Determining the Limits of Flexibility to Understand Responses to Environmental Change

Phenotypic flexibility has received increasing attention as the pace of anthropogenic environmental change has accelerated. But, where and when should we actually expect species to exhibit flexibility and how should we expect flexibility to actually influence a species’ ability to respond to changes in their environment? I will explore this question with long-distance migratory shorebirds, which undertake incredible trans-hemispheric nonstop flights. While these extreme migrants are declining rapidly, their populations are showing surprising resilience that is best understood through the lens of phenotypic flexibility, providing hope that targeted management and conservation efforts can be developed.