

The datasets include all data necessary to recreate results and figures in the manuscript. Code can be found on GitHub (https://github.com/syanco/seasonal_survival/tree/main). See below for details about the datasets.

KW_Motus_Data.rda

Rows represent observations and/or detections of individual birds. Variables are as follows:

ts = Timestamp (YYYY-MM-DD HH:MM:SS) of capture, re-sighting event, detection by automated telemetry, or detection by handheld telemetry.

ts_Yday = Ordinal date (1-365) of each timestamp.

motusTagID = Motus assigned unique identifier for each tagged individual.

recvDeployName = Name of automated telemetry station or study site that the individual bird was detected at. "Tagged" indicates that this observation was the capture and tagging event in The Bahamas.

Detection_Type = Indicates type of detection, including: Tagged (tagging event), Tower (automated telemetry station), By Hand (handheld telemetry or re-sighting of color-banded individual).

recvLat = Latitude in decimal degrees of tagging event, direct observation, detection by automated telemetry, or detection by handheld telemetry.

recvLon = Longitude in decimal degrees of tagging event, direct observation, detection by automated telemetry, or detection by handheld telemetry.

Period = Manual annotations indicating the period of the annual cycle the bird was detected during (Winter, Migration, Breeding, Breeding Departure [detected at departure on fall migration], or Fall Migration. Other options include: Tagged (capture and tagging event), Died (individual was found dead), Never Found (individual was detected by automated telemetry on the breeding grounds but never observed in person).

Sex = Sex of bird

btbw_data.RData

nYears = Number of years

jam.m.marray = Capture histories of male warblers in Jamaica, formatted as a *m*-array. Rows and columns correspond to capture occasions, which in this case are combinations of year and season (October, March). Entries indicate the number of individuals released on the occasion of the corresponding row (1:# occasions – 1) that were recaptured on the occasion of the corresponding column (2:# occasions). The final column indicates the number of individuals released on the occasion of the corresponding row that were never re-captured.

jam.f.marray = Capture histories of female warblers in Jamaica, formatted as a *m*-array. Occasions are combination of year and season (October, March). See *jam.m.marray* for description of the *m*-array structure.

nh.m.marray = Capture histories of male warblers in New Hampshire, formatted as an *m*-array. Occasions are combination of year and season (May, August). See *jam.m.marray* for description of the *m*-array structure.

nh.f.marray = Capture histories of female warblers in New Hampshire, formatted as an *m*-array. Occasions are combination of year and season (May, August). See *jam.m.marray* for description of the *m*-array structure.

r.jam.m = Number of banded male warblers released on each occasion in Jamaica. Occasions are combination of year and season (October, March).

r.jam.f = Number of banded female warblers released on each occasion in Jamaica. Occasions are combination of year and season (October, March).

r.nh.m = Number of banded male warblers released on each occasion in New Hampshire. Occasions are combination of year and season (May, August).

r.nh.f = Number of banded female warblers released on each occasion in New Hampshire. Occasions are combination of year and season (May, August).

soi = Annual Southern Oscillation Index (SOI) values, 1989-1999.

stn.bseas = Standardized breeding season length at Hubbard Brook Experimental Forest, 1989-1999 (days).