

Sandhill Veterinary Services

Veterinary Care for Game Birds, Commercial Poultry and Pigeons



Game Bird Disease Surveillance Report May – September 2016

SUBMISSION REVIEW

A 'submission' is a single bird or distinct batch of birds of the same age or type. These figures do not include faeces samples submitted for coccidial oocysts counts and worm egg counts.

Total Birds Examined	2355
Total Number of Pheasant Submissions	413
Total Number of Partridge Submissions	234
Total Number of Duck Submissions	3
Total Number of Submissions	650

PHEASANTS

Breeding birds:

Mycoplasmosis was seen in breeding flocks from February onwards and testing showed some of these flocks to also have other bacterial infections present including Pasteurella (and related bacteria) and Ornithobacterium rhinotracheale (ORT) infection. All these other bacterial infections increase the clinical signs and severity of Mycoplasmosis. From May onwards, adult breeding pheasants submitted showed conditions typical of laying birds including egg peritonitis, vent peck wounds and some small birds that were not competing within the laying pen environment. Visceral gout due to Coronavirus infection was seen in very few flocks during the breeding season and in those showing infection, mortality remained low.



Young chicks:

Problems in young chicks related mainly to poor chick quality with yolk sac infections being common. In addition significant numbers of undersized chicks were seen which failed to compete with their flock mates. These two conditions made up the bulk of submissions. A large number of the submissions in June came from one of the larger British game farms with mortality in delivered chicks starting soon after delivery and reaching up to 20% in the first week of life. The problem was seen by a number of our clients receiving chicks from the same source and the problem was confirmed by the game farm's own veterinary surgeon who found both very small chicks and chicks with yolk sac infection on one site within three hours of the chicks being delivered. No cases of Rotavirus were seen in young chicks but a number of early cases of severe enteritis which looked very like Rotavirus infection were seen but these were negative on testing. No salmonella was isolated from game chicks this season.

Growing poults:

Mycoplasmosis was seen on numerous rearing sites this season and it was suspected that most cases originated from infected laying stock. Two severe cases resulted in sheds of poults being culled as they failed to respond to antibiotic medication. Both cases originated from breeding stock caught up from the same estate and the original chicks on the estate had a connection with the outbreak in 2014 when birds failed to respond to a variety of drugs commonly used to treat Mycoplasmosis.



A number of cases of Mycoplasma in rearing pheasants were associated with significant secondary infections such as Pasteurella, Ornithobacterium rhinotracheale and Bordetella, all of which would increase the severity of the Mycoplasma infection.

As usual enteritis was a common finding in growing poults with Spironucleosis parasites (Hexamita) also being commonly present from early June onwards. The first case of clinical coccidiosis was seen in 17 day-old pheasants on 19th May and cases continued to be regularly seen throughout the rearing season.

Pheasant chick with Mycoplasma / Respiratory disease

Two outbreaks of Ascites (water belly) were seen in young pheasant chicks, the youngest being only 8 days-old. Ascites is a build up of fluid in the abdominal cavity due to chronic heart failure and death occurs when the bird is unable to clear fluid from its lungs. Ascites can result from a number of causes but in these cases the cause was traced back to the feed having incorrect levels of salt present. Changing birds to a diet with correct levels of salt stopped new cases occurring.



Broiler chick with Ascites – the lesion is the same in game bird chicks

Released birds:

Cases of bacterial enteritis were the most common finding in released birds. In many cases this was related to birds under stress due to them being underweight and not taking the commercial food offered. Often it was found that their main dietary intake was wild weed seeds such as cleavers and dock and later in the season blackberries or sloes all of which have little nutritional value. These smaller birds were more prone to disease especially when the nights turned chilly. Encouraging the larger birds to leave the pen to allow the smaller birds better access to the food, dealing with any other identified stresses together with the use of suitable medication was largely effective in dealing with these problems. In some cases the reason for the birds choosing to eat wild seeds was that they preferred to remain in cover due to the presence of aerial predators. Although many released birds had coccidial oocysts present on microscopic examination of the gut contents, there was a lower percentage with clinical coccidiosis than in the rearing birds examined.

Some released birds very quickly picked up gape worms suggesting highly contaminated pens and the likelihood of feeders and drinkers being in similar positions to the previous season hence attracting birds to already contaminated areas.

More cases of Mycoplasmosis in released birds were seen than in 2015 - these proved difficult to treat as the birds were not necessarily taking the medicated water or feed provided in sufficient quantities or sufficient time. Another complication of Mycoplasmosis in pheasants is the large number of birds that have other respiratory infections present that increased the clinical signs of disease and which in many cases need treating with a different drug to that needed to treat the Mycoplasma. The time required to get laboratory results from such birds often makes further testing and treatment of released birds impracticable.



Gape worms

PARTRIDGES

Young chicks:

Poor chick quality was the only finding of significance seen in partridge chicks up to 7 days of age. The primary finding was yolk sac infection which is regarded as a hatchery problem but we also saw a number of very small chicks being sent out by the hatcheries which failed to thrive and died within the first few days of life. No Salmonella was isolated from the partridge chicks this season.

Growing birds:

Bacterial enteritis and coccidiosis were the most common diseases seen in birds up to 5 weeks-old, thereafter the incidence of enteritis reduced as did the incidence of coccidiosis in birds over 10 weeks old. Levels of motile protozoa, such as Hexamita, associated with bacterial enteritis were much lower in partridge chicks than in pheasant chicks.

Ascites was seen as the primary cause of death in some 14 day-old partridge chicks. They were on the same feed as pheasant chicks also showing signs of ascites. In addition a number of isolated partridge chicks from 10 days-old to 56 days-old were diagnosed with ascites but these were cases affecting individual birds rather than outbreaks of diseases and in these cases food was not believed to be a contributory factor.

Later in the season cases of Necrotic or Ulcerative Enteritis were seen in birds from 12 weeks of age and gape worms were seen in 10 week old rearing birds.



As in pheasants, cases of Mycoplasma were seen in rearing partridges. Most cases of Mycoplasmosis in rearing partridges started in birds over 8 weeks-old suggesting that the source of infection did not come with the chicks via the egg but the birds were infected from some other source. From our testing it appears that partridges with signs of Mycoplasmosis have fewer significant secondary invaders than pheasants.

Partridge with Mycoplasmosis

Released birds:

Birds in poor bodily condition were the most common submission for released birds. In most cases examination of these birds showed little significant clinical diseases suggesting that the birds were not going to the feeders due to some reason – possibly insufficient feeders for the number of birds or birds being frightened off the feeders by predators particularly birds of prey. A few cases of enteritis and coccidiosis were seen, but the other problem that was relatively common in released partridges was Mycoplasmosis. It is not known whether the birds seen were carrying the infection when released or if they caught the infection from wild birds after release. However some cases occurred several weeks after the birds had been released suggesting that wild birds were the most likely source of infection.

Copies of this Disease Surveillance Report can be found on the practice website.