

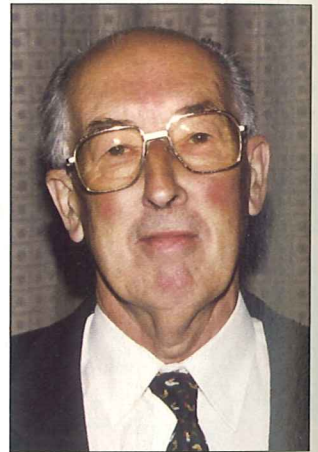
Layer welfare symposium – some questions answered but plenty of problems still to solve

Report of the WPSA Poultry Science Symposium on the Welfare of the Laying Hen. Among the topics were discussed were red mites, beak trimming and the links between genetics, behaviour and welfare. — Dr Claire Weeks

The 27th WPSA Poultry Science Symposium on the Welfare of the Laying Hen took place in the UK city of Bristol in July this year.

Red mites ubiquitous

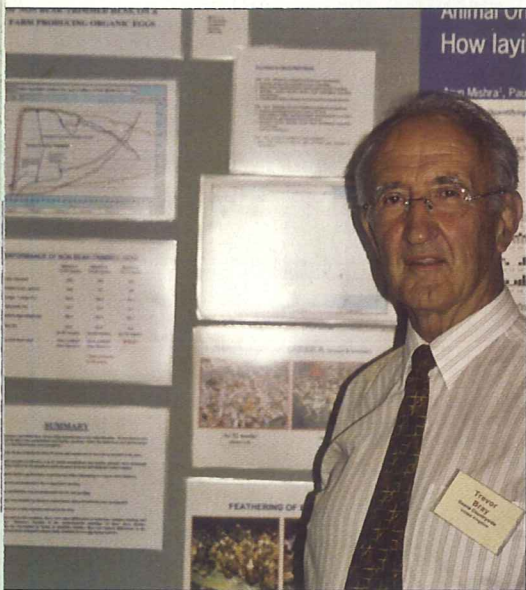
Populations of red mite are spiralling out of control, particularly in organic laying units in Europe. "Fifteen years ago, they were never seen in conventional wire battery cages: now they are ubiquitous" claimed international systems consultant, Arnold Elson. Several veterinary surgeons at the conference expressed their concern, with David Parsons regularly finding them causing death by anaemia in hens in his UK practice. A unit that is infested with red mite is also extremely unpleasant for stockpeople working there. A major factor is the uptake of alternative systems and the furnishing of cages, which provide refuges for the mites, making it very hard to eliminate them even during the cleaning between batches. It was felt that desperate organic farmers might resort to chemical control for the welfare of their stock and staff and thereby lead to the possibility of chemical residues in the eggs.



Arnold Elson (UK) "Red mite is now ubiquitous"

Links with genetics

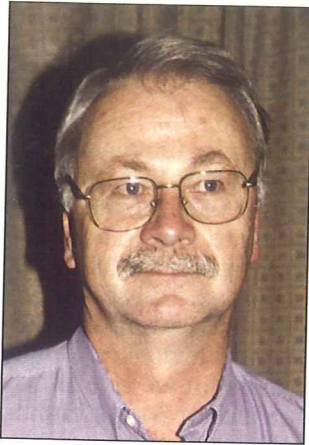
Various health and welfare concerns are associated with the move out of cages. Mortality is frequently higher,



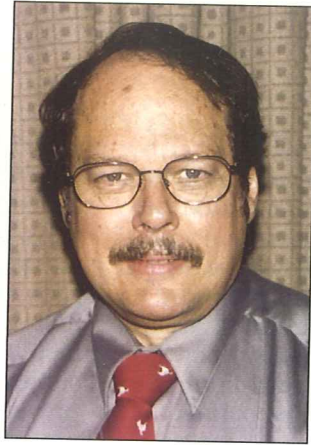
Trevor Bray (UK): poster showing variation between genotypes in feather pecking and cannibalism on organic farms



Mohan Raj, Malcolm Mitchell and David Tinker, UK scientists working on the slaughter, transport and handling of poultry



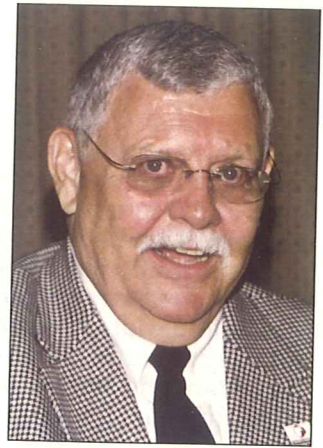
Paul Hemsworth (Australia) discussed the relationship between stockmanship and welfare



Bill Muir (USA)



Ruth Newberry (USA)



J. Paul Thaxton (USA)

particularly on free-range units where parasites and predation reduce welfare. Feather pecking and cannibalism are still dominant problems, with unpredictable and sporadic outbreaks making it hard to identify the triggers. Decades of research have still not found a solution. Genetics may provide the answer as both Dutch and Danish scientists have bred low- and high-feather pecking lines, with Jørgen Kjaer reporting a five-fold difference in incidence of feather pecking between these by the fifth generation.

The relatively new and simple technique of group selection looks very promising. Bill Muir, Purdue University, USA described the thinking behind its development. "If you select individuals, you may actually be selecting the most aggressive birds because they compete most effectively for resources such as feed. However if you keep birds in family groups and select those groups for productivity, then their behavioural (social) stress must be low". He reported that Hy-line is now using this model and in the US, their line does not need beak trimming to prevent feather pecking. The experience of some delegates was that this was not always the case under European conditions.

This was one example of the



OUR CONSTANT PROGRESS BRINGS US CLOSER TO YOU

BIOLOGICALS PHARMACOLOGICALS DIAGNOSTIC REAGENTS



LABORATORIOS HIPRA, S.A.
Experts in Animal Health

See us at VIV Europe 2003
Booth 3.D.079

E-mail: hipra@hipra.com - www.hipra.com

Layer welfare symposium

need to select birds in the systems in which they will be used and also to test several genotypes when developing new systems, both points that were flagged up at the symposium for future attention. It was also noted that much more research should involve farm-scale trials of commercial relevance.

Future for beak trimming?

The days of beak trimming to combat problems of cannibalism and feather pecking are numbered. In the USA, the fast-food outlets are driving a move to outlaw it in their suppliers, as are the UK welfare organisation (RSPCA) and major retailers. The practice is likely to be banned in

most EU countries in advance of 2012 when the Directive 1999/74, concerning the welfare of laying hens, comes into force. The main reason for this is the evidence for prolonged pain and disability following the mutilation, and the fact that the whole flock is subjected to the procedure as a preventive measure for potential not inevitable outbreaks.

The provision of perches

Ruth Newberry, Washington State University, noted that there could be a reduction in cannibalism in layers in systems with perches if they had been reared with perches from a very young age (before four weeks). Linda Keeling also described work that had shown a reduction on floor eggs and better nestbox use in group-housed systems where the pullets had been reared with perches. It is therefore important that legislation specifies rearing conditions where there is the science to back it up.

Avoiding stress

Stress is a cause of poor welfare and in the USA, distress is virtually synonymous with this, according to physiologist Paul Thaxton of Mississippi State University. His research, using models in which ACTH was injected into hens to cause a rise in the stress hormone corticosterone, has identified many of the changes associated with stress. For caged birds, an increase in bodyweight accompanied by increased feed and to a lesser extent water, is a common indicator of stress that can be identified on farm. The hens also have fatty livers and may stop laying if severely stressed. Floor house birds, however, tend to lose weight when stressed although they too, eat more. Paul Hemsworth noted that in Australia, researchers were measuring levels of stress hormones in egg albumen to monitor the welfare state of the layers.

Flexible in solutions
dynamic in research

See us at
VIV Europe 2003
Hall 11, Stand C024



Veterinary
Biological
Specialities

IZO S.p.A. - Via A. Bianchi, 9 - 25124 Brescia - Italy



www.izo.it

A major cause of stress is handling and transport and Malcolm Mitchell from the Roslin Institute in Scotland pointed out that layers were generally transported three times - as chicks, pullets and at the end of lay. This amounts to several billion journeys worldwide. Research has indicated that temperature is the most important stressor to control, but as this relates to humidity, both are important. A uniform thermal environment within the transport truck is important, so that no birds suffer in hot or cold spots, and this can be achieved only by using fans. Certainly in temperate climates, cold stress is a concern in poorly feathered end-of-lay birds, which need to be kept dry.

End-of-lay hens are particularly vulnerable to poor welfare, as very often they are osteoporotic with bones that fracture easily, and they have low - or in some cases negative - economic value. It can be difficult to depopulate from some systems but particularly from many alternative percheries that have been designed without consideration for ease of catching. More research is urgently needed in this area. Birds may also have to travel long distances to the few plants that process them. In view of this, Christopher Wathes, Silsoe Institute, UK, suggested that on-site maceration be considered as a practical alternative. This has been found to be a humane way of disposing of male chicks.

Legislation - the way ahead?

Both politics and economics were considered at the conference as it was realised that trade agreements, in particular WTO negotiations, could have a major impact on proposed legislation. It is increasingly apparent that decisions in the future will be made in the context of social and environmental

sustainability. This is already written into the New Zealand way of legislating and most other countries are set to follow if they have not already set up their own system. It was also recognised that animal welfare is a social issue and that society may need to make the decisions as to what is and is not

acceptable. Consumers currently have many misconceptions about farming systems and so there is a pressing need to educate them to make informed choices.

CAB International will publish the symposium proceedings in book form next year.

— Dr Claire Weeks, Holcombe, UK

LUBING the Original

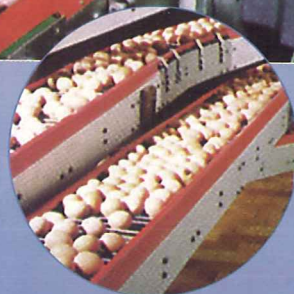
Capacities ranging from 15.000 to 65.000 eggs per hour

CURVE CONVEYOR SYSTEM FOR EGG TRANSPORT



COPE WITH ANY SPOT REQUIREMENT

The LUBING Curve Conveyor for egg transport is of crucial importance for egg farms of all sizes because variations in battery arrangements as a rule always require a tailor-made, individual solution.



Further information on the internet: www.lubing.de

AGENCIES ALL OVER THE WORLD!

37/02 - 25.04.03

LUBING MASCHINENFABRIK GMBH & CO. KG
Am Kampe 60 · D-49406 Barnstorf (Germany) · Tel. +49 (0) 54 42 - 98 79-0
Fax +49 (0) 54 42 - 98 79-33 · e-mail: info@lubing.de