Issue 9

July 2005

New finds, p. 5

NIFG NEWS

Geoglossum umbrinum
An earth tongue

inside…

NIFG NEWS 2005

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

Hi Folks!

Welcome to another edition of the Newsletter.

In this edition we have the usual selection of articles in which there should be something for just about everyone in the group.

Alas, the cookery session last year fell through so this event is not included in the Newsletter. I'm afraid, no recipes either! While on the subject, the content of the Newsletter depends vitally upon members' contributions. Apart from one or two stalwarts, contributions this year have been notable for their rarity.

Come on, at least the cooks in our midst can contribute something to NIFG News. All contributions, however trivial or small are welcomed and should be sent to me at the address below.

Roy Anderson, Editor

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Chairman's Report 2004

With reference to last year's report the weather forecasters were right - there was a return to more normal weather conditions and a number of long lost friends reappeared, but more of this later. Last year was rather difficult as David's presence was sorely missed and as a result lots of good finds went unidentified. As a measure of gratitude for the enormous effort David has put into the running of NIFG the AGM unanimously voted him life membership. Congratulations from us all.

As usual the AGM was held at Peatlands and the food was even more splendid than ever. Beef Wellington and some delicious hand made confectionery made their first appearance. The usual business took place with a tendency in the choice of foray sites to visit old venues. For instance we are going back to Arch House near Florencecourt for the residential this year on 15/16 October followed by the cookery evening at Mary's the following Tuesday evening.

Group liability insurance is now easier than in previous years as the temporary membership arrangement is no longer necessary. However, it is still the case that only full individual members of the Association of British Fungus Groups (which arranges our insurance) are allowed to lead forays anywhere in the EU. So if you wish to lead and are not a full member please make amends. There was one rather unnerving moment of panic when ABFG insurers at first wanted to exclude NIFG on the grounds of civil disorder, lockouts and general mayhem. Fortunately Michael Jordan was able to convince them that NIFG forays never got entangled with such activities and all is well.

On the foraying front matters were complicated by both David's absence and heavy other commitments on the part of those less able in identification skills. At the time of writing the foray lists are still not up on the web, they will be soon but will lack a general introductory paragraph. Sorry but there are only twenty four hours per day. Here are a few personal recollections of what went on - perhaps others could add to them for future use.

There was a large turn out for Lissan House

including four new members. We were warmly welcomed by the owner, Hazel Dolling, who gave us lots of tips as to where interesting specimens could be found. For instance over the last two arid years *Tricholoma* species were scanty but due to improved weather conditions *T. equestre* and *T. album* were now fruiting. Earthstars, once rare, are now abundant (at least locally) and Mrs. Dolling led us to what Ronnie determined as *Geastrum fimbriatum* (*G. triplex* being much more common). Other good finds at Lissan included *Hygrocybe calytpriformis* and *H. marchii*.


Hygrocybe calyptriformis

The residential this year was held on Saturday in the Glenveagh National Park and in Ards Forest on Sunday. Chris and I were extremely apprehensive as we knew lots of stuff beyond our expertise would be found, but we were in luck - the US Cavalry turned up unexpectedly in the shape of Howard Fox and Maria Cullen. There were lots of interesting finds one of which was an intriguing fairy ring of *Lepista flaccida* in a small copse next to the bus stop. Driver Tom Connolly told us that lots of leaves had been dumped there the previous year. Some of us stayed at Arnold's Hotel, Dunfanaghy, while others in Letterkenny. We held the Saturday night dinner in Arnold's with eighteen attending.


Geastrum fimbriatum

Agnew's Hill provided the expected crop of Wax Caps including *Hygrocybe nitrata*. We were all puzzled by lumps of slimy excrescence at first which turned out to be the blue-green alga, *Nostoc*, once thought to be derived from the stars.

Happy foraying for 2005, and please don't forget to send in any general comments on forays I have not mentioned.

Gerry

10th May, 2005

NEW BOOKS

Some new books now out:

Fungi of Switzerland Vol 6 featuring the Russulales (*Russula* and *Lactarius*) has been published as has British Fungus Flora Vol.9: *Lactarius*, and Galli's latest book, this time on *Agaricus,* has just been released.

Mauro Sarnari's monograph of the European *Russula* seemed doomed to be abandoned after his untimely recent death. However, colleagues have banded together to resurrect a second volume completing the monograph: Sarnari, Mauro: Monografia Illustrata del genere *Russula* in Europa. Volume 2. 2005. approx. 310 col. photographs. Hardcover.- In Italian, with bilingual keys (Italian / English).

Machiel Noordeloos's supplement to his monograph on European Entolomas has just been released. With over 100 new species, new keys and lots of photos, it will be indispensable for anyone interested in this genus. See http://www.entoloma.nl/html/ent_monogr.html

On a different tack, a new book about fungi in the New Naturalist Series by Brian Spooner and Peter Roberts of Kew has been published. This excellent book looks at all aspects of the natural history of fungi from their lifestyle, habitats and ecology to their medicinal and culinary use and place in folklore. Well worth getting (especially with the prices on Amazon!!)

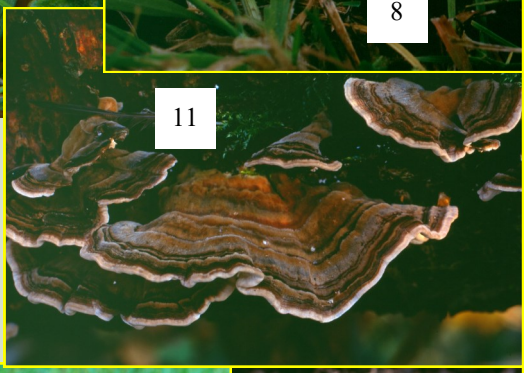
Manfred Enderle has produced an attractive fungus flora of the Ulm area in Germany. Website: http://www.manfred-enderle.de/pilzbuch.htm.

The new Checklist to the Basidiomycetes of the British Isles has now been published by the Royal Botanic Gardens Kew. Well done Nick Legon and Alick Henrici!!

Fungi Picture Quiz

Can you identify these 12 fungi?

Answers on page 9



Foray and other finds 2004

Although very dry, the season has produced a few of the good finds so far: Ronnie Irvine found *Boletus rubellus* in Drum Manor. Although common in the south of the British Isles, it is not found often in Northern

Ireland (3 records).

Arlette found *Pleurotus pulmonarius* on the foray to Slieve Gullion and although from Wales and not NI, I just have to pop in a photo of *Boletus parasiticus* fruiting out of *Scleroderma citrinum.* It is thought not really to be parasitic, but living together with the *Scleroderma* (both are ectomycorrhizal). Quite what they are doing and why is another question....

It is early summer and the first signs of the season to come are here. This is *Agrocybe pediades* from my garden. It is a delicate fungus, noted by its round cells in the cap, brown spores, mealy

taste and hints of velar remains on the cap.

Another new Irish record - this time for a truffle. Robert Cobain from Bangor found a pinkish truffle under a young three year old Eucalyptus tree in his garden, Curiously, it was grown from seed so the truffle didn't come in the root ball of the tree. So how did it get there?? There must be more around.... It is very recognisable with the pink colours and the intricate internal structure. An exciting observation!

A new Irish record for a Bolete.

Alan Hills has confirmed Stuart Dunlop's find of *Suillus flavidus* from Mongorrey Wood outside Raphoe in Donegal from September 2004. This is a Scots Pine associate often found in Scotland in boggy natural Scots Pine woods. It is noted by its paler yellow colours (than Slippery Jack, *Suillus luteus*), slender form and the thin

jelly like ring.

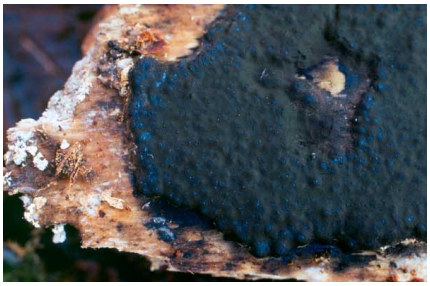
Ronnie Irvine has been finding

some good things in Tyrone again. He found *Inocybe godeyi* which is marked by white, quickly reddening fruiting bodies with a bulbous stipe and cystidia with encrusted crystals at the tip for the first time in Northern Ireland since 1948 and also *Ramaria abietina* which is recognised for going green.

Some updates from Roy Ander-

son's latest ascomycete finds: *Nemania aenea* var. *macrospora* was found in Rostrevor Oakwood on 17th March 2005. On decayed, soft heartwood of holly in *Quercus petraea* woods.

First Irish record. There is a single British record, but status of this uncertain. Characterised by large spores (13-18 µm) and thick, whitish, waxy layer un-



derlying the carbonaceous fruiting body. Rare in Europe.

Hypoxylon macrocarpum found 3 times at Rea's Wood (J143852) on 19.2.2005, Ardgillan Castle(O219609)/ 26.2.2005 and Belfast Castle (J329790)/13.3.2005. Segregate of the widespread *Hypoxylon rubiginosum*, but with greenish-brown rather than orange KOH-extractable pigments and very large fruiting bodies, up to 750cm long. Undersides of decorticated logs in wet places.

Hypoxylon petriniae is ubiquitous on ash (Fraxinus) wood. Often confused with *H. rubiginosum* from which it is distinguished by its purplish- brown ascomata, lacking perithecial mounds and with a distinct black marginal layer. Also by its specificity for ash. *H. rubiginosum* occurs mainly on other woods and the ascomata have perithecial mounds and a strong rusty or orange colour without a marginal layer.
Hypoxylon subticinense found 4 times at Belfast Castle (J328798)/14.11.2004, Lagan Meadows(J335704)/17.2. 2005, Rea's Wood (J139852)/19.2i.2005 and Rea's Wood(J141850)/5.3.2005. Found respectively on fallen beech branch, on dead *Salix viminalis* branches in a fen, on dead standing *Salix fragilis* and on fallen alder branch in carr litter. This species otherwise recorded only in SW France and Washington State, US. Characterised by bracket-like, hairy, bright orange immature fruiting bodies with yellow, hairy margins. The mature fruiting body looks like *H. rubiginosum* but without perithecial mounds and with distinct black spots where the ostioles emerge.

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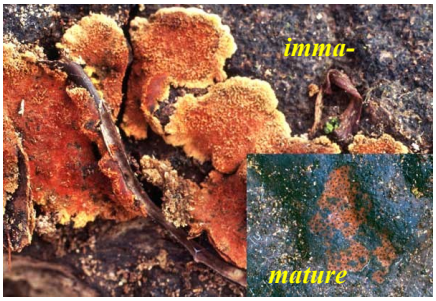


orange immature fruiting bodies with yellow, hairy margins. The mature fruit*ing body looks like H. rubiginosum* but without perithecial mounds and with distinct black spots where the ostioles emerge.

[Note: fuller accounts of the ascomycete finds above have been submitted to the Mycologist—Ed.]

Biscogniauxia anceps found at Charleville Demesne (N319226)/24.5.2003. On dead standing blackthorn branches; wet carr woodland. First Irish record. 2 English sites are mentioned in BMS database. Scarce in Europe, known from single sites in Italy and Spain, several in France.

Notes from Howard Fox:

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 at 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 we had a pyrenomycete. On a slide under the microscope, the ascospores were colossal, 50-70 x 20 microns and 1 septate. The top cell of the ascospore was dark brown and many many times the size of the paler brown lower cell. This ascospore type is most unusual - unprecedented in my experience. There is an old record of *Splanchnonema scoriadea* made by David Moore in the 1860s from Killarney in the DBN herbarium, and there are only a handful of records on the BMSFRD.

The pyrenomycetes of easily snapped white-rotted attached or recently shed twigs of various host tree species (Birch, Lime, Elder, Sycamore, Hazel, Oak, Gorse, etc.) are not so difficult to name - a microscope preparation of the perithecium contents (ascospores, asci, physes), and a copy of Ellis & Ellis with species descriptions on your desk will allow anyone so equipped to contribute new records of pyrenomycetes in Northern Ireland.

Hypocrea pulvinata (Hypocreaceae) was seen on the lower side of a birch polypore which had fallen from a dead birch, and had come to land ventral face up. It was seen along a woodland walk in Florencecourt, Co. Fermanagh on 2 July 2004, new to Northern Ireland. The spongy hymenium 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 in) 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. -
H. Fox, 5 July 2004.

***Pholiota limonella* from Ballycastle, collected, new to Ireland, by Joe Breen jnr. (aged 9!)**

Despite the poor fruiting season in the second year of the NI Waxcap Survey, there were 12 new Irish records (at least no other Irish records are listed for these species in the BMSFRD) and there were 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 Downhill Forest and *Sistotremastrum niveocremeum* 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).

Bracket fungi are particularly rare in Northern Ireland due to the lack of continuity of woodland (most large trees were felled for the English ship building industry in the 16th to 18th centuries or ring barked for tannin). So it was particularly pleasing to find the large spongy bracket, *Aurantioporus (Tyromyces) fissilis* on a Turkey Oak (*Quercus cerris)* in Castlewellan Forest Park. It was right beside the lake car park and was a fair height up in a old wound where a branch had fallen off. It needed my tripod fully extended standing on tip toes to be able to knock a bit off for identification purposes! An Irish first. Thanks to Nick Legon for confirming it.

David Mitchel

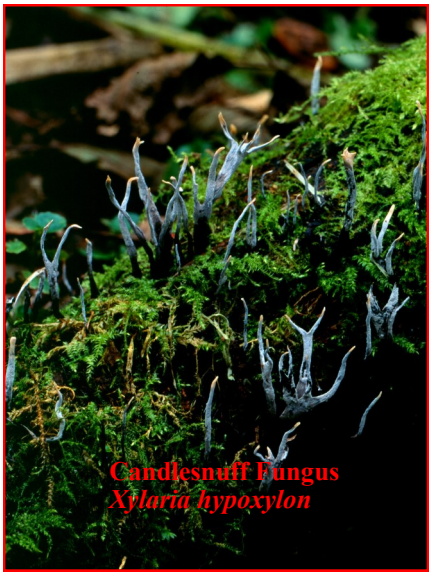
What goes on within our trees ?

When we see fungi fruiting on trees whether they be brackets, agarics or ascomycetes, like with fungi on the forest floor, there are a lot of things happening within the tree that we cannot see. At a recent BMS workshop, Professor Lynn Boddy of Cardiff University gave a series of talks on what goes on beneath the bark and these are some of my notes from those talks. Apologies to Lynn if I have things wrong – this is my spin on some of her fascinating work.

Deadwood is one of the most important fungal habitats. It is estimated dead wood hosts one third of all forest species (not just fungal). Whilst there used to be 75-250m^3 of dead wood per hectare, now there is only on average 1-5 m^3 which is a drastic reduction. It is particular species that rot heartwood (trunk species) that are in decline with relative increases in species that live on small branches and twigs. So it is particularly important to try to understand what goes on beneath the bark.

When the resource an organism is trying to live in and get its energy from, is a restricted environment such as a tree, that organism is going to be coming up against other species or individuals also trying to exploit that space. So with fungi, competition is all about space. Like with any habitat, there are different niches available (the living sapwood, the heartwood, branches, roots) and different species with strategies for exploiting the niches.

There are species that are the primary colonisers. They get in quick, are good at dispersal with rapid spore germination, rapid mycelial growth and the ability to utilize compounds in unexploited space. Then there come the secondary colonisers who come in and oust the primary colonisers and then defend their territories. When fungal hyphae from one individual comes up against another, the battles can begin. Mycelia can change in form and dramatic pigments can be produced at the line of contact. Look at a section of sawn timber and see all the often black lines dividing up the fungal individuals within that piece of wood. Some species are much more aggressive than others and better at dominating others. Some species like *Lenzites betulina* will actually penetrate the hyphae of *Bjerkandera adusta*, kill them and take over



its space. Species like *Hypholoma fasiculare, Psathyrella hydrophyllum* or *Phanerochaete velutina* are stronger combatively than *Trametes versicolor, Stereum hirsutum* or *Xylaria hypoxylon*.

It is possible to create these battles in the lab on agar plates, but an interesting question is would the same things happen in the middle of a tree where the oxygen levels, gaseous regimes and pH are so different. Indeed, conditions determine the species balance to a great deal and some species try to manipulate the environment to alter it to their strengths. For instance, species belonging to the Xylariaceae eg Candle Snuff fungus, *Xylaria hypoxylon* are best in dry situations and they may be actually pumping water out of the wood manipulating their environment so they can slowly rot the wood in a stable dry environment that they are best in.

So any tree or fallen log will have dozens of species or individuals. Some will be exploiting the sapwood, others the heartwood. Many will not have enough energy to fruit and others may be totally enclosed and may only fruit if the tree nears senescence and splits. Then suddenly, the enclosed fungus has access to air and it produces a fruiting body. Hence many species "typical" of mature trees may just be species living all the time enclosed in the heartwood and that can only fruit when a branch breaks or the tree splits.

Of course, it is not only the fungi that can defend themselves. The trees themselves have cocktails of chemicals to defend themselves

(Continued on page 9)

and, especially with heartwood fungi, this leads to specialisation as heartwood fungi are often adapted to cope with one particular cocktail of chemicals. Here, the comparison between Oak and Beech is particularly fascinating. Their environment is quite different. Oak has a pH of 3.5 whereas Beech has a pH of 4.5 and Oak is packed full of chemicals to defend itself while Beech is virtually useless at defending itself. Hence, Oak only has a few specialist heartwood fungi exploiting it whilst Beech has a large range of species, most of which occur on other trees as well. Beech is such an easy food source that a Beech stump 5 years after felling is well rotted whilst an Oak stump is still solid. An Oak often will have a single individual dominating that tree. This is one reason why a list of deadwood indicator species for Oak would be very small compared to Beech.


Sulphur Tuft
Hypholoma fasciculare

One interesting line of discussion / speculation concerned Sudden Oak Death (*Phytophora ramorum)*. This has been rampant in the American red oaks in the US and has also affected Beech here. Our Oaks have not been affected to date. One reason could come from the trees' defences. Our Oaks (*Q. petraea* or *Q. robur*) are packed full of chemicals. The Red Oaks are not so and Beech is almost useless. It could be that the *Phytophora* has infected our Oaks, but due to the chemical battles going on, is just taking time to establish itself. It may take many years or a sequence of years when climatic conditions stress the trees, but it may be in there slowly taking over……

David Mitchel

NEWS JUST IN— Forayers & the Drug Laws

The Drugs Act 2005 has just come into being getting in just before the last election was called. The interesting bit for mycologists is that it is now an offence to have fruiting bodies of *Psilocybe* in your possession. Previously, you were not allowed to possess psilocin but now, to quote the amendment it says: "In Part 1 of Schedule 2 to the Misuse of Drugs Act 1971 (c. 38) (Class A drugs), in paragraph 1, insert at the appropriate place- "Fungus (of any kind) which contains psilocin or an ester of psilocin." This now makes *Psilocybe semilanceata* and other psilocin-containing mushrooms a Class A drug. *This means it is illegal to have Psilocybe semilanceata in your possession and the potential penalty is 7 years in jail*, but what does this mean? If you have it in your garden or field, does this mean you have it in your possession? It is not clear in the legislation at all and various landowner associations are demanding clarification from the new Government.

But it also means that any forayers should not be collecting species that have psilocin!! A quick search on the internet reveals the following mushrooms as possessing psilocin in the UK: *Conocybe kuehneriana, Copelandia cyanescens, Panaeolus subbalteatus, P. firmicola, Psathyrella candollenana, Inocybe aeruginascens, I. calamistrata, I. corydalina, I. haemacta, Pluteus salicinus*, Most *Psilocybe.* There are maybe more, but this is certainly food for thought for forayers.

A piece of legislation rushed through with little thought of the consequences? It looks a little like it. Psilocin is the only chemical listed, but there are a number of others out there as well.

David Mitchel

Neocon Plaudit

[extract from "News from Deadbrain"]

Vice President Dick Cheney said he was "thrilled, honored and humbled" that species of slime-mould beetles were named after him, as well as President Bush and Defense Secretary Donald Rumsfeld.

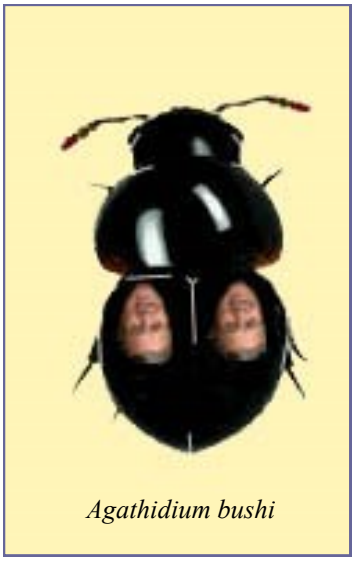
"Let me be totally open and honest for once, I'm not thrilled and humbled that often," Cheney said. "In fact, not at all. But this is a special honor, and I know the president and the secretary share my enthusiasm."

Two ex-Cornell University entomologists discovered the species, and, as scientists are allowed to do, named them - choosing Bush, Cheney and Rumsfeld.

"They said they chose the names because of admiration for our principles, not because we looked like beetles or ate like beetles or, heaven forbid, acted like beetles," Cheney said. "But we're still checking out that part of their story."

The beetles, which feed on a fungi-like mould, or myxomycete (see attached photo), are now called *Agathidium bushi* (see attached photo, below), *A. cheneyi* and *A.rumsfeldi*.

"The names sound kind of awkward, but I guess that's all in a day's work in the world of science," Cheney said. "I kind of like it!"



Agathidium bushi

Cheney vehemently denied that the beetles were named because the scientists were secret Democrats who just wanted to bring ridicule and scorn to the top levels of the Bush Administration.

"Absolutely not," Cheney said. "We gave them the neocon litmus test - asking them about abortion, religion, Social Security, weapons of mass destruction, the Iraq war, the whole nine yards. They passed with flying colors."
Cheney said the beetle names would last long after the Bush Administration has left office, and would serve as a legacy to what he called "our absolute greatness."

"*Anybody can have a building or a road named after them*," Cheney said. "*But it's special knowing that your namesakes will always be there, rooting around in the dirt, eating mold and, in general, acting better than any Congress member would - especially a Democrat*."

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really depends on environmental factors."
The extension service is putting on workshops in rural communities, showing how to pick, dry and market morels, which when dried can command prices of hundreds of dollars per pound. The service

Forget ISAs!!!- buy a Tartufo-Nero black truffle tree and grow your own money!!

Black and, unbelievably, white truffle trees, chosen for their suitability for growing in the UK (black summer truffles are native to the UK already) are now available for sale. The ultimate status symbol and the most sophisticated flavour gives the truffle it's world famous reputation as the ultimate gastronomic experience. It's not uncommon for a house with a 'tartufaio' to actually increase in value, and the trees

Can be seen as an investment!!

The roots of the hazelnut bushes are impregnated with the spores of the truffle and some production can result after 3 years, but more often

from 5-8 years in correct soil conditions. The hazelnut plants will form hedges and can grow to 7m max if not trimmed, and will produce delicious nuts. They will last 60-70 years and grow very quickly at first. They are quicker to grow than oak, ash and other truffle tree varieties and get results quicker and they also tolerate very cold weather and shade. The plants are first certified before they can be sold and a typical plant can produce between 20g-50g after 6-8 years and 50g-100g of truffles per year in full production after 12 years. A white Bianchetto truffle costs about £2.50 per gram fresh, so 50g

of truffles would give you £125-£150 of truffles each year!! A black summer truffle costs about 30p per gram and is a superb truffle for the price, strong, but not like the White Bianchetto truffle and very easy to grow. A 50g Black summer truffle would cost you about £15 to buy, plus you get to eat the nuts, so the plants will pay for themselves over their lifespan.

Only 10-15% of the Italian market is supplied, such is the rareness of these gastronomic underground funghi (sic). For truffle farming, 80-400 trees per hectare will bring a high return - please contact us for bulk order prices. You may need to check the pH of your soil with one of our pH - testing kits first, to ensure suitability. The truffle trees are available for the UK ONLY, and will be available continuously from October onwards, whilst the plants are dormant PRE-ORDER NOW AND SAVE £5. Makes the most sophisticated gift. ONLY £33.99 including P&P! UK delivery by Royal Male.

(UK & Europe only). Beautifully packaged 100 gram boxes of dried mushroom spawn,

Contact:
Trufflehead@cyberbin.co.uk

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Alaska expects last year's wildfires to create a 'Shroom Boom.

Treasured mushrooms
Karl Olson, a University of Alaska Fairbanks research technician, holds a bucket of morels that were picked on the Erickson Creek Fire, north of Fairbanks, in this 2003 file photo. Morel mushrooms, treasured for French cooking, thrive on and a year after it's disturbed by forest fires. Alaska set records in scorched earth in 2004 and is preparing for a morel 'gold rush' in late spring this year.

ANCHORAGE, Alaska -- Alaska has a history of booms -- fur, gold, oil. This summer could see another -- a 'shroom boom.

Morel mushrooms, treasured for French cooking, often thrive on land in the year following a forest fire, and Alaska set records in scorched earth last year.
More than 6.5 million acres burned, mostly in Alaska's Interior, the vast middle swath between the Brooks Range to the north and the Alaska Range in the south. With the right moisture and temperatures, Alaska could witness a morel gold rush in late spring. "That is what we're hoping on," said Jay Moore of the University of Alaska Fairbanks Cooperative Extension Service. "It

hopes to create a cottage industry in cash-poor places where people last year were smothered with smoke and soot. It's part of a "mushroom task force" that includes state and federal land managers readying permit systems and informational campaigns. The agencies already are taking calls from commercial harvesters, wondering where to pick.

Where to pick is one of the mysteries of the fabulous fungi, said Trish Wurtz, a U.S. Forest Service research ecologist and affiliate research professor at University of Alaska Fairbanks. Wurtz has studied morels for three years and is fascinated by their enigmatic ways.

"You can go to a study site repeatedly and it's not there," she said of the morel. "And you go the next time, and it's there. And you go back, and it's not there."

Gary Laursen, professor of mycology at the university's Institute of Arctic Biology, said morel hunters should stay away from boggy areas and search where wildfires were hottest, such as hillsides. Morels appear on soil, not the decaying vegetable matter on the ground in a forest.

"If the fire was hot enough to burn away the duff, then overlay all that soil with ash, then you're going to get a prolific fruiting of what are called the ascomes, the fruit body," Laursen said.

Just identifying morels is confusing. Hundreds of species of fungi are in Alaska's soil, many that have yet to be described, Wurtz said. Scientists speculate that five or six species of morel occur in Interior Alaska, varying in appearance depending on where they grow.

Generally, morel season begins as early as the beginning of March in Texas and the Gulf states, and moves north until it reaches Canada by May. Most commercial morel harvesting in North America occurs in western states and Canada. Black morels are usually the first to appear, followed by the half-free and yellow varieties. Scientists can merely speculate on their life cycles but know they can show up after fire, timber harvest or insect infestation of trees.

Alaska has the potential for a bumper crop, but dry, hot weather could negate other favorable conditions, Wurtz said.

A bountiful harvest also depends on price. Morels reach the market from China, Russia, India and eastern European nations.

But Alaska could be attractive to pickers this year. As of early September, only 1.3 million acres in the Lower 48 state had burned, about one-third the average. But 4.3 million acres burned in the Yukon Territory.

The Cooperative Extension Service has conducted 'shroom workshops in Fort Yukon and Tok and had plans for other Interior towns. "We're trying to target the rural communities that were near large pockets of fire," Moore said.

The prices morels fetch can make the effort pay off. A two-ounce package of morels cost $16.99 at Fresh Direct, an online grocery and delivery service in New York City, while they command $33 a pound from Earthy Delights, a firm that supplies delicacies to top chefs.

Moore's workshops encourage people to be good stewards of the land and make sure they obtain permission and permits before picking. With an eye to liability, he will not be giving detailed instruction on what to pick.

"We really are not keying on identifying mushrooms," he said. "That's up to the picker."

Laursen said people are right to show caution. People can get sick from eating false morels and others can be sickened from eating the real thing. For people who have never eaten morels, he recommends eating only a small portion over a few days.

"*Unfortunately because of individual body chemistry, not all people can eat this mushroom*," he said.

FUNGI PICTURE QUIZ

1) Scarlet Hood *Hygrocybe coccinea*
2) Bog Beacon *Mitrula paludosa*
3) Beefsteak fungus *Fistula hepatica*
4) Scarlet Bonnet *Mycena adonis*
5) *Cantharellus lutescens*
6) Meadow Coral *Clavulinopsis corrugata*
7) Sunny Side Up *Bolbitius vitellinus*
8) Snowy Waxcap *Hygrocybe virginea*
9) Southern Bracket *Ganoderma australe*
10) Brown Birch Bolete *Leccinum scabrum*
11) *Trametes versicolor*
12) *Coprinus plicatil;is*

Conservation News

The Northern Ireland Biodiversity Strategy recommends the creation of two lists identifying species that either require conservation action (priority species) or that need to be monitored to determine if they are threatened (Species of Conservation Concern). EHS has now published these draft lists on their website . The NIFG contributed to this list giving advice on the fungi that should be on the lists and we are pleased that fungi are now being recognized in the conservation scene here. The lists which contain 272 Northern Ireland priority species and 457 Northern Ireland SOCC. There are 16 priority species of fungi (which automatically also become SOCC). For many priority species, conservation action will be undertaken through existing UK species action plans, the management of designated sites or as a part of Northern Ireland Habitat Action Plans. However, some priority species will require Northern Ireland species action plans or all-Ireland species action plans. To read more about what these mean, click the hyperlinks above.

The important thing from our point of view is that these species listed below are very important and are worth getting to know so that you can report records of these species. One of the key criteria in listing species was that of a proof of decline. This is particularly difficult to prove with fungi as we have little historical data in NI (prior to the NIFG being formed). However, our dataset of grassland fungi is now improving rapidly and there is a lot of proof that the habitat is declining quickly (hence the species as well). Therefore many of the species listed are grassland species. The list of fungi are:

Armillaria ectypa
Marsh Honey Fungus

Boletus satanas
Devil's Bolete

Clavaria zollingeri
Violet Coral

Dencoeliopsis johnstonii

Entoloma bloxamii
Big Blue Pinkgill

Geoglossum atropurpureum
Dark-purple Earthtongue

Hydnellum aurantiacum
Orange Tooth

Hydnellum concrescens
Zoned Tooth

Hydnellum spongiosipes
Velvet Tooth

Hygrocybe calyptriformis
Pink Waxcap

Hygrocybe lacma
Grey Waxcap

Hygrocybe ovina
Blushing Waxcap

Microglossum olivaceum
Olive Earthtongue

Phellodon melaleucus
Grey Tooth

Porpoloma metapodium
Mealy Meadowcap

Trichoglossum walteri

It is worth getting to know these species. Look them up in books and on the NI Atlas on our website to get an idea of their distribution and if you think you might have found some of them, carefully keep a specimen, dry it and pass it on for identification.

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SELECTION CRITERIA (N. Ireland Species of Conservation Concern—SOCC):

Species fulfilling any of the following criteria:

1. Northern Ireland Priority Species.
2. Declining (1% per year)
3. Scarce and with Northern Ireland being a stronghold (S) consisting of either:-
   - >50% of the Irish population
   - >20% of the UK population/range occurring in Northern Ireland
4. Amber-listed species in either the Ireland or UK Birds of Conservation Concern (BOCC) lists.
5. Species listed as Rare in an Irish Red Data Book published with the last 15 years.

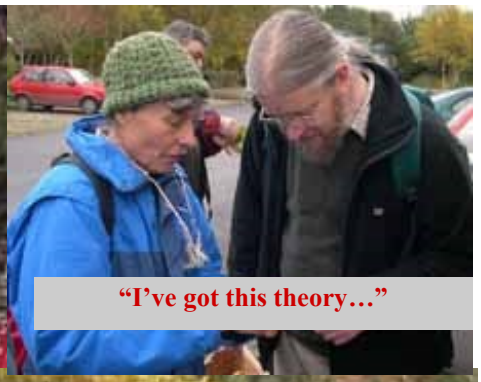
[Note:
Some of the criteria listed in Biodiversity in Northern Ireland: Recommendations to Government for a Biodiversity Strategy for species of conservation concern have not been applied fully because applying the criteria directly would result in unduly large list. These may be reviewed at a later stage and include:-

- Species which are rare or scarce without conforming to any of the above criteria
- Genetically distinct in Ireland (e.g. Irish sub-species)
- Species which are functionally critical to ecosystems]

David Mitchel

2004 PORTFOLIO

A fine group of Fly Agaric, Glenveagh



"I've got this theory…"

Cortinarius at Glenveagh

"Come on you lot"
Gerry doing leader at Glenveagh

Matt et al. at Stormont

Some Glenveagh results

Faerie Ring at Glenveagh

"Boring"

The indignity of it!

"Pay attention you lot"
[Roy at Stormont]

Gathering at Stormont carpark

Myxo on lawn waste, Stormont

Any ideas??? This was growing under lime at Stormont

Russula delica
Stormont

FORAY PROGRAMME 2005

Saturday July 23rd, 1 pm: Slieve Gullion
South from Newry take the Forkhill road. There are many signposts to Slieve Gullion Forest Park which will lead you to our meeting point, the large car park beside the Courtyard Centre. The Centre supplies good food and drink. Visit www.newryandmourne.gov.uk/tourism/activities/walking/ slievegullion.asp

Saturday August 13th, 1 pm: Glenariff Forest
Meet in the top car park (not the bottom one by Manor Lodge), although there is a charge of £4 per car this will probably be waived. Members of the public will be joining us for this foray.

Saturday September 3rd, 1pm : Belvoir Park
Meet in the car park by the Forest Centre and RSPB headquarters. Belvoir Forest is signposted from the Belvoir/Knockbreda dual carriageway. Coming from the M1, select the road to Bangor/Newtownards and you will find yourself on the Carrriageway. The Forest is signposted on the left before you reach the Forestside crossroads and shopping centre.

Saturday September 17th, 1:00 pm: Prehen Wood
Meet in the Everglades Hotel car park (south side of Victoria Rd., west of Derry on the way to Strabane) then cross Prehen Rd. and go up Hazelwood Ave. and enter site where there is a gap in the houses: see *OS Street Map of Londonderry*, scale 1:10,000. See following URLs:
Welcome to Prehen Wood , <www.wt-woods.org.uk/Prehen Wood
click on Site Description or
www.wt-woods.org.uk/Prehen Wood/description.asp.

Saturday October 1st, 1:00 pm: Helen's Tower
Drive along the Ards to Bangor/ Bangor to Ards Carriageway (coming from either direction doesn't matter). Take either entrance into Conlig village. Around the centre of the village is a sign for Clandeboye Golf Club. Take this turning, drive up the hill for approx 70yds and on your RIGHT is the visitors carpark (sign posted). We can park here and then walk up through the members carpark and onto the woodland path.

Saturday October 15th - Sunday 16th: Residential - Archtullyhona Farm Guest House
This is easy to find: from Enniskillen just follow the signposts to Florence court and the Marble Arch Caves. Arch House is about a mile and a half on the right hand side of Marble Arch Road in the direction of the caves which are two miles away. Excellent food modestly priced. Please let Gerry know well in advance of the numbers in your party. There are six bedrooms and one family room. also extra accommodation half a mile away if you don't wish to share. Foray sites, of which there are many excellent ones nearby to be arranged. Do you have any special preferences? Let us know.

Tuesday October 18th, Cook-in
Mary Taylor-Winter has kindly agreed once again to host a cook-in at Daisy Cottage. Start about 7:30.

Saturday October 29th, 1pm: Derrynoyd Forest
First make your way to Tobermore (whether travelling from Belfast or Derry). Once in Tobermore take the B41 into Draperstown and then take the third exit off the roundabout onto the B40 Derrynoyd road for 1.5 miles. The entry to the Rural College/Derrynoid Centre is clearly marked on the right hand side. Meet in the car park. For a map and more detailed directions visit www.derrynoid.co.uk/directions.asp.

Saturday November 12th, 1pm: Errigal Glen
We will take the way-marked path that leads to the glen from near Churchtown.
Turn off the A29 on the southern edge of Garvagh down the B64 Churchtown Road. (A left turn if you are coming from the south.) Turn right down the Ballyrogan road, the second right turn about 2 miles from the A29 junction. Take the first left after about ¼ mile and stop on the left a short distance up here opposite the first house.