



# Sandhill

## VETERINARY SERVICES



### Preparing gamebirds for breeding - Jan 2020

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Careful selection of breeding stock is a key step in the whole process of breeding and rearing healthy birds. With *Mycoplasma gallisepticum* (MG) transmitting through the egg, starting with a 'known' health status is essential. Ideally, all breeding stock should be selected from the rearing field then over-wintered in netted pens where they can be regularly checked for signs of disease. This way you know the full history of the birds and can be as confident as possible of their MG status. However, as wild birds carry MG, a potential breakdown is always a risk.

Birds caught up for breeding are more likely to carry disease and this is particularly true if birds from a variety of sources are mixed just prior to the breeding season. Catching up and mixing birds is also a cause of stress, which is a potential trigger for disease. With caught up birds, you must find out as much as possible regarding the origin and disease status of these birds (and the neighbouring shoots).

You should screen any birds showing signs of disease, this may involve your vet using culture, PCR (testing for pathogen DNA) or serology (blood test) to aid the diagnosis. Screening healthy birds is not practical. Regarding *Mycoplasma* testing, there are significant problems to screening flocks. The test sample size required to be sure a group of birds is negative for this disease, the cost and the stress caused collecting blood samples would be unacceptable. As just one diseased bird within the group could soon cause a disease outbreak you would need to know the disease status of every bird in the group. Another problem is that birds may be negative when tested but could be infected the next day. MG serology results are not reliable in gamebirds, it may take weeks from infection to antibodies to be detected, so infected birds may be misdiagnosed as false negatives.

Any groups of birds testing positive for MG, should not be bred from and ideally should be culled.

Vaccination is a useful tool to control some diseases, but you must consider what you are trying to achieve. Vaccines work differently; some reduce clinical signs, some reduce disease transmission and some help the immune system to clear disease. In the case of MG vaccination, it suppresses or masks clinical disease, but has no known effect on limiting disease transmission through the egg (as per the BVPA guidelines) or clearing MG. It is for this reason we do not recommend the use of any MG vaccines. We believe it is important for breeding birds to show disease (if they have it) allowing us to test/treat/cull as required. By masking MG we run the risk of hiding it throughout lay and then setting infected eggs which will spread the disease.

Two common diseases we see in breeding gamebirds that appear to be controlled successfully, safely and cost effectively with vaccination are Avian Rhinotracheitis (ART) and Coronavirus (IB virus). ART produces respiratory signs similar to MG and is often found concurrent with MG infections. Coronavirus in pheasants damages the kidney and can cause sudden death and mortalities above 50%.

Any vaccination program should be completed well before expected start of lay so that the vaccine or stress of handling does not interrupt laying.

When moving birds into breeding pens ensure enough time is left prior to breeding for birds to recover from the stress. Over stressful periods we recommend use of electrolytes/multivitamins, such as *Vetrellyte*® to support birds. It is also sensible to use some form of water sanitisation, such as organic acids. This helps keep lines clean and will reduce bird to bird transmission of pathogens (such as MG) through drinkers. All lines should be cleaned prior to use and the site should ideally have a water audit carried out to ensure tank and line cleanliness.

Laying bird nutrition is important in order to have the birds in the correct body condition, with adequate minerals and vitamins ready for lay. Birds should be transitioned onto a suitable laying ration three weeks prior to lay.

One product we have had a great deal of success with in poults, is the probiotic *Clostat*®. By improving gut health, our trials showed *Clostat*® lowered mortality, increased weight gain and reduced antibiotic use. This product has the added benefit of increasing calcium uptake, so is ideal for use in breeding birds toward the end of lay when birds are weaker and shell strength may be unsatisfactory. We do not recommend starting *Clostat*® early in lay as it may increase shell thickness and reduce hatchability.

Well before pheasants move to the breeding pens, we advise that game farmers review their birds' management with their vet to address any problems that occurred last season and prevent problems occurring during the coming season.