

## **Bio-Security for the Home Poultry Flock**

### **by Rich Barczewski (May, 2019)**

You may have heard the term bio-security before but do you know what it means? Bio-security refers to the practices employed to protect your birds from biological disease organisms. Essentially, the process involves setting up a plan to minimize the potential for disease organisms getting into your flock.

Disease organisms can gain entry into your flock in several ways. They can be carried by people, animals, insect pests, in the air or even on vehicles traveling onto your property. The way disease organisms are transported depends on the particular disease that we are talking about. Additionally, it is important to realize that some disease organisms are fairly stable in the environment while others do not persist very long. Regardless of this fact, a bio-security plan should take into account the best way you can avoid bio-organism contamination on your property.

The first step in developing a bio-security plan is to evaluate your facilities. It is going to be easier to minimize disease organism entry onto your property if you have enclosed facilities. Enclosed buildings generally prevent unwanted wild birds, animals, and people from coming into contact with your flock. However, we all realize that this may not be possible in all situations and many of us in the exhibition hobby have seen some health and condition benefits to allowing our birds to be outside on a regular basis.

One thing that we can control is the people who come onto our property and have contact with our birds. Many commercial producers of poultry and livestock limit outsider contact to their poultry and animals. Additionally, when contact must be made, it is generally recommended that the individuals coming onto the property have not been around any other birds that same day. They should also be wearing shoes and clothing that is cleaned and has not come in contact with any other birds. This may sound extreme, but you need to realize that disease organisms can easily be carried from one place to another on clothing and especially on shoes. Some individuals wisely incorporate the use of disinfectant foot baths and require that anyone entering their facilities step into those foot baths prior to being allowed into the buildings. As a rule, minimize outsiders coming into your facilities whenever possible.

Another often neglected area of bio-security involves the potential exposure of organisms that older birds may have to younger birds. Special concern needs to be given to young chicks that do not have a developed immune system and require much cleaner and more sanitized pens than older birds. Never, co-mingle older birds with just hatched or young chicks. It is usually a bad idea anyway, but realize that older birds have established immune systems and have been exposed to environmental organisms that the young chicks have not. Additionally, be sure to clean and disinfect your pens (allowing them to air out for a couple of days if possible) before moving younger birds into them. What should you use for a disinfectant? Anything is better than nothing, but there are several good quality disinfectants on the market and available from poultry suppliers. Even household disinfectants are acceptable provided you allow the pens to air out before putting younger birds in the pens. The key to properly using a disinfectant is to thoroughly clean the pens before you disinfect them. Caked manure or adhering dirt cannot be disinfected so do a good cleaning job first, and then spray on the disinfectant.

It is important to be especially careful when you travel to shows or swap meets and return home. Never wear the same clothes to your barn after you've attended a show or swap meet. We often come in contact with many other birds from many other sources at a show or swap and we need to avoid bringing home disease organisms with our birds when we return. Again, be especially concerned about shoes that can hold manure and dirt longer than most other articles of clothing. Many of us can specifically think of situations where we returned from a show and within 7 to 10 days, our birds were sick. It is not uncommon to bring back some mild respiratory diseases when we travel to shows or other poultry gatherings and for that reason we need to be especially careful during these times. If possible, birds that travel to shows should be isolated for 2 weeks before putting them back in the same facilities as your other birds. This is not always possible due to pen space restrictions however, it is an ideal situation. That way, if a bird that was at a show comes down with an illness, it has not exposed all your other birds to that disease. In cases where you

cannot isolate returning birds, be extra diligent in looking out for a disease break and be prepared to treat your birds if a problem arises.

Currently, the United States Department of Agriculture is dealing with a reportable, contagious disease in California and Arizona. The disease is called Exotic Newcastle Disease. While this situation may seem a world away, be aware that you should not be shipping birds to or from that area of the country in an effort to prevent the spread of this disease. The most recent case in Arizona was in a backyard poultry flock so that is particularly troubling. All bird keepers need to be aware of how this disease is progressing and avoid contact with this area until the disease is eradicated.

We don't live in a perfect world and it isn't always possible for us to do everything that we would ideally like to do to prevent disease outbreaks, however I hope I gave you a few ideas on how to protect your birds from disease organisms.