The following supplement accompanies the article

Blue crab larval dispersal highlights population connectivity and implications for fishery management

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Marine Ecology Progress Series 625: 053–070 (2019)

Supplementary Material

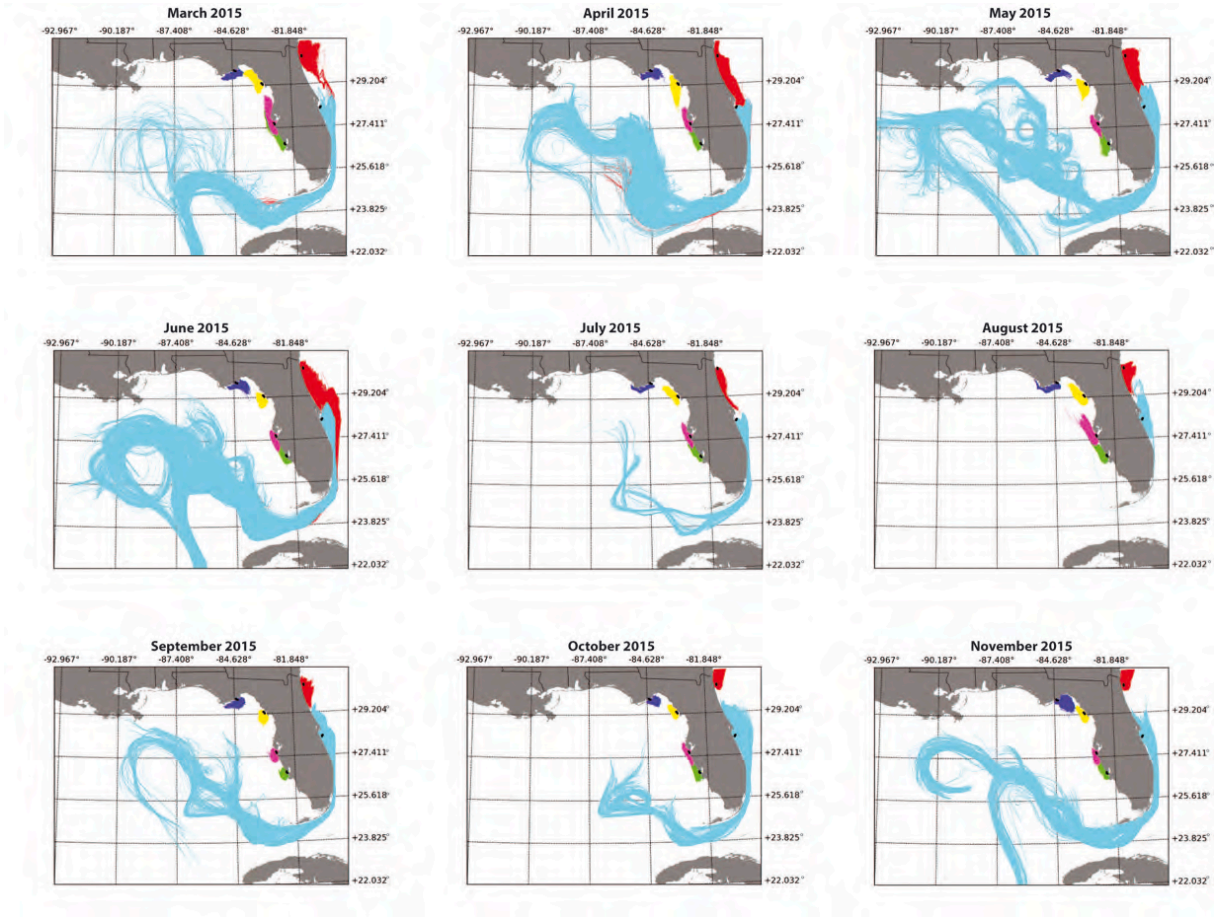
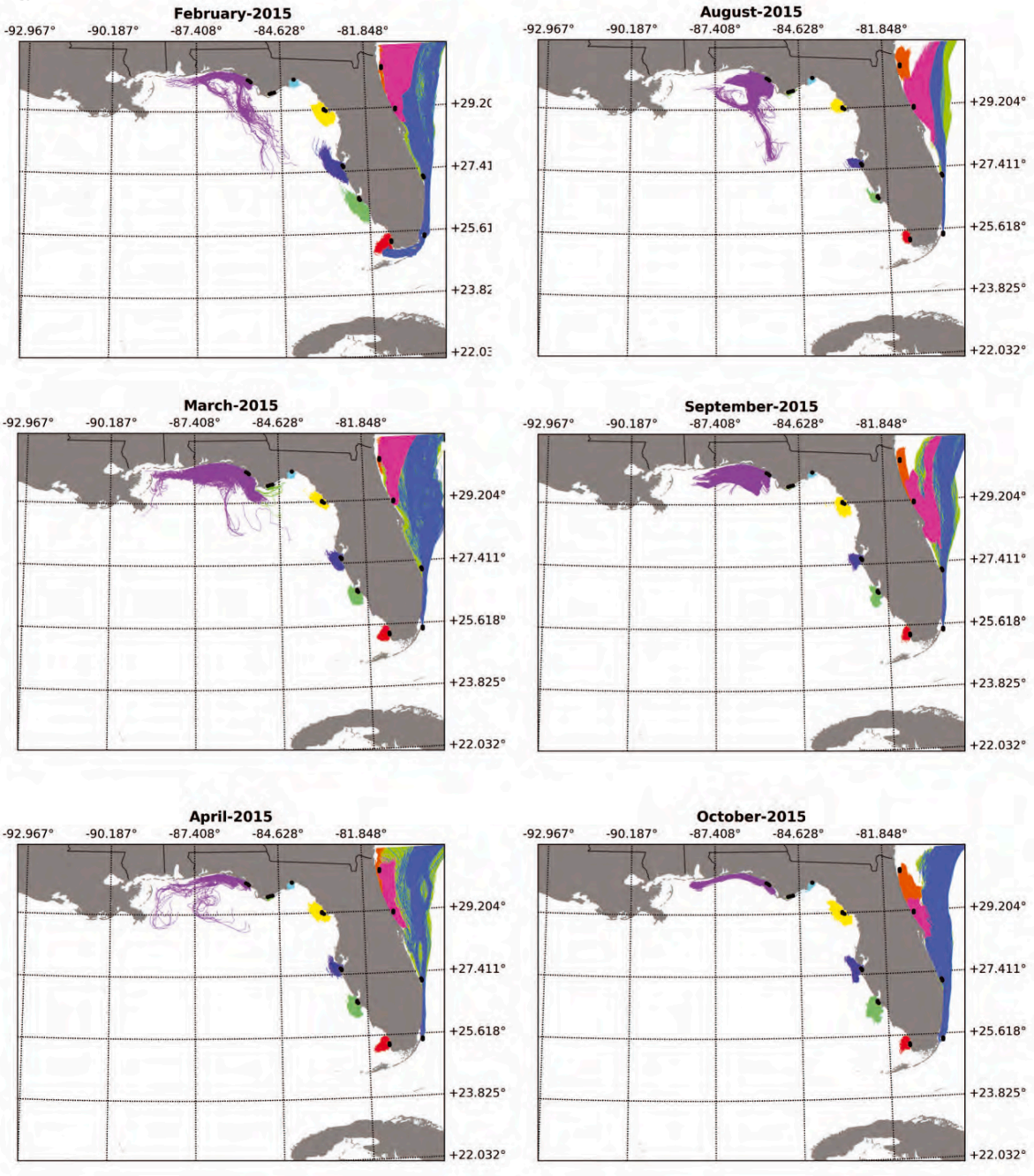


Figure S1. Trajectories of ingressing blue crab larvae derived from backward simulations conducted from March 2015 to November 2015. Black dots represent settlement areas. Trajectories to settlement areas are represented by a different color. On the western coast of Florida, virtual larvae ingressing to Apalachicola Bay are in dark blue, to Cedar Key in yellow, to Tampa Bay in purple, and to Charlotte Harbor in green. On the eastern coast of Florida, virtual larvae ingressing to Jacksonville are in red, and to the Indian River Lagoon in light blue.

a


February-2015
August-2015
March-2015
September-2015
April-2015
October-2015
-92.967°
-90.187°
-87.408°
-84.628°
-81.848°
+29.204°
+27.411°
+25.618°
+23.825°
+22.032°

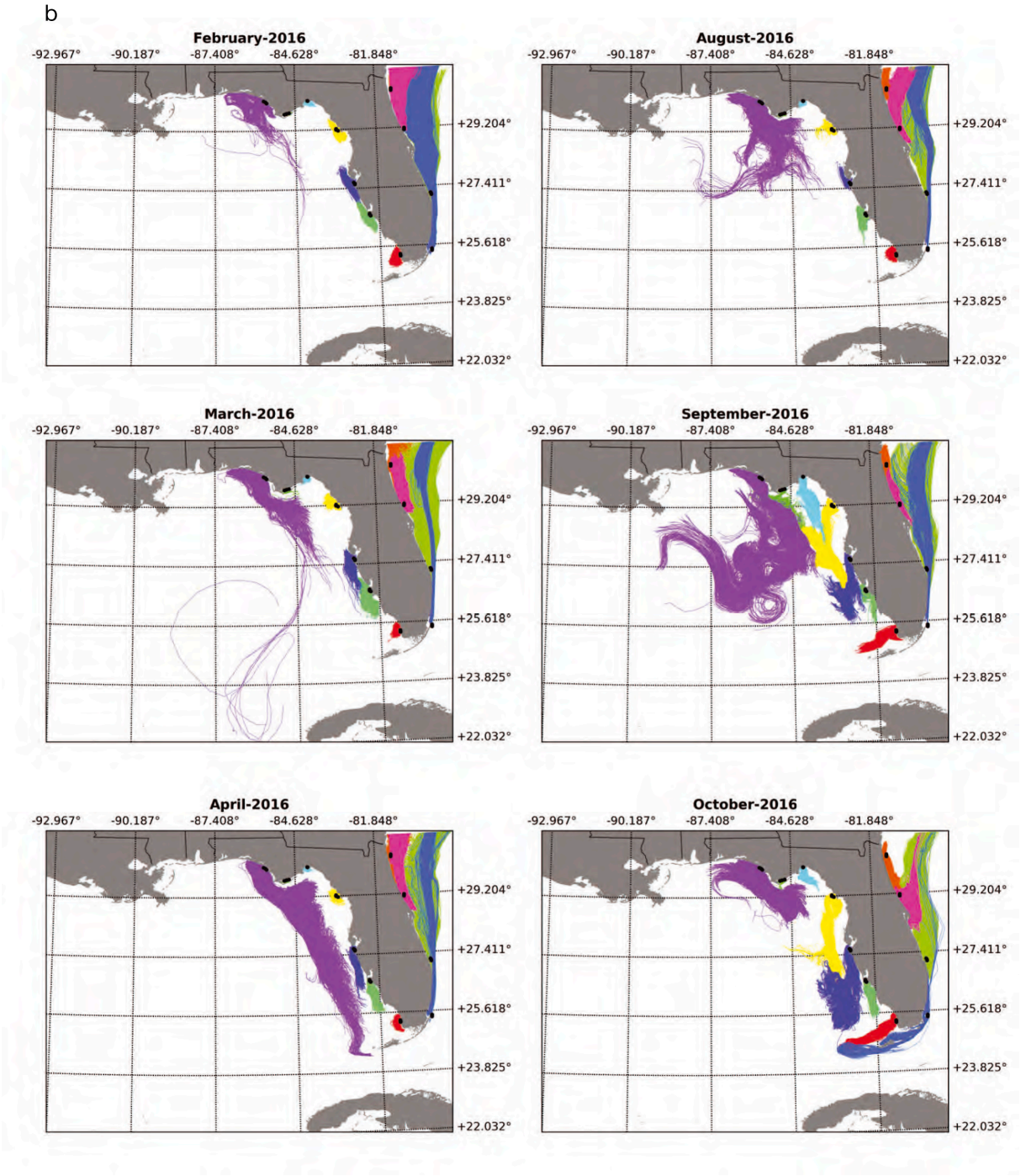
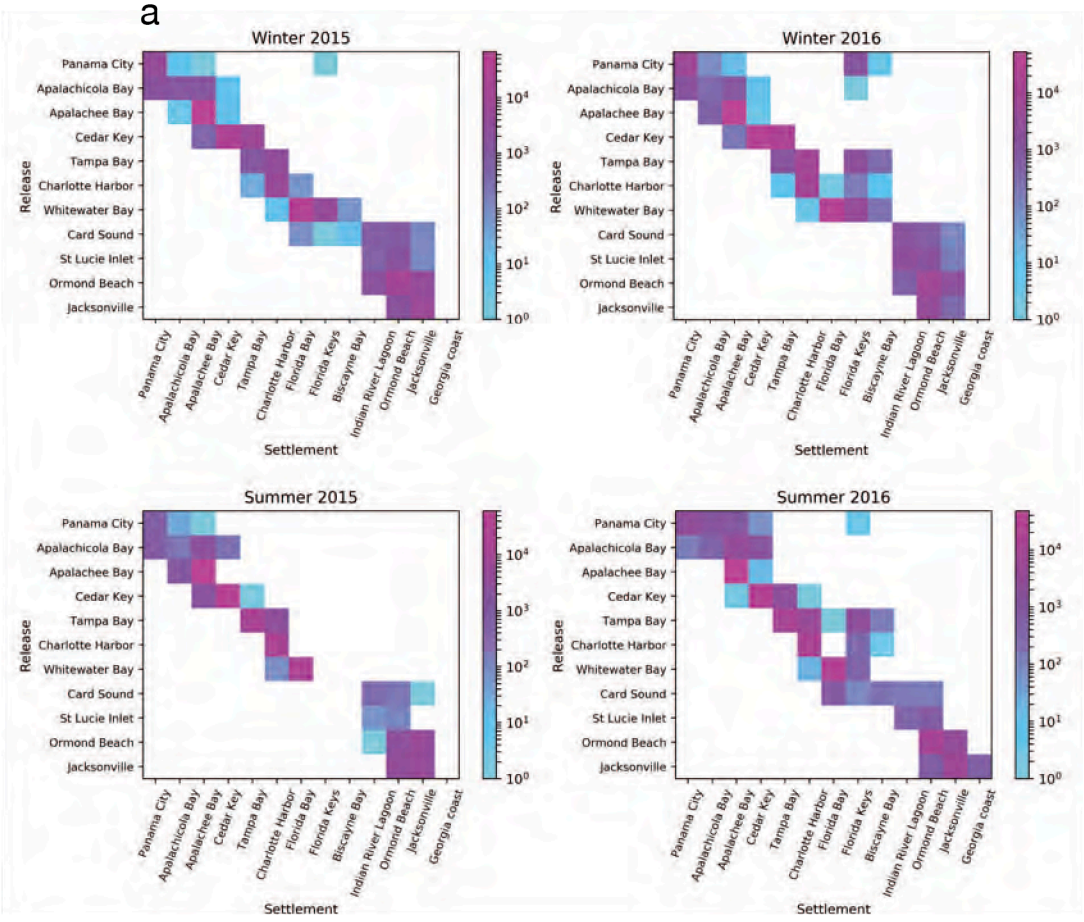


Figure S2. Trajectories of blue crab larvae from inshore spawning sites derived from forward simulations released in (a) 2015 and (b) 2016. Each graph depicts the trajectories of the corresponding release month. The trajectories end after 55 (40) days for virtual larvae released in boreal winter (summer). Trajectories at each site are represented by different colors: Panama City (PC) in purple, Apalachicola Bay (AaB) in green, Apalachee Bay (AeB) in light blue, Cedar Key (CK) in yellow, Tampa Bay (TB) in dark blue, Charlotte Harbor (CH) in light green, Whitewater Bay (WB) in red, Card Sound (CS) in blue, St. Lucie Inlet (SL) in green, Ormond Beach (OB) in orange and Jacksonville (JX) in pink.

a


Winter 2015
Winter 2016
Summer 2015
Summer 2016
Release
Settlement
Panama City
Apalachicola Bay
Apalachee Bay
Cedar Key
Tampa Bay
Charlotte Harbor
Whitewater Bay
Card Sound
St Lucie Inlet
Ormond Beach
Jacksonville
Florida Bay
Florida Keys
Biscayne Bay
Indian River Lagoon
Georgia coast
10^0
10^1
10^2
10^3
10^4

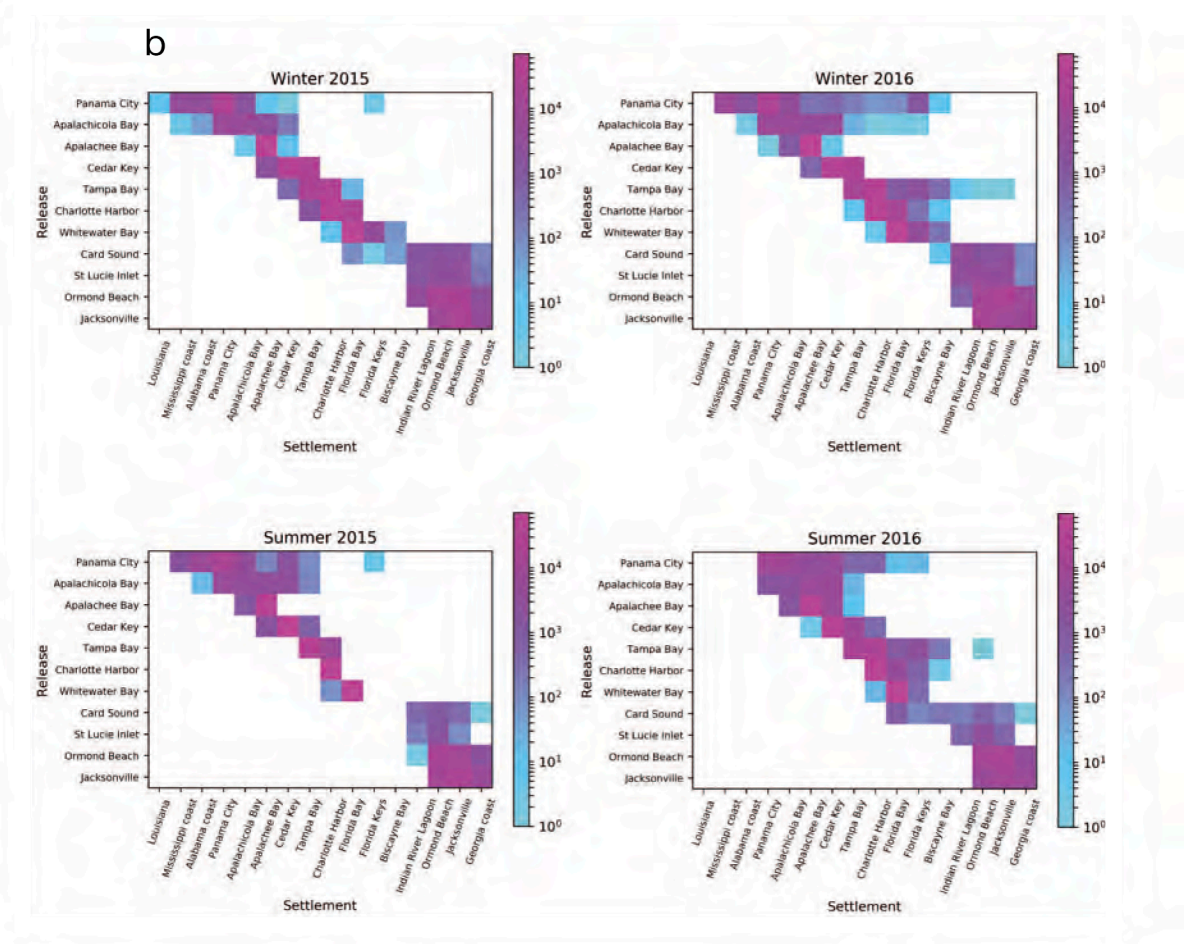


Figure S3. (a) Habitat connectivity matrices showing the number of blue crab larvae transiting between each release (*y*-axis) and settlement (*x* axis) habitats from inshore locations in 2015 and 2016 boreal winter and boreal summer months. (b) Same as (a) for the regional connectivity matrices. Boreal winter (summer) virtual settlements periods correspond to January to May (June to December) respectively. The color bar ($\log_{10}$ scale) indicates the number of larvae. Settlement and release locations used in the matrix are labeled according to their longitude. The South Carolina settlement region was left out of the connectivity matrices because no larvae reached that region in our simulations.