



Kristen Ruegg
Associate Professor
Biology Department
Colorado State University
USA

The Bird Genoscape Project: Harnessing the power of genomics to advance migratory bird conservation

Research suggests that nearly half of all songbird populations in the Western Hemisphere are in decline, and these declines are expected to be exacerbated by the impacts of climate change. However, understanding the precise locations of the most significant population declines has proven challenging due to the long-distance movements of migratory birds across their breeding, migratory, and wintering territories. In the upcoming presentation, I will delve into our efforts to tackle this pressing issue through the development of the The Bird Genoscape Project. This collaborative endeavor aims to unite scientists from across the Western Hemisphere to map the migratory routes of songbirds using genetic tools. Specifically, the main objectives of the Bird Genoscape Project are to: 1) create comprehensive, visually impactful, migratory flyway maps for birds that can be used to motivate conservation efforts across geographic and political boundaries, and 2) map the potential for bird populations to adapt to climate change. Throughout this presentation, my focus will particularly center on how data derived from the Bird Genoscape Project