Competitive interactions in tropical birds and their role in phenotypic evolution and community structure

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When related species come into contact they might character displace and coexist, they might converge and coexist, or they might exclude each other completely from their ranges. Much theoretical work has described how each of these outcomes could be predicted to occur. Yet, little work has examined when you might expect convergence versus divergence, and empirical evidence is lacking of examples comparing when related species might on some occasions coexist and others exclude each other. I show how two related species if tinkerbird coexist in Central and East Africa, facilitated by character displacement in their song and morphology, while in West Africa there is competitive and/or reproductive exclusion. I also describe the interaction between two further tinkerbird species that are largely excluded from one another’s ranges and relate those patterns to the molecular phylogeny. I then show an example of character convergence and discuss how it also facilitates coexistence in Amazonian antbirds. I will end by briefly describing the work I’ve been doing exploring inter- and intrasexual interactions in Mexican antthrushes.

Who is Alex Kirschel?

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Selected publications:


