Electronic Supplementary Material
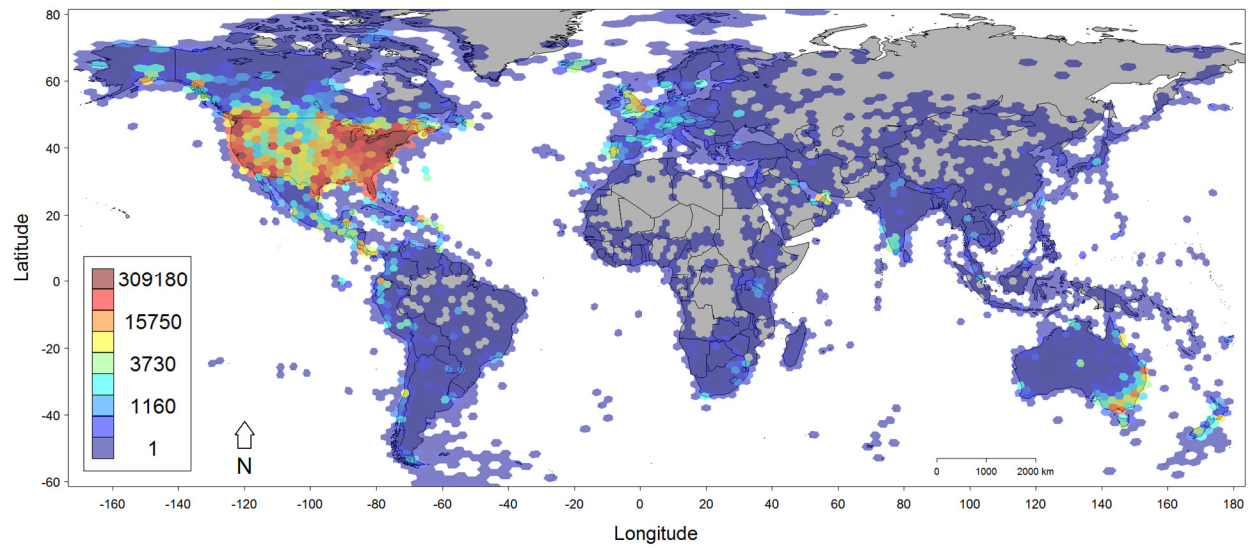

Figure S1. The global distribution of eBird checklists compiled within equal-area hexagon cells (49,811 km²) of a global icosahedron from 2002 to 2014.
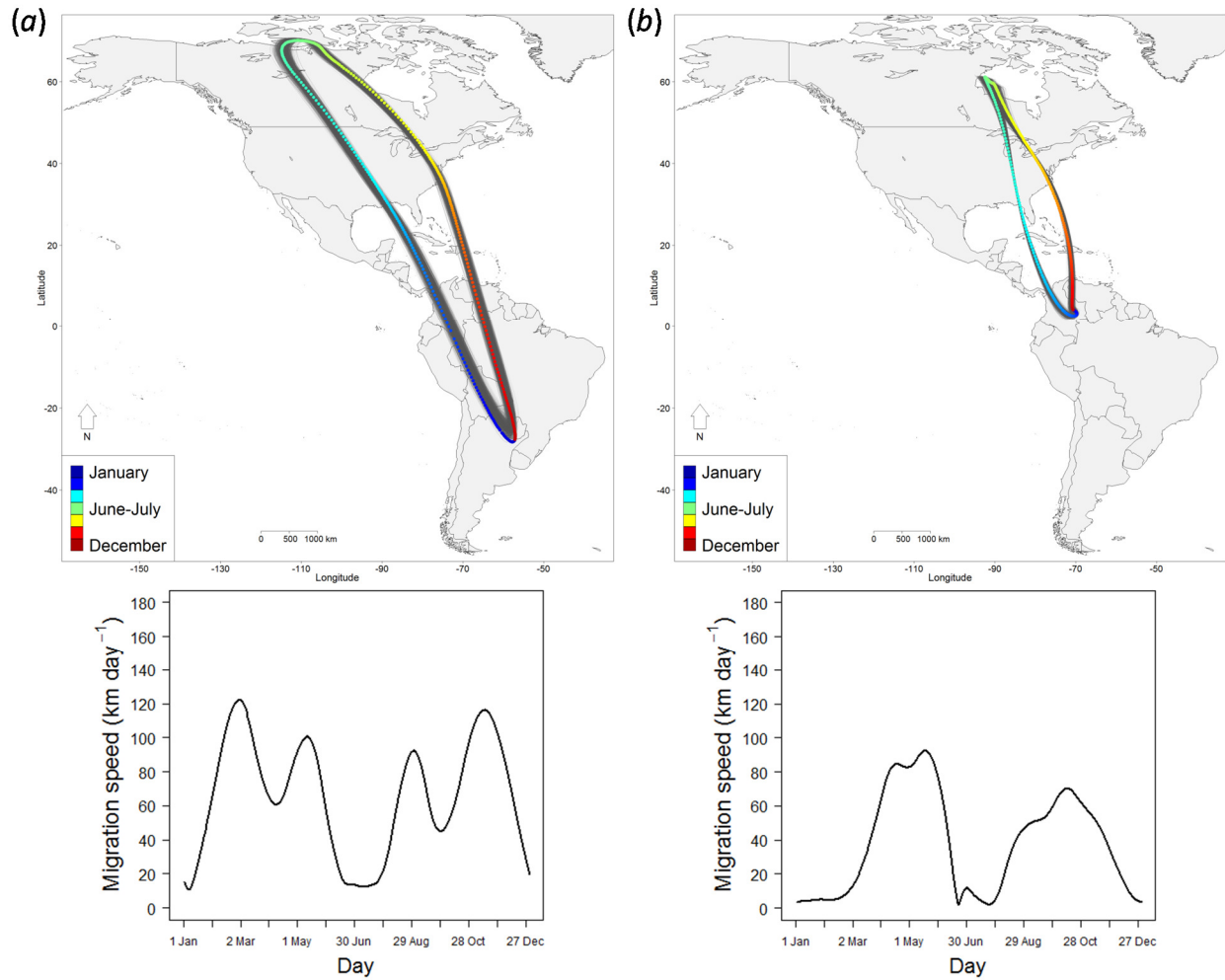
Figure S2. Examples of population-level migration trajectories estimated daily across the annual cycle for the combined period 2002-2014 for the (*a*) American Golden Plover (*Pluvialis dominica*) and the (*b*) Blackpoll Warbler (*Setophaga striata*). The black trajectory lines are from 1000 bootstrap replicates. The plots below each map are population-level estimates of daily migration speed across the annual cycle for the combined period 2002-2014.
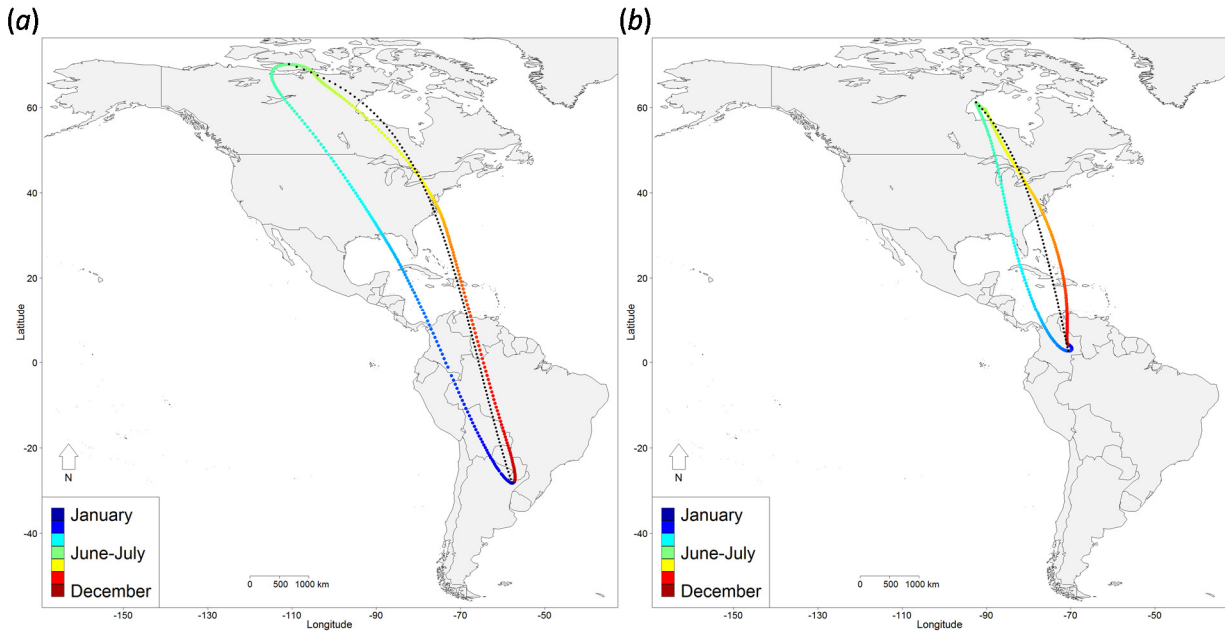
Figure S3. Examples of population-level migration trajectories estimated daily across the annual cycle for the combined period 2002-2014 for the (*a*) American Golden Plover (*Pluvialis dominica*) and the (*b*) Blackpoll Warbler (*Setophaga striata*). The dotted black trajectory lines are the great circle (orthodromic) paths between the daily centroids having the minimum and maximum latitudes.
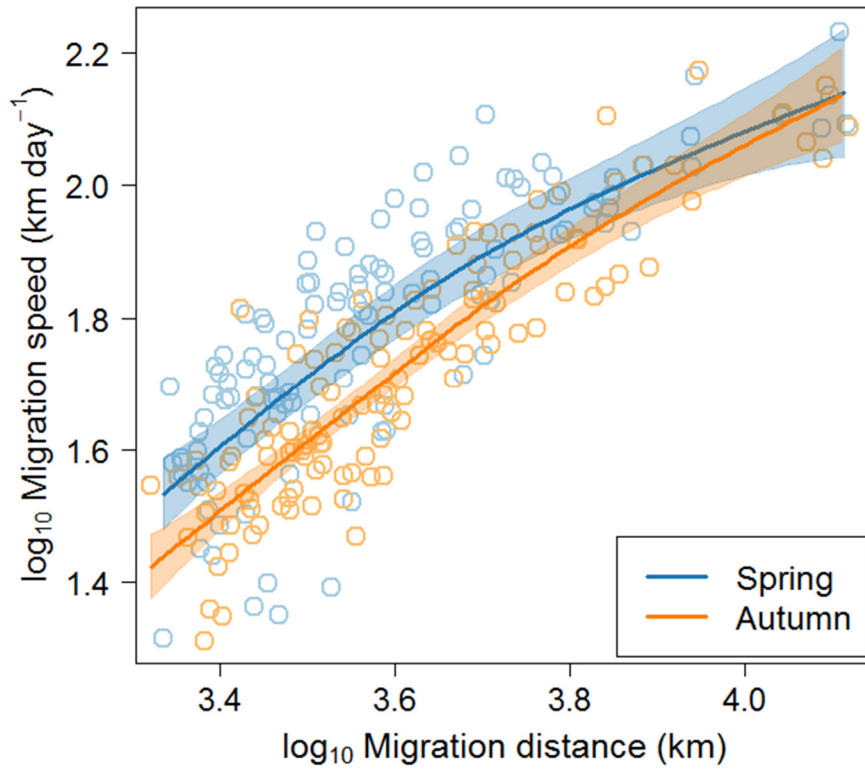
Figure S4. The relationship between migration distance and peak migration speed for 118 migratory bird species estimated at the population-level during spring and autumn migration within the Western Hemisphere. The fitted lines and 95% confidence bands are from generalized additive mixed models with family as a random effect.