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Newsletter of the Australian Veterinary Poultry Association

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The Australian Veterinary Poultry Association is a Special Interest Group of the Australian Veterinary Association. Membership is available to individuals and groups working in or showing an interest in any veterinary aspect of poultry. The annual fee is \$20 [groups \$50]. Enquiries to Secretary/Treasurer, Dr Garry Cross, Department of Veterinary Clinical Studies, University of Sydney, Private Bag 3, Camden, NSW 2570. [046] 55 2300. Fax [046] 55 1212

Send items for this newsletter to
Trevor Faragher, NBSL, Private Bag 7,
Parkville 3052. [03] 387 4211

Food for Thought

Due to advances in agriculture in many countries, there is now a substantial world surplus of food. Twenty-five countries, notably U.S.A., Canada, Australia and Argentina, but including some of the European Economic Community, China, India and even Saudi Arabia, are net exporters of grain. Prospects are that for the next decade at least, world capability to produce food will increase faster than population. These developments have had and will have profound effects on agriculture here and abroad. Symposia on global agriculture were part of the recent American Association for the Advancement of Science meeting and were discussed by PH Abelson [1987] in an editorial in *Science* 236 9.

Plant genetics has been the foremost factor in the rise of farm productivity in recent years. Asian rice yields have increased from 1.2 tons per hectare [t/ha] in 1960 to 3.2 t/ha and are still rising. European wheat yields have about tripled and since 1960 have risen to 4.4 t/ha. Comparable improvements have occurred in other countries, and yields today in many instances equal those in the U.S.A.

China provides the most dramatic example of improvements in agriculture. Since 1978, productivity has increased 50-60% due in part to organizational reforms that encouraged private initiative. However, seed-breeding institutions have provided high-yielding varieties of wheat, rice and maize. Better water control, more irrigation, extension services and increased use of manufactured fertilizer have been factors. China is now the third largest user of manufactured fertilizer, though night soil and other organic matter still provide half of the added nutrients.

Since 1968, India has moved from being a grain importer to a grain exporter. Moreover, as in China, the Indians have established excellent capability for genetic improvement of seeds. Substantial improvement has occurred elsewhere, for example, in Bangladesh and Indonesia. The slowest rate of progress has been in Africa, but improvements there seem likely. A new sorghum hybrid produced by the International Centre for Research in Semi-Arid Tropics is drought resistant. In a bad year, it yields more than local cultivars do in a good year. In a good year it doubles and triples yields.

The growing food surplus has been exacerbated by national policies of subsidising farm outputs. World agricultural subsidies, which totaled about US\$20 in 1970 have risen to US\$150. In 1960 Japan paid its rice growers twice the world market price. Internal politics have raised the price of Japan's rice to ten times that for Thai rice. Japanese shoppers pay US\$25 for a melon and US\$30 per pound for beef. The subsidies have led to excessive production and low prices for grains sold on the world market. The people who are taxed to provide the subsidies usually do not enjoy the benefits of low world prices.

Given surpluses, there are many people who advocate decreasing agricultural research and extension services. This, wrote Abelson, is wrongheaded. We are in a global competitive market in which others are improving their capabilities. If we are to compete, we cannot rest on past achievements. We must find ways of being more creative and more effective in rapidly harvesting the many potentials of research and development.

Duck puffing

Cold roast duck has been a delicacy to the Chinese for many centuries. However, an oven-ready duck is as wrinkled as a prune and so limp that it just flops around on a roasting spit. The result is that some parts get overdone and others hardly brown at all. An early marketing expert recognised that the product would have greater customer appeal if the cooked birds were an even brown and every bit of skin done to a nice crispness. The problem was solved with typical Chinese ingenuity - by inflating the duck. A change in the technique normally used to clean the duck was needed. Instead of a bold slashing incision, the operator carries out keyhole surgery at a site just below the parson's nose. A tube is then inserted and the duck puffed up by mouth. In this condition the duck is nicely rounded and all parts exposed for even roasting.

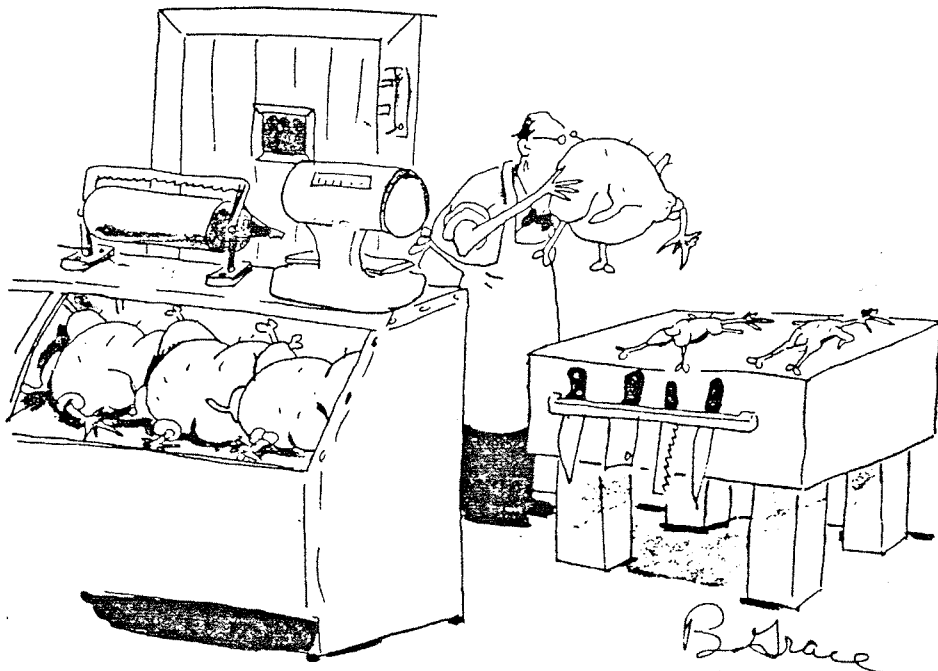
Countless millions of ducks have been treated this way down the ages until a local Health Inspector in Hong Kong attended a course on Public Health. Returning to his duties with a certificate and reforming zeal, he was horrified to recognise what disgustingly unhygienic things were done with food - like puffing up ducks by mouth.

The Inspector set about establishing a thoroughly clean way of duck puffing. He bought a cylinder of nitrogen, readied himself with a supply of prepared ducks, attached one to the cylinder valve and started inflating. The duck behaved quite unmanageably with 2 000 psi applied to its fundament, but no great harm was

done because the nitrogen vented through the beak with the loudest quack ever heard in those parts. The Health Inspector saw at once that the duck had to be made gas-tight. So, assuming the stance of a Scottish pipe major, he tucked a second duck under his left arm and held the neck firmly like a chanter. This achieved gas-tightness, but with all safety valves inoperable, a potentially interesting situation developed. The full cylinder pressure was applied again and this time the duck disintegrated with frightening force, ruining the Health Inspector's uniform, bruising him severely and embedding fragments of duck in remote parts of the building.

The Health Inspector, being of good pioneering stock and resilient spirit, was undaunted, but prudence suggested that he should delegate his duties while he sought advice. His gas supplier provided him with a regulator and collaborated in a project to develop a safe and effective technique. Deciding that no duck has yet been bred that has a working pressure of 2 000 psi, the acceptability of 50 psi was tested. At this pressure the duck did not explode but flew off across the room powered by a single jet and making derisory noises to boot. By trial and error they found that 5 psi is the ideal duck puffing pressure.

Duck puffing is big business in Hong Kong - tens of thousands each day and each puffed duck needs 0.7 cu.ft. of nitrogen; a goose, just over 1 cu.ft. The Health Inspector prohibited oral duck puffing and the gas supplier has a satisfactory increment in nitrogen sales.



Veterinary Work with Birds

The British Veterinary Journal is publishing a Veterinary Professional Development Series on veterinary work with non-domesticated pets. In the third paper in the series, JE Cooper 1987 *ibid* 143 21-34 dealt with birds.

Basic biological data were summarised, and handling and restraint, clinical examination, anaesthesia, diseases and treatment discussed. Much information was tabulated.

Review: avian respiratory infections

In a long review of the pathogenesis and pathology of avian respiratory infections, RSF Campbell of James Cook University, Townsville, *Veterinary Bulletin* [1986] 56 521-543 has:

- provided a contemporary account of the pathology of these infections, primary and otherwise;
- provided a framework of reference for the differential diagnosis of these conditions especially for diagnosticians who are working without full microbiological support;
- taken account of the fact that respiratory diseases often have a multiple aetiology; and
- considered the often considerable variation that can occur within the pathology of individual diseases depending on the host, the strain of pathogen, time factors, age and immune status as well as on a multitude of predisposing environmental factors.

Vasectomy in budgerigars

During the experimental design of a reproductive biology study in budgerigars at the zoo in London's Regent's Park, it became clear that single hens would not lay eggs, carry out incubation or rear chicks if they were not stimulated by the presence of a male. Therefore to perform artificial insemination in this species, 'teaser' males were used to induce normal reproductive behaviour in the hen.

Samour JH & Markham JA 1987 *Veterinary Record* 120 115 described the surgical procedure of vasectomy. Vasectomised birds showed 'normal' male sexual behaviour, including courtship and copulation, when housed with hens in breeding conditions.

Googies and Baddies

When chooks roamed round the farmyard and lots of eggs were lost,
egg farmers thought of methods which might help reduce their cost.
One hit on the bright idea, with storage costs so high,
he'd store the eggs inside the house, warm and safe and dry.

His missus wasn't very keen to keep them in the house
but shut her thoughts inside her, though she thought he was a louse.
Visitors all remarked on the eggs stacked ceiling high,
and when they left she yelled at him, "You kiss your eggs goodbye.

"I hate them in the lounge room, so you'll have to build a shed."
Tempers started boiling and some nasty words were said.
She grabbed an egg and threw it, and it splattered on the floor
so he let fly with several, but she ducked and threw some more.

He scored a lovely full-toss, so she countered with a spin
and grabbed a thirty-six pack as she yelled "You'll never win."
She fainted with a left hook, so he ducked away to right
where she knew he'd move to and she threw with all her might.

He didn't see the sofa so he took a nasty fall
Three dozen splattered over him and over half the wall.
The argument kept raging until they'd cracked all their eggs.
As tempers cooled they realised they'd have to clean the egress.

A hot day had been forecast, and the smell was soon severe
so she said, "You clean this room up, or I won't be living here."
It seemed a simple idea, as he got the garden hose,
'cos anything was better than bad eggs upon the nose.

The racks went out the window, then he hosed the walls and floor
and he heard a snaky comment as she shut the lounge room door.
"All of this is your fault that the eggs got chucked about.
But now the place is saturated, how's the water getting out?"

By then he'd had a gutful, so he gave an angry roar
picked up a brace and bit and bored some holes right through the floor.
They soon patched up their quarrel, but for weeks they both used pegs
to shut out the awful smell from the argument with eggs.

JOHN BASHAM

....stolen from the Victorian Police Association Journal, November 1986.

Toxoplasmosis in Zoo Birds

The protozoan parasite *Toxoplasma gondii* is ubiquitous and has been isolated from the tissues of mammals, birds and reptiles. Toxoplasmosis is common in zoos and is generally spread by faeces containing sporulated oocysts that contaminate feed, bedding and utensils.

Hubbard *et al* 1986 *Veterinary Pathology* 23 639-641 described an outbreak in which 13 of 20 birds [pigeons of three genera and rockfowl] in one exhibit died within a three-week period. Birds that were not found dead were emaciated, lethargic, anorexic and had laboured respirations. Gross lesions, if present, included thickening or clouding of the pleura and air sacs, congestion of the lungs, livers and kidneys, and discrete multifocal thickening of the intestinal walls. A diagnosis was made using an immunoperoxidase technique for *Toxoplasma gondii*.

Controlling red mite

A shed housing 6000 birds on a broiler breeder farm near Sydney was infested with red mite despite spraying of nest boxes and perches with malathion every three weeks.

After similar spraying twice with flumethrin [Bayticol® Cattle Dip and Spray] at a concentration of 300 mg active ingredient per litre, Cooper NA & Cobb RM 1987 *Australian Veterinary Journal* 64 83 found no adult mites in or around the sprayed areas for nine weeks after the second spraying. Adult mites were found in the joints of the chain feeder assembly, which had not been sprayed and which was used as a roost by the birds.

Controlling Tb

Gill IJ & Blandy ML 1986 *Australian Veterinary Journal* 63 422-423 described the control of avian tuberculosis in a free-range commercial poultry flock of about 2200 laying hens which had access to a one hectare yard on the banks of the Goulburn River in Victoria.

Day-old chicks were bought, reared in pens until point of lay then transferred to free-range management where they mixed freely with older birds.

Tuberculosis was diagnosed in birds in 1980. The generally accepted methods for controlling the disease were not applied to this flock. Slaughter of the flock would have resulted in economic hardship for the owner. It was not possible to provide fresh ground for new stock. The operator did not have a large enough hen quota to make capital investment in laying cages or impervious floors economically feasible.

Instead quarantine measures were imposed and the free-range area and pens were divided by 1.8 m high fences so that batches of birds could be segregated. The free-range ground and pens were scraped back to bare earth between batches. Over the next two years, the pens were refilled with clay from another farm before being flooded with water and allowed to set. All culled birds were examined *post mortem*.

Negative necropsy findings in 1982-83-84 were supported by the absence of tuberculin reactors in 1986. The disease appears to have been eliminated.

Alimentation method for sick birds

A technique claimed to improve the prospects for treating a variety of conditions in pet birds and captive birds in zoos by preventing secondary malnutrition was reported by Goring *et al* 1986 *Journal of the American Veterinary Medical Association* 189 1017.

The needle catheter duodenostomy method for duodenal alimentation is applicable in cases of crop inflammation, beak disorders, pharyngeal injuries, etc. Catheters were inserted in the gut of five pigeons which were then maintained on a liquid diet for 14 days. After removal, the birds resumed a normal diet and no ill effects were reported although some weight loss did occur.

The Use of Antibiotics and Other Drugs in the Poultry Industry, 1987, APIA, Sydney.

This document was developed by the Australian Poultry Industries Association as a Code of Practice for use by companies associated with APIA.

The Association recognises that it has a responsibility to ensure that poultry meat and eggs produced by associated companies are not only wholesome and nutritious, but free from any undesirable residues. APIA also recognises that it has a responsibility to control its use of antibiotics so as to minimise the risk of antibiotic resistance developing in bacteria.

The document includes guidelines which cover the growth promoting, prophylactic and therapeutic uses of antibiotics. Uses, schedules, withdrawal periods and some residue limits in meat and eggs for many drugs used in poultry production are tabulated. Relevant legislation and sources of further information are cited. The AVPA Code of Practice for the Use of Schedule 4 Restricted Substances in the Poultry Industry is included.

As APIA believes that the document will be of value to many people associated with the poultry industries, copies are available, gratis, upon request to Robert Brewster, APIA, PO Box 579, North Sydney 2060; facsimile [02] 925 0627.

Ecology of *E. coli*

The phenomenon of drug resistance among bacteria, particularly *E. coli*, has been a major research interest of the University of Bristol's departments of microbiology and veterinary medicine during the past 15 years. Tens of thousands of *E. coli* isolates from man and farm animals have been examined in studies of both the ecology of the species and the epidemiology of their resistance to therapeutic agents.

M Hinton 1986 Veterinary Record 119 420-426 described the principal findings obtained in these investigations of isolates from man, cattle, pigs and poultry, including carcass contamination and the spread of *E. coli* to man and the transfer of R factors within the intestine and in the environment.

Salmonella in the USA

In the Northeastern United States, the rate of *S. enteritidis* infections has increased five-fold in the last ten years. The rate is unchanged in other regions. In 1985, *S. enteritidis* replaced *S. typhimurium* as the single most commonly reported serotype in three states in the Northeast. Seasonality of the infection has not changed. Studies of outbreaks implicated various foods including rice balls, scrambled eggs, ziti and roast beef. [Morbidity & Mortality Weekly Report 1987 36:10-11]

Salmonellosis poses a health problem of large proportions in the USA. Annually, it accounts for more than 40 000 reported cases, 500 deaths and financial costs well in excess of \$US 50 million.

Antimicrobial resistance is increasing in *Salmonella* strains, a finding that has important public health implications.. Although the chain of transmission of the bacteria is often complex, combined epidemiological and laboratory studies with use of new methods of molecular biology make it possible to trace antimicrobial-resistant salmonellae to their

primary source - foods of animal origin.

Cohen ML & Tauxe RV 1986 Science 234 964-969 reviewed these studies and suggested that the antimicrobial drugs to which food animals are exposed provide selective pressure that leads to the appearance and persistence of resistant strains. They also conclude that more prudent selection and use of antimicrobials in animals as therapeutic agents and production enhancers is necessary to combat the increasing frequency of antimicrobial resistance in *Salmonella*.

Competitive Exclusion Update

Exploitation of the competitive exclusion [CE] principle, first described by Nurmi and Ramtala in 1973, is one of the few developments over many years to offer the prospect of improved salmonella control in live poultry.

Establishing an adult gut flora at the earliest opportunity overcomes the high susceptibility of the young bird to salmonella colonisation and provides a degree of protection that is usually available only to the adult individual. The effectiveness of such treatment has been confirmed many times in different experimental trials which have been reviewed by Schleifer JH 1985 World's Poultry Science Journal 41: 72-83.

Because of the apparent risk of transmitting any unspecified human or avian pathogens that may be present in donor bird[s], there is considerable interest in developing a defined treatment microflora and identifying the key organisms. The ultimate aim would be to elaborate a safe and effective product which could be prepared in a standard form. Such a goal is not readily attained, and may well require a more detailed understanding of the underlying mechanisms of CE and of interactions occurring among the organisms involved, if optimal protection is to be obtained.

A review by Mead GC & Impey CS 1986 Journal of Applied Bacteriology Symposium Supplement 67S-75S considers the progress that has been made towards the development of a defined gut flora treatment which would significantly reduce the salmonella infection in commercial poultry flocks.

Discriminating Salmonellae

In January - February this year, an outbreak caused by *Salmonella typhimurium* phage type 12a occurred in humans in the Launceston region of Tasmania. A number of isolates from this outbreak were sent to the Salmonella Reference Laboratory at the IMVS, Adelaide.

No non-human isolates of this phage type were recorded during the period of the outbreak although several isolates were received from chicken in the period June - September 1986.

All these chicken isolates and the human outbreak strains of *S. typhimurium* phage type 12a were tested for plasmid content. None of the human isolates from the outbreak contained detectable plasmids. However, the chicken isolates contained several plasmids over various sizes.

The testing indicated that the human outbreak strains were different from the chicken isolates found in Tasmania between June and September.

Monthly Report, April 1987, Salmonella Reference Laboratory, IMVS. [contributed by Rod Reece].

Size of Relief for some.....for others, Dim Sums

From a combined research and development budget of \$1 538 481, the Chicken Meat Research Council and the Poultry Research Council have allocated about one third [\$526 690] to disease programmes for 1987/88. These are:

- \$44 600 UWA MacKenzie
AI & ND surveillance
- 42 186 CSIRO AAHL Della Porta
ND diagnostic tests
- 38 340 CSIRO Bagust
Chicken anaemia agent
- 35 000 IMVS Steele
Salmonella epidemiology
- 34 150 CSIRO Ignjatovic
IB studies
- 32 383 CSIRO Fahey
Non-infectious coccidiosis vaccine
- 33 242 CSIRO Fahey
Live coccidiosis vaccine
- 31 122 UN Tannock
IB studies
- 30 697 UN Tannock
AE studies
- 27 505 UN Tannock
Big liver & spleen disease
- 27 455 UWA Wilcox
Reovirus vaccine development
- 27 016 DPIQ Blackall
B. avium characterisation
- 25 296 UM Whithear
MG vaccine development
- 23 727 UM Whithear
MS vaccine development
- 18 000 US Cross
Junior Research Fellow - Big liver & spleen disease
- 18 000 UM Whithear
Junior Research Fellow - MG & MS
- 13 500 DANSW Sinkovic
ILT vaccine development
- 11 921 US Cross
Big liver & spleen disease
- 10 050 UJC Burgess
ND diagnosis
- 2 500 CSIRO Bagust
Travel by Dr JJ Giambone within Australia

In an innovative development - where one organization manages a project in co-operation with other organizations to cover Australia, Councils allocated \$51 180 to the DAV for a project on poultry housing.

The core of this project will be the employment for three years of an agricultural engineer to work, under the Victorian Department's supervising engineer but with all State Departments and industry, to upgrade existing buildings and to design improved housing suitable for a range of Australian climates and management practices. When the project is completed, the supervising engineer in the Victorian

Department will provide advice on housing to industry on an on-going basis.

For further information on the research and development programmes of both Councils, contact Robert Brewster [02] 929 3224.

Down with Starlings

The Commonwealth allocated \$161 000 to the States and Territories for feral animal control in 1986-87. Most of the money goes towards programmes for control of feral pigs, but \$10 000 went to the ACT Parks and Conservation Service, CSIRO and the Bird Hazard Unit of the Department of Aviation to test methods for the control of birds such as starlings in an avian influenza outbreak.

Heavy Metal

Diamonds are a girl's best friend, as Marilyn Monroe put it, but most precious metals are anathema to living things.

The presence of silver, copper or nickel in coins or jewellery is often said to protect against bacterial contamination. Sadly, it seems that no real organism can rival the Alicanto, a mythical Chilean bird described in Jorge Luis Borges' Book of Imaginary Beings. This nocturnal creature is reputed to gorge itself on gold or silver, whereupon it glows in the dark with a hue appropriate to its diet. The Alicanto cannot fly, but it is said to run with its wings open - rather like a demented but extremely wealthy emu. Borges passes on the intelligence that the bird's flightlessness is not a failure of evolution, but a design fault caused by the 'heavy metallic meals that weigh down its crop'.

Nature made a stab at imitating art last year when a Chinese farmer in the Kimberleys, Ah Gyle, found a 1.18 carat uncut diamond in the gizzard of a chicken he was about to eat. "Ah, ha," said Ah, "As Confucius say 'Diamonds are Ah Gyle's best friend'".

New horizons for veterinary medicine

The Wooldridge Memorial Lecture for 1986 was given by Dr E.J.L. Soulsby, professor of animal pathology and head of the Department of Clinical Veterinary Medicine at the University of Cambridge. Professor Soulsby was President of the Royal College of Veterinary Surgeons, 1984-1985.

".....It seems likely to me that one of the new developments in the coming year will be the abandonment of mass medication for the control or prevention of disease or for growth promotion. The anabolic steroids have been rejected, not because of any scientific evidence of their harmfulness, but because of public and political pressure. If these compounds cannot withstand such pressure how can others where the scientific evidence shows that organisms become resistant from over use and the mass use of them may well be wasteful, for example in the regular mass treatment of animals for intestinal parasites in which it is known that the majority of worms occur in a minority of hosts.

"What would we do if all infeed additives were to be prohibited? How much closer and specific would our advice be on the control of coccidiosis in chickens or of blackhead in turkeys?....."

[Veterinary Record 119 327-334]

Malawi picks Websters V4 for ND control

Intensive poultry production in Malawi has expanded in recent years but most poultry is still husbanded in smallholder units. Newcastle disease is widespread - many areas experience outbreaks at least once a year and losses are often high.

Traditionally, chickens were vaccinated with La Sota and Komarov vaccine strains administered by eye-drop and wing-web stab, respectively, which was labour intensive and impractical for large numbers of birds. Moreover, chickens, especially those in small holdings, were often inadequately protected, probably because of the thermolability of the strains.

A cooperative study between the University of Wisconsin, USA, and the Department of Animal Health, Malawi, selected the V4 isolate of NDV as a thermostable vaccine strain which would provide good protection and retain its potency under adverse field conditions. Sagild IK and Spalatin J 1982 *Avian Diseases* 26: 625-628 described trials of a V4 vaccine made in Malawi which showed that it was safe and effective.

Sagild IK and Haresnape JM 1987 *Avian Pathology* 16: 165-176 have described subsequent large-scale use of V4 vaccine. Because of difficulties of viral containment in local manufacture, 3 000 000 doses of V4 vaccine were obtained from Arthur Webster Pty Ltd, Northmead, in 1983 and 1984. Following successful field trials for safety and efficacy after administration by eye-drop, drinking water and oral droplet methods, the vaccine was distributed in many rural areas. Large scale use appears to have reduced the incidence of ND in Malawi where V4 is recommended as an alternative to La Sota and Komarov, particularly for small holder flocks, because of its thermostability, ease of administration and transmissibility.

Symposium on Avicultural Health and Production

A symposium on caged bird health and production will be held at the University of Sydney, Camden, on Saturday 8th and Sunday 9th August 1987. Accommodation is available at the venue and all meals will be provided. Costs will be included in the registration.

A programme will be sent to all members in mid July.

Any member who is interested in attending or making a presentation at this symposium should contact Garry Cross.

Poultry Meats

The short term outlook for the poultry industry remains favourable due to strong demand and relatively low feed costs.

According to the Bureau of Agricultural Economics' Quarterly Review of the Rural Economy 1987 9: 144, poultry meat production is forecast to continue its steady expansion, rising by almost 7% to 405 kt in 1987-88. If this achieved, there will have been an average annual growth rate of almost 5% over the ten years ending 1987-88.

Returns are expected to remain favourable due to the relatively low price of wheat, gains in production efficiency and more innovations in marketing.

Consumption per person is forecast to increase by just under 4% to 24.5 kg in 1987-88. This growth is consistent with a forecast increase of around 2% in the retail price of chicken to 290c/kg. Such a small increase represents a decline in chicken prices relative to the prices of beef, lamb and pork.

Houghton 1985-86

In his last report as Director of the Houghton Poultry Research Station, Peter Biggs described the swingeing financial cuts that have required the loss of 43 posts, including 15 redundancies. The result of the cuts was an erosion in scientific capability generally and a specific reduction in work on Marek's disease, lymphoid leucosis, salmonella, turkey diseases and stress. Despite these traumas, there has been success in attracting outside funds and some exciting scientific developments and achievements have been recorded.

The whole of the genome of infectious bronchitis virus has been cloned and sequenced. This is the first coronavirus genome and the largest RNA virus genome to have been sequenced - a major achievement. Houghton's Genetic Group has produced its first transgenic chickens and the technique used, although not satisfactory because of lack of specificity forms a good basis for future developments. A virus has been isolated which is a prime candidate for the cause of turkey rhinotracheitis, a condition only recently recognised in U.K.

Trials with a vaccine based on the precocious lines of all seven species of coccidia of chickens have given very satisfactory results and it is hoped that the vaccine will be available commercially in the near future. The design, development and production of a new isolator for SPF flocks is economically important for its reduces the space required for housing the flocks to a third that needed at present, reduces labour and increases the ease of management.

During 1986, Houghton became the Houghton Laboratory, which together with the Laboratories at Pirbright, Edinburgh and Compton, become the Institute for Animal Disease Research. Peter Biggs was appointed Director of the Institute on 1 June 1986 and Jim Payne has been appointed Acting Head of the Houghton Laboratory.

The Syd Wilkin's Memorial Prize : call for applications

The prize is to recognise outstanding research among scientists who are under 30 years of age and are working in Australia. Each applicant will be judged primarily on a research paper written by the candidate on any aspect of poultry science. The paper may be the candidate's original research or a critical review written at any time in the candidate's career. A paper already published may be submitted.

Applications close on 1 August. The winner will be announced soon after adjudication in September. The prize, which is worth \$550 this year, will be presented at the Annual Symposium of the Poultry Husbandry Research Foundation in February 1988. For further information and a copy of the prize rules, contact Robert Brewster, Secretary, WPSA, Australian Branch. Telephone [02] 929 4077

Uppers and Downers

Coffee raises people's serum cholesterol concentrations; tea lowers them; and eggs have less effect than either, says a report from Israel in the *Journal of Epidemiology and Community Health* 1986 40 324-329.

Of course, such statements depend on how much coffee and tea and how many eggs [9% of the sample ate more than 10 a week] but the report shows how confusing the diet/cholesterol story is becoming.

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