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## **\*\*SPARROW DISPERSAL AS AN AGENT OF DISEASE TRANSMISSION (POSTER)**

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This project tracks the movement of the Eurasian House Sparrow (*Passer domesticus*) as a potential vector for disease, specifically between backyard chicken coops. Controlled studies show that sparrows and chickens easily transmit a host of diseases between species, including the avian flu, E.coli (*Escherichia coli*), and Salmonella, many of which are also transmittable to humans. There hasn't been a lot of research that tracks the movement of sparrows, especially between chicken coops as feeding stations. Our hypothesis is that sparrows use multiple chicken coops as feeding sites, thereby serving as a vector for disease. This research will help improve the scientific understanding for the potential impact sparrows could have, by being a vector for transmission to chickens, as well as other species, by the use of the different coops as feeding sites. Using traps designed specifically for sparrows,

we captured the birds at 15 sites in the urban area of Butte-Silver Bow County. We then used colored leg bands to identify the birds based on location and age, and developed a number system to account for individuals. As the research progressed, increased movement between locations was observed. In conclusion, by tracking the movement of sparrows we can explain the extent to which backyard chicken coops are connected, and thereby investigate the vulnerability of the chickens to disease transmission