Table S1. List of sciaenids that were stocked in the Great Salt Pond near Chechessee Creek, SC between June 2015 and February 2016.

Common Name	Scientific Name	Abunc < 2.3 (0.6)	2.3-4.5 (0.6-0.8)	e Classes - k 4.5-9.0 (0.8-0.9)	g (m) >9.0 (0.9)	Unknown Sizes	Total Abundance
Black drum	Pogonias cromis	116	41	15	0	333	505
Spot	Leiostomus xanthrus	0	0	0	0	1	1
Atlantic croaker	Micropogonias undulatus	0	0	0	0	58	58
Spotted seatrout	Cynoscion nebulosus	10	0	0	0	102	112
Red drum	Sciaenops ocellatus	43	47	16	6	0	112

Abundances in bold indicate that fish were most likely reproductively mature.

Male *P. cromis* reach reproductive maturity at 0.61 – 0.62 mm (Nieland and Wilson, 1993).

Male C. nebulosus reach reproductive maturity at  $\sim 0.60$  mm (Brown-Peterson and Warren, 2001).

Male *S ocellatus* reach reproductive maturity at ~ 0.65 mm (Wilson and Nieland, 1994).

Table S2. Spatial passive acoustic surveys performed in Chechessee Creek, SC. H = high tide; L = low tide.

	Survey	Start	End	Tidal	Track
Date	ID	Time	Time	Time	Distance (km)
8/9/16	1-Out	18:33	20:00	H 14:53	2.8
8/9/16	1-Return	20:16	22:22	L 20:40	5.1
8/23/16	2-Out	14:52	15:42	H 13:55	3.3
8/23/16	2-Return	18:44	20:57	L 20:01	5.6
9/21/16	3-Out	15:46	17:16	H 13:36	5.0
				L 19:45	

Table S3. Water quality data from Chechessee Creek (CC1, CC2) and the Great Salt Pond (GSP). Std = Standard deviation; Range = Max - Min.

		CC1	CC2	GSP
	Mean ±	25.55 ±	25.36 ±	24.94 ±
Salinity (ppt)	Std	2.75	2.73	2.31
	Max	28.23	28.26	27.27
	Min	22.34	22.31	22.00
	Range	5.89	5.95	5.27
	Mean ±	27.97 ±	28.14 ±	27.50 ±
Temperature (°C)	Std	3.15	3.21	2.88
	Max	33.89	34.47	33.97
	Min	19.96	19.96	16.61
	Range	13.93	14.51	17.36
	Mean ±			
pН	Std	$7.36 \pm 0.13$	$7.40 \pm 0.21$	7.64
	Max	7.45	7.55	na
	Min	7.26	7.25	na
	Range	0.19	0.30	na

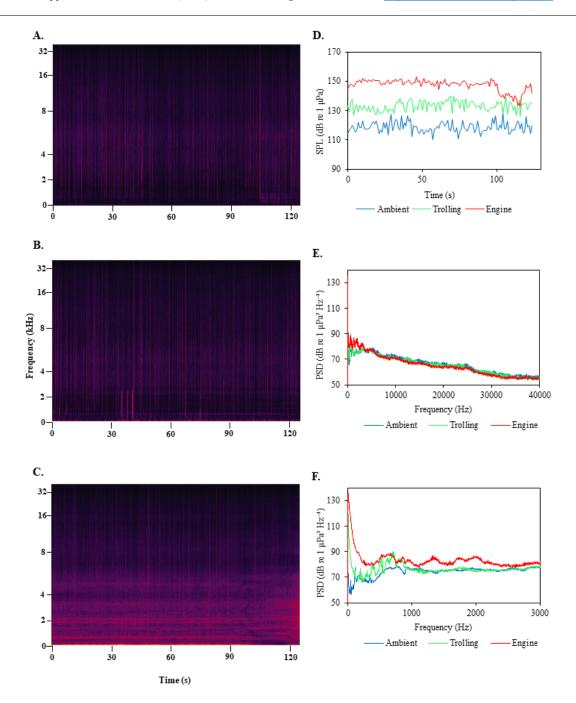


Fig. S1. A comparison of the noise contribution associated with using a trolling motor (i.e. 1 hp Minn Kota EO Transom-Mount Electric Outboard Motor) versus a boat engine (i.e. 90 hp Yamaha Four Stroke) for passive acoustic surveys. Spectrograms of (A) ambient sound (i.e. snapping shrimp) where the SPL was 119 dB re 1  $\mu Pa$  on average; (B) ambient sound and trolling motor noise where the SPL was 132.6 dB re 1  $\mu Pa$  on average; and (C) ambient sound and boat motor noise where the SPL was 146.8 dB re 1  $\mu Pa$  on average. (D) Broadband sound pressure levels (1 - 40,000 Hz) of ambient, trolling motor, and boat engine versus time. (E) Power spectral density analysis from 1 to 40,000 Hz and (F) from 1 to 3,000 Hz

#### LITERATURE CITED

Brown-Peterson NJ, Warren JW (2001) The reproductive biology of spotted seatrout, *Cynoscion nebulosus*, along the Mississippi Gulf Coast. Gulf Mex Sci 1: 61–73 doi:10.18785/goms.1901.07

Nieland DL, Wilson CA (1993) Reproductive biology and annual variation of reproductive variables of black drum in the northern Gulf of Mexico. Trans Am Fish Soc 122:18–327

Wilson CA, Nieland DL (1994) Reproductive biology of red drum, *Sciaenops ocellatus*, from the neritic waters of the northern Gulf of Mexico. Fish Bull 92: 841–850

#### Supplemental Audio Files

#### 1 Alligator

This file is an alligator bellowing in the Great Salt Pond (GSP) on Spring Island, SC. Recorded on May 18, 2016 at 18:40 Eastern Standard Time (EST).

# 2 Atlantic Croaker

This file is an Atlantic croaker calling at station 9M in the May River, SC. Recorded on May 10, 2018 at 11:00 EST.

#### 3 Atlantic Bottlenose Dolphin

### *3.1.* **Atlantic Bottlenose Dolphin -** Burst Pulse

This file contains burst pulse vocalizations from Atlantic bottlenose dolphins at station 37M in the May River, SC. Recorded on March 9, 2014 at 0:20 EST.

## 3.2 Atlantic Bottlenose Dolphin - Echolocation

This file contains echolocation signals from Atlantic bottlenose dolphins at station 37M in the May River, SC. Recorded on November 23, 2015 at 9:00 EST.

#### 3.3 Atlantic Bottlenose Dolphin - Whistles

This file is an Atlantic bottlenose dolphin whistling at station 37M in the May River, SC. Recorded on March 11, 2013 at 5:00 EST.

#### 4 Oyster Toadfish

### 4.1 **Oyster Toadfish** - Boatwhistle

This file is an example of an oyster toadfish boatwhistle at station 14M in the May River, SC. Recorded on March 21, 2013 at 19:00 EST.

## 4.2 **Oyster Toadfish** - Boatwhistle Chorus

This file is an example of an oyster toadfish boatwhistle chorus at station 14M in the May River, SC. Recorded on April 1, 2013 at 19:40 EST.

### 4.3 **Oyster Toadfish** - Grunt

This file is an example of an oyster toadfish grunt at station 14M in the May River, SC. Recorded on October 9, 2018 at 21:00.

#### 5 Red Drum

# 5.1 **Red Drum -** Calling

This file is red drum calling at station 37M in the May River, SC. Recorded on June 30, 2013 at 1:40 EST.

## 5.2 **Red Drum -** Chorusing

This file is red drum chorusing at station 37M in the May River, SC. Recorded on September 14, 2014 at 17:00 EST.

### 6 Silver Perch

## 6.1 Silver Perch - Calling

This file is silver perch calling at station 37M in the May River, SC. Recorded on March 19, 2013 at 20:40 EST.

## 6.2 **Silver Perch** - Chorusing

This file is silver perch chorusing at station 37M in the May River, SC. Recorded on April 12, 2013 at 16:20 EST.

## 7\_Snapping Shrimp

This file is an example of snapping shrimp snaps at station 14M in the May River, SC. Recorded on February 21, 2013 at 11:20 EST.

## **8 Spotted Seatrout**

# 8.1\_Spotted seatrout - Calling

This file is spotted seatrout calling at station 9M in the May River, SC. Recorded on September 8, 2013 at 20:20 EST.

### 8.2 Spotted seatrout - Chorusing

This file is spotted seatrout chorusing at station 9M in the May River, SC. Recorded on September 7, 2013 at 21:00 EST.