

Table S1. Source groups and species compositions included in mixing models.

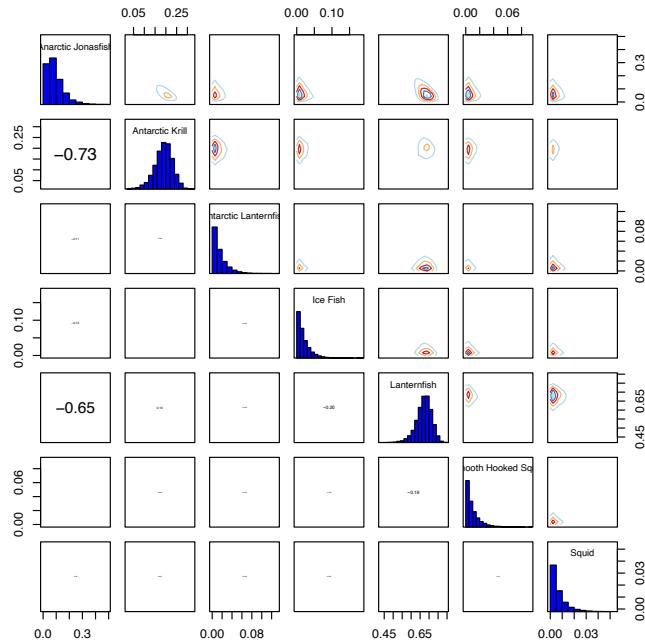
Source Group	Meand13C	SDd13C	Meand15N	SDd15N	n	Species included
Antarctic Krill	-26.7	1	3.3	0.6	59	Krill
Cod Icefish	-24.66	0.53	9.14	0.75	55	Grey rockcod, dusky rockcod, mackerel icefish, & Antarctic silverfish
Antarctic Lanternfish	-25.5	0.7	8.8	0.7	41	Antarctic lanternfish
Squid	-25.77	0.6	12.34	0.53	16	Glacial squid & longarm octopus squid; corrected for whole body
Lanternfish	-22.81	0.59	8.86	0.83	25	Bolin's, Nichol's, & electron lanternfish
Smooth Hooked Squid	-24.07	0.94	12.21	0.55	10	Smooth hooked squid; corrected for whole body
Anarctic Jonasfish	-25.7	0.4	7.2	0.8	3	Antarctic jonasfish

Table S2. Breakdown of vibrissa segments into foraging periods by max length of vibrissa.

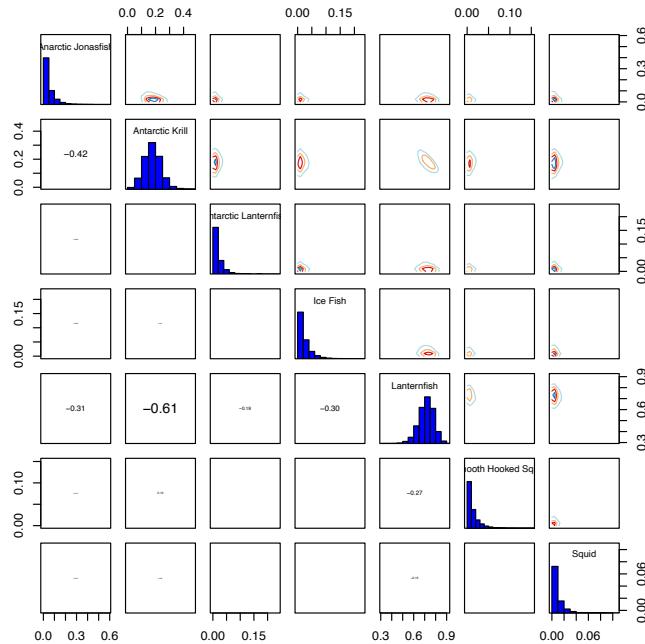
Max Length	1st Period	2nd Period	3rd Period
15	9-15	5-8	1-4
14	9-14	5-8	1-4
13	9-13	5-8	1-4
12	9-12	5-8	1-4
11	7-11	4-6	1-3
10	7-10	4-6	1-3
9	7-9	4-6	1-3
8	5-8	3-4	1-2
7	5-7	3-4	1-2
6	5-6	3-4	1-2

Figure S1. Pairs plots from each of the 8 mixing models, one per previously identified foraging cluster from Huckstadt et al (2012).

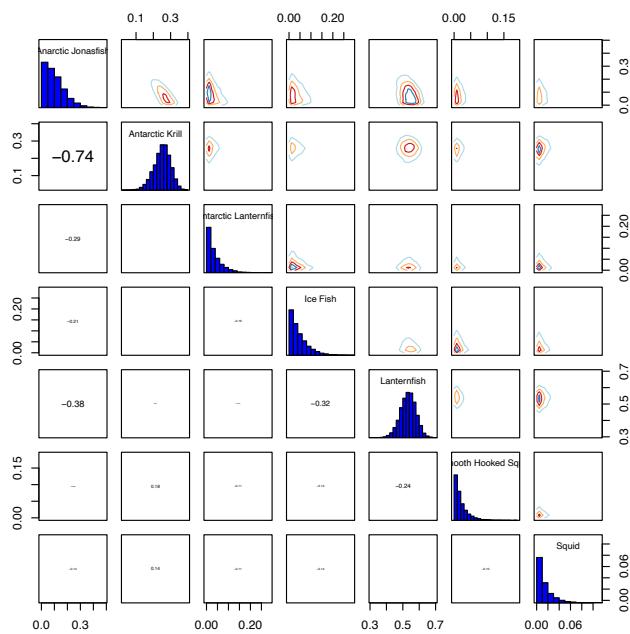
### Cluster 1



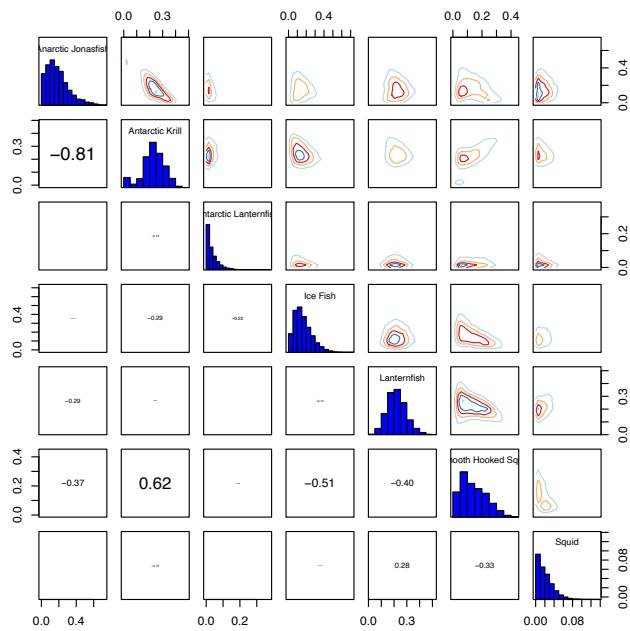
### Cluster 2



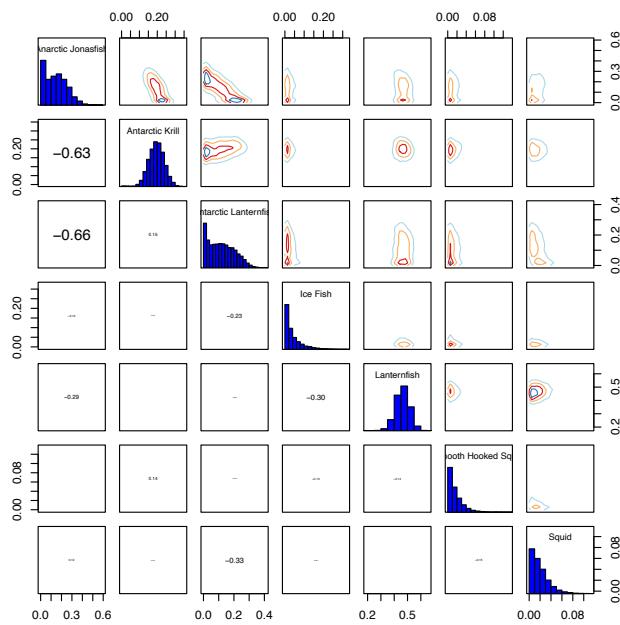
### Cluster 3



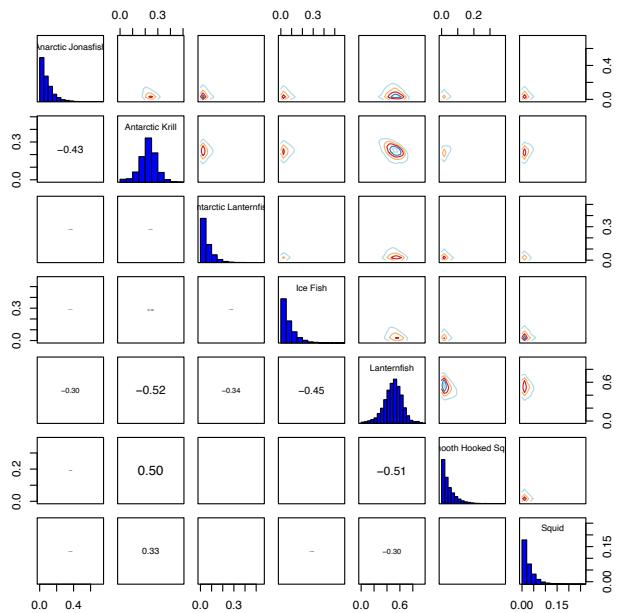
### Cluster 4



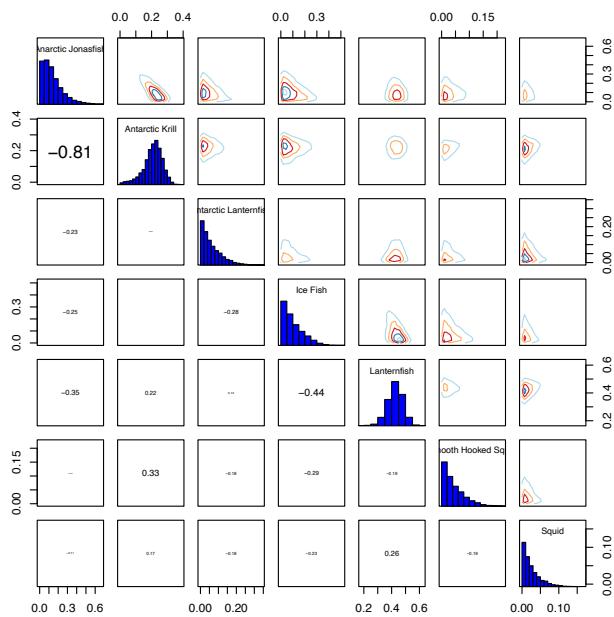
## Cluster 5



## Cluster 6



## Cluster 7



## Cluster 8

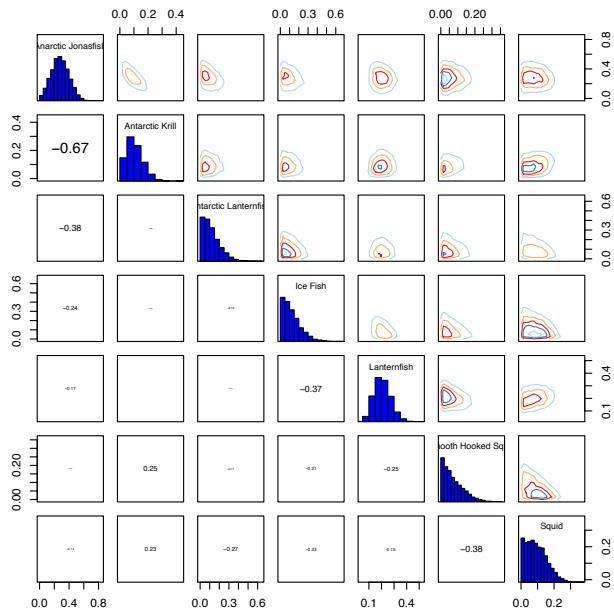


Figure S2. Mean  $\pm$  SD of carbon and nitrogen ratios along the length of the whisker. Color corresponds to cluster and time moves from left to right.

