream coloured, becoming yellowish brown when old
Generative hyphae	Thin to thick-walled (up to 4 µm thick); 1.5-14 µm wide	Thin to thick-walled; 3-18 µm wide	Thin to thick-walled; 3-15 µm wide
Gloeoplerous hyphae*	4.5-8 µm wide, often curving into hymenium as gloeocystidia	4-7.5 µm wide, often protruding into the hymenium	5-13 µm wide, often protruding into the hymenium, and then sometimes capitate
Basidium shape/size (µm)	Clavate, 20-30 x 4-5	15-20 x 3.5-5	25-40 x 5-7
Spore size (µm)	3.5-4.5 x 2.5 x 3.5	3.5-5 x 2.8-4	5-6.2 x 4-5
Spore surface/colour	Smooth, hyaline, thick-walled, amyloid	Roughened to verrucose	Minutely roughened to verrucose
Spore shape	Subglobose to broadly ellipsoid	Subglobose to ovoid	Subglobose to ovoid

*Sterile hyphae with dense, staining, oily, resinous or granular contents

2.3 Mating behaviour

It has been suggested that *H. coralloides* is amphithallic (=homothallic) (Hallenberg 1983), i.e. sexual reproduction can occur on a mycelium derived from a single basidiospore. However, this was largely based on single spore isolates having clamp connections; from a fruit body which had developed in culture, germlings that were small tended not to have clamps, whereas faster growing germlings were clamped. Basidiomycete secondary mycelium (i.e. mycelium after mating has occurred successfully) has clamp connections; however, several families have clamped primary (i.e. not mated) mycelium (e.g. Ainsworth 1987). Therefore, clamps on germlings should not necessarily be taken as implying homothallism, and mating studies are necessary to determine whether fungi have mating systems that favour inbreeding or outbreeding.

Haploid fruiting (i.e. fruiting of a culture that has not mated) was observed in single spored cultures of *H. coralloides* and *H. alpestre*, resulting in bi-sterigmate basidia formed directly on the mycelium. Crossing tests indicated tetrapolarity (bifactorial; i.e. there is a 25% chance of successful mating with mycelium formed from spores taken from a single fruit body), though only a few crosses were made (Hallenberg 1983).

More rigorous mating studies, performed by Ginns (1985), indicated that *H. coralloides*, *H. erinaceus*, *H. abietis* and *H. americanum* have tetrapolar (bifactorial) mating systems (i.e. there is a 25% chance of successful mating with mycelium formed from spores taken from a single fruit body). Thus they have mating systems that favour outbreeding. It would be useful to confirm the mating systems of the British species.

3. Published research

Aside from the aforementioned taxonomic texts little research has been done on these fungi, apart from cultivation for production of edible fruit bodies (see Ehlers & Schnitzler, 1998; Stamets, 2000) and isolation of novel metabolites from *H. erinaceus* cultures, particularly for medicinal uses. For example, novel metabolites include: diterpenoids (erinacenes H & I; Lee *et al*, 2000); erinicene A, B, C, D & E metabolites that stimulate the synthesis of nerve growth factor (Kawagishi *et al*, 1991, 1994); hericerin that inhibits pollen germination and growth (Kimura *et al*, 1991). *H. erinaceus* fruit bodies and some metabolites have antimicrobial properties (Okamoto *et al*, 1993); suppress tumour growth (Mizuno *et al*, 1992); and are useful in treatment to reduce inflammation in gastric ulcers (Xu 1985).

With regard to cultivation, in artificial culture H. *erinaceus* is whitish, with mycelial cords radiating from the dense centre (Stamets 2000). Aerial growth is stimulated by elevated CO_2. As cultures age they become yellow to pinkish. Fruit bodies (elongated aerial spines changing from whitish to yellowish with age) form in 2 – 3 weeks at 24^{o}C. The species is easy to culture outdoors by inoculating logs with colonised wood dowels or sawdust, and indoors in logs or containers (e.g. polythene bags) of sawdust. Cultural characteristics of the North American species are provided by Ginns (1985).

4. Occurrence in England: pre- and post-1980

4.1 Source and reliability of records

The major depository of records is the British Mycological Society (BMS) database (http://194.131.255.3/bmspages/BMSFRD/bmsfrd.htm). This includes information on: species name, associated vegetation, habitat type, altitude, date, locality, grid reference, vice-county number and county. Unfortunately, however, many entries are incomplete. Also, data must be examined carefully since records of the same site within the same season may indicate re-recording of the same fruit body. Records for the same site in different years are, however, useful because they imply continuity of fruiting or a population of more than one individual.

There is also a separate database for the New Forest (Wicks, 1999), which will be added to after re-surveying in 2003 (Naomi Ewald, pers. comm.). This contains similar information to the BMS database, though records are often more detailed.

Data are also held by county recorders and other individuals. Some of these data have been obtained by postal/email contact, and are included. However, response to requests for data was very low.

It is not easy to determine the reliability of the data. Incorrect identification is always a major concern. There are also uncertainties in identification of host, and of exact site. Also, in the BMS data base over half of the records (312) are anonymous.

4.2 Status of *C. cirrhatus*, *H. coralloides* and *H. erinaceus* based on the BMS database

There are as many or more records of these three species in the last 20 years as in the previous 170 years (Table 3; Fig. 1; Appendix 1). However, this at least partly reflects recording efforts, and mirrors the trend of increase in reports of other fungi, e.g. Agaricales (Fig. 2).

Some degree of host specificity is evident, over 80% of each species being recorded on beech (*Fagus sylvatica*), with a further 14% of *H. coralloides* records on ash (*Fraxinus excelsior*; Fig. 3; Appendix 2). Few records indicate the state of the host, but there are reports on standing, fallen and felled trunks, stumps and dead attached branches, including well decayed wood and hollow trunks. Many of the records are on sites of semi-natural woodland with a continuous history of tree coverage, a range of tree age classes, and retained dead wood.

The fruiting season of *C. cirrhatus* extends from mid-July to late-November (Fig. 4). The season for *H. coralloides* and *H. erinaceus* is narrower extending from early September to late-November, though there are also a few records at other times of the year (Fig. 4).

Table 3 Records of *C. cirrhatus*, *H. coralloides* and *H. erinaceus* in the BMS database

	C. cirrhatus	*H. coralloides*	*H. erinaceus*
Total records	196	107	252
Records with date	184	95	235
Records 1811-1980	66	48	109
Records post-1980	118	47	126
Records specifying host	129	58	135

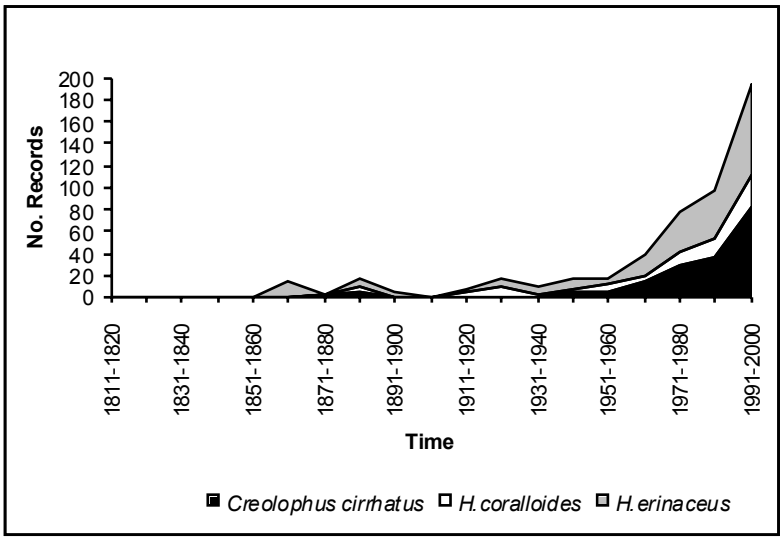

Figure 1 Number of records of *C. cirrhatus*, *H. coralloides* and *H. erinaceus* per decade in the BMS database

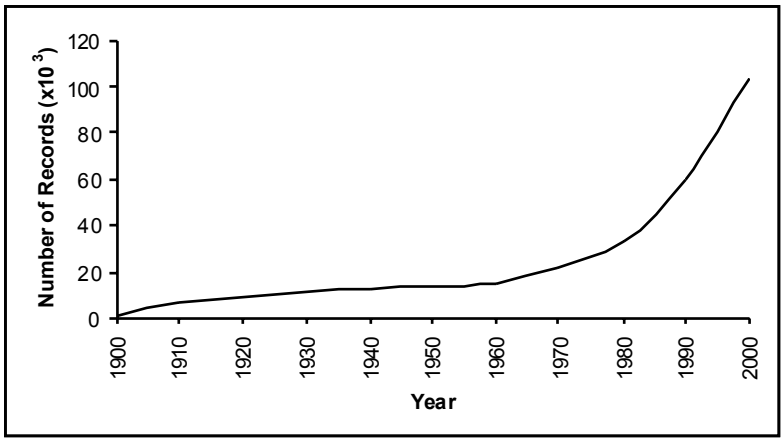

Figure 2 Number of records of Agaricales per decade in the BMS database

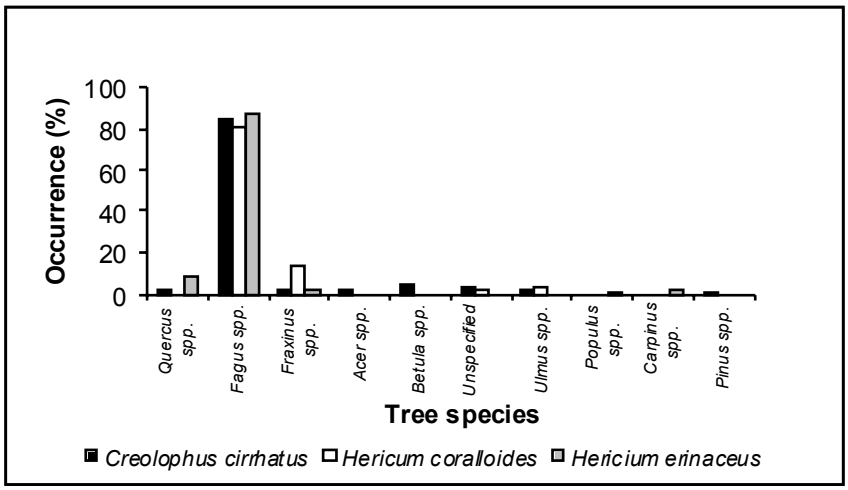

Figure 3 Number of records of *C. cirrhatus*, *H. coralloides* and *H. erinaceus* in the BMS database with respect to tree species

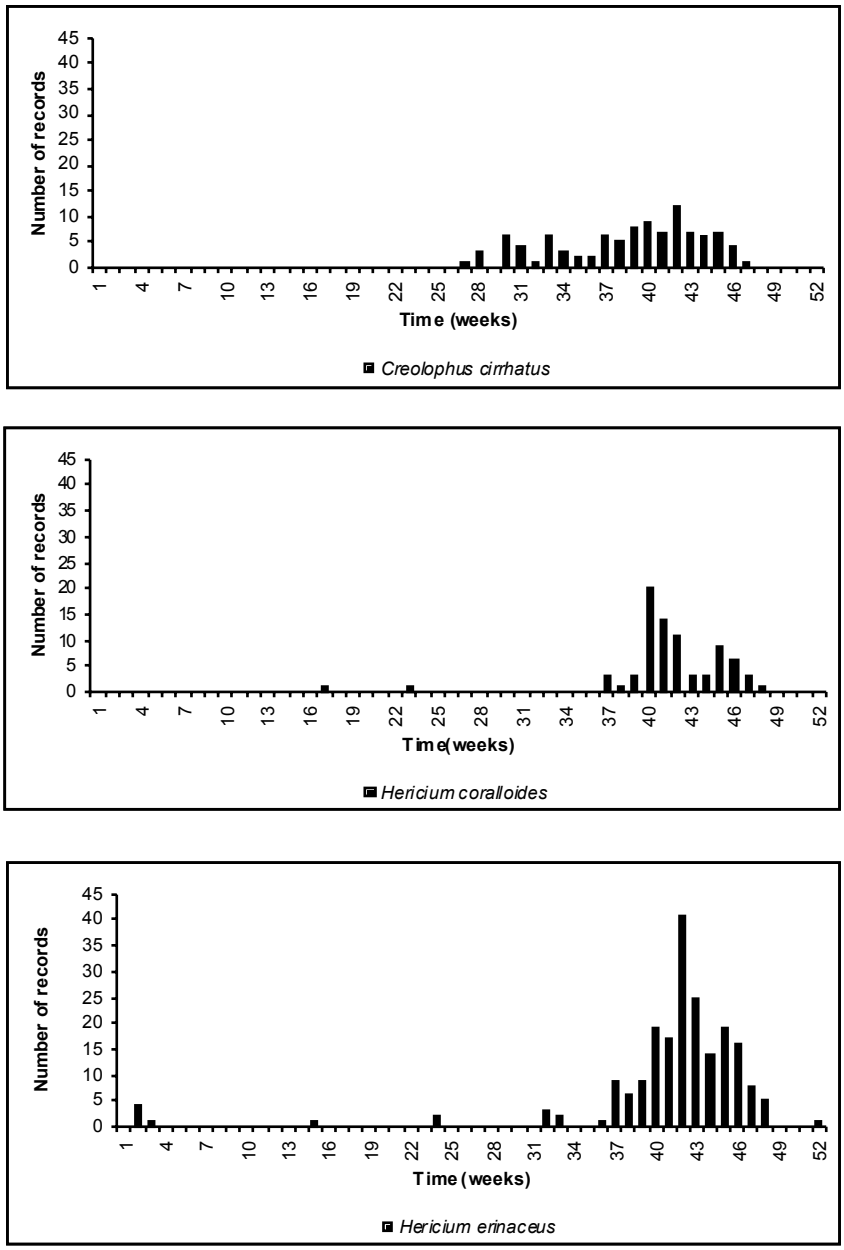

Figure 4. Time (week 1 = first week of January) when *C. cirrhatus*, *H. coralloides* and *H. erinaceus* were reported fruiting in the BMS database. Records have only been included when the actual day was specified. Reports where only month was recorded have been omitted, including a few records outside of the main fruiting season (see Appendices 7-9).

4.3 Occurrence of *C. cirrhatus*, *H. coralloides* and *H. erinaceus* based on the New Forest database

As in the BMS database, records of fruit body occurrence increased during recent years (Fig. 5; Appendix 3). Beech was again the most common host for all species (Appendix 4). *C. cirrhatus* was always reported on fallen trees, *H. coralloides* was mostly (90%) on fallen trees, whereas *H. erinaceus* was more frequently recorded on standing trees (68%; Fig. 6; Appendix 5). Where girth was recorded all species were found fruiting on large trunks: *C. cirrhatus* (183 cm diameter at breast height (dbh)), *H. coralloides* (range 50 –260 cm; n=2, mean=143) and *H. erinaceus* (range 107-460 cm; n=7, mean=256, SEM=54; 50 cm dbh of oak) (Appendix 6). These data should be interpreted cautiously as girth may only have been recorded when trees were large!

Marren & Dickson (2000) observe that *C. cirrhatus* is usually found fruiting on cut surfaces and damaged standing trees, sometimes high off the ground; *H. coralloides* on large fallen logs; and *H. erinaceus* on living trees that have suffered damage from gales or lightning strikes.

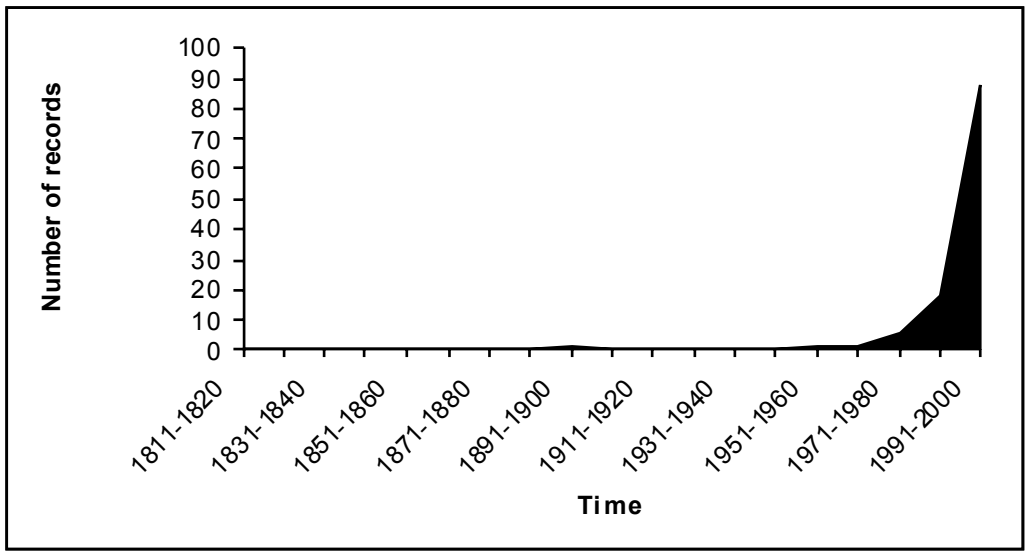

Figure 5 Number of records of *C. cirrhatus*, *H. coralloides* plus *H. erinaceus* per decade in the Hampshire database

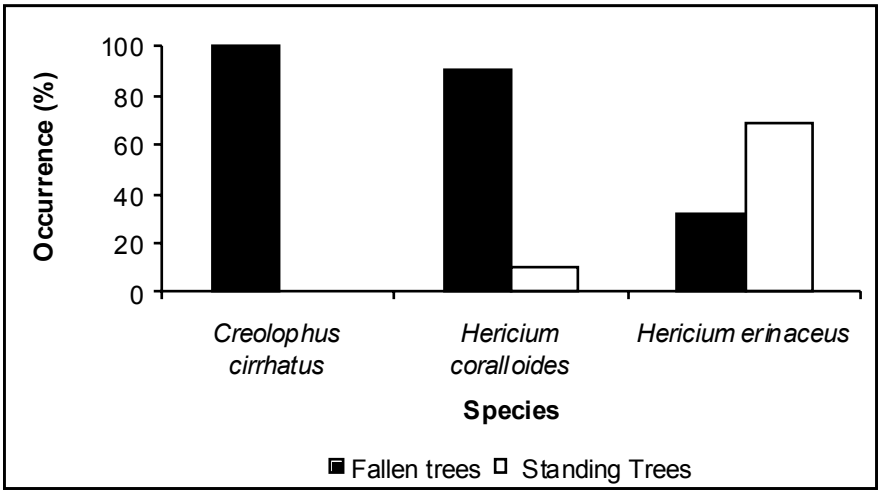

Figure 6. Fruit body occurrence on standing and fallen trees based on the Hampshire database

5. Distribution in England: county records

All three species were most frequently recorded in the south / south east with very occasional northern or westerly records (Figs 7 & 8, Appendices 7-9). Vc 11 (Hampshire) had the most records, with fruiting reported in a variety of sites in the New Forest. The Hampshire database (Appendices 10-12) had some overlap of records with the BMS database (Appendices 7-9).

Surrey (Vc 17), Essex (Vc 18), Sussex (Vc 13 &14) and Somerset (Vc 5 & 6) each had 10 or more records of *C. cirrhatus*, Hertfordshire (Vc 20) had 8 records, while Vice counties 1, 3, 7, 8, 9, 21, 22, 23, 24, 28, 30, 34, 36, 59, 62, 64, 65 had less than 5 records (Appendix 7).

Similarly, *H. coralloides* had 10 or more records from Sussex (Vc 13) and Essex (Vc 1) though none from Surrey (Vc 17) or Somerset (Vc 5 & 6), but 11 from Buckinghamshire (Vc 24); Suffolk (Vc 25) had 8 records; Vice counties 1, 16, 20, 21, 22, 23, 26, 28, 29, 38, 56, 64 and 69 had less than 5 records (Appendix 8).

H. erinaceus had 10 or more records in Kent (Vc 16), Surrey (Vc 17), Essex (Vc 18), Berkshire (Vc 22) and Buckinghamshire (Vc 24); there were 7 records from Sussex (VC 13); and 5 or less records from Vc 1, 5, 8, 9, 20, 23, 25, 36 and 58 (Appendix 9).

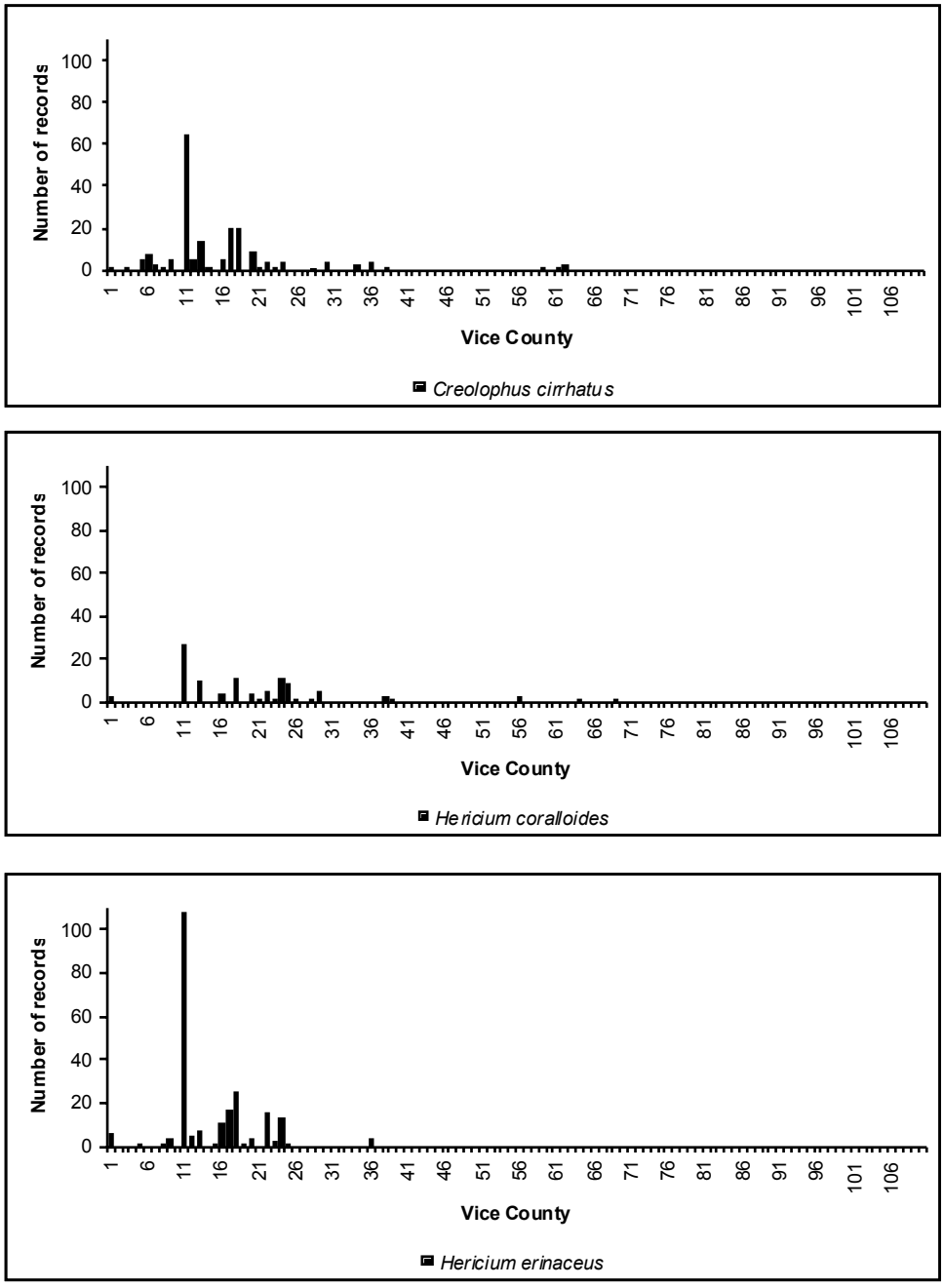

Figure 7 Number of records of *C. cirrhatus*, *H. coralloides* and *H. erinaceus* by vice county. See Appendix 14 for vice county numbering scheme.

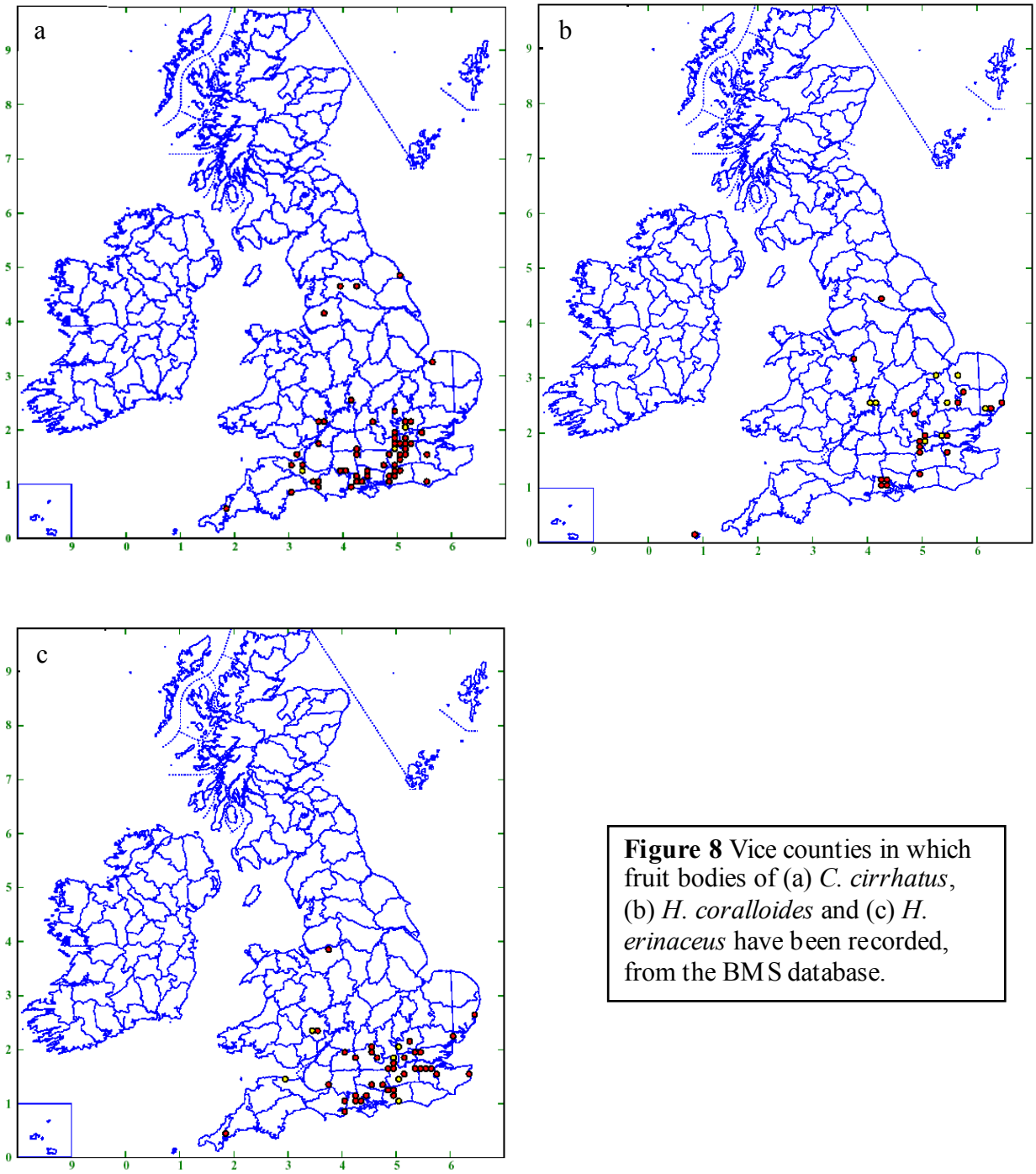

Figure 8 Vice counties in which fruit bodies of (a) *C. cirrhatus*, (b) *H. coralloides* and (c) *H. erinaceus* have been recorded, from the BMS database.

6. Sites, conservation and management

The main centre for *C. cirrhatus*, *H. coralloides* and *H. erinaceus* is the New Forest area, which historically and ecologically can be regarded as a single, large continuous site, though it could also be considered a dense group of many smaller sites (Table 4). Other sites from which fruit bodies have been frequently recorded in the past have few or no records in the last decade, though the species are extant at Windsor Great Park (Table 4). It would be valuable to intensively re-survey these areas to determine whether populations are extant.

Table 4 Major areas where *Hericium* species have been record, and date of last record

Vc	site	*C. cirrhatus*	*H. coralloides*	*H. erinaceus*
11	New Forest/Hampshire	extant	extant	extant
18	Hainault Forest	1996		1863
18	Epping Forest	1993	1988	1987
22	Windsor Great Park	extant*	extant*	extant
24	Burnham Beeches	1994**	1962	1943

*last recorded in the BMS database in 1946 and 1975 for *C. cirrhatus* and *H. coralloides* respectively, but definitely extant (Appendix 13)
** last recorded in the BMS database in 1962, but definitely present in the last 10 years (Appendix 13)

These sites have in common continuity of tree coverage through time, large old trees, and retention of dead wood. For management to conserve these fungal species it is essential to:

- retain old trees;
- ensure a continuity of different age classes;
- encourage regeneration of saplings where fallen trees have left gaps;
- retain standing and fallen dead wood;
- avoid local pollution events;
- avoid clear felling.

7. Research priorities

A lot is known about culturing *Hericium* species (especially *H. erinaceus*) artificially for production of fruit bodies for consumption and medical uses. However, little is known about their ecology, and the following research questions need to be addressed to determine the factors limiting their distribution:

- Are *C. cirrhatus*, *H. coralloides* and *H. erinaceus* really rare, or is fruit body production limited in nature? What limits fruit body production in nature (e.g. microclimate, size of mycelium, presence of other species)?
- What tree species and wood size classes can be successfully colonized, and under what climatic conditions?
- To what extent are these species able to naturally establish in areas relatively rich in natural fruiting populations?

- Following successful establishment in wood, how quickly are *C. cirrhatus*, *H. coralloides* and *H. erinaceus* replaced, by what are they replaced, and is there differential replacement according to host species and size class?
- If mycelial establishment is easy and fruit body production is prolific (which appears to be the case *in vitro*) what limits establishment in the field?
    - How many spores do fruit bodies produce and what proportion are viable?
    - How far and by what are spores dispersed, and what is the probability of finding a suitable substratum for germination/growth?
    - What is a suitable substratum for growth, in terms of tree species, size, infection courts, whether uncolonized or not, and if colonized by what species?
    - What microclimatic factors affect spore production, dispersal, germination and successful colonization?
    - What is the population structure and mating system in Britain?
- Investigate the possibility of modelling data on these species to determine which factors influence distribution, as has begun for a wood decay basidiomycete in Sweden (J. Stenlid, pers. comm.).
- Is it possible to re-establish *C. cirrhatus*, *H. coralloides* and *H. erinaceus* populations in the field? If so, which of the sites from which the species had been previously recorded would now be the most appropriate sites for re-establishment (i.e. 'restored' to conditions which can support these species)? Then, which would be the most appropriate 'donor populations'? The latter would require information, including genetic/molecular diversity, on populations from different localities.

8. Conclusions and recommendations

- Though there has been an increase in fruit body records of *C. cirrhatus*, *H. coralloides* and *H. erinaceus*, this mirrors increases in records of taxa, which probably reflect increase in recording effort rather than population increases. Indeed there is some indication that *Hericium* species no longer fruit at some main sites from which they were previously recorded.
- *H. coralloides* appears to be rarer than *H. erinaceus*, and should therefore also be a UK BAP priority species.
- Though records are frequently imprecise, *C. cirrhatus*, *H. coralloides* and *H. erinaceus* seem to be found fruiting most commonly in mature woodlands on beech, with a long history of tree coverage, a range of tree age classes and retained dead wood. Maintaining appropriate habitat is therefore likely to be essential. They may be indicators of good habitat quality and increased nature conservation value.
- Insufficient information is recorded in the databases to give any indication of whether other fungi may be indicators of the types of sites at which *C. cirrhatus*, *H. coralloides* and *H. erinaceus* might be expected to be found.
- Frequently re-survey the New Forest/Hampshire area to determine whether or not there appear to be changes in the location and abundance of fruit bodies, as is planned for autumn 2003 (Naomi Ewald pers. comm.).
- Re-survey other sites listed in Table 4 to determine whether these are still main sites for the species.

- Research has been initiated at Cardiff University to determine: (1) if populations can be re-established by inoculating felled logs and standing trees in the field; (2) how easily *C. cirrhatus*, *H. coralloides* and *H. erinaceus* are replaced by other wood rotting basidiomycetes in the laboratory and in the field; (3) basic growth and spore germination responses to abiotic factors in the laboratory. Further research should be funded to: (1) determine whether artificially established *Hericium* populations can be maintained in the mid-term; (2) address the remaining research priorities listed in Section 8.

9. Acknowledgements

Thanks to: the British Mycological Society for access to records in the current database, Debbie Wicks and Naomi Ewald for access to Hampshire database records, Martyn Ainsworth for allowing inclusion of his photographs, to the latter and Ted Green for general advice and for additional field records, and to all other contributors of field records.

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Appendices

Appendix 1. Frequency of records in the BMS database in 10 year categories

	C. cirrhatus	*H. coralloides*	*H. erinaceus*
1811-1820	0	1	0
1821-1830	0	0	0
1831-1840	0	0	0
1841-1850	0	0	0
1851-1860	0	0	0
1861-1870	1	0	13
1871-1880	3	0	0
1881-1890	5	5	7
1891-1900	1	0	3
1901-1920	0	0	1
1911-1920	0	5	2
1921-1930	1	9	8
1931-1940	1	2	6
1941-1950	4	3	9
1951-1960	6	6	5
1961-1970	14	6	19
1971-1980	30	11	36
1981-1990	36	17	44
1991-2000	82	30	82
With Date	**184**	**95**	**235**
No date	12	12	17
Total	**196**	**107**	**252**
No. records pre 1980	66	48	109
No. records post 1980	118	47	126
%records pre 1980	34	45	43
%records post 1980	60	44	50
No. records specifying Host	129	58	135

Appendix 2 Frequency of records in the BMS database with respect to host

	C. cirrhatus		*H. coralloides*		*H. erinaceus*	
	frequency	**percent**	**frequency**	**percent**	**frequency**	**percent**
Quercus sp.	2	2	0	0	11	8
Fagus sp.	109	84	47	81	118	87
Fraxinus sp.	2	2	8	14	2	1
Acer sp.	2	2	0	0	0	0
Betula sp.	6	5	0	0	0	0
Unspecified	4	3	1	2	0	0
Ulmus sp.	3	2	2	3	0	0
Populus sp.	0	0	0	0	1	1
Carpinus sp.	0	0	0	0	3	2
Pinus sp.	1	1	0	0	0	0
Total	129		58		135	

Appendix 3 Frequency of records in the Hampshire database in year categories

	Frequency
1811-1890	0
1891-1900	1
1901-1950	0
1951-1960	1
1961-1970	1
1971-1980	6
1981-1990	18
1991-2000	88
With Date	115
No date	0
Total	115
No. records pre 1980	3
No. records post 1980	108
%records pre 1980	2.61
%records post 1980	93.91
No. records specifying host	100

Appendix 4 Frequency of records in the Hampshire database with respect to host

	C. cirrhatus	***H. coralloides***	***H. erinaceus***
Quercus sp.	0	0	1
Fagus sp.	29	19	49

Appendix 5 Frequency of records in the Hampshire database with respect to whether tree was standing or fallen

		fallen		standing	
	total	**frequency**	**percent**	**frequency**	**percent**
H. erinaceus	19	6	32	13	68
H. coralloides	10	9	90	1	10
C. cirrhatus	3	3	100	0	0

Appendix 6 Girth (at breast height) of trees on which *C. cirrhatus*, *H. coralloides* and *H. erinaceus* were recorded fruiting in the Hampshire database

Species	**Standng/Fallen**	**Girth (cm)**	**Host**
C. cirrhatus	Fallen	183	Beech
H. coralloides	Fallen	50	Beech
H. coralloides	Standing	260	Beech
H. erinaceus	Standing	305	Beech
H. erinaceus	Standing	107	Beech
H. erinaceus	Standing	137	Beech
H. erinaceus	Fallen	120	Beech
H. erinaceus	Standing	250	Beech
H. erinaceus	Standing	410	Beech
H. erinaceus	Standing	460	Beech
H. erinaceus	Standing	50	Oak
Mean ± SEM		212 ± 64	

Appendix 7 Records of *C. cirrhatus* from British Mycological Society database

VC	Record no.	Identifier	Year	Month	Day	Grid ref	Locality	Associated host
1	217957	anon	1974	--	--	SW8350	St Allen, Truthan Woods	
3	354364	D.B. Farley	1995	10	08	SY030845	Bystock Pools	*Fagus sylvatica*
5	218923	A.J. Dodd	1954	09	26	ST22	Taunton	beech
5	229293	D.A. Reid	1954	09	26	ST22	Taunton	*Fagus*
5	218924	anon	1961	09	26	ST2135	Bridgewater, Higher Merridge	beech
5	229294	anon	1961	06	29	ST2135	Higher Merridge, Bridgwater	*Fagus*
5	229297	anon	1971	10	10	ST50	White Vine Farm, Crewkerne	
6	218943	M. Madelin	1984	09	23	ST5572	Bristol, Leigh Woods	deciduous
6	229281	anon	1984	09	23	ST57	Leigh Woods, near Bristol	Angiospermae
6	147744	anon	1985	--	--	ST0537	Nettlecombe	*Fagus sylvatica*
6	444438	N.W. Legon	1999	09	27	ST1653	Triscombe, Quantock Hills	*Fagus sylvatica*
6	479707	N.W. Legon	1999	09	27		Quantock Hills : Triscombe Stone	*Fagus sylvatica*
6	498548	N.W. Legon	1999	09	27	ST1653	Triscombe : Quantock Hills	*Fagus sylvatica*
6	561463	J. Wills	2000	09	28		Quantock Hills: Triscombe: by the Quantock Ridgeway	*Fagus sylvatica*
7	538221	D. Shorten	1994	10	09	SU2067	Savernake Forest	*Fagus sylvatica*
7	541163	D. Shorten	1995	10	22	SU2067	Savernake Forest	*Fagus sylvatica*
8	218936	anon	1976	11	15	ST92	Swallowcliffe, Crockerton Firs	beech
9	218930	anon	1971	10	10	ST40	Crewkerne, White Vine Farm	
9	216379	anon	1985	--	--	SY5195	Nettlecombe	
9	218935	anon	19XX	--	--	ST4301	Lewesdon Hill	beech
9	229286	anon	19XX	--	--	ST4301	Lewesdon Hill	*Fagus*
11	229324	P.J. Roberts	1922	10	--		New Forest	*Fagus*
11	218929	anon	1967	08	30	SU20	Lyndhurst	beech
11	218925	anon	1969	11	03	SU2709	New Forest, Emery Down	beech
11	229299	anon	1969	11	03		New Forest: Emery Down	*Fagus*
11	403430	D.A. Reid	1969	11	03	SU2808	New Forest	*Fagus*
11	403431	D.A. Reid	1969	11	03	SU2808	New Forest	

VC	Record no.	Identifier	Year	Month	Day	Grid ref	Locality	Associated host
11	215993	anon	1979	10	10	SU2407	New Forest 05	
11	218942	anon	1979	10	13	SU2407	New Forest, Mark Oak Wood	beech
11	229280	anon	1979	10	13		New Forest: Mark Ash Wood	*Fagus*
11	403432	D.A. Reid	1979	10	10	SU2407	Marsh Ash Inclosure	
11	403433	D.A. Reid	1979	10	13	SU2407	Marsh Ash Inclosure	*Fagus*
11	403434	D.A. Reid	1979	10	13	SU2407	Marsh Ash Inclosure	*Fagus*
11	215994	anon	1985	08	11	SU2212	New Forest 52	*Fagus*
11	216382	anon	1985	10	05	SU3100	Roydon Woods Nature Reserve	
11	403435	G.C. Dickson	1985	08	11	SU2212	Anses Wood	*Fagus*
11	215995	anon	1986	08	05	SU3200	New Forest 1817	
11	403436	A.C. Leonard	1986	08	05	SU3200	Calveslease Copse	
11	215996	anon	1987	10	20	SU2508	New Forest 28	*Fagus*
11	221581	anon	1987	10	03		New Forest	*Fagus*
11	403437	G.C. Dickson	1987	10	20	SU2708	Millyford Bridge	*Fagus*
11	215997	anon	1989	10	13	SU3209	New Forest 59	*Fagus*
11	230412	G.C. Dickson	1989	09	--	SU321094	Mallard Wood	*Fagus*
11	403438	G.C. Dickson	1989	10	13	SU3209	Mallard Wood	*Fagus*
11	221607	N.W. Legon	1990	11	05		New Forest: Boulder Wood	*Fagus*
11	380028	N.W. Legon	1990	11	02	SU2450	Mark Ash Wood, New Forest	*Fagus*
11	403439	A.C. Leonard	1991	09	11	SU2506	Barrow Moor	*Fagus*
11	221834	anon	1992	09	13		New Forest: Millyford Bridge	*Fagus*
11	403440	H. Wollweber	1992	09	14	SU3804	North Gate C.P. & Foxhunting Inclosure	*Fagus*
11	380610	N.W. Legon	1993	07	30	SU30	Denny Wood, New Forest	*Fagus*
11	380625	N.W. Legon	1993	08	13	SU30	Denny Wood, New Forest	*Fagus*
11	222505	N.W. Legon	1994	09	17	SU30	New Forest: Denny Wood	*Fagus*
11	371183	P. Holloway	1994	11	13	SZ190920	Steamer Point 2	
11	380874	N.W. Legon	1994	09	17	SU30	Denny Wood, New Forest	*Fagus*
11	403441	S. Guy	1994	10	08	SU3305	Denny Inclosure	*Fagus*
11	403442	S. Guy	1994	10	22	SU3603	Frame Wood	*Fagus*
11	403443	S. Guy	1994	12	03	SU2215	Eyeworth Wood	*Fagus*

VC	Record no.	Identifier	Year	Month	Day	Grid ref	Locality	Associated host
11	403444	S. Guy	1994	12	04	SU2208	Bratley Inclosure	*Fagus*
11	460655	G.C. Dickson	1994	11	23	SU3001	Roydon Woods NR W1	*Fagus sylvatica*
11	223294	N.W. Legon	1995	06	10	SU30	New Forest: Denny Wood	*Fagus*
11	245354	J.N. Diserens	1995	10	01	SU272125	Rufus stone	*Fagus sylvatica*
11	381203	N.W. Legon	1995	06	10	SU30	Denny Wood, New Forest	*Fagus*
11	403445	S. Guy	1995	09	23	SU3305	Denny Inclosure	*Fagus*
11	403448	S. Guy	1995	11	05	SU2806	Gritnam Wood	*Fagus*
11	403449	S. Guy	1996	10	13	SU3603	Frame Wood	*Fagus*
11	403450	N. Diserens	1996	10	15	SU2214	Eyeworth Wood	*Fagus*
11	403451	S. Guy	1996	11	02	SU2215	Eyeworth Wood	*Fagus*
11	247506	G.J. Mattock	1997	08	11	SU484277	St Catherine's HIll	*Fagus*
11	247507	G.J. Mattock	1997	08	16	SU321094	Mallard Wood	*Fagus*
11	382691	N.W. Legon	1997	09	20	SU30	Little Holmhill Inclosure, New Forest	*Fagus*
11	403452	S. Guy	1997	08	17	SU3306	Denny Inclosure	*Fagus*
11	403453	N.W. Legon	1997	09	20	SU3206	Little Holmhill Inclosure	*Fagus*
11	403454	S. Guy	1997	10	12	SU3603	Frame Wood	*Fagus*
11	403455	S. Guy	1997	10	13	SU3603	Frame Wood	*Fagus*
11	403456	S. Guy	1997	10	13	SU2215	Eyeworth Wood	*Fagus*
11	403458	S. Guy	1997	11	08	SU3503	Frame Wood	*Fagus*
11	403459	S. Guy	1997	11	09	SU3305	Denny Inclosure	*Fagus*
11	372763	S. Rogerson	1998	11	05	SU2214	Eyeworth Wood	
11	403460	S. Guy	1998	10	23	SU2215	Eyeworth Wood	*Fagus*
11	559963	L. Goodwin	1998	10	06	SU310063	Park Ground Inclosure South East	*Fagus sylvatica*
11	444164	N.W. Legon	1999	09	25	SU2400	Burley Old Inclosure, New Forest	*Fagus sylvatica*
11	491659	P. Budd	1999	08	08	SU472135	Telegraph Wood 3	*Fagus sylvatica*
11	493186	J.N. Diserens	1999	08	28	SU252127	Long Beech	*Fagus sylvatica*
11	498274	N.W. Legon	1999	09	25	SU2400	Burley Old Inclosure : New Forest	*Fagus sylvatica*
11	560000	L. Goodwin	1999	10	08	SU222157	Studley Castle	*Fagus sylvatica*
12	222085	anon	1993	09	--	SU73	Selborne	*Fagus ?*
12	244772	BS	1995	11	11	SU833536	Norris Bridge	*Betula*

VC	Record no.	Identifier	Year	Month	Day	Grid ref	Locality	Associated host
12	246633	D.H. Dell	1996	09	21	SU833536	Norris Bridge	*Betula*
12	247487	G.J. Mattock	1997	07	12	SU813587	Yateley	*Fagus*
12	369586	D.H. Dell	1997	10	18	SU827507	Bourley Reservoirs	*Betula*
13	229296	anon	1967	08	30		Lyndhurst	*Fagus*
13	218934	anon	1972	08	05	SU80	Goodwood	ash
13	220194	anon	1972	09	23	SU80	Goodwood	beech
13	229289	anon	1972	09	23	SU80	Goodwood	*Fagus*
13	229291	anon	1972	08	05	SU80	Goodwood	*Fraxinus*
13	218932	anon	1977	09	24	SU91	Chichester, Kingley Vale, path to	
13	218920	anon	1984	08	--	SU92	Petworth, The Mens	
13	218939	anon	1984	07	25	SU81	East Marden, Wildham Wood	beech
13	229284	anon	1984	07	25		Wildham Wood, East Marsden	*Fagus*
13	229304	anon	1984	08	--	TQ02	The Mens	
13	455253	anon	1994	08	20	SU9727	Ebernoe Common (unspecified)	*Fagus sylvatica*
13	403446	S. Guy	1995	09	30	SU0223	The Mens Wood	*Fagus*
13	403447	S. Guy	1995	10	15	SU9027	Ebernoe	*Fagus*
13	231111	E.E. Emmett	1996	08	13	SU92	Ebernoe Common	*Fagus sylvatica*
14	218951	anon	1960	07	30	TQ50	Arlington, Abbots Wood	hardwood
16	154829	anon	1981	09	13	TQ5354	Knole Park	
16	220097	D.A. Reid	1981	09	13	TQ55	Knole Park	
16	613182	S. Lines	1994	--	--	TQ575723	Darenth Wood	
16	609519	B. Harrop	1995	--	--	TQ415665	Brook Wood, Bromley Common	*Fagus sylvatica*
17	218928	anon	1967	08	05	TQ05	East Horsley, Sheepleas	
17	229295	anon	1967	08	14		Sheepleas, East Horsley	
17	135185	anon	1977	10	02	TQ1450	Ranmore Common	Angiospermae
17	216283	anon	1977	10	02	TQ15	Ranmore	
17	218933	anon	1977	10	02	TQ15	Ranmore Common	
17	229290	anon	1977	10	02	TQ15	Ranmore Common	
17	218529	anon	1983	10	11	TQ15	Norbury Park	beech
17	218919	anon	1984	07	09	TQ1972	Richmond Park, Pembridge Lodge	

VC	Record no.	Identifier	Year	Month	Day	Grid ref	Locality	Associated host
17	221701	N.W. Legon	1991	09	30	TQ1585	Norbury Park, Mickleham	*Fagus*
17	386424	N.W. Legon	1991	09	30	TQ158535	Mickleham, Norbury Park	*Fagus*
17	386497	N.W. Legon	1991	11	02	TQ158535	Mickleham, Norbury Park	*Fagus*
17	422014	R. Tantram	1992	09	05	TQ1263	West End Common	
17	223544	P.C. Holland	1995	07	25	TQ27	Wimbledon Common	*Quercus*
17	381449	N.W. Legon	1995	10	08	TQ04	Coombe Bottom, nr Shere	*Fagus*
17	387172	N.W. Legon	1996	10	12	TQ158535	Mickleham, Norbury Park	*Fagus*
17	353762	N.W. Legon	1998	09	16	SU97	Englefield Green: Cooper's Hill	*Acer pseudoplatanus*
17	376591	N.W. Legon	1998	09	16	TQ07	Cooper's Hill, Englefield Green	*Acer pseudoplatanus*
17	377534	N.W. Legon	1998	10	17	SU9631	Brentmoor Heath, nr Bisley	*Betula*
17	385155	M. Waterman	1998	10	17	SU9631	Brentmoor Heath, nr Bisley	*Betula*
17	479052	A. Henrici	1999	08	17	TQ17	Kew: Royal Botanic Gardens, Queen's Cottage ground	Angiospermae
18	215922	anon	1873	--	--	TQ49	Epping Forest	
18	218944	anon	1884	10	--	TQ49	Epping Forest, Chingford	
18	218945	anon	1884	10	--	TQ49	Epping Forest, Chingford	
18	218946	anon	1884	10	--	TQ49	Epping Forest, Chingford	
18	229310	anon	1884	10	--	TQ49	Epping Forest: Chingford	
18	217199	anon	18XX	--	--	TQ49	Epping Forest	
18	229311	anon	18XX	--	--	TQ49	Epping	
18	229313	anon	18XX	--	--	TQ49	Epping	
18	218926	anon	1971	07	27	TQ49	Epping Forest	beech
18	229298	anon	1971	07	27	TQ49	Epping Forest	*Fagus*
18	218931	anon	1972	10	15	TQ49	Epping Forest	
18	229292	anon	1972	10	15	TQ49	Epping Forest	
18	218941	anon	1978	11	16	TQ49	Epping Forest	elm
18	229279	anon	1978	11	16	TQ49	Epping Forest	*Ulmus*
18	229300	P.J. Roberts	1988	11	01	TQ49	Epping Forest	

VC	Record no.	Identifier	Year	Month	Day	Grid ref	Locality	Associated host
18	222023	anon	1993	07	25	TQ49	Epping Forest	*Fagus*
18	230054	anon	1996	09	03	TQ49	Hainault Forest	*Fagus*
18	217207	anon	19XX	--	--	TQ49	Epping Forest	
18	217208	anon	19XX	--	--	TQ49	Epping Forest	
20	217232	anon	1898	--	--	TL10	St. Albans	elm
20	217231	anon	1939	--	--		Hertfordshire	
20	218950	E.M. Wakefield	1951	10	30	TL11	Harpenden, Cooper Rd.	beech
20	229307	E.M. Wakefield	1951	10	30		Cooper Road, Harpenden	*Fagus*
20	218922	anon	1989	11	14	TL11	Harpenden	
20	229302	anon	1989	11	14	TL11	Harpenden	
20	426553	Kew	1989	10	15	TL232170	Danesbury Park	
20	229282	anon	19XX	08	18		?Nettleden, N. of Hemel Hempstead	
21	221863	T. Lassoe	19XX	--	--	TQ1879	Hanwell Cemetery	
22	218949	E.M. Wakefield	1946	10	22	SU97	Windsor Great Park	
22	229306	E.M. Wakefield	1946	10	22	SU96	Windsor Great Park	
22	217117	anon	19XX	--	--	SU97	Windsor	
23	264090	RBP	1994	10	02	SP5119	Kirtlington Pk	
24	229312	anon	1878	08	--	SU9883	Stoke Poges	
24	229334	P.J. Roberts	1962	09	23	SU98	Burnham Beeches	*Fagus*
24	537787	P. Cullington	1999	11	--	SU9296	Penn Wood	
28	147760	anon	1985	10	05	TF6922	Roydon Woods NR	
30	218937	anon	1985	10	26	SP93	Stockgrove Park	
30	218940	anon	1985	10	26	SP93	Stockgrove Wood	
30	229285	anon	1985	10	26	SP93	Stockgrove Wood	
34	218938	anon	1980	10	30	SO61	Forest of Dean, Soudley	beech
34	229283	anon	1980	10	30		Forest of Dean: Soudley	*Fagus*
36	353870	E. Blackwell	1998	11	10	SO5415	Great Doward	*Fagus*
36	455821	S. Thomson	1998	11	10	SO5516	Great Doward	*Fagus sylvatica*
36	458192	S. Thomson	1999	10	06	SO5516	Great Doward	*Fagus sylvatica*
38	97260	anon	1962	07	--	SP15	Great Alne	

VC	Record no.	Identifier	Year	Month	Day	Grid ref	Locality	Associated host
59	229786	anon	1996	07	07	SD61	Smithills Country Park, nr Bolton	*Fagus*
62	217458	anon	19XX	--	--	TA08	Scarborough	*Fagus*
64	212015	anon	197X	--	--	SD9063	Malham	
64	218921	anon	1984	09	16	SE26	Ripon, Fountains Abbey	beech
65	229303	anon	1984	09	16	SE26	Fountains Abbey, Ripon	*Fagus ?*
	218947	anon	1863	--	--		British Isles	beech
	218918	anon	1878	08	22		British Isles	
	351232	anon	1883	--	--			*Fagus*
	218948	F.L. Balfour-Browne	1945	10	21		British Isles	oak
	229309	F.L. Balfour-Browne	1945	10	21		Streathbourne Road, SW17	
	229308	anon	1960	07	30		Abbots Wood, Arlington	
	218927	anon	1966	07	--		Wexford, Rosslare	pine
E	351231	D.A. Reid	1966	07	--		near Rosslare	
	217357	anon	1976	11	13		Crokerton Firs	
	229287	anon	1976	11	15		Crockerton Firs, Swallowcliffe	*Fagus*
	229288	anon	1977	09	24		path to Kingley Vale, near Chichester	
	229305	anon	1984	07	09		Pembroke Lodge, Richmond Park	
	222097	B.M. Spooner	1993	10	06		Briar's Hall Farm Wood, Ormskirk	*Fagus*
W	241512	anon	1997	08	22		Morganstown, nr Cardiff	*Fagus*
	403457	S. Guy	1997	10	14	SU2615	New Forest	*Fagus*
	403461	S. Guy	1998	10	25	SU2512	New Forest	*Fagus*
	476131	N.W. Legon	1998	10	17		Bisley: Brentmoor Heath	*Betula*

E – Republic of Ireland
W - Wales

Appendix 8 Records of *H. coralloides* from British Mycological Society database

VC	Record no.	Identifier	Year	Month	Day	Grid ref	Locality	Host
1	217958	anon	1967	10	--	SV81	Isles of Scilly, Bryher	
1	216323	anon	1981	10	10	SU2912	New Forest, Shave Green	
11	218961	anon	1979	11	03	SU20	Lyndhurst, Foxlease	beech
11	229319	D.A. Reid	1979	11	03	SU2907	Foxlease, Lyndhurst	*Fagus*
11	403485	D.A. Reid	1979	11	03	SU2908	New Forest	
11	154937	anon	1981	10	10	SU2812	Shave Green	*F. sylvatica*
11	215998	anon	1981	10	15	SU2905	New Forest 08	*Fagus*
11	218577	anon	1981	10	08	SU2905	New Forest, Whitley Wood	
11	218578	anon	1981	10	11	SU2905	New Forest, Whitley Wood	beech
11	403464	G.C. Dickson	1981	10	15	SU2905	Whitley Wood	*Fagus*
11	215999	anon	1983	10	10	SU2905	New Forest 08	*Fagus*
11	403465	G.C. Dickson	1983	10	10	SU2905	Whitley Wood	*Fagus*
11	216000	anon	1984	11	17	SU2905	New Forest 08	*Fagus*
11	403466	G.C. Dickson	1984	10	17	SU2905	Whitley Wood	*Fagus*
11	218531	anon	1988	10	--	SU30	New Forest, Denny area	*Fagus*
11	216001	anon	1990	10	03	SU3306	New Forest 10	*Fagus*
11	403467	G.C. Dickson	1990	10	03	SU3306	Denny Inclosure	*Fagus*
11	245360	J.N. Diserens	1995	10	20	SU288082	Emery Down	*F. sylvatica*
11	403470	N. Diserens	1995	10	17	SU2808	New Forest	*Fagus*
11	245386	G.J. Mattock	1996	04	26	SU288079	Lyndhurst Hill	*Fagus*
11	245730	anon	1996	10	26	SU288079	Lyndhurst Hill	*Fagus*
11	403471	N. Diserens	1996	11	06	SU2808	New Forest	*Fagus*
11	371630	G.J. Mattock	1998	10	11	SU288079	Lyndhurst Hill	*F. sylvatica*
11	371902	G.J. Mattock	1998	10	21	SU266156	Bramshaw	*F. sylvatica*
11	372621	anon	1998	11	29	SU312112	Busketts Lawn	*F. sylvatica*
11	403472	S. Guy	1998	10	04	SU2808	New Forest	*Fagus*
11	403474	G.C. Dickson	1998	10	12	SU2808	New Forest	*Fagus*
11	403475	S. Guy	1998	11	07	SU2615	Bramshaw Wood	*Fagus*
13	403468	S. Guy	1994	10	29	SU9027	Ebernoe	*Fagus*
13	453858	P.L. Leonard	1994	10	23	SU9727	Ebernoe Common (unspecified)	

VC	Record no.	Identifier	Year	Month	Day	Grid ref	Locality	Host
13	403469	S. Guy	1995	10	15	SU9027	Ebernoe	*Fagus*
13	450951	P.L. Leonard	1995	11	19	SU9727	Ebernoe Common (unspecified)	
13	453523	anon	1995	10	01	SU9727	Ebernoe Common (unspecified)	
13	453670	B. Ferry	1995	10	28	SU9727	Ebernoe Common (unspecified)	
13	372790	D.H. Dell	1998	11	12	SU266156	Bramshaw	*F. sylvatica*
13	403473	S. Guy	1998	10	10	SU9027	Ebernoe	*Fagus*
13	403476	S. Guy	1998	11	15	SU9027	Ebernoe	*Fagus*
13	477251	N.W. Legon	1998	10	10	SU92	Ebernoe Common, nr. Northchapel	*Fraxinus*
16	233043	J. Pitt	1996	11	02	TQ46	Orpington, Crofton Woods	*Fraxinus*
16	612469	I. Johnson	1996	11	01	TQ438665	Crofton Wood and Heath	*Fraxinus excelsior*
16	612498	J.E.A. Weightman	1997	11	10	TQ438665	Crofton Wood and Heath	*Fraxinus excelsior*
18	218958	anon	1916	10	14	TQ49	Epping Forest	
18	229326	anon	1916	10	14	TQ49	Epping Forest	
18	218954	anon	1919	10	18	TQ49	Epping Forest	
18	229325	anon	1919	10	18	TQ49	Epping Forest	
18	217841	anon	1950	--	--	TQ39	Epping Forest	
18	218876	anon	1975	10	04	TQ49	Epping Forest	*F. sylvatica*
18	218877	anon	1975	10	04	TQ49	Epping Forest	*F. sylvatica*
18	229333	anon	1975	10	04	TQ49	Epping Forest	*Fagus*
18	229335	anon	1975	10	04	TQ49	Epping Forest	*Fagus*
18	218873	anon	1988	11	01	TQ49	Epping Forest	
20	220138	anon	1963	10	01	TQ09	Chorley Wood	beech
20	229329	J.B. Evans	1963	10	01	TQ09	Chorleywood	*Fagus*
20	598126	K. Robinson	2000	11	--		Cuffley Station (nr)	
21	215915	anon	18XX	--	--	TQ08	Uxbridge	
22	218968	anon	1955	11	05	SU97	Windsor Great Park	beech
22	229336	J.B. Evans	1955	11	05	SU96	Windsor Great Park	*Fagus*
22	218960	anon	1975	10	06	SU97	Windsor Great Park	beech
22	229320	anon	1975	10	06	SU96	Windsor Great Park	*Fagus*
23	215917	anon	18XX	--	--	SP1056	Oversley	

VC	Record no.	Identifier	Year	Month	Day	Grid ref	Locality	Host
24	218953	anon	1922	10	01	SU98	Burnham Beeches	
24	152775	anon	1923	10	01	SU9685	Burnham Beeches	
24	216518	anon	1923	10	01	SU98	Burnham Beeches	
24	218964	anon	1923	10	02	SU98	Burnham Beeches	
24	229318	anon	1923	10	02	SU98	Burnham Beeches	
24	229322	anon	1923	10	01	SU98	Burnham Beeches	
24	218966	anon	1935	09	27	SU9585	Burnham Beeches, Victoria Drive	beech
24	229330	anon	1935	09	27	SU98	Burnham Beeches (S. side of Victoria Drive)	*Fagus*
24	218878	anon	1962	09	23	SU98	Burnham Beeches	*Fagus*
24	218874	anon	1982	10	06	SP8737	Milton Keynes, Woughton Park	
24	229337	anon	1982	10	06	SP83	Woughton Park, Milton Keynes	Angiospermae
25	218952	anon	1950	11	13	TM14	Ipswich	
25	229321	anon	1950	11	13	TM14	Ipswich	
25	218967	F.L. Balfour-Browne	1954	09	16	TM45	Sudbourne	wych elm
25	229331	F.L. Balfour-Browne	1954	09	16	TM45	Sudbourne	*Ulmus*
25	218955	anon	1958	09	--	TM14	Ipswich	
25	229323	anon	1958	09	--	TM14	Ipswich	
25	217774	anon	19XX	--	--	TM24	Martlesham Wood	
25	217775	anon	19XX	--	--	TM45	Sudbourne	
26	218174	anon	19XX	--	--	TL7074	Mildenhall	
28	215916	anon	18XX	09	--	TF6801	Wereham	
29	229332	anon	18XX	--	--		near Cambridge	
29	218956	anon	1912	11	06	TL4658	Cambridge	*Fraxinus*
29	218875	anon	1978	09	10	TL65	Devil's Dyke, S.E. end	ash
29	229301	anon	1978	09	10		SE end of Devil's Dyke	*Fraxinus*
29	580499	S.E. Wells	2000	11	15	TL305577	Caxton	*F. excelsior*
38	217331	anon	1813	10	--	SP05	Oversley	
38	217293	anon	19XX	--	--	SP	Warwickshire	

VC	Record no.	Identifier	Year	Month	Day	Grid ref	Locality	Host
39	216474	anon	1963	09	28	SJ73	Fair Oak area	
56	229317	anon	1884	10	--		Tuxford, near Newark	*Fagus*
56	229327	anon	1884	10	--		near Tuxford, near Newark	*Fagus*
64	347272	M.W. Sykes	1997	06	14	SE2741	Adel Dam, Leeds	
69	218969	anon	1962	10	08		Westmorland, Silverband Mine	
	218959	anon	1884	10	--	TF20	Newark	
	217482	anon	1881	--	--		Yorkshire	
	218965	anon	1884	10	--		Juxford ?	
	218963	anon	18XX	--	--		British Isles	
	218957	anon	1922	10	--	SU	New Forest	
	403462	J.F. Rayner	1922	10	15		New Forest	
	403463	J.F. Rayner	1922	10	15		New Forest	
	230387	anon	1982	08	--		New Forest	*Fagus*
	225296	N.W. Legon	1995	11	20		New Forest: near Emery Down church	*Fagus*
	384878	N.W. Legon	1998	10	10	SU92	Ebernoe Common, nr Northchapel	*Fraxinus*
	403477	S. Guy	1998	11	25	SU3111	Busketts Wood & Lawn Inclosure	*Fagus*
	218962	anon	19XX	--	--		British Isles	
	351233	anon	1XXX	--	--			
	351234	anon	1XXX	--	--			

Appendix 9 Records of *H. erinaceus* from British Mycological Society database

VC	Record no.	Identifier	Year	Month	Day	Grid ref	Locality	Host
1	218141	anon	1983	11	30	SW8646	Tresil, Tregoninny	oak
1	218912	anon	1983	11	30	SW8646	Tresillian	
1	218913	G.B. Miller	1983	11	30	SW8646	Tresillian	
1	229363	anon	1983	11	30	SW84	Tresillian	
1	218138	anon	1990	--	--	SW84	Tresillian	oak
1	403512	S. Guy	1995	10	29	SU9022	Cowdray Park	*Fagus*
5	229365	anon	1959	11	07	SS9047	Bossington	*Fraxinus ?*
8	403534	S. Guy	1997	11	22	ST73	Stourhead	*Fagus*
9	218883	anon	18XX	--	--		Dorset	
9	348982	M.V. Pike	1997	10	12	SZ024883	Brownsea Island	
9	420998	A.C. Leonard	1998	09	29	SU0304	Holt Forest	*F.sylvatica*
11	229359	anon	1894	09	--	SU20	Lyndhurst	
11	403501	M. de Grey	1894	09	15	SU2908	New Forest	
11	229347	M.A. Maas Geesteranus	1948	10	18		New Forest	
11	403480	F.B. Hora	1955	10	01	SU3306	Denny Inclosure	
11	126476	anon	1966	10	01	SU3603	New Forest, Wilverley	
11	126784	anon	1968	10	04		New Forest	
11	218146	anon	1968	09	28	SU20	New Forest, Wilverley	
11	127154	anon	1971	10	--		New Forest	
11	218128	anon	1971	10	15	SU3306	New Forest 10	*Fagus*
11	403481	G.C. Dickson	1971	10	15	SU3306	Denny Inclosure	*Fagus*
11	127349	anon	1973	10	20	SU3306	Denny Wood	
11	218144	anon	1973	10	20	SU3306	New Forest, Denny Woods	
11	134963	anon	1976	--	--	SU2806	Gritnam Wood	
11	218147	anon	1976	11	--	SU41	Southampton, Gritnam Wood	
11	139201	anon	1978	10	13	SU3306	Denny Wood	
11	139562	anon	1978	10	--		New Forest	
11	218115	anon	1978	10	--	SU3306	New Forest, Denny Enclosure	
11	218126	anon	1978	11	10	SU2907	New Forest 46	*Fagus*

VC	Record no.	Identifier	Year	Month	Day	Grid ref	Locality	Host
11	218127	anon	1978	10	15	SU3306	New Forest 10	*Fagus*
11	403482	G.C. Dickson	1978	10	15	SU3306	Denny Inclosure	*Fagus*
11	403483	D.A. Reid	1978	11	10	SU2907	Foxlease	*Fagus*
11	218125	anon	1979	11	21	SU3503	New Forest 14	*Fagus*
11	218129	anon	1979	10	13	SU3306	New Forest, Denny Wood	
11	403484	D.A. Reid	1979	11	03	SU2907	Foxlease	*Fagus*
11	403488	G.C. Dickson	1979	11	21	SU3504	Frame Wood	*Fagus*
11	154936	anon	1981	10	24	SU3206	Denny Enclosure	*Fagus sylvatica*
11	218123	anon	1981	11	15	SU3503	New Forest 14	*Fagus*
11	218124	anon	1981	11	15	SU3305	New Forest 33	*Fagus*
11	218145	anon	1981	10	24	SU3306	New Forest, Denny Inclosure	
11	218537	anon	1981	10	09	SU3105	New Forest, Park Dale	
11	403489	G.C. Dickson	1981	11	15	SU3504	Frame Wood	*Fagus*
11	403490	G.C. Dickson	1981	11	15	SU3305	Denny Lodge	*Fagus*
11	144513	anon	1982	09	11	SU3306	Denny Wood	
11	218121	anon	1982	09	25	SU3306	New Forest 10	*Fagus*
11	218122	anon	1982	08	19	SU2907	New Forest 46	*Fagus*
11	218142	anon	1982	09	11	SU3306	New Forest, Denny Wood	
11	403491	G.C. Dickson	1982	08	19	SU2907	Foxlease	*Fagus*
11	403492	anon	1982	09	10	SU3306	Denny Inclosure	
11	403493	G.C. Dickson	1982	09	25	SU3306	Denny Inclosure	*Fagus*
11	218886	anon	1984	09	--	SU20	Lyndhurst	
11	220131	anon	1985	11	17	SU3306	New Forest 10	*Fagus*
11	403494	G.C. Dickson	1985	11	17	SU3306	Denny Inclosure	*Fagus*
11	218119	anon	1986	01	10	SU3503	New Forest 14	*Fagus*
11	403495	A. Bolton	1986	01	10	SU3504	Frame Wood	*Fagus*
11	218116	anon	1989	09	20	SU2102	New Forest 00	*Fagus*
11	218140	anon	1989	11	15	SU3503	New Forest 14	*Fagus*
11	218143	anon	1989	11	15	SU2712	New Forest 36	
11	403496	G.C. Dickson	1989	09	20	SU2302	New Forest	*Fagus*
11	403497	A. Bolton	1989	11	15	SU2712	Rufus Stone (E. of road)	

VC	Record no.	Identifier	Year	Month	Day	Grid ref	Locality	Host
11	403498	A. Bolton	1989	11	15	SU3503	Frame Wood	*Fagus*
11	222107	N.W. Legon	1992	10	01	SU30	New Forest: Denny Wood	*Fagus*
11	380527	N.W. Legon	1992	10	01	SU30	Denny Wood, New Forest	*Fagus*
11	380554	N.W. Legon	1992	10	13	SU30	Denny Wood, New Forest	*Fagus*
11	403500	G.C. Dickson	1992	09	23	SU3101	Bakers Copse	*Fagus*
11	380713	N.W. Legon	1993	10	16	SU30	Denny Wood, New Forest	*Fagus*
11	222581	N.W. Legon	1994	10	30	SU30	New Forest: Denny Wood	*Fagus*
11	223610	N.W. Legon	1994	09	29	SU30	New Forest: Denny Wood	*Fagus*
11	380999	N.W. Legon	1994	09	29	SU30	Denny Wood, New Forest	*Fagus*
11	403502	S. Guy	1994	10	08	SU3305	Denny Inclosure	*Fagus*
11	403503	S. Guy	1994	10	16	SU3305	Denny Inclosure	*Fagus*
11	403504	S. Guy	1994	10	22	SU3603	Frame Wood	*Fagus*
11	403505	S. Guy	1994	11	06	SU2706	New Forest	*Fagus*
11	245371	J.N. Diserens	1995	11	03	SU294123	Shave Wood	*Fagus*
11	381282	N.W. Legon	1995	09	22	SU30	Denny Wood, New Forest	*Fagus*
11	381477	N.W. Legon	1995	10	09	SU30	Denny Wood, New Forest	*Fagus*
11	403508	S. Guy	1995	10	16	SU3305	Denny Inclosure	*Fagus*
11	403509	S. Guy	1995	10	21	SU3305	Denny Inclosure	*Fagus*
11	403510	S. Guy	1995	10	22	SU2208	New Forest	*Fagus*
11	403511	S. Guy	1995	10	23	SU3603	Frame Wood	*Fagus*
11	403513	N. Diserens	1995	11	03	SU2912	Shave Green Inclosure & Shave Wood	*Fagus*
11	403514	S. Guy	1995	11	05	SU2806	Gritnam Wood	*Fagus*
11	459547	A.C. Leonard	1995	10	31	SU3101	Roydon Woods NR B6	*F. sylvatica*
11	245689	anon	1996	10	26	SU272055	Poundhill	*Fagus*
11	245826	anon	1996	10	27	SU305003	Roydon Woods	*Fagus*
11	247058	J.N. Diserens	1996	10	23	SU	Brinken wood	
11	403515	G.C. Dickson	1996	10	13	SU2304	New Forest	*Fagus*
11	403516	S. Guy	1996	10	13	SU2806	Gritnam Wood	*Fagus*
11	403517	S. Guy	1996	10	15	SU2706	New Forest	*Fagus*
11	403518	S. Guy	1996	10	15	SU2405	New Forest	*Fagus*

VC	Record no.	Identifier	Year	Month	Day	Grid ref	Locality	Host
11	403519	S. Guy	1996	10	19	SU3305	Denny Inclosure	*Fagus*
11	403521	N. Diserens	1996	10	23	SU2705	Brock Hill & Rhinefield Ornamental Drive North	*Fagus*
11	459548	anon	1996	10	27	SU3101	Roydon Woods NR B4 Bakers Copes	*F. sylvatica*
11	247745	S. Rogerson	1997	10	05	SU290116	Hazel Hill	*Fagus*
11	248096	N. Diserens	1997	10	25	SU272055	Poundhill	
11	248097	N. Diserens	1997	10	30	SU272125	Rufus Stone	
11	382692	N.W. Legon	1997	09	20	SU30	Little Holmhill Inclosure, New Forest	*Fagus*
11	403523	N.W. Legon	1997	09	20	SU3206	Little Holmhill Inclosure	*Fagus*
11	403524	N.W. Legon	1997	09	30	SU3306	Denny Inclosure	*Fagus*
11	403525	N. Diserens	1997	10	03	SU2712	Rufus Stone (E. of road)	*Fagus*
11	403526	S. Guy	1997	10	12	SU3603	Frame Wood	*Fagus*
11	403528	A.C. Leonard	1997	10	15	SU3305	Denny Lodge	*Fagus*
11	403529	GM	1997	10	15	SU3503	Frame Wood	*Fagus*
11	403530	S. Guy	1997	10	16	SU3305	Denny Inclosure	*Fagus*
11	403531	S. Guy	1997	10	18	SU2208	New Forest	*Fagus*
11	403532	N. Diserens	1997	10	25	SU2705	Brock Hill & Rhinefield Ornamental Drive North	*Fagus*
11	371903	G.J. Mattock	1998	10	21	SU334069	Denny Wood	*F. sylvatica*
11	372650	anon	1998	11	29	SU294123	Shave Wood	*F. sylvatica*
11	372766	D.H. Dell	1998	11	11	SU261153	Shepherds Gutter	*F.sylvatica*
11	384576	N.W. Legon	1998	10	03	SU20	Millyford Bridge, New Forest	*Fagus*
11	403536	N.W. Legon	1998	10	03	SU2608	New Forest	*Fagus*
11	403537	N. Diserens	1998	10	06	SU2702	Bratley Arch	*Fagus*
11	403538	S. Guy	1998	10	18	SU3305	Denny Inclosure	*Fagus*
11	403539	S. Guy	1998	11	08	SU3603	Frame Wood	*Fagus*
11	447552	S. Cadbury	1999	11	07	SU2880	Gritnam Wood, New Forest	*F. sylvatica*
11	491803	G.J. Mattock	1999	09	18	SU294123	Shave Wood	*F. sylvatica*
11	501661	S. Cadbury	1999	11	07	SU2880	Gritnam Wood : New Forest	*F. sylvatica*

VC	Record no.	Identifier	Year	Month	Day	Grid ref	Locality	Host
11	218893	anon	19XX	--	--	SU20	New Forest, Wootton	beech
12	218148	anon	1971	09	25	SU21	New Forest, Nomansland	
12	218907	anon	1975	10	26	SU7433	Selbourne	beech
12	229357	anon	1975	10	26	SU73	Selbourne	
12	492021	anon	1999	10	03	SU563353	The Grange	*F. sylvatica*
13	160296	anon	1926	10	02	TQ0108	Rewell Wood	
13	218118	anon	1928	10	04	TQ00	Littlehampton, Rewell Wood	
13	403506	S. Guy	1994	11	23	SU8521	Stedham	*Fagus*
13	450846	P.L. Leonard	1994	11	06	SU845220	Iping Common	
13	403507	S. Guy	1995	09	30	SU9815	Bignor	*Fagus*
13	403533	S. Guy	1997	11	15	SU9022	Midhurst	*Fagus*
13	403540	S. Guy	1998	11	15	SU9022	Cowdray Park	*Fagus*
15	218902	anon	1969	08	08	TR35	Deal, Walmer	
16	218114	anon	1964	10	25	TQ75	Maidstone, Sandling Wood	
16	220064	B. Hawkes	1966	11	10	TQ6768	Rochester, Cobham	
16	229367	anon	1966	11	10	TQ66	Cobham, near Rochester	
16	229366	anon	1969	08	08	TR3752	Walmer, Deal	
16	218908	anon	1979	10	21	TQ46	Orpington area	
16	218916	anon	1981	11	05	TQ56	Lullingstone Park	
16	229361	anon	1981	11	05	TQ56	Lullingstone Park	
16	218914	anon	1983	11	03	TQ56	Lullingstone Park	
16	229362	anon	1983	11	03	TQ56	Lullingstone	
16	609710	J.E.A. Weightman	1984	--	--	TQ505424	Stonewall Park, Chiddingstone Hoath	*F. sylvatica*
17	218879	anon	1884	11	19	TQ0847	Gomshall	
17	218890	anon	1884	10	--	TQ04	Guildford	
17	229343	anon	1884	10	--		Guildford	
17	229348	anon	1884	10	--		Guildford	
17	229352	anon	1884	11	19	TQ04	Gomshall	
17	229353	anon	1884	11	19	TQ04	Gomshall	
17	218892	anon	1945	06	17	TQ15	Mickleham	oak

VC	Record no.	Identifier	Year	Month	Day	Grid ref	Locality	Host
17	229371	anon	1945	06	17	TQ1753	Mickleham	*Quercus*
17	229379	J.B. Evans	1954	01	26		Croham Hurst, Croydon	*Quercus*
17	218899	J.B. Evans	1961	10	28	SU86	Camberley	
17	229360	J.B. Evans	1961	10	28	SU86	Camberley	
17	218897	anon	1964	01	26	TQ36	Croydon, Croham Hurst	oak
17	223568	B.M. Spooner	1994	10	26		nr Wotton, Dorking	*Fagus*
17	229364	B.M. Spooner	1994	10	26		near Wotton, Dorking	*Fagus*
17	387558	N.W. Legon	1998	10	09	TQ158535	Mickleham, Norbury Park	*Fagus*
17	477065	N.W. Legon	1998	10	09	TQ1585	Norbury Park, Mickleham	*Fagus*
18	218236	R. Watling	1863	11	12	TQ49	Hainault Forest	
18	218880	anon	1863	11	12	TQ49	Hainault Forest	
18	218900	anon	1863	12	--	TQ49	Hainault Forest	hornbeam
18	229345	anon	1863	11	12	TQ49	Hainault Forest	*Carpinus*
18	229346	anon	1863	11	--	TQ49	Hainault Forest	
18	229350	anon	1863	11	--	TQ49	Hainault Forest	*Carpinus*
18	229351	anon	1863	11	12	TQ49	Hainault Forest	
18	218885	anon	1864	--	--	TQ49	Epping	
18	229382	anon	1868	--	--	TQ49	Epping	
18	218896	anon	1919	10	18	TQ49	Epping Forest	
18	229373	anon	1919	10	18	TQ49	Epping Forest	
18	218895	anon	1938	10	15	TQ49	Epping Forest	
18	229372	anon	1938	10	15	TQ49	Epping Forest	
18	218894	anon	1947	10	11	TQ49	Epping Forest	oak
18	229374	anon	1947	10	11	TQ49	Epping Forest	*Quercus*
18	218137	anon	1950	--	--	TQ39	Epping Forest	
18	218904	anon	1972	10	15	TQ49	Epping Forest	
18	229369	anon	1972	10	15	TQ49	Epping Forest	
18	127328	anon	1973	08	07	TQ4197	Epping Forest	
18	218911	anon	1978	10	14	TQ49	Epping Forest	
18	229354	anon	1978	10	14	TQ49	Epping Forest	
18	218915	anon	1987	--	--	TQ49	Epping Forest	beech

VC	Record no.	Identifier	Year	Month	Day	Grid ref	Locality	Host
18	218130	anon	19XX	--	--	TQ39	Walthamstow, Laytonstone and Wansted, forest betwe	poplar
18	218132	anon	19XX	--	--	TQ49	Epping Forest	
19	218133	anon	19XX	--	--	TM02	Alresford, Grange Park ?	
20	218134	anon	1926	--	--	TL00	Frithsden	
20	426600	M. Holden	1994	12	31	TL232170	Danesbury Park	
20	426601	anon	1995	10	17	TL232170	Danesbury Park	
22	218905	anon	1969	09	15	SU59	Bagley Wood	
22	229368	anon	1969	09	15	SP50	Bagley Wood	
22	218903	anon	1970	11	01	SU68	Wallingford	beech
22	229370	anon	1970	11	01	SU68	Wallingford	*Fagus*
22	218910	anon	1971	10	26	SU97	Swinley Park	*Quercus*
22	229355	anon	1971	10	26	SU97	Swinley Park	*Quercus*
22	218906	anon	1979	10	21	SU97	Windsor Great Park	beech
22	229356	anon	1979	10	21	SU96	Windsor Great Park	*Fagus*
22	162	anon	1987	10	17	SU96	Windsor Great Park	*F. sylvatica*
22	218139	anon	1987	10	17	SU96	Windsor Great Park	*F.sylvatica*
22	8139	P.M. Kirk	1988	10	22	SU96	Windsor Great Park	
22	220091	P.M. Kirk	1988	10	22	SU96	Windsor Great Park	
22	90705	P.M. Kirk	1995	11	04	SU96	Windsor Great Park	
22	97122	anon	1997	10	18	SU96	Windsor Great Park	
22	218120	anon	19XX	--	--	SU97	Windsor	
23	123569	anon	1969	09	15	SP5102	Bagley Wood	
23	218131	anon	1969	09	15	SU59	Oxford, Bagley Wood	
24	218882	anon	1868	11	--	SU98	Burnham ?	
24	229344	anon	1868	11	17	SU98	Burnham Beeches	
24	229385	anon	1868	11	--	SU98	Burnham Beeches	
24	152776	anon	1923	10	01	SU9685	Burnham Beeches	
24	218117	anon	1923	10	01	SU98	Burnham Beeches	
24	218884	anon	1923	10	01		Bucks	*Fagus*
24	229349	anon	1923	10	01	SU98	Burnham Beeches	

VC	Record no.	Identifier	Year	Month	Day	Grid ref	Locality	Host
24	229383	anon	1923	10	01	SU98	Burnham Beeches	*Fagus*
24	218917	anon	1932	10	--	SU98	Burnham Beeches	
24	229386	anon	1932	10	--	SU98	Burnham Beeches	
24	218898	F.L. Stephens	1938	10	--	SU98	Burnham Beeches	
24	229380	F.L. Stephens	1938	10	--	SU98	Burnham Beeches	
24	218891	anon	1943	10	01	SU98	Burnham Beeches	
25	218135	M.B. Ellis	1990	10	28	TM46	Minsmere	beech
36	229381	anon	18XX	--	--	SO53	Hereford	
36	439376	anon	18XX	--	--	SO4834	Haywood Forest	
36	218887	anon	19XX	--	--	SO53	Hereford	
58	218136	J.L. Taylor	1989	10	15	SJ7487	Dunham Park	*F. sylvatica*
	218536	anon	1980	10	--	SU	Hampshire	*Fagus*
	218533	anon	1981	10	--	SU	New Forest	beech
	477734	N.W. Legon	1998	10	15		New Forest: Wood Crates	*F. sylvatica*
	229375	anon	19XX	--	--		New Forest: Woodlands, Totton	*Fagus*
	351238	anon	1863	11	--			
	218881	anon	1884	11	--		Gronpsham ?	
	403527	Rev. Eyre	1897	10	15		New Forest	
	229384	anon	18XX	--	--		Dorset	
	403478	J.F. Rayner	1904	10	15		New Forest	
	218889	anon	1948	10	18	SU	New Forest	
	403479	R.A. Maas Geesteranus	1948	10	18		New Forest	
	218901	anon	1959	11	07		Bassington	ash
	218112	anon	1961	09	07	SU9374	Windsor, High Standing Hill	
	218113	anon	1964	10	09	SU	New Forest	
	218909	anon	1979	11	08			*F. sylvatica*
	229358	anon	1979	10	21		near Orpington	
	351239	anon	1979	11	08			*Fagus*
	403486	D.A. Reid	1979	11	08		New Forest	*Fagus*

VC	Record no.	Identifier	Year	Month	Day	Grid ref	Locality	Host
	403487	D.A. Reid	1979	11	08		New Forest	*Fagus*
	403499	A. Bolton	1990	10	30	SU2913	New Forest	*Fagus*
	225929	D.N. Pegler	1996	01	20		Porton Down Ranges, Salisbury	*Fagus*
	241163	G.C. Dickson	1996	10	13		New Forest, Burley Lew inclosure	*Fagus*
	350255	M.V. Pike	1996	11	24	SZ016882	National Trust	
	403520	S. Guy	1996	10	21	SU0497	Bournmouth	*Fagus*
	238760	anon	1997	04	09		British Isles	
	403522	G.C. Dickson	1997	09	15		Fordingbridge	*Quercus*
	403535	S. Guy	1998	09	18	SU0497	Bournmouth	*Fagus*
	218888	anon	19XX	--	--		British Isles	
	230399	G.C. Dickson	19XX	--	--		Frame Wood, New Forest	*Fagus*

Appendix 10 Records of *C. cirrhatus* from New Forest database

1km Grid	Grid Ref	Site No.	Site Name	Recorder	Date	Host
22 08	226 084	NF 07	Bratley Wood	Steve Guy	04/12/1994	Beech
22 12		NF 52	Anses Wood	Gordon Dickson	11/08/1985	Beech
22 15	2242 1550	NF 77	Eyeworth Wood	Sue Rogerson	01/11/1998	Beech
22 15	225 150	NF 77	Eyeworth Wood	Steve Guy	03/12/1994	Beech
22 15		NF 77	Eyeworth Wood	Neville Diserens	15/10/1996	
22 15		NF 77	Eyeworth Wood	Steve Guy	02/11/1996	Beech
22 15		NF 77	Eyeworth Wood	Steve Guy	13/10/1997	Beech
22 15		NF 77	Eyeworth Wood	Steve Guy	23/10/1998	Beech
24 07		NF 05	Mark Ash Inclosure	Gordon Dickson	10/10/1979	Beech
24 07		NF 05	Mark Ash Inclosure	Gordon Dickson	13/10/1979	Beech
25 06		NF 63	Barrow Moor	New Forest Mycota	11/09/1991	Beech
25 12	255 125	-	Longbeech Wood	Steve Guy	25/10/1998	Beech
26 12	260 125	-	Longbeech Wood	Steve Guy	14/10/1997	Beech
27 06	279 061	-	Great Huntley Bank	Alan Lucas	01/07/1997	Beech
27 08		NF 28	Wood Crates	Gordon Dickson	20/10/1987	Beech
28 06	288 063	NF 67	Gritnam Wood	Steve Guy	05/11/1995	Beech
28 08		-	Lyndhurst Hill/Emery Down	D A Reid (NFM)	03/11/1969	Beech
28 13	286 135	-	Bignell Wood	Alan Lucas	01/08/1998	Beech
32 00		NF 18	Roydon Woods	Alan Lucas	05/08/1986	Beech
32 06		NF 47	Holmhill	New Forest Mycota	20/09/1997	
32 09		NF 59	Mallard Wood	Gordon Dickson	13/10/1989	Beech
33 05	337 056	NF 33	Denny Wood	Steve Guy	08/10/1994	Beech
33 05	337 056	NF 33	Denny Wood	Steve Guy	23/09/1995	Beech
33 05		NF 33	Denny Wood	Steve Guy	17/08/1997	Beech
33 05		NF 33	Denny Wood	Steve Guy	09/11/1997	Beech
33 06		NF 10	Denny Inclosure	Steve Guy	08/10/1994	Beech
33 06		NF 10	Denny Inclosure	Steve Guy	23/09/1995	
33 06		NF 10	Denny Inclosure	Steve Guy	07/09/1997	
36 03	360 036	NF 14	Frame Wood	Steve Guy	22/10/1994	Beech
36 03	360 036	NF 14	Frame Wood	Steve Guy	13/10/1996	Beech

1km Grid	Grid Ref	Site No.	Site Name	Recorder	Date	Host
36 03		NF 14	Frame Wood	Steve Guy	12/10/1997	Beech
36 03		NF 14	Frame Wood	Steve Guy	08/11/1997	Beech
38 04		NF 15	Foxhunting Inclosure	New Forest Mycota	14/09/1992	Beech

Appendix 11 Records of *H. coralloides* from New Forest database

1km Grid	Grid Ref	Site No.	Site Name	Recorder	Date	Host
29 05		NF 08	Whitley Wood	Gordon Dickson (NFM)	15/10/1981	Beech
29 05		NF 08	Whitley Wood	Gordon Dickson (NFM)	10/10/1983	Beech
29 05		NF 08	Whitley Wood	Gordon Dickson (NFM)	07/10/1984	Beech
33 06		NF 10	Denny Inclosure	Gordon Dickson (NFM)	03/10/1990	Beech
28 08	288 082	-	Lyndhurst Hill/Emery Down	Neville/Mary Diserens (HFG)	20/10/1995	Beech
28 07	288 079	-	Lyndhurst Hill/Emery Down	Graham Mattock (HFG)	26/04/1996	Beech
28 07	288 079	-	Lyndhurst Hill/Emery Down	British Naturalist (HFG)	26/10/1996	Beech
28 08		-	Lyndhurst Hill/Emery Down	Neville Diserens	06/11/1996	Beech
28 08	287 085	-	Lyndhurst Hill/Emery Down	Steve Guy	03/10/1998	Beech
28 08	288 082	-	Lyndhurst Hill/Emery Down	Neville/Mary Diserens	08/10/1998	Beech
29 06	298 063	NF 08	Whitley Wood	Sara Cadbury/John Manners	09/10/1998	Beech
26 15	266 156	NF 02	Bramshaw Wood	Stuart Skeates	19/10/1998	Beech
26 15	2670 1561	NF 02	Bramshaw Wood	Neil Sanderson	31/10/1998	Beech
26 15	266 155	NF 02	Bramshaw Wood	Steve Guy	07/11/1998	Beech
28 08	287 085	-	Lyndhurst Hill/Emery Down	Steve Guy	07/11/1998	Beech
22 15	228 158	NF 77	Eyeworth Wood	Peter Ludlam	09/11/1998	Beech
26 15	266 155	NF 02	Bramshaw Wood, Margarets Bottom	David/Jean Dell	12/11/1998	Beech
31 11	313 112	NF 65	Busketts Wood	Steve Guy	25/11/1998	Beech
31 11	3135 1100	NF 65	Busketts Wood	Clive Chatters/ Gordon Dickson	05/12/1998	Beech

Appendix 12 Records of *H. erinaceus* from New Forest database

1km Grid	Grid Ref	Site No.	Site Name	Recorder	Date	Host
36 03		NF 14	Frame Wood	Gordon Dickson (NFM)	21/11/1979	Beech
35 03		NF 14	Frame Wood	Alison Bolton (NFM)	15/11/1989	Beech
29 13		-	Rockram Wood	Alison Bolton (NFM)	30/10/1990	Beech
31 01		NF 18	Roydon Woods	Alan Lucas	23/09/1992	Beech
23 12	231 128	NF 52	Anses Wood	Alan Lucas	01/09/1994	Beech
33 05	339 058	NF 33	Denny Wood	Steve Guy	08/10/1994	Beech
33 05		NF 33	Denny Wood	Steve Guy	16/10/1994	Beech
36 03	360 038	NF 14	Frame Wood	Steve Guy	22/10/1994	Beech
27 06	276 066	-	Brinken Wood	Steve Guy	06/11/1994	Beech
33 05	339 058	NF 33	Denny Wood	Steve Guy	16/10/1995	Beech
33 05		NF 33	Denny Wood	Steve Guy	16/10/1995	Beech
33 05		NF 33	Denny Wood	Steve Guy	21/10/1995	Beech
22 08	222 089	-	Slufters Inclosure	Steve Guy	22/10/1995	Beech
36 03	360 038	NF 14	Frame Wood	Steve Guy	23/10/1995	Beech
29 12	294 123	NF 55	Shave Wood	Neville/Mary Diserens (HFG)	03/11/1995	Beech
28 06	288 062	NF 67	Gritnam Wood	Steve Guy	05/11/1995	Beech
36 03	360 038	NF 14	Frame Wood	Steve Guy	13/10/1996	Beech
27 06	276 066	-	Brinken Wood	Steve Guy	15/10/1996	Beech
24 05	244 052	-	Dames Slough Incl	Steve Guy	16/10/1996	Beech
33 05		NF 33	Denny Wood	Steve Guy	19/10/1996	Beech
27 05	272 055	-	Poundhill	British Naturalist (HFG)	26/10/1996	Beech
30 00	305 003	NF 18	Roydon Woods	British Naturalist (HFG)	27/10/1996	Beech
31 01	316 015	NF 18	Roydon Woods	Stan Kirk	01/10/1997	Beech
28 11	289 116	NF 55	Shave Wood (Hazel Hill)	Sue Rogerson (HFG)	05/10/1997	Beech
36 03	360 038	NF 14	Frame Wood	Steve Guy	12/10/1997	Beech
33 05	339 058	NF 33	Denny Wood	Steve Guy	16/10/1997	Beech
33 05		NF 33	Denny Wood	Steve Guy	16/10/1997	Beech
22 08	222 089	-	Slufters Inclosure	Steve Guy	18/10/1997	Beech
27 05	272 055	-	Poundhill	Neville/Mary Diserens (HFG)	25/10/1997	Beech
27 12	272 125	NF 36	Rufus Stone	Neville/Mary Diserens (HFG)	30/10/1997	Beech

1km Grid	Grid Ref	Site No.	Site Name	Recorder	Date	Host
27 05	272 056	-	Poundhill	Neville/Mary Diserens	28/09/1998	Beech
28 06	286 065	NF 67	Gritnam Wood	Sara Cadbury	29/09/1998	Beech
26 08	267 086	-	The Knowles	Neville/Mary Diserens	03/10/1998	Beech
33 03	336 030	-	Ladycross Inclosure	Jenny Plucknett	12/10/1998	Beech
33 05	339 058	NF 33	Denny Wood	Steve Guy	18/10/1998	Beech
33 05		NF 33	Denny Wood	Steve Guy	18/10/1998	Beech
33 05	336 055	NF 33	Denny Wood	Graham Mattock	21/10/1998	Beech
30 04	309 046	-	Hollands Wood	Sara Cadbury	30/10/1998	Beech
28 11	2880 1193	NF 55	Shave Wood	Sue Rogerson	01/11/1998	Beech
28 11	2892 1180	NF 55	Shave Wood	Sue Rogerson	01/11/1998	Beech
33 05	339 057	NF 33	Denny Wood	Philip Budd	05/11/1998	Beech
35 03	358 036	NF 14	Frame Wood	Jenny Plucknett	05/11/1998	Beech
36 03	360 038	NF 14	Frame Wood	Steve Guy	08/11/1998	Beech
39 45	396 453	-	Harewood Forest, Andover	David/Madge Goodall	09/11/1998	Beech
26 15	261 153	NF 02	Bramshaw Wood, Shepherds Gutter	David/Jean Dell	11/11/1998	Beech
34 05	342 058	NF 33	Denny Wood	Donald Bradshaw	30/11/1998	Beech
33 05	339 059	NF34	Denny Wood	Chris Lipscombe	03/11/2001	Beech
36 05	366 055	-	Ferney Crofts	Richard Reeves	01/12/2001	Beech
29 08		-	?	Mabel de Grey (NFM)	15/09/1894	Beech
23 07	234 079	-	North Oakley Inclosure	Peter Ludlam	13/10/1998	Oak
33 06		NF 10	Denny Inclosure	New Forest Mycota	01/10/1955	
33 06		NF 10	Denny Inclosure	Gordon Dickson	15/10/1971	
33 06		NF 10	Denny Inclosure	Gordon Dickson	15/10/1978	
29 07		NF 46	Foxlease	Gordon Dickson (NFM)	10/11/1978	
29 07		NF 46	Foxlease	Gordon Dickson (NFM)	03/11/1979	
33 05		NF 33	Denny Wood	Gordon Dickson	15/11/1981	
36 03		NF 14	Frame Wood	Alison Bolton (NFM)	15/11/1981	
29 07		NF 46	Foxlease	Gordon Dickson (NFM)	19/08/1982	
33 06		NF 10	Denny Inclosure	Gordon Dickson	10/09/1982	
33 06		NF 10	Denny Inclosure	Gordon Dickson	17/11/1985	
36 03		NF 14	Frame Wood	Alison Bolton (NFM)	10/01/1986	

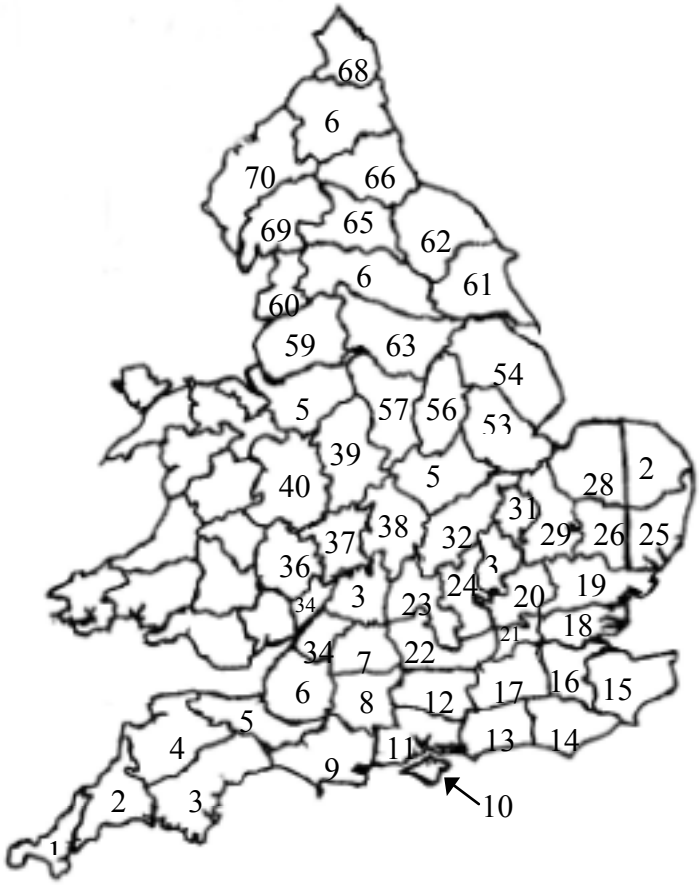
1km Grid	Grid Ref	Site No.	Site Name	Recorder	Date	Host
23 02		-	Clayhill, Burley	A Lucas/Gordon Dickson (NFM)	20/09/1989	
27 12		NF 36	Rufus Stone	Alison Bolton (NFM)	15/11/1989	
27 06		-	Brinken Wood	Neville/Mary Diserens (HFG)	23/10/1996	
30 00		NF 18	Roydon Woods	New Forest Mycota	?	

Appendix 13 Reports of *C. cirrhatus*, *H. coralloides* and *H. erinaceus* not recorded in the BMS or Hampshire databases

Identifier	Year	Month	Grid ref	Locality	Associated host	Other details
C. cirrhatus						
A.M. Ainsworth & E. Green	2001			Windsor Great Park	*Fagus*	Fallen
P.A. Budd	1994	13 Nov	SZ199930	Steamer Point Woodland Nature Reserve, Dorset		Cliff-top woodland
A.M. Ainsworth & E. Green	1994			Egypt woods, Burnham Beeches, Bucks	*Fagus*	Fallen trunk
Unknown (material sent to A.M. Ainsworth)	1996 (not found again)			Path between Winter Hill and Bisham, Berks	*Fagus*	Fallen
A.M. Ainsworth	1994	Oct		Denny Wood, New Forest	*Fagus*	
A.M. Ainsworth	2000	Nov		Stubbs Wood, New Forest	*Fagus*	
H. coralloides						
A.M. Ainsworth & E. Green	1993 (not since)			Windsor Forest, High Standing Hill	*Fagus*	Fallen trunk; herbarium culture
A.M. Ainsworth & E. Green	1999 2000 2001			Windsor Great Park	*Fagus*	Fallen trunk
P.D. James	1994	23 Oct		Ebernoe Common		
P.D. James	1995	01 Oct		Ebernoe Common		
G. Fookes	1995	28 Oct		Ebernoe Common		
E.E. Emmett	1995	19 Nov		Ebernoe Common		Standing dead tree
N. Legon	1998	10 Oct		Ebernoe Common	ash	Standing dead
A. Simpson	1999	20 July	SU981272	Ebernoe Common, Compartment 43		
A. Simpson	1999	04 Sept	SU981272	Ebernoe Common, Compartment 43		
A. Simpson	2000	07 Oct	SU981272	Ebernoe Common,		Trunk fallen

Identifier	Year	Month	Grid ref	Locality	Associated host	Other details
				Compartment 43		
J.N. Hedger	1998	11 Oct		Ebernoe Common		
H. erinaceus						
A.M. Ainsworth & E. Green	1993 1996 1998 (did not fruit in 1994 1995 1999 2000 2001)			Windsor Forest, High Standing Hill	*Fagus*	Dead parts of living tree; top of tree fell in early 2002, but E. Green re-erected it later in 2002
A.M. Ainsworth & E. Green	1993 (not since)			Windsor Great Park	*Fagus*	Fallen; in Herbarium collection
A.M. Ainsworth	1991	Oct		Savernake	*Fagus*	
Ted Blackwell	2001			Herefordshire	*Fagus*	
P.D. James	1994	23 Oct		Ebernoe Common		
L. Manns	2001	24 Oct	SU976275	Ebernoe Common, compartment 43		
P. Holloway R.P. Harley P. Holloway S. Moore	1999 2000 2001 2002 no.of fruit bodies increasing	 18 Oct 27 Sept 31 Oct	SZ199930	Steamer Point Woodland Nature Reserve, Dorset	*Fagus*	Cliff-top woodland, branch

Appendix 14 Vice county numbering system



Appendix 15 Fruit bodies of *H. coralloides* and *H. erinaceus*

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Middle left: English Nature bat warden with a whiskered bat near Holme, Devon.
Paul Glendell / English Nature 24,795
Bottom left: Radio tracking a hare on Pawlett Hams, Somerset.
Paul Glendell / English Nature 23,020
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