

## “Biosecurity - Learning from the “Bird Flu” Situation”

Dave Shewmaker

[www.shewmaker.com](http://www.shewmaker.com)

copyright 2006

Some lessons are hard to learn. In the world of computers, there is a saying that goes something like this, “*There are two groups of people who use computers – those who **have** already lost data and those who **will** someday lose data. The only ones who regularly backup their files are those in the first group.*” Despite all of the compelling, common sense reasons to backup files and despite all of the policies and advice that command or urge files be backed up, most people just don't do it. Until of course, their world is turned upside down by the loss of a critical file.

In the world of pigeon racing, we have our own set of lessons that are hard to learn. One of these is the need to protect the gene pool. Just like the computer file, once it is lost, we either have to let it go or set about the slow and emotionally painful process of trying to recreate it all over from scratch. And just like the computer analogy, how stupidly unnecessary the loss was in the first place!

There are steps that we can take to protect and preserve the gene pool of our loft. Some of these steps are fairly obvious. Vaccinate your birds against the major diseases for which there are effective vaccines available. Keep a few extra birds of key matings in the event of an untimely death. Farm out some birds to other lofts so that we can reacquire them in the event of a loft fire or other disaster. There are some other steps though that are rarely taken which would go a long way toward increasing our level of protection. This is what I want to discuss in this article.

Returning to the computer analogy one last time, there was a photo in one of the trade journals a decade or so ago of the burned out office of an insurance company. In the photo was a charred desk on top of which were two separate piles of ashes. The caption said that the ashes on the left were of the company's computer on which all of their business files were stored. The pile of ashes on the right was their backup tape unit on which all of the backup files were stored. The point being that having a **plan** is better than having none at all, but it is better still to have a **good plan** that anticipates all scenarios.

One of the scenarios many, if not most, racing pigeon fanciers don't consider is that of the catastrophic disease outbreak. In this scenario, entire lofts can be lost. While the current “Bird Flu” scare may or may not translate into such a scenario for racing pigeons, the worse case scenarios that are being portrayed in the news media should at least raise in the fancier's mind the question of “how can I protect my loft from such a situation?”

To be sure, such scenarios are not out of the question. In California a few years ago we experienced an outbreak of Exotic Newcastle Disease. While there were not specific cases of the disease in racing pigeon lofts (the positive cases were mostly chickens), government rules resulted in the depopulation of lofts within a prescribed radius of confirmed outbreaks. With respect to “Bird Flu” (aka Avian Influenza and H5N1), this is a very serious virus which is prone to mutation and adaptation. While there is some evidence to suggest that pigeons are currently not as susceptible as other species of birds, it is virtually impossible to predict the precise course this disease will take. It only makes sense that we protect our breeding lofts against the worse case scenario. If it never materializes, then of course, all the better. There is also the threat of the “next disease”. In this day and age where we have international futurity races and we routinely import birds from around the world, the ability for new diseases (or new flare ups of old diseases) to spread quickly is a fact of life. If we want to protect our

breeding loft, we must take reasonable precautions against these scenarios as well.

Twenty years ago I was involved in the production of swine breeding stock. There are several diseases in pork production which are considered economically catastrophic. For some of these diseases, an outbreak on a production farm results in mandatory depopulation. Given the extreme economic consequences of such an event, swine producers have developed some very effective protocols for protecting the health of their herds. One of these is particularly illustrative of how a few carefully planned upfront steps can pay huge dividends.

The protocol was called SPF, which stands for Specific Pathogen Free. "SPF Herds" were certified to be free of a specific list of diseases that were particularly harmful in swine production. It did not mean that they were "disease free" or "sterile". The concept was that if producers who were forced to repopulate would procure their stock from an SPF Certified source and subsequently follow protocols designed to prevent the introduction of the specific pathogens, then they could reasonably expect to resume production with a minimal risk of a future outbreak.

We were what was known as a Primary SPF Certified Herd. To achieve this status we had to totally depopulate our farm, follow a thorough disinfection protocol of all facilities on the farm, leave the facilities completely idle for an extended period of time and then repopulate with baby pigs that had been delivered by way of a sterile cesarean section performed in a special laboratory. We then hand raised these pigs and they became our breeders. The farm was closed to all new livestock introductions (except by artificial insemination and additional lab c-sections). If we took a hog to a show, it was not allowed to return to the farm. It had to be sold or taken to the stock yards. All visitors to the farm had to shower and wear special protective clothing before they were allowed in the barns. Four times a year we had to have a state veterinarian come onto the farm and perform a farm inspection. Four times a year we had to have 50 hogs posted by a state veterinarian to verify none of the specific pathogens were present. The entire SPF repopulation process took almost two years and cost a fortune. Maintaining that SPF certification was also costly. Here is the point: we never lost our SPF certification and were able to operate and sustain a very successful large seedstock business for well over a decade before selling the business. In other words, the protocol was 100% successful for a prolonged period of time and the payback greatly exceeded the cost. I mention this example, not to suggest that an expensive protocol needs to be implemented in our pigeon lofts, but to underscore that the protocol I am about to recommend has been validated in the real world and was economically justified even when it was expensive to implement. In the case of pigeon racing, it is very inexpensive. It merely requires a change in some of our habits.

Here is the concept. We should **place a high priority on minimizing the exposure of our breeding loft to vectors of contagious diseases**. The more we can do to minimize the exposure, the more we limit our risk. There is of course no such thing as zero risk. The trick is to strike a balance that is right for your particular situation. What I will specifically outline below, are a series of steps that will minimize the risk of the breeding loft contracting diseases **new to the flock**. Naturally, we would like to protect our flying team as well, but given the nature of our sport, it is virtually impossible to achieve the same level of risk protection for them. Since we can always repopulate our flying team with birds produced in our breeding loft, our greatest concern is with the breeding loft. Still, some of the steps below will be appropriate for the flying team as well.

Remember, the overall concept behind all of these recommendations is to prevent "contact" between our breeding flock and the vectors commonly involved in the spread of the viruses,

bacteria, fungi, microorganisms and parasites that cause disease in our pigeons. The most direct form of contact is bird to bird, so a number of these steps are aimed at preventing this. The second most common form of contact though is through intermediaries. Anything that can transfer blood (e.g. Mosquitoes), pigeon fecal material (shoes, hands, clothing, cats, rodents), saliva (water systems) and even exhaled air (ventilation systems) should be considered a risk and reasonable efforts taken to minimize it. Since our flying team is regularly exposed to many of these vectors, we must also avoid “contact” between the flying team(s) and the breeders.

Here is a “Bio Security” Plan, designed for the small backyard fancier. It attempts to strike a balance between providing reasonable protection of the breeding flock while still enabling the fancier to enjoy his or her hobby. A large breeding center would of course benefit from a much stricter plan given their need to protect their enormous investment.

1. Provide a physically separate area for the breeders as far away from the race team(s) as possible. I recognize it may be part of the same loft, but choose as isolated a section as you can. Make particularly sure the race team(s) and the breeders do not share a common water system. If the two sections are adjacent, make sure there is a solid partition between the two pens. Try to arrange the ventilation so that the exhaust air from the race team does not enter the breeding section. Use separate equipment for the breeder section. For example, the breeder section should have its own scrapper and cleaning bucket. In setting up a backyard arrangement, two smaller separate buildings would be better than one larger building. This would allow better separation of the breeders from the race team(s).
2. If possible, arrange your chores so the breeder chores are done first and in the morning. Presumably at that time of day you will be in clean clothes and freshly showered. After the breeder chores are completed, the race team and other chores can be done. If it is necessary to reenter the breeding section later in the day, it would be best to re-shower and put on fresh clothes. However, many people will not want to go to this extreme. In that case, the very minimum should be to wash your hands (perhaps have some handi-wipes in the loft), put on a smock that is only used for the breeding loft and either use a foot bath or put on special shoes / boots reserved for the breeder section.
3. Do not allow visitors into your breeder section. If you feel the need to allow visitors to handle your breeders, make sure at a minimum that they have washed their hands and have them put on protective clothing such as a smock and boots.
4. Always shower and change into fresh clothes when returning from a pigeon event, such as shipping or an auction. This is a good practice even if you don't plan to go back out to the loft. It just reduces the risk and is a good habit to get into.
5. NEVER wear your street shoes into your loft. Have a foot bath and/or special shoes or boots that are used only in the loft. Something as simple as going to the feed store and then back to your loft can be a mechanism for transferring fecal material brought to the feed store on the shoes of another flyer.
6. Ensure that the breeder section allows no contact with wild birds or their droppings.
7. Control mosquitoes.
8. Control rodents. Maintain permanent bait traps.

9. Control cats and any other animal movements in and out of the loft area.
10. If you have other species of birds (particularly chickens), keep them separate from your pigeons.
11. Maintain an uncrowded and healthy environment for your pigeons. A stress free pigeon with a healthy immune system is often able to resist infection even when exposed.
12. Only place new birds into the breeding section that have gone through a complete and thorough quarantine program. The quarantine program should include a complete laboratory workup including throat, stool and blood analysis and be followed up with an appropriate treatment protocol.

We all hope that the "Bird Flu" disappears as quickly as it arrived. In the mean time though, the threat is very real. Take this opportunity to change a few habits. In the short term it may help you avoid a disaster. In the long term, it almost certainly will.