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Goose Specialist Group  
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Conference abstracts



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## WILD BIRDS AS CARRIERS OF ANTIMICROBIAL RESISTANT BACTERIA

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Migratory birds are investigated as potential carriers of antimicrobial resistant bacteria that can be spread globally. The aim of this study was to investigate the carriage of multi-resistant bacteria in waterfowl and gulls. Faecal samples from gulls, swans, geese and ducks (n=416) were collected on parks, riverbanks, grasslands and municipal dumps in Lithuania. *Staphylococcus* and *Escherichia coli* were selected for testing. Minimal inhibitory concentrations were determined and interpretation of the results was based on EUCAST clinical breakpoints. Isolates resistant to at least 3 antimicrobial classes were treated as multi-resistant. Staphylococci were isolated from 176 samples (42.3%) from which 64 samples were from waterfowl. Fifty seven isolates out of 176 were multi-resistant however, only 3 isolates were from waterfowl while the rest of the samples were from gulls. *Escherichia coli* were isolated from 142 samples (34.1%) from which 44 isolates (31%) were treated as multi-resistant. The majority of multi-resistant isolates (40 out of 44) were from gulls and only 4 isolates were from waterfowl. The isolates demonstrated resistance to beta-lactams, sulphonamides and tetracyclines most frequently.

According to the data obtained it may be outlined that wild birds are carriers of antimicrobial-resistant bacteria but the highest prevalence are demonstrated in gulls that feed on dumps. Nevertheless, antimicrobial resistant bacteria may easily spread through water and infect other hosts including waterfowl.

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