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**SUPPLEMENTARY MATERIAL**

**Online Resource 1**

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related to:

**Microbial diversity of the glass sponge *Vazella pourtalesii* in  
response to anthropogenic activities**

Kathrin Busch<sup>1\*</sup>, Lindsay Beazley<sup>2</sup>, Ellen Kenchington<sup>2</sup>, Frederick Whoriskey<sup>3</sup>, Beate M. Slaby<sup>1</sup>,  
Ute Hentschel<sup>1, 4</sup>

<sup>1</sup>GEOMAR Helmholtz Centre for Ocean Research Kiel, Düsternbrooker Weg 20, 24105 Kiel, Germany

<sup>2</sup>Department of Fisheries and Oceans, Bedford Institute of Oceanography, Dartmouth, Nova Scotia, Canada

<sup>3</sup>Ocean Tracking Network, Dalhousie University, Halifax, Nova Scotia, Canada

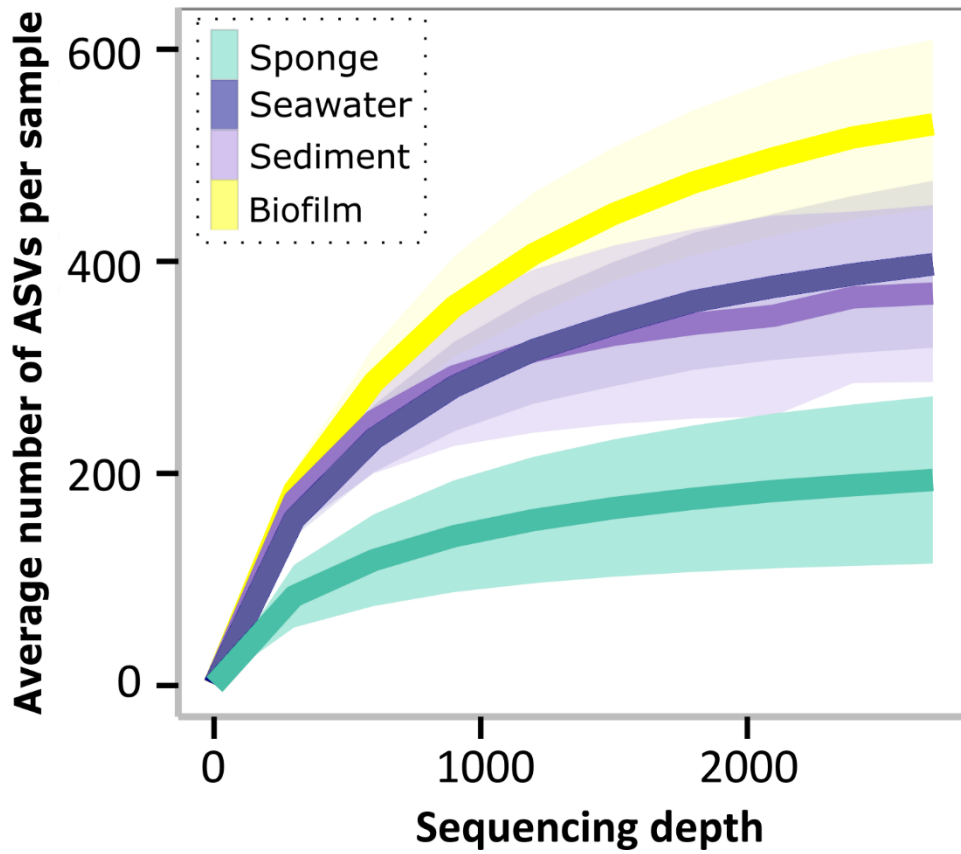
<sup>4</sup>Christian-Albrechts University of Kiel, Düsternbrooker Weg 20, 24105 Kiel, Germany

**CORRESPONDENCE**

\* kbusch@geomar.de

**JOURNAL NAME**

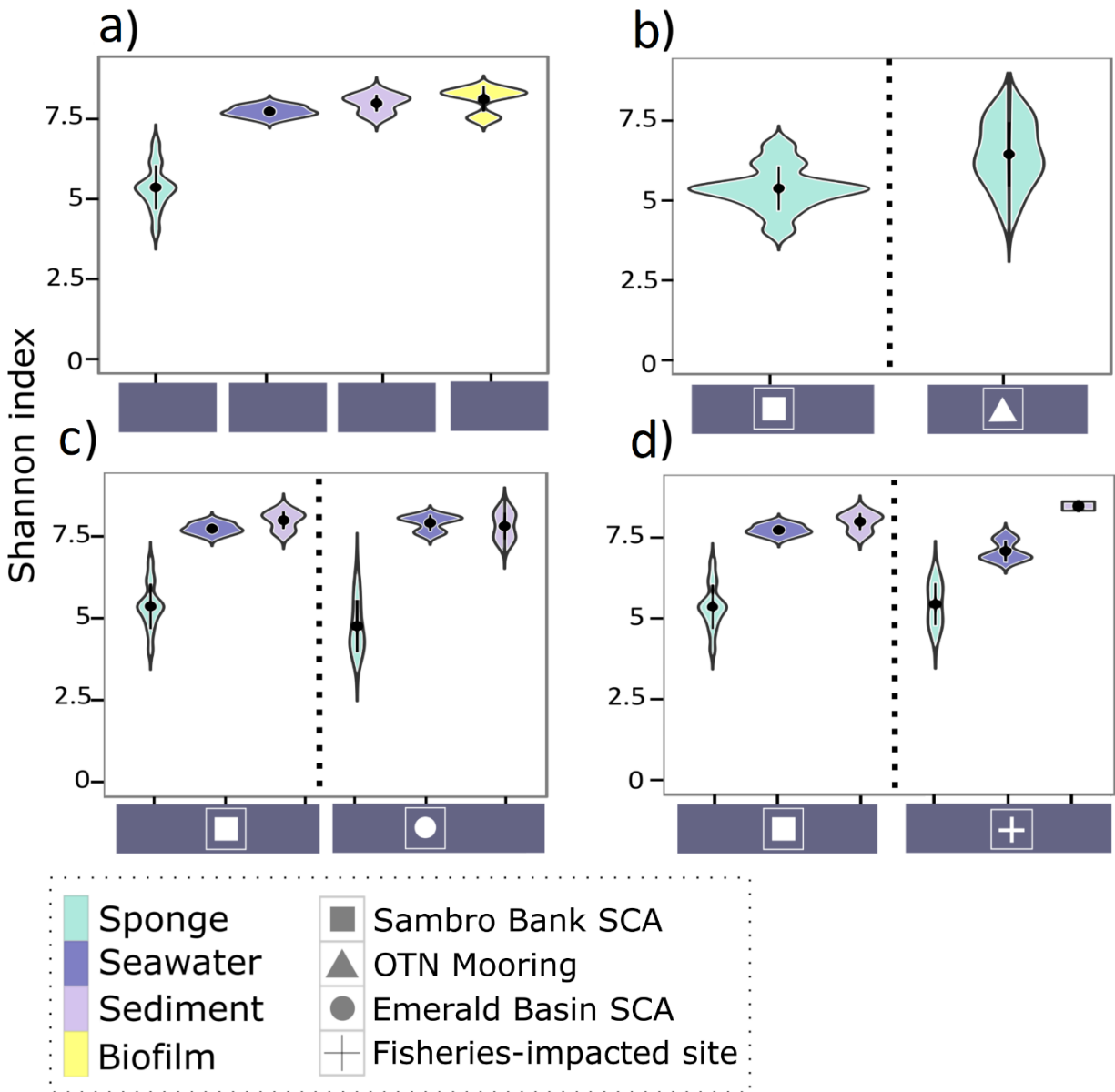
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**S1** Alpha-rarefaction curves. Number of observed ASVs per sample is plotted against sequencing depth. Calculated means (solid lines) and standard deviations (colored ranges around lines) of all rarefactions are indicated per sample type (sponge samples - green, sediment samples - purple, seawater samples - blue, biofilm samples - yellow)

**Table S1** Intra-location variation in the microbial community composition of five *Vazella pourtalesii* individuals (B0001 – B0132) from the Emerald Basin SCA is presented. Technically, UniFrac distances between sample pairs and p-values of pairwise PERMANOVAs (999 permutations) are shown

<b>group1</b>	<b>group2</b>	<b>UniFrac distance</b>	<b>p-value</b>
EmeraldBasinSCA_Sponge_B0001	EmeraldBasinSCA_Sponge_B0002	0.31	0.1
EmeraldBasinSCA_Sponge_B0001	EmeraldBasinSCA_Sponge_B0003	0.23	0.1
EmeraldBasinSCA_Sponge_B0001	EmeraldBasinSCA_Sponge_B0004	0.16	0.09
EmeraldBasinSCA_Sponge_B0001	EmeraldBasinSCA_Sponge_B0132	0.19	0.11
EmeraldBasinSCA_Sponge_B0002	EmeraldBasinSCA_Sponge_B0003	0.33	0.33
EmeraldBasinSCA_Sponge_B0002	EmeraldBasinSCA_Sponge_B0004	0.43	0.11
EmeraldBasinSCA_Sponge_B0002	EmeraldBasinSCA_Sponge_B0132	0.41	0.36
EmeraldBasinSCA_Sponge_B0003	EmeraldBasinSCA_Sponge_B0004	0.31	0.18
EmeraldBasinSCA_Sponge_B0003	EmeraldBasinSCA_Sponge_B0132	0.34	0.38
EmeraldBasinSCA_Sponge_B0004	EmeraldBasinSCA_Sponge_B0132	0.19	0.18



**S2** Microbial community alpha-diversity (Shannon index) of the examined sample types, across locations and habitats. Four graphs show differences between **a)** sample type, **b)** habitat, **c)** sampling area on the Canadian shelf, **d)** fisheries impact. Violin plots show Shannon index of respective samples per group, dots and whiskers inside violins indicate the mean and standard deviation per group