SUPPLEMENTARY INFORMATION FOR PERMANOVA TEST

PERMANOVA is sensitive to differences in multivariate dispersion then we made evaluations with PERMDISP, a resemblance-based permutation test focused strictly on the null hypothesis of homogeneity of multivariate dispersion (Anderson, 2006). Below we record the analysis of variance that tested the dispersion among groups for both factors (Species and Period – pre- and post-damming). PERMDISP showed there were no differences in group dispersion between phases (pre-and-post-HPPs) and species indicating that there are only position effects detected by the PERMANOVA (Tabs. **S4.1** and **S4.2**).

TABLE S4.1 | Results of the Analysis of Variance for testing average distance to median between pre- and post-phases of the diet of the species, distances were based on PERMIDISP test.

Response: Distances					
	Df	SumSq	MeanSq	F value	Pr(>F)
Groups	1	0.0031	0.00314	0.229	0.634
Residuals	49	0.6725	0.01372		

TABLE S4.2 | Results of the Analysis of Variance testing average distance to median among the four species analyzed based on PERMIDISP test.

Response: Distances					
	Df	SumSq	MeanSq	F value	Pr(>F)
Groups	3	0.11947	0.039823	0.6624	0.5793
Residuals	47	2.82541	0.060115		

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- **Anderson MJ.** Distance-based tests for homogeneity of multivariate dispersions. Biometrics. 2006; 62(1):245–53. https://doi.org/10.1111/j.1541-0420.2005.00440.x

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