Aviculture and the Veterinarian

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1. A brief history of the veterinarian in Australian aviculture

When I first started in aviculture 40 years ago this August, there was little available in professional medical help for our birds. Indeed, the aviculturist's medicine chest consisted of Condy's Crystals, Pine-O-Clean, charcoal, whisky (for both the owner and his charges), Mercurachrome and the like. Seldom was consideration given to taking problems to the local vet. Many of the old timers had their own remedies and potions and these were often zealously guarded with the result that one very often had to find one's own way through the minefield of treating sick or injured birds. And, of course, no self respecting aviculturist would be caught without a copy of Robert Stroud's ("The Birdman of Alcatraz" fame) "Digest on the diseases of birds" on the bookshelf.

A drastic method employed by many breeders was to "put down" any sick or injured bird which, with the lack of expert knowledge at the time, was probably the most effective method of containment. Even today this method is employed by some aviculturists.

It was not until the 1980s that aviculture and veterinary practice embraced on a broad scale. One contributing factor for this change was the introduction of The Avicultural Federation of Australia's national/international conventions. These provided a forum for Australian and overseas veterinarians to promote advances in avian medicine. Information was also disseminated through a plethora of Australian books and magazines on the subject. There is, however, still much to be done to encourage aviculturists to use veterinarians. Some suspicions still remain. In the majority of cases, referral to veterinarians is related to the value of the birds to be treated, i.e. the more valuable the bird, the more likely an aviculturist is to seek the advice and/or treatment by a veterinarian. Likewise, with surgical sexing. Surgical sexing has proved to be a major advance as a tool in aviculture. Whilst it has been embraced by aviculturists, complications remain and losses are still unacceptably high. Naturally, one's skill in this field is a contributing factor and this is borne out in results that show some individual veterinarians have overall a substantially lower loss rate than others. News of a veterinarian's success rate travels fast on the grapevine with the result that aviculturists gravitate to those veterinarians with the good track record. It is interesting to note that in recently imported birds that had supposedly been surgically sexed overseas prior to shipment, approximately 25% had been incorrectly

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identified - bearing in mind the 50% - 50% likelihood of success or failure anyway, this result is abysmal and happily the Australian veterinarians have a very much better success rate than this.

2. **Problems facing the aviculturist**

When I was setting up our bird farm in 1987, I contacted an old friend and highly respected avian veterinarian, Dr Lucio Filippich. Dr Filippich outlined what in ideal veterinary terms would be the perfect protocol. Conversely, I detailed the problems from a practical point of view which constrained implementation of the "perfect system". These could be loosely grouped into two categories:

(i) Financial limitations
(ii) Practicality

It was at this point we agreed that compromises had to be made so that the best possible result may be achieved, taking into account all of the issues. These were implemented and whilst some ongoing changes had to be implemented, on the whole the system worked very well. It is therefore on the issues of the perfect veterinary system verses the feasibility of implementation that I am basing my lecture.

At the bird farm we were able to introduce a series of innovations that facilitated our operation. These included quarantine facilities, mini laboratory, food preparation room, granary, despatch area, incubation room and temperature controlled hospital room. Unfortunately the average backyard aviculturist does not have the space or the financial capability to have such an extravagant system. And after all it is the average aviculturist that forms the vast majority of people who keep and/or breed birds. So let us examine the issues facing aviculturists and hopefully translate into something you as veterinarians will be able to take into account when dealing with aviculturists.

(A) **Acquisition**

A substantial part of the trade in birds is conducted between breeders. This may consist of swapping birds, or a sale and purchase of a bird or birds between two people or within a syndicate of breeders.

Of course, any movement of stock carries a risk factor - particularly contagious diseases and parasitic infestation. Whilst a movement of stock between two breeders is a risk factor, that factor is greatly enhanced when the bird or birds are purchased from a bird dealer or pet shop. Unfortunately, some of the bird dealers/pet shops are poorly maintained and this, coupled with their being a melting pot of stock from all manner of sources coming together, provides a hot-bed of disease and parasite infestation. Pet shops/bird dealers are very often the first contact the public at large have with birdkeeping and as such should serve as our front line in presentation. Whilst some dealers keep excellent premises other disappointingly leave a lot to be desired. Perhaps more effort should be made by both the avicultural community and professionals such as the veterinarians could be made to encourage the sub-standard dealers to lift their game.

Most informed aviculturists are particular about stock selection. A small number however are not and will purchase stock of any quality based on:

price, need, appeal (impulse buying)

Again, value appears to play a major role in whether or not the purchaser chooses to have the newly acquired stock checked by a veterinarian. If a bird is considered of little financial value the likelihood of its being checked is low.

(B) **Transportation**

Transportation standards of birds in this country is generally good. Some media reports on an individual's indiscretion may be sensational but they are very much in the minority and usually associated with the shipment of large quantities of birds by dealers. Personally, I have for many years shipped birds throughout Australia and overseas with an extremely low loss rate.

(C) **Quarantine**

Through a process of education via club and commercial magazines, books and videos, the importance of quarantining new acquisitions is having its effect. Many aviculturists are now quarantining their birds. The smaller backyard aviculturists however are still failing to do so. All too often one acquires a new bird and immediately introduces it into the breeding aviary or cage. Hopefully, a continuation of education will gradually eliminate this problem. For quarantine purposes with birds I use 60 days. After 30 days I introduce a sentinel bird. The quarantine period is used to treat in order - Psittacosis, Coccidia, Endo and Ecto parasites.

(D) **Introduction**

The introduction process is often overlooked as being important. It is, however, essential that correct procedures be adopted. One should determine if the bird being introduced is compatible with those who have already established their pecking order in the aviary. Not all species will accept a mate into their territory. In such cases, the resident bird will have to be removed from the aviary and introduced via unfamiliar adjoining cages and eventually introduced into the breeding environment. Seed and water should be placed in open dishes on the aviary floor for the new arrivals so that they are easily able to find them. I always suggest obtaining detailed information on the birds' past diet so that it can be maintained or weaned onto their new diet. Likewise, the water - I take a bottle of their current water home and wean the birds into it over a period of a week. Release into a new environment should always be undertaken early on a sunny morning so as the bird is able to familiarise itself with the new environment and pecking order. Inattention to correct introduction procedure often results in a trip to the veterinarian or worse.

(E) **Behaviour**

Ethology is a complicated and lengthy subject with which to deal in the short space

available. It does, however, critically affect the health and breeding capability of our stock. Unfortunately, a good knowledge of bird behaviour only comes from experience. One should study the birds over a long period of time. A good working knowledge of bird behaviour will overcome many problems before they become serious. Of course, a species' behaviour in captivity may be quite different to that in the wild. Compatibility between species sharing a communal aviary or between a breeding pair may be quite different during the breeding season to that during the non-breeding period. A bird may be identified as being unwell before it shows the usual symptoms of a sick bird - simply by noticing that its behaviour has changed. One has to be aware of what to expect during the courtship and mating procedure. Whereas it may be normal for the male of one species to ruthlessly pursue its mate to the point of exhaustion - the same behaviour in another species may signify murderous intent. It may be necessary in communal aviaries to provide more than one feeding station. It is not uncommon for a dominant bird to control the feeding station. Badly stressed birds quickly succumb or at least lead to secondary health problems.

(F) **Sexing**

One of the great difficulties has been the visual identification of a bird's sex. Certainly surgical sexing has provided a wonderful tool for larger birds - there is still a lot of small species, particularly finches, which are not surgically sexed because the size makes it a higher risk or the financial value of the bird makes it not a financially viable proposition. Generally, an experienced aviculturist is able to determine the sex of a bird by one or a combination of the following:

(i) behaviour
(ii) call
(iii) markings
(iv) colour
(v) head and/or mandible shape
(vi) examination of the vent
(vii) size of the bird
(viii) eye colour

(G) **Diet**

An inappropriate diet is one of the largest contributing factors to ill health and poor breeding results. Very few if any birds kept in captivity are by nature wholly granivorous, frugivorous or insectivorous. Most are omnivorous. Even the most common species that pet owners normally feed a dry seed diet are, in the wild, omnivorous. The reason we feed dry seed is for our own convenience. Wild birds do not eat dry seed - at best, the seed is half ripe. Birds in captivity should be provided with as varied a diet as possible. I use four (4) diets at different times of the year:

(i) Summer diet (low fat)
(ii) Winter diet (increased fat)
(iii) Non-breeding diet (austerity diet)
(iv) Breeding diet (high protein for stimulation)

Of course, there is no advantage in providing a varied diet if some of it is duplication, i.e. I see no advantage in feeding sprouted seed and half ripe seedheads. I much prefer half ripe seedheads because of the dangers in feeding sprouted or soaked seed. Whilst increased protein is essential as a stimulant to breed and subsequently rear young, an excess may cause health problems or overstimulate the male resulting in the loss of the nestlings. It is therefore most important that aviculturists know their species' requirements.

(H) **Housing**

The quality of avicultural housing and aviary furniture has improved greatly during the past few years. This can probably be attributed to more Australian avicultural books, club and commercial magazines, conferences and visiting lecturers. The variety of modern building materials has also made attaining the correct micro environment much easier to obtain. Health problems related to housing are:

(i) unclean conditions
(ii) dampness
(iii) excessive heat
(iv) draughts
(v) poor construction causing escapes or injuries
(vi) birds reared in hothouse conditions and then sold on to an aviculturist who places them in an open flight aviary
(vii) poor pest control, i.e. rodents, reptiles, insects

Each species has its own requirements and aviculturists must thoroughly research the requirements before obtaining the relevant birds.

Summary

The various facets of aviculture that I have dealt with here are really only the tip of the iceberg and, in some cases, a simplification of the subject. They do, however, provide you with some idea of what really happens in aviculture. Whilst aviculture has embraced veterinary science in recent years, there still remains a need for closer co-operation. While there is still a large section of aviculturists not prepared to use veterinarians, the risk of large scale problems exist.

May I offer for your consideration some proposals I believe may achieve a closer working relationship.

(i) greater participation by veterinarians in avicultural clubs
(ii) a sliding scale of fees so as to encourage people with cheaper birds to use their veterinarians
(iii) aviary tours by veterinarian groups to acquaint themselves with what is happening in a cross section of establishments
(iv) veterinary organisations making avicultural organisations aware of the latest advances in technology and/or recent outbreaks of disease

In 1999, Queensland will host The Avicultural Federation of Australia's national/international avicultural convention. It would be a great opportunity for your members to participate.