

Transport of blue crab larvae in the northern Gulf of Mexico during the Deepwater Horizon oil spill

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Supplement. This supplement contains figures relating to the sensitivity analyses that we conducted. The figures demonstrate that our results are not sensitive to our assumptions regarding release timing or that distance that ovigerous females migrate.

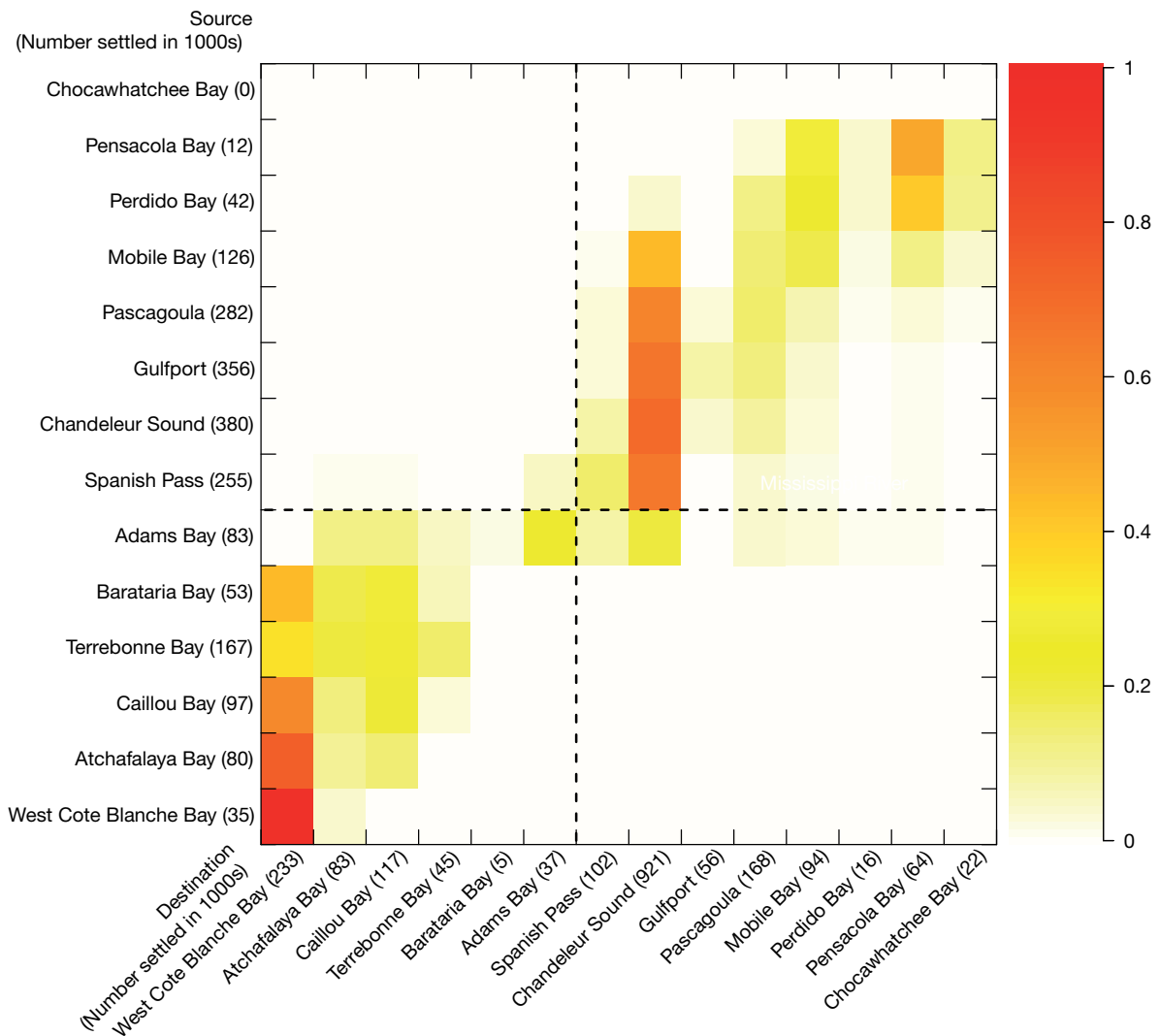


Fig. S1. Connectivity matrix summed over the 12 simulations where the particle release date coincided with a full or new moon. The vertical axis is the estimated source estuary and the horizontal axis is the destination estuary in which larvae settled. The color of each block indicates the proportion of successfully settling larvae spawned at the source estuary that settled in the destination estuary

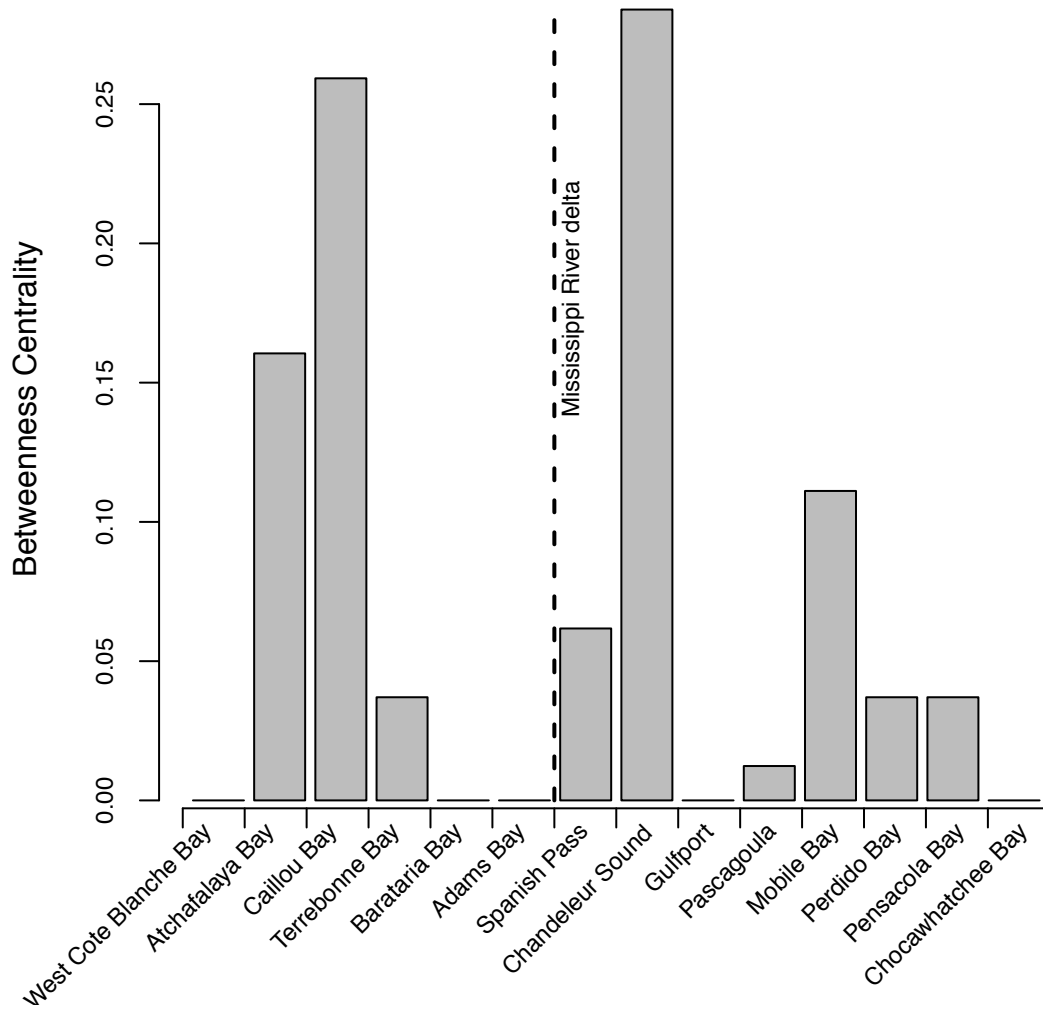


Fig. S2. Betweenness centrality calculated for each estuary as described in the text, and including only the simulations where particle release was synchronized with a full or new moon. This metric shows the importance of each estuary to maintaining connectivity

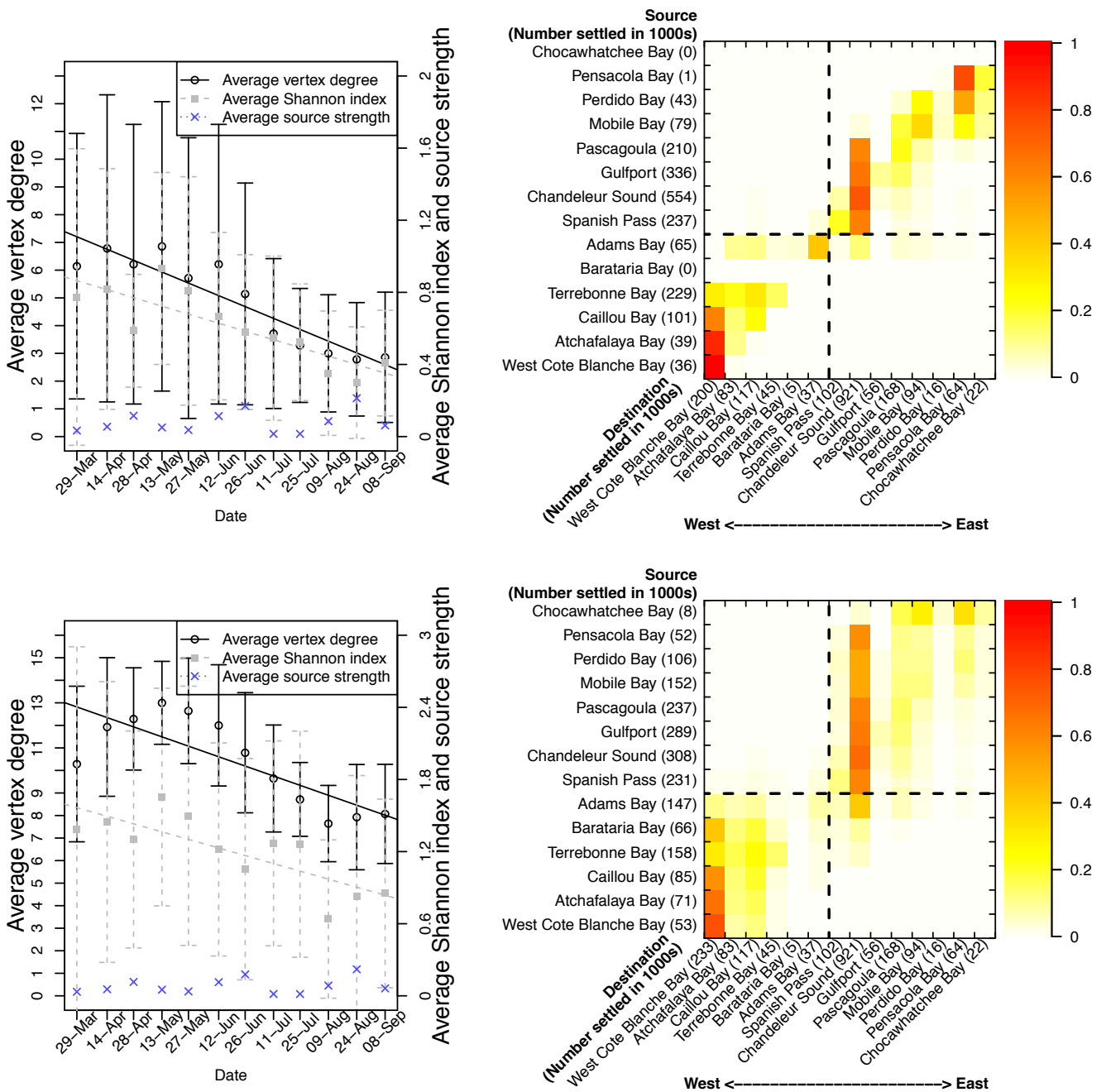


Fig. S3. Connectivity matrices, average vertex degree, Shannon index, and source strength computed under two alternative choices of maximum migration distance for ovigerous females: 50 km (top) and 200 km (bottom). The overall patterns that the Mississippi River delta is a barrier to dispersal and that connectivity declines throughout the spawning season persist despite doubling and halving the migration distance. When the maximum migration distance for ovigerous females is reduced, the patterns become more prominent