

## SUPPLEMENTARY MATERIAL

**Table S1.** Number of stomachs with food content (n) of each hammerhead shark species and their subgroups. The p-value of the linear regression of the four end points of each cumulative prey curve is shown, as well as its respective value of the coefficient of variation (CV). Values in bold indicate slopes different from zero.

Size range	<i>Sphyrna lewini</i>			<i>Sphyrna corona</i>			<i>Sphyrna media</i>			<i>Sphyrna tiburo</i>		
	38.7 - 162 cm TL			30.6 - 115 cm TL			32.5 - 117 cm TL			22.8 - 140 cm TL		
	n	p	CV	n	p	CV	n	p	CV	n	p	CV
Total	127	1.00	0.00	145	0.23	0.19	90	0.11	0.23	64	0.23	0.18
Juvenile	111	1.00	0.00	41	0.23	0.21	15	<b>0.02</b>	0.86	45	0.05	0.28
Adult	16	<b>&lt;0.01</b>	2.06	104	0.23	0.20	75	0.23	0.20	19	0.05	0.73
Female	60	0.23	0.51	90	1.00	0.00	63	0.23	0.20	30	0.05	0.33
Male	67	1.00	0.00	55	0.23	0.21	27	0.27	0.43	34	<b>0.02</b>	0.58

**Table S2.** Mean and standard deviation (SD) of the consumer and prey isotopic signals along with the number of individuals (n) analyzed per species, the taxonomic category used in the mixed models, and the species code used in figure 7 of the main document.

Category	Species	Species code	n	Mean- $\delta^{13}\text{C}$	Mean- $\delta^{15}\text{N}$	SD- $\delta^{13}\text{C}$	SD- $\delta^{15}\text{N}$
Consumer	<i>Sphyrna lewini</i>	Sl	22	-16.00	15.48	0.27	0.63
Consumer	<i>Sphyrna lewini</i> juvenile	Sl	17	-16.05	15.27	0.22	0.22
Consumer	<i>Sphyrna lewini</i> subadult	Sl	5	-15.83	16.18	0.37	0.37
Consumer	<i>Sphyrna lewini</i> female	Sl	10	-16.02	15.47	0.30	0.71
Consumer	<i>Sphyrna lewini</i> male	Sl	12	-16.02	15.36	0.30	0.67
Consumer	<i>Sphyrna corona</i>	Sc	29	-16.55	14.64	0.27	0.44
Consumer	<i>Sphyrna corona</i> juvenile	Sc	6	-16.78	14.32	0.23	0.26
Consumer	<i>Sphyrna corona</i> adult	Sc	23	-16.50	14.73	0.26	0.45
Consumer	<i>Sphyrna corona</i> female	Sc	22	-16.56	14.69	0.29	0.48
Consumer	<i>Sphyrna corona</i> male	Sc	7	-16.54	14.53	0.24	0.35
Consumer	<i>Sphyrna media</i>	Sm	22	-16.62	14.74	0.48	0.47
Consumer	<i>Sphyrna media</i> juvenile	Sm	4	-16.99	14.39	0.40	0.61
Consumer	<i>Sphyrna media</i> adult	Sm	18	-16.53	14.82	0.47	0.42
Consumer	<i>Sphyrna media</i> female	Sm	19	-16.59	14.73	0.52	0.51
Consumer	<i>Sphyrna media</i> male	Sm	3	-16.76	14.81	0.02	0.15
Consumer	<i>Sphyrna tiburo</i>	St	16	-16.67	13.99	0.65	0.63
Consumer	<i>Sphyrna tiburo</i> juvenile	St	9	-17.02	13.99	0.52	0.71
Consumer	<i>Sphyrna tiburo</i> adult	St	7	-16.22	14.00	0.53	0.55
Consumer	<i>Sphyrna tiburo</i> female	St	8	-16.53	13.94	0.71	0.59
Consumer	<i>Sphyrna tiburo</i> male	St	8	-16.80	14.04	0.61	0.69
Shrimp	<i>Protrachypene precipua</i>	Pp	8	-17.90	9.23	0.20	0.32
Shrimp	<i>Xiphopenaeus riveti</i>	Xr	12	-19.42	10.31	1.01	0.55
Crab	<i>Callinectes arcuatus</i>	Ca	12	-16.66	10.27	0.88	1.07
Crab	<i>Callinectes toxotes</i>	Ct	5	-17.38	10.54	1.36	0.42
Crab	<i>Neodoclea boneti</i>	Nb	4	-17.30	11.15	0.52	0.52

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Cephalopod	<i>Lolliguncula diomedae</i>	Ld	5	-16.87	13.47	1.32	0.34
Cephalopod	<i>Lolliguncula panamensis</i>	Lp	5	-17.15	13.53	0.78	0.52
Stomatopod	<i>Squilla aculeata aculeata</i>	Saa	10	-16.46	11.95	0.76	0.59
Bony fish	<i>Achirus scuttum</i>	As	9	-17.25	11.34	0.57	0.68
Bony fish	<i>Anchoa</i> sp.	Asp	7	-17.81	13.00	0.61	0.43
Bony fish	<i>Cetengraulis mysticetus</i>	Cm	5	-16.40	11.80	0.30	0.32
Bony fish	<i>Daector dowi</i>	Dd	5	-18.11	11.99	0.31	0.35
Bony fish	<i>Larimus argenteus</i>	La	5	-17.47	13.28	0.10	0.14
Bony fish	<i>Ophisththerus equatorialis</i>	Oe	5	-17.08	14.08	0.28	0.31
Bony fish	<i>Paralonchurus goodei</i>	Pg	13	-18.88	11.33	0.90	0.61
Bony fish	<i>Paralonchurus petersi</i>	Ppe	4	-17.22	12.87	0.84	0.34
Bony fish	<i>Sphyraena ensis</i>	Se	5	-15.98	14.46	0.14	0.20
Bony fish	<i>Stellifer melanocheir</i>	Sme	5	-17.48	13.19	0.40	0.35

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**Table S3.** Values of prey-specific index of relative importance (%PSIRI) and index of relative importance (%IRI) of prey items and food categories (bold) found in the stomach content of hammerhead shark species.

Prey category	<i>S. lewini</i>		<i>S. corona</i>		<i>S. media</i>		<i>S. tiburo</i>	
	%PSIRI	%IRI	%PSIRI	%IRI	%PSIRI	%IRI	%PSIRI	%IRI
<b>Phylum Annelida</b>								
<b>Class Polychaeta</b>	--	--	--	--	<b>0.22</b>	<b>0.02</b>	--	--
n.i. Polychaeta	--	--	--	--	0.22	0.02	--	--
<b>Phylum Chordata</b>								
<b>Class Osteichthyes</b>								
<b>Subclass Actinopterygii</b>	<b>63.43</b>	<b>87.86</b>	<b>23.79</b>	<b>29.28</b>	<b>37.83</b>	<b>48.07</b>	<b>6.95</b>	<b>3.82</b>
n.i. Actinopterygii	49.32	86.77	15.94	28.70	21.64	44.69	5.38	3.64
Anguilliforme	0.87	0.04	1.05	0.11	--	--	--	--
Clupeiforme	5.07	0.78	--	--	2.08	0.17	1.15	0.13
Perciforme	--	--	--	--	3.56	0.97	--	--
Pleuronectiforme	0.13	0.00	1.20	0.13	--	--	--	--
Ariidae	0.79	0.02	--	--	--	--	--	--
Clupeidae	--	--	--	--	2.48	0.54	--	--
Congridae	0.76	0.03	--	--	--	--	--	--
Cynoglossidae	--	--	0.43	0.02	--	--	--	--
Engraulidae	1.53	0.10	1.34	0.14	1.02	0.11	--	--
Gonostomatidae	0.25	0.01	--	--	--	--	--	--
Paralichthyidae	--	--	0.31	0.01	--	--	--	--
Pristigasteridae	0.16	0.00	--	--	--	--	--	--
Sciaenidae	0.44	0.02	--	--	--	--	0.42	0.05
Scombridae	0.39	0.01	--	--	--	--	--	--
Sphyraenidae	0.39	0.01	--	--	--	--	--	--
<i>Aluterus</i> sp	0.59	0.01	--	--	--	--	--	--
<i>Cetengraulis mysticetus</i>	0.36	0.01	1.01	0.07	4.41	1.44	--	--
<i>Chloroscombrus orquetta</i>	0.11	0.00	--	--	--	--	--	--

Prey category	<i>S. lewini</i>		<i>S. corona</i>		<i>S. media</i>		<i>S. tiburo</i>	
	%PSIRI	%IRI	%PSIRI	%IRI	%PSIRI	%IRI	%PSIRI	%IRI
<i>Chromis</i> spp.	--	--	0.69	0.02	--	--	--	--
<i>Ichthyapus selachops</i>	--	--	--	--	0.32	0.02	--	--
<i>Larimus</i> spp.	0.43	0.01	--	--	--	--	--	--
<i>Myrophis vafer</i>	--	--	--	--	1.11	0.06	--	--
<i>Opisthonema</i> spp.	0.49	0.01	--	--	--	--	--	--
<i>Paralonchurus petersii</i>	0.79	0.02	--	--	0.92	0.05	--	--
<i>Porichthys</i> spp.	--	--	0.44	0.02	0.29	0.02	--	--
<i>Scomberomorus sierra</i>	0.46	0.01	--	--	--	--	--	--
<i>Selene peruviana</i>	0.10	0.00	--	--	--	--	--	--
<i>Stellifer</i> spp.	--	--	0.69	0.02	--	--	--	--
<i>Stellifer melanocheir</i>	--	--	0.69	0.02	--	--	--	--
<b>Class Chondrichthyes</b>								
<b>Subclass Elasmobranchii</b>	<b>0.40</b>	<b>0.01</b>	<b>1.84</b>	<b>0.11</b>	<b>2.50</b>	<b>0.15</b>	<b>0.00</b>	<b>0.00</b>
Batoidea	0.40	0.01	0.34	0.01	0.30	0.03	--	--
<i>Urotrygon</i> spp.	--	--	1.13	0.08	0.48	0.03	--	--
<i>Urotrygon aspidura</i>	--	--	--	--	1.11	0.06	--	--
<i>Urotrygon rogersi</i>	--	--	0.37	0.01	0.61	0.03	--	--
<b>Phylum Cnidaria</b>								
<b>Class Scyphozoa</b>	--	--	--	--	<b>0.52</b>	<b>0.03</b>	--	--
n.i. Scyphozoa	--	--	--	--	0.52	0.03	--	--
<b>Phylum Mollusca</b>								
<b>Class Bivalvia</b>	--	--	--	--	--	--	<b>0.41</b>	<b>0.41</b>
n.i. Bivalvia	--	--	--	--	--	--	0.41	0.01
<b>Class Cephalopoda</b>	<b>10.13</b>	<b>0.99</b>	<b>27.92</b>	<b>37.79</b>	<b>16.55</b>	<b>19.12</b>	<b>3.79</b>	<b>1.63</b>
n.i. Cephalopoda	2.35	0.41	1.64	0.47	--	--	0.26	0.03
Teuthida	1.97	0.26	18.84	31.90	9.36	11.70	3.53	1.60
Loliginidae	1.15	0.10	6.47	5.36	7.19	7.42	--	--

Prey category	<i>S. lewini</i>		<i>S. corona</i>		<i>S. media</i>		<i>S. tiburo</i>	
	%PSIRI	%IRI	%PSIRI	%IRI	%PSIRI	%IRI	%PSIRI	%IRI
<i>Abraliopsis</i> spp.	0.33	0.01	--	--	--	--	--	--
<i>Dosidicus gigas</i>	1.57	0.07	--	--	--	--	--	--
<i>Gonatus onyx</i>	0.20	0.00	--	--	--	--	--	--
<i>Histioteuthis</i> cf. <i>heteropsis</i>	0.17	0.00	--	--	--	--	--	--
<i>Hyaloteuthis pelagica</i>	0.17	0.00	--	--	--	--	--	--
<i>Leachia danae</i>	0.12	0.00	--	--	--	--	--	--
<i>Lolliguncula argus</i>	--	--	0.40	0.01	--	--	--	--
<i>Lolliguncula diomedae</i>	0.27	0.01	0.07	0.00	--	--	--	--
<i>Lolliguncula panamensis</i>	--	--	0.50	0.04	--	--	--	--
<i>Ommastrephes bartramii</i>	0.13	0.00	--	--	--	--	--	--
<i>Onychoteuthis banksii</i>	0.13	0.00	--	--	--	--	--	--
<i>Sthenoteuthis oualaniensis</i>	1.57	0.10	--	--	--	--	--	--
<b>Class Gastropoda</b>	--	--	--	--	--	--	<b>0.30</b>	<b>0.30</b>
Olividae	--	--	--	--	--	--	0.30	0.03
<b>Subphylum Crustacea</b>								
<b>Class Malacostraca</b>								
<b>Order Stomatopoda</b>	<b>2.89</b>	<b>0.16</b>	<b>8.64</b>	<b>1.74</b>	<b>1.19</b>	<b>0.15</b>	<b>3.90</b>	<b>0.59</b>
n.i Stomatopoda.	0.35	0.02	0.16	0.01	0.05	0.00	0.48	0.11
Squillidae	1.71	0.11	1.24	0.22	0.41	0.09	0.80	0.18
Lysiosquillidae	--	--	0.82	0.06	0.37	0.04	--	--
<i>Lysosquilla panamica</i>	--	--	0.69	0.02	--	--	--	--
<i>Squilla aculeata</i>	--	--	--	--	--	--	0.27	0.03
<i>Squilla biformis</i>	--	--	0.10	0.00	--	--	--	--
<i>Squilla mantoidea</i>	--	--	3.63	0.92	--	--	0.61	0.07
<i>Squilla panamensis</i>	--	--	--	--	--	--	1.23	0.14
<i>Squilla parva</i>	--	--	--	--	0.15	0.01	0.51	0.06
<i>Squilla</i> spp.	0.83	0.04	2.00	0.50	0.21	0.01	--	--

Prey category	<i>S. lewini</i>		<i>S. corona</i>		<i>S. media</i>		<i>S. tiburo</i>	
	%PSIRI	%IRI	%PSIRI	%IRI	%PSIRI	%IRI	%PSIRI	%IRI
<b>Orden Decapoda</b>								
<b>Infraorder Anomura</b>	<b>1.57</b>	<b>0.07</b>	--	--	--	--	--	--
Albuneidae	1.57	0.07	--	--	--	--	--	--
<b>Suborder Dendrobranchiata</b>	<b>20.08</b>	<b>10.86</b>	<b>36.48</b>	<b>31.03</b>	<b>37.83</b>	<b>32.26</b>	<b>26.69</b>	<b>21.84</b>
n.i. Dendrobranchiata	16.70	10.65	15.11	21.23	6.70	4.73	8.59	11.64
Penaeidae	1.62	0.14	8.65	6.23	13.35	18.13	6.76	6.11
Solenoceridae	--	--	1.82	0.20	0.45	0.02	--	--
<i>Farfantepenaeus brevirostris</i>	0.29	0.01	--	--	0.30	0.02	--	--
<i>Farfantepenaeus californiensis</i>	--	--	--	--	0.35	0.02	--	--
<i>Litopenaeus</i> spp.	--	--	0.69	0.02	1.41	0.15	2.14	0.31
<i>Litopenaeus stylirostris</i>	--	--	--	--	0.69	0.04	--	--
<i>Litopenaeus vannamei</i>	--	--	--	--	--	--	1.13	0.13
<i>Protrachypene precipua</i>	--	--	0.62	0.07	--	--	1.54	0.17
<i>Rimapenaeus byrdi</i>	--	--	0.93	0.13	--	--	0.47	0.05
<i>Rimapenaeus faoe</i>	--	--	0.47	0.03	--	--	--	--
<i>Rimapenaeus fuscina</i>	0.27	0.01	0.92	0.07	1.48	0.24	--	--
<i>Rimapenaeus pacificus</i>	--	--	1.55	0.18	1.06	0.12	--	--
<i>Rimapenaeus</i> spp.	--	--	0.88	0.08	2.97	0.97	0.58	0.07
<i>Sicyionia</i> spp.	0.38	0.02	--	--	--	--	0.63	0.07
<i>Solenocera</i> spp.	--	--	--	--	0.08	0.00	--	--
<i>Xiphopenaeus riveti</i>	0.82	0.04	4.84	2.79	8.99	7.82	4.85	3.29
<b>Infraorder Brachyura</b>	<b>1.25</b>	<b>0.04</b>	<b>1.21</b>	<b>0.06</b>	<b>3.37</b>	<b>0.22</b>	<b>57.98</b>	<b>72.06</b>
n.i. Brachyura	0.46	0.02	0.23	0.02	0.52	0.06	8.38	7.57
Leucosiidae	--	--	--	--	--	--	0.27	0.03
Portunidae	--	--	--	--	0.11	0.01	14.63	28.10
<i>Arenaeus mexicanus</i>	--	--	--	--	1.11	0.06	2.92	1.32
<i>Callinectes</i> spp.	--	--	--	--	0.35	0.02	5.04	3.42
<i>Callinectes arcuatus</i>	--	--	--	--	0.92	0.05	14.52	24.60

<b>Prey category</b>	<i>S. lewini</i>		<i>S. corona</i>		<i>S. media</i>		<i>S. tiburo</i>	
	%PSIRI	%IRI	%PSIRI	%IRI	%PSIRI	%IRI	%PSIRI	%IRI
<i>Callinectes toxotes</i>	--	--	--	--	--	--	3.36	1.52
<i>Portunus</i> spp.	0.79	0.02	--	--	0.36	0.02	4.81	3.81
<i>Portunus asper</i>	--	--	0.29	0.01	--	--	3.40	1.54
<i>Raninoides benedicti</i>	--	--	--	--	--	--	0.65	0.15
<i>Neodoclea boneti</i>	--	--	0.69	0.02	--	--	--	--
<b>Phylum Sipuncula</b>								
<b>Class Sipunculidea</b>	<b>0.23</b>	<b>0.01</b>	<b>0.11</b>	<b>0.00</b>	--	--	--	--
Sipunculidae	0.23	0.01	0.11	0.00	--	--	--	--

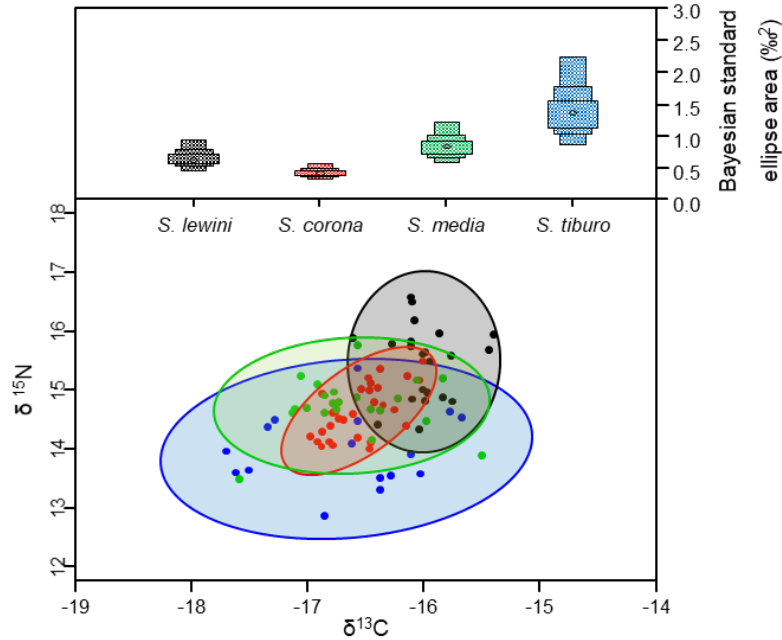


**Table S4.** Intraspecific comparisons evaluating the effect of sex and life stage on the  $\delta^{13}\text{C}$  and  $\delta^{15}\text{N}$  signal. The value of the statistic and the p-value of each univariate test (t = t-student test, W = Wilcoxon-Mann-Whitney test) used for *S. lewini*, *S. corona* and *S. tiburo* are shown. Values in bold indicate significant differences.

Species	Sex				Life Stage			
	$\delta^{13}\text{C}$		$\delta^{15}\text{N}$		$\delta^{13}\text{C}$		$\delta^{15}\text{N}$	
	Statistic	p-value	Statistic	p-value	Statistic	p-value	Statistic	p-value
<i>S. lewini</i>	t= 0.54	0.59	t= 0.92	0.36	W= 49.50	0.61	W= 79.00	< <b>0.001</b>
<i>S. corona</i>	W= 54.00	0.25	W= 80.00	0.90	W= 112.50	<b>0.02</b>	W= 104.50	0.06
<i>S. tiburo</i>	t= 0.82	0.42	t= 0.30	0.76	t= 3.01	<b>0.01</b>	t= 0.04	0.96

**Table S5.** Interspecific comparisons in the  $\delta^{13}\text{C}$  (Dunne test) and  $\delta^{15}\text{N}$  signal (Tukey test). The p-value of each post-hoc test used in the paired comparisons is shown. Values in bold indicate significant differences.

Paired comparisons	$\delta^{13}\text{C}$	$\delta^{13}\text{C}$	p	$\delta^{15}\text{N}$	$\delta^{15}\text{N}$	p
<i>S. lewini</i> - <i>S. corona</i>	-16.00	-16.55	< <b>0.01</b>	15.48	14.64	< <b>0.01</b>
<i>S. media</i> - <i>S. corona</i>	-16.62	-16.55	0.39	14.74	14.64	0.91
<i>S. tiburo</i> - <i>S. corona</i>	-16.67	-16.55	0.48	14.00	14.64	< <b>0.01</b>
<i>S. media</i> - <i>S. lewini</i>	-16.62	-16.00	< <b>0.01</b>	14.74	15.48	< <b>0.01</b>
<i>S. tiburo</i> - <i>S. lewini</i>	-16.67	-16.00	< <b>0.01</b>	14.00	15.48	< <b>0.01</b>
<i>S. tiburo</i> - <i>S. media</i>	-16.67	-16.62	0.39	14.00	14.74	< <b>0.01</b>



**Figure S1.** Isotopic niche of *S. lewini* (black ellipse), *S. corona* (red ellipse), *S. media* (green ellipse) and *S. tiburo* (blue ellipse). The boxplot depicting the mean (circle) and confidence intervals of 50%, 75% and 95% (boxes) of the Bayesian standard ellipse area (SEAb) for each species is shown in the upper box.