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**URBAN RATS OR FLYING HEROES? WHAT CAN ROCK
PIGEONS TELL US ABOUT HELMINTH AND
VIRUS CO-INFECTION?**

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Abstract: Emerging diseases are rapidly becoming a global conservation issue, and traditional approaches to understanding transmission among in-situ populations often involved investigating hosts in the context of a single pathogen. Yet it is clear now that understanding disease dynamics within ecological frameworks must address hosts as simultaneously infected with multiple organisms. Helminths are among the most common parasites of vertebrates, yet their impacts on host populations are underappreciated due to their typical sublethal and/or subclinical effects. However, helminths may indirectly play a central role in the spread of other virulent pathogens, including many microparasites (e.g., viruses, bacteria). These indirect effects occur because pre-existing helminth infections can suppress host immunity in ways that increase microparasite susceptibility and enhance infectiousness, 2 key parameters that influence microparasite transmission. This study examines free-ranging urban Rock Pigeons (*Columba livia*) naturally exposed to both gastrointestinal helminths and Pigeon Paramyxovirus-1 virus (PPMV-1) in north-central Georgia to examine implications of helminth co-infection for microparasite transmission. Preliminary results show that 97.4% of wild-caught pigeons were infected with gastrointestinal helminths. Hatch-year birds shed more parasite eggs than adults, and birds with more flight feather wear shed fewer eggs. Ongoing work will examine whether widespread helminth infections in pigeons are associated with the seroprevalence of PPMV-1 and viral shedding rates.