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Mushroom Growers' Association

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Müshroon JOURNAL

April 2001

No 615

EDITORIAL

ANOTHER YEAR OVER.

Another Association year draws to a close and as a result the temptation to take stock is almost irresistible.

In previous years, at this time, various commentators have concentrated on changes within the industry. They have done so, sometimes, in such a way as to indicate, by implication, that things were 'bad'. Not this year.

In many ways the changes within businesses and industries can be likened to biological evolution. Business may not be quite as ruthless as nature but the analogy holds reasonably well. The emphasis in evolution is on change, and adaption.

In our case, retail marketing evolves, for example, and we change to adapt to it. Farms, or perhaps one should say mushroom marketing organisations, grow larger to adapt to the developments in retailing and the total number of farms decrease. This is neither bad nor good, it is simply evolution and successful evolution at that!

Research funding from government is slowly decreasing. We may consider that a negative factor. Politically it is predictable and inevitable and once again neither good nor bad, just an evolutionary fact.

It is not the changes themselves that are to be lamented only, in some instances, our responses to them.

Fortunately, the MGA itself is adapting to the changes that are taking place. As an organisation we also have a role to play in advising those purporting to support us how they can best adapt their activities to the evolutionary changes taking place. Whilst organisations such as HRI and HDC have their own challenges to survival, as do we all, their overt missions in life are to serve the horticultural industry, including mushrooms. It is legitimate, therefore, for the MGA, as the representative body of our industry, to discuss with them the best way forward. Such discussion will no doubt soon unearth the subject of MAFF. Still, perhaps, the real masters or influence in this area.

So let us not lament change, regret has no part to play, let us use what ingenuity we have on continuing to successfully adapt to the changes that are, have and always will occur. And let us help to ensure that those organisations of use to us also adapt successfully.

Mushroom Bureau

om Burgou Committee wich to

The Mushroom Bureau Committee wish to thank the following people for their contributions for 2001.

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Monaghan Middlebrook	16,080	Lords Mushrooms	1,080
Carbury Park Mushrooms	5,580	Orchidwood Mushrooms Ltd	1,000
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BRYAN DYER LEAVES MONAGHAN MIDDLEBROOK

Mr Bryan Dyer has left Monaghan Middlebrook. Ronnie Wilson, Chairman of Monaghan Middlebrook has taken overall responsibility for the management of Great Britain and Ireland. Mr John Hall will report to Mr Wilson as Director of Farm Operations (Great Britain) with responsibility for the four GB Farms.

Kathryn Gray is due to leave the company on the 20th June to continue her career elsewhere.

A Monaghan Middlebrook spokesman said "Although the changes to our group management structure are significant, we believe that the group will manage the transition successfully and continue to strengthen our position as a leading mushroom company in the United Kingdom and Ireland".



Mr Ken Hayward, formerly of Dolphin Packaging in Dorset, has retired.

> Ken's replacement at Dolphin is Mr Glyn Goddard.

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A NOTE FOR YOUR DIARY

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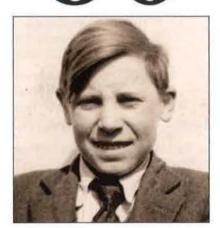


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GUESS WHO'S



ON 9TH MAY...

Cotswold Views

March 2001

by Peter Howard



Monday 5th March

Rain, rain and more rain. This is really starting to get me down now. My kids are right, I am becoming a miserable old sod.

Thought I'd better obtain planning permission to site the farm at the bottom of the hill seeing as it's starting to move that way on ...'s own, anyway.

Tuesday 6th

More gaps appearing between the concrete where the roadways are continuing to move in the wet conditions.

I thought we were getting a bit short of staff, have we lost a few down the fissures? Do I have to tell the H.S.E.?

Wednesday 7th

A late afternoon visit to London to meet with the customer's buyers. Yes, I have two to deal with — one for organics and one for conventional.

A serious discussion on strategies to ensure we have the correct balance between the two lines.

When we started with the organic lines, it was a nice "add-on" to the conventional product but with volumes having trebled in a little over six months, the additional costs of organic sales has proved to be very expensive.

hursday 8th

I had obviously built myself up for yesterday's meeting, and had travelled home feeling very relaxed. Woke up today with a heavy cold and it's still raining. Great!

Made every attempt to keep a cheery smile whilst dragging my aged, aching and portly frame around the farm.

Friday 9th

What's the best way to aggravate a cold? Walk in and out of warm growing rooms all day whilst the outside temperature is near freezing. And, it's raining.

Yep. Sean is off on a week's holiday. Normally I look forward to having a go at the growing — not this time though!

Monday 12th

The outbreaks of foot and mouth disease are starting to get closer to the farm, with a suspected case locally having led to the postponement of the Cheltenham Gold Cup, which should have been this week.

Have decided to close the farm shop in order to commence the management of vehicles in and out of the farm.

Additionally to this, many of our staff have livestock and any protection I can offer them must be instigated.

Tuesday 13th

Learnt today of a system to reduce the cost of installing carbon dioxide sampling systems within your farm:

Purchase an analyser for one room and install it permanently to sample the air, within that house;

When requiring to test the carbon dioxide levels within another room simply enter that growing house with a dustbin bag and inflate it by waving it around within the room;

Close the top of the bag and hold tight — you now have an air sample. Move quickly to the growing room with the installed analyser and place the mouth of the bag over the intake;

Check the reading for the carbon dioxide level and there you have it.

Probably best done when everyone's gone home!

Wednesday 14th

Should have been the start of Cheltenham races today. Eerily quiet around the area.

I will have to think of another reason to go down the pub — shouldn't be too difficult.

Thursday 15th

Still suffering from aphanocladium spotting — not me, the farm. Presumably the damp weather isn't helping. Harvesting control has proved to be critical, to combat the infection, as well as cooking out over-mature rooms.

I used to believe that "not quite" getting the farm picked helped tremendously in keeping yields up — i.e. not overpicking. Presently, any product left on the bed for the next day is liable to snot

This cannot be allowed to happen and so extra hours are required to ensure complete crop control — more expense!

Friday 16th

We now have an ornamental feature displayed in the flowerbed alongside the roadway that leads from pre-cropping to the harvesting area — a four tonne forklift!

Monday 19th

A sad day today for Jackie, our harvesting manager, foot and mouth has been confirmed in the cattle herd adjacent to her's.

She's had to move out to stay with a friend in order to be able to attend work and look after her horses whilst her husband stays behind and deals with the inevitable.

Tuesday 20th

I didn't really appreciate how far The Journal travels until today when I received a telephone call from Canada.

An interesting conversation about tray growing and timber moulds.

COTSWOLD VIEWS — (continued...)

Since we stopped dipping trays three years ago, the mould growth has reduced significantly. Now it's just a cookout and a power-wash, although the trays are lined with plastic.

Wednesday 21st

With foot and mouth disease established in the county, there has been a massive drop in local sales.

Last week would normally have been very busy through wholesalers with the influx of visitors to the town for the Gold Cup. Add to this, the reduction in tourists to the area and volumes will be reduced and will be into the summer months when we could do with a few extra alternative outlets.

Thursday 22nd

Still concerned about the general lethargy of the cropping. We're not "pushing the rooves off" as I've heard it described lately but we're not under achieving massively either.

Recent tests for virus X have proved negative. It appears general around the industry, well, for the few that still talk to me,

A long period of wet weather cannot have done our raw materials any good. Still, won't be long before everything's too

Friday 23rd

Took the day off and popped up to Rochdale to watch Cheltenham Town playing football. A long way to go for a one-one

Not as far, though, as Carlisle, (on a Tuesday night), last season for a draw and this season to Darlington for a one-nil loss.

I must be mad!

Monday 26th

Time, I think, to increase our fridge capacity. Having changed to organic production with the resultant smaller pack-sizes and reduction in loose product the space available in the fridges is very limited at times.

This, coupled with supply to eight different depots results in musical pallets at certain times of the day.

Made my mind up when I found Joan perched on top of a ladder trying to count the stock — she can squeeze through the gaps but cannot see over the top of anything over five feet high when she gets there!

Tuesday 27th

How on earth can anyone manage to break the counterbalance in half on the back of a four tonne forklift?

Wednesday 28th

Having grown a few trays of chestnut mushrooms per week for a few months we've decided to fill whole rooms with the product, in order to commence a new line.

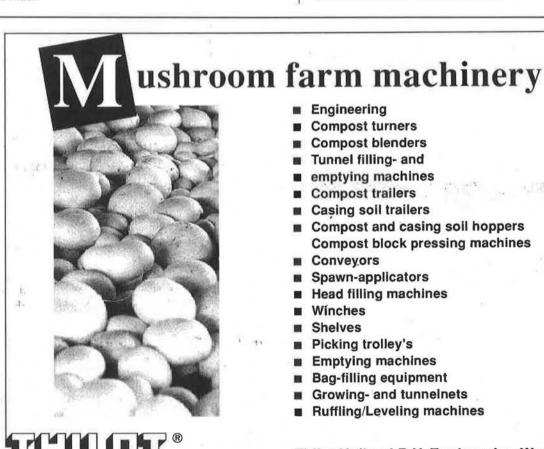
Pinning hadn't been too good on the few trays that we had grown alongside the whites and assumed that this was due to incorrect conditions.

The full rooms haven't faired much better, yet!

Thursday 29th

I don't know if it's the same in your area but our view across the Severn Vale at the moment is shrouded in smoke.

It really is a sad sight to see all the pyres both locally and well into the next county. The sheep grazing the land next to the farm are still here — for the moment.



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The Problem Page

TRIALS AND TRIBULATIONS





Virus X — An Update By Richard Gaze

Introduction

I have, in the past, wondered whether we confuse this issue by continual repetition. Virus X has been the subject of problem pages on a fairly regular basis for some time now. The conclusion I draw, after my usual period of self-doubt and introspection, is that it is sufficiently complex and dynamic to justify periodic reassessment. Added to this is the growing certainty that we should not expect the problem to disappear nor should we expect a quick 'scientific fix'. We would seem,



THE PROBLEM PAGE — (continued...)

therefore, to be saddled with it for the foreseeable future.

Improvement in the situation will probably be as a result of a number of small incremental steps rather than a major dramatic cure. These steps are likely to arise from a sound understanding of virus disease and an ability to identify priorities correctly.

As the disease progresses opinions on the best way forward change and in some cases harden, often as a result of the dialogue between yourselves and Helen and myself here at HRI

The progress of the disease and sometimes the apparent implacability of it involve some issues of extreme sensitivity within the industry, which are both difficult to express and to resolve but which, nonetheless, should I think be faced and accepted.

This month I had intended simply to try to bring you up to date with the incidence of the disease. This I will do but, many of the enquiries we have received centre on the modes of spreading the disease which are clearly related to the incidence in general. What is probably more to the point, the natural interest in how you 'catch' virus can easily obscure the reality of the situation.

Another phenomenon that I think I have detected and which worries and perplexes me is what one can only describe as a sort of stalemate, but I'll come to that later.

Modes of spread

I'll start with the bad news. We don't know the answers to this, but of course that is only a half or perhaps even a quarter truth. One also has to be far more specific about what one means by spread. Because we don't know when, where and how the virus first appears we can only guess at modes of spread from site to site. We can indeed, only guess as to whether it even happens in the ways in which people are asking about.

Some of the earliest known cases had no obvious contact with anyone so where did they get it from? But this is a real chicken and egg question and it is to this that we most accurately say we don't know. We have been asked if you can 'catch it' by transfer on shoes, clothing, vehicle tyres even flies. The logical answer has to be, in theory at least, yes. But that is an inadequate answer at best because it ignores the fact that we don't know how virus arises and also the fact that virus appears not to survive on a farm without mechanisms for the recycling of mushroom spores and/or mycelium from crop to crop.

We regularly take virus infected material onto the HRI mushroom unit but so far we haven't 'spread' it to the unit. Even if one explores all the speculations about the origins of this virus; and these include, spontaneous evolution within the mushroom, constant presence as an integral micro component of mushrooms, mutation of existing known viruses and several I've probably forgotten, it doesn't help answer this concern.

I'm convinced that whether the virus arrives as an act of God, on someone's shoes or in a bucket of infected compost, a present from a well-wisher, it doesn't matter. It only matters if you bulk it up by contaminating each crop with ma-

terial from older ones. In short, we don't know how it spreads so it's probably better to target one's anxiety towards the real worry which is, whether or not you are reproducing it and bulking it up to disease levels. Virus is after all, and it's an important part of our understanding, a quantitative disease. If levels are high, whatever that means, you have a disease. When they are low you don't. Somewhere in between, you are skating on thin ice.

Many of these things have been lumped together in the past under the category of 'enigmas which only confuse'. That is, I believe, still true. One could summarise by saying assume virus is there at very low, non-disease levels and concentrate on ensuring that's where it remains. It's the 'virus loop' that counts.

But in today's industry this ignores one important and delicate issue and one that reluctantly I cannot ignore. In the past, every farm was involved in all the processes of production. Over many years more and more has been delegated to specialists, first phase I then II and now III. So the stages at which the 'loop' can occur may be on two separate sites is theoretically possible, therefore, to transfer contaminated material from site to site.

So spread means different things to different people. I prefer to make a distinction between spread and transfer. Control depends upon breaking the contamination 'loops' wherever they are. It would, at first sight, seem sensible to take precautions to avoid spreading the disease. In reality, it is almost certainly impossible and, by comparison with ensuring the non contamination of crops, is of minor importance.

Current incidence

The incidence of Virus X has almost, but not quite, reached the point where one would say it has become endemic in Britain. There are farms which register a negative result. I put it like that on purpose. The virus seems to be effective at low levels, almost at the lowest levels of detection. So on the farms we say are negative it may be at levels that we cannot currently detect. But may be not, we just don't know. It, probably not important if you accept the premise that it's the magnification by crop contamination that requires attention. These farms, 'the negative ones', by luck, or by design are clearly not allowing it to reach detectable let alone disease levels.

We have to suppose there are many more of these 'negative' farms than so far confirmed as our diagnostic sampling is heavily biased toward either those showing some symptoms or farms of known vulnerability. It is from such targeting that we can say that Virus X occurs in Ireland, where a more common symptom is the 'brown mushroom' syndrome.

In Britain we have identified in excess of forty infected sites. In Ireland, perhaps, ten or more. Bearing in mind the relative numbers and size structures of the two industries one can suppose that in Britain much more of the industry is affected.

On a slightly prophetic note it would be surprising if the disease does not occur elsewhere. If, and when it does, it will give various commentators endless material by which to debate who gave it to whom. I have no doubt the emotions of blame and competitiveness will vie with each other. It will be difficult to claim precedence, however, without attracting blame!

THE PROBLEM PAGE — (continued...)

An Impasse

I detect a sort of impasse, a stalemate, a lockout, I cannot quite think of the right description. Let me try to explain as it worries me somewhat.

Many, unfortunately not all, of the forty or so cases referred to are learning to live with the problem. They probably have it partially under control and are otherwise growing well enough that they are surviving. So it hurts but it is bearable. They know much of what needs to be done, in principle, to solve the problem but it is difficult and expensive. Thus the stalemate.

To say difficult sounds negative does it not? So yes pick all your mushrooms closed. For many people that would be the end of the problem. Ignoring the difficulty of picking closed mushrooms if you have a market for flats, what would be the cost? You might argue, it would be more than the current losses due to Virus X. Then there's bulk handling. If you have airborne contaminants, either spores or mycelial propagules, and you were to design a system to mix them into the compost most efficiently you would have a job improving on many bulk handling systems currently in use. Mind you if you never let a mushroom open, cooked out efficiently and put bulk phase III on ice you probably would not have any arial contaminants in the first place.

So my impasse is the tendency to think, in economic terms, that the cure is more expensive or difficult than the disease. Looked at superficially that seems a fairly convincing argument. I suppose my motivation in introducing the subject is because I believe one must resist being wooed and soothed by such thoughts.

If, for most farms, picking 100% closed mushrooms or retrogressively going back from bulk phase III are not an option, then one must accept that and resist believing in the balanced equation of cost versus cure.

I think on closer analysis, the cost of the disease is much higher than it is estimated to be. A general level of excellence can disguise yield loss. Loss of quality, on the other hand, a 'ommon symptom, is a time bomb for future loss of competiiveness.

Consider also the tight rope being walked. We know this disease can, if 'let out' be devastating. Yield losses of 60-80% are known. Who really wants to run that close to the wind? One small botch up or factor beyond your control and - bang!

I think the only way to safely live with this disease is 'near zero tolerance'.

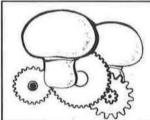
This may begin to sound rather defeatist, it is not meant to, just the opposite. There is much that can still be done by R & D to define and refine the priorities of exclusion both of spores and mycelial propagules.

I do believe, however, that the impasse I have tried to describe is unacceptable. If open mushrooms, flats and value packs, are grown, particularly on farms filling bulk phase II or III onto shelves, the need to manage the spore load is, in my opinion, an absolute necessity. The same point can be made about the production of bulk phase III, but in this instance managing the mycelial propogale load can be added to, or substituted for spores.

Summary

- * Don't worry too much about 'catching' Virus X. Think more along the lines of whether you are capable of bulking it up.
- * If you recognise the state of impasse described, perhaps, you should reconsider the farm's strategy.
- * There seems to be little prospect of a wonder cure, it is going to be a long slow haul by you.

On that cheerful note



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Mushroom and Water: some minor questions - or are they?

What is a minor question?

'Ask a silly question', they say, and you'll get a silly answer. Ask a simple question and it is by no means certain that a simple answer will be forthcoming. Quite often the answer to an apparently simple question can be very complicated. This could mean that the simple answer should be, 'we don't know'. Often 'it all depends' gets flung in there somewhere, and, what about 'good' questions? Come to think of it, is it possible to ask a 'bad' question?

I suppose whether a question is a 'minor' or a 'major' one might depend on the answer and whether the implications of the answer are likely to have major or minor effects.

Well let's try some 'minor' quéstions and see where it gets us.

Water temperature and water hardness

W. Robinson in his book, 'Mushroom Culture' published in the late 19th century was quite positive on both temperature and hardness. Writing about watering mushroom beds he stated, "it should be soft water heated to 80°F (27°C) given with a fine rose" The bit about a fine rose will probably not meet with much argument, but Fred Atkins in his 'Mushroom Growing Today' (1966 edition), was dismissive of warm water and did not deign even to mention the degree of water hardness. 'No evidence is forthcoming in support of the old contention that water should be warmed before application to the beds' he wrote. He went on to record that some growers water their beds from a tank within the cropping house so that it is at cropping room temperature when used. 'Neither hygienic nor based on science' was Fred's

During my studies on the casing layer at the long-gone Mushroom Research Association Laboratories I measured temperatures throughout the depth of a mushroom bed at 1 inch (2.5 cm) intervals (MRA Annual Report for 1953. Temperatures in the casing layer dropped around 1.5 to 2°C immediately after watering with water at 6°C to 7°C (around 43-45°F) and had returned to their original level within a couple of hours. The temperature effects were much the same whether the casing was soil or a peat mix. Not much sign of a major effect there, so water temperature at

watering probably is a 'minor' question. It is strange though, that Robinson recommended 80°F (27°C). That would have been quite a lot higher than the air temperature in his houses as, in his book he recommended 50 to 60°F (10-15°C) during cropping. Is it possible he knew something we don't?

Carrying out watering experiments using water at say, 10, 15, 20 or 25°C, while not impossible, would not be easy. I guess that no one has ever attempted anything like such an experiment and maybe never will. One could well expect to be able to say the same about experimenting with water at different degrees of hardness, but not so!

A question of using hard or soft water

A recent publication from the Belgian Experimental Centre for Mushroom Culture published in 2000 and covering the years 1995 to 1999, reports on that very question of water hardness (336 pages, English summaries).

To be fair, it was not the prime objective of the investigation. They were trying to confirm, or otherwise, the effects of adding calcium chloride to mushroom irrigation water on crop quality and, in particular, on mushroom whiteness under Belgian cropping conditions. They obtained, as Burton reported at the 1999 HRI Subject Day, rather disappointing results from the calcium chloride treatments. One possible reason for this was thought to be differences in the hardness of the water used. As a consequence of performing several series of trials in which mushroom beds were irrigated with water of three different degrees of hardness containing no calcium chloride and three concentrations of it, they found that using hard, medium hard and soft water had no effect on crop yield or on mushroom quality. A negative result, then, or a positive one if one reads it as there is no need for mushroom farms in hard water areas to go to the expense of installing costly water softening plant, at least for watering the beds.

Calcium Chloride in the water? An update

A connection between calcium in the irrigation water and the post harvest qualities of mushrooms goes back quite a while. In 1984 Guthrie in a Master of Science thesis at the

PETER FLEGG INVESTIGATES — (continued...)

Pennsylvania State University reported that mushrooms washed in hard water (high in Calcium), had better post harvest quality than those washed in distilled water. Following on from that observation Bardon, also in a Master of Science thesis, at the same University in 1990, found that mushroom quality was improved by adding calcium chloride to the irrigation water. Yet another Master of Science thesis by Miklus in 1993, took the story a stage further.

Two papers in Mushroom Science No. 13 (1991), and two more in Mushroom Science No. 14 (1995) by R. Beelman and his co-workers at Penn. State University, followed by an article in Mushroom News in 1998, seemed to suggest firmly that here was an important step forward in ensuring high crop quality. In my 'investigation' of this and similar topics in 1999 (Mushroom Journal February 1999), I concluded that time would tell whether we then stood at the threshold of an exciting new era relating to mushroom crop quality.

Well, a couple of years later, it seems to be worth an update.

Two more papers by Beelman and colleagues in Mushroom Science No. 15 (2000), reinforced the message that calcium chloride in the irrigation water was a simple and effective way of improving crop quality by making mushrooms whiter and reducing browning, and it looked as though time was indeed 'telling'. It seems that if time is really going to tell, then it needs time.

Although reporting, at the 1999 HRI Mushroom Day, only 'a small improvement' in the whiteness of mushrooms and a greater tendency to 'resist' bruising treatments after crops had been watered with calcium chloride solutions, Barton in his review (Mushroom Science No. 15) acknowledged the positive effects of using calcium chloride.

The Belgian experience

The report of the Belgian Experimental Centre on the effects of calcium chloride and water hardness found that the degree of whiteness of mushrooms at harvest was not affected by the calcium chloride treatments, and the degree of hardness of the water was not a factor either. However, some benefits were evident after the mushrooms had been stored for five to six days. It is concluded that calcium chloride treatments slow down the development of the yellow-brown colouration, a possibility that growing the conditions such as casing soil composition might be an influence is conceded. There is, however, no getting away from the main conclusion that the use of calcium chloride in the Belgian and Dutch growing system makes no sense.

Could it be that calcium chloride is most effective when the mushrooms are likely to receive rough handling? Burton's results seem to support that idea.

Compost moisture

Water in the compost is no less important than water is

casing. Looking back, the last time that I touched on the subject of compost moisture was around five years ago (M. Journal 555, April 1996). To prevent compost drying out excessively, I suggested covering spawned compost with absorbent paper accompanied by occasional light waterings to help reduce water loss. I also went on to point out that covering the compost with a plastic sheet meant less need for the watering but could encourage localised damage to the substrate and mycelium by condensation forming under the plastic sheet. Fairly commonsense remarks and in line with common practice it would seem (see M. Journal 601 pages 17,18), but minor enough not to raise sufficient questions demanding answers, one might have thought. Not so, yet again!

A Patent and a paper - something positive

During one of my regular sifts through recent publications on mushroom culture and science, I was somewhat surprised to find details of a US Patent (US 6061951, May 16, 2000) for a plastic film cover for mushroom beds during spawn running. The plastic cover allows ventilation by having a pattern of symmetrically arranged holes.

Also unexpected, was the report of a paper by Phil White of HRI on the effects of covering compost with paper on mushroom cropping (J. Horticultural Science and Biotechnology Vol. 75 (6) 667).

The compost was covered from the start of phase II, from the start of spawn running, at both times or not covered at all. Cropping was delayed whenever the compost was covered at the start of spawning. Covering prior to phase II did not affect the start of cropping. Compared with uncovered compost, yields were increased; the longer the period of cover, the higher the yield. Reduced moisture loss and raised carbon dioxide concentrations are suggested as possible causes for the results.

At least that is one reassuring answer to a minor question. But, then, a treatment which raises crop yield cannot surely be 'minor' can it?

A good question

I am not sure now whether questions can be classified either as 'major' or 'minor'. If, as I suggested atthe beginning, it depends on the answer then it seems that, with mushrooms, the answer can often be 'it depends'.

I expect we could go on almost indefinitely discussing for example, why the effects of calcium chloride in the irrigation water on mushroom whiteness are apparently not consistent everywhere. Or again, why covering compost with paper should, in some circumstances, increase yield and delay cropping. In both instances it would seem that, 'it depends'.

Could it be that it is not important whether the question asked is either 'major' or 'minor'? Perhaps instead we should be asking, 'do we understand the answer?'

Now, that is a good question.

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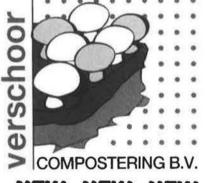
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Jan (78 years of age) was an unsung pioneer in Europe for the production of high quality (Thilot) machinery and equipment for the mushroom industry. I have always been good friends with Jan and, during recent years, he often said to me "We are two of the few remaining members of the first generation of the mushroom industry in Holland".

I am sure that many of his associates in the mushroom industry, and his many friends outside of it, will really miss him.

> Gerard Derks, Italy April 2001

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K

Koppert UK Limited Green House Homefield Business Park Homefield Road, Haverhill Suffolk CB9 8QP Tel: 07801 981278 Fax: 01440 704487 E-maii: steve@koppert.co.uk

L.

L & P Peat Ltd (Humax Horticulture) Tollund House Abbey Street, Carlisle Cumbria CA3 8TX Tel: 01228 522181 Fax: 01228 52181 E-mail: Humax@global.co.uk

M

MacGregor Mushroom Casing Bogbain of Inshes Inverness IV1 2BD Tel: 01463 772010 Fax: 01462 772010

McGearys 53-58 Armagh Road, Moy Dungannon, Co. Tyrone N. Ireland BT71 7HZ Tel: 028 37 548017/548292 Fax: 028 37 548719/549844 E-mail: info@compost-ireland.com

J F McKenna Ltd 66 Cathedral Road, Armagh N. Ireland BT61 8AE Tel: 028 3752 4800 Fax: 028 3752 2227

Meilor Bromley Air Conditioning Services Ltd 141 Barkby Road Leicester LE147LW Tel: 0116 2766636 Fax: 0116 246025

MicroBio Limited
17 High Street, Whittlesford
Cambridge CB2 4LT
Tel: 01223 830860
Fax: 01223 830861
E-mail: microbio@dial,pipex.com
Web site: www.microbiogroup.com

Monomech Services
Millstones, Hampole
Doncaster
South Yorkshire DN6 7ET
Tel/Fax: 01302 727729
E-mail: jan@monomechservices.co.uk

Mush. Comb. Vof. Campagneweg 14, 5964 PH Horst, The Netherlands Tel: +317739 83929 Fax: +317739 88299 Famil: info@mushcomb.com Web site: www.mushcomb.com

Mushroom Bureau 27 King Edward Walk London SE1 7PR Tel: 020 7261 1086 Fax: 020 7401 3588 E-mail: victoria @ kingedwardwalk.freeserve.co.uk Web site: www.mushroom-uk.com Spawn Producers

Composting Systems Growing Systems

Air Conditioning Equipment Cooling Equipment Environmental Controls Humidity Controls

Biological Control Suppliers

Casing Suppliers

Casing Suppliers

Air Conditioning Equipment
Computer Systems
Consultancy Services
Cooling Equipment
Environmental Controls
Growing & Irrigation Equipment
Spawned Composters
Spawn Suppliers
Trays & Bags
Tunnels
Turnkey Projects
Wholesalers

Air Conditioning Equipment Chemical Suppliers Computer Systems Cooling Equipment Humidification Equipment Packaging

Air Conditioning Services Humidification Systems

Biological Control Suppliers

Growing Equipment Suppliers (including: Polytunnel Woven Covers Shelving Growing Nets Bulk Pasteurisation Glide & Pulling Nets)

Growing Equipment Suppliers

Information Services Publicity Mushroom Consulting J. Huys BV P O Box 6144, 5960 AC Horst The Netherlands

Tel: +31 77 463 8200 Fax: +31 77 463 8201 E-mail: mushcon@tref.nl

Web site: www.tref.nl/horst-sevenum/mushcon

National Korona Mushroom Union

H- 3396 Kerecsend Pf. 8 Hungary Tel: +36 36 500 500/550 100 Fax: +36 36 550 100

Progress Products
Queenswood House, 70 Durleigh Road

Bridgwater, Somerset TA6 7TE Tel: 01228 429800 Fax: 01228 444866 E-mail: steve@progressproducts.fsnet.co.uk

Prunty Peat Ltd Crieve, Fivemiletown Co. Tyrone N. Ireland BT75 0SF Tel: 028 895 21006 Fax: 028 895 21821.

Tony A. Russell & Associates Eastways, Buxton Road Frettenham, Norwich Norfolk NR127NG Tel/Fax: 01603 898409 E-mail: tarussell@aol.com

SPA (Sacherie de Pont-Audemer)

15 rue des Papetiers B.P. 232- F 27502 Pont-Audemer Cedex, France Tel: +33 2 32 567918/10 Fax: +33 2 32 5679 11 commercial@sacherie-de-pont-audemer.fr

Sylvan Spawn Ltd Broadway, Yaxley
Peterborough,
Cambridgeshire PE7 3EJ
Tel: 01733 240412

Fax: 01733 245020 E-mail: pknipe@sylvaninc.com Web site: www.sylvaninc.com

T.

Tamplin Engineering Main Road, Birdham

Chichester West Sussex PO20 7BU Tel: 01243 512599 Fax: 01243 511189 Web site: www.tamplineng.co.uk

Thilot Holland B.V. Hoofdstraat 11-17 5973 ND Lottum The Netherlands Tel: +31 77 4631 774 Fax: +31 77 4632 648 E-mail: thilot@thilot.com Web site: www.thilot.com

Topterra Holland BV Geystersweg 12b 5861 BL Wanssum

The Netherlands Tel: +31 478 538 181 Fax: +31 478 532 147 E-mail: info@topterra.com Web site: www,topterra.com

Traymaster Ltd New Road, Catfield Great Yarmouth Norfolk NR29 5BQ Tel: 01692 582100 Fax: 01692 582211 E-mail: sales@traymaster.co.uk Web site: www.traymaster.co.uk

Tunnel Tech Limited The Old Airfield, Winchester Street Leckford, Stockbridge Hampshire SO20 6JF Tel: 01264 810032 Fax: 01264 810900 E-mail: martyn@tunneltech.co.uk Web site: www.tunneltech.co.uk

Verschoor Compostering BV

Postbus 9 4254 ZG Sleeuwijk NL The Netherlands Tel: +31 183 407 704 Fax: +31 183 500 620 Consultancy Services

Casing Suppliers Consultancy Services Spawned Composters Spawn Suppliers Whole Range of Products for Mushroom Cultivation

Chemical Suppliers Cleaning Materials Disinfectants Hygiene & Disease Controls

Casing Suppliers

Consultancy

Packaging

Spawn Producers

Growing Equipment Mushroom Machinery

Compost & Casing Machinery Engineering Services Mushroom Farm Machinery

Casing Suppliers

Compost Machinery Growing Equipment Suppliers Mushroom Machinery

Casing Suppliers Spawned Composters

Organic Phase I, II & III Compost Organic Straw

MGA Chairman's Report 2000/2001

This year the Chairman's Report is in the way of a brief update of events, issues and changes that have occurred during, what can only be termed, 'a tough year'.

Many issues have been addressed during the past twelve months. In brief they include:

- * MGA staffing structure
- * Agricultural Wages Board
- * Quality Standards for Fresh Mushrooms
- * Extension of Product Liability to Primary Agricultural Products
- * Climate Change Levy
- * The Industry Code of Practice for Composting and Casing.

I have to admit that I have found it a hard job trying to keep up to speed with all the matters arising and the speed at which they have had to be dealt with. With this in mind, I decided, that practically from the outset, I would endeavour to visit the MGA Office twice a month throughout my year in office for a regular update on current issues and happenings affecting the Association. My other aim, whilst doing this, was to give the staff any help and encouragement I felt they may have needed. The office has been redecorated and carpeted recently and, with the new desk-top publishing equipment up and running, I feel the Association is well-equipped to serve its members. The MGA staff have been a considerable support to me, and I have, I hope, been able to show them my support in return.

The 2000 MGA Conference in Bournemouth was a most enjoyable and well-organised event. On behalf of the MGA, I would like to thank Cecilia, Melissa and Lynda for all their hard work before, during and after the Conference. I personally feel it's a pity that, whilst 'geared' towards the grower members each year, the grower attendance at annual conferences tends to be low. Not so, at the 2000 MGA area meetings - attendance was very good, as was the subject matter. It is so obvious to me that the members really enjoy attending area meetings and, at the same time, find time to discuss topical issues with their neighbouring growers and suppliers, whilst having an opportunity to enjoy a meal and a drink or two to catch up on industry news. The meetings are well-organised and attendance can be high - a compliment to the MGA Area Chairmen. I am very much looking forward to having the opportunity to attend more this year.

By the time this is in 'print' I will have nearly fulfilled the task of MGA Chairman 2000/2001 - another milestone in my life -so thanks to all the members of the MGA Council and to the staff at Stamford, who have all supported me throughout my year in office.

Dennis Watkins MGA Chairman 2000/2001



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- Korona co-operates with Amycel in scientific research and spawn production for further improvement of their spawn's quality
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Secretary to the Association's Report 2000/2001

This is my first report to Members, since assuming the post of Secretary to the Association, in September last year. Since last year's Annual General Meeting, there have been major organisational and administrative changes, commencing with the MGA Director's leaving in early May 2000. In the ensuing four months, there was an uncertain period, during which the situation was reviewed in the light of this event and the orgoing 2000 MGA Review. The normal work and activities of the MGA were maintained during this time and, in September, Council was in a position to inform Members of the future shape of the MGA Secretariat.

Features of the Year

Food Issues and Crises

In May, once again, a potential food scare involving mushrooms hit the headlines, when *E.coli* was purportedly found in some organic mushoms. Further investigation, however, revealed that the strain of *E.coli* present was a non-toxic variety and, in any case, its presence was due to cross-contamination and not growing practice. Thankfully, the shelf-life of this particular issue was very short, but this is not always the case and it emphasised the need to have a plan in place for managing issues and crises.

Just such a plan has been the subject of consideration by Council throughout the year, with different options being evaluated. One option was to retain the services of a public relations company and Council also considered in detail a draft outline plan, prepared by Victoria Lloyd-Davies of the Mushroom Bureau, for issues being dealt with from within the industry, with additional input from appropriate specialists. Council decided that the latter option should be taken forward, in order to be able to respond and communicate rapidly and effectively when future issues occur.

Agricultural Wages

In early October 2000, it was announced that the Agricultural Wages Board for England & Wales would continue for a further five years, in line with the Scottish Executive's announcement of the previous month that the Board would continue in Scotland.

The timetable of this year's round of wage negotiations has been amended because of the foot and mouth disease situation. As a result, it is likely that the 2001 Wages Orders will now come into effect at the jinning of October. This will coincide with the increase in the rate of wid National Minimum Wage and these two factors are likely to have an additional impact on this year's wage negotiations.

Quality Standards

At the end of March 2001, notification was received of a proposal to introduce mandatory marketing standards for fresh mushrooms, by adding fresh mushrooms to the list of products covered by Regulation (EC) No 2200/96. It is understood by MAFF that the mandatory marketing standards will be based on the voluntary UN/ECE standard. Those MGA Members who provided expert input to the revision process are examining very closely the 'final' version of the UN/ECE standard, to ensure that it fully meets the needs of the industry.

MGA Industry Code of Practice for Compost and Casing

During the year, the MGA Industry Code of Practice for Composting and Casing was finalised and circulated to all Grower Members who make compost and to Spawned Composters and casing suppliers. Additionally, several copies have been sent to members on request. The MGA gratefully acknowledges the contributions from industry representatives and retailers in the drawing up of the Code.

Climate Change Levy

On 1 April 2001, the Climate Change Levy came into force. Although a fifty per cent rebate for Horticulture, for energy used for heating and lighting utilised in the growing process, had, in principle, been agreed with government prior to the Levy's coming into being, just weeks before the deadline it was announced that this was now subject to approval by the European Commission, under State Aid rules. At the time of writing, no EC decision has yet been received. There remains, too, a lack of clarity over the definition of heating and lighting and the MGA is still pursuing this.

EU Pesticides Review Programme

EU legislation provided for a review of all existing active substances used as an agricultural pesticide in at least one Member State. The review began in 1995 with a list of about 800 compounds to be tackled in four stages. The review is now beginning to pick up pace. One impact of the review is that it will reduce the number of compounds and particularly the number of uses available. This is likely to have serious consequences for UK horticulture. As matters stand, the major impact of the review will be felt in 2003 when all the compounds not supported are due to be withdrawn. The European Commission's response has been to permit a limited number of 'essential uses' to continue beyond this date for a period of four years to allow alternatives to be developed. It is anticipated that the final list of 'essential uses' will be adopted in early 2002.

MGA Activities

The year commenced with the AGM attended by 35 members. The AGM was a meeting attended by Members only, in view of the ongoing 2000 MGA Review and to facilitate full and frank discussion on the future direction and staffing of the MGA.

The main event of the year was the MGA Conference in Bournemouth, which has been mentioned in detail elsewhere, and a busy programme of Area Meetings was of interest and enjoyment to many Members. Thanks are due to all Area Chairmen.

The MGA continues to publish the monthly Mushroom Journal and Update and this year has seen the installation of the in-house desk-top publishing system. All aspects of the Journal activities are covered in the Editorial Board Report.

The MGA Council, Committee and Area Structure

The following meetings were held in 2000/2001:-

Council 4
Management Committee 1
Editorial Board 5
Conference Committee 5

It was decided, at the Meeting of Council held on 7th September 2000, to merge Management Committee Meetings with MGA Council Meetings.

During the year, Mr G Ganney retired from business and thus resigned from Council as East and West Midlands Representative. The MGA is indebted to Geoff Ganney for his immense contribution to Council, over many years, and welcomes his continuing on the Editorial Board.

At the year end, the status of Council was, as follows:

- 6 Members continuing in Office [Messrs. J Hall (replacing Mr B Dyer), Mr P Howard, Mr F Stewart-Wood, Mr D Walker, Mr P Woad and Ms C Mitusch].
- 5 Members standing for re-election [Messrs. R Brown, MW Middlebrook, J Rothwell (as Medium Grower Representative), ASD Sampson, D Watkins]. Mr JS Orr, who replaced Mr M Barton in 2000, has withdrawn from the re-election process.
- 2 Members standing down [Messrs JS Orr (as South East Representative) and J Rothwell (from his place as Honorary Treasurer only)].

Editorial Board Report 2000/2001

Membership Melissa Nairn (Journal Manager), Peter

Flegg, Geoff Ganney, Richard Gaze, Peter

Howard, and David Mann.

Meetings

Five meetings of the Editorial Board have

been held in the year.

David Bird retired from the Board in August and in November David Mann joined the team. The MGA Chairman, Dennis Watkins kindly joined the Board for many of the meetings throughout the year. These are the bald statistics but what of our hopes, fears and aspirations?

We continue to hope that the Mushroom Journal informs you of what is happening or likely to happen within the industry, via articles, news, advertisements and 'snippets'. If it occasionally stimulates or fleetingly amuses you that would be a bonus. We hope it is topical, well-targeted in the subjects chosen and technically and scientifically at the leading edge of developments.

Like all producers of Journals our fear is that copy will dry up or that Melissa will win the lottery and swan off to the Bahamas.

Our aspirations have been at their simplest two-fold. To develop the capacity for desk-top publishing. At the end of February 2001 we took delivery of an Apple-Mac G4-450 with colour printer and top of the range scanner. We think this equipment will both reduce costs of production and also

increase efficiency. Our excellent printers can then concentrate on printing. No more mismatched captions and hours of Melissa's time toing and froing with the typesetters. This development is, as you can see from the dates, very topical. Early progress looks extremely promising. With that and all the advantages of e-mail we'll hardly know ourselves.

Our second aspiration has been to strengthen the Editorial Board in relation to its representation of, and penetration within, the industry. David Mann represents our first hesitant step. We want the Editorial Board to be progressive. We want it to have its intelligence retrieval systems throughout the industry and we continue to explore how best to do that in relation to composters, spawn makers and more, young, sustainable blood.

We have also aspired to drawing other organisations closer to us, the HDC and the Mushroom Bureau, both of whom, in their different ways, serve the mushroom industry.

The Mushroom Journal is the major voice of the MGA to its members. It can also be a conduit for the voice of the members to reach the MGA, although one has to admit the is somewhat under-developed at present.

In summary, our thoughts at the end of the year are very much focused on making the Journal topical, cost-effective and sustainable and much of the activity of the Editorial Board is concentrated in these areas. One cannot conclude without offering thanks to all the Board members who give a considerable amount of their time for the benefit of the Journal. But pre-eminent in all the activities is Melissa Nairn, the Journal Manager, for whom no amount of appreciation would be adequate.

R H Gaze, Editor

SECRETARY'S REPORT - (continued...

. 1 Member stood down [Mr GW Ganney, as E and W Midlands Representativel.

The outcome of the Council Elections will be announced at the 2001 AGM and the new Council will take Office at the conclusion thereof.

During the year, James Rothwell took over as Northern Area Chairman, Peter Howard as South West Area Chairman (from Michelle Gibbs) and Graham Mann as Eastern Area Chairman, from (Damian Hearne). Thanks are due to Michelle Gibbs and Damian Hearne for their energetic commitment and valuable contribution over the years.

The following Members now serve as Area Chairmen:

Tex Crosswell

South East Area

Peter Howard

South West

Area

Graham Mann

Eastern Area

Catherine Mitusch Scottish Area

James Rothwell

Northern Area

MGA Staff

Following the departure of the Director, in May 2000, the staffing structure of the Association was changed significantly. It was decided not to continue with the post of MGA Director, but to appoint a Secretary to the Association, to manage the Association.

Melissa Nain was promoted to the position of Journal Manager. Both appointments took effect on 7th September 2000.

At the year end, the MGA's staff complement was:

Mrs CE Timewell, Secretary to the Association (1 WTE) Mrs MM Nairn, Journal Manager (0.71 WTE) Mrs LS Saunders, Accounts Administrator (0.46 WTE) Mrs S Howard, Office Cleaner (0.17 WTE)

WTE Whole-time equivalent

Conclusion

It would be true to say that this has been an exceptionally challenging year, for the industry, for the Association, for the staff and for the MGA Chairman and Vice-Chairman, with much uncertainty all round and major changes within the MGA office undergone. Once again, the MGA Staff has continued to 'produce the goods', regardless, and with unfailing willingness, and I would like to say a personal thank you to Melissa Nairn and Lynda Saunders for their total support.

I pass our thanks, too, to Council and the many members who have provided support, and not least to your Chairman, Dennis Watkins, who has always found time to listen and act when necessary, for the benefit of the Association and the MGA Staff

Cecilia Timewell, Secretary to the Association

Conference Committee Report 2000/2001

The 2000 MGA Conference saw a return, after ten years, to Bournemouth, within the Royal Bath Hotel, a venue which was, again, much to the liking of those who attended. There was, to some degree, a pleasant sense of *déjà vu*, for me, as it was at Bournemouth, in 1990, that I had my first experience of a Mushroom Growers' Association Conference. Exhilarating and exhausting were the impressions at the time, and I certainly did not envisage, then, the possibility of revisiting the experience in ten years' time!

The 2000 Conference, however, was not a carbon copy of the 1990 event. Much has changed in the intervening ten years, both within the industry and with the Conference itself. The most notable difference in the 2000 Conference was that it was the first Conference for many years with no MATA Trade Exhibition.

ie Exhibition element notwithstanding, the Conference tollowed the successful format of recent years. The first event was the Thursday evening Chairman's Reception, when delegates were, once again, the beneficiaries of MATA's sponsorship of drinks. A Night at the Races followed and, happily, on this occasion, the whole racing programme was accomplished, to the delight of the winners and disconsolation of the losers.

On Friday, the first session of the Lecture Programme was presented by Richard Gaze, the 2000 Sinden Award winner. Richard's well-received talk was entitled 'The longest "Problem Page" ever or an Exercise in Egotism' and ranged over such topics as the importance of R & D to the industry and Virus 'X', as well as relating some of the lighter moments from his long association with the industry.

The second planned session of the day was saved by Aoife O'Brien, of Sylvan Spawn Ltd, who had kindly and bravely stepped into the breach at exceedingly short notice when a speaker from outwith the industry withdrew. Aoife's presentation gave an up-to-the minute and comprehensive picture of the European Mushroom industry, highlighting the moent developments in, and 'new' marketing opportunities

the Eastern European countries.

In the afternoon, Harold Linfield, made a joint presentation on the Future of Organics, with Rob Haward of the Soil Association. Our thanks to all the speakers. For the final session of the programme, we had engaged a 'motivational' speaker. The general consensus was that he was entertaining and stimulating, but was it really worth the money?

We had two excellent Farm Walks and sincere thanks go to Martyn Dewhurst, Sheila Killby, Tim Harker and staff at Tunnel Tech Ltd and Malcolm Crabtree, Mike Ewin and staff at Leckford Mushrooms Ltd.

The only disappointing aspect of the 2000 Conference was the numbers, which were, for an MGA Conference, on the low side. It is not always easy to pinpoint exactly why one Conference has a high attendance and another a low, but the matter is always addressed and examined, in detail, post-conference, by the Conference Committee. The Conference Committee, which met five times this year, takes many factors into consideration in the conference planning process and works assiduously to achieve the optimum mix for each Conference

often working eighteen months before the event takes place, by which time outside factors may have changed!

The 2001 Conference will be held at the Moat House Hotel in Chester, from Thursday 1st - Saturday 3rd November. The Moat House hotel is situated in the very heart of this historic city (but don't worry - there is ample parking!).

James Rothwell, J Rothwell & Son Ltd, has kindly agreed to host the Farm Walk on the Saturday and, with a technical programme designed to make this a 'growers' Conference, we are sure that you will not want to miss Chester 2001.

Our thanks must go to the Conference Committee for their continuing and unstinting work and to Melissa Nairn and Lynda Saunders for, once again, providing a massive contribution to what is a team effort.

Cecilia Timewell

Auditors' Report

To the Members of Mushroom Growers' Association

We have audited the financial statements on pages 34 to 35 which have been prepared under the historical cost convention, and the accounting policies set out on page 35.

Respective responsibilities of the Council and auditors
The Council is responsible for the preparation of financial
statements. It is our responsibility to form an independent
opinion, based on our audit, on those statements and to
report our opinion to you.

Basis of opinion

We conducted our audit in accordance with Auditing Standards issued by the Auditing Practices Board. An audit includes examination, on a test basis, of evidence relevant to the amounts and disclosures in the financial statements. It also includes an assessment of the significant estimates and judgements made by the Council in the preparation of the financial statements, and of whether the accounting policies are appropriate to the Association's circumstances, consistently applied and adequately disclosed.

We planned and performed our audit so as to obtain all the information and explanations which we considered necessary in order to provide us with sufficient evidence to give reasonable assurance that the financial statements are free from material mis-statement, whether caused by fraud or other irregularity or error. In forming our opinion we also evaluated the overall adequacy of the presentation of information in the financial statements.

Opinion

In our opinion the financial statements give a true and fair view of the state of the Association's affairs as at 31st December 2000 and of its deficit for the year then ended and have been properly prepared in accordance with the Financial Reporting Standard for Smaller Entities.

Kingston & Co

Chartered Accountants Registered Auditors Fulbeck, Lincolnshire 12th April 2001

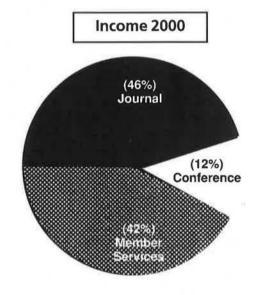
ACCOUNTS

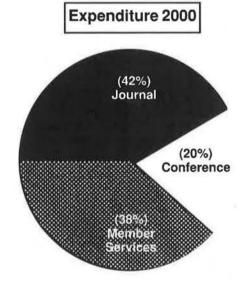
Mushroom Growers' Association Income and Expenditure Account for the year ended 31st December 2000

ended 31st December 2000	2000	1999
	2000	£
INCOME	L	-
Subscriptions - growers	58,696	57,864
Subscriptions - associate	14,864	18,056
Subscriptions - overseas	27,660	32,416
Advertising revenue	66,835	69,874
Conference income	24,928	53,244
Seminar income	24,020	3,711
Area meeting income	1,672	1,657
Interest received less taxation	7,657	7,275
Sundry income	367	986
Total income	202,679	245,083
EXPENDITURE		
Journal		
Cost of production	56,151	52,292
Bad debts	8,667	4,165
	64,818	56,457
Conference		
Direct costs	28,777	32,839
Member services		
Seminar costs	_	4,532
Area meeting costs	1,924	1,206
Meetings on behalf of members	2,783	1,383
Net AGM and EGM costs	561	998
NFU service fee	2,718	2,616
NFU legal aid fee	1,839	1,840
Consultants fees	2,500	2,500
	12,325	15,075
Accommodation costs		
Rent	9,500	9,500
Light and heat	1,227	916
Rates	3,472	3,574
Insurance of building	315	358
Repairs and maintenance	2,443	60
	16,957	14,408
Salaries and related costs		
Salaries and pensions	86,660	87,926
Motor and travelling	2,389	2,927
Motor vehicle depreciation	910	3,641
Profit on disposal of motor vehicle	(486) 89,473	(3,606)
	05,473	30,000
Office costs	0.005	0.075
Stationery	2,305	2,975
Postage	3,283	4,544
Telephone	1,460	1,960
Insurance	1,899	2,227
Equipment repairs and maintenance	437	230
Equipment depreciation	267	861
Subscriptions	2,720	2,609
Bank charges	720	898
Audit	1,800	2,500
	2,175	5,823
[1987] [1882] (1982] 1883 [1882] (1982) [1882] [1882] [1882] [1882] [1882] [1882] [1882] [1882] [1882] [1882]		1,066
MITT TO THE PARTY OF THE PARTY	1,477	
Accountancy Sundry expenses	1,477 18,543	25,693
MITT TO THE PARTY OF THE PARTY		

Breakdown of activities by profit centre for the year ended 31st December 2000

	2000	1999
	3	£
INCOME		
Journal	91.729	99,048
Conference	24,928	53,244
Member services	86,022	92,791
	202,679	245,083
EXPENDITURE		
Journal	96,097	89,204
Conference	46,292	51,177
Member services	88,504	94,979
	230,893	235,360
SURPLUS/(DEFICIT)		
Journal	(4,368)	9,844
Conference	(21,364)	2,067
Member services	(2,482)	(2,188)
NET (DEFICIT)/SURPLUS FOR	THE YEAR (28,214)	9,723





The notes on pages 35 form part of these financial accounts.

ANNUAL ACCOUNTS — (continued...)

Balance Sheet as at 31st December 2000

		2000		1999)
	Note	£	£	£	£
Fixed assets					
Tangible assets	2		533		11,724
Current assets					
Stocks		282		510	
Debtors	3	35,297		26,656	
Cash at bank and in hand		225,539 261,118		254,997 282,163	
Creditors: amounts falling	due				
within one year	4	(52,425)		(57,169)	ľ.
Net current Assets/(Liabilit	ies)		208,693	2	224,994
Net assets			209,226	i	236,718
Accumulated funds	5				
Member services fund			133,594	- 1	161.086
Stoller fund			50,000		50,000
Congress 1995 fund			25,632		25,632
· v			209,226	i	236,718

These financial statements were approved by the Council on 31st March 2001 and signed on its behalf by:

J. Rothwell

) Honorary Treasurer

C E Timewell

) Secretary to the Association

The following notes form part of these financial statements.

NOTES FORMING PART OF THE FINANCIAL STATEMENTS for the year ended 31st DECEMBER 2000

1. Accounting Policies

1.1 Accounting Convention

The financial statements have been prepared under the historical cost convention, and in accordance with the Financial Reporting Standard for

The following accounting policies have been applied.

1.2 Subscriptions

Subscriptions are credited to income and expenditure account in the year to which they relate.

Depreciation

reciation is provided to write off the cost less estimated residual value of all fixed assets over their estimated useful lives. It is calculated on the original cost of the asset at the following rates:

Office equipment Fixtures and fittings Motor vehicles

25 % per annum 25 % per annum

25 % per annum

1.4 Stocks

Stocks are valued at the lower of cost or net realisable value. Cost is calculated on a first-in, first-out basis.

Corporation tax is provided on interest received during the year. No tax is chargeable on the results of mutual activities.

Where assets are financed by leasing agreements that give rights approximating to ownership ("finance leases"), the assets are treated as if they had been purchased outright. The amount capitalised is the present value of the minimum lease payments payable over the term of the lease. The corresponding leasing commitments are shown as amounts payable to the lessor. Depreciation on the relevant assets is charged to the income and expenditure account.

Lease payments are analysed between their capital and interest

components using the straight-line method. The interest is charged to the income and expenditure account. The capital part reduces the amount payable to the lessor.

All other leases are treated as operating leases. Annual rentals are charged to the income and expenditure account on a straight-line basis over the term of the lease.

1.7 Pension contributions

Contributions to the company's defined contribution pension scheme are charged to the income and expenditure account in the year in which they become payable.

1.8 Foreign currency

Foreign currency transactions are translated at the rates prevailing at the date of the transaction. Foreign currency monetary assets and liabilities are translated at the rate prevailing at the balance sheet date. Any differences are taken to the income and expenditure account.

2. Tangible fixed assets

2. Taligible fixed assets	Office equipment fixtures and fittings	Motor vehicles £	Total
Cost or valuation	35		
At begining of year	23,748	14,565	38,313
Additions	-	-	
Disposals	=	(14,565)	(14,565)
At end of year	23.748		23,748
Depreciation			
At beginning of year	22,948	3,641	26,589
Charge for year	267	910	1,177
Disposals	-	(4.551)	(4,551)
At end of year	23,215		23,215
Net book values	100000		57602
At end of year	533	-	<u>533</u>
At beginning of year	800	10,924	11,724
3. Debtors			
		2000	1999
Trade debtors		£ 15,311	£
Other debtors and prepayments		19,986	17,187 9,469
Other debtors and prepayments		35,297	26,656
All amounts were due within one y	rear.	00,201	20,000
4. Creditors: amounts falling du	e within one year		
		2000	1999
Trade creditors		44 COE	£
		44,665	45,791 23
Corporation tax Other creditors and accruals		7,760	11,355
Other creditors and accidais		52,425	57,169
		52,425	37,103
Movements in accumulated for			Visite Control Control Control
	Member	er-II	Congress
	services £	Stoller	1995 £
Balance at beginning of year	161,086	50,000	25,632
Deficit for year	(28,214)	-	
Tax repayable	722	-	-
Balance at end of year	133,594	50,000	25,632

6. Commitments under non-cancellable operating leases

Amounts payable within the next twelve months following the balance sheet date were as follows:

	2000 £	1999 £
Leases which expire:		
within one year	-	1,292
between two and		
five years	_	-
after five years	9,500	9,500
20 (m) 4 (20) 2 m (20) (2.2 m) 4 (2) (2) (2) (2)	9,500	10,792

7. Pension

The company operates a defined contribution scheme. The assets of the scheme are held separately from those of the company, being invested with insurance companies. The pension cost charge represents contributions payable by the company to the fund.

Honorary Treasurer's Report

The accounts for 2000 show a substantial loss. This is mostly due to a loss on the Conference rather than a profit. Subscriptions and advertising revenues are also down. Bad debts continue to be a problem. Unfortunately, most are not recoverable. Even with the reduction in costs due to the loss of the Director, we are budgeting for a loss in the current year. With the continuing loss of membership and the loss of income that will come from the down-sized Conference, it is likely that in its present form, the MGA will continue to operate at a loss.

There are considerable reserves available so it is an option to continue to operate at a deficit for quite some time.

Savings can be made. The office has some seven years of the

lease left. I have taken legal advice regarding this. Although we will continue to be liable for the rent for the remainder of the lease, we are able under the terms of the lease to sublet. If accommodation costs could be halved then we could go a long way to balancing the books.

Unfortunately, due to the pressure of work, I have not had as much time as I would have liked this year to spend on MGA affairs. I see little likelihood of this changing in the foreseeable future and so have decided to stand down as Treasurer.

I would like to thank the staff at the MGA for their sterling efforts throughout the year. Thanks also to Tony Kingston, the new auditor, who has done an excellent job with the accounts as a considerable saving.

James Rothwell

Honorary Treasurer

Looking back

COMPOST HEAPS

The day is approaching when we will be able to say, compost heaps, do you remember them?



A view of the co-operative composting enterprise in Ottersum.

This picture above caught my eye (Mushroom Journal No. 118 page 333, October 1982), I suppose because nowadays you can go quite a long while before seeing 'real' Phase I stacks. It comes from an article by Peter Vedder and Jan Smits entitled 'Tunnels and Bulk Treatment of Compost' so perhaps the seeds of obsolescence for stacks were already in the air.

A bit of unashamed nostalgia. Why not, I would still make Phase I in a stack, given the choice. They were, however, exciting times, lots of novelty, an editor's paradise.

In the same edition was an article by Hans Visscher on substitutes for peat in casing. We still haven't cracked that, although Ralph Noble is working on it. Also in that issue there were three pages of 'Letters to the Editor'. So not much change there either!

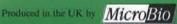
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SITUATIONS VACANT



Fiddleford Mushrooms Ltd is a modern, progressive company that is successfully supplying the supermarket sector. An extensive expansion programme is underway and we are now looking to fill the following positions in our management team:

* Packhouse & Quality Control Manager.

Applicants must have a proven track record in this field. Experience in the food/fresh produce industry is preferred and candidates must also possess good people development skills. Computer experience is necessary and this role demands excellent organisational and administrative skills.

* Trainee Grower or Grower.

The successful candidate will be college or higher trained and have experience or knowledge of commercial crop production. Qualifications/experience in supervision would be beneficial and computer literacy is essential. Full training in mushroom cultivation and management is on offer to someone who is seriously interested in mushroom production. Alternatively, an experienced grower will enjoy excellent facilities and the chance to progress his/her career.

Competitive sarlaries are on offer for both positions and prospects for advancement are excellent. Please apply in writing with an up-to-date C.V. to:

Mr V Young, Farm Manager, Fiddleford Mushrooms Ltd., Fiddleford, Sturminster Newton, Dorset DT10 2BY

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New Zealand Opportunity

Group Production/Technical Manager

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- Bunker composting
- * Tray operation
- * Tunnel Phase II
- AEM climate controls for growing

Meadows is the largest mushroom producer in New Zealand, spawns 5300 m2/week, employs 500 staff and provides mushrooms to the local and 5 key export markets.

Meadows is a totally integrated mushroom producer, producing spawn, compost, growing and marketing of fresh and canned mushrooms.

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Please send your expression of interest and CV to

Bruce Matheson, Chief Executive Meadow Mushrooms Ltd 578 Springs Road, Prebbleton Canterbury, New Zealand

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