Salmonella Surveillance Among Great-tailed Grackles (*Quiscalus mexicanus*) and Other Urban Bird Species in East Central Texas

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Abstract: Wild birds may play an important role in maintaining and transmitting Salmonella. Their ability to travel large distances and their proximity to human habitations could make them a vehicle for bridging Salmonella from wild and domestic animals to humans. To determine the potential public health risk presented by urban birds, we investigated the prevalence of Salmonella among Great-tailed Grackles (Quiscalus mexicanus) and other cohabiting urban bird species. Fecal samples were collected from 114 birds communally roosting in parking lots of retail locations in Brazos County, Texas from February to July of 2015. Great-tailed Grackles and European Starlings (Sturnus vulgaris) were the predominant species sampled. Standard bacteriologic culture methods were used to isolate Salmonella from samples, and isolates were characterized via serotyping and antimicrobial susceptibility testing. Overall, 1.8% (2/114) of samples were confirmed as positive for Salmonella. Both positive birds were Great-tailed Grackles sampled in June, yielding a 2.6% (2/76) apparent prevalence among this species. Isolates were serotyped as Salmonella Typhimurium and found to be pan-susceptible based on the National Antimicrobial Resistance Monitoring System (NARMS) panel of antimicrobial agents. The occurrence of Salmonella in Great-tailed Grackles represents a potential threat to public health, particularly considering their population size and their tendency to congregate near human establishments such as grocery stores.