

# Sandhill Veterinary Services

Game Bird, Poultry and Pigeon care

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Spring 2012

WELCOME to our spring game bird newsletter with the lead article focusing on the perennial problem of stress in birds and its relationship to clinical disease.

Medicine Record Books

We have a small number of Medicine Record books available for clients. These have been kindly supplied by Vetoquinol. They will be made available on a first come - first served basis.

**Opening Times:**

**Monday-Friday**

**8.30am - 5.00pm**

**Saturday**

**9.00am - 12.00noon**

**All other times by appointment only**

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## Game Bird Newsletter

### Reduce stress to reduce disease.

With the new breeding season about to start now is a good time to consider the effects of stress on game birds.

Whilst we may think we know what is meant by the term 'stress', in the context of reducing the incidence of disease stress may be defined as anything that adversely affects the bird's immune system or, to put it more simply, anything that reduces the bird's ability to fight disease thus making it more likely to become ill.

In human terms, we are all aware that 'stress' can lead to disease and that stress can be physical in origin, psychological, due to other diseases or caused by nutritional deficiencies.

The immune system of the bird is very complex but the basic components of a bird's immune system giving it resistance to infection are physical barriers (such as the windpipe, the intestinal lining, secretions such as those in tears from the eye and the skin) and white blood cells that directly kill disease-causing organisms or which produce antibodies to kill the organisms.

The types of stress that affect humans – physical, psychological, other diseases and nutritional also affect birds, and reducing these stresses can improve the overall immune status of the birds in our care.

Physical environment factors that will increase stress include poor temperature control (especially chilling or overheating of chicks), marked day / night temperature variations, draughts and damp conditions.

Psychological factors that will increase stress will include repeated predator threats and overstocking which results in birds lower down the pecking order being stressed

Other diseases can specifically affect the immune system (Mycoplasmosis) and in contaminated environments the immune system can become overloaded which is a particular danger when birds are overstocked.

Commercial diets should provide the requirements for maintenance and growth of the birds but when birds are scoured or when food intake is decreased due to disease then the effectiveness of the immune system can be further diminished. In game-birds higher levels of vitamins A & E may enhance immune competence.

Practically, what may be done to reduce stress will depend on the age of the birds. In breeding birds providing shelter will reduce the effects of strong winds and will provide cover from rain whilst for young birds in rearing sheds the level of management needs to be high to give the correct environmental conditions. Predator threat is more likely to affect released birds whilst overstocking is more commonly, though not exclusively, a problem on the rearing field.

Taking factors that cause stress seriously and tackling them should not only reduce the incidence of disease but will ensure that if birds do need to be treated they will respond more effectively to the medication.



### Foreign Bodies in Gizzards

Every year we see a wide variety of unusual objects in the gizzards of game birds. Many of the objects pictured here resulted in the bird's death. More care would prevent the birds having access to nails and pieces of wire and more care in taking out bits would prevent their ingestion. Other objects such as sharp pieces of rape straw question the suitability of rape for bedding young chicks and the thistles had been left as cover for birds; young pheasants then ate the heads which became stuck resulting in the birds starving.



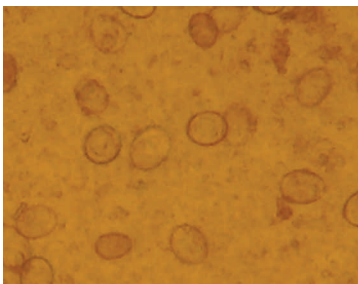
# 2011 REVIEW

The warm weather in early 2011 resulted in the laying season quickly passing its peak and there were few problems seen in the breeding birds although there were two outbreaks of Coronavirus infection seen. Both from home bred and imported chicks - both pheasants and partridges - there were problems associated with very small non-viable chicks which resulted in increased levels of starve-outs. This was particularly noticeable in chicks from one particular game farm.

In pheasants, enteritis in chicks less than a week old was largely due to Rotavirus infection but no Rotavirus was detected in partridge chicks. In partridges most early mortality was related to chick quality resulting in yolk sac infections and starve-outs.



As the season progressed and the weather became more variable enteric problems became more noticeable. The first cases of coccidiosis in both pheasants and partridges were seen in late May and the first case of Intestinal Spironucleosis (Hexamita) in pheasants was seen in the middle of June which was 2-3 weeks later than in 2010.



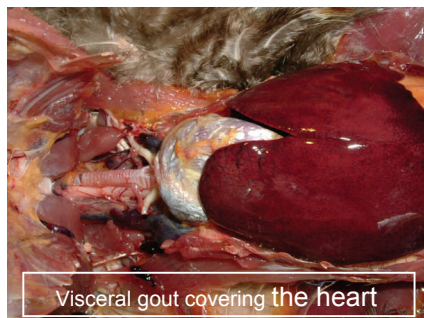
Other significant conditions seen in 2011 included enteritis in both pheasants and partridges associated with Spirochaete bacteria, several cases of Aspergillosis in pheasants related to the use of untreated bedding and from July onwards a number of cases of Necrotic Enteritis were seen in partridges over eight weeks old. In total 2417 birds were seen in 2011 of which pheasants accounted for 72% compared with 66% of submissions in 2010.

## CORONAVIRUS VACCINATION OF PHEASANTS

Coronavirus infection in pheasants causes clinical problems mainly in the breeding stock. It was first reported in Great Britain causing kidney disease and significant mortality in 1994. Pheasants that die of Coronavirus usually show signs of visceral gout.

There is no medication available to control outbreaks of this disease and the use of antibiotics and / or multivitamins has no discernible beneficial effect. It is most likely introduced into a breeding flock by a Pheasant that is carrying the virus without showing any clinical signs so mixing caught-up birds from a number of sources can be particularly dangerous.

In an attempt to induce immunity in the birds, poultry vaccines have been used on the basis that if a few infected birds enter the breeding pens, the spread of disease may be prevented or reduced. As there are many distinct strains of Coronavirus it is not possible to ensure control with the limited number of poultry vaccines that are available but their use may often be beneficial. Pheasants are vaccinated by eye-drop as they enter the laying pens. To discuss the possible use of vaccination in a pheasant breeder flock please contact Richard at the practice.



Visceral gout covering the heart

## STAFF CHANGES

Karen Barningham left the practice in October 2011 to take up an office administrators job with a company at Leeming Bar. We are very grateful for her contribution to the development of the practice over the past four years.

In November 2011 we were joined by Fran Jeffery who had been working as a Scientific Officer at AHVLA in Thirsk. Fran has extensive laboratory experience and her knowledge of bacteriology and parasitology are particularly relevant to the work of the practice. We are looking forward to her contribution to the further development of the practice laboratory facilities.

### PRICE LIST 2012

#### Services:

Post-mortem	28.00
Bacterial culture	6.50
Coccidial oocyst / worm egg count	6.50
Trichostrongylus worm count (Grouse)	12.00
Culture hygiene swab	5.50
Culture water sample	6.50
Medicated foodstuff prescription	8.50

#### Vitamins and Tonics:

Janssen Game Bird Tonic 1litre	28.22
Optishell Algal Booster	52.68
Vitamax Liquid Multivitamin 1litre	11.67
Vetrelite 1.5kg	22.20

#### Disinfectants:

Antec Virkon-S 5kg	40.78
Bi-oo-cyst 5litre	40.96
Biochlor Tabs 200	8.79
Orffa pH 10litre	22.00
Poultry Shield 1litre	10.19

All prices quoted are exclusive of VAT

All prices quoted are subject to alteration without notice.

Carriage will be charged where applicable.

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