SUPPLEMENTARY MATERIAL

Table S1. Average $\delta^{13}C$ and $\delta^{15}N$ values with standard deviations for collected basal carbon sources.

Species	$\delta^{13}C$ (‰)	$\delta^{15}N$ (‰)	*n*
Mangrove (All species, live and dead)	**-29.1 ± 3.9**	**1.3 ± 2.5**	**34**
Avicennia marina (Live)	-28.7 ± 0.7	4.6 ± 0.2	3
Avicennia marina (Dead)	-32.7 ± 2.3	3.3 ± 1.1	2
Sonneratia alba (Live)	-29.3 ± 0.8	3.3 ± 0.5	3
Sonneratia alba (Dead)	-27.1 ± 1.8	3.2 ± 2.4	3
Rhizophora mucronata (Live)	-31.0 ± 2.3	1.9 ± 0.9	3
Rhizophora mucronata (Dead)	-24.1 ± 0.4	3.2 ± 0.4	3
Ceriops tagal (Live)	-28.4 ± 0.9	0.6 ± 0.5	3
Ceriops tagal (Dead)	-28.5 ± 0.9	0.8 ± 0.6	2
Bruguiera gymnorhiza (Live)	-28.7 ± 0.6	0.5 ± 0.9	3
Bruguiera gymnorhiza (Dead)	-37.4 ± 7.5	-0.9 ± 2.1	3
Xylocarpus granatum (Live)	-27.3 ± 0.3	-1.0 ± 0.4	3
Xylocarpus granatum (Dead)	-27.6 ± 1.5	-3.5 ± 1.1	3
Seagrass (all species)	**-10.8 ± 1.6**	**2.2 ± 0.4**	**8**
Syringodium isoetifolium	-9.1 ± 0.1	2.1 ± 0.6	3
Cymodocea rotundata	-12.7 ± 0.2	2.2 ± 0.2	2
Thalassodendron ciliatum	-11.3 ± 0.5	2.4 ± 0.4	3
POM	**-20.3 ± 2.6**	**5.4 ± 1.1**	**6**

Table S2. Gelman and Geweke Diagnostics for 'null', 'body-size', and 'age-class' models. 'Vars' refer to the variables being estimated in each model. The number of variables over the 1.1 $\hat{R}$ threshold and the worst $\hat{R}$ values are indicated in the third and fourth columns. The number of variables falling outside of the Geweke diagnostic ±1.96 range for each chain is indicated.

Model	Total Vars	Gelman # of Vars > 1.1	Gelman Worst var	Geweke Chain 1	Geweke Chain 2	Geweke Chain 3
Thumbprint Emperor						
Null	64	0	<1.01	0	0	0
Body-size	549	0	1.01	8	9	6
Age-class	376	0	1.08	18	41	27
Crescent Perch						
Null	180	0	<1.01	8	0	1
Body-size	1593	0	1.01	116	104	195
Age-class	1072	1	1.14	106	80	44
Dory Snapper						
Null	73	0	<1.01	10	1	1
Body-size	630	0	<1.01	30	9	23
Age-class	430	0	1.03	17	77	20

Table S3. Leave-one-out information criterion (LOOic) values, standard errors around the LOOic values (SE), and Akaike weights for each of the assessed models in this study. Much like the Akaike Information Criterion, lower LOOic values indicate better model fit. Akaike weights refer to the probability that a certain model will provide the best fit. Asterisks (*) indicate the best fitting model for each species based on these metrics.

Model	LOOic	SE (LOOic)	Weight
Dory Snapper			
Body-size	12.2	24.7	0.089
*Age Class**	8.5	26.2	0.911
Null	73.2	25.2	0
Thumbprint Emperor			
*Body-size**	-109.8	10.2	1
Age Class	-88.2	11.5	0
Null	-44.1	14.6	0
Crescent Perch			
*Body-size**	330.9	27.3	1
Age Class	380.5	26.1	0
Null	427.9	24.1	0

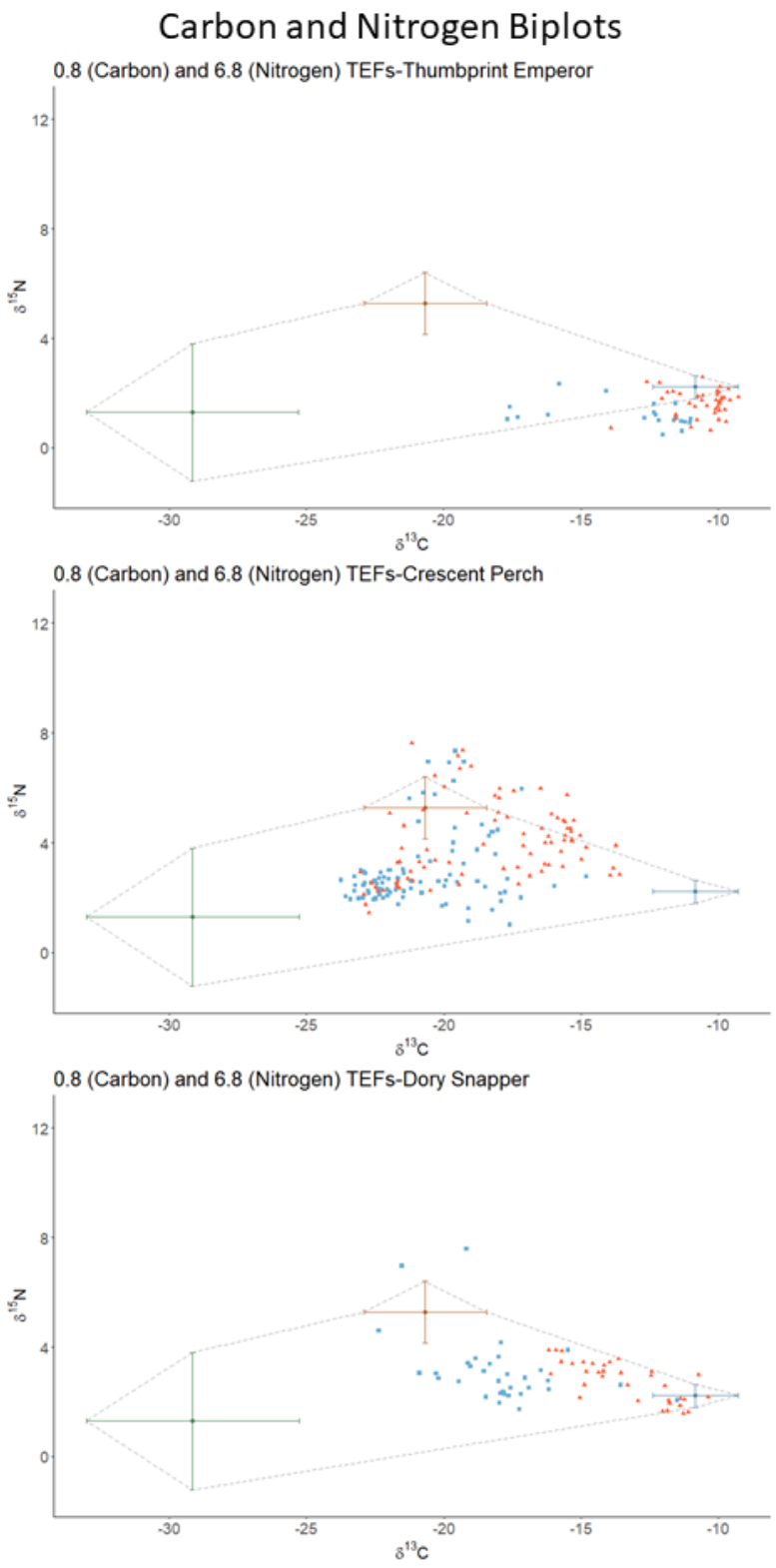

Figure S1. Carbon and nitrogen biplots with mean source values and error bars (SD). Blue and red points are age-0 and age-1+ individuals, respectively. The source polygon is indicated by the dotted, dark grey line. Consumer points were adjusted using the indicated trophic discrimination factors for carbon and nitrogen.