

Changes in macrofaunal biological traits across estuarine gradients: implications for the coastal nutrient filter

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Table S1. Results of SIMPER analyses between inner and outer coastal sites within each study area. AB: abundance, BIO: biomass. Dissimilarity describes the average dissimilarity between inner and outer sites. Species contributing with up to 70 % of within site similarities are given for each site.

SIMPER	Dissimilarity (%)	Site	Average similarity (%)	Species contributing to 70 % of within site similarity
Roskilde Fjord	90.88	In	34.69	Hydrobiidae, <i>Neanthes succinea</i> , Chironomidae, <i>Mytilus edulis</i> , <i>Polydora cornuta</i> , <i>Mya arenari</i> , <i>Pygospio elegans</i> , <i>Microdeutopus</i> sp.
		Out	32.35	<i>Angulus tenuis</i> , <i>Corbula gibba</i> , <i>Eteone longa</i> , <i>Ophelia rathkei</i> , <i>Pygospio elegans</i>
	96.64	In	33.47	<i>Mytilus edulis</i> , <i>Mya arenaria</i> , <i>Neanthes succinea</i> , <i>Hydrobia</i> spp., <i>Macoma balthica</i> , <i>Cerastoderma glaucum</i>
		Out	25.65	<i>Angulus tenuis</i> , <i>Nephtys caeca</i> , <i>Corbula gibba</i> , <i>Eteone longa</i> , <i>Ophelia rathkei</i>
Gulf of Gdansk	62.94	In	61.41	Hydrobiidae, <i>Hediste diversicolor</i> , <i>Macoma balthica</i> , Oligochaeta
		Out	43.25	<i>Macoma balthica</i> , <i>Pontoporeia femorata</i> , <i>Diastylis rathkei</i> , <i>Marenzelleria</i> spp., <i>Bylgides sarsi</i>
	61.31	In	57.10	<i>Macoma balthica</i> , Hydrobiidae, <i>Hediste diversicolor</i> , <i>Cerastoderma glaucum</i>
		Out	46.44	<i>Macoma balthica</i> , <i>Pontoporeia femorata</i> , <i>Marenzelleria</i> spp.
St. Anna archipelago	68.55	In	49.26	<i>Marenzelleria</i> spp., Chironomidae
		Out	48.17	<i>Macoma balthica</i> , <i>Marenzelleria</i> spp., Chironomidae
	75.39	In	41.66	<i>Marenzelleria</i> spp., Chironomidae
		Out	42.18	<i>Macoma balthica</i> , <i>Marenzelleria</i> spp., Chironomidae
Tvärminne archipelago	45.65	In	65.58	<i>Macoma balthica</i> , <i>Marenzelleria</i> spp., Chironomidae, Hydrobiidae
		Out	76.68	<i>Marenzelleria</i> spp., <i>Macoma balthica</i> , <i>Monoporeia affinis</i>
	40.40	In	66.51	<i>Macoma balthica</i> , <i>Marenzelleria</i> spp., Chironomidae
		Out	71.61	<i>Macoma balthica</i> , <i>Marenzelleria</i> spp.
Umeå archipelago	70.47	In	30.76	<i>Marenzelleria</i> spp., Oligochaeta
		Out	65.36	<i>Macoma balthica</i> , <i>Marenzelleria</i> spp., <i>Monoporeia affinis</i>
	78.65	In	31.20	<i>Marenzelleria</i> spp., Oligochaeta
		72.64	Out	66.30

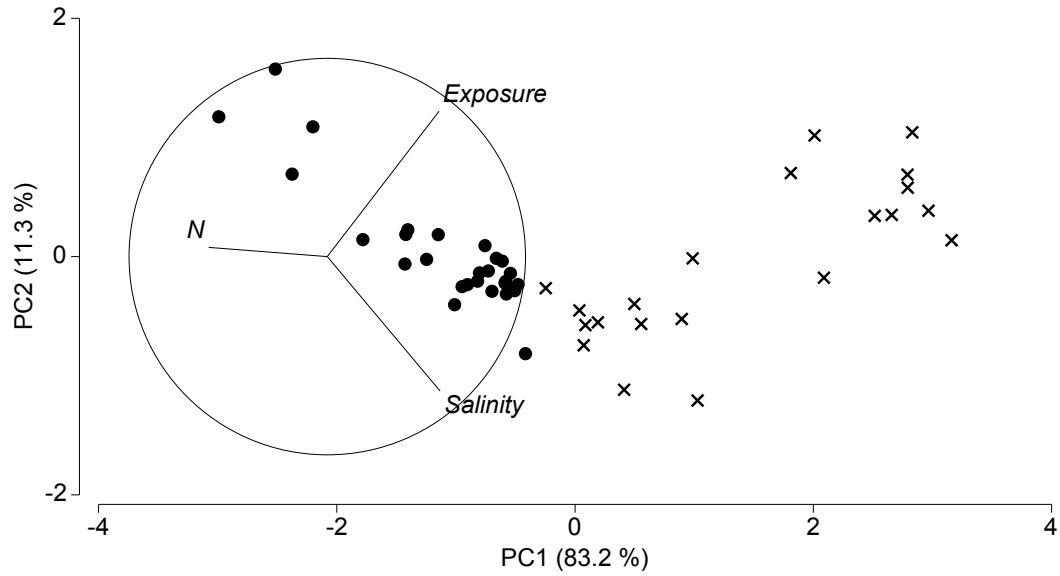


Figure S1. In the Tvärminne archipelago, a PCA was run to separate inner (filled circle) vs outer (cross) sites. The analysis was based on geographic position ($^{\circ}$ N) from the Karjaanjoki river, wind-wave exposure and bottom-water salinity content. The vector overlay (large circle) visualize the relationships between the variables and the ordination axes (Anderson et al. 2008).

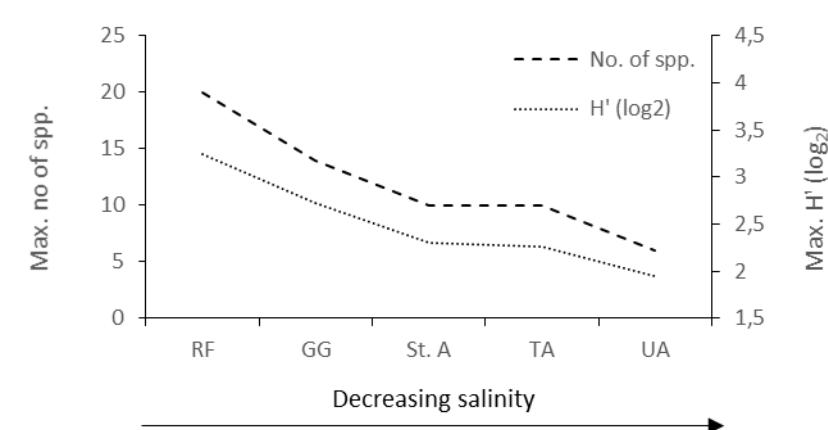


Figure S2. The maximum number of species and diversity (H') observed at a single site for each coastal area. RF: Roskilde Fjord, GG: Gulf of Gdansk, St. A: St. Anna archipelago, TA: Tvärminne archipelago, UA: Umeå archipelago.