

2009

Fungal Survey

Mitcham Common



Author
Mario Tortelli

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Introduction

In order to record fungi, their fruiting bodies have to be collected, as identification in the field is not always possible. Different genera have subtle differences in their fruiting strategies or life styles, requiring many different conditions for fruiting. A short survey completed over a limited period can only hope to pick up a small portion of the species likely to be present. Some species are ethereal and fruit for only one day and others may only appear if specific conditions are conducive to fruiting. This could mean a particular fungus may fruit once in a year or sometimes only once in a number of years. Regular surveying throughout the season and over a number of years is required to build up a full picture of the number of species that are present. Furthermore, it is likely that some fungal mycelia never fruit so the true extent and importance of fungi in an ecosystem cannot be ascertained using field survey methods alone.

Heavy early summer rain and an extremely dry late summer and early autumn in 2009 meant that collecting proved to be very poor throughout the months of August, September and October. Rainfall in the London area for 2009 was 50% less than the average recorded between 1971 and 2000 see map below produced by the met office. This restricted the fruiting of many fungal genera that have an ectomycorrhizal association with other plants, i.e. the Boleti, Russulas, and Lactarius. This was true across England (pers. comm.). Thus the main autumn flush of larger fungi was severely curtailed and fungi were not seen in any great numbers until late November. During the dry early period the grassland sections were virtually devoid of fruit bodies. My efforts therefore were concentrated on areas that from local knowledge were known to be productive.

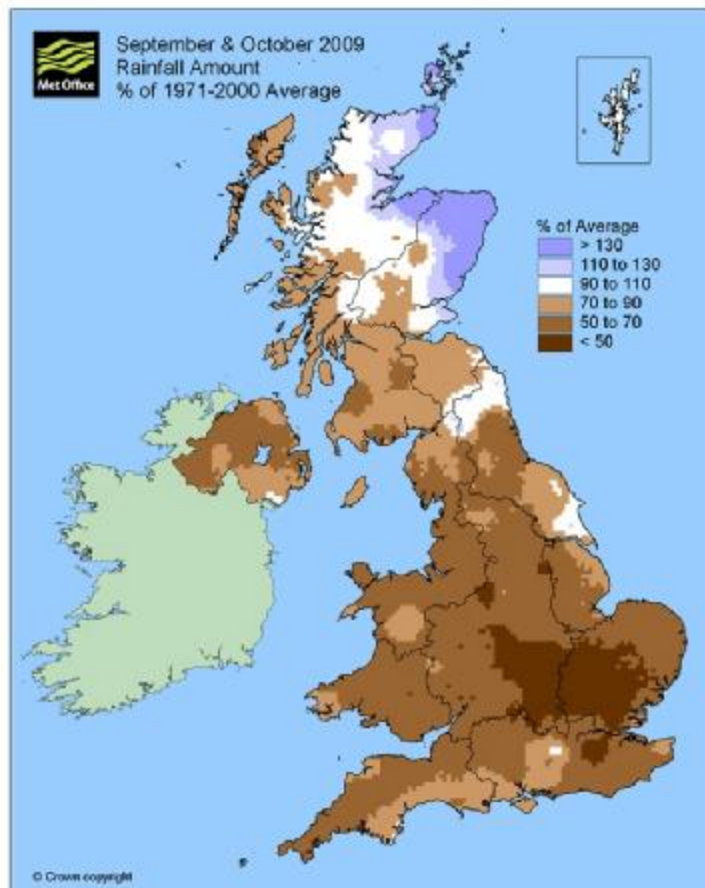


Figure 1. Map showing average rainfall 1971- 2000.

Sampling Method

Day visits were made on the 9th August, 27th September, 29th October and 22nd November. In addition, the following records include species collected during the South London Botanical Institute's autumn foray held on the 11th October. These dates were selected to coincide with the most favourable weather conditions for fruiting. The adverse collecting conditions resulted in an emphasis on woodland fungi. Consequently the transect route followed, shown in Fig 2., was devised to try to include as many productive compartments as possible on the sample days. It does not show small detours made to include nearby compartments.

Whenever possible, fungi were identified in the field, collections were made of species that were not identifiable in the field and these were taken back for microscopic examination, using specialised keys. Some specimens were retained and dried as voucher material. A few species were referred to other mycologists to confirm identification.

The nomenclature used for the survey comes from *The Checklist of the British & Irish Basidiomycota* by *N.W. Legon and A. Henrici 2005* and its updates.

Records of frequency were obtained from the Fungal Records Database of Britain & Ireland (FRDBI) a website maintained by the British Mycological Society

Map of Mitcham Common

Legend

H = heathland
N = area subjected to tipping
R = acid or neutral grassland
S = woodland
T = area subjected to standing water
U = Sites subject to other influences



Figure 2. Map of the common showing compartments and approximate transect covered in the survey.

Summary and Recommendations

Some 90 species were recorded in all, with the woodlands being by far the best recording areas. Some of the grassland and heathland compartments were very disappointing due to the dry summer with none or limited fruit bodies evident throughout the months of August, September and October.

The stands of oak woodland, especially where younger and older trees co-exist, provide by far the best range of fungi. The living trees, deadwood, stumps, logs, twigs and branches all help to provide a range of niches for both ectomycorrhizal and saprotrophic species.

Of note:

Meripilus giganteus in S13 was recorded twice, once at the base of a very large lopped sycamore and once on an old stump. This fungus causes a white rot in the extreme base of broad leaf trees eventually making them unstable and liable to fall in strong winds. As this tree is close to a main road this may prove problematic in the future.

Armillaria gallica was also recorded. This species is believed to feed off dead material (saprophytic), so is thought not to cause root rot; unlike its near relative, the well-known Honey Fungus *Armillaria mellea*, a nasty parasite of trees. Both spread over large distances using their black bootlace-like rhizomorphs. Very little can be done to combat them in a woodland situation. It could be that in woodland habitats they are only problematic to weak or sick trees.

Lyophyllum gangraenosum a species with only 130 records nationally and only 12 records for Surrey and a new species for the Common.

Two *Agrocybe*, species *A. cylindracea* and *A. erebia* with only 31 and 42 county records respectively in the FRDBI both are new records for the Common.



Figure 3. *Gymnopus aquosus* ©Geoffrey Kibby

Gymnopus aquosus see above has only 121 national records and only 14 for Surrey, again another new record for the Common as was *Agaricus impudicus*.

Lepiota subincarnata has been recorded in Surrey 15 times and is a new record for Mitcham Common.

Lactarius controversus found under willow around the edge of Seven Island Pond, probably represents one of the Common's most interesting records to date. Only listed in the FRDBI once for Surrey and that was back in 1932. It is a largish, chunky and rather conspicuous white *Lactarius* (milk cap) with pinkish gills and should not be too hard to spot should it occur again. As it is an ectomycorrhizal species, it is quite likely to reoccur given the correct climatic conditions. The area around Seven Island Ponds with several large specimen oak trees, some birch and a lime tree is a particularly rich and interesting area for fungal species and management of the area should try to reduce soil compaction which results from walkers or heavy vehicles. Through traffic should be kept to a minimum, if at all possible, especially round the edge of the Ponds.



Figure 4. *Radulomyces molaris* ©Geoffrey Kibby

Radulomyces molaris above is common on fallen Oak twigs it develops on the upper branches of the tree falling to the ground when weakened, it has a strong medicinal smell.

Following a long transect route through many of the common's numerous compartments results in a cursory sample of fungal fruiting. Therefore, it might be better in the future to select a smaller number of compartments for more detailed focussed sampling.

Species list

Recorder	Compartment	Date	Species	Abundance	Substrate	Notes
M. Tortelli	S9	09/08/2009	<i>Xerocomus cisalpinus</i>	c	grass under oak	usually has intense blue flesh when cut
M. Tortelli	S9	09/08/2009	<i>Russula parazurea</i>	c	under oak	the commonest <i>Russula</i> sp. seen on the common.

M. Tortelli	S9	09/08/2009	<i>Russula praetervisa</i>	c	under oak	
M. Tortelli	S9	09/08/2008	<i>Russula inochlora</i>	sc	under oak	
M. Tortelli	S9	09/08/2008	<i>Russula vesca</i>	r	under oak	
M. Tortelli	S9	09/08/2008	<i>Clitocybe odora</i>	c	oak litter	with strong aniseed smell
M. Tortelli	S9	09/08/2008	<i>Gymnopus confluens</i>	c	under oak	more commonly known as <i>Collybia confluens</i>
M. Tortelli	S9	09/08/2008	<i>Chlorophyllum olivieri</i>	vc	litter under hardwood trees	more commonly known as <i>Lepiota rhacodes</i>
M. Tortelli	R11	09/08/2008	<i>Russula sorroria</i>	r	under oak	
M. Tortelli	R1	09/08/2008	<i>Russula nigricans</i>	sc	under oak near pond	
M. Tortelli	R1	09/08/2008	<i>Russula vesca</i>	r	under lime	
M. Tortelli	S1	09/08/2008	<i>Xerocomus cisalpinus</i>	c	under oak	
M. Tortelli	S1	09/08/2008	<i>Mycena rosea</i>	vc	under oak	
M. Tortelli	S1	09/08/2008	<i>Scleroderma bovista</i>	r	pathside in moss	
M. Tortelli	S1	09/08/2008	<i>Collybia dryophila</i>	vc	under oak	
M. Tortelli	S4	09/08/2008	<i>Scleroderma bovista</i>	sc	soil by path	
M. Tortelli	R8	09/08/2008	<i>Agaricus arvensis</i>	sc	in grass	
M. Tortelli	H3	09/08/2008	<i>Chlorophyllum olivieri</i>	vc	under nettles	
M. Tortelli	S13	27/09/2008	<i>Meripilus giganteus</i>	r	base of old tree	
M. Tortelli	R11	27/09/2008	<i>Polyporus squarrosa</i>	r	tree stump	
M. Tortelli	R11	27/09/2008	<i>Auricularia auricula-judae</i>	c	on elder branch	
M. Tortelli	S7	27/09/2008	<i>Ganoderma australe</i>	r	on oak	more commonly known as <i>G. adspersum</i>
M. Tortelli	S9	11/10/2009	<i>Russula parazurea</i>	c	under oak	
M. Tortelli	S9	11/10/2009	<i>Russula amoenolens</i>	r	under oak	
M. Tortelli	S9	11/10/2009	<i>Pluteus plautus</i>	r	on sycamore	
M. Tortelli	S9	11/10/2009	<i>Bjerkandera adusta</i>	c	on hardwood stump	
M. Tortelli	S9	11/10/2009	<i>Marasmius rotula</i>	c	oak litter	
M. Tortelli	S9	11/10/2009	<i>Gymnopus dryophylla</i>	vc	oak litter	more commonly known as <i>Collybia dryophylla</i>
M. Tortelli	S9	11/10/2009	<i>Vascellum pratense</i>	sc	in grass	
M. Tortelli	S9	11/10/2009	<i>Chlorophyllum olivieri</i>	vc	litter under oak	
M. Tortelli	S9	11/10/2009	<i>Trametes Versicolor</i>	vc	on dead wood	
M. Tortelli	S2	11/10/2009	<i>Gymnopus dryophylla</i>	vc	under oak	more commonly known as <i>Collybia dryophylla</i>
M. Tortelli	S2	11/10/2009	<i>Gymnopus aquosus</i>	r	under oak	rarely reported has pink rhizomorphs
M. Tortelli	S2	11/10/2009	<i>Agaricus impudicus</i>	c	litter	
M. Tortelli	S2	11/10/2009	<i>Crepidotus cesatii</i>	c	on small oak twigs	
M. Tortelli	S2	11/10/2009	<i>Mycena galericulata</i>	vc	on oak twigs	
M. Tortelli	S2	11/10/2009	<i>Scleroderma verrucosum</i>	sc	in soil	
M. Tortelli	S2	11/10/2009	<i>Psathyrella corrugis</i>	r	in soil	
M. Tortelli	S2	11/10/2009	<i>Rigidoporus ulmarius</i>	sc	on mature poplar	
M. Tortelli	S2	11/10/2009	<i>Chlorophyllum olivieri</i>	vc	litter under oak	
M. Tortelli	R12	11/10/2009	<i>Marasmius oreades</i>	c	in grass	
M. Tortelli	S10	11/10/2009	<i>Crepidotus cesatii</i>	c	on twigs	
M. Tortelli	S10	11/10/2009	<i>Daedaleopsis confragosa</i>	c	on willow	
M. Tortelli	S10	11/10/2009	<i>Clitocybe phaeophthalma</i>	sc	litter	
M. Tortelli	S10	11/10/2009	<i>Gymnopus hybrida</i>	sc	litter	
M. Tortelli	S10	11/10/2009	<i>Mycena galopus</i>	c	in soil	
M. Tortelli	S10	11/10/2009	<i>Radulomyces molaris</i>	sc	on oak twigs	with a strong medicinal smell
M. Tortelli	S10	11/10/2009	<i>Chlorophyllum olivieri</i>	vc	litter under oak	
M. Tortelli	S9	29/10/2009	<i>Pleuratus dryinus</i>	sc	on hardwood log	

M. Tortelli	S9	29/10/2009	<i>Armillaria gallica</i>	c	on logs	
M. Tortelli	S9	29/10/2009	<i>Calocora cornea</i>	c	on logs	
M. Tortelli	S9	29/10/2009	<i>Mycena pura</i>	vc	litter	
M. Tortelli	S9	29/10/2009	<i>Mycena galericulata</i>	vc	on log	
M. Tortelli	S9	29/10/2009	<i>Lycoperdon perlatum</i>	c	soil in litter	
M. Tortelli	S9	29/10/2009	<i>Pholiota squarrosa</i>	r	on log	
M. Tortelli	S9	29/10/2009	<i>Lepista flaccida</i>	c	soil in litter	
M. Tortelli	S9	29/10/2009	<i>Psathyrella piluliformis</i>	c	on dead wood	
M. Tortelli	S9	29/10/2009	<i>Hypholoma fasciculare</i>	vc	on logs	
M. Tortelli	S9	29/10/2009	<i>Mycena leucogala</i>	sc	soil path	
M. Tortelli	S9	29/10/2009	<i>Lepiota cristata</i>	r	soil path	
M. Tortelli	S9	29/10/2009	<i>Conocybe arrhenii</i>	r	bare soil	
M. Tortelli	S9	29/10/2009	<i>Stropharia caerulea</i>	r	in grass	
M. Tortelli	S9	29/10/2009	<i>Clitocybe odora</i>	c	litter	
M. Tortelli	S2	29/10/2009	<i>Pluteus chrysophaeus</i>	sc	on oak log	on oak log
M. Tortelli	S2	29/10/2009	<i>Clitocybe phyllophila</i>	r	litter	litter
M. Tortelli	S2	29/10/2009	<i>Chlorophyllum olivieri</i>	vc	litter	littermore commonly known as <i>Lepiota rhacodes</i>
M. Tortelli	S2	29/10/2009	<i>Amanita muscaria</i>	r	under oak but birch in sight	under oak but birch in sight
M. Tortelli	S2	29/10/2009	<i>Piptoporus betulinus</i>	r	on birch	on birch
M. Tortelli	R2	29/10/2009	<i>Mycena olivaceomarginata</i>	r	in short grass	
M. Tortelli	R2	29/10/2009	<i>Hypholoma fasciculare</i>	vc	on stump	
M. Tortelli	R2	29/10/2009	<i>Psathyrella piluliformis</i>	c	on stumps	
M. Tortelli	R2	29/10/2009	<i>Collybia cirrhata</i>	sc	on dead <i>Meripilus</i>	
M. Tortelli	R2	29/10/2009	<i>Meripilus giganteus</i>	r	on hardwood stump.	
M. Tortelli	R2	29/10/2009	<i>Rickenella fibula</i>	r	in mossy grass	
M. Tortelli	R2	29/10/2009	<i>Agrocybe cylindracea</i>	sc	on poplar by pond	
M. Tortelli	R2	29/10/2009	<i>Lyophyllum decastes</i>	sc	in grass by path	
M. Tortelli	S1	29/10/2009	<i>Lepista flaccida</i>	c	litter under hawthorn	
M. Tortelli	S1	29/10/2009	<i>Chlorophyllum olivieri</i>	vc	litter under hawthorn	more commonly known as <i>Lepiota rhacodes</i>
M. Tortelli	S1	29/10/2009	<i>Gymnopus confluens</i>	vc	under oak	more commonly known as <i>Collybia confluens</i>
M. Tortelli	S1	29/10/2009	<i>Collybia dryophila</i>	vc	under oak	
M. Tortelli	S1	29/10/2009	<i>Bjerkandera adusta</i>	r	on stump	
M. Tortelli	S1	29/10/2009	<i>Piptoporus betulinus</i>	r	on birch trunk	
M. Tortelli	S1	29/10/2009	<i>Mycena rosea</i>	vc	litter	
M. Tortelli	S1	29/10/2009	<i>Clitocybe nebularis</i>	vc	litter	
M. Tortelli	R8	29/10/2009	<i>Chlorophyllum olivieri</i>	vc	litter	more commonly known as <i>Lepiota rhacodes</i>
M. Tortelli	S6	29/10/2009	<i>Lepiota subincarnata</i>	sc	litter by path	New species for common
M. Tortelli	S6	29/10/2009	<i>Stropharia caerulea</i>	r	in grass	
M. Tortelli	S6	29/10/2009	<i>Mycena rosea</i>	vc	litter	
M. Tortelli	S6	29/10/2009	<i>Collybia butyracea</i>	vc	litter	
M. Tortelli	S6	29/10/2009	<i>Chlorophyllum olivieri</i>	vc	under oak	more commonly known as <i>Lepiota rhacodes</i>
M. Tortelli	S6	29/10/2009	<i>Daedaleopsis confragosa</i>	c	damp willow	
M. Tortelli	S6	29/10/2009	<i>Psathyrella piluliformis</i>	c	on dead wood	
M. Tortelli	T10	22/11/2009	<i>Clitocybe nebularis</i>	vc	litter under oak	
M. Tortelli	T10	22/11/2009	<i>Pholiota squarrosa</i>	r	on oak log	
M. Tortelli	T10	22/11/2009	<i>Lepista nuda</i>	c	litter under oak	
M. Tortelli	T10	22/11/2009	<i>Mycena rosea</i>	vc	litter under oak	
M. Tortelli	T10	22/11/2009	<i>Collybia butyracea</i>	vc	litter under oak	
M. Tortelli	R9	22/11/2009	<i>Hygrocybe virginea</i>	r	in grass	
M. Tortelli	R9	22/11/2009	<i>Mycena aetites</i>	c	in grass	

M. Tortelli	S8	22/11/2009	<i>Hypholoma fasciculare</i>	vc	In buried wood	
M. Tortelli	S8	22/11/2009	<i>Clitocybe odora</i>	c	litter	
M. Tortelli	S8	22/11/2009	<i>Russula sororia</i>	r	under oak	had a weak guaiac reaction
M. Tortelli	S8	22/11/2009	<i>Clitocybe phyllophila</i>	r	oak litter	
M. Tortelli	S8	22/11/2009	<i>Lepista flaccida</i>	c	oak litter	
M. Tortelli	R2	22/11/2009	<i>Lyophyllum gangraenosum</i>	sc	under shrubbery by pond	rare find retained as dried material
M. Tortelli	R10	22/11/2009	<i>Amanita muscaria</i>	r	in grass under birch	
M. Tortelli	R10	22/11/2009	<i>Leccinum scabrum</i>	r	in grass under birch	
M. Tortelli	R10	22/11/2009	<i>Boletus baduis</i>	sc	in grass under birch	
M. Tortelli	R10	22/11/2009	<i>Galerina hypnorum</i>	r	in moss	
M. Tortelli	R10	22/11/2009	<i>Mycena flavoalba</i>	c	in grass	
M. Tortelli	R10	22/11/2009	<i>Flammulina velutipes</i>	sc	on dead wood in heather	
M. Tortelli	S8	22/11/2009	<i>Tubaria furfuracea</i>	r	on wood	
M. Tortelli	S8	22/11/2009	<i>Clitocybe fragrans</i>	r	litter	
M. Tortelli	S8	22/11/2009	<i>Heboloma sordescens</i>	sc	under oak	
M. Tortelli	S8	22/11/2009	<i>Agrocybe erebia</i>	sc	litter by path	
M. Tortelli	S8	22/11/2009	<i>Boletus porosporus</i>	sc	litter under oak	
M. Tortelli	S8	22/11/2009	<i>Russula parazurea</i>	c	under oak	
M. Tortelli	S8	22/11/2009	<i>Bjerkandera adusta</i>	c	on stump	
M. Tortelli	S8	22/11/2009	<i>Russula cyanoxantha</i>	r	grass under oak	
M. Tortelli	S8	22/11/2009	<i>Russula sororia</i>	r	under oak	
M. Tortelli	R2	22/11/2009	<i>Hygrocybe ceracea</i>	r	in grass	
M. Tortelli	R2	22/11/2009	<i>Hygrocybe virginea</i>	r	in grass	
M. Tortelli	R2	22/11/2009	<i>Hygrocybe marchii</i>	r	in grass	
M. Tortelli	R2	22/11/2009	<i>Laccaria laccata</i>	c	in grass	
M. Tortelli	R2	22/11/2009	<i>Psathyrella multipedata</i>	sc	in grass	
M. Tortelli	R2	22/11/2009	<i>Xylaria hypoxolon</i>	c	on dead wood	
M. Tortelli	R2	22/11/2009	<i>Hypholoma fasciculare</i>	vc	on dead wood	
M. Tortelli	N1	22/11/2009	<i>Lyophyllum decastes</i>	sc	in grass	
M. Tortelli	N1	22/11/2009	<i>Marasmius oreades</i>	r	in grass	
M. Tortelli	N1	22/11/2009	<i>Laccaria laccata</i>	c	in grass	

c = common, vc = very common, r = rare less than 10 fruitbodies, sc = single collection

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