**Title**: Temporalchanges in the individual size distribution decouple long-term trends in abundance, biomass, and energy use of North American breeding bird communities

# Authors: Renata M. Diaz1,2\* and S. K. Morgan Ernest3

1. School of Biology and Ecology, University of Maine, Orono, ME.

2. School of Natural Resources and Environment, University of Florida, Gainesville, FL.

\* Corresponding author. Email: [renata.diaz@weecology.org](mailto:renata.diaz@weecology.org)

3. Department of Wildlife Ecology and Conservation, University of Florida, Gainesville, FL. Email: [skmorgane@ufl.edu](mailto:skmorgane@ufl.edu)

**Data availability:** All data and code supporting this manuscript are available online on GitHub at <https://www.github.com/diazrenata/bbs-size-shifts>. For the purposes of double-blind review, we have uploaded an identical copy of these materials to a temporary GitHub repository at <https://github.com/bbssizeshifts/BBSsims>. Upon manuscript acceptance, they will be archived in perpetuity on Zenodo.

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**Conflict of interest:** The authors declare no conflict of interest.

**Ethics approval, patient consent, reproduction of material, and clinical trial registration:** These do not apply to this manuscript.

**Biosketches:** RMD is a computational biodiversity scientist studying how the emergent properties of ecological systems respond to global change. SKME is an ecologist who studies long-term changes in communities and the processes driving those changes.