

APPENDIX 3- Details on the Benthos-Trawl Case Study

a) Detailed description of vulnerability factors

For the Benthos-trawl case study, these vulnerability factors have been chosen after thorough discussions in expert-group meetings. They reflect the morphological and ecological properties controlling the probability of being damaged by a demersal trawl haul that could be unambiguously documented for the 355 taxa of our study. The main idea behind the selection and ranking of these 5 factors is that large and sessile species living at the sediment surface are the most likely to be captured in a trawl haul. When captured, species with complex and fragile shells will be more likely to be damaged than species with simple morphology and hard shell.

Vulnerability factors

F_1 classify the benthos species in three size classes, tiny (1), medium sized (2) and large. Tiny organisms are those that are likely to pass through the meshes of a trawl, medium sized organisms have some chances of escaping and large organisms will most probably not escape the trawl if caught.

F_2 relates to the position of benthos species relatively to the sediment, distinguishing infauna organisms spending most of their lives buried within the sediment (1) from epifauna organisms (3) spending their life at the sediment surface. An intermediate code (2) has been used to distinguish individuals migrating from within the sediment to the surface.

F_3 refers to the mobility of organisms, ranging from sessile organisms (3) that have no ways of escaping a coming trawl to fast moving/swimming organisms that have better chances to escape (1). An intermediate code (2) is used for the organisms presenting slow mobility.

F_4 refers to the vertical dimension of organisms that affects their probability of suffering damages when caught by a trawl. It distinguishes vertically erected organisms composed of many tiny branches (3) from ball- or flat-like organisms (1). An intermediate code (2) corresponds to some degree of vertical erection and complexity.

F_5 refers to the hardness of the shell of the organisms, distinguishing soft (3) from hard and calcified (1) organisms. An intermediate code (2) corresponds to some degree of natural protection.

b) F_{if} matrix for Benthos and derived vulnerability to trawling T_i

Group	Species	F_1	F_2	F_3	F_4	F_5	T_i
Surface sea spiders	<i>Ascorhynchus abyssi</i>	1	3	3	2	2	0.898
Surface sea spiders	<i>Boreonymphon robustum</i>	1	3	3	2	2	0.898
Surface large sea spiders	<i>Colossendeis sp</i>	1	3	3	2	2	0.898
Surface sea spiders	<i>Cordylochele brevicolis</i>	1	3	3	2	2	0.898
Surface sea spiders	<i>Cordylochele malleolata</i>	1	3	3	2	2	0.898
Surface sea spiders	<i>Nymphon elegans</i>	1	3	3	2	2	0.898
Surface sea spiders	<i>Nymphon grossipes</i>	1	3	3	2	2	0.898
Surface sea spiders	<i>Nymphon hirtipes</i>	1	3	3	2	2	0.898
Surface sea spiders	<i>Nymphon hirtum</i>	1	3	3	2	2	0.898
Surface sea spiders	<i>Nymphon serratum</i>	1	3	3	2	2	0.898
Surface sea spiders	<i>Nymphon sp</i>	1	3	3	2	2	0.898
Surface sea spiders	<i>Nymphon spinosum</i>	1	3	3	2	2	0.898
Surface sea spiders	<i>Nymphon stroemi stroemi</i>	1	3	3	2	2	0.898
Surface flatt sea spiders	<i>Pycnogonida sp</i>	1	3	3	1	1	0.860
Surface flatt sea spiders	<i>Pycnogonum litorale</i>	1	3	3	1	1	0.860
Retractable sea anemons	<i>Actiniaria sp</i>	2	3	3	2	1	0.943
Retractable sea anemons	<i>Actinostola sp</i>	2	3	3	2	1	0.943
Retractable sea anemons	<i>Hormathia sp</i>	2	3	3	2	1	0.943
Retractable sea anemons	<i>Metridium senile</i>	2	3	3	2	1	0.943
Retractable sea anemons	<i>Urticina felina</i>	2	3	3	2	1	0.943
Retractable sea anemons	<i>Anthozoa sp</i>	2	3	3	2	1	0.943
Surface soft corals	<i>Drifa glomerata</i>	2	3	3	3	1	0.951
Surface soft corals	<i>Duva florida</i>	1	3	3	3	1	0.898
Surface soft corals	<i>Gersemia fruticosa</i>	1	3	3	3	1	0.898
Surface soft corals	<i>Gersemia rubiformis</i>	1	3	3	3	1	0.898
Surface soft corals	<i>Gersemia sp</i>	2	3	3	3	1	0.951
Small surface coral cup	<i>Caryophyllia smithii</i>	2	3	3	2	3	0.957
Epifaunal mobile crabs	<i>Cerianthus lloydi</i>	2	3	3	2	2	0.951
Erect hydroids	<i>Campanulariidae</i>	1	3	3	3	1	0.898
Erect hydroids	<i>Haleciidae</i>	1	3	3	3	1	0.898
Erect hydroids	<i>Hydrozoa sp</i>	2	3	3	3	1	0.951
Erect hydroids	<i>Laodiceidae</i>	2	3	3	3	1	0.951
Erect hydroids	<i>Sertulariidae</i>	1	3	3	3	1	0.898
Erect hydroids	<i>Tubulariidae</i>	2	3	3	3	1	0.951
Sealilje	<i>Umbellula encrinus</i>	3	3	3	3	2	1.000
Encrusting on Pagurus	<i>Epizoanthus incrustatus</i>	1	3	3	2	2	0.898
Encrusting on Pagurus	<i>Epizoanthus sp</i>	1	3	3	2	2	0.898
Surface amphipods	<i>Acanthostephea malmgreni</i>	1	3	2	1	2	0.816
Surface amphipods	<i>Amathillopsis spinigera</i>	1	3	2	2	2	0.840
Infaunal tube	<i>Ampelisca eschrichti</i>	1	1	2	1	2	0.667
Surface amphipods	<i>Amphipoda sp</i>	1	2	2	1	2	0.745
Surface amphipods	<i>Anonyx nugax</i>	1	3	2	1	2	0.816
Surface amphipods	<i>Anonyx sp</i>	1	3	2	1	2	0.816

Surface amphipods	<i>Arrhis phyllonyx</i>	1	3	2	1	2	0.816
Surface amphipods	<i>Atylidae sp</i>	1	3	2	1	2	0.816
Infauanal amphipod	<i>Cleippides quadricuspis</i>	1	2	1	2	2	0.706
Interface amphipod	<i>Epimeria loricata</i>	1	2	1	2	2	0.706
Surface amphipods	<i>Eurythenes gryllus</i>	2	3	2	1	2	0.882
Surface amphipods	<i>Eusirus cuspidatus</i>	1	3	2	1	2	0.816
Surface amphipods	<i>Eusirus holmi</i>	1	3	2	1	2	0.816
Surface amphipods	<i>Gammaridae sp</i>	1	2	2	1	2	0.745
Surface amphipods	<i>Gammarus wilkitzkii</i>	1	3	2	1	2	0.816
Surface amphipods	<i>Haploops sp</i>	1	3	1	1	2	0.745
Surface amphipods	<i>Lepidepecreum umbo</i>	1	3	2	1	2	0.816
Surface amphipods	<i>Onisimus sp</i>	1	2	2	1	2	0.745
Surface amphipods	<i>Paramphithoe hystrix</i>	1	3	2	1	2	0.816
Surface amphipods	<i>Pardalisca abyssi</i>	1	3	2	1	2	0.816
Surface amphipods	<i>Paroedicerus lynceus</i>	1	3	2	1	2	0.816
Surface amphipods	<i>Rhachotropis aculeata</i>	1	3	2	1	2	0.816
Surface amphipods	<i>Rhachotropis sp</i>	1	2	2	1	2	0.745
Surface amphipods	<i>Socarnes bidenticulatus</i>	1	3	2	1	2	0.816
Surface amphipods	<i>Stegocephalus inflatus</i>	1	3	2	1	2	0.816
Surface amphipods	<i>Tmetonyx cicada</i>	1	3	2	1	2	0.816
Surface amphipods	<i>Unciola leucopis</i>	1	3	2	1	2	0.816
Cave-living crab	<i>Lithodes maja</i>	2	2	1	2	2	0.777
Cave-living crab	<i>Munida bamffica</i>	2	2	1	2	2	0.777
Surface mobile crabs	<i>Pagurus bernhardus</i>	2	3	2	2	2	0.898
Surface mobile crabs	<i>Pagurus pubescens</i>	2	3	2	2	2	0.898
Surface mobile crabs	<i>Paralithodes camtschaticus</i>	3	3	1	2	2	0.898
Surface mobile crabs	<i>Chionoecetes opilio</i>	2	3	1	2	2	0.840
Surface mobile crabs	<i>Hyas sp</i>	2	3	2	2	2	0.898
attached cirripeds	<i>Balanus sp</i>	2	3	3	1	3	0.951
attached cirripeds	<i>Scalpellum sp</i>	1	3	3	2	3	0.910
attached cirripeds	<i>Semibalanus balanoides</i>	2	3	3	2	3	0.957
surface small crustacean	<i>Diastylis sp</i>	1	2	2	1	2	0.745
Epifaunal isopod	<i>Aega sp</i>	1	3	3	1	2	0.882
Semipelagic mysidacea	<i>Boreomysis arctica</i>	1	3	2	1	2	0.816
Epifaunal isopod	<i>Calathura brachiata</i>	1	3	3	1	2	0.882
Epifaunal isopod	<i>Isopoda sp</i>	1	3	3	1	2	0.882
Epifaunal isopod long legs	<i>Munnopsis sp</i>	1	3	3	2	3	0.910
Epifaunalrobust isopod	<i>Saduria sabini</i>	1	3	2	2	2	0.840
Epifaunalrobust isopod	<i>Saduria sp</i>	2	3	2	2	2	0.898
Semipelagic shrimps	<i>Bythocaris biruli</i>	1	3	2	2	2	0.840
Semipelagic shrimps	<i>Bythocaris sp</i>	1	3	2	2	2	0.840
Semipelagic shrimps	<i>Eualus gaimardi</i>	1	3	2	2	2	0.840
Semipelagic shrimps	<i>Eualus sp</i>	1	3	2	2	2	0.840
Semipelagic shrimps	<i>Hymenodora glacialis</i>	1	3	2	2	2	0.840
Semipelagic shrimps	<i>Lebbeus polaris</i>	1	3	2	2	2	0.840
Semipelagic shrimps	<i>Pandalus borealis</i>	1	3	2	2	2	0.840

Semipelagic shrimps	<i>Pandalus montagui</i>	1	3	2	2	2	0.840
Semipelagic shrimps	<i>Pontophilus norvegicus</i>	1	3	2	2	2	0.840
Surface shrimps	<i>Sabinea sarsi</i>	1	3	2	1	2	0.816
Surface shrimps	<i>Sabinea septemcarinata</i>	1	3	2	1	2	0.816
Surface shrimps	<i>Sabinea sp</i>	1	3	2	1	2	0.816
Surface shrimps	<i>Sclerocrangon boreas</i>	2	3	2	1	2	0.882
Surface shrimps	<i>Sclerocrangon ferox</i>	2	3	2	1	2	0.882
Surface shrimps	<i>Spirontocaris sp</i>	1	3	2	1	2	0.816
Surface shrimps	<i>Spirontocaris spinus</i>	1	3	2	1	2	0.816
Sealilje	<i>Heliometra glacialis</i>	2	3	3	3	3	0.961
Sealilje	<i>Poliometra proluxa</i>	1	3	3	3	3	0.920
Infaunal seaurchin	<i>Brisaster fragilis</i>	2	1	3	1	3	0.840
Epifaunal seaurchin	<i>Echinus acutus</i>	2	2	3	2	3	0.910
Epifaunal seaurchin	<i>Echinus esculentus</i>	2	3	3	2	3	0.957
Epifaunal seaurchin	<i>Echiurus echiurus echiurus</i>	1	3	3	2	3	0.910
Epifaunal sea urchin	<i>Strongylocentrotus sp</i>	2	3	3	2	3	0.957
Infaunal seaurchin	<i>Spatangus purpureus</i>	2	1	3	1	3	0.840
Interface sea cucumber	<i>Molpadia arctica</i>	2	2	3	2	1	0.882
Interface sea cucumber	<i>Molpadia borealis</i>	3	2	3	2	1	0.943
Infaunal sea cucumber	<i>Ekmania barthi</i>	2	1	3	1	1	0.784
Infaunal sea cucumber	<i>Thyonidium sp</i>	2	1	3	1	1	0.784
Infaunal sea cucumber	<i>Myriotrochus rinkii</i>	1	1	3	1	1	0.703
Infaunal sea cucumber	<i>Pentamera calcigera</i>	2	1	3	1	1	0.784
Epifaunal sea cucumbers	<i>Psolus phantapus</i>	2	3	3	2	2	0.951
Epifaunal sea cucumbers	<i>Psolus sp</i>	1	3	3	2	2	0.898
Epifaunal sea cucumbers	<i>Stichopus tremulus</i>	3	3	3	2	1	1.000
Epifaunal sea cucumbers	<i>Cucumaria frondosa</i>	3	3	3	3	1	1.000
Epifaunal sea cucumbers	<i>Phyllophoridae sp</i>	1	2	3	2	2	0.840
Epifaunal sea cucumbers	<i>Holothuroidea sp</i>	1	2	3	2	2	0.840
Erect barsket sar	<i>Gorgonocephalus arcticus</i>	3	3	3	3	3	1.000
Erect barsket sar	<i>Gorgonocephalus eucnemis</i>	3	3	3	3	3	1.000
Erect barsket sar	<i>Gorgonocephalus lamarcki</i>	3	3	3	3	3	1.000
Erect barsket sar	<i>Gorgonocephalus sp</i>	3	3	3	3	3	1.000
Low brittestars	<i>Ophiacantha bidentata</i>	1	3	3	1	2	0.882
Low brittestars	<i>Ophiocten sericeum</i>	1	3	3	1	2	0.882
Clinging brittestars	<i>Ophiopholis aculeata</i>	1	3	3	2	2	0.898
Low brittestars	<i>Ophiopleura borealis</i>	2	3	3	1	2	0.943
Low brittestars	<i>Ophioscolex glacialis</i>	2	3	3	1	2	0.943
Low brittestars	<i>Ophiura robusta</i>	1	3	3	1	2	0.882
Low brittestars	<i>Ophiura sarsi</i>	1	3	3	1	2	0.882
Low brittestars	<i>Ophiuridae sp</i>	1	3	3	2	2	0.898
Low seastars	<i>Asterias rubens</i>	1	3	3	1	2	0.882
Low seastars	<i>Asteriidae sp</i>	2	3	3	1	2	0.943
Low seastars	<i>Bathybiaster vexillifer</i>	2	2	3	1	2	0.882
Low seastars	<i>Ceramaster granularis</i>	2	3	3	1	2	0.943
Low seastars	<i>Crossaster papposus</i>	2	3	3	1	2	0.943

Low seastars	<i>Ctenodiscus crispatus</i>	1	2	3	1	2	0.816
Low seastars	<i>Henricia sp</i>	1	3	3	1	2	0.882
Low seastars	<i>Hippasteria phrygiana</i>	3	3	3	1	2	1.000
Low seastars	<i>Hymenaster pellucidus</i>	1	3	3	1	2	0.882
Low seastars	<i>Icasterias panopla</i>	2	3	3	1	2	0.943
Low seastars	<i>Korethraster hispidus</i>	1	3	3	1	2	0.882
Low seastars	<i>Leptasterias sp</i>	2	3	3	1	2	0.943
Low seastars	<i>Leptychaster arcticus</i>	1	3	3	1	2	0.882
Low seastars	<i>Lophaster furcifer</i>	2	3	3	1	2	0.943
Low seastars	<i>Pontaster tenuispinus</i>	2	3	3	1	2	0.943
Low seastars	<i>Poraniomorpha hispida</i>	2	2	3	1	2	0.882
Low seastars	<i>Poraniomorpha sp</i>	2	2	3	1	2	0.882
Low seastars	<i>Poraniomorpha tumida</i>	2	2	3	1	2	0.882
Low seastars	<i>Pseudarchaster parelii</i>	2	2	3	1	2	0.882
Low seastars	<i>Pteraster militaris</i>	2	2	3	1	2	0.882
Low seastars	<i>Pteraster obscurus</i>	2	2	3	1	2	0.882
Low seastars	<i>Pteraster pulvillus</i>	1	2	3	1	2	0.816
Low seastars	<i>Solaster endeca</i>	3	3	3	1	2	1.000
Low seastars	<i>Solaster sp</i>	3	3	3	1	2	1.000
Low seastars	<i>Solaster syrtensis</i>	2	3	3	1	2	0.943
Low seastars	<i>Stichastrella rosea</i>	2	3	3	1	2	0.943
Low seastars	<i>Tylaster willei</i>	3	3	3	1	2	1.000
Low seastars	<i>Urasterias linckii</i>	2	3	3	1	2	0.943
Infaunal echiura	<i>Hamingia arctica</i>	2	1	3	1	1	0.784
Epifaunal brachiopoda	<i>Brachiopoda sp</i>	1	3	3	2	3	0.910
Epifaunal brachiopoda	<i>Hemithyris psittacea</i>	1	3	3	2	3	0.910
Epifaunal brachiopoda	<i>Macandrevia cranium</i>	1	3	3	2	3	0.910
Epifaunal brachiopoda	<i>Terebratulina retusa</i>	1	2	3	2	3	0.859
Epifaunal brachiopoda	<i>Terebratulina sp</i>	1	3	3	2	3	0.910
Encrusting bryozoa	<i>Alcyonidium disciforme</i>	1	3	3	1	3	0.898
Encrusting bryozoa	<i>Alcyonidium gelatinosum</i>	2	3	3	1	2	0.943
Encrusting bryozoa	<i>Alcyonidium sp</i>	2	3	3	1	2	0.943
Encrusting bryozoa	<i>Electridea</i>	1	3	3	1	3	0.898
Encrusting bryozoa	<i>Bryozoa sp</i>	2	3	3	2	3	0.957
Erect bryozoa	<i>Bryocryptellidae</i>	2	3	3	2	3	0.957
Erect bryozoa	<i>Cellepora</i>	1	3	3	3	3	0.920
Erect bryozoa	<i>Diastoporidae</i>	2	3	3	3	3	0.961
Erect bryozoa	<i>Flustridae</i>	2	3	3	3	2	0.957
Erect bryozoa	<i>Frondiporidae</i>	1	3	3	3	3	0.920
Erect bryozoa	<i>Myriaporidae</i>	1	3	3	3	3	0.920
Erect bryozoa	<i>Phidoloporidae</i>	1	3	3	3	3	0.920
Erect bryozoa	<i>Smittinidae</i>	1	3	3	3	2	0.910
Erect bryozoa	<i>Stigmatoechidae</i>	1	3	3	3	3	0.920
Erect bryozoa	<i>Tubuliporidae</i>	1	3	3	3	3	0.920
Infaunal worm	<i>Proneomenia sp</i>	1	1	3	1	1	0.703
Infaunal worm	<i>Solenogastres sp</i>	1	1	3	1	2	0.745

Attached bivalve	<i>Anomia sp</i>	1	3	1	1	2	0.745
Interfaunal Pecten	<i>Arctinula greenlandica</i>	1	2	3	1	3	0.840
Epifaunal bivalves	<i>Astarte arctica</i>	2	3	3	1	2	0.943
Epifaunal bivalves	<i>Astarte borealis</i>	2	3	3	1	2	0.943
Epifaunal bivalves	<i>Astarte crenata</i>	2	3	3	1	2	0.943
Epifaunal bivalves	<i>Astarte elliptica</i>	2	3	3	1	2	0.943
Epifaunal bivalves	<i>Astarte sp</i>	2	3	3	1	2	0.943
Interfaunal bivalv	<i>Bathyarca glacialis</i>	1	2	3	1	2	0.816
Interfaunal bivalv	<i>Bathyarca pectunculoides</i>	1	2	3	1	2	0.816
Interfaunal bivalv	<i>Bivalvia sp</i>	1	2	3	1	2	0.816
Epifaunal bivalves	<i>Chlamys islandica</i>	2	3	2	2	3	0.910
Epifaunal bivalves	<i>Chlamys sp</i>	2	3	2	2	3	0.910
Infaunal bivalve	<i>Clinocardium ciliatum</i>	2	1	3	1	2	0.816
Interfaunal bivalv	<i>Cuspidaria arctica</i>	1	2	3	1	2	0.816
Interfaunal bivalv	<i>Cuspidaria sp</i>	1	2	3	1	2	0.816
Epifaunal bivalves	<i>Hiatella arctica</i>	1	3	3	2	2	0.898
Epifaunal bivalves	<i>Hiatella sp</i>	1	3	3	2	2	0.898
Infaunal bivalves	<i>Leionucula tenuis</i>	1	1	3	1	2	0.745
Interfaunal bivalv	<i>Macoma calcarea</i>	1	2	3	1	2	0.816
Interfaunal bivalv	<i>Macoma sp</i>	2	2	3	1	2	0.882
Epifaunal bivalves	<i>Modiolus modiolus</i>	1	3	3	2	2	0.898
Epifaunal bivalves	<i>Musculus laevigatus</i>	1	3	3	1	2	0.882
Epifaunal bivalves	<i>Musculus sp</i>	1	3	3	1	2	0.882
Infaunal bivalves	<i>Mya truncata</i>	2	1	3	1	2	0.816
Infaunal bivalves	<i>Nucula sp</i>	1	1	3	1	2	0.745
Infaunal bivalves	<i>Nuculana pernula</i>	1	1	3	1	2	0.745
Epifaunal bivalves	<i>Pectinidae sp</i>	1	2	3	1	3	0.840
Epifaunal bivalves	<i>Pseudamussium septemradiatum</i>	2	2	3	1	3	0.898
Epifaunal bivalves	<i>Serripes groenlandicus</i>	2	3	3	2	2	0.951
Interfaunal bivalv	<i>Yoldia hyperborea</i>	1	2	3	1	2	0.816
Interfaunal bivalv	<i>Yoldiella sp</i>	1	2	3	1	2	0.816
Epifaunal mobile cephalopods	<i>Bathypolypus arcticus</i>	2	3	3	3	1	0.951
Epifaunal mobile cephalopods	<i>Benthoctopus sp</i>	2	3	3	3	1	0.951
Epifaunal mobile cephalopods	<i>Rossia moelleri</i>	2	3	3	3	1	0.951
Epifaunal mobile cephalopods	<i>Rossia palpebrosa</i>	2	3	3	3	1	0.951
Epifaunal mobile cephalopods	<i>Rossia sp</i>	2	3	3	3	1	0.951
Epifaunal pred snail	<i>Admete viridula</i>	1	2	2	2	2	0.777
Epifaunal naked snails	<i>Aldisa zetlandica</i>	1	2	2	2	1	0.745
Epifaunal snails	<i>Beringius ossiani</i>	2	2	2	2	2	0.840
Inter snail	<i>Boreotrophon sp</i>	1	2	2	2	2	0.777
Inter snail	<i>Buccinidae sp</i>	1	2	2	2	2	0.777
Inter snail	<i>Buccinum angulosum</i>	2	2	2	2	2	0.840
Inter snail	<i>Buccinum belcheri</i>	1	2	2	2	2	0.777
Inter snail	<i>Buccinum ciliatum ciliatum</i>	1	2	2	2	2	0.777
Inter snail	<i>Buccinum ciliatum sericatum</i>	1	2	2	2	2	0.777
Inter snail	<i>Buccinum elatior</i>	2	2	2	2	2	0.840

Inter snail	<i>Buccinum finmarchianum</i>	1	2	2	2	2	0.777
Inter snail	<i>Buccinum fragile</i>	2	2	2	2	2	0.840
Inter snail	<i>Buccinum glaciale</i>	2	2	2	2	2	0.840
Inter snail	<i>Buccinum hydrophanum</i>	2	2	2	2	2	0.840
Inter snail	<i>Buccinum maltzani</i>	2	2	2	2	2	0.840
Inter snail	<i>Buccinum micropoma</i>	1	2	2	2	2	0.777
Inter snail	<i>Buccinum nivale</i>	1	2	2	2	2	0.777
Inter snail	<i>Buccinum polare</i>	2	2	2	2	2	0.840
Inter snail	<i>Buccinum undatum</i>	2	2	2	2	2	0.840
Inter snail	<i>Bulbus smithi</i>	1	2	2	2	2	0.777
Epifaunal naken snail	<i>Cadlina laevis</i>	1	2	2	2	1	0.745
Inter snail	<i>Capulacmaea radiata</i>	1	3	2	2	2	0.840
Inter snail	<i>Colus altus</i>	2	2	2	2	2	0.840
Inter snail	<i>Colus holboelli</i>	1	2	2	2	2	0.777
Inter snail	<i>Colus islandicus</i>	2	2	2	2	2	0.840
Inter snail	<i>Colus kroyeri</i>	2	2	2	2	2	0.840
Inter snail	<i>Colus pubescens</i>	2	2	2	2	2	0.840
Inter snail	<i>Colus sabini</i>	2	2	2	2	2	0.840
Inter snail	<i>Colus sp</i>	1	2	2	2	2	0.777
Inter snail	<i>Colus turgidulus</i>	2	2	2	2	2	0.840
Inter snail	<i>Cryptonatica affinis</i>	1	2	2	1	2	0.745
Inter snail	<i>Cylichna alba</i>	1	1	2	1	2	0.667
Epifaunal naken snail	<i>Dendronotus sp</i>	1	3	2	2	1	0.816
Epifaunal naken snail	<i>Gastropoda sp</i>	1	2	2	2	2	0.777
Epifaunal snails	<i>Limneria undata</i>	1	3	2	2	2	0.840
Epifaunal snails	<i>Lunatia pallida</i>	1	3	2	2	2	0.840
Epifaunal snails	<i>Margarites costalis</i>	1	3	2	2	2	0.840
Epifaunal snails	<i>Margarites groenlandicus</i>	1	3	2	2	2	0.840
Epifaunal snails	<i>Margarites sp</i>	1	3	2	2	2	0.840
Inter snail	<i>Mohnia mohni</i>	1	2	2	2	2	0.777
Inter snail	<i>Naticidae sp</i>	1	2	2	2	2	0.777
Inter snail	<i>Neptunea communis</i>	2	2	2	2	2	0.840
Inter snail	<i>Neptunea denselirata</i>	2	2	2	2	2	0.840
Inter snail	<i>Neptunea despecta</i>	2	2	2	2	2	0.840
Inter snail	<i>Neptunea sp</i>	1	2	2	2	2	0.777
Inter snail	<i>Neptunea ventricosa</i>	3	2	2	2	2	0.898
Naken snails	<i>Nudibranchia sp</i>	1	2	1	2	1	0.667
Epifaunal snails	<i>Oenopota harpa</i>	1	2	2	2	2	0.777
Epifaunal naken snail	<i>Onchidiopsis glacialis</i>	2	3	2	2	1	0.882
Epifaunal naken snail	<i>Onchidoridae sp</i>	1	3	2	2	1	0.816
Epifaunal snails	<i>Philine finmarchica</i>	1	3	2	2	2	0.840
Epifaunal snails	<i>Philinidae sp</i>	1	3	2	2	2	0.840
Epifaunal snails	<i>Propebela sp</i>	1	2	2	2	2	0.777
low Epifaunal snails	<i>Scaphander punctostriatus</i>	1	2	2	1	2	0.745
Epifaunal snails	<i>Scaphander sp</i>	1	2	2	1	2	0.745
Epifaunal snails	<i>Tachyrhynchus sp</i>	1	3	2	2	2	0.840

Epifaunal snails	<i>Turrisipho lachesis</i>	1	3	2	2	2	0.840
Epifaunal snails	<i>Turrisipho sp</i>	1	3	2	2	2	0.840
Epifaunal snails	<i>Velutina velutina</i>	1	3	2	1	2	0.816
Epifaunal snails	<i>Velutinidae sp</i>	1	3	2	1	2	0.816
Epifaunal snails	<i>Volutopsis norvegicus</i>	2	2	2	2	2	0.840
Epifaunal polyplachophora	<i>Hanleya sp</i>	1	3	2	1	2	0.816
Epifaunal polyplachophora	<i>Polyplacophora sp</i>	1	3	2	1	2	0.816
Mobile polychates	<i>Polychaeta sp</i>	3	2	2	2	2	0.898
Mobile polychates	<i>Aphroditidae sp</i>	1	3	2	1	2	0.816
Mobile polychates	<i>Eunice sp</i>	1	3	2	1	2	0.816
Mobile polychates	<i>Euphrosine sp</i>	1	3	2	1	2	0.816
Mobile polychates	<i>Glycera sp</i>	1	1	2	1	1	0.615
Mobile polychates	<i>Lumbrineris sp</i>	1	1	2	1	1	0.615
Mobile polychates	<i>Nephtys sp</i>	1	3	2	1	1	0.784
Mobile polychates	<i>Nereis sp</i>	1	3	2	1	1	0.784
Mobile polychates	<i>Nothria hyperborea</i>	1	3	2	1	1	0.784
Mobile polychates	<i>Phyllodocidae sp</i>	1	2	2	1	2	0.745
Mobile polychates	<i>Polynoidae sp</i>	1	2	2	1	2	0.745
Sedentary polychates	<i>Ampharetidae sp</i>	1	2	3	1	1	0.784
Sedentary polychates	<i>Brada granulosa</i>	1	2	2	1	2	0.745
Sedentary polychates	<i>Brada inhabilis</i>	1	2	2	1	2	0.745
Sedentary polychates	<i>Brada sp</i>	1	2	2	1	2	0.745
Infaunal seaurchin	<i>Brada villosa</i>	1	2	2	1	2	0.745
Sedentary polychates	<i>Maldanidae sp</i>	1	2	3	2	2	0.840
Sedentary polychates	<i>Pectinaria hyperborea</i>	2	2	3	1	1	0.860
Sedentary polychates	<i>Polyphysia sp</i>	1	2	2	1	1	0.703
Sedentary polychates	<i>Sabellidae sp</i>	1	2	3	2	1	0.816
Sedentary polychates	<i>Serpulidae sp</i>	2	3	3	1	3	0.951
Sedentary polychates	<i>Spiochaetopterus typicus</i>	2	2	3	2	2	0.898
Sedentary polychates	<i>Terebellidae sp</i>	1	2	3	2	2	0.840
Encrusting sponge	<i>Forcepia sp</i>	2	3	3	1	3	0.951
Encrusting sponge	<i>Mycale sp</i>	3	3	3	1	3	1.000
Erect small glassponge	<i>Sycon sp</i>	1	3	3	2	3	0.910
Erect sponge	<i>Asbestopluma sp</i>	1	3	3	3	3	0.920
Erect sponge	<i>Chondrocladia gigantea</i>	2	3	3	3	3	0.961
Erect sponge	<i>Geodia barretti</i>	3	3	3	3	3	1.000
Erect sponge	<i>Geodia macandrewii</i>	3	3	3	3	3	1.000
Erect sponge	<i>Geodia sp</i>	3	3	3	3	3	1.000
Erect sponge	<i>Haliclona sp</i>	3	3	3	3	3	1.000
Erect sponge	<i>Phakellia sp</i>	3	3	3	3	3	1.000
Erect sponge	<i>Porifera sp</i>	2	3	3	3	3	0.961
Erect sponge	<i>Stylocordyla borealis</i>	1	3	3	3	3	0.920
Erect sponge	<i>Suberites ficus</i>	2	3	3	3	3	0.961
Erect sponge	<i>Suberites sp</i>	3	3	3	3	3	1.000
Low ball sponge	<i>Tethya aurantium</i>	1	3	3	2	3	0.910
Low ball sponge	<i>Tethya norvegica</i>	1	3	3	2	3	0.910

Low ball sponge	<i>Tetilla cranium</i>	2	3	3	2	3	0.957
Low ball sponge	<i>Tetilla polyura</i>	2	3	3	2	3	0.957
Low ball sponge	<i>Tetilla sp</i>	2	3	3	2	3	0.957
Low muffin sponge	<i>Thenia muricata</i>	2	3	3	2	3	0.957
Low muffin sponge	<i>Thenia sp</i>	1	3	3	2	3	0.910
low musrom sponge	<i>Tentorium semisuberites</i>	1	3	3	2	2	0.898
Low sponge	<i>Myxilla incrustans</i>	2	3	3	2	3	0.957
Low sponge	<i>Myxilla sp</i>	3	3	3	2	3	1.000
Low sponge	<i>Polymastia sp</i>	2	3	3	2	2	0.951
Low sponge	<i>Polymastia uberrima</i>	3	3	3	2	2	1.000
Low sponge	<i>Radiella grimaldi</i>	2	3	3	2	2	0.951
Low sponge	<i>Radiella hemisphaericum</i>	2	3	3	2	2	0.951
Low sponge	<i>Radiella sarsi</i>	3	3	3	2	2	1.000
Low sponge	<i>Sphaerotylus sp</i>	2	3	3	2	2	0.951
Delecate erect ascidie	<i>Synoicum tirgens</i>	2	3	3	3	3	0.961
Colonial encrusting ascidia	<i>Botryllus schlosseri</i>	2	3	3	1	2	0.943
erect robust ascidie	<i>Ascidia prunum</i>	2	3	3	2	2	0.951
erect robust ascidie	<i>Ascidacea sp</i>	1	2	3	2	2	0.840
erect robust ascidie	<i>Microcosmus glacialis</i>	1	3	3	2	2	0.898
infauna ascidie	<i>Pelonaia corrugata</i>	1	1	3	1	2	0.745
Long fragile acidie	<i>Ciona intestinalis</i>	2	3	3	3	3	0.961
Spiny ball ascidie	<i>Boltenia echinata</i>	2	3	3	2	2	0.951
Colonial encrusting ascidia	<i>Didemnidae sp</i>	2	3	3	1	2	0.943
Surface low ascidian	<i>Styela rustica</i>	1	3	3	2	2	0.898
Surface low ascidian	<i>Styela sp</i>	1	3	3	2	2	0.898
Surface worm	<i>Nemertini sp</i>	2	2	2	1	1	0.784
Interface worm	<i>Priapulidae sp</i>	2	2	2	1	2	0.816
Interface worm	<i>Priapulopsis bicaudatus</i>	2	2	2	1	2	0.816
Interface worm	<i>Priapulus caudatus</i>	1	2	2	1	2	0.745
Interface worm	<i>Golfingia sp</i>	1	2	3	1	2	0.816
Interface worm	<i>Golfingia vulgaris vulgaris</i>	2	2	3	1	2	0.882
Interface worm	<i>Nephasoma sp</i>	1	2	3	1	2	0.816
Interface worm	<i>Phascolion strombus strombus</i>	1	2	3	1	2	0.816
Interface worm	<i>Sipunculidea sp</i>	2	2	3	1	2	0.882
Interface worm	<i>Plathelminthes sp</i>	1	2	2	1	1	0.703
Interface worm	<i>Turbellaria sp</i>	1	2	2	1	1	0.703