



Corrigendum: Investigating Seasonal Succession Patterns in Mesozooplankton Community Structure Following Hurricane Harvey

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A Corrigendum on:

Investigating Seasonal Succession Patterns in Mesozooplankton Community Structure Following Hurricane Harvey

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In the original article, there was a mistake in the legend for **Figure 1** as published. The legend states that nearshore stations are orange when they are printed as white. The correct legend appears below:

“Figure 1. Map of stations sampled off the coast of Texas, United States. Colors correspond to depth bin (nearshore = white, shelf = gray).”

In the original article, there was a mistake in **Figure 2** as published. A taxonomic group previously sorted into the Cyclopoida taxa, were found to be misidentified and were changed to their proper identification of ‘Calanoida’. As such, all figures with underlying community data were modified, however, no change to the results or discussion have occurred. The corrected **Figure 2** appears below.

In the original article, there was a mistake in **Figure 3** as published. The new PERMANOVA results showed no differentiation with a conservative Bonferroni correction. The corrected **Figure 3** appears below.

In the original article, there was a mistake in **Figure 4** as published. The new PERMANOVA results showed no differentiation with a conservative Bonferroni correction. As such, all cruises, rather than just Oct. and March, were compared in the subsequent SIMPER test and displayed in the updated **Figure 4**.

In the original article, there was a mistake in **Figure 5** as published. Abundance values are corrected for Cyclopoida and Calanoida to reflect the new taxonomic distinction. The corrected **Figure 5** appears below.

In the original article, there was a mistake in **Table 1** as published. A taxonomic group previously sorted into the Cyclopoida taxa, were found to be misidentified and were changed to their proper identification of ‘Calanoida’. As such, all statistics with underlying community data were modified. The new two-way ANOVAs and Kruskal-Wallis values are presented in the updated **Table 1**. No difference in results were found. The correct **Table 1** appears below.

In the original article, there was a mistake in **Table 2** as published. The new PERMANOVA values are presented in the updated **Table 2**. Former significant differences were no longer found in the revised analysis due to a conservative Bonferroni correction. The correct **Table 2** appears below.

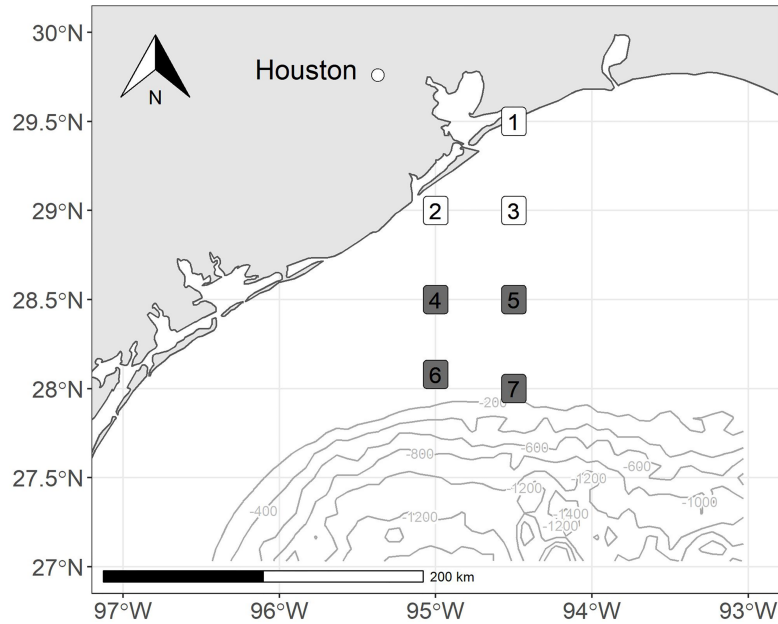


FIGURE 1 | Map of stations sampled off the coast of Texas, United States. Colors correspond to depth bin (nearshore = white, shelf = gray).

TABLE 1 | Results of two-way ANOVAs (richness, H') and Kruskal-Wallis test [$\log_{10}(\text{density})$] against cruise and spatial position.

	Response	DF	F value	Chi-Squared	P value
Month	Richness	3	3.43	na	0.036
	H'	3	4.39	na	0.015
	$\log_{10}(\text{density})$	3	na	13.4	0.004
Position	Richness		11.07	na	0.003
	H'		17.81	na	0.0003
	$\log_{10}(\text{density})$		na	2.84	0.09

Bold font indicates significant ($p < 0.05$) results.

TABLE 2 | Pairwise-PERMANOVA results based on Bray-Curtis dissimilarity on Hellinger standardized densities of zooplankton community structure in relation to cruise.

	Df	Sums Of Sq	F.Model	R2	P value	P adjusted
Oct. vs Jan.	1	0.129	2.441	0.182	0.05	0.29
Oct. vs March	1	0.139	2.69	0.196	0.04	0.26
Oct. vs Sept.	1	0.129	2.916	0.196	0.03	0.19
Jan. vs March	1	0.141	2.893	0.224	0.03	0.16
Jan. vs Sept.	1	0.088	2.154	0.164	0.06	0.36
March vs Sept.	1	0.068	1.714	0.135	0.14	0.82

F, degrees of freedom; SumOfSq, sum of squares; F model, F value by permutation; P-values based on 9999 permutations. Bold values indicate significant differences ($p < 0.05$).

TABLE 3 | Results from BIOENV analysis.

			Size	Correlation
Salinity			1	0.2013
Salinity	Transmission		2	0.2445
Dissolved Oxygen	Salinity	Transmission	3	0.2610
Dissolved Oxygen	Salinity	Temperature	4	0.2471

Bold denotes best combination of environmental parameters based on the highest Spearman's correlation.

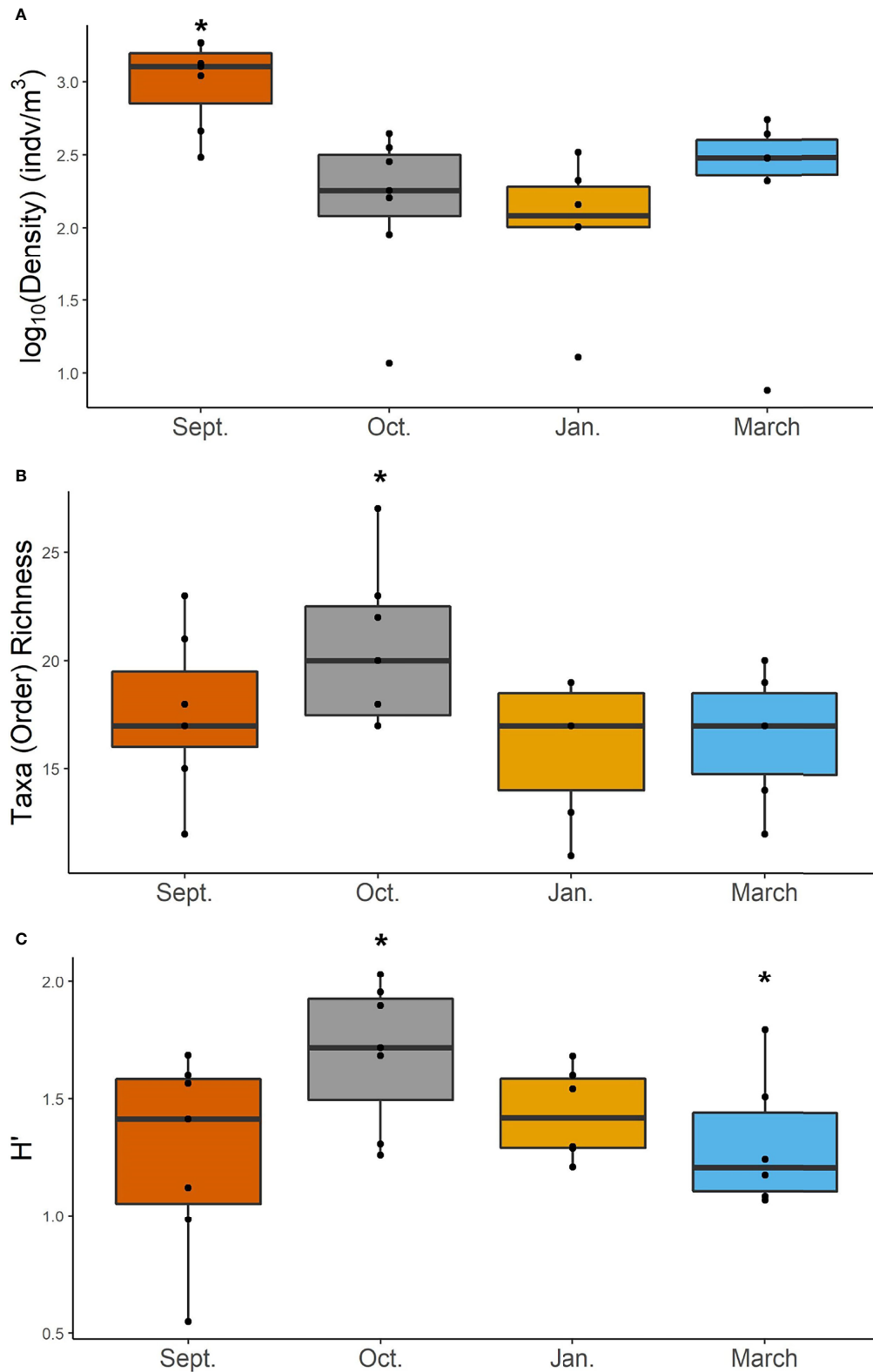


FIGURE 2 | Density (\log_{10} transformed) (A), taxa richness at order (B), and Shannon-Weiner diversity (H') (C) of mesozooplankton for each cruise. Asterisk denotes groups that are significantly different based on a two-way ANOVA and *post-hoc* Tukey test. Differences in abundance were determined using a Kruskal-Wallis and pairwise-Wilcoxon test.

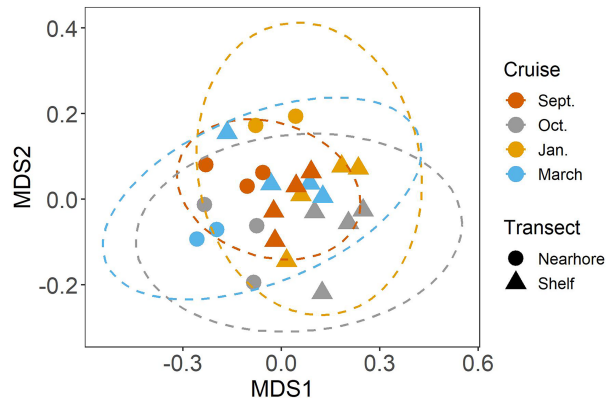


FIGURE 3 | NMDS analysis of mesozooplankton community structure. Colors indicate cruise month. Ellipses represent 95% CI (Solid lines = significant differences in community structure from PERMANOVA, $p < 0.05$).

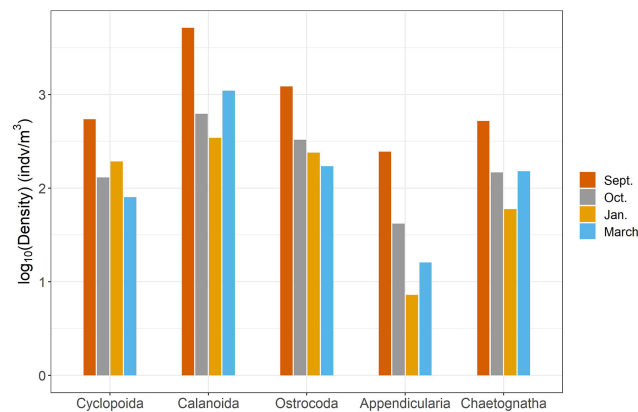


FIGURE 4 | Results of SIMPER analysis between cruises. Top five highest contributing taxa to structural differences were chosen to explain over 50% of the variance.

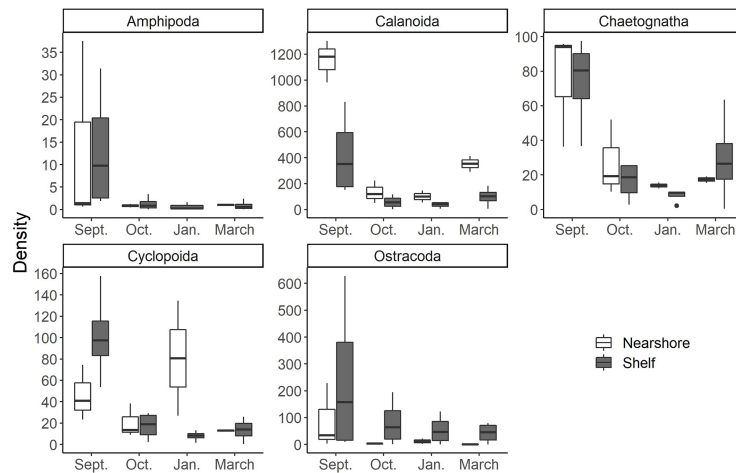


FIGURE 5 | Common mesozooplankton taxa found in larval fish gut contents at the study area according to McSkill et al. (in prep). Note differences in scale of the y axis (density; indiv m^{-3}). Nearshore stations are white and shelf stations are grey.

In the original article, there was a mistake in **Table 3** as published. The new BIOENV values are presented in the updated **Table 3**. The corrected **Table 3** appears below.

In the original article, there was an error. We found that a taxonomic group within the ‘Cyclopoida’ were erroneously sorted and have been changed to their proper identification of ‘Calanoida’. As such, all analysis were rerun, with no major changes to the conclusions of this paper.

A correction has been made within the *Results*, paragraph 1 to update the p-values of each Tukey HSD tests:

“Taxa richness was slightly higher in October relative to other months (**Table 1** and **Figure 2B**). A difference in richness was also found between nearshore and shelf stations (**Table 1**, $p = 0.01$) with higher richness found at shelf stations (**Supplementary Figure S2**). Diversity followed a “hump-shaped” over the 6 months sampled. Diversity peaked during October 2017 (**Figure 2C**) and was found to be statistically different from September (Tukey HSD, $p = 0.04$) and March 2018 (Tukey HSD, $p = 0.02$)”.

When reanalyzing the data, we found that the temporal community structure was no longer differentiated at the pairwise level when using a highly conservative test. However, the abundance pattern with peaked September values remains across our major groups. No changes were made to the results about community structure differences in space.

A correction has been made within the *Results*, paragraph 2:

“The *post-hoc* pairwise PERMANOVA, using a conservative Bonferroni corrected p-value, could not reveal any differences between the months. Raw p-values indicate differences between each month, except September and March (**Table 2**), but this should be interpreted carefully as Type I error is likely inflated. Closer inspection of the most abundant taxa revealed that all groups exhibited higher densities during the September cruise relative to other months, with calanoid copepods exhibiting an especially pronounced peak (**Figure 4**). Nearshore and

shelf stations had significantly different mesozooplankton community structures ($Df = 1$, $\text{Sum Sq} = 0.28$, $\text{Pseudo-F} = 6.15$, $R^2 = 0.204$, $p \ll 0.001$) which was driven by ostracods (18%), calanoid copepods, cyclopoid copepods, salps, chaetognaths, and appendicularians (**Figure 4**). Combined, these six taxa accounted for over half the spatial variation in community structure (55%)”.

A correction has been made within the *Results Section*, paragraph 2, to update correlation values of the BIOENV analysis:

“The BIOENV analysis revealed that mesozooplankton community structure was related to mean salinity, dissolved oxygen, and transmission (correlation = 0.261, **Table 3**)”.

The authors apologize for these errors and state that they do not change the scientific conclusions of the article in any way. The original article has been updated.

SUPPLEMENTARY MATERIAL

The Supplementary Material for this article can be found online at: <https://www.frontiersin.org/articles/10.3389/fmars.2022.903054/full#supplementary-material>

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