

Issue 8
July 2004



Fungal poisons
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NIEG NEWS



Clavulinopsis helvola
A fairy Club

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NIFG NEWS 2004

With the kind support of Museums & Galleries of Northern Ireland (MAGNI)

As you may already know, Mark Wright, who has edited the Newsletter since its inception, has resigned as editor to take a well-earned break. Many thanks to Mark for a great job over the years - and a hard act to follow!

I have taken over as editor and my first job has been to get copy for the present edition. Not an easy task. But many thanks indeed for those who have made a contribution to this edition.

The issue comes complete with our 2004 programme with projected foray dates decided at the AGM in March, plus the now traditional

weekend away and two cookery nights.

As Mark has said before on many occasions, please keep the articles coming in. It's your Newsletter and depends on your input to make it challenging and interesting!

Comments etc, should be sent to
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Chairman's Report 2003 and 2004

To quote Geoff Kibby's editorial in *Field Mycology*, January 2003: "What a strange season it was last year ...". Yes! It was just the same in Ireland as in the southeast of England - good early rains producing flushes of agarics and then a general anticyclonic zilch until November (but see individual foray reports for exceptions) when the wood-rotters went into overdrive.

2003 proved similar. In particular, beech woods were almost devoid of the usual crops of *Russula* and *Lactarius*. It is interesting to speculate what 2004 will be like. A recent weather forecast predicts a return to more normal conditions - we shall see.

2002 saw us back in Peatlands for the AGM. Eleven were present with seven apologies, and ten for 2003 with six apologies. The usual variety of

food and drink for the buffet lunch once again made both occasions most enjoyable. A major topic discussed was public liability insurance, something very difficult and expensive to secure these days. At the moment we organise this through the Association

of British Fungus Groups, which is a perfectly satisfactory if somewhat cumbersome arrangement. I was asked, therefore, to investigate alternative schemes. So far I have been unable to come up with anything better, but shall keep on searching.

The residential for 2002 was held at Cornaher House, Co. Westmeath, jointly with the Fungus Working Group of the Dublin Field Naturalists Society - from now on the Dublin Fungus Group (DFG). For 2003 we stayed at Arch Tullyhona Fann Guest House, Co. Fermanagh. Full details of species and experiences can be found on the web and in NIFG NEWS nos. 6 and 7.

We have received over the last year or so complimentary copies of three publications. The first two, *Fungus Fred goes foraging* and *The Fungi Name Trail* are aimed at young children and of excellent standard. Like most groups we are a somewhat ageing lot and need to be more vigorous in encouraging an interest in fungi

DISCLAIMER

The contents of NIFG NEWS are as accurate as can be achieved within the constraints of a small newsletter. The editorial staff take no responsibility for views expressed about the edibility or otherwise of fungi described by contributors. Edibility is a relative term and what may suit one person may react badly with another. The identification of fungi for consumption is entirely the responsibility of the individual reader. Guidance given in these pages is not definitive and regardless of the degree of expertise available, infers no guarantee of edibility. Therefore the management accept no responsibility for the consumption of fungal fruiting bodies based on information presented here, whatever the advice or ultimate consequences.

amongst youngsters, so please make sure you have these as well as *How The Mushroom Got Its Spots* on your birthday/Xmas present list. For full details see the inset on page 3. The third, *Recommended English names for fungi in the UK*, is an extension of a previous project dating back to the 1960s concerning the need sometimes to avoid fancy Latin names. It will be interesting to see how many of the new recommendations become truly popular in the way "Plums and Custard" once did. I have divided opinions myself as some new names are very good. For instance "The Flirt" for *Russula vesca* (the cap margin representing a glimpse of petticoat under the raised hem of a saucy girl's frock), while others are just plain awful, for instance "The Something Oyster" for anything in the genus *Pleurotus* (garbling an old specific name with a new generic one). Debate on this will be long and spirited. Again for full details see the inset on page??

There is a new electronic method available now for the exchange of groups' newsletters, so this will considerably reduce our postage bills - ergo no increase in membership fees is likely in the near future!

Alas, Mark Wright, a founder member of NIFG, has had to climb down as editor of NIFG NEWS to be replaced by Roy Anderson. Many thanks Mark for carrying out such a difficult task so successfully - and for so long, and may I apologise on behalf of all of us who never got that promised article in. Best of luck, Roy, in getting future editions together.

Another resignation was that of Rachel Siggins as treasurer. It was Rachel, way back in 1995/96, who first started enquiring about fungus groups in Northern Ireland only to find there weren't any. As a direct result of the endeavours of her and others NIFG came into being in April 1966. Many thanks Rachel for your pioneering spirit and looking after our cash. Chris Stretch takes over now as

treasurer.

Congratulations to Royall Moore who was awarded the Benefactors Medal of the British Mycological Society for 2003. Royall has been an editor and webmaster for the journal *Mycologist* for many years and is a past member of Council of the BMS. We will formally congratulate Royall at the next AGM.

Finally, it is with great regret that we learn of David Mitchel's imminent departure to South Wales. David is to take up a new GIS consultancy position near Brecon and will be sorely missed. However, all is not gloom as David will still continue as our recorder and webmaster. David, like Rachel and Mark, was a founder member of NIFG and in many ways its internal combustion engine. Without David's drive and leadership

NIFG would be just another any old fungus group and not a group of some distinction. We had a presentation and farewell eulogy for him at Peatlands on March 27 (see insert).

Happy foraying for
2004

Gerry



Fungus Fred Goes Foraying, M. Hadley, British Mycological Society, 2002 available from www.britmycolsoc.org.uk/education.asp

The Fungi Name Trail, Liz Holden and Kath Hamper, 2004, Field Studies Council Publications, Preston Montford, Montford Bridge, Shrewsbury, Shropshire SY4 1HW £3.25 + p.& p.

How The Mushroom Got Its Spots, S. Assinder and G. Rutter, British Mycological Society, 2002, available from www.britmycolsoc.org.uk/education.asp

Recommended English names for fungi in the UK, Edited by Liz Holden, British Mycological Society et al., 2003, available from Plantlife Bookstore Summerfield Books, Main Street, Brough, Cumbria CA17 4AX. £6 inc. p.&p.

Cook-in 2003

Daisy Cottage, Mary Taylor-Winter's home, was the ideal venue for our annual cook-in once again.

There were ten of us, including Tess (Mary's dog). Due to a slight problem with the lighting the homely kitchen was

Nicola, and Mary and Maureen. His creamy scrambled eggs and mushrooms included blewits, cloud agaric and *Clitocybe nebularis* fresh, and picked by his own fair hand. All was served with mixed salads.

Our deserts were so colourful

cream.

With hand picked fruits from by Alan and Nicola, was an extremely good blackberry and apple crumble, and this was cooked by Nicola (the crumble had an interesting crunch of nuts in it). Mary served the custard from silverware, modern, and carefully crafted to resemble Ambrosia Devon Custard tins!

Maureen produced a chocolate cake which looked remarkably like *Bovinus cowpaticus*! Gerry suggested she should decorate it with a *Coprobria granulata* look-alike next year.

Once again, thank you Mary for sharing your home! It was a super, fun, gastronomic evening. Do not miss it next year!



enhanced by lamplight, adding to the ambience.

Mary once again started proceedings by a welcoming glass of wine, followed by mini-tartlets, cocktail sausages, delicious mushroom soufflé, and a hearty potato gratin. The stuffed mushrooms were remembered in time by Maureen this year!

But it was Alberto, in his own inimitable and enthusiastic style who demonstrated *Revuelto* to us, as cooked by his Mother. It is a regional dish from N. Spain. He was cheered on by his family Saioa and Suzanne, and by Gerry and Joan, Alan and

and good. Home grown by Gerry, we had stewed damsons and sugared raspberries served with either crème fraîche or

Maureen



Cooking miscellany

‘30-MINUTE SOUP’

Mushroom & Herb Soup

[serves 4]

2 oz. rindless smoked streaky
bacon rashers
1 white onion, chopped
1 tbsp sunflower oil
12 oz/3 cups of flat-cap
cultivated mushrooms (or a
mixture of wild mushrooms)
1 pint beef stock
2 tbsp sweet sherry
2 tsp mixed dry herbs
Seasoning
4 tbsp thick Greek or other
natural yoghurt

Chop the bacon and cook
lightly in a large saucepan.

Add the onion and oil and cook
until soft.

Added the mushrooms chopped
coarsely.

Cover and cook on alow heat
until softened.

Add the stock, sherry, herbs
and seasoning and simmer for
10-12 minutes.

Blend the whole mixture in a
food processor or using a small
portable blender, in situ.

Return to the saucepan and heat
thoroughly.

Serve with a dollop of yoghurt
and a herb sprig in each bowl.

Roy Anderson

‘PUFFECT’

Baked Chicken & Puffballs

1/4 cup flour
1 Tbsp dried tarragon
Salt & pepper to taste
One 2-1/2 to 3 lb. chicken, cut
into serving pieces
1/4 cup oil
1 cup dry white wine
2 whole garlic cloves, crushed
3 Tbsp butter or more, if
needed
About 1 lb puffballs, peeled &
cut
into thick slices

Mix the flour, tarragon, salt,
and pepper in a paper or plastic
bag. Shake the chicken pieces
in the bag one at a time.

Sauté the chicken in oil until
brown. Remove the chicken
pieces from the pan and arrange
them in a baking dish. Add the
wine to the sauté pan and let it
boil for 2 to 3 minutes. Pour the
wine over the chicken. Add the
garlic cloves to the dish, cover,
and bake for 20 minutes in a
preheated 350°F oven.

While the chicken bakes in the
oven, add the butter to the same
pan and sauté the puffballs.
Toss and gently coat the
mushrooms in butter for 7 to 10
minutes or until they turn
brown. Add more butter if
necessary.

Remove the chicken from the
oven and skim off the fat. Add
the mushrooms. Cover and
continue to bake for 15 to 20
minutes longer.

[internet]

NB: puffballs must be used
when the cut flesh is an unsul-
lied white i.e. when quite fresh.

Also bear in mind that the fla-
vour is subtle and easily over-
whelmed by injudicious use of
spices.

Alternative Uses for Giant Puffballs



1) Puff-airbag



2) Butt substitute, or cushion -
for those of a sensitive disposi-
tion.

Any other suggestions are wel-
come.

Foray finds 2003

Just a reminder that if you want access to species lists for the Forays, these are on the website at www.nifg.org.uk/past_forays.htm.

Otherwise only the highlights of the forays are posted in the Newsletter.

Saturday 16th April, Springhill Estate, Moneymore, Co.Tyrone

This was a lovely site well worth a return autumn visit. Some of the trees are majestic and the grounds and house are a delight. In between the showers, there were enough fungi to keep us guessing. The best find was that of the Myxomycete (slime mould), *Badhamia macrocarpa* on felled sycamore trunks. This was the first time it was found in Ireland since 1920. Other dramatic finds were the mass of earth stars, *Geastrum triplex* - fruiting bodies from last year - under a huge Yew and, at a second site, under a Monterey Cypress. There were other hangers on from last year - a remnant of a Giant Puffball and a well decayed *Inonotus dryadeus*, but there were also signs of things to come with *Psathyrella spadiceogrisea* and *Panaeolus acuminatus* out.

Saturday July 26th, 1pm: Baronscourt, near Newtownstewart, Co.Tyrone

The weather was mostly pleasant but we were not expecting to find much as it has been a pretty unproductive year so far.

We immediately found, however, some clapped out Russulas under an old oak tree in the car park but could not identify them. The agent, Robert Scott, gave us a warm welcome, squared us up with the gamekeeper, made sure we did not disturb (poach?) any of the many pheasants and showed us where to foray. This was two hundred and fifty acres of beech wood interspersed with oak, ash some conifers and many rhododendron bushes. Although we had to hunt hard for what we found, there were two rewarding finds which made the day: the elegant *Pluteus salicinus* and *Volvariella gloiocephala*. A young *Peziza* with a long grooved stalk foxed us as well.

Saturday August 16th, 1pm: Glenmore Estate, Ballybofey, Co.Donegal

The warm weather had baked most areas so we were not too hopeful on this foray, but the wood turned out to be pleasantly wet and muddy so there were fungi to be found. It was mainly an ash wood, but there were scattered oak, beech and alder to give some ectomycorrhizal interest. The best find was that of *Lactarius cyathuliformis*, a small milkcap under Alder with a dark olivaceous centre. This is probably its first Irish record, but it is also probably overlooked. There were also beautiful specimens of *Chlorociboria aeruginascens* and *Amanita vaginata*. The amount of *Poly-*

porus badius on fallen ash branches was also notable.

Saturday September 6th, 1pm: Shane's Castle, Antrim

The drought continues... Shane's Castle has some of the oldest trees in Northern Ireland (and possibly Ireland) so this was an eagerly anticipated foray. The dry weather limited our finds of ectomycorrhizal fungi however, but it was noticeable that the amount of brackets was not bad for N.Ireland (but probably still poor compared to GB with its longer cover of woodland). *Inonotus dryadeus*, *Laetiporus sulphureus* and *Fistulina hepatica* were all present. In terms of Agarics, the best finds were that of *Entoloma sinuatum*, a large woodland *Entoloma* that looks like *Clitocybe nebularis*, *Marasmius coharens* (in perfect condition) and curiously *Lecanum duriusculum* under Hazel. There were also some huge specimens of *Boletus radicans*. Some very curious Russulas still await identification and they are probably the best finds of all. But this was only scratching on the surface of a huge estate. We only got into one small area and certainly would love to go back.

Saturday September 27th, 2pm: Loughgall Manor, Co.Armagh Joint foray with the Armagh Field Naturalists' Group

The meeting was attended by about twenty people with roughly equal members from

each side. Loughgall Manor/Country Park is a splendid site with rich soil and mixed conifer/deciduous woodland habitat. as we expected in this, so far, poor year only forty or so species were identified - not a single *Russula* and only one each of *Lactarius* & *Suillus*. However, we were rewarded with an abundance of earth stars (*G.striatum* and *G.triplex*) and the rare *Melanophyllum eyrei*. About four specimens of the latter were found in thin grass alongside a palisade of lime trees.

Fermanagh Weekend October 18-19

This year we stayed at Arch Tullyhona Farm Guest House run by Rosemary and Geoffrey Armstrong. Situated between Florencecourt and the Marble Arch Caves, this delightful establishment provides first class accommodation, hospitality and home cooking - you even get whisky to put on your porridge. A record turnout, with eight plus little Soaia on the Friday night and fourteen on the Saturday. The highlight of our four course gourmet Saturday night dinner was home cooked and home reared lamb, followed up by an interesting musical evening featuring the Boar's Head Carol (in four part harmony) and various Irish folk songs. Unlike last year (for those who can remember it) we retired to bed early. Five sites were visited: Inish Rath / Florencecourt (Chris leading) and Inishturk/Claddagh Glen (Gerry leading) on Saturday followed by Corey's Point (David leading) on Sunday. Finally a most warm welcome to the six new members whose first experi-

ence of NIFG was the residential.

Saturday October 18th: Inishturk, Lower Lough Erne

Owned by the RSPB, Inishturk lies to the north of Boa Island not far from the western road-bridge. Brad Robson of the RSPB piloted us there from Castle Caldwell through some very choppy water - nobody was seasick. The island, very overgrown and with many dead/dying trees (mostly birch), was rather unproductive. The finds were not particularly impressive, the most interesting being the Jelly Rot, *Merulius tremellosus*, which kept turning up this weekend also being found in Inishrath and Marble Arch.

Saturday October 18th: Inishrath, Upper Lough Erne

Inishrath is a small island in Upper Lough Erne owned by the Hare Krishna community. The centre of the island holds a temple with lawns and some large trees, this is surrounded by a wooded belt running down to the shore, including beech and birch. There were good finds suggesting a visit in the peak fruiting time would be very productive. *Chroogomphus rutilus* - Copper Spike, *Lactarius chrysorrheus* - Yellow Milk Cap, *Lepiota aspera* - Freckled Dapperling and *Limacella guttata* were the best finds.

Sunday October 19th: Corry's Point Forest Nature Reserve, Belcoo

The most prolific foray of the year so far. This interesting wood that projects out into Lower Lough Macnean has a

very interesting Willow and Alder lake shore fringe with Oak, Hazel, Ash and the odd planted Beech above it on the small hill. The most spectacular find was *Cortinarius olearioides (subfulgens)*. This is a Phlegmacium with a sticky cap, but dry stipe. The flesh goes pink with KOH putting it in the section *fulvi*. Then, the small spores and flesh colours identify it as *olearioides*. Other good finds were the Horn Stalkball, *Onygena equina* on a sheep's horn, the purple *Lactarius lilacinus* under Alder, the masses of Bitter Poisonpie, *Hebeloma sinapizans* and the Blue Roundhead, *Stropharia cyanea* in the field on the way to the wood.

Saturday October 25th, 1pm: Dromantine College, Co.Down

A cool afternoon with winter feeling near. The parkland immediately surrounding the abbey was the most interesting part of the estate and not just for fungi, but also for wedding photographs. I just pity the poor couple whose photos feature an odd looking bunch all wrapped up in winter woolies on their hands and knees in the background. It all looked very dry but once we started looking, there were a lot of ectomycorrhizal fungi deep in the moss - a lovely specimen of *Russula faginea* (under Oak which is common here in N.Ireland), the Fragile Britlegill, *Russula fragilis*, the Girdled Webcap, *Cortinarius trivialis*, the Earthy Webcap, *Cortinarius hinnuleus*, the Tawny Milkcap, *Lactarius fulvissimus* and lots of The Miller, *Clito-*

(Continued on page 8)

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pilus prunulus. The Oak Bracket, *Inonotus dryadeus*, was another interesting find, but my favourite was the club, *Typhula phacorrhiza* complete with sclerotium at its base. This site must be good for Boletes earlier in the year.

**Saturday November 8th, 1pm:
Drumlaph Woodland Trust
Reserve, near Maghera**

The final foray of the season and

it was a gloomy day - winter was on its way. Woodland can be traced back on this site to the 15th century so it is an old wood, but typical of many Irish woods, it had been heavily grazed by stock in the past so what is found on the ground could be better. However, there were still good things to be found. The interesting finds were a *Russula* that is still waiting to be identified but which is possibly *R. lundellii*, the two

Cortinarius, *Cortinarius ringens* with an iodoform smell and rooting stipe, and *Cortinarius subpurpurascens* which bruised strongly purple on the stipe, *Crepidotus epibryus* on the leaf (2nd NI record), *Entoloma vinaceum* var. *fumosipes* (small spored, glabrous and with short fat cells in the cap) and *Nyctalis parasitica* on the rotting *Russula*.

David Mitchel

Prehistoric Giants ?



organisms of early terrestrial ecosystems.

Remember the quotation - "specimens of *Prototaxites* over 1 m wide have been reported..."? One **metre** across? So maybe, just maybe ...!

Quote: '...It has been suggested that some of the nematophytes (*Prototaxites*) were terrestrial fungi... (specimens of *Prototaxites* over 1 metre wide have been reported)...'

[Wellman, C. H. & Gray, J. (2000). The microfossil record of early land plants. *Philosophical Transactions of the Royal Society of London, Series B* 355, 717-732]

Now, nematophyte fossils start in

rocks more than 450 million years old. They are fossilized tubular things (maybe fungal hyphae?) and are so common and widespread that they must have been an important, even dominant, element both in terms of abundance and diversity in terrestrial ecosystems. They are found in rocks dating from the Ordovician to the early Devonian periods. This covers the best part of 100 million years. Nematophytes also included by far the largest



Mycological Society News

GRASSLAND WORKSHOP

Dates: 01/11/2005 To 05/11/2005

Location: To be arranged

Session Times: To be arranged

Following several very successful workshops on *Hygrocybe* species in earlier years, we are hoping to arrange a workshop on some of the other grassland fungi, especially the earth tongues, club & coral fungi and grassland *Entolomas*. This would be slightly longer than the usual weekend workshop and would probably be held in late October or early November, with a number of expert tutors to cover the different genera. We are now hoping to hold this workshop in 2005.

FORAYS

AUTUMN FORAY

Dates: 08/10/2004 To 15/10/2004

Location: Ashburnham Place, Near Battle, East Sussex

Session Times: 8th – 15th October 2004

The Society's 2004 Autumn Foray offers an opportunity to meet fellow field mycologists, to update on recent developments and to participate in the main event in the foray calendar. Beginners will be most welcome and members of the Foray Committee will be on hand to offer help and advice if you need it. Ashburnham Place is set in a splendid park designed by Capability Brown with fine trees, and three lakes; its grasslands and lawns have a good range of *Hygrocybe* and related species. Organiser Patrick Leonard. Approximate cost £190-305 (sharing).

Ashburnham Place is set in a splendid park designed by Capability Brown with fine trees, and three lakes; its grasslands and lawns have a good range of *Hygrocybe* and related species and part of the park is an SSSI.

The foray will be visiting a range of East Sussex habitats and sites will include the grounds of Herstmonceux Castle, Abbot's Wood and Ashdown Forest. There are also plans to visit old chestnut coppice with oak woodlands where wild boar

have re-established themselves in the wild. If the weather conditions are favourable we will visit a good sand dune system on the Channel coast and one of the largest expanses of vegetated gravel in Britain at Dungeness. A touring day foray of East Sussex's excellent range of ancient churchyards is also being planned. The foray will offer a chance to visit St Dunstons Farm which is one of the very few remaining private holdings which are still farmed in a traditional manner. The Wealden woodlands are varied and boast stands of oak, beech, hornbeam, alder, poplar, willow and chestnut as well as rarer examples of lime, cherry and w a y f a r i n g t r e e .

The Ashburnham Place Christian Trust where the foray will be based has a range of accommodation from brand new en-suite bedrooms, through standard rooms with shared facilities to dormitory accommodation. The number of places of each type will be limited so please book early. Estimated costs for the week are likely to range from approximately £305 in en-suite (sharing) down to £190 based on dormitory (4 sharing) a c c o m m o d a t i o n .

Committee will be on hand to offer help and advice if you need it.

UPLAND FORAY

Dates: 23rd – 30th October 2004.

Location: Community Hall, Youlgreave, Derbyshire.

Organisers Caroline Hobart and Dr. Tony Lyon. Approximate cost £25 plus the cost of accommodation and meals

The 2004 upland foray will be based in the village of Youlgreave this is a few miles SW of Bakewell (Ordnance survey map 119). The area is close to a variety of known excellent sites including the Chatsworth Estate and Longshaw Estate (NT) renown for its unimproved grassland flora. During the week it is planned to include visits to a variety of sites typical of the eastern area of the Peak District. For participants wishing to continue their

studies on fungal species associated with Rock rose there will be opportunities to visit some of the other more northern dales rich in this species. Our base will be Youlgreave Community Hall; a pleasant sizeable room with integral kitchen and toilets. There will be a fixed charge for the use of the workroom of £25 (£15 for BMS members and partners) and participants will be free to make their own arrangements for accommodation from a range of choices available in the village depending on individual needs. Self Catering Cottages and Bed and Breakfast can be booked. The local YHA is in walking distance, it is small and has an excellent reputation for its food; shared rooms are available for approximately £12 per night plus the cost of meals. All accommodation will need to be booked well in advance by participants as the last week in October is one of the busiest for ramblers and walkers. For a full list of accommodation available in the village, contact Caroline Hobart (hobart@geaster.u-net.com).

- 1) Black Bulgar *Bulgaria inquinans*
- 2) *Spaethularia flavidula*
- 3) *Clitocybe geotropa*
- 4) *Collybia butyracea*
- 5) Chicken of the Woods *Laeli-*
- 6) Common Waxcap *Hygrocybe porsu sulfureus*
- 7) Striate Earthstar *Geastrum striatum*
- 8) Sickener *Russula emetica*
- 9) *Lactarius deterrimus*
- 10) *Trametes gibbosa*
- 11) *Russula amara*
- 12) Tawny Grisette *Amanita fulva*
- 13) *Lycoperdon pyriforme*

FUNGI PICTURE QUIZ

FUNGAL POISONS

Following David Mitchel's interesting article on cases of fungal poisoning in Ireland, which appeared in the last edition, I thought it would be useful to look again at what is known of the effects of the many and varied fungal toxins

The commonest toxins found in larger fleshy fungi are:

Amanitoxin, gyromitrin, orellanine, ibotenic acid, muscarine, muscimol, psilocybin, coprine

You are probably aware that toxic mushrooms are distinguished by the name 'toadstool', from the German *Todesstuhl*, for death's stool. None of the fungal toxins are proteins (unlike bacterial toxins) and so cannot be destroyed by cooking. Each toxin has a unique effect upon the human body but only a few are fatal.

Antabuse

This is one of the few fungal toxins which has found a medicinal application. The biochemical name is coprine but pharmacists call it sulfiram or antabuse and it is present in fungi of the Ink Cap type. It is in fact a very simple compound called an amino acid, but a very unusual amino acid (there are about 30 kinds in the human body) although one which your body will metabolise fairly safely.

It produces symptoms only if alcohol is consumed within 72 hours of ingestion. The symptoms are not caused primarily by coprine, however. Coprine is first broken down to a compound called cyclopropanone hydrate. This then interferes strongly with the natural

breakdown of acetaldehyde, a toxic metabolite of alcohol in the human body. As a result, the sufferer effectively has a short, sharp dose of alcoholic poisoning. The symptoms are similar to those suffered by people (such as many Chinese) naturally intolerant of alcohol. There is strong reddening of the face (I have seen this in some Chinese and it looks strange on a dusky face), palpitations, racing pulse, headaches and sweating. There may also be nausea, vomiting, loss of balance and blurred vision. Affected individuals appear confused and in extreme cases fall over!

Contrary to popular belief, the Ink Cap known as Lawyer's Wig *Coprinus comatus* is a poor source of coprine. I have eaten it with wine but have had no symptoms. The Common Ink Cap *Coprinus atramentarius* is a much better source and will do the trick (that is, if you are interested in experiencing alcoholic poisoning at first hand!).

The properties of other Ink Caps in Ireland are not well known, so (in the cause of science) here is an opportunity for some hardy soul to push back the frontiers! It would probably be a bad idea by the way, to use a good quality wine during the Ink Cap tasting, for obvious reasons!

Non-specific reactions

Many toadstools exhibit variable toxicity. This can vary with geography, strain of toadstool, age of person eating

the fungus etc. Even some common edible fungi can produce adverse reactions. A raw marinade of morel (*Morchella esculenta* and *M. elata*) was once the cause of a mass poisoning in Vancouver. Seventy-seven out of 483 guests at a dinner suffered nausea, diarrhoea, vomiting and cramps with some complaining of numbness and rashes up to 7 days later.

Gyromitrin

The Early False Morel *Gyromitra esculenta* is sometimes confused with the true Morel *Morchella esculenta*, and poisonings have occurred after consumption of fresh or cooked *Gyromitra*. *Gyromitra* poisonings have also occurred after ingestion of commercially available "morels" contaminated with *G. esculenta*. It may be that the apparent poisoning with 'edible' morels in Vancouver was due to contamination of this sort. The commercial sources for these fungi (which have not yet been successfully cultivated on a large scale) are field collection of wild morels by semi-professionals

Gastrointestinal irritants

Mycophiles most often complain of tummy upsets after consuming wild fungi.

Rollrim *Paxillus involutus*, Beechwood Sickener *Russula emetica* and other *Russulas*, and several boletes such as Peppery Bolete *Chalciporus piperatus* are common species which can cause nausea,

vomiting and diarrhoea. Many other species produce a reaction only in susceptible individuals. Producers of mild gastroenteritis are too numerous to list here, but include members of many of the most abundant genera, including *Agaricus* (especially the yellow stainer), *Boletus*, *Lactarius*, *Russula*, *Tricholoma*, *Pluteus*, and others. The mechanism of irritation is unknown but some people are intolerant of the unusual sugar trehalose present in many fungi.

Symptoms of gastro-intestinal upset also occur after consuming the more seriously poisonous fungi, but here the onset of pain is not for some time (at least 12 hours) after ingestion. The offending fungi in the present section cause discomfort quickly after a meal, which will at least offer some re-assurance re more serious poisoning.

Psilocybin

Hippie's delight as I have christened this, is a neurotoxin produced by species of *Psilocybe*, *Gymnopilus*, *Conocybe* and *Pluteus*. The usual source in Ireland is Liberty Cap *Psilocybe semilanceata*. This can grow in some pretty mundane places and is easily recognisable, even to a non-expert, by its size, colour and papillate cap. It is recorded from about 40 10-km squares in N. Ireland.

The active ingredient, psilocybin causes symptoms similar to intoxication with alcohol, and hallucinations are also reported.

Other species of *Psilocybe* containing psilocybin include the large N. American *P. mexicana* in which there seems

to be a fairly large trade both via the internet and via normal import routes. How large the trade is became apparent only recently when Gordon Brown slapped 17.5% VAT on importers. This was done by re-classifying the toadstool as a drug rather than as a food so that it would become amenable to tax.. Good old Gordon—even prepared to legalise what is clearly a trade of doubtful legality in order to reap a tax harvest!

Muscimol etc. from Fly Agaric etc.

This type of alkaloid is neurotoxic but not fatal and is produced by a number of Amanitas. Muscimol and ibotenic acid, for instance, are the two most potent toxins in Fly Agaric *Amanita muscaria*. Ingestion can cause sleepiness followed in a couple of hours by excitability, delirium and hallucinations. This fungus was much used by the Siberian Indians for ceremonial earth magic.

Muscarine is another Amanita neurotoxin. It is also potent in toadstools such as the Fibrecap *Inocybe geophylla* ingestion of which can induce profuse sweating for a couple of hours, then sometimes nausea, blurred vision and perhaps more serious complications.

Amanitoxins and other protoplasmic poisons

These are the really serious villains of the piece. Protoplasmic poisons kill cells, mainly in the liver, but give no tell-tale symptoms until the poisoning is irreversible. Violent vomiting, diarrhea and

abdominal pain only occur from about 12 hours after consumption, and then may last for days. These symptoms fade but are followed by failure of the kidney and liver followed by coma and usually death.

Ingestion of any of the following fungi, which contain these toxins, can be fatal:

Death Cap *Amanita phalloides*

Destroying angel *A. virosa*

Fool's Mushroom *A. verna*

Funeral Bell *Galerina marginata* (picture below)

All occur in Ireland and several have caused accidental injury or death as indicated in David's article.

The incidence of this type of poisoning is pretty low at present but it would be unwise to be complacent. More and more people are tempted each year to try wild 'mushrooms' for the pot. Even 'experts' occasionally fall victim so complacency is misplaced and the cautionary principle is always advised—even for 'experts'.

Roy Anderson



Fungi Picture Quiz



New Finds, 2003- 2004

N. Ireland Waxcap Survey, 2003

Despite the poor fruiting season in the second year of the NI Waxcap Survey, there were a number of 12 Irish records (at least no other Irish records are listed for these species in the BMSFRD) and there are another 10 species new to Northern Ireland. Liz Holden found *Camarophyllopsis schulzeri* on the slopes of Knocklayd near Ballycastle, *Dermoloma pseudocuneifolium* near Torr Head, *Entoloma ochromicaceum* at White Park Bay and *Entoloma nigroviolaceum* at Knocklayd and White Park Bay. Richard King found *Clavaria tenuipes* at Ballynahavla Bridge near Slieveanorra and the strange *Squamanita paradoxa* parasitising *Cystoderma* sp. near Altnahinch Dam. Shelley Evans and Peter Roberts spectacularly found *Hygrocybe phaeococcinea* at the White Rocks near Portrush and also (some during diversions into nearby woods) *Colacogloea peniophorae* and *Hyphoderma cryptocallimon* at Keady Mountain, *Hyphodontia detritica* at Dowhill Forest and *Sistotremastrum niveocreum* and *Tulasnella deliquescens* in Ervey Wood ASSI.

Species new to Northern Ireland include *Cortinarius huronensis* (Shelley Evans at New Buildings, Co. Londonderry), *Entoloma excentricum* (Liz Holden at Ballynahavla Bridge), *Entoloma rhombisporum* (Liz Holden near Torr Head), *Entoloma pseudoturci* (Liz Holden at Knocklayd), *Entoloma hirtipes* and *Entoloma hispidulum* (Roy Anderson at Barony Bridge, Tyrone), *Entoloma longistriatum* (both Liz Holden at Drumtullagh Church in Carrowreagh townland and Roy Anderson at Tirkane near Swatragh), *Gamundia striatula* (Liz Holden at St.

Patrick's Church, Kilrea), *Microdiscula phragmitis* (Peter Roberts at Donnybrewer Level (Intake) Townland) and *Omphalina galericolor* var. *lilacinicolor* (Peter Roberts at the Pot Quarry, Ballyness Townland near Limavady).

David Mitchel

Forays 2004

Splanchnonema scoriadea (Pleomassariaceae) turned up for the first time in Northern Ireland at Correl Glen, Co Fermanagh on 28 June 2004 on brittle dead twigs from a low hanging branch of a birch tree in the wood. Melina McMullen, Maria Cullen & Howard Fox were studying birch epiphytes there for a monitoring project. The group of black flask shaped structures to 1mm diameter on the bark of the twig made it obvious that the find was a pyrenomycete. The ascospores are very large, 50-70 x 20 microns and 1 septate. The top cell of the ascospore is dark brown and many many times the size of the paler brown lower cell.

Hypocrea pulvinata (Hypocreaceae) was seen on the lower side of a birch polypore in Florencecourt, Co. Fermanagh on 2 July 2004, new to Northern Ireland. The spongy hymenium is composed of spore-bearing tubes soaked up rain water and was dark and rotten.

The 3-8mm diameter lemon yellow spots (stroma with tiny perithecia) were scattered over the host hymenium and made the fallen bracket appear from a distance like a discarded rotten poxy orange skin [poxy = a folk medical term for spotted]. There is one other specimen in the DBN herbarium, from near Lough Fin, Co. Mayo, collected by Maura Scannell in the 1950s. In addition to rotting down Piptoporus, this saprobe is reported in other European countries on *Fomitopsis* brackets.

[edited contribution of Howard Fox to the NIFG website, 5 July 2004.]

Miscellaneous

One of the more eye-catching groups of ascomycetes are galls of the *Taphrina* species which affect fruits of the alder and plum families. On a foray to Peatlands Park in August 1996 NIFG members found abundant galls of *Taprina alni* on female catkins of the common alder. These appeared as reddish wing-like outgrowths from the catkins. On a walk on Carnmoney Hill in June this year, I came across blackthorn bushes in which the sloes were heavily infested by the related *Taphrina pruni*. This produces banana-shaped yellow outgrowths and renders the fruits sterile. It appears to be rare in N. Ireland. When a large infestation occurs, however, it can be spectacular

Roy Anderson

AGM PORTFOLIO



**Food for thought—
Gerry with Chris**



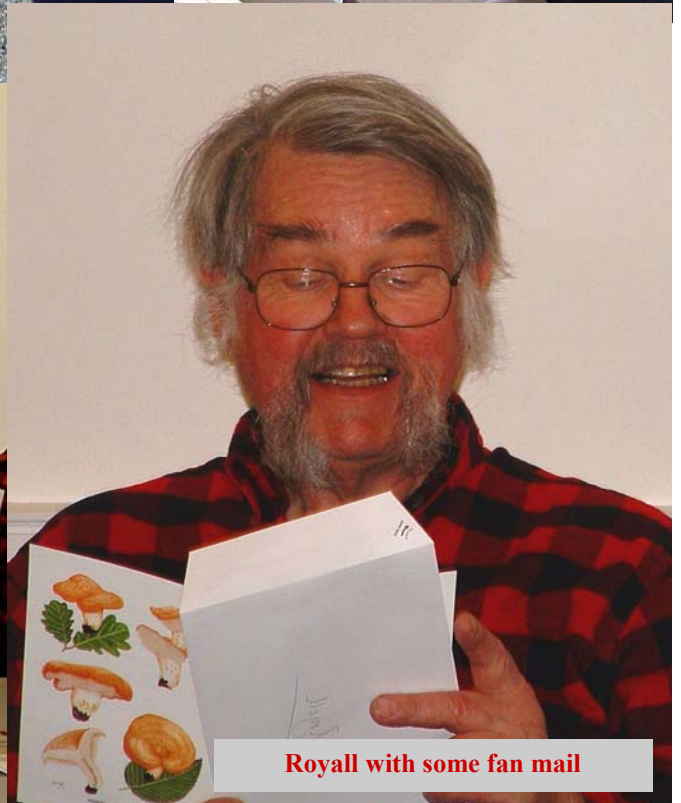
**Pass the caviar!
Alberto, Mary and Rachel enjoy the
'ambience'**



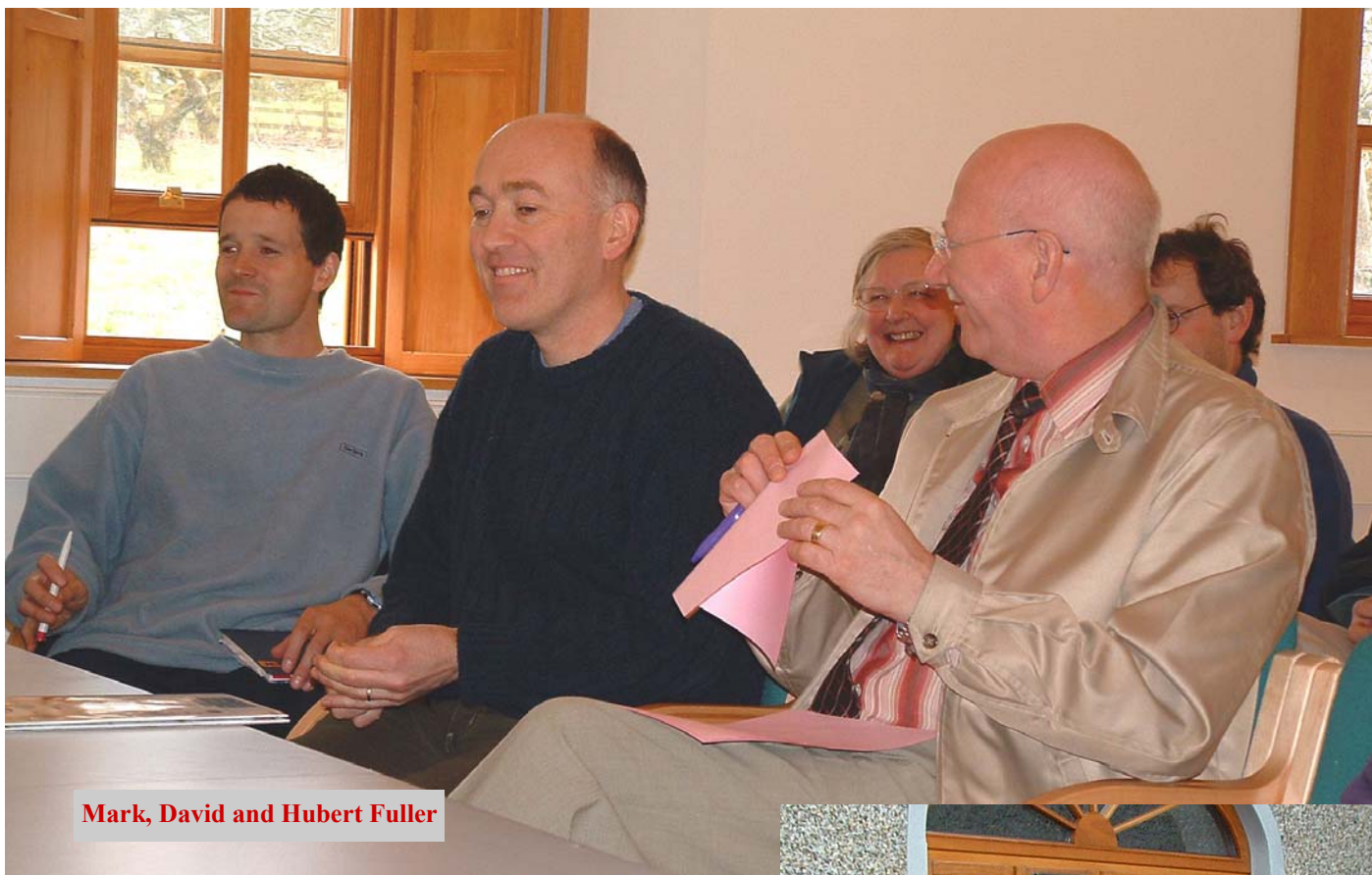
Thick as thieves



As I was saying....



Royall with some fan mail



Mark, David and Hubert Fuller



**A fine Beaujolais!
Royall and a congratulatory
drink**



A farewell cake!

FORAY PROGRAMME 2004

Saturday August 21st, 1pm : Crom Estate, Newtownbutler, Co. Fermanagh. Meet in car park by the Visitor Centre. Again well signposted from Lisnaskea.

Saturday September 4th, 1pm : Pomeroy Forest, Co. Tyrone. We will meet in the forestry college car park. From Belfast take the M1, go past Dungannon and then take first right on road to Castle Caulfield and then Donaghmore, turn left on to B43 then 7 miles to T junction at which turn right on to B160. the white entrance to forest is 1/4 mile on the right. From Cookstown take the A505 Omagh road and then B4 to Pomeroy. Turn left on to B160 and entrance is about half a mile on the left east out of town.

Saturday September 18th, 1:00 pm : Stormont Estate, Belfast . From Belfast take the Newtownards road, go past the main gates on your left for 500 yards, through the traffic lights and meet in the public car park immediately on the left.

Saturday October 2nd, 1:00 pm : Lissan Estate, Cookstown, Co. Tyrone. Consult OS Sheet 13 (The Sperrins). From Cookstown take the A29 to Moneymore, about half way turn left on to the Churchtown/Lough Fea road. At the [Yield] T-junction in Churchtown turn left; follow along to the next [Stop] T-junction (where a minor road joins from the left); turn right and after a short distance the road veers left and descends BUT GO STRAIGHT AHEAD along a farm track [just below, on the map, the no. 82 and an indicated structure], keep going for a fair distance; at a Y junction with ruin in it keep to left. eventually you will come to Lissan House on Lissan Water. If we were to arrive somewhat earlier than usual the owner would like to meet us.

Saturday October 16th - Sunday 17th: Residential weekend, Glenveagh National

Park and Tramore Dunes, Co. Donegal. Plans are still being finalised, but in the first instance meet at the Visitor Centre in the park at 10:00 pm. on the Saturday. If anyone has good ideas about accommodation please get in touch with Gerry. It will be difficult to find something as excellent as Arch House last year.

Saturday November 6th, 1:00 pm : Agnew's Hill. This foray is mainly for waxcaps. Meet in the Gingles' farmyard Grid Ref. 339 014 OS Sheet 9 (Ballymena, Larne). Parking for about 6 cars. Dogs OK provided on lead. Take the Starbog Road from Kilwater village which is near Larne on the A36 Ballymena/Larne road. This road is 100m north of the village crossroads. After about a kilometre there is an unsigned lane on the left with two stone circular and flat topped gate posts. This is the