

A tale of two cities: exploring cryptic chickadee hybridization in an urban world



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ABSTRACT Humans transform ecosystems. These large-scale changes have welldocumented effects on species distributions, but we do not fully understand how humancaused landscape changes affect complex processes like species interactions. One such interaction is hybridization, the interbreeding of individuals from distinct populations. A growing body of literature documents hybridization between typically reproductively isolated species in human modified landscapes, indicating that habitat disturbances are changing how species are distributed across landscapes and how they interact within them. Despite being a common and significant outcome of human landscape change, we do not understand how human habitat disturbances drive hybridization between typically 'good' species or what happens to hybridizing populations in the long-term. Using three years of fine scale population monitoring coupled with nearly 500 whole genomes, I will share findings characterizing the reproductive barriers and consequences of hybridization in a wild, sympatric population of Colorado chickadees where human habitat disturbances appear to influence hybridization.

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