

Ecological Applications

Appendix S3 – Correlation tables

Complementarity and sensitivity of benthic state indicators to bottom-trawl fishing disturbance

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Table S1. Mean correlation of indicators. The mean correlations are computed by averaging all Pearson correlations across all trawl gradient datasets.

	M- AMBI	DKI	R	Dm'	SI	H'	IS	BEN- TIX	AMBI	B	A	TDI	mTDI	mT	pTDI	Lm	Lf
DKI	0.9																
R	0.8	0.8															
Dm'	0.9	0.7	0.9														
SI	0.7	0.7	0.4	0.6													
H'	0.9	0.8	0.6	0.7	0.9												
IS	0.7	0.7	0.5	0.6	0.9	0.9											
BENTIX	0.2	0.2	0.0	0.1	0.1	0.1	0.0										
AMBI	0.4	0.5	0.2	0.2	0.2	0.2	0.1	0.6									
B	0.4	0.6	0.6	0.4	0.1	0.3	0.2	0.0	0.1								
A	0.2	0.5	0.5	0.2	0.1	0.0	0.0	-0.1	0.1	0.7							
TDI	0.1	-0.1	0.1	0.1	0.0	0.1	0.1	-0.2	0.1	0.0	0.0						
mTDI	0.1	-0.1	0.0	0.0	0.0	0.1	0.1	-0.2	0.1	0.0	-0.1	1.0					
mT	0.0	-0.2	0.0	0.0	0.1	0.1	0.1	-0.1	0.1	0.0	-0.1	0.7	0.8				
pTDI	-0.1	-0.4	0.1	-0.1	0.1	0.1	0.1	0.1	0.0	0.1	-0.1	0.3	0.3	0.4			
Lm	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.2	0.0	0.2	0.2	0.0	0.2		
Lf	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.0	0.1	0.3	0.1	0.2	0.2	0.0	0.2	0.8	
SoS	0.0	0.0	0.1	0.0	0.1	0.1	0.1	-0.1	-0.1	0.1	0.0	0.0	0.1	0.1	0.3	0.3	0.3

Table S2. Standard deviation of correlations across trawl gradient datasets. The standard deviations are determined by calculating Pearson correlations between two indicators for each dataset. Subsequently, a standard deviation is computed across datasets based on these correlation values. A high standard deviation indicates greater variability in the correlations between gradient datasets.

	M-AMBI	DKI	R	Dm'	SI	H'	IS	BEN-TIX	AMBI	B	A	TDI	mTDI	mT	pTDI	Lm	Lf
DKI	0.1																
R	0.2	0.2															
Dm'	0.1	0.1	0.0														
SI	0.2	0.3	0.3	0.2													
H'	0.1	0.2	0.3	0.2	0.1												
IS	0.2	0.3	0.3	0.2	0.1	0.1											
BENTIX	0.5	0.6	0.5	0.5	0.6	0.5	0.5										
AMBI	0.4	0.4	0.5	0.5	0.6	0.5	0.5	0.4									
B	0.5	0.2	0.3	0.4	0.4	0.4	0.4	0.5	0.6								
A	0.6	0.5	0.4	0.5	0.6	0.6	0.5	0.5	0.6	0.3							
TDI	0.6	0.7	0.4	0.4	0.5	0.6	0.5	0.5	0.6	0.5	0.6						
mTDI	0.6	0.7	0.5	0.5	0.6	0.6	0.5	0.5	0.6	0.6	0.6	0.0					
mT	0.5	0.6	0.4	0.4	0.5	0.5	0.4	0.5	0.6	0.5	0.6	0.5	0.4				
pTDI	0.6	0.6	0.5	0.5	0.5	0.6	0.5	0.6	0.6	0.5	0.5	0.7	0.7	0.5			
Lm	0.5	0.5	0.4	0.4	0.4	0.5	0.4	0.5	0.5	0.4	0.3	0.6	0.6	0.6	0.5		
Lf	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.6	0.6	0.6	0.5	0.2	
SoS	0.6	0.5	0.5	0.6	0.4	0.5	0.4	0.5	0.5	0.5	0.4	0.6	0.6	0.5	0.5	0.5	0.4