Chapter 9

REPORTS OF SALMONELLA IN OTHER STATUTORY BIRDS

Other statutory birds comprise guinea fowl, partridges, pheasants, pigeons and quail.

In total, there were 51 isolations of *Salmonella* reported in ‘other statutory’ birds in 2016, which was a decrease of 25.0% compared to 2015 (68 isolations).

Game birds

Submissions from game birds to APHA/ SRUC for all reasons totalled 293 in 2016 compared to 344 in 2015 (decreasing by 14.8%, a trend which has continued from 2014 and earlier). There was one submission from guinea fowl in 2016 whereas there were none in 2015. Submissions from grouse increased by 34.1%; from 41 in 2015 to 55 in 2016. The number of submissions from partridges has continued to decrease (31 in 2016 (34.0% fewer than in 2015, n=47)). The number of submissions has been decreasing since 2013.

The total number of pheasant submissions declined by 19.2% in 2016, with 194 submissions compared to 240 in 2015. There were just three submissions from quail in 2016, compared to four and six in 2015 and 2014, respectively. A further nine submissions were from birds reported as ‘other game’, compared to 12 in 2015 (a 25% decrease) and 14 in 2014 (a 35.7% decrease).

As there is no statutory *Salmonella* monitoring of game birds in Great Britain, the majority of submissions in 2016 were for diagnostic purposes (87.4%) which was comparable 2015 (87.2%).

There was a 48.9% decrease in reports of *Salmonella* from game birds (guinea fowl, partridges, pheasants and quail) in 2016 (23 isolations) compared with 2015 (45 isolations). This was mainly due to a reduction in isolations from pheasants (13 vs. 34 in 2015). *Salmonella* Orion var. 15* was the most commonly reported serovar in game birds (7 isolations; 30.4% of total game bird isolations) and *S. Typhimurium*, which was previously the most commonly reported serovar, was the second most common (6 isolations; 26.1% of total game bird isolations).
Guinea Fowl
There were no isolations of *Salmonella* in guinea fowl in 2016; in 2015 *S.* Indiana was isolated once and this was the first isolation of any *Salmonella* from guinea fowl since 2010 (Table 9.1).

Partridges
There were a total of seven isolations from partridges in 2016 (six in 2015) (Table 9.2). There were no isolations of *S.* Typhimurium in 2016, for the first time since 2010 (Figure 9.1). *S.* Orion var. 15*+* was isolated four times in 2016 through voluntary surveillance. There was one isolate of *S.* Senftenberg detected in 2016, which was also reported in partridges in 2012, 2013 and 2015. *Salmonella* Kedougou was isolated once in 2016 and had previously been reported in 2011 through voluntary surveillance. *Salmonella* Newport was also isolated once in 2016 (through diagnostic testing with no presenting signs) and has not been reported in partridges since 2002.

Pheasants
The number of isolations of *Salmonella* from pheasants decreased by 61.8% in 2016 (n=13), from 34 in 2015 (Table 9.3). *Salmonella* Typhimurium was isolated three times in 2016 with the following phagetypes identified; DT8 (n=1) and DT36 (n=2) (Figure 9.2). This is a reduction of 82.4% compared with 2015 (17 isolations) and 86.4% compared with 2014 (22 isolations). Other serotypes isolated in pheasants in 2016 were; *S.* Dublin (n=1) (previously reported in 2008 through diagnostic testing with no presenting signs given), *S.* Kedougou (n=2), *S.* Orion (n=3) *S.* Orion var. 15*+* (n=3) and *Salmonella* 3,15:y:- (n=1). There were no isolations of *Salmonella* Pullorum (untyped) in pheasants in 2016, but this had previously been isolated in 2012, 2013 and 2015 and is likely to be present at a low level in the game bird population (Table 9.3).

Quail
In 2016, there were three isolations of *Salmonella* from quail; all were *S.* Typhimurium (one phagetype DT8 and two of DT104) (Table 9.3). This is slightly lower than in 2015 (4 isolations) but slightly higher than in 2014 (2 isolations). There were also two reports of *S.* Infantis and single reports of *S.* Typhimurium DT104 and UNTY in quail in 2016 from birds originating in France but as they were of non-GB origin they do not contribute to the tables and figures in this report.

Pigeons
Submissions from pigeons to APHA/ SRUC totalled 54 in 2016 (26 of which were diagnostic) which is an increase of 5.9% compared to 2015
(51 submissions) but a decrease of 5.3% compared to 2014 (57 submissions).

There were 28 isolations of Salmonella from pigeons in 2016, which was a 21.7% increase compared to 2015 (n=23) (Table 9.5). Twenty-four isolates were S. Typhimurium; 19 of which were DT2 (considered to be host adapted to pigeons), three were DT99 (also host-adapted), one was DT208 (previously reported in 2008 from diagnostic testing) and one was DT8, a duck-associated type which has never previously been reported from pigeons in GB; and was reported through diagnostic testing with no presenting signs given (Figure 9.4).

A further four serotypes were identified in 2016 (Table 9.5); S. Derby (n=1), which has never previously been reported in pigeons and was isolated through voluntary surveillance; S. Dublin (n=1) which was last isolated in pigeons in 1988; S. Panama (n=1) which has never previously been reported from pigeons and S. Senftenberg (n=1) which was last reported in 2012. In these cases it is likely that pigeons have acquired infection as a result of environmental contamination originating from other species.
### Table 9.1: Isolations and incidents of *Salmonella* in guinea fowl on all premises in Great Britain

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### Table 9.2: Isolations and incidents of *Salmonella* in partridges on all premises in Great Britain

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Table 9.3: Isolations and incidents of *Salmonella* in pheasants on all premises in Great Britain

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Table 9.4: Isolations and incidents of *Salmonella* in quail on all premises in Great Britain

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Table 9.5: Isolations and incidents of *Salmonella* in pigeons on all premises in Great Britain

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**Figure 9.3:** S. Typhimurium phage types in quail in GB 2012 - 2016

**Figure 9.4:** S. Typhimurium phage types in pigeons in GB 2012 - 2016
Figure 9.5: *Salmonella* 4,5,12:i:- phage types in pheasants in GB 2012 - 2016