Quarantine?



David N. Phalen, DVM, PhD, Dipl. ABVP

Director of the Wildlife Health and Conservation Centre

Avian, Reptile, and Exotic Pet Hospital

University of Sydney

Camden, New South Wales, Australia

Over the many years that I have worked with birds, the issue of quarantine and biosecurity has come up over and over again. As a result I have lectured on this topic to many people who keep birds for many reasons. During these lectures I feel like a minister preaching to a congregation that needs to be inspired to mend their ways. After all isn't the most important thing to keep our birds healthy by keeping disease out? Like a minister, after the preaching is over, there are some converts, some who heard some of the message and others that come up to me rolling their eyes and either saying or are thinking, 'Yeah. Right. In what world are you living?'

Is there a place for a bio-security program that includes quarantine in your aviary? To answer this question, let's examine the value of quarantine and what a quarantine program requires? Quarantine is a period of time that all new birds and any bird that has left the aviary but then returns are kept in isolation before they are allowed to mix with the other birds in the aviary. The reason for quarantining birds is that infectious diseases are most likely to develop in the weeks immediately following disease exposure. Therefore, in theory, an exposed bird would develop signs of illness before exposing the resident birds in the collection.

Principles of quarantine include location, duration, isolation and the all in and all out concept. No two quarantine plans will be exactly the same, as each bird owner will need to create a quarantine protocol that fits their needs and their circumstances. The quarantine room can be anything from a bathroom to a separate building. The main features of the quarantine room should be that it is as far away from your other birds as possible; it should have limited traffic in and out; and it should not be your hospital area. The duration of the quarantine period is also going to vary. Thirty days is probably the minimum effective quarantine period. However, the longer the quarantine, the better. It is possible for you to carry disease agents from quarantined birds to the birds in your aviary. Therefore, you should always take care of the birds in quarantine last and keep their food sources and food and water bowls separate from the food and bowls used for the main aviary. The all in and all out concept means that if a group of birds is put in quarantine, that new birds are not added to that group during the quarantine process. If new birds are added to the quarantine

room and birds are already in there, then the clock starts again so that all the birds, new and old, leave quarantine at the same time.

Two realistic questions to ask at this point are: 1. Does a quarantine program make sense for you? and 2. Is a quarantine program alone sufficient to keep disease out? Quarantine takes time and effort. According to quarantine basics all new birds entering the aviary and all birds returning from shows should be quarantined before they return to the flock. Ideally, birds going to one show would be quarantined in a separate quarantine set up. For most budgerigar breeders this is highly impractical or at least highly inconvenient during the show season.

Not only is quarantine sometimes not practical, sometimes it is not effective. An unfortunate fact of life is that some infectious agents can infect birds and these birds may never show signs of illness and as result these infections will not be detected in quarantine. However, they may still be able to pass their infection onto another bird and that bird may become ill. A good example of this is avian polyomavirus. This virus does not cause disease in young adult birds, but is shed for several months after infection and when it gets into chicks it can be fatal. To keep out these types of infectious agents, birds need to be quarantined, but they also need to be tested. In many cases testing requires that birds be taken to a veterinarian and the cost of testing may be more than you are willing to pay. Additionally, not all tests are available in all places and not every test is 100 per cent accurate.

Quarantine is not going to do you any good if the diseases that you are trying to keep out are already in your collection. There are several infectious diseases that are widespread in budgerigars. Many, like *Macrorhabdus ornithogaster*, formally megabacteria, are present in nearly every aviary. Quarantine is not the solution to this type of infectious agent.

So is there any point is quarantine at all? I think there is and while it will not provide you with a guarantee that you will keep your birds free of disease, it may keep out the really bad infectious agents that could be devastating.

What I currently recommend is that budgerigar breeders keep at least two distinct populations of birds during the show season. The first are the breeding birds and the birds you are preparing for the show or are intending to sell. These are your clean birds—you care for them first. The second group contains the birds that have been to shows or are birds that you have just acquired. Keeping your show birds and newly acquired birds separate or at least in different cages would be best, but will depend on your circumstances. These birds you care for last. They should remain as isolated as possible until you are ready to set them up for breeding. This gives you a buffer, so if they bring back a very hot virus or a bacterial infection, hopefully it will show up soon after they enter your aviary and it will not get into your most valuable birds, your breeding stock.

Acknowledgement

This article by Dr. David N. Phalen is supplied by the *World Budgerigar Organisation (www.world-budgerigar.org)*, as part of their encouraged exchange of research information, and supplied to the WBO with kind permission by the *Budgerigar Society of New South Wales, Australia*.