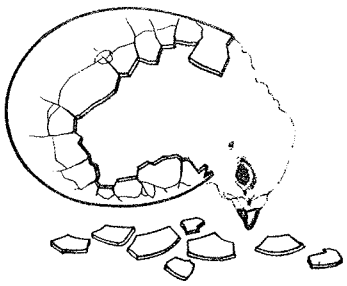

P.O. Box K362,
HAYMARKET. 2000

February, 1982

AVPA NEWSLETTER No. 13

News

Your Editor (and currently President) has been out of action with regard to AVPA affairs since March, 1981 when the last issue and the last meeting of the Association were held prior to a recent meeting at Broadbeach in Queensland attended by 20 members. Apart from the demands of my new position as Chief of the Division of Animal Production I was also Chairman of a Committee of Enquiry into the N.S.W. Egg Industry for five months during that period. This included a trip to the USA, Canada and New Zealand to observe features of the egg industry in those countries. The Report of the Committee of Enquiry is now with the N.S.W. Minister for Agriculture and Fisheries.

At the last annual meeting Richard Bevan was induced to take on the Secretary/Treasurer job but has found that the demands of his work at Websters prevent him from operating effectively and following the Broadbeach meeting, at which he was criticised soundly by some members, I have undertaken to act in his stead. The voluntary duties associated with an organisation like the AVPA are expected to be thankless but the criticisms of those, particularly those who have never stood for office in the Association, could well be tempered by an understanding of the difficulties involved.

I now have a Secretary and our auditor who is in another section of the Department has offered to assist with the duties.

Newsletter Items

A number of members and others throughout the poultry industry have indicated their appreciation of receipt of the newsletter but the task of finding items has been left entirely to me with very few exceptions. These exceptions have been acknowledged in the items concerned. Since July, 1978 there have been 12 issues of the Newsletter which is an average approaching 4 per annum. As you might imagine in my new position my reading of the literature with regard to Avian Health is likely to diminish and therefore the Newsletter will become more dependant upon contributors. So please review your benefits obtained from the newsletter and ensure its survival by your contribution. At the last meeting Trevor Faragher offered to collate material submitted by members. This would be most useful.

Note AVPA Secretary's address is now back to P.O. Box K362, HAYMARKET, 2000

World Veterinary Association Congress, Perth, 1983

The World Veterinary Association holds its meetings every four years and the opportunities for this to reoccur in Australia will be many years away. The World Veterinary Association depends upon the World Veterinary Poultry Association Headquarters to organise some parts of the programme and the AVPA has nominated Dr. Trevor Bagust of C.S.I.R.O., Division of Animal Health, Parkville, Victoria to be its representative in liaising with the Australian Veterinary Association organisers of the conference and with the World Veterinary Poultry Association. This liaison has already progressed considerably. Any information can be obtained by contacting Trevor at the Laboratory at (03) 347 2311.

AVA May, 1982

Dr. Hugh Bray of the South Australian Department of Agriculture is representing the AVPA in organising a contribution to the AVA conference. The AVPA share of the conference will be held on the Sunday and there will be speakers on Animal Welfare. Dr. Bray advises that Dr. Bob Johnston, Professor Macfarlane and Mr. Phil Glatz will speak.

When to Transfer Eggs from Setter to Hatcher

Proudfoot F.G. et al (1981) in Poultry Science 60:302, describes a series of experiments which demonstrated that the transfer of eggs from setter to hatcher trays at any time after 13 days of incubation had no significant effect on hatchability and those transferred after 16 days of age had no significant effect on their subsequent performance as broilers. It is well known that repeated tilting of eggs at least up to somewhere around 9-10 days of age, is necessary to prevent embryos from sticking at hatching time. The actual time of transfer being 18 days seems to be related to the absence of any necessity to move them before hatching actually commences. While the average hatching time is 21 days, some chicks may be pipping the shell as early as 18½ days. This work seems to suggest that the continued turning of eggs after 16 days is not necessary and that even as early as 13 days has little effect.

New Strains of Marek's Disease Virus?

Eidson C.S. et al (1981) Poultry Science 60:317, report on studies on three isolates of Marek's Disease Virus against which HVT vaccine produced significantly lower protection than in the case of two other isolates which appear to be the standard form. The three isolates

concerned were similar in virulence to the other two, but had different cultural characteristics. The implication is that a degree of resistance to the HVT vaccine has developed in these strains and it is important for us to watch for the same thing to occur in Australia. It is hoped that poultry veterinarians will avoid the trap of attributing apparent field failures to the emergence of resistant strains without proving their suspicions by conducting experiments similar to those reported here. The field condition which results from inadequate vaccination is quite similar to that which can be expected with the degree of resistance developed in these strains. It could be a trap for the unwary and caution is recommended.

More on the Fatty Liver Situation

A paper by Miles R.D. and Harmes R.H. (1981) in Poultry Science 60:485, reports a condition which they call Fatty Liver Syndrome, (which seems to be different from the Fatty Liver Haemoragic Syndrome) in which they observe high plasma calcium and phosphorus levels and an increase in the comb size of the affected hens. It would be worthwhile knowing whether comb size is observed by our Victorian colleagues who described this condition in the field in the Melbourne area.

Vacutainers and Poor Serum Harvest

Kim Chritchley a Veterinarian working with poultry in the Department of Agriculture in South Australia has supplied the following:

"Using vacutainers for blood sampling is easy and simple compared to syringes and bottles. It does have a draw back though in that clotting is often slow with a resultant poor clot retraction.

On investigating possible causes, one that looks the most likely is the different clotting mechanisms of the bird compared to mammals. Mammalian blood has intrinsic thromboplastins which can be activated by contact with a foreign substance e.g. glass. Avian blood does not have these, but requires the presence of tissue thromboplastins. Could this be the explanation? So often, the technique with vacutainers is quite atraumatic and very little tissue juice will be included with the sample. Stopforth (1970) noted that, if the sampling technique was not as good as it should be, the samples clotted much more readily and this concurs with our findings.

Stopforth, A. (1970) Page 901 Physiology and Biochemistry of the Domestic Fowl. Vol. II Academic Press (1971)."

Skin Leucosis

The following has been submitted by Dr. John Dingle of the Queensland Agricultural College.

"The February AVPA Newsletter Page 2 had a comment about looking out for skin leucosis in Australia.

As I was aware of the potential increased broiler condemnations if this form of Marek's Disease occurred in Australia I submitted a suspect case, a point of lay pullet, to the Animal Research Institute, Yeerongpilly in August last year.

The gross and microscopic lessions suggested Marek's Disease virus was responsible for the tumors. I can give you the details of the case if you want further information. Tom Grimes did the pathology at A.R.I. He made the surprising remark at the time that he "sees quite a lot of these skin tumors".

Poultry Slaughter Technique

An article by Heath G.B.S. et al in Veterinary Record (1981) 108:97 describes a year's experiment of poultry processing by four official Veterinary Surgeons who felt that the methods of stunning, killing and bleeding could be improved. They describe the usual processes and suggest new ones. It would be useful for some Australian Veterinarians involved in poultry processing to review this article in relation to the Australian industry at some future AVPA Scientific Meeting. Any volunteers?

Inactivated Bronchitis Vaccine

Gough R.E. et al in Veterinary Record (1981) 108:99, describes apparently successful protection against drop in egg production in IB infected birds which had previously been vaccinated, firstly with a live IB vaccine during rearing, and at 20 weeks of age with an oil emulsion vaccine. The experiment also describes Newcastle Disease vaccine and an experimental vaccine which was trivalent including Newcastle Disease, Bursal Disease and Bronchitis components.

Subclinical Infectious Bursal Disease in the UK Broiler Industry

Those working with or interested in Bursal Disease and its vaccine, should review some Epidemiological notes published in the Veterinary Record 108:88 which describes the subclinical condition in UK.

Worming Individual Birds

From Tom Hungerford's C & T No. 1284 "Dispense Lopatol 100 (Ciba-Geigy): Dose 1 tablet for Bantams; 2 tablets for larger layers".

Carbon Dioxide Effect on Broilers

We all worry about closing up sheds to keep birds warm and conserve energy, as pollution, ammonia and humidity are problems. Lack of oxygen and excess carbon dioxide are also problems Reece and Lott (1980) Poultry Science 59:2400 examined the carbon dioxide question. Normal atmospheric levels of 300 ppm are raised to 3000 ppm in normal brooding, but have been measured at 5000 ppm. The experiment showed that growth to 7 weeks was not affected by up to 6000 ppm. However, 12000 ppm carbon dioxide had significant effects on bodyweight but feed conversion did not suffer.

Heat Shock

Recently one egg producer lost 50% of his hens and the N.S.W. flock suffered an estimated 3% mortality. Mechanical protection from heat and activation of cooling devices such as fans and misting devices are the major preventive measures.

Fox (1980) Poultry Science 59:2391 reports on prevention by feeding thiouracil for four weeks prior to 42.2°C heat stress. Benefit also resulted from daily injection of DL - thyroxine for three days before stress. No prediction methods are suggested for our climate, but possible uses in applied breeding programmes are discussed.

Don't Overdo the Magnesium

Lee et al (1980) Poultry Science 59:2403, describes the lesions of magnesium toxicity in chicks. Poor growth, diarrhoea and rachitic lesions were seen. Some of our Australian leg weakness syndromes could well be checked out for this.

External Parasites

Northern fowl mite is often a problem in Australia and resistance to insecticides is suspected.

Hall et al (1980) in Poultry Science 59:2424 have studied four chemicals and found resistance to one, administration problems with another and two with good results.

Chicken Sexing

How many poultry veterinarians can sex chickens - alive that is!

Dr. Matsui of Japan is quoted in The Poultry . . . Farmer of 26th July, 1980. A useful reference.