

THE *Mushroom* JOURNAL

JUNE 1991 NUMBER 222 ISSN 0144-0551



Somycel



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FINANCE FOR MUSHROOMS ■ AREA
MEETINGS ■ MGA CONFERENCE 1991

Somycel STRAINS

AGARICUS

— SMOOTH WHITE

Bitorquis
Hybrid
Hybrid

Somycel 191
Horst K26*
Horst U3
Somycel 112

Somycel 521 *Somycel* 521P*
Horst U3 SS *Horst* U3P*
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— WHITE

Hybrid
Hybrid
Hybrid
Hybrid

Horst U1
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Somycel 611
Horst U1 SS *Horst* U1P*
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— CREAM

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— BROWN

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PLEUROTUS

Ostreatus
Ostreatus
Pulmonarius
Pulmonarius
Colombinus
Ostreatus
Cornucopiae
Eryngii
Ostreatus
Sporeless Hybrid
Sporeless Hybrid

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PHOLIOTA AEGERITA

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COPRINUS COMATUS

Somycel 4030*

LENTINUS EDODES (SHII-TA-KE)

Somycel 4055
Somycel 4065*

LEPISTA NUDA

Somycel 4101*

*ON FIRM ORDER



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THE *Mushroom* JOURNAL

June 1991

No 222

EDITORIAL

Financial judgement is crucial to any business and we presume that because you are growing and selling mushrooms, or servicing those who do, your money matters are being correctly attended to.

In 1991, to be in our business, you can be assured that the machinery to suit your operation can be obtained and the cultural information is there for the using with the advice you require there for the employment of all of these. So success within these fields is largely within our own hands. In the market there is a modest growth and the falling price in real terms can, to an extent, be combated by increased efficiency.

This means, then, that our successful financial future depends in the longer term on a sensible pragmatic political approach and here three issues are paramount.

First is the almost domestic matter of the Agricultural Wages Board. For an industry to sit back and accept large pay increases forced upon it which it cannot afford is crass stupidity. We must, therefore, as a matter of urgency find a way to negotiate our own pay and conditions, ideally by leaving the AWB altogether or probably by obtaining a special section as the Scots have done, with our negotiations through the NFU.

Second, we have the Irish question where there has been what could be considered unfair competition. The rights and wrongs are that at the moment the market is over-supplied and any more grant aid either for Northern Ireland or Great Britain would be wrong because it would create jobs in one location only to lose them in another.

Third, we could face at any time a situation which occurs through our membership of the ERM. With the £, the Guilder, the Deutschmark and the Punt together within this discipline we could face a market crisis through a movement of exchange rates. Should the position move against the Dutch in Germany for example, they will switch production into our market if this provides better returns and this would be a disaster for us.

So in this special financial number of the Journal our advice is to read the comments on better management and carry on with the fine tuning.

But put your main thrust behind the director and the Executive who can achieve so much on a political level. In the long term this must be the policy.

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THE WORLD OF MUSHROOMS

A statement from Middlebrook Mushrooms Limited, the United Kingdom's largest producer of fresh mushrooms for the retail multiple market with production units in Yorkshire, Leicestershire and Avon and a mushroom canning operation in Avon sets out their present position.

In response to flat product prices and inflationary cost pressures, Middlebrook has undertaken a thorough review of its operational strategy in order to position itself for further profitable growth.

As a result, the company is to make further investment at Avon to enhance product quality for the fresh markets. This will result in a modest increase in overall production enabling the company fully to maintain supplies to existing customers. At the same time a greater proportion of cannery product is to be mechanically harvested with the whole of the older Gateforth farm being devoted to this operation in future. Unfortunately, this will involve job losses. The company workforce is expected to reduce by about a third by means of both natural wastage and redundancies, with the majority of job losses being in the Selby area. Upon completion, the company will employ about 1000 people.

These moves are designed to strengthen Middlebrook's competitive position in the market and in particular to enhance both product quality and customer service.

Blue Prince also announced their intentions in the following statement.

During recent months, Blue Prince Mushrooms have undertaken a major business review. Taking into consideration the current market situation, increasing production costs and future investment in our business the Company has decided to reduce its operating sites by the closure of the Angmering farm.

Further investment on this site would not give adequate returns and additional

production on the remaining sites at Woking, Horley, Bradford on Avon and Poling will ensure we maintain our competitive place in the industry.

Redundancies at the Angmering site will obviously be kept to the minimum with many people being re-employed at the nearby Poling farm.

The Poling site will be developed with additional packing, cold storage and production facilities to accommodate an increase in volume.

The present Head Office at Station Road, Rustington will also be re-located to the Poling site during the summer of this year.

Chesswood Products Limited announce the appointment of Miles Warnick as Managing Director. S E Poulton, present MD says: "Miles has been with Chesswood for almost three years, firstly as Operations Director for our Suffolk operation and more recently as Operations Director responsible for the Sussex sites. He therefore has a firm grounding in mushroom production, and I am completely confident that he, and the rest of the Chesswood management team, will further consolidate our position as the leading British producer and marketer of mushrooms.

"This change will be effective from 1 June 1991, at which point I will be leaving Chesswood to be Assistant Operations Director of British Bakeries Limited, pending the retirement of the current Operations Director. British Bakeries is the main bakery arm of Ranks Hovis MacDougall, trading primarily under the Mother's Pride, Hovis and Granary brand names."

Fisons is the latest company to offer an information service. Their Growfax Grower Information Tape, says the company, is free and will give a review of



And here is our own Lisa Cartwright waiting at Stamford 0780 66888 to assist with your advertising queries. Whether you want information about an advertisement in any issue, or wish to advertise - from classified staff or sales and wants to display on business - Lisa will be pleased to hear from you.

news and views across the industry. Details from Gill Craig at Fisons, Paper Mill Lane, Ipswich IP8 4BZ.

obtained from Miss H Atkinson, MAFF, Whitehall Place (East Block), London SW1A 2HH.

A new sister association has been formed to serve the interests of growers in India. It is based at the National Centre for Research and Training Chambaghat, Solan-173 213, and will be called The Mushroom Society of India. It intends to publish a journal, organize symposia and to offer a common platform for researchers, development workers and growers in the sub-continent. Membership is open to all interested personnel who can obtain details from the Secretary Dr Dhar at the above address.

The 3rd International Show of Farming and Equipment for Farming (SIAMAT) will be held in Tunisia from 8-12 October 1991. Further details can be

News from around the mushroom world is welcome every month - closing date end of the first week in each month - send yours now!

DIRECTORS NOTES

It will cost you £800 – plus £500 a year

Smells

Hardly a week passes now without a telephone call or letter from a local authority, or private individual, raising the issue of smell.

We must all be aware of the problems caused through release of toxic fumes, with constant publicity about car exhausts and industrial air pollution causing acid rain in neighbouring countries. In mushrooms we are facing similar scrutiny, but now we are moving from enquiries on statutory and public nuisance to yet another area.

The most recent call to me, was from the Local Authority Unit of the Department of the Environment. Under the Environmental Protection Act – Prescribed Processes Regulations (do not stop reading, this is important for you!), compost which is made for sale; even that sold by a grower to his neighbour, brings the composter within these regulations.

What does it mean? That the composter must seek authorisation – TO CONTINUE PROCESSING. The official who spoke to me, has to produce guidelines for all local authorities by September, to ensure consistency of enforcement in all local authority areas. An application to start – or continue – composting, will cost £800, plus an annual fee of £500.

The MGA and its Spawned Composters Federation, will be liaising with the DOE, to help ensure that the guidelines are fair. Legal opinion is being sought to decide whether they consider that sales of spent compost come within the same regulations.

It highlights the importance of the MGA guidelines on dealing with smells and the environment, sent out with a recent edition of Update.

Watch this space for more developments. I wonder how many of our European colleagues, in addition to Holland, have yet been faced with the oncosts of 'air pollution' from composting.

The Market

Among all the discussions on prices offered for direct sales to processors, it was a change this week to receive a call which commented that supplies are tighter to the markets. Wholesale prices this year, according to official statistics, have been higher than in 1990 for all classes of mushrooms.

An indication that if supplies are tight, there is always somebody to fill the gap, comes in the first three months' import statistics. I mentioned in last month's notes that UK/Eire reported a standstill in production for 1991. Their exports to us for Jan/Mar are down 15%, but those for Belgium and Holland are up 51.9 and 29.3% respectively. This still leaves fresh imports 6% lower in 1991. Canned and frozen are also slightly down.

Co-operation

The SLIGHT increase in market prices does not lessen the real need for growers to collaborate in meeting larger orders. On a small scale this is happening. Several growers in South Wales, under the enthusiastic leadership of Ruth Hanmer, are obtaining real benefits in buying and selling by simple co-operation. A group is also nearing the completion of the first stages in collaboration, from N and S of the Thames. Developments proposed in N Yorkshire will also have an impact on the debate for or against co-operation.

Stan Hughes was still adamant, when I talked with him in Italy, that his proposal for better control of wholesale market supplies was still worth working on. The M & P Committee think so also, so maybe there will be sufficient

Ken James



growers interested in longer term profitability, who will take the initiative to make such a scheme work.

Swedish visitor

I was happy to entertain Lars Stridsberg, founder President of the Swedish MGA, in my home this week. He is sure that development in Sweden – to meet competition from Far East supplies – will come from local co-operation, using larger scale composting as a means of ensuring consistency and economy.

ISO 9000

Another set of initials which we have discussed in the MGA over the past year. It is a means of establishing quality management in all aspects of business. Several members are already applying this system and retailers are asking that it should be applied in several areas of supply. Is it just another means of adding to the forest depletion, or should growers take it seriously? Many industries who have already established quality management through ISO 9000, find that the whole of their operation benefits, not just those who gain more work from the paperwork involved. Want to know more? Ring the office, we have details.

Ken I James

May 1991

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Geoff Ganney's **GROWING PAINS**

1st April

Compost ammonia levels have plummeted to .28 which is well below the .45 minimum we feel happy to fill at. Need to gain maximum compost selectivity and that means the correct carbon:nitrogen ratios at spawning. Efforts in arriving at a more well-made compost seem to have been held up by this low ammonia level. Now nitrogen adjustments upwards have been made we will monitor carefully to avoid going the other way. Mind you, one gets the distinct feeling when discussing ammonia levels that analytical techniques (not to mention sampling!!) testing are not as reliable as one would hope.

2nd April

Somehow we seem to have chopped straw as a litterbase to the chicken manure coming in. Must check to see that it is returned to wood shavings as soon as possible. Maybe that is affecting ammonia levels?

3rd April

Watching the after-crop steaming chamber being emptied and the damage occurring to the timber trays, brought back thoughts of using methyl bromide as an after-crop sterilant. With well-sealed plastic sheds it should present little problem in reaching the dose and time levels required. But how effective is the material under commercial conditions? I suppose some farms still use the technique – must see who can give us some information under current conditions. Fred Hayes did much of the pioneering and early research on the subject, must try to get him to put a note together for the Journal. I hope I am NOT trying to get you **over-exposed Fred**...

5th April

Quarterly review of **Agriculture** published by Laurence Gould and Lloyds Bank comments '**Multiples now have a 77% share of the grocery market with the**

five majors holding 62% up from 47% five years ago. It seems likely that in future there will be more emphasis on price with the multiples using their size to advantage against the fragmented fruit and vegetable supply sector in an effort to obtain competitive advantage over each other.'

No doubt the Director would have some thoughts on this subject.

6th April

Too wet, too dry, too deep, too shallow, too lumpy, too fine, too much commercially to cope with!! That's casing for you!! Perhaps we try making it too complicated?

Discussing the pinning of crops in with Peter Munns and the multifactorial relationships. One has compost compression, casing mixtures, moisture levels, humidity and CO₂ relationships – it's a wonder we get them to pin at all!! And don't forget the strain added Peter...

7th April

Compost bulk density increased at the last two fills giving us a far more superior product for off-white hybrids to grow on. Should now see an increase in **mushroom bulk density**, improved keeping quality and appearance. We had gradually become drier in the composting process leading to less effective breakdown and not enough dry matter loss in the yard. Some say it is not necessary!

8th April

Automatic monitoring applicator for casing mycelial supplement now installed and immediately blocked up! Modifications resulted in double rates being applied, no doubt much to the delight of the suppliers! Eventually progress was made and a steady rate of flow was achieved. This lasts exactly until we arrived at the point where we changed from one manufacturer to another when the whole system came to a full stop!! There is both much to learn about the techniques and the need for a modification to the product to ensure uniform mixing in **all**

types of casing mixtures. We are constantly being told we are still airing too late with added supplement. I only wish that those looking could also understand there are great variations in growing techniques with different casing mixtures. Seems to be ever under discussion, this casing layer...

Why do we still need the casing layer? Probably ruffling the surface of the compost and spraying with wallpaper paste would be sufficient. Could be another patent. Don't seem to have had too many mushroom patents in recent years? **Do you recall the plastic bag patent?** Should be a pay-out resembling the 'Mushroom Millions' by now.

9th April

Wonder why there is just not time to cover every aspect of a mushroom production business in the professional way necessary to make it successful? Probably because either we are inefficient or someone keeps changing the packaging!! Was asked why I seemed to be so outspoken on some topics; it's probably like making a compost; the ingredient quality and the way you make it!!

10th April

Problem to get really dry mushrooms this week due mainly to a change in the evaporation pattern and pinning fractionally too deep in the casing layer. With mycelium casing additives, in theory it seems to be generally agreed this can not (**or should not**) happen. But then what is a casing mixture? Or rather, what is our casing mixture by the time it is applied? Anyway we decided to increase the water application on the casing line to make sure it **was wet enough**.

11th April

Green mould growing over some thick stalk bases left attached to the casing layer after a heavy first flush. Maybe that was why we used to '**trash and re-fill**' the casing layer many years ago. Clearly recall doing trial work on this at Fairfield EHS in

1961 (30 years ago!) along with looking at cecid control and casing alternatives. Not so clear now on the significance of what was found as it always seemed with so many treatments (even with correct randomisation) in the same shed, one could easily bias toward that treatment receiving the most favourable environment. Ah well, no doubt today multi-factorial control units overcome this, but I doubt it.

12th April

Form arrived for grower nominations to the HDC panel which without doubt confirmed our worst fears about the cost (whatever it is) of administering HDC monies. Nominations require 6 supporters and the screed runs into four sheets of foolscap and takes fifteen minutes to read and three days to digest. Probably easier to get elected to the House of Lords!!

14th April

Continuing problem with damp mushrooms which are also not holding on the beds for any length of time. Talking with other growers it would appear similar problems can be found throughout and along the country. So what is that; weather, compost, watering, spawn, casing or just bad luck?

15th April

Growers meeting to discuss various aspects of farm hygiene and prophylactic controls for the summer left us extremely surprised how we had changed in past years. Using more critically-applied knowledge it seemed we had eliminated much that previously we had considered to be essential. There is **little doubt** you can do the same job for too long.

16th April

More activity by the contractors extending the A6 trunk road around Market Harborough and past the Marigold farm. Such enormous soil movements from the site and incoming tour of hardcore certainly has an anti-therapeutic effect on one's sleep!

17th April

Daily Telegraph environmental officer explains that; 'A delicate mushroom (is there anything else!?) for which West End gourmets pay £12-£14 a plate is to be harvested in an attempt to save the "Trapogen", an inhabitant of the Himalayan forest area of Western Tragopan and which is the world's rarest pheasant. An area in Indus Kohistan which has morels growing in profusion and where the never-photographed Trapogen thrives is due for destruction and conservationists hope that harvesting morels may bring about its preservation.' **These edible fungi have far reaching importance.**

18th April

No question our pre-wetted compost is too dry at stacking; also not enough top-up water is being used in the stacks. You need to be away from the daily routine to notice the gradual and unpredictable changes that there have been. Certainly it seems that you can spend too long in close daily proximity to the 'happenings'.

19th April

Looked at 'Mastertrap' a recently-developed physical catching strip for monitoring low levels of leaf-minor and tobacco whitefly in glasshouse nurseries. It is marketed by Fargro and looks to be ideal for monitoring mushroom flies and no doubt with correct numbers of strips in relation to a cubic area likely outbreaks of sciarids would be readily forecast. We will try it and see!

21st April

Looking at today's turning, to be filled on Tuesday, it is obvious we are going to be too short filling; at last we have the bulk density!! Now we have to re-adjust either the timing schedules or pre-wet moves. Always find Sunday a good day to spend an hour looking at the composting activities while it is relatively quiet with no people or traffic around. Not to mention the telephone which these days I tend not to answer anyway.

Have every suspicion that this summer, composting could become a major cropping feature due to rapid breakdown. We will see.

22nd April

Having had a detailed look around the three farms today I have decided either I must be mellowing, getting soft or the climate has changed.

23rd April

Institute of Directors Annual Convention attendance was rewarded with the most excellent speeches and a day to unwind, think and discuss at ease some of today's mushroom growing problems. Made me think to look at the MGA Bulletin for April 1951.

24th April

Did just that. I found that the Research Fund had a minimum target of £1,500 (£19,500 today). A review of Mushroom Science I the first conference, held in Peterborough in 1950. Stanley Middlebrook speaks his mind on Bulletin 34 HMSO on Mushroom Growing and is also recording his diary. Ron Edwards is made a life Honourary Member. Fred Atkins thinks over pre-packaging (40 years ago!) **And so on. There is much topical discussion and advertising** especially by market wholesalers, spawn and manure suppliers. Being prompted to go to last page I find an advert by W. Stevens, Stable Manure Suppliers who's trademark was this ditty:

*From its warm and steamy bed
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"If you want us fine and strong
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It gives the maximum of FLUSHES - whatever type of bed."
So spoke the little MUSHROOM.*

*And he knows what is the best,
Just buy the SPAWN that you prefer,
STEVENS' Long Straw does the rest.*

Ed. I hope there is no copyright? (There is no copyright in a fair quote for comment - Ed.)

26th April

W W Casing Trays write with regard to their Bag Span Casing Tray and suggesting we try them at Woodhurst. Done! In fact could be useful to gauge depths on our trays, we will try!

28th April

Strange how mushrooms are expected to grow exactly to size, weight, shape and colour and to meet the specifications laid down on paper. Also strange when it doesn't quite happen that way that there is an element of surprise.

29th April

David Tolhurst writes with

regard to bag growing and has given me licence to use his comments. They will undoubtedly help in discussions on the subject!

Growing Pains

Feb 3rd

Couldn't be more true.

Feb 4th

We are cropping from 48lbs pressed bags around 8lbs of mushrooms in the first 2 flushes and looking for 10lbs in 4. We came to the same conclusion as you and have just increased the casing depth from 5cm to just under 6cm. We spawn run for 16 days because I want the compost completely and fully run before casing. The reason for this is that all the heat during the growth of spawn-run has finished and I can run the case - run air temp at 70°F right from the beginning to fresh air time giving me the best condition to get the spawn as fully run as possible in the casing. I also deep ruffle twice, 2 days apart. This gives me 2 occasions when I

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GROWING PAINS

can ensure the casing is even – although the main reason is to give us the strongest run possible in the casing before airing. On a large scale deep ruffling may not be possible due to the sheer numbers of bags. I can only see in that case the possibility of flat hand light ruffling and relevering of the casing at the time when the mycelium is at or near the surface as we used to do with the old spawn strains. My fear of casing at 6cm on a big bag farm, where relevering may not be possible, is that there could be many places where the casing ends up deeper and few mushrooms then appearing. Just a thought.

Feb 6th

We have been on Hauser 9.3 during the winter and have experienced the same situation as much as 48 hours late with the second flush. I came to the conclusion it's been the weather. Can't

prove it but sure I am right.

Feb 11th

Thanks for the mention. Now using only 5 sheds for growing doing 255 bags (5.5 tons) fill per fortnight. I treat the farm as an experimental bag unit. Most of the work is done by me or with me working with one other person giving me total control over the growing. We have established what we have to do to get a crop of around 550lb to the tonne in the first 2 flushes. I am then able to make certain that we repeat this with every crop by making sure every single operation is done correctly. Part of this is total conviction that a level casing right from the beginning is crucial, for without it you cannot have even watering for even pump.

Feb 17th

Have seen the same in Italy. The historical reason I think is that many European countries

have always bought fresh veg, fruit etc on what it tastes like not what it looks like. Eg. the big crinkly Italian tomatoes look awful but terrific flavour.

Feb 18th

Same here. We use 1oz sporgon, 1oz hymush second day after casing on 255 bags. No other chemicals used on farm. No cook-out, just empty and high pressure water hose-out. No verticillium or cobwebs or dry rubble on farm, and virtually no fly.

Feb 20th

My thoughts on tunnel peak heating – with the short straw we have not had for so long – is that is must be highly dangerous to be 75% or over with the water content. Over-wet compost plus at times the job of cleaning the nets not being done properly could well be the reason for so much of the green moulds we have seen over the years. We find pressing the bags we do not need to be more than 68% water at spawning; 66% is ok.

Feb 25th

I have just had a long chat to John Peaker, he once again reiterated the importance of pressing the compost at spawning. He was in great form.

Most interesting comments David and **many thanks** for letting me use them. No doubt you will be voted onto the HDC panel!!

30th April

Growth appears to be slow this week with no signs of the vigour we would have expected at this time of year. Still it has not exactly been heat-wave conditions and compared with last year the season is weeks behind. Generally seems to be a shortage of mushrooms or from the increasing enquiries for product it would appear to be the case. A time to reflect on production techniques to ensure that all is as it should be and no unplanned changes have crept into the system. It continually happens!!

Australian compost workshop proceedings

Reviewed by Peter Flegg

Memories and impressions of this meeting were reported in the July 1990 Mushroom Journal by Geoff Ganney. Now available is the official account of the Proceedings.

Totalling a little over 160 pages, this handy volume has two main parts. Just over half of the book is taken up with reports from the Workshop Sessions. There are five reports in this section each reviewing a particular aspect of composts and composting for mushroom production and each concluding with a comprehensive list of the relevant publications referred to in the text.

The physical factors involved in composting are reviewed by F. C. Miller and K. R. Dahlberg and cover such topics as the matrix structure, heat production, temperature, the management of heat and temperature moisture, oxygen and bulk density. As the authors conclude, the topic is extremely complex. General agreement on the relative importance of the various factors is lacking and probably there is no one single set of ideal conditions. However, the authors are optimistic that in the near future research will clarify the fundamental requirements which will be important to process control and traditional composting methods.

B. Stone and J. Laborde bring together thoughts on the chemical aspects in a series of questions which they address as they review the literature. In the discussion of their final question, 'is composting an absolute requirement?', they point out that although mushrooms can be fruited on uncomposted, sterile substrates, to date for practical, commercial mushroom growing, composting, under

non-sterile conditions to create a selective growth medium, is a pre-requisite.

In a report on biological aspects of composting, T. R. Fermor and B. J. Macauley conclude with the recommendations on this topic of the workshop groups. Environmental Controlled Composting (ECC) was much discussed. The main aim, it was concluded, should be to develop a commercially viable process. Among others, an important problem highlighted is the need for reliable and standardised methods of microbial isolation and identification.

It does not require long experience with traditional mushroom composting to appreciate the considerable production (and loss) of heat and carbon dioxide which occurs during phase I. Over time, composting durations have been and are being reduced with consequent reductions in loss (waste) of energy and lower production of waste gases. This is not an area that has been well researched and the authors, E. Harper, F. C. Miller and S. Stuart, in discussing the energy balance of mushroom composting and production, conclude that work on ECC should be directed towards increasing the proportion of the gross energy in compost which is available for mushroom growth.

Following on from the previous paper, J. Laborde discusses the trend towards controlled substrate preparation and looks briefly, and optimistically, to the future.

The Seminar Sessions dealt with social implications of composting and some commercial solutions. M. O'Neil discusses the effects of exposure to composting activities on human health and J. Bradwell discusses problems of

smell, noise and waste water together with suggestions on how to deal with them. Among discussion of the commercial solutions to such problems, H. Kuhre describes their indoor composting system and how they had to develop it and M. O'Brien describes the enforced relocation of a major composting operation.

Also included in this section are five brief reports on the commercial situation in Holland, Ireland, S. E. Asia and the UK with special reference to mushroom composting in relation to environmental pressures.

Finally, under the heading of 'general topics', M. Wach examines the prospects for collaboration of international research, the ISMS paper on Compost Terminology by P. B. Flegg and W. A. Hayes is reproduced and W. A. Hayes discusses the functions of ISMS and its future role.

The editor, Tan Nair, the organising committee, authors and workshop participants are to be congratulated for their respective contributions to this useful and informative document. Tan Nair in his editorial note, states that the articles contained within these 'Proceedings' depict the current state of knowledge on compost technology and incorporate the valuable experience and thinking exchanged by the workshop participants. As such they hold considerable value to mushroom composters worldwide.

If you are inclined to think that at \$AUS 125.00 the book is a trifle expensive, reflect on this. Compared with actual attendance at the workshop/seminar, to possess this volume is a good alternative and to most people a considerably cheaper one.



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Glasgow Confere

September 11-14th

**Moat House International Hotel, Congress Road,
Glasgow G3 8QT. Tel: 041 204 0733. Fax: 041 221
2022**

The MGA Conference will offer a wonderful opportunity to transfer your thinking from the scientific atmosphere in Dublin, to the application of science in the mushroom business. Growers will find the journey North, or across the Irish Sea, a worthwhile one. Glasgow is one of the outstanding cities of the Victorian period.

Learn from discussion with your colleagues in the industry

Biological control and compost improvements are high on every grower's list of priorities. We shall hold discussion groups, using growers and scientists who are at the centre of research and practical application, to ensure that your business can benefit from these group discussions.

A sample of the speakers

Professor John Smith of Strathclyde University, who is an international authority on applied bio-technology, will review the future of speciality species.

Another look forward – to the European Market, post 1992, will be the task of Susan Shaw, Professor of Marketing at Strathclyde University. Professor Shaw has just completed a major project on the mushroom market, sponsored by Safeway, a leading supermarket in the UK.

Re-use of compost for casing or for sale, will be the subject for Dr Robin Szmidt of West of Scotland Agricultural College. Dr Szmidt is working on this project for the mushroom panel of the British Horticultural Development Council.

Sinden Award

Gerard Derks, who for over 20 years has been working as consultant and technical collaborator, with Sgr Bruno Francescutti in Italy, has been chosen as the 1991 Sinden Award winner. They are continuing their exciting developments on a compost system, which is both environmentally friendly and produces high quality compost. Gerard Derks will give the Sinden Award lecture this year.

Trade Exhibition

The importance of the trade exhibition grows every year. We expect over 40 exhibitors, dealing with every aspect of the mushroom industry, from spawn to compost and packaging. A visit to the trade exhibition will be a must for all delegates.

It will be held in the superb purpose-built exhibition hall at the Moat House, on Thursday and Friday afternoon. If you want to book a stand, as a member of the Mushroom Allied Trades Association, please contact the MGA office as soon as possible. If you want to know more about the Mushroom Allied Trades Association, contact chairman, Tony Russell, on 0692 582225 (tel) or 0692 581848 (fax), or write to him at Priorlucky Catfield, Gt Yarmouth, Norfolk NR29 5BQ.

Farm walk

A visit to Fenton Barnes (a part of the Monaghan Group of Ireland) at their Scottish operation near North Berwick, will be the opportunity to see compost and bag growing, on the largest bag growing farm in the UK.

the 1991

Social programme in the best of Scottish traditions

Wednesday Tee Off

The Conference will tee off with golf at the attractive Gleddock Club at Langbank, Renfrewshire. Tees will be reserved from 12.30pm.

Spectator Sport

For non-golfers a visit to the world-famous Burrell Collection in Glasgow is arranged. The ladies will include the Burrell in their Thursday visit, but you can easily spend a day there.

Out of the Bunker

With the Chairman's Reception in the evening followed by a Ceilidh, a traditional Scottish evening of food, fun, music, dancing and, of course, the opportunity to sample the local liquid gold!

Thursday

On the Green

Where better than the magnificent City Chambers, a building of great historical and architectural interest. As guests of the Lord Provost of Glasgow, there will be a Civic Reception, Banquet and entertainment, which will guarantee a unique night to remember.

Friday

The Nineteenth Hole!

A kilned banquet, with traditional Scottish humour in the speaker, much fun and dancing until the last dram is drunk!

Ladies

Ladies' Day Captain, Maggie Dumbreck, will be on hand – with an official personal guide, for a visit to the world-famous Burrell Collection, home of the Glasgow School of painting, followed by lunch and a tour of Pollok House, an 18th century Palladian house which has been preserved as a domestic museum.

Glasgow

Glasgow, 1990 European City of Culture, is fascinating, full of interest, and the city shopping centre is within easy reach of the Conference Hotel.

Hotel Bookings

Hotel bookings should be made direct to the Conference Hotel as soon as possible. We have reserved a number of rooms at the University of Strathclyde, within 5 minutes' walk of the conference hotel, at a cost of £15.85 per person B&B for those who require more modest accommodation. If you wish to book these you should contact the university direct on 041 533 4148. Alternatively, contact the Greater Glasgow Tourist Board on 041 204 4480 who have a list of hotels at various prices and who will be happy to help you make your booking.

Meanwhile, take advantage of our special offer;

BOOK EARLY AND GET 10% DISCOUNT ON YOUR DELEGATE TICKET!!

Booking forms are over the page.

1991 MGA Conference and Exhibition Glasgow 11-14th September 1991

WHAT VALUE FOR MONEY!

Activities included in each delegate category are:

		Full Delegate	Accomp. Lady	Thursday Delegate	Friday Delegate	Farm Walk Delegate
(All prices include VAT)		£171.00	£88.00	£70.50	£70.50	£53.00
Wed	Chairman's Reception	●	●			
	Ceilidh with supper	●	●			
Thurs	Conference Sessions	●	●	●		
	Lunch	●		●		
	Trade Exhibition	●	●	●		
	Civic Reception and Banquet including transport	●	●			
Friday	Conference Sessions	●	●		●	
	Lunch	●	●		●	
	Trade Exhibition	●	●		●	
Sat	Farm Walk	●	●	●	●	●
	Lunch	●	●	●	●	●
	Transport	●	●	●	●	●

If you book, and payment is received, by Friday 9th August 1991, you receive a special discount on delegate fees.

Additional activities, at separate cost: (all prices include VAT).

Wed	Golf	£34.00
	Visit to Burrell Collection	£ 5.50
Thurs	Ladies' Outing, incl Lunch	£30.50
	Ladies' lunch in hotel	£14.00
	Civic Reception and Banquet (additional cost to day delegates only)	£20.00
Fri	Conference Banquet	£28.50

Please make your booking for additional activities on the Conference Booking Form.

Attention! – Mushroom Allied Trade Association

Booking an exhibition stand includes an allocation of full delegate tickets. A booking form specifically for this will be sent to each MATA member. (Please see, also, note for Trade Exhibitors at bottom of Conference Booking Form.)

Please read the above information carefully before completing the booking form.

CONFERENCE BOOKING FORM

(Please tick column for tickets required)

ALL PRICES ARE INCLUSIVE OF VAT @ 17.5%
THERE WILL BE A 10% DISCOUNT ON
DELEGATE FEES, WHERE PAYMENT IS
RECEIVED BY FRIDAY, 9 AUGUST 1991

DELEGATE'S NAME*

(Please print each name as you wish it
to appear on name badge.)

DELEGATE TICKETS (prices include VAT)						EXTRA ACTIVITIES (prices include VAT)							Farm Walk**	
Full Delegate	Thursday Day Delegate	Friday Day Delegate	Accompanying Lady	Saturday Delegate (Farm Walk & Lunch)	Total for Delegate Tickets (Column A) £	Wednesday	Thursday		Friday	Total for Extra Activities (Column B) £	Attending	Transport Required		
						Golf Tournament	Burrell Collection Visit	Ladies' Outing and Lunch OR Lunch at Hotel	Civic Reception (Thurs/Fri Delegates)				Conference Banquet	
£ 171.00	£ 70.50	£ 70.50	£ 88.00	£ 53.00		£ 34.00	£ 5.50	£ 30.50	£ 14.00	£ 20.00	£ 28.50			

Sub-total Column A £

Less 10% early booking discount £

Total Column A £

Total Column B £

Grand Total (Column A plus Column B) £

* IMPORTANT NOTE FOR EXHIBITING ALLIED TRADE MEMBERS

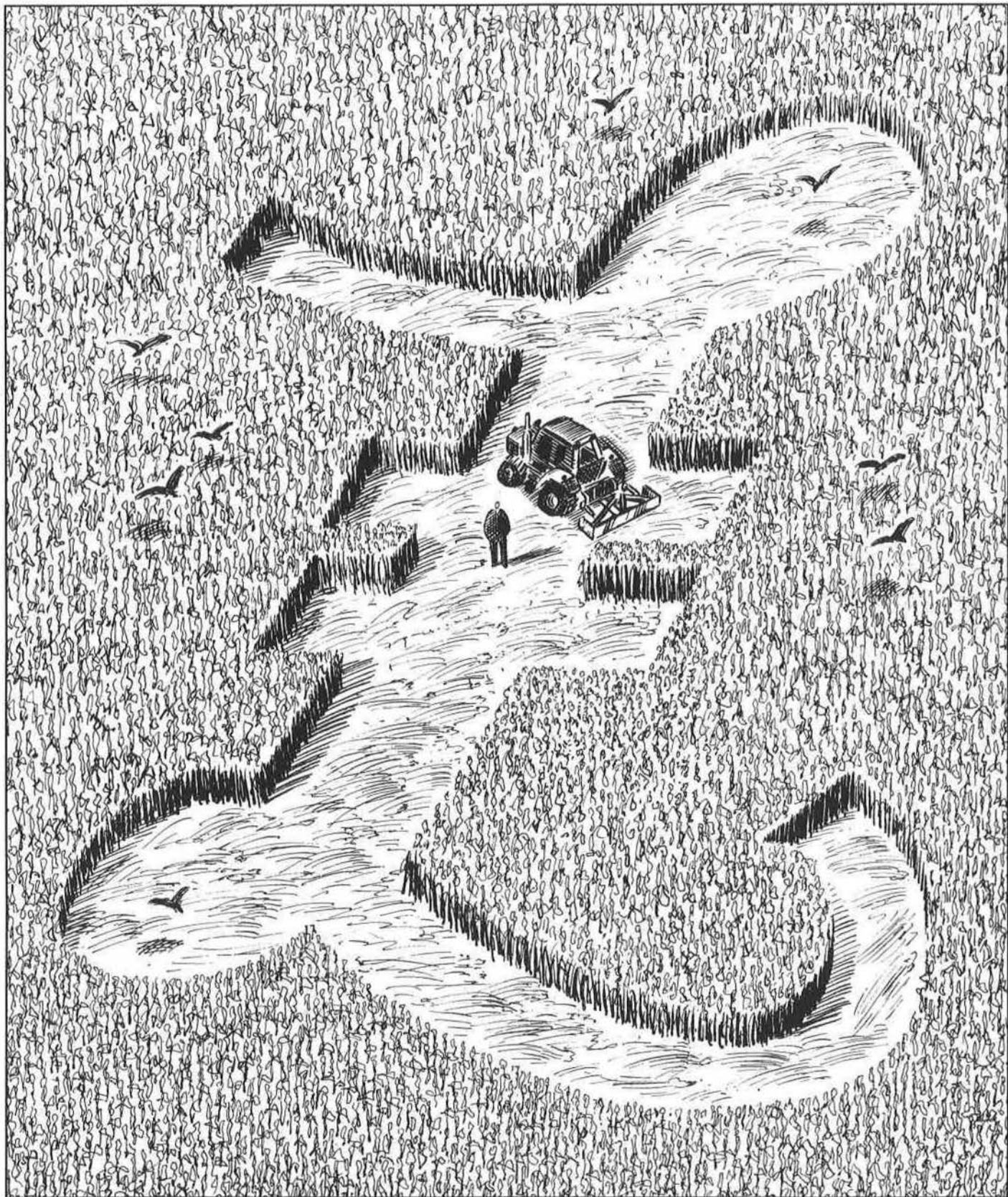
Exhibiting Members will receive a specific allocation of full delegate tickets with each exhibition space booked. THE COST OF THESE TICKETS IS INCLUDED IN THE CHARGE FOR THE STAND SPACE AND, THEREFORE, MUST **NOT** BE INCLUDED ON THIS BOOKING FORM. USE THIS FORM FOR ANY **ADDITIONAL** DELEGATE TICKETS AND ANY EXTRA ACTIVITIES REQUIRED. Please put an asterisk (*) after any exhibiting member's name.

Fees for additional delegate tickets and any extra activities should be remitted with this form.

** Would **all** delegates attending Farm Walk please tick as appropriate.

COMPANY	
ADDRESS	
TEL NO	FAX NO
SIGNED	

PLEASE RETURN THIS FORM, TOGETHER WITH YOUR CHEQUE MADE PAYABLE TO: THE MUSHROOM GROWERS' ASSOCIATION, 2 ST PAULS STREET, STAMFORD, Lincs. PE9 2BE, BY 9 AUGUST 1991. If you have any queries, please contact Marion Soar on 0780-66888 (Tel) or 0780-66558 (Fax).



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 **NatWest** ...*here to make life easier*

This month we look at finance generally and this NatWest contribution sets out guidelines on...

Raising and managing finance for mushroom farming

What the Bank Manager needs to know

If the pace of life is getting faster, then the pace of change in agriculture is moving equally quickly. Success in a changing environment inevitably requires the acceptance and adaptation of new techniques and practices. This is certainly the case in the banking and finance industry. The same can be said for the agricultural and horticultural industry – the dynamic nature of the mushroom farming sector is a prime example.

To the casual observer the growth in mushroom production over the last decade has been phenomenal. Relative to other sectors of horticultural and agricultural production, the value of UK mushroom output, estimated at £173M for 1990, has grown at nearly twice the rate of all vegetable production. With rates of return on total capital employed, estimated at 20%+ in some low cost tunnel systems, it is not surprising to see the huge interest now being shown by some mainstream farmers investigating potential diversification opportunities.

The industry has shown the same signs of 'polarisation' in business unit size as mainstream agriculture, if not more so. The larger producers are more able to serve the growing volumes required by the supermarket sector with the three largest producers now contributing more than 50% of the total market.

But there is still a resultant niche market for locally produced fresh products, which can be effectively supplied by 'family-based' low cost units. However, it does appear that the Irish producers having pioneered the satellite farm system have now gained the marketing ability and efficiency to benefit most from the UK market growth. There is speculation that the same production methods would also work well in the UK, provided the transition is handled carefully and a price collapse, due to an excessive increase in supply, is avoided.

For growers wishing to change their production systems, or new growers expanding to meet a market demand,

there are some basic ground rules, when considering raising and controlling the necessary finance.

For most family based farm businesses the first step is usually to talk over the whole project with your local bank manager. Bear in mind that your bank manager does wish to lend money, despite any rumours to the contrary, but will want some assurance that the money is being invested in a profitable enterprise which is able to meet interest repayments and provide for your own needs.

Presenting a good case to your bank manager is the best possible first step to obtaining the finance your business needs. Nothing will impress him more than a well thought out case with all the facts properly marshalled and clearly presented.

Check List

About you

If you are starting out for the first time, it is likely that you have been thinking over this venture for quite a while, fired with enthusiasm and a commitment to succeed. Your presentation should communicate to the bank manager the essence of this commitment and give him the confidence to say 'yes'. Remember, a poor presentation of a sound proposition can cause delay and frustration.

The bank manager will want to know something about you, as he is lending to a person first and foremost. He will want to know if you have the abilities to run the new business including any qualifications or experience within the various parts of your enterprise. Your enthusiasm is very much an asset in your presentation, since it proves a will be make sacrifices to reach your goal. He will want to be sure that you have the full support of your family, who will also have to share the initial sacrifices which are always part of setting up a new business.

The bank manager will also want to know about any other people involved. If you need staff, are they available locally with the necessary training?, will there be

someone who could manage things in your absence?

About your business

Unfortunately, optimism is not enough and you will have to try to substantiate your plans. The presentation should be as clear and concise as possible but cover all the essential questions. The enterprise should be carefully defined or explained – including all the practical aspects and timings involved. You should be aware of potential problems that you are likely to encounter and any special resources required to set up the enterprise. Diagrams, photographs or illustrations can help particularly when property purchase or site conversion is necessary.

Consideration should be given to any planning permission requirements (particularly when a "change of land use" is involved), licencing from the local authority and business rating assessment and finally, insurance cover (including buildings, and public liability).

It is worth thinking about contingency plans just in case there are any setbacks.

The market

It is essential that you have identified your market and established that there is a demand for your product, in the catchment area surrounding your site if you are selling locally. If you intend to take premises, these will be of great interest to the bank manager, particularly its location within the market, the availability of services, access, power, water etc, the cost of rent (if appropriate), heating and lighting, and size. Is there sufficient available land for the operation that you have in mind and the growth that you anticipate? If you are buying a purpose built unit, such as polytunnel, he will need to see that all the associated site preparation, heating, lighting, ventilation work has been considered.

You should investigate any likely competitors and look to the possible growth of your business and your ability to sustain that growth. Do you have any special

selling points or competitive advantages?

About your financial projections

It is very important that you identify exactly how much money will be needed. Many people approaching a bank manager ask for too little, thinking he will be more willing to agree to a lower figure. First assess your capital expenditure requirements to build or convert the property and equip it as necessary. These items should be funded over a term to match the useful life of the unit in some form of structured loan. The other finance you need is "working capital" to fund the purchase of inputs such as compost, and to cover other running costs, until the sales commence and payment is received. This may involve an overdraft facility. By producing a cashflow forecast for each year, you can identify how much you require and when.

The forecast should be based on your budgets and will highlight any peak requirements particularly during start-up periods. The budgets should be as realistic as possible and based on as much factual information as possible. Hopefully, this will highlight any sensitive areas in the costings including a 'break-even' point and provide an indication of the business's ability to repay any loans.

For those businesses already up and running, financial control is an integral part of sound business management. By using an adequate monitoring system, to highlight month by month variances, it does allow you to keep a firm grip on cost control and profitability levels. The key process of good financial management is to monitor, analyse and act.

Your contribution

In most applications, the bank manager will expect you to have a personal stake in the business. There are no set guidelines and each situation is looked at individually. The bank manager will need to be assured that you are able to pay the interest on and repay the capital element of the amount borrowed. He may also ask for security, usually in the form of a mortgage on property, and/or any insurance policies. The Government-backed Loan Guarantee Scheme now covers horticulture, and provides guarantees to banks, where the borrower is unable to provide any other tangible security to support a new proposition. Further details are available from all banks. For eligible farmers, grant aid is usually available through the MAFF Farm Diversification Grant Scheme (25% towards capital expenditure, 50% towards feasibility studies, 40% towards marketing costs subject to limits).

As you will see, there is a great deal of work to do before you make the appointment to meet the bank manager and it will help if you make your approach in plenty of time. If at all possible, send him a copy of your plans prior to your meeting, so that he might gain an insight into your proposition. It will give him an opportunity to come back to you for further information if required. The help of a professional consultant is well worth considering. A comprehensive feasibility report would cover many of the areas mentioned above and give the bank manager much more confidence in the overall proposition.

Having raised the finance and started production there is a continuing need for good business planning. The importance of regular financial monitoring, using cash flows and budgets was mentioned earlier. Those already involved in the industry know only too well the seasonal nature of production and demand, and the consequent effects on price throughout the year. They would also agree that achieving and maintaining an average selling price above break even level is not that easy either requiring excellent technical and marketing skills. Having discussed the important contribution that good financial planning and management can make to profitability, it is worth making a final observation on the marketing aspects.

The 'satellite' system was mentioned earlier, and I feel the essence of co-operative organisation and marketing has much to commend itself. On the continent, co-operatives have provided the strength and salvation to many rural based small farm businesses. In the face of fewer, larger and more powerful food retailers, co-operatives will be worthwhile.

Good marketing is essential; a collective effort to develop demand still further and supply it with home grown produce is an objective for the whole industry to undertake. There are still many factors which could underpin market growth. Amongst these are strong promotion, relative cheapness as a source of nutritional food, the growth in the convenience food sector and catering industry and that nearly half the UK householders still do not consume mushrooms regularly. The development of new varieties such as browns, organics and exotics like *Shiitake*, should help stimulate that demand.

It is up to the UK producers to make the most of these opportunities, and this will undoubtedly require high standards of business and financial management together with excellent marketing skills and probably a greater degree of co-operation.

Grant Aid and Special Lending schemes

Limited grant aid is available, depending upon the individual circumstances of the proposal. It may be worthwhile contacting the following agencies:-

- MAFF Farm Diversification Grant Scheme (via local MAFF/ADAS office) provides capital (25%), marketing (40%) and feasibility study (50%) grant aid for farmers diversifying away from agriculture/horticulture.

- Local Authorities

There are often schemes run by the individual local authorities, particularly where job creation for young/unemployed people is involved.

The major banks provide a range of different lending schemes and early contact with your branch manager is recommended. Brief details of the usual products and services are as follows;

- Bank overdraft, as a general principle this will usually accommodate the day to day financing of the running costs, ie the working capital requirements. The flexibility of an overdraft means that the customer only pays interest, at an agreed margin above base rate, on the amount borrowed on a day to day basis.

- Long term loan finance is more suitable for long term capital expenditure. The cost of the asset can be repaid over the same term as its useful life and if an initial establishment period exists, then a capital repayment holiday could be considered, allowing the business to get onto its feet. Repayment timings can usually be arranged to coincide with income receipts to help the cashflow situation.

- Many banks provide structured loans where interest rate and repayment amount are fixed throughout the complete term of the loan, which provides certainty to the budgeting process. Capital repayment holidays can sometimes be arranged to ease initial cashflow pressures during the start-up period.

Most of the major banks also provide leasing facilities and comprehensive insurance services.

Remember, that while the foregoing may seem a tall order to a new business just to get finance, it can form the basis of a successful long term relationship with your bank. Above all, the bank wants to be your financial partner in a successful venture.

For further details please contact:
National Westminster Bank PLC
Agricultural Office
3rd Floor
24 Broadgate
Coventry CV1 1NB
(Tel: 0203 553721)

Robert Brown of Woodlands Mushroom Farm Uppingham, Essex, explains his ...

Personal approach to finance

Imagine a company makes a car that sells at £10,000. They have a problem as only 60% of their product can be sold to achieve this profitable price so they send the rest to Arthur Daley.

"Cor blimy guv, could only get five big ones for those motors - lot of them about you know."

I can't imagine any car company doing this, yet it is the way that most mushroom growers finance their business. The car company has an advantage over us for it can store its product in some large field for months. So how do we keep the stuff from the door, on past experience?

We know the price and quantity of our contract sales, so we balance this with the price returns from market, to end up with a profit. This works fine until too many mushrooms end up in the wholesale markets and the price is driven down so profit becomes marginal. This situation would be OK, but after a time our contract customers become restless, and so we now have difficulty in raising our prices to the level required to make a profit to replace machinery and buildings.

Then to top it all the government decides to push the economy into recession. This cuts into the contract customers, especially restaurants. So this is where we are; with quite a number of growers going out of business.

What can be done? Cut production to push the market price up? Who is going to go first? Everyone will wait for someone else and it would only bring in more imports. Cut the cost of production? This can usually only be done nowadays by investment in labour-saving equipment. Most growers are not in a position to borrow large sums of money or pay it back.

Improve quality? We know that this works to increase the price. Improve grading? It also works, for the Dutch and Irish growers have shown this to our detriment. Improved marketing? This works too, but most of us do not seem to have the time to do it while we are busy growing and if we implement better standards of quality and grading have even less time. We need to employ people to do this. Large growers, Dutch and Irish for example, work this way and they have

achieved a much higher percentage of contract customers with better prices. Co-operation between the small growers and possibly medium growers would benefit us all. Then we can talk about the finance, because with a bit of luck we will have some.

Now what have I personally done about this; to put my money where my mouth is? In 1987 I made a decision that my farm would come to the end of its life in about a year. The sheds, machinery, trays all dated back to 1969 and before. I was filling 1800 sq. ft. every three weeks. This was not a stable production system to increase the percentage of contract customers. Going on to fortnightly fill would help.

Next was to decide on a system, trays, shelves or bags. Bags were the first to be dismissed, for the area I had for production was limited. I have twice had a prolapsed disc, so the thought of moving all those bags about filled me with dread. I had not seen a shelf farm so I visited Simon Newell on his completely Dutch set-up. I was impressed by the simplicity of not having to move the compost each time it was processed. After this John Orr kindly showed me around his farm, built on the shelf system, but he had kept the cost down by using tunnels.

This now looked like a system for keeping the costs down and giving greater flexibility, so I visited Hensby Composts, farm which was nearing completion, again using tunnels. I now had to sit down to cost and decide on a system. The trays were going to be more expensive because of the price of all the machinery. The shelves themselves would be more expensive but the thought of having not to take a hammer to them for the next 20 years seemed like paradise.

Next a visit to my bank manager to see what my prospects were like for borrowing some money. They turned out to be good as the farm had good asset value, 30 years with the same bank had built up a knowledge of the way our business was run. My plans to improve quantity and quality were music to a bank manager's ears.

Now for the difficult part putting it all into operation. Three of our six tunnels were built behind our existing sheds. Then the four old sheds were to be demolished to put up the next three tunnels. This left us with three tunnels for some months. Then because the company I had originally contracted with for tunnels and machinery failed after 15 months over the completion of the first three tunnels and shelves let alone any machinery, I was forced to contract the work to another company.

A month later Heat Pump Services, who were supplying the environmental control system ceased to trade.

After all this the project was finally completed in June 1990 two years from when I had first started clearing the site. I now had six tunnels with 2,230 sq ft. in each filling 25 tonnes of phase one averaging 12,500 pounds of mushrooms per crop.

The cost for all this, a great deal of blood, sweat, tears and £170,000. Labour and maintenance costs have dropped. Picking rates have increased because of the better working environment.

None of this would have been possible without the backing of my bank who understood the difficulties of mushroom growing: that one cannot always put a figure on everything; some things are just down to historical judgement.

Now on to marketing to improve my finances. Seeing that the only way for a small grower to improve his marketing, as the Dutch have proved, was to cooperate, myself and four growers have done this by setting up a cooperative marketing group under the name of Springfield Mushrooms. A number of growers in Norfolk and Suffolk have set up a cooperative under the name of Waveney.

The future of mushroom growing in this country relies upon making sound financial judgement. This does not mean spending vast sums of money but getting the best price for our produce which in turn means more control over to whom we give our mushrooms to sell.

The rational choice of future- oriented growers.

Dalsem-Veciap : a household word whenever mushroom growing requires advanced management.
In both small-scale and large-scale mushroom production.

Of course, this reputation did not come naturally : Dalsem-Veciap owes its success to a unique combination of qualities. We have a thorough knowledge of current cultivation techniques, and skilled staff of our own to realize the buildings, machinery, equipment and automation systems, thus creating the prerequisites for efficient and cost-conscious production. Because of this Dalsem-Veciap is in an excellent position for providing the mushroom growers with an extensive and flexible package of services.

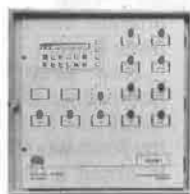
We can supply anything between advice on cultivation techniques and the "turn-key" delivery of complete cultivation plants: we furnish everything, from a simple mushroom knife up to the computer-controlled systems for production monitoring.



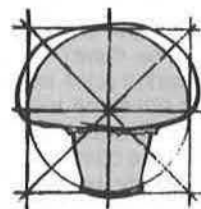
VEC Computers champions in champignon growing.

The VEC computer guarantees you optimum conditions for reliable surveillance of the mushroom cultivation process in all stages. After protracted tests in our own experimental cultivation plant the VEC system has started its persuasive advance in both smaller and large-scale mushroom farms.

The system consists of a VEC-12 personal computer centrally located in the farm premises, which is connected with a satellite terminal at each growing room. Thus it is possible to control the conditions for the individual rooms.



If you want reference addresses or more detailed information about the specific possibilities for your firm: don't hesitate to contact us.



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OUR RESEARCH IS YOUR SUCCESS

M N Cottle of Alexander Stenhouse explains ...

The insurance needs of a mushroom grower

Every company or organisation, regardless of the trade or industry in which it operates and competes, is exposed to certain risks which can affect adversely the productivity of the company and, therefore, its profit. This general principle equally applies to the mushroom grower, who must be fully aware of these risk exposures and the availability of insurance to cover them. He can then decide whether to insure or self retain the identified risks, with the decision based on the risk exposure of his own business, the availability of cover and the cost involved.

Three main areas

There are various insurance exposures specifically appropriate to the grower and these can be dealt with under three main headings:

- a) statutory requirements;
- b) essential covers;
- c) other risks.

Statutory requirements

All growers must cover the following risks:

Employer's liability

This covers your legal liability for any injury, illness or disease suffered by employees arising out of and in the course of the business. A Certificate of Employers Liability insurance must be displayed to comply with statutory obligations.

Growers are faced increasingly with employees' claims relating to back injuries caused by picking, as well as to falls on steps made slippery by moist atmospheric conditions and mushroom debris.

Motor

Cover for third party injury is a minimum requirement under the Road Traffic Act and this cover is always included in the usual methods of arranging motor insurance which are:

- third party only (which also includes third party property damage);

- third party as above including fire and theft;

- comprehensive.

Whilst it is only required by law to insure the minimum risk, it is usual to insure comprehensively to include accidental damage, often with an excess.

Engineering

Many items of pressure plant and lifting tackle require statutory inspection by an authorised body and this is often undertaken by an insurance company's engineer. Inspection certificates need to be retained as they may be required at some future date. Examples of statutory plant are:

- air receivers;
- steam pressure plant;
- lifting equipment.

Essential covers

Detailed here are the major risks which may apply to any Company, but more specifically, to the mushroom grower. If the following events were to occur it could have a serious detrimental effect on the business and, given the worst possible scenario, may necessitate closure.

Fire and perils

The "catastrophe" perils are fire, lightning, aircraft and explosion. A major fire for example may involve the loss of a substantial amount of buildings, machinery and stock, and lightning damage may cause serious disruption to computer equipment controlling the environment within the growing sheds.

Storm damage

Whilst this is not deemed to be a "catastrophe" peril, because of today's non standard construction of buildings, there could be a high exposure. Many mushroom growing sheds are now steel framed with polythene skins and are highly susceptible to storm damage. Insurance cover is available in the market, although a higher rate applies and an increased excess may be required.

Other perils which can be covered under this section are riot, civil commotion, malicious damage, flood, burst pipes, impact and accidental damage.

Consequential loss

Cover is available to protect against loss of gross profit following a reduction in turnover caused by an insured peril under the material damage policy, or increased cost of working incurred in order to avoid that loss of turnover.

The indemnity period chosen needs to be adequate not only to cover the period of reinstatement, but also the time taken to get back into full production and to obtain the turnover level which would have been achieved had the damage not occurred initially.

Book debts can also be insured following loss of detailed records and accounts.

Computers

Computerisation has been widely applied to the mushroom growing industry, as a more efficient means of controlling the environment in the growing sheds. Such equipment monitors and controls the levels of temperature, relative humidity and carbon dioxide levels in the shed and damage or breakdown of the system could result in a substantial loss being incurred.

Engineering breakdown

Cover can be arranged to cater for the repair costs and, if required, consequential losses following breakdown. This could apply to generating equipment or other items of plant.

Public/products liability

Cover is necessary to protect your legal liability for accidents, injury or disease suffered by any third party and for damage to their property arising out of or in the course of the business.

Such cover would include your legal liability for accidents on or away from the premises as well as for injury or damage caused by products supplied by the business. Due to the ever increasing awards being made in the courts, a heavy liability



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may be incurred and the limit of indemnity chosen is subject to individual requirements, but as a minimum, should be £1,000,000.

"When assessing the need for essential covers there may be substantial exposures which do not fall into the above categories, these may not, on first investigation be obvious. The need for a comprehensive assessment is of paramount importance."

Other risks

The insurance market also provides protection against other areas of risk. Each grower must decide in each instance whether to insure, or stand his own risk, having taken into account the exposure to his own particular business. These risks can be separately detailed under overall headings.

Property

Additional covers include:

- goods in transit;
- marine;
- fidelity guarantee;
- money (on premises or in transit);
- theft;

- deterioration of stock.

Liabilities

We have already dealt with Employers Liability and Public and Products Liability, but other liability covers are also available in the insurance market.

Directors and Officers Liability coverage has become increasingly important over the last five years, as UK and EC legislation has greatly increased the scope of accountability of Directors and Officers to shareholders and other parties, so that now the requirement is a high degree of skill and care, especially where the appointment arises from a particular expertise.

The standard public and products liability coverage does not include liability for advice or design given for a fee where the supply of a product is not involved. Again, cover can be arranged for the professional indemnity risk.

Miscellaneous

There are many other risks which can be protected by insurance and each of them needs to be considered:-

- personal accident - company provided or voluntary;
- legal expenses;

- credit (bad debts);
- travel;
- employee benefits - life and pensions.

Conclusion

To summarise, all growers should ensure that covers are arranged on two fronts: i) to comply with statute, and ii) to cover for the insurable risks were a high level of exposure exists. A systematic approach must therefore be undertaken to highlight the risks of a particular operation, as well as the availability of appropriate insurance coverage.

Whilst the cost of the insurance cover is always an important consideration, it should also be stressed that lack of cover against a major loss could have catastrophic consequences. In short, the business, which may have taken many years to create, could cease to exist.

Note: Nick Cottle will be writing a second article on COSHH responsibilities and the insurance implications of these in a future issue.

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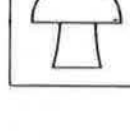
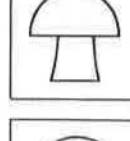
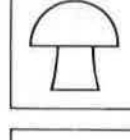
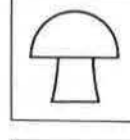
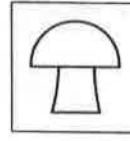
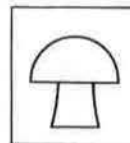
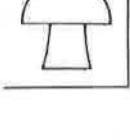
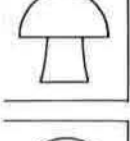
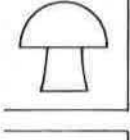
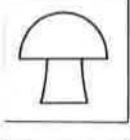
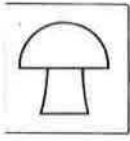
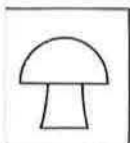
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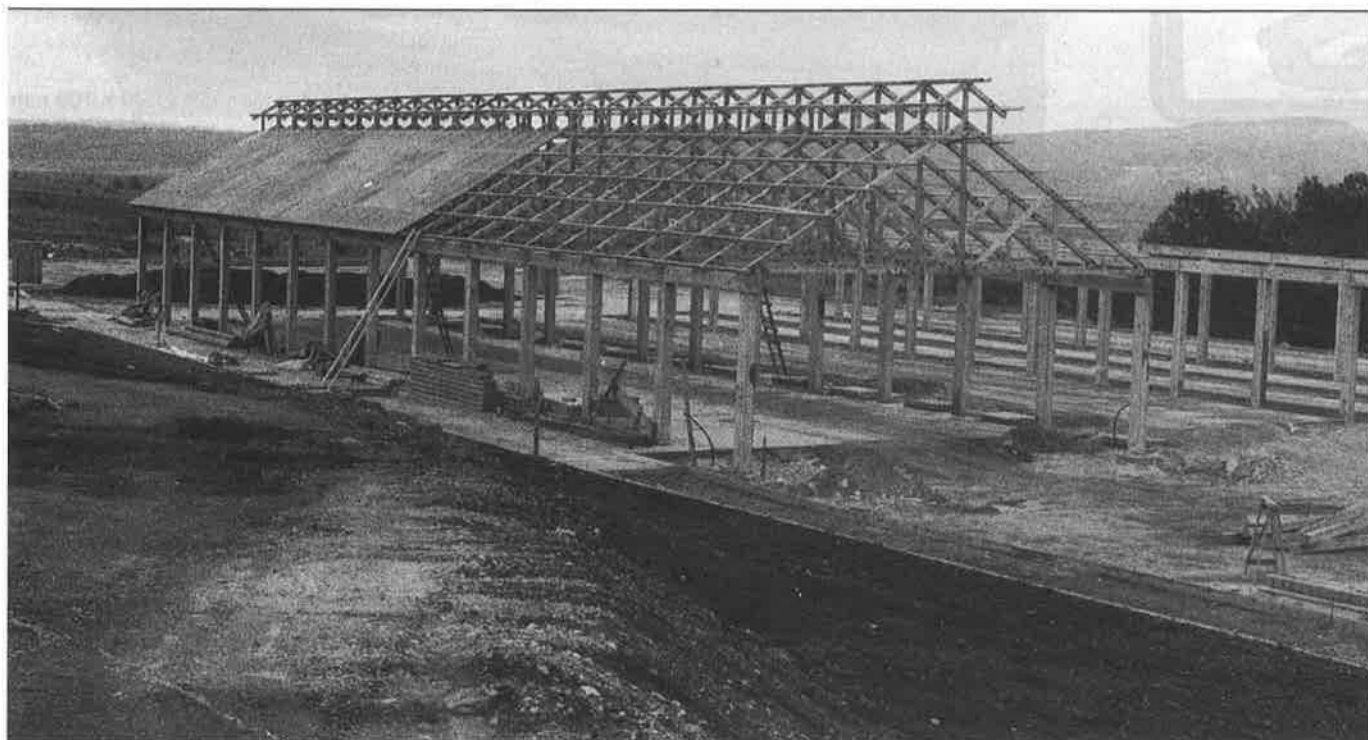
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Budapest, April 1991

Hungarian mushroom industry reorganised



Following the political changes, the mushroom industry in Hungary has been substantially reorganised in the past few months. The Duna Co-operative, which was the largest producer in the country, discontinued mushroom production. At the same time a number of new producing groups and private farms were formed.

The firm Quality Champignons Ltd. has set up a modern compost centre. Its peak heating tunnels operate with Dutch computer control; composting and bagging machines also originate from the Netherlands. For the time being only the first group of tunnels are in active production, with a weekly output of 300 tons of spawned compost. This is an entirely new enterprise; its predecessor, a nearby smaller yard, being utilised solely for producing *Pleurotus* substrate (100 tons per week).

The Pécs State Farm modernised its older compost yards, and very soon a third computerised compost centre, owned by Champignon Union Ltd., will also come into operation. A few other existing compost yards are of older technical design.

Recently, Somycel opened an agency in Budapest; its *Agaricus* hybrids are already widely utilised. Among the oyster mushrooms the Hungarian hybrids developed by P. Gyurkó are most popular, especially the strain HK35. The strain HK44 also has promising potential.

Compost yard of Champignon Union being built.



Pleurotus of Quality Champignons Ltd. prepared for export.

In 1991 the output of *Agaricus* is expected to reach 20,000 tons, together with about 2,500 tons of *Pleurotus*. The bulk of *Agaricus* will be taken up by the domestic market, though Austria is also an established consumer of Hungarian mushrooms. About half of the *Pleurotus* is being exported, mainly to Germany. Occasionally some spawned compost in

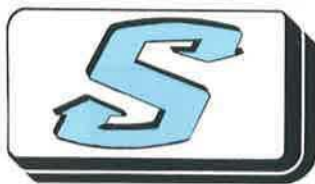
bags is also sold abroad. Owing to its central position, Hungary expects to penetrate East-European markets (e.g. the Ukraine), in the hope that the financial problems of these countries will be solved fairly soon.

Dr Gábor TASNÁDI
National Mushroom Consultant, Hungary

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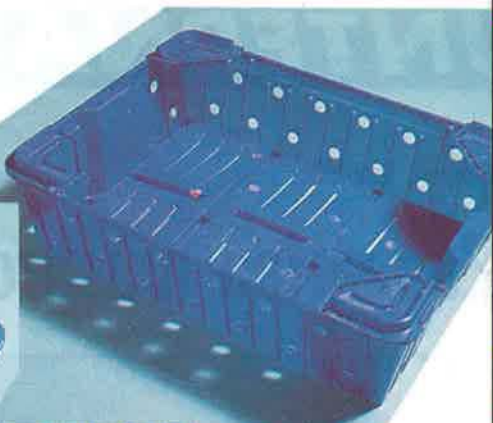


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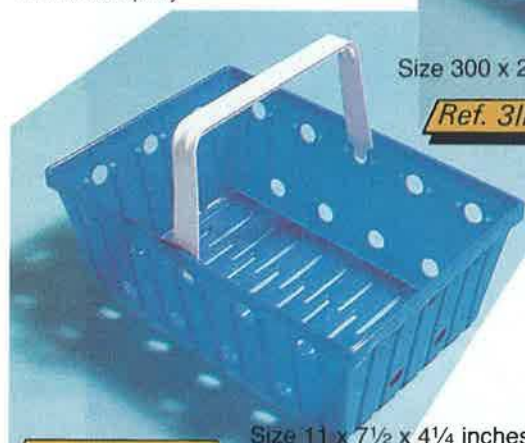
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AREA MEETINGS

Peat mixes reviewed

**South East I and II Area Meeting -
Godstone - March**

John Orr chaired a lively meeting attended by over forty growers and members of the allied trades. Harold Linfield from Chesswood, Peter Woad - Farm Manager from Blue Prince, Horley, and Dr Jim Smith from Bord na Mona (Sham-

rock Peat) spoke of their various experiences in search of the perfect casing medium.

It emerged that they each held viable and individual views on how this might be achieved: Jim Smith pointed out that there were plenty of different options and anyone who wished to discuss experi-

menting with a different mix of peats was welcome to seek his advice. Peter Woad preferred the heavy Dutch peat and Harold Linfield, who seems to have tried almost everything, recommended in the end that it was the casing medium that worked for you that you should probably stick to!

When do mushrooms become food?

**Scottish Area Meeting - Scottish
Agricultural College, Auchincruive - April**

Dr Robin Szmidt was also concerned with the casing layer, but in a different way. He has been experimenting with recycling spent compost and using it as a casing medium both in bags and on trays or shelves. Results so far indicate that there is no reason why it shouldn't become a useful solution to cutting down on the use of peat, should peat become a less available natural resource. It also appeals to those who would like to find a use for spent compost.

Ian Maxwell welcomed everyone very warmly and was keen to remind mushroom growers that the College's resources were available to the industry in a variety of ways and, in particular, they



Tony Dumbreck from Mossgiel/Golden Crumb and Hugh Bryant listen to Richard Green's high-tech solutions to bank holiday production.



Ian Maxwell, from the West of Scotland Agricultural College - he took the mushroom growers into the world of cucumbers and tomatoes for a breath of fresh air.



Jim Dumbreck, Barry Woodcock from Agrisystems Traymaster, and Dr Robin Szmidt evaluate the mushrooms growing on recycled compost casing.



Dr Robin Szmidt, working with HDC funding to find an alternative to peat at Auchincruive, West of Scotland Agricultural College.

offered a compost analysis service run by Dr Jim Dixon. He also expressed an interest in expanding training schemes for mushroom growers at the College.

After the farm walk, and excellent high tea held in the splendid Richard Adam surroundings of Oswald Hall, Aoife O'Brien, from Darmysel, and Richard Green, from Hauser, took part in an informal discussion group. Aoife reported on a meeting she had recently attended on new hygiene regulations for packers under the Food Act. To comply with conditions which have still to be specified by Government, it will be important for at least one member of a packing team to have taken a six-hour course on handling and food hygiene. The point at which mushrooms become food, however remains unclear! Is it at picking, packing or wrapping?

Richard Green described, with the help of an elaborate chart, the proposition that by spawning and casing at the same time the period in the growing house could be cut down to 40 days with three flushes. This involves very careful management of bed and air temperatures, and is not for faint-hearted users of current technology.

Access to expertise

Farm Walk - Chesswood Produce (Shepherds Grove) Limited - April 18th 1991

Tony Green, operations director at Shepherds Grove, welcomed the visitors and gave a brief outline on the history of the Company. The Chesswood site at Shepherds Grove offers a variety of growing houses from the older tray farm built in the early sixties, to the "state of the art" Dutch shelf farm. Up to 300,000 lbs of mushrooms are grown every week from



A team of Chesswoods pickers on the new site.



Tony Green, Operations Director, at Shepherds Grove with Gerry Parker and Jim Dumbreck looking at the new Dutch shelf farm.



Sid Cripps decided to try out the Chesswood conveyor belt! Does he meet the required quality control checks though?

a production area of approximately 50,000 sq ft. The farm produces the whole product range from baby buttons through to large flats in order to satisfy the demands of every customer.

The farm walk was conducted in groups lead by Colin Sturgeon, project/



Damian Hearne and Robert Brown at Chesswoods, Shepherds Grove.

engineering manager; Colin Last, financial director; David Spurdens, farm operations manager; and Tony Green. On the way round we talked to picking manager Chris Barker, who described the shi systems, picking rotas and incentive that help make Chesswood's name synonymous with quality.

Afterwards the management team was joined by sales and marketing director Roy Haycock, for questions and conversation with the 40 guests over a delicious tea and drinks. There were a lot of smaller farms represented and no doubt many useful tips were gleaned from access to such impressive expertise.

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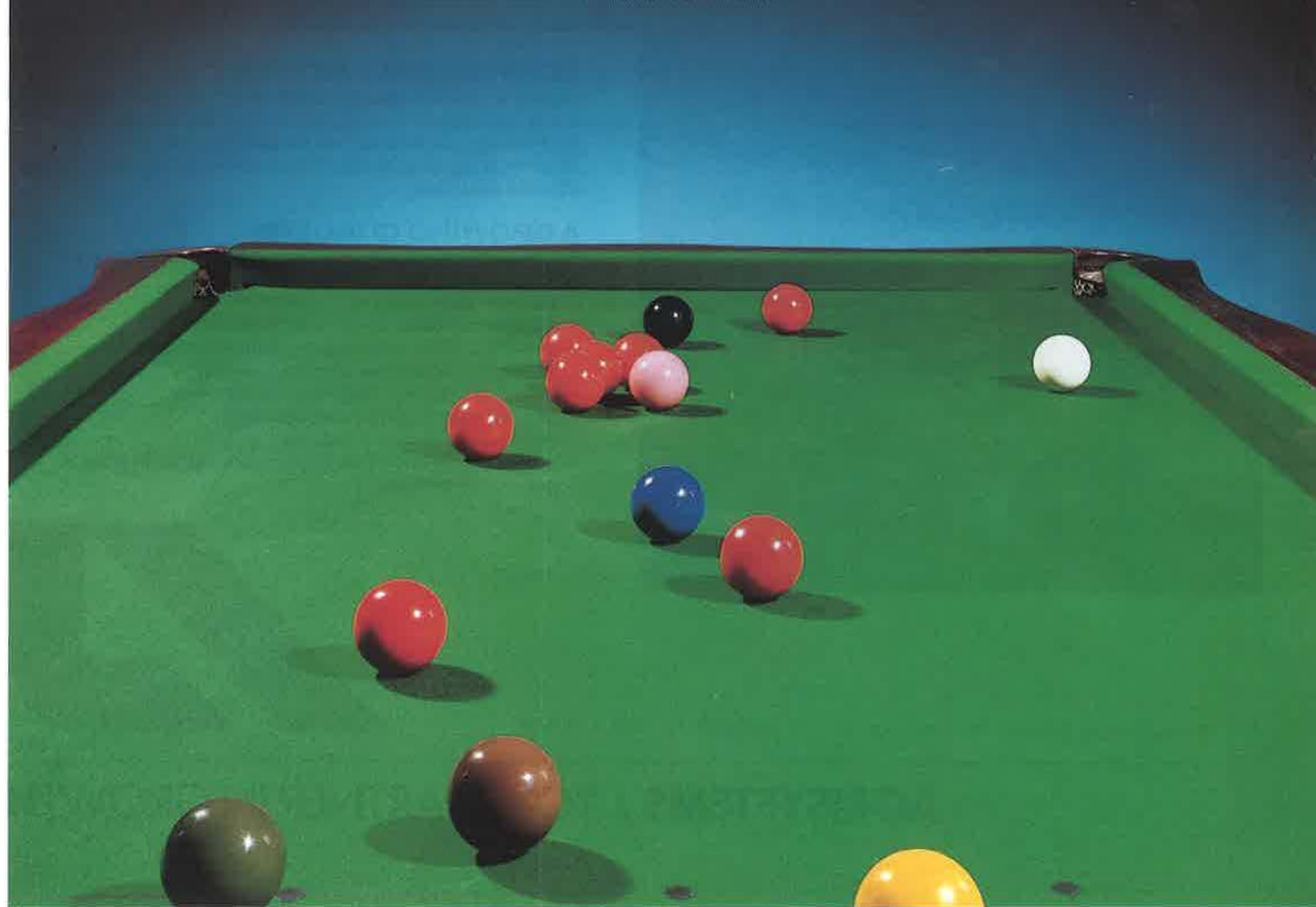
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