This is the README file for the "Peer J Consumption Dataset", available at http://hdl.handle.net/1853/53699. The data are contained within a single file, "Public access data.xlsx." The data are duplicated in the preservation copy, "Public access data.csv," to facilitate long-term preservation.

These data are related to a forthcoming Peer J Article, written by Marc J Weissburg and Jeffrey Beauvais, both of the Georgia Institute of Technology.

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Summary. The data file contains the results of predation experiments on oyster spat by mud crabs in the presence of chemical cues produced by blue crabs fed differing amounts of mud crabs and placed different distances away. The treatment variables and levels consist of: Distance (0.25m, 0.5m, 1m, 1.5m, or 2m); Diet (High [H], Low [L], or Control [C]); and, Time (24, 48 hours). Date of experiment also is included (MM/DD/YYYY). The measurement variables consist of Total Number Eaten, and Proportion Eaten Outside Refuge. These represent the number of oyster spat consumed and the number of spat consumed inside the refuge divided by the total number consumed.

Experimental protocol. Predation trials occurred in enclosures (2.2 m x 0.75m x 0.3 m) with a small oyster reef (Refuge) set up at one end (Figure 1). Artificial oyster clusters were used to control the placement of oyster spat (10-16 mm long), with 4 clusters placed inside the reef/refuge and 4 outside the reef 25-35 cm away. Each cluster contained 4 spat. A total of 15 mud crabs were used per enclosure: 8 crabs 15-20 mm CW, 4 crabs 20-25 mm CW, and 3 crabs 25-30 mm CW. Each enclosure also contained a single blue crab (12-16 cm CW) fed one of two different diets (Low or High mud crab biomass). A Control condition was also included, which consisted of empty predator cages positioned 0.5 m away. Each blue crab was placed within its own vexar cage (0.3 m dia x 0.3 m) to prevent interaction with the mud crabs, which were set at one of five distances from the center of the oyster reef: 0.25 m, 0.5 m, 1.0 m, 1.5 m, or 2.0 m. A second caged predator with the same diet regime was placed outside the enclosure at the same distance from the reef. The total number of oyster spat consumed was

determined at 24 or 48 hours (Time), although experiments in 2013 lacked data for the 24 hour time period. Enclosures were placed parallel to the tidal flow approximately 1 m below mean low water on a mudflat adjacent to the Priest Landing facility on the campus of the Skidaway Institute of Oceanography, Savannah. The mudflat was bordered by *Spartina alternaflora* with isolated patches of aggregated oysters approximately 1-3 m in dia.
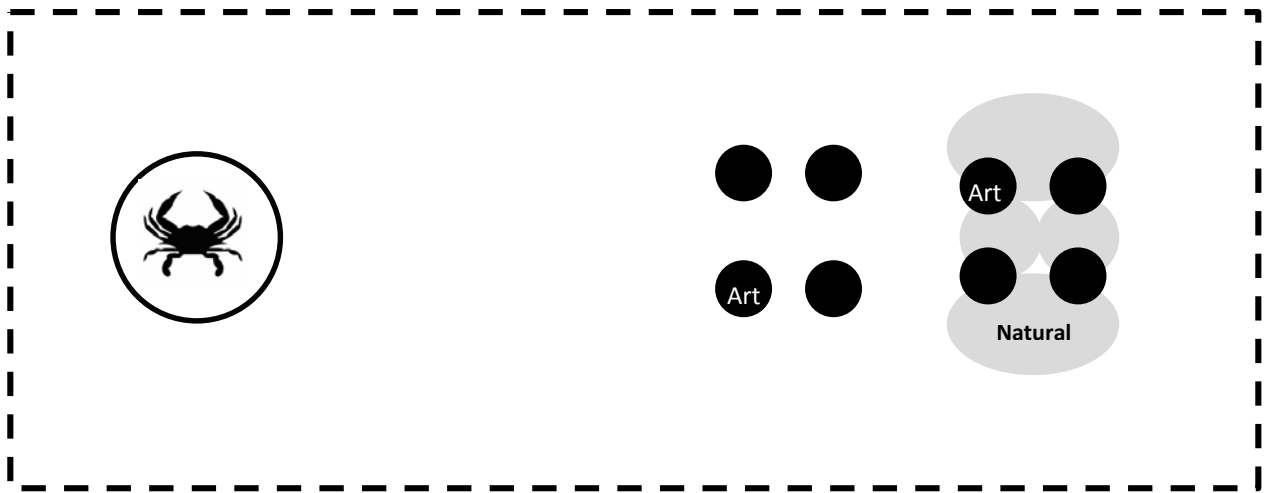

Figure 1. Diagram of the enclosure cage design (not to scale), showing the enclosure cage, the predator cage, the four artificial oyster clusters (Black; Art) outside and inside the natural clusters that form the refuge (Grey; Natural). Not shown is the additional predator cage located outside the enclosure, which is at the end opposite the predator cage within the enclosure. Note that only 1 of the four artificial clusters within and outside the refuge is labeled, as is only 1 of the four natural clusters forming the refuge.