

Table S1. Extra regional characteristics. Regional environmental parameters (2006-2014 minimum depth averages) were obtained from BioORACLEv2.1 (Assis et al., 2018).

| | Churchill | Deception Bay | Iqaluit | Steensby Inlet |
|--|--------------------------|----------------------------|---------------------------|--------------------------|
| Phosphate ($\mu\text{m m}^{-3}$) | 1.18 | 0.53 | 0.37 | 0.6 |
| Nitrate ($\mu\text{m m}^{-3}$) | 8.5 | 0.6 | 1.0 | 1.3 |
| Salinity (P.S.U.) | 33.2 | 31.9 | 32.2 | 30.2 |
| Dissolved oxygen ($\mu\text{m m}^{-3}$) | 283 | 363 | 353 | 365 |
| Sea Surface Temperature (°C) | -0.2-3.6 | -0.4-2.0 | -0.8-1.8 | -1.0-0.3 |
| Chlorophyll (mg m^{-3}) | 0.02 | 0.31 | 0.47 | 0.32 |
| Water velocity (m s^{-1}) | 0.006 | 0.043 | 0.004 | 0.008 |
| Ship traffic 2007-2011 (vessels y^{-1})¹ | 21.8 | 29.4 | 29.4 | 4.8 |
| Population (2021)² | ~870 | 0 | ~7400 | 0 |
| Historical ice period³ | Mid-November to mid-June | Late November to late June | Late November to mid-July | Mid-october to late July |

¹ Statistics Canada Archives (2023). Shipping in Canada from 2007 to 2011: Tables 11 and 12, International and Domestic shipping – Number of movements, vessel capacity and tonnage transported by province or territory and port.
<https://www150.statcan.gc.ca/n1/en/catalogue/54-205-X>

² Statistics Canada (2023). Census Profile, 2021 Census of Population.
<https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E>

³ Canadian Ice Service (2023). 30-year ice climate normals (1991-2020).
<https://iceweb1.cis.ec.gc.ca/30Atlas/page1.xhtml?grp=Guest&lang=en>

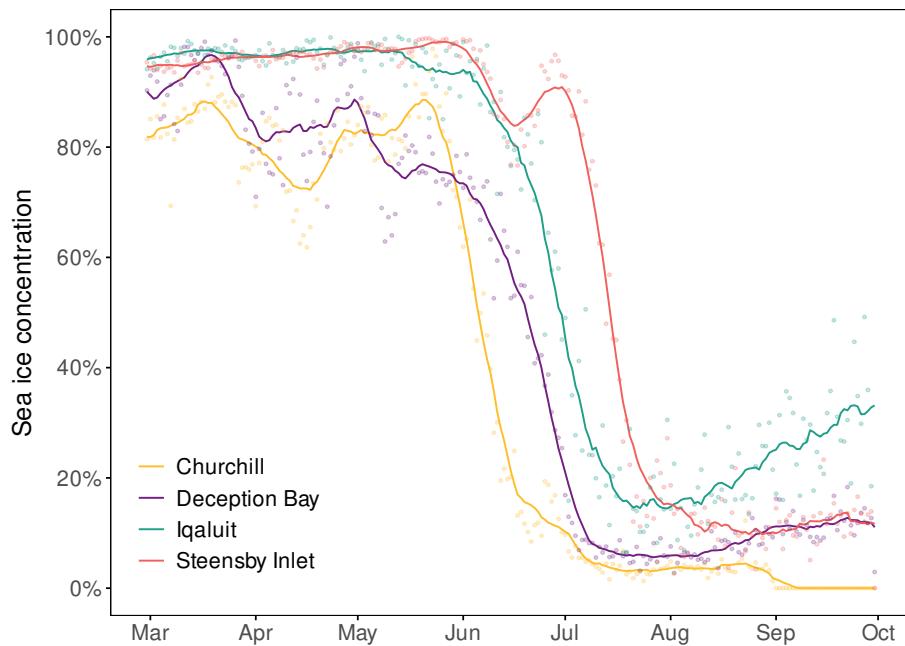


Figure S1. Sea ice concentration in the four regions. Daily average between 2006 and 2011 (data obtained from the National Snow and Ice Data Center (https://nsidc.org/data/ae_si12/versions/3), 2023). Lines correspond to a 14-days rolling mean.

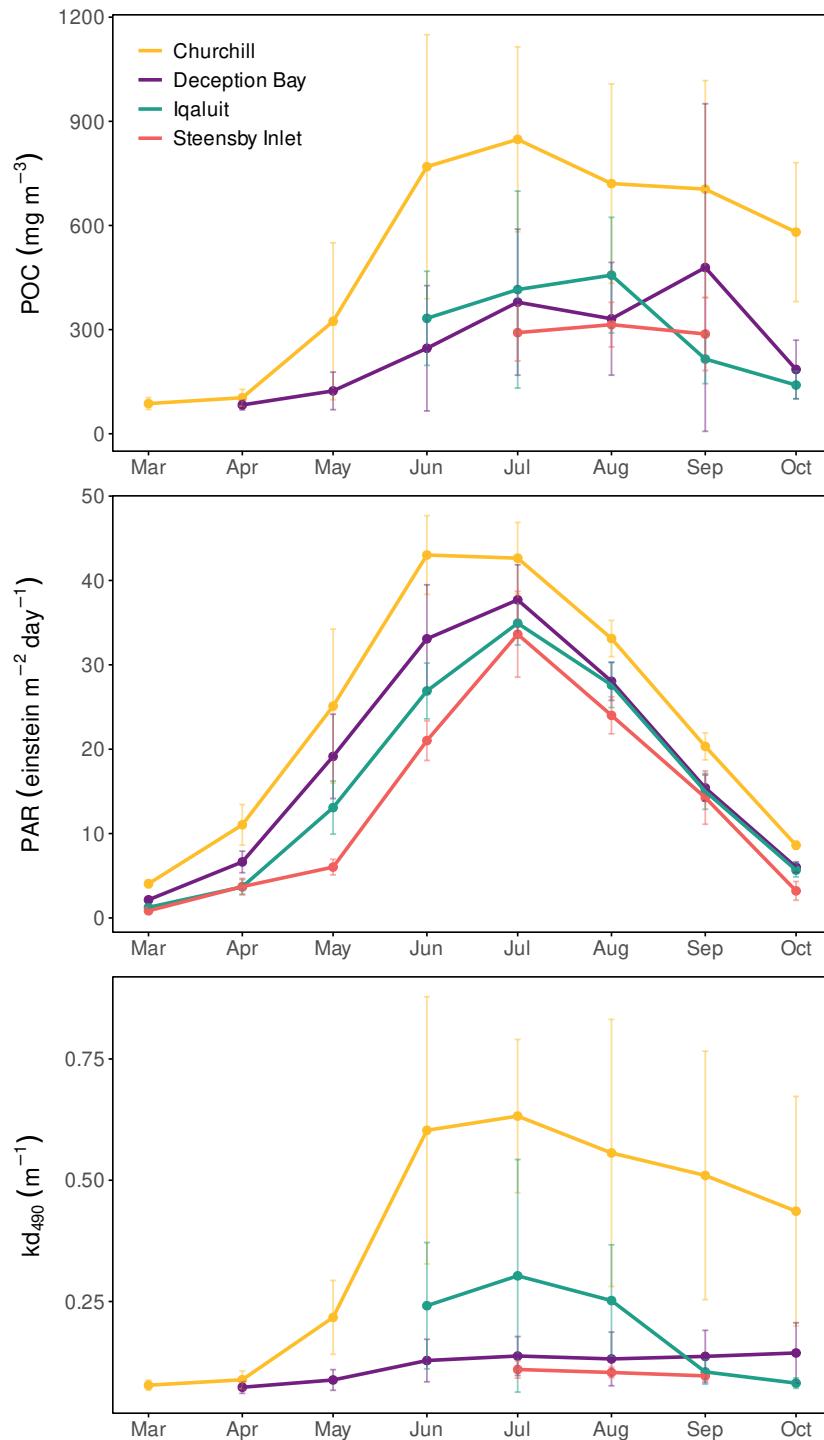


Figure S2. Other characteristics to explain differences in light availability to the seafloor among regions. A) Particulate organic carbon, B) photosynthetically active radiation and C) diffuse attenuation coefficient (the rate at which light at 490 nm is attenuated with depth). All graphs show monthly averages between 2006 and 2011 (data obtained from the NASA Ocean Biology Distributed Active Archive Center, 2023). Waters with kd_{490} values over 0.3 are considered turbid, while waters with values below 0.1 are mostly transparent. Most Arctic regions have values below 0.1 (Shi & Wang 2010).

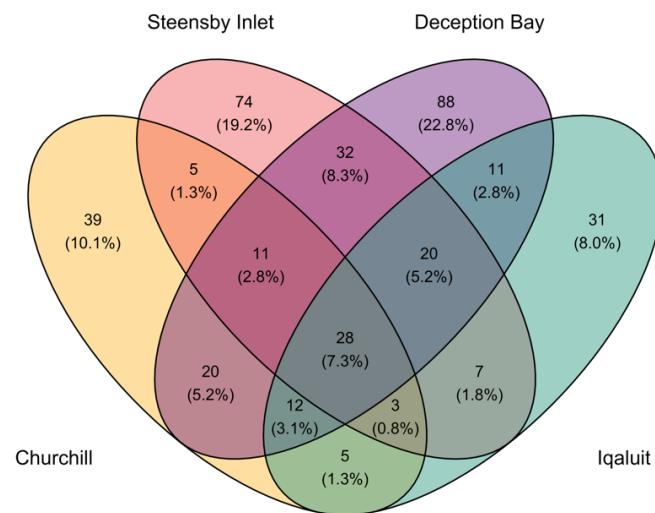


Figure S3. Venn diagram showing the taxa shared - in total number (top) and percentage (bottom) - between all four regions.

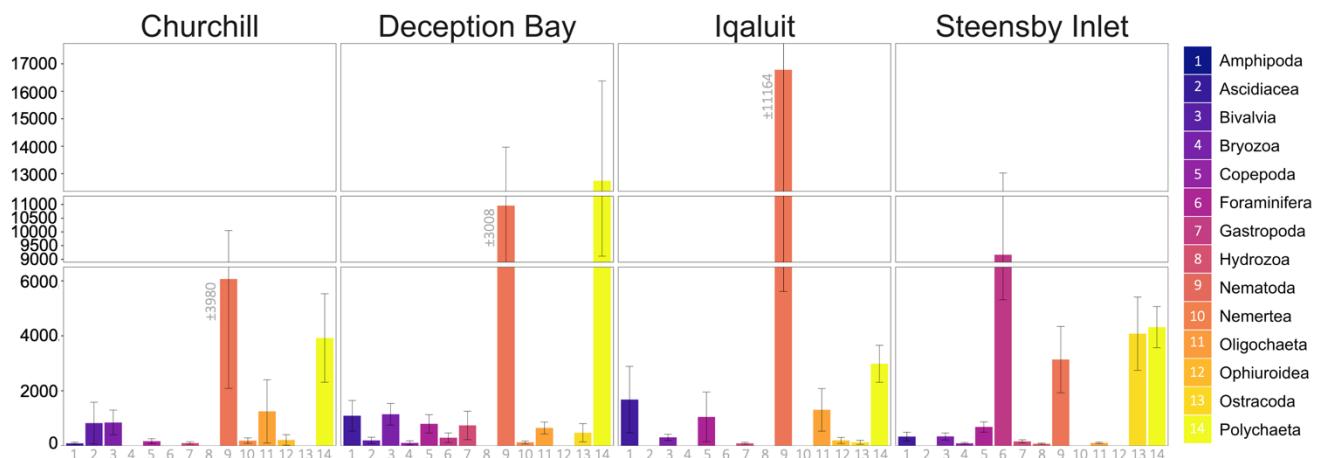


Figure S4. Class-level densities (mean ind. m⁻² ± SE) among the four regions sampled.



Figure S5. Densities of invertebrate taxa (at lowest identifiable taxonomic level) relative to percent kelp cover in Deception Bay ($N=10$) and Iqaluit ($N=7$), color-coded by broad taxonomic groups (class level).

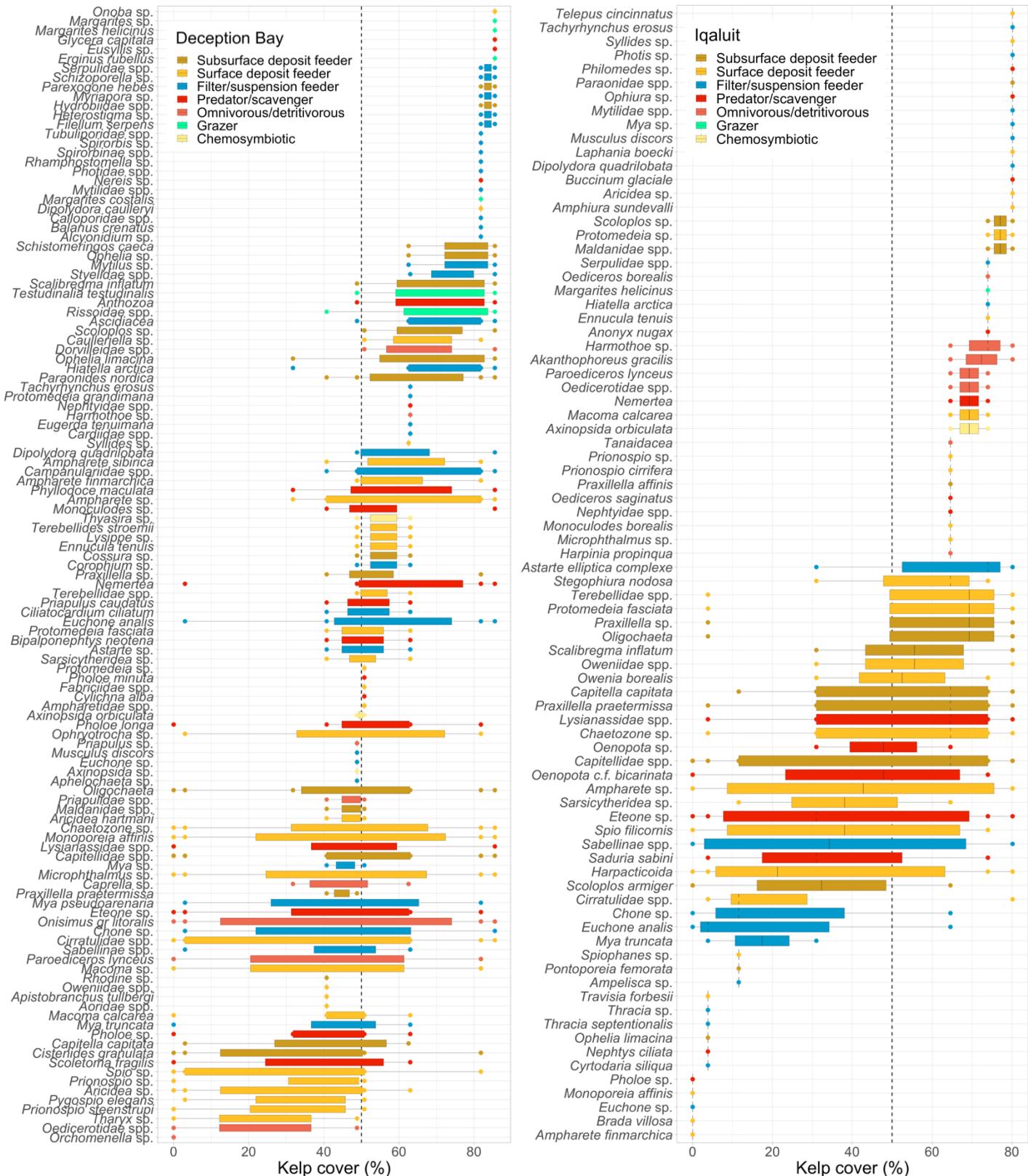


Figure S6. Densities of invertebrate taxa (at lowest identifiable taxonomic level) relative to kelp percent cover in Deception Bay (N=10) and Iqaluit (N=7), color-coded by feeding guild.

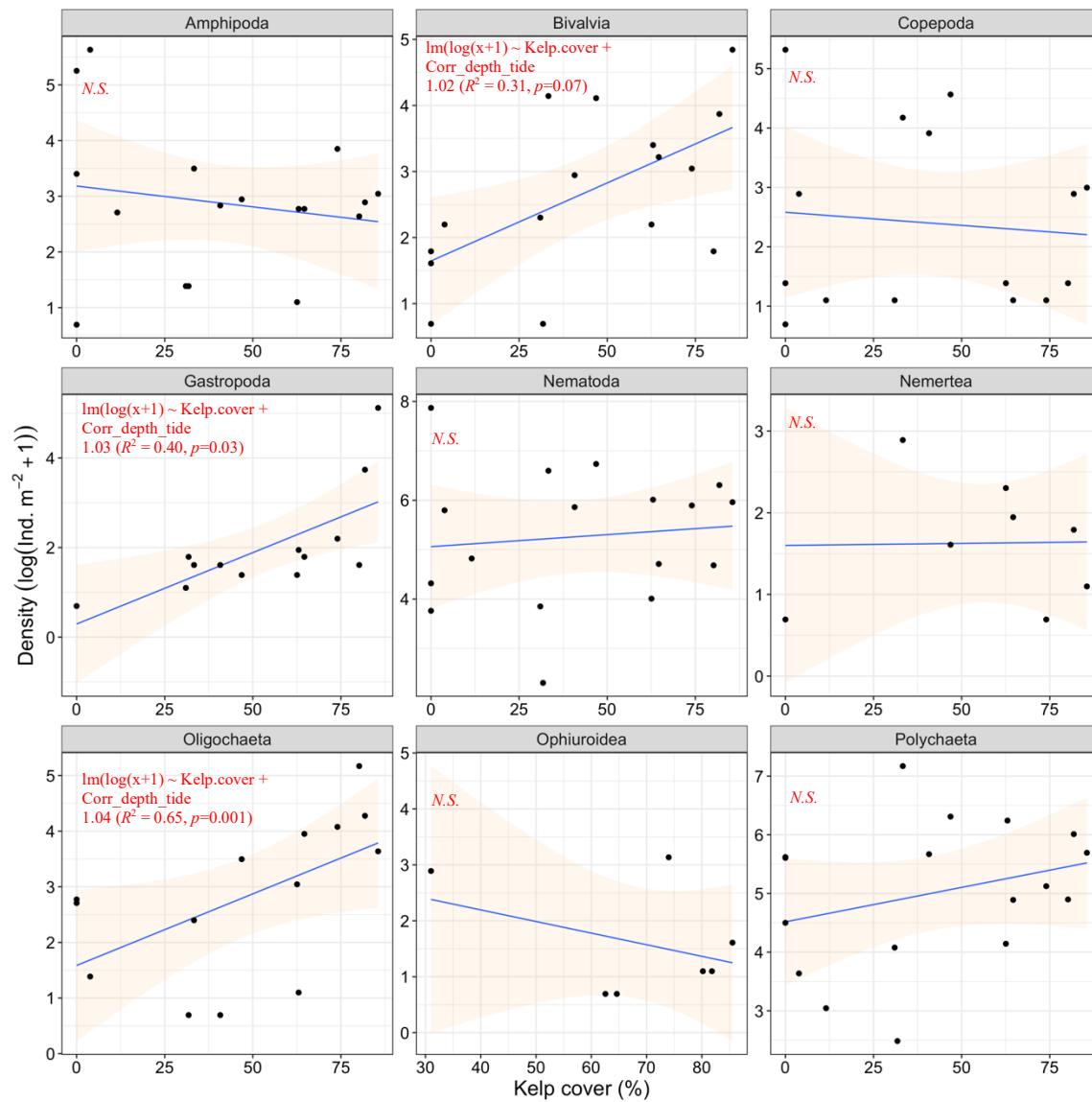


Figure S7. Total density of each taxonomical group in relation to kelp percent cover in Deception Bay and Iqaluit. Only groups present at most of the sites were investigated.

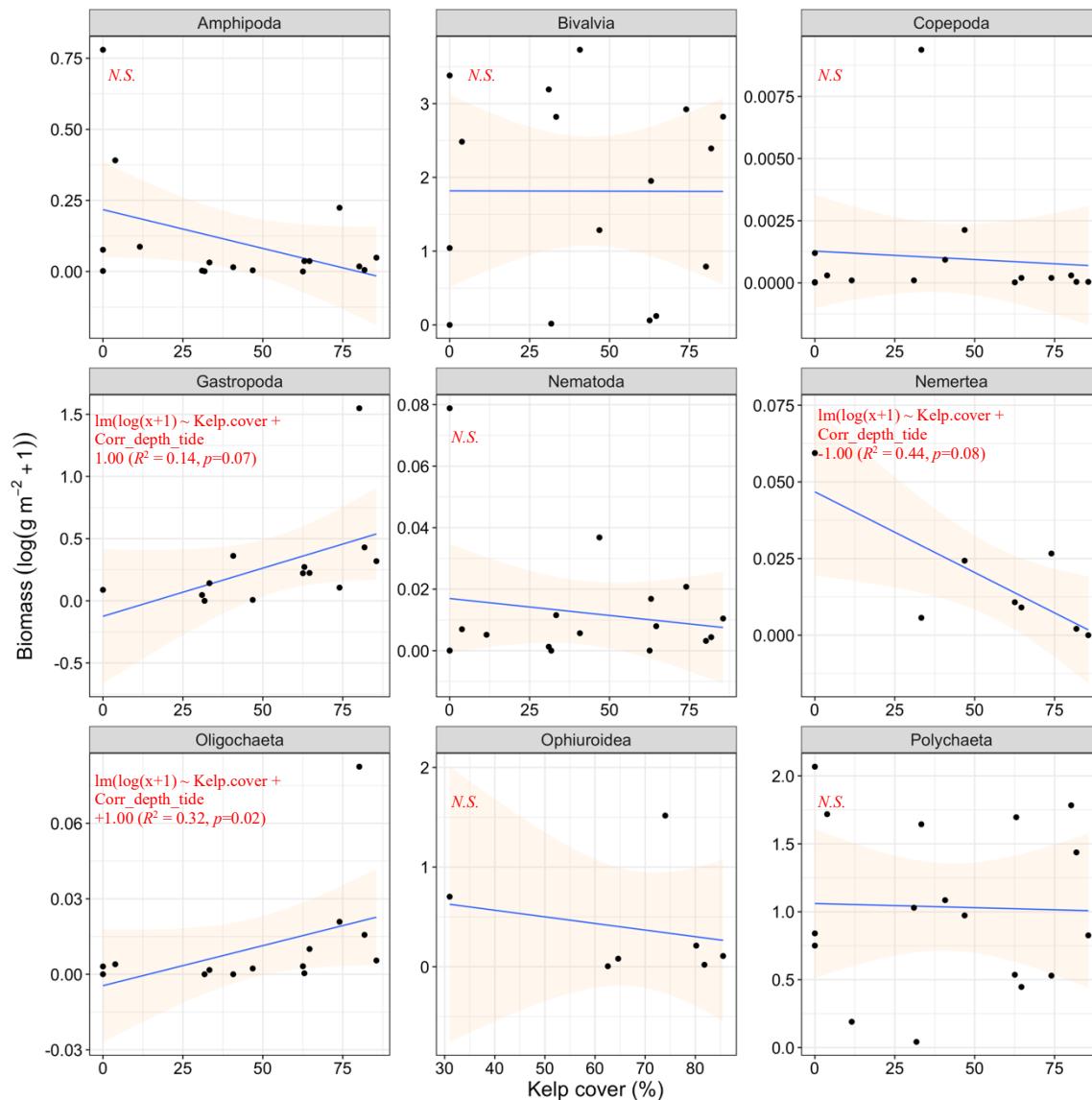


Figure S8. Total biomass of each taxonomical group in relation to kelp percent cover in Deception Bay and Iqaluit. Only groups present at most of the sites were investigated.

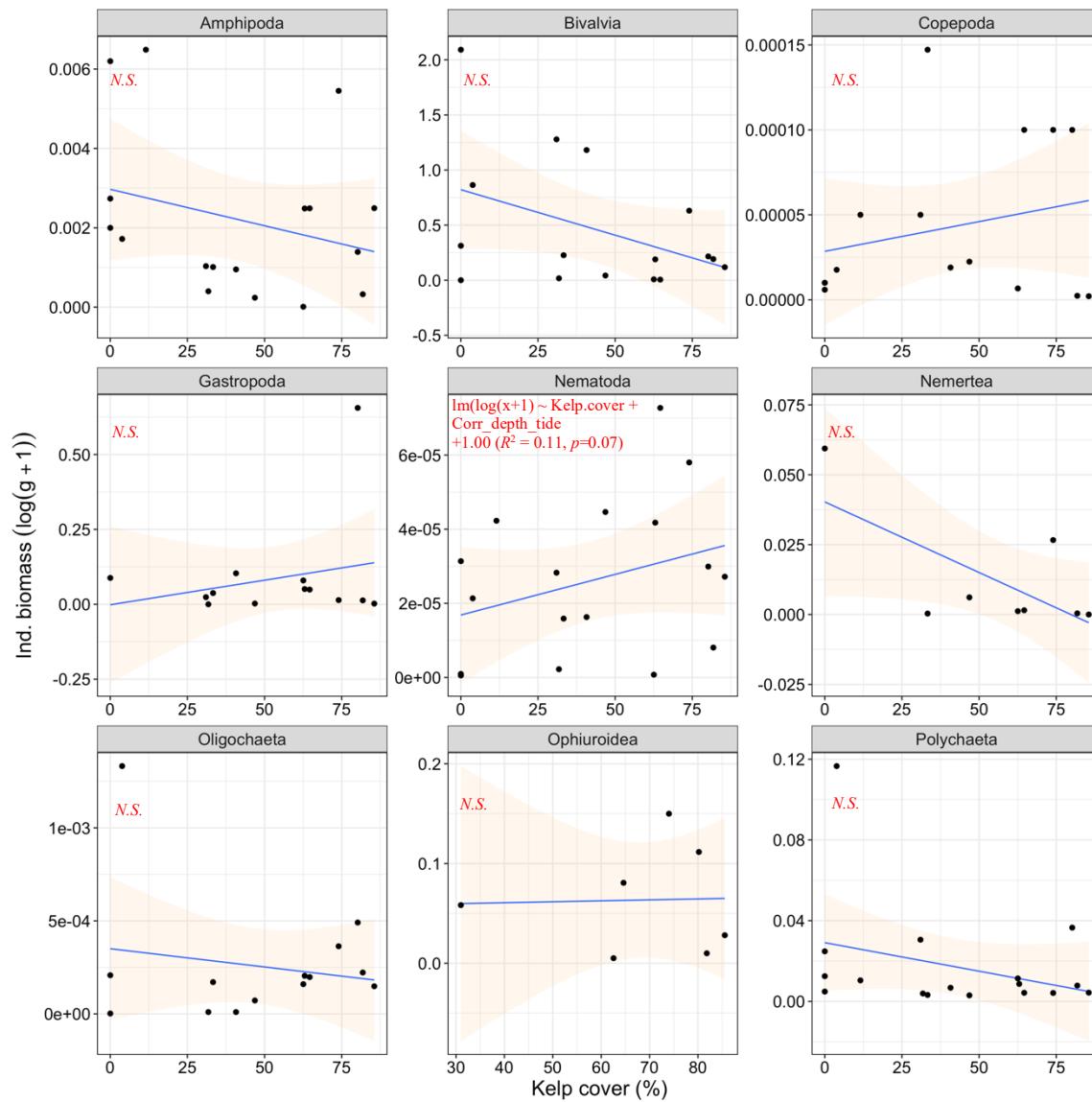


Figure S9. Mean individual biomass (total abundance/total biomass) vs kelp percent cover for each taxonomical group in Deception Bay and Iqaluit. Only groups present at most of the sites were investigated.

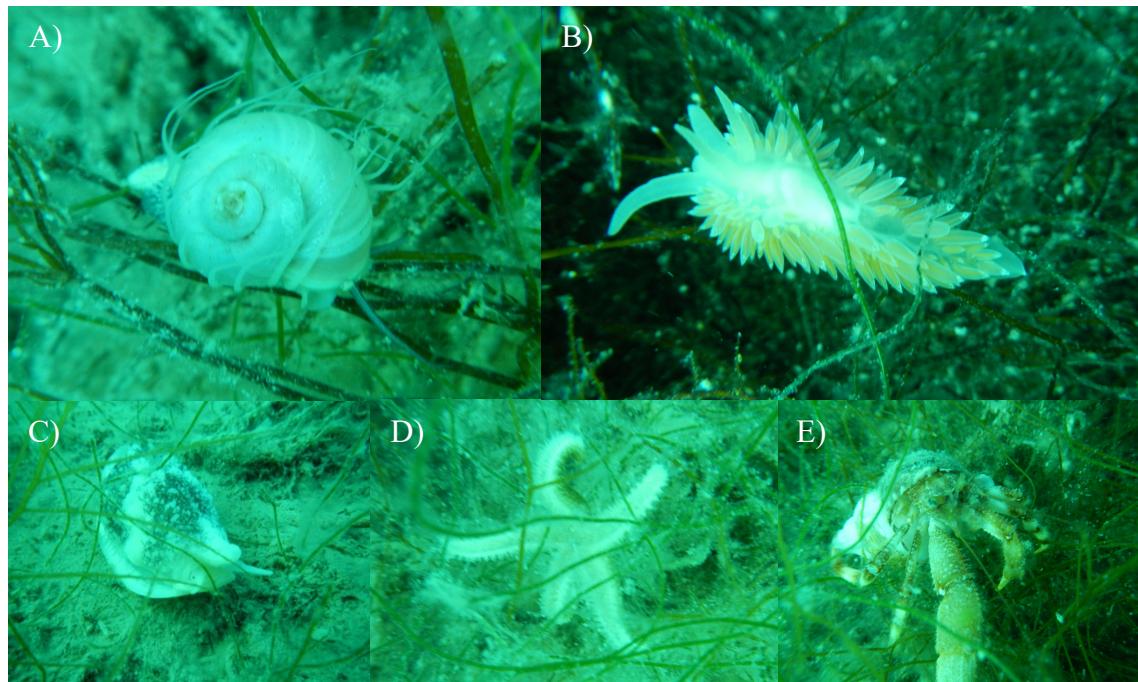


Figure S10. Small fauna encountered in Steensby Inlet's Desmarestiales. A) *Margarites* sp. B) *Ziminella salmonacea* C) Gastropoda D) Asteriidae spp. E) Paguridae spp.

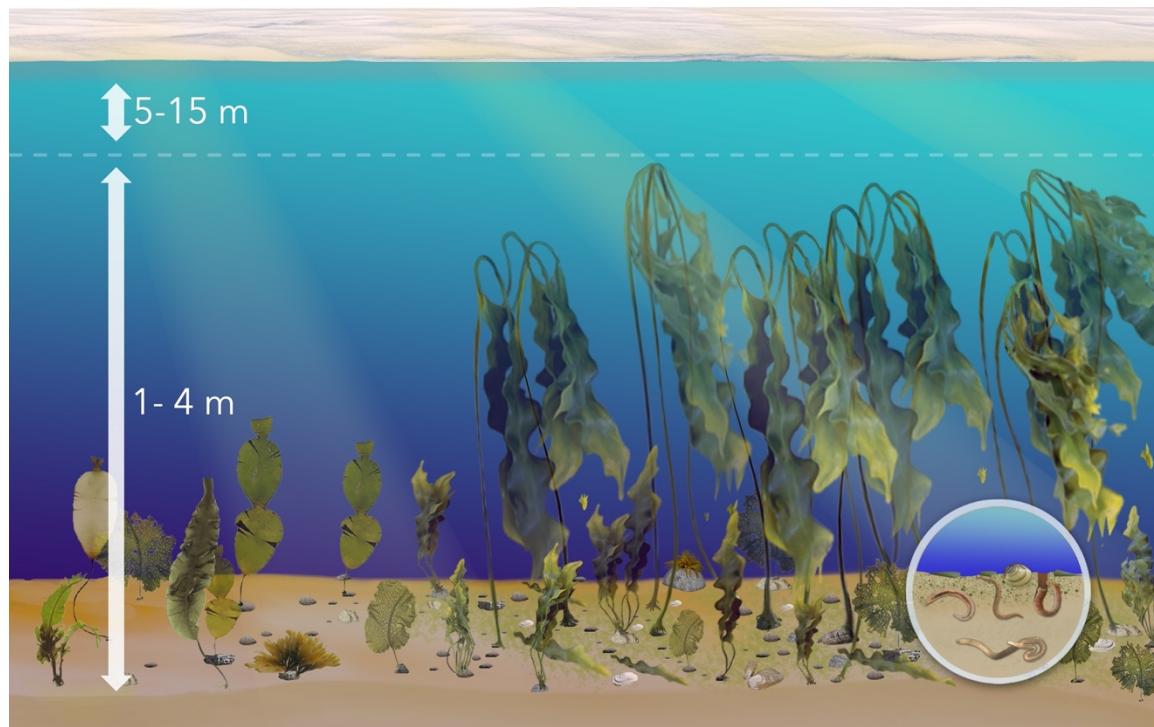


Figure S11. Tall kelp forest over soft substratum and some associated subsurface deposit-feeders.

Table S2. Taxa list per region.

| | Churchill | | Deception Bay | | Iqaluit | | Steensby Inlet | |
|----|---------------------------------|-------|-------------------------------------|---------|--------------------------------|---------|---------------------------------|---------|
| | Taxa | Aphia | Taxa | AphiaID | Taxa | AphiaID | Taxa | AphiaID |
| 1 | Actiniidae spp. | 10065 | <i>Acanthocythereis dunelmensis</i> | 128359 | <i>Akanthophoreus gracilis</i> | 136340 | Acari | 1349 |
| 2 | <i>Alcyonidium</i> sp. | 11099 | Actiniaria | 1360 | <i>Alcyonidium</i> sp. | 110993 | <i>Akanthophoreus gracilis</i> | 136340 |
| 3 | <i>Ampharete acutifrons</i> | 12977 | <i>Alcyonidium</i> sp. | 110993 | <i>Ampelisca</i> sp. | 101445 | <i>Ampharete baltica</i> | 129776 |
| 4 | <i>Ampharete</i> sp. | 12915 | <i>Ampharete finmarchica</i> | 129778 | <i>Ampharete finmarchica</i> | 129778 | <i>Ampharete sibirica</i> | 332933 |
| 5 | Ampharetidae spp. | 15225 | <i>Ampharete sibirica</i> | 332933 | <i>Ampharete</i> sp. | 129155 | <i>Ariadnaria borealis</i> | 714762 |
| 6 | Ampharetidae spp. | 981 | <i>Ampharete</i> sp. | 129155 | Ampharetidae spp. | 981 | <i>Aricidea nolani</i> | 157218 |
| 7 | <i>Anonyx nugax</i> | 10251 | Ampharetidae spp. | 152252 | <i>Amphiura sundevalli</i> | 125100 | <i>Aricidea</i> sp. | 129430 |
| 8 | Anthozoa | 1292 | Anthozoa | 1292 | <i>Anonyx nugax</i> | 102514 | <i>Astarte borealis complex</i> | 138818 |
| 9 | <i>Aricidea hartmani</i> | 13056 | Aoridae spp. | 101368 | <i>Aricidea nolani</i> | 157218 | <i>Astarte</i> sp. | 137683 |
| 10 | <i>Aricidea</i> sp. | 12943 | <i>Aphelochaeta</i> sp. | 129240 | <i>Aricidea</i> sp. | 129430 | <i>Asterias</i> sp. | 393252 |
| 11 | Asciidiacea | 1839 | <i>Apostobranchus tullbergi</i> | 129851 | <i>Aricidea</i> sp. | 137683 | <i>Boltenia echinata</i> | 103814 |
| 12 | <i>Balanus crenatus</i> | 10621 | <i>Argis dentata</i> | 107550 | <i>Axinopsida orbiculata</i> | 141652 | Buccinidae spp. | 149 |
| 13 | <i>Bipalponephthys neotena</i> | 55819 | <i>Aricidea hartmani</i> | 130561 | <i>Axiothella catenata</i> | 130275 | Calanoida | 1100 |
| 14 | Buccinidae spp. | 149 | <i>Aricidea nolani</i> | 157218 | <i>Brada villosa</i> | 130099 | Calliopiidae spp. | 146744 |
| 15 | Calanoida | 1100 | <i>Aricidea</i> sp. | 129430 | <i>Buccinum glaciale</i> | 138864 | Callopriidae spp. | 110733 |
| 16 | Campanulariidae spp. | 1606 | Asciidiacea | 1839 | Calanoida | 1100 | Campanulariidae spp. | 1606 |
| 17 | <i>Campanulina pumila</i> | 15064 | <i>Astarte elliptica complexe</i> | 138821 | <i>Capitella capitata</i> | 129876 | Campanulinidae spp. | 1607 |
| 18 | <i>Capitella</i> sp. A | 12921 | <i>Astarte montagui</i> | 138823 | <i>Capitella</i> sp. A | 129211 | Candidae spp. | 110734 |
| 19 | Capitellidae spp. | 921 | <i>Astarte</i> sp. | 137683 | <i>Capitella</i> sp. B | 129211 | <i>Capitella</i> sp. B | 129211 |
| 20 | Capitellidae spp. A | 921 | Autolytinae spp. | 152231 | Capitellidae spp. | 921 | Capitellidae spp. A | 921 |
| 21 | Capitellidae spp. B | 921 | <i>Axinopsida orbiculata</i> | 141652 | Capitellidae spp. A | 921 | <i>Caprella septentrionalis</i> | 101851 |
| 22 | <i>Cauloramphus intermedius</i> | 42325 | <i>Axinopsida</i> sp. | 138550 | Capitellidae spp. B | 921 | Caprellidae spp. | 101361 |
| 23 | Chironomidae spp. | 11810 | <i>Axinulus</i> sp. | 152413 | <i>Chaetozone</i> sp. | 129242 | <i>Chaetozone</i> sp. | 129242 |
| 24 | <i>Chone</i> sp. | 12952 | <i>Axiothella catenata</i> | 130275 | <i>Chone</i> sp. | 129525 | <i>Circeis spirillum</i> | 131201 |
| 25 | Cirratulidae spp. | 919 | <i>Balanus crenatus</i> | 106215 | Cirratulidae spp. | 919 | Cirratulidae spp. | 919 |
| 26 | Cirratulidae spp. A | 919 | <i>Boltenia echinata</i> | 103814 | Cirratulidae spp. A | 919 | Cirratulidae spp. A | 919 |
| 27 | <i>Cistenides granulata</i> | 23837 | <i>Boreocingula castanea</i> | 141265 | Cyclopoida | 1101 | <i>Cistenides granulata</i> | 238377 |
| 28 | <i>Cistenides hyperborea</i> | 15731 | Brachiopoda | 1803 | <i>Cyrtodaria silqua</i> | 140102 | <i>Cistenides</i> sp. | 157316 |
| 29 | Crinoidea | 12308 | Brachyura | 106673 | <i>Dipolydora quadrilobata</i> | 131121 | <i>Clymenura polaris</i> | 130286 |
| 30 | <i>Dendrodoa</i> sp. | 10353 | Calanoida | 1100 | <i>Ennucula tenuis</i> | 140584 | <i>Cossura</i> sp. | 129251 |
| 31 | Diastylidae spp. | 11038 | <i>Callopora</i> sp. | 110851 | <i>Eteone</i> sp. | 129443 | <i>Cribrilina</i> sp. | 110892 |
| 32 | <i>Diastylis rathkei</i> | 11048 | Callopriidae spp. | 110733 | <i>Euchone analis</i> | 130903 | <i>Crisia</i> sp. | 111032 |

| | | | | | | | | |
|----|--|-------|--------------------------------|--------|---------------------------------|--------|--|--------|
| 33 | <i>Diastylis</i> sp. | 11039 | <i>Campanularia</i> sp. | 117029 | <i>Euchone</i> sp. | 129528 | Cytheroidea spp. | 127477 |
| 34 | <i>Eteone</i> sp. | 12944 | Campanulariidae spp. | 1606 | Foraminifera | 1410 | <i>Diplocirrus</i> sp. | 129290 |
| 35 | <i>Eucratea loricata</i> | 11136 | <i>Capitella capitata</i> | 129876 | Gammaridae spp. | 1207 | <i>Dipolydora caulleryi</i> | 131116 |
| 36 | <i>Exogone</i> sp. | 12965 | <i>Capitella</i> sp. B | 129211 | <i>Gammarus oceanicus</i> | 102285 | <i>Dipolydora quadrilobata</i> | 131121 |
| 37 | Foraminifera | 1410 | <i>Caprella</i> sp. | 101430 | <i>Gammarus</i> sp. | 101537 | <i>Dipolydora socialis group</i> | 131124 |
| 38 | <i>Galathowenia oculata</i> | 14695 | Cardiidae spp. | 229 | <i>Harmothoe</i> sp. | 129491 | Echiura | 1269 |
| 39 | Gammaridae spp. | 1207 | <i>Caulleriella</i> sp. | 129241 | Harpacticoida | 1102 | <i>Ektonodiastylis robusta</i> | 160614 |
| 40 | <i>Gammarus oceanicus</i> | 10228 | <i>Cellepora</i> sp. | 110873 | <i>Harpinia propinqua</i> | 102974 | <i>Elosonella</i> sp. | 127623 |
| 41 | <i>Gammarus setosus</i> | 10229 | Chaetodermatida | 2088 | Hesionidae sp. A | 946 | <i>Ennucula delphinodonta</i> | 506605 |
| 42 | <i>Gattyana cirrhosa</i> | 13074 | <i>Chaetozone</i> sp. | 129242 | Hesionidae spp. | 946 | <i>Ennucula tenuis</i> | 140584 |
| 43 | <i>Gattyana</i> sp. | 12948 | Cheilostomatida | 110722 | <i>Hiatella arctica</i> | 140103 | <i>Escharella</i> sp. | 110965 |
| 44 | <i>Glycera capitata</i> | 13011 | <i>Chone</i> sp. | 129525 | <i>Lamprops fuscatus</i> | 110517 | <i>Eteone</i> sp. | 129443 |
| 45 | <i>Glycera</i> sp. | 12929 | <i>Ciliatocardium ciliatum</i> | 139000 | <i>Laphania boecki</i> | 131496 | <i>Eualus fabricii</i> | 158357 |
| 46 | Halacaridae spp. | 1484 | <i>Circeis spirillum</i> | 131201 | <i>Lichenopora crassiuscula</i> | 156210 | <i>Euchone incolor</i> | 155202 |
| 47 | <i>Halicryptus spinulosus</i> | 10115 | Cirripedia | 1082 | Lysianassidae spp. | 101395 | <i>Eucratea loricata</i> | 111361 |
| 48 | <i>Hardametopa carinata</i> | 15809 | <i>Cistenides granulata</i> | 238377 | <i>Macoma calcarea</i> | 141580 | Eudendriidae spp. | 1600 |
| 49 | <i>Harmothoe imbricata</i> | 13076 | Copepoda | 1080 | Maldanidae spp. | 923 | <i>Eugerda tenuimana</i> | 118559 |
| 50 | <i>Harmothoe</i> sp. | 12949 | <i>Corophium</i> sp. | 101489 | <i>Margarites helcinus</i> | 141821 | <i>Eulalia viridis</i> | 130639 |
| 51 | Harpacticoida | 1102 | <i>Cossura</i> sp. | 129251 | <i>Microphthalmus</i> sp. | 129313 | Eusyllinae spp. | 152233 |
| 52 | <i>Hemithiris psittacea</i> | 10405 | Cyclopoida | 1101 | <i>Monoculodes borealis</i> | 102881 | <i>Exogone</i> <i>(Exogone) naidina</i> | 131304 |
| 53 | <i>Hiatella arctica</i> | 14010 | <i>Cylichna alba</i> | 139474 | <i>Monoculopsis longicornis</i> | 102901 | <i>Filellum serpens</i> | 117690 |
| 54 | <i>Lafoeina maxima</i> | 11741 | Cytheroidea spp. | 127477 | <i>Monoporeia affinis</i> | 103077 | Foraminifera | 1410 |
| 55 | <i>Lamprops fuscatus</i> | 11051 | <i>Dipolydora caulleryi</i> | 131116 | <i>Musculus discors</i> | 140472 | Gammaridae spp. | 1207 |
| 56 | <i>Lanassa</i> sp. | 12969 | <i>Dipolydora quadrilobata</i> | 131121 | <i>Mya</i> sp. | 138211 | <i>Gammarus oceanicus</i> | 102285 |
| 57 | <i>Littorina obtusata</i> | 14026 | <i>Dipolydora socialis</i> | 131124 | <i>Mya truncata</i> | 140431 | <i>Gammarus</i> sp. | 740304 |
| 58 | <i>Littorina</i> sp. | 13813 | <i>Dipolydora</i> sp. | 129611 | Mytilidae spp. | 211 | <i>Gattyana cirrhosa</i> | 130749 |
| 59 | <i>Macoma balthica</i> | 14157 | <i>Ektonodiastylis robusta</i> | 160614 | <i>Nebalia bipes</i> | 147032 | <i>Guernea</i> <i>(Prinassus) nordenskioldi</i> | 158095 |
| 60 | Maldanidae spp. | 923 | <i>Ennucula tenuis</i> | 140584 | Nematoda | 799 | <i>Halecium</i> sp. | 117103 |
| 61 | <i>Manayunkia</i> sp. | 1859 | <i>Erginus rubellus</i> | 140275 | Nemertea | 152391 | <i>Hardametopa carinata</i> | 158099 |
| 62 | <i>Margarites groenlandicus umbilica</i> | 23679 | <i>Erinaceusyllis</i> sp. | 195949 | Nephtyidae spp. | 956 | <i>Hardametopa nasuta</i> | 103110 |
| 63 | <i>Micronephthys</i> sp. | 12936 | <i>Escharella</i> sp. | 110965 | <i>Nephtys ciliata</i> | 130356 | <i>Harmothoe imbricata</i> | 130769 |
| 64 | <i>Microphthalmus aberrans</i> | 13016 | <i>Escharoides</i> sp. | 110966 | <i>Oediceros borealis</i> | 102906 | <i>Harmothoe</i> sp. | 129491 |
| 65 | <i>Microphthalmus</i> sp. | 12931 | <i>Eteone</i> sp. | 129443 | <i>Oediceros saginatus</i> | 102908 | Harpacticoida | 1102 |
| 66 | <i>Microspio</i> sp. | 12961 | <i>Euchone analis</i> | 130903 | Oedicerotidae spp. | 101400 | <i>Hiatella arctica</i> | 140103 |

| | | | | | | | | |
|-----|-------------------------------|-------|--|--------|---------------------------------|--------|------------------------------|--------|
| 67 | <i>Moelleria costulata</i> | 14185 | <i>Euchone</i> sp. | 129528 | <i>Oenopota c.f. bicarinata</i> | 158012 | Holothuroidea | 123083 |
| 68 | <i>Molgula griffithsii</i> | 25088 | Eudendriidae spp. | 1600 | <i>Oenopota</i> sp. | 137826 | Isaeidae spp. | 101388 |
| 69 | <i>Mya pseudoarenaria</i> | 15624 | <i>Eugerda tenuimana</i> | 118559 | Oligochaeta | 2036 | <i>Ischyrocerus anguipes</i> | 102412 |
| 70 | <i>Myrianida prolifera</i> | 23820 | Eusyllinae spp. | 152233 | <i>Ophelia limacina</i> | 130494 | <i>Lafoea</i> sp. | 117136 |
| 71 | <i>Mytilus</i> sp. | 13822 | <i>Eusyllis</i> sp. | 129653 | <i>Ophiura</i> sp. | 123574 | <i>Lamprops fuscatus</i> | 110517 |
| 72 | Nematoda | 799 | <i>Exogone (Exogone) naidina</i> | 131304 | Ophiuroidae | 123084 | <i>Lamprops</i> sp. | 110408 |
| 73 | Nemertea | 15239 | Fabriciidae spp. | 154918 | Orbiniidae spp. | 902 | <i>Lanassa venusta</i> | 131494 |
| 74 | Nephtyidae spp. | 956 | <i>Filellum serpens</i> | 117690 | Ostracoda | 1078 | <i>Laphania boecki</i> | 131496 |
| 75 | <i>Nephtys ciliata</i> | 13035 | Foraminifera | 1410 | <i>Owenia borealis</i> | 329882 | <i>Leaena abranchiata</i> | 155008 |
| 76 | <i>Nephtys incisa</i> | 13036 | <i>Galathowenia oculata</i> | 146950 | Oweniidae spp. | 975 | <i>Lepeta caeca</i> | 140187 |
| 77 | Oligochaeta | 2036 | Gammaridae spp. | 1207 | <i>Paraonella nordica</i> | 156316 | Leptognathiidae spp. | 237596 |
| 78 | <i>Opercularella lacerata</i> | 11741 | <i>Gammarus oceanicus</i> | 102285 | Paraonidae spp. | 903 | Leuconidae spp. | 110382 |
| 79 | <i>Ophelia limacina</i> | 13049 | <i>Gammarus setosus</i> | 102293 | <i>Parexogone longicirris</i> | 152251 | <i>Levinsenia gracilis</i> | 130578 |
| 80 | Opheliidae spp. | 924 | <i>Gammarus</i> sp. | 101537 | <i>Paroedicerus lynceus</i> | 102911 | Lichenoporidae spp. | 110809 |
| 81 | Ophiomyxidae spp. | 24213 | <i>Glycera capitata</i> | 130118 | <i>Philomedes</i> sp. | 127524 | Lysianassidae spp. | 101395 |
| 82 | <i>Ophiopholis aculeata</i> | 12512 | <i>Guernea (Prinassus) nordenskioldi</i> | 158095 | <i>Pholoe</i> sp. | 129439 | <i>Macoma calcarea</i> | 141580 |
| 83 | <i>Ophiuropa robusta</i> | 12493 | <i>Guernea</i> sp. | 101499 | <i>Photis</i> sp. | 101563 | <i>Macoma</i> sp. | 138531 |
| 84 | <i>Ophiuropa</i> sp. | 12357 | Halacaridae spp. | 1484 | <i>Phoxocephalus holboelli</i> | 102989 | <i>Maldane</i> sp. | 129352 |
| 85 | Ophiurida | 12311 | <i>Hardametopa carinata</i> | 158099 | Podocopida | 1091 | Maldanidae spp. | 923 |
| 86 | Ophiuroidae | 12308 | <i>Harmeria scutulata</i> | 111344 | <i>Pontoporeia femorata</i> | 103079 | Mangeliidae spp. | 153853 |
| 87 | Oweniidae spp. | 975 | <i>Harmothoe imbricata</i> | 130769 | Porifera | 558 | <i>Margarites helcinus</i> | 141821 |
| 88 | <i>Paraonides nordica</i> | 33034 | <i>Harmothoe</i> sp. | 129491 | <i>Praxillella affinis</i> | 130322 | <i>Margarites</i> sp. | 138592 |
| 89 | <i>Paraonis</i> sp. | 12943 | Harpacticoida | 1102 | <i>Praxillella praetermissa</i> | 130326 | <i>Melinna elisabethae</i> | 129805 |
| 90 | <i>Parexogone longicirris</i> | 15225 | <i>Hartmania moorei</i> | 157434 | <i>Praxillella</i> sp. | 129360 | <i>Metopa</i> sp. | 101764 |
| 91 | Patellogastropoda | 38215 | <i>Heterostigma</i> sp. | 103521 | <i>Prionospio cirrifera</i> | 131153 | <i>Micronephthys minuta</i> | 130348 |
| 92 | Pectinariidae spp. | 980 | <i>Hiatella arctica</i> | 140103 | <i>Prionospio</i> sp. | 129620 | <i>Microphthalmus</i> sp. | 129313 |
| 93 | <i>Pholoe longa</i> | 13060 | Hydrobiidae spp. | 120 | <i>Protomediea fasciata</i> | 102443 | <i>Monoculodes</i> sp. | 101694 |
| 94 | <i>Pholoe</i> sp. | 12943 | <i>Laonome kroyeri</i> | 254745 | <i>Protomediea</i> sp. | 101574 | <i>Monticellina</i> sp. | 1961 |
| 95 | <i>Phyllodoce</i> sp. | 12945 | Lichenoporidae spp. | 110809 | <i>Sabellides octocirrata</i> | 129818 | <i>Munna fabricii</i> | 118754 |
| 96 | Phyllodocida | 892 | <i>Lumbrineris zatsepini</i> | 327207 | Sabellinae spp. | 154917 | <i>Musculus discors</i> | 140472 |
| 97 | Phyllodocidae spp. | 931 | Lysianassidae spp. | 101395 | <i>Saduria sabini</i> | 119036 | <i>Mya</i> sp. | 138211 |
| 98 | Porifera | 558 | <i>Lysippe labiata</i> | 129800 | <i>Sarsicytheridea</i> sp. | 127599 | <i>Mya truncata</i> | 140431 |
| 99 | <i>Praxillella</i> sp. | 12936 | <i>Lysippe</i> sp. | 129166 | <i>Scalibregma inflatum</i> | 130980 | <i>Myriotrochus</i> sp. | 123441 |
| 100 | <i>Prionospio steenstrupi</i> | 13116 | <i>Macoma calcarea</i> | 141580 | <i>Scoloplos armiger</i> | 334772 | Nematoda | 799 |
| 102 | <i>Procereopsis</i> sp. | 32506 | <i>Macoma</i> sp. | 138531 | <i>Scoloplos</i> sp. | 129425 | Nephtyidae spp. | 956 |

| | | | | | | | | |
|-----|----------------------------------|-------|---|--------|------------------------------------|--------|---------------------------------|--------|
| 103 | <i>Protomedieia</i> sp. | 10157 | <i>Manayunkia aestuarina</i> | 130926 | Serpulidae spp. | 988 | <i>Nephys ciliata</i> | 130356 |
| 104 | <i>Pygospio elegans</i> | 13117 | <i>Margarites costalis</i> | 141819 | <i>Spio filicornis</i> | 131183 | <i>Nephys incisa</i> | 130362 |
| 105 | <i>Robertsonites</i> sp. | 12767 | <i>Margarites groenlandicus</i> <i>groenlandicus</i> | 345370 | Spionidae spp. | 913 | <i>Nephys longosetosa</i> | 130364 |
| 106 | Sabellidae spp. | 985 | <i>Margarites helcinus</i> | 141821 | <i>Spiophanes</i> sp. | 129626 | <i>Nephys paradoxa</i> | 130365 |
| 107 | Sabellinae spp. | 15491 | <i>Margarites</i> sp. | 138592 | <i>Stegophiura nodosa</i> | 124943 | <i>Nephys pente</i> | 130352 |
| 108 | <i>Sarsicytheridea</i> sp. | 12759 | <i>Melita formosa</i> | 102838 | Syllidae spp. | 948 | <i>Nephys</i> sp. | 129370 |
| 109 | <i>Scalibregma inflatum</i> | 13098 | <i>Microphthalmus</i> sp. | 129313 | <i>Syllides</i> sp. | 129679 | <i>Nereimyra</i> sp. | 129314 |
| 110 | <i>Schistomeringos caeca</i> | 13004 | <i>Monoculodes</i> sp. | 101694 | <i>Tachyrhynchus erosus</i> | 196391 | <i>Nereis zonata</i> | 130407 |
| 111 | <i>Scoloplos armiger</i> | 33477 | <i>Monoporeia affinis</i> | 103077 | Tanaidacea | 1133 | <i>Nuculana minuta</i> | 140577 |
| 112 | <i>Scoloplos</i> sp. | 12942 | <i>Musculus discors</i> | 140472 | <i>Telepus cincinnatus</i> | 131543 | <i>Nymphon microrhynchum</i> | 134701 |
| 113 | Serpulidae spp. | 988 | <i>Mya pseudoarenaria</i> | 156249 | Terebellidae spp. | 982 | Oedicerotidae spp. | 101400 |
| 114 | <i>Spio filicornis</i> | 13118 | <i>Mya</i> sp. | 138211 | <i>Thracia septentionalis</i> | 156454 | Oligochaeta | 2036 |
| 115 | <i>Spio</i> sp. | 12962 | <i>Mya truncata</i> | 140431 | <i>Thracia</i> sp. | 138549 | Ophiuridae spp. | 123200 |
| 116 | Spionidae spp. | 913 | <i>Myriapora</i> sp. | 110949 | Thyasiridae spp. | 219 | Ophiuroidea | 123084 |
| 117 | <i>Stenosemus albus</i> | 24777 | Mysida | 149668 | <i>Travisia forbesii</i> | 130512 | <i>Ophryotrocha</i> sp. | 129266 |
| 118 | Styelidae spp. | 10345 | Mytilidae spp. | 211 | <i>Tubulipora c.f. flabellaris</i> | 111758 | Ostracoda | 1078 |
| 119 | Syllidae spp. | 948 | <i>Mytilus</i> sp. | 138228 | | 116 | <i>Pagurus pubescens</i> | 107240 |
| 120 | <i>Syllides</i> sp. | 12967 | Nemertea | 152391 | | 117 | <i>Pagurus</i> sp. | 106854 |
| 121 | Terebellidae spp. | 982 | <i>Neoamphitrite groenlandica</i> | 131506 | | | <i>Paraonides nordica</i> | 330349 |
| 122 | <i>Terebellides stroemii</i> | 13157 | <i>Nereimyra</i> sp. | 129314 | | | <i>Parexogone longicirris</i> | 152251 |
| 123 | <i>Testudinalia testudinalis</i> | 23420 | <i>Nereis</i> sp. | 129379 | | | <i>Paroedicerous lynceus</i> | 102911 |
| 124 | Thracidae spp. | 256 | <i>Obelia</i> sp. | 117034 | | | <i>Petaloprotus tenuis</i> | 130320 |
| 125 | <i>Tonicella rubra</i> | 14015 | Oedicerotidae spp. | 101400 | | | <i>Philomedes</i> sp. | 127524 |
| 126 | | | Oligochaeta | 2036 | | | <i>Pholoe longa</i> | 130602 |
| 127 | | | <i>Onisimus gr litoralis</i> | 102646 | | | <i>Pholoe</i> sp. | 129439 |
| 128 | | | <i>Onoba</i> sp. | 138451 | | | <i>Phyllocoete groenlandica</i> | 334506 |
| 129 | | | <i>Ophelia limacina</i> | 130494 | | | <i>Phyllocoete mucosa</i> | 334512 |
| 130 | | | <i>Ophelia</i> sp. | 129413 | | | Phyllodocidae spp. | 129455 |
| 131 | | | <i>Ophiura robusta</i> | 124933 | | | Podoplea | 155879 |
| 132 | | | Ophiuroidea | 123084 | | | Polycirrinae | 181512 |
| 133 | | | <i>Ophryotrocha</i> sp. | 129266 | | | <i>Polydora</i> sp. | 129619 |
| 134 | | | <i>Orchomenella</i> sp. | 101634 | | | Polynoidae spp. | 147006 |
| 135 | | | Ostracoda | 1078 | | | Polynoidae spp. | 939 |
| 136 | | | <i>Paradexiospira</i> <i>(Paradexiospira) violacea</i> | 334339 | | | Pontoporeiidae spp. | 101406 |
| 137 | | | <i>Paraonides nordica</i> | 330349 | | | <i>Portlandia</i> sp. | 138671 |
| 138 | | | <i>Parexogone hebes</i> | 131302 | | | <i>Praxillella praetermissa</i> | 130326 |

| | | | | | | | | |
|-----|--|--|---------------------------------|--------|--|--|----------------------------------|--------|
| 139 | | | <i>Parexogone longicirris</i> | 152251 | | | <i>Praxillella</i> sp. | 129360 |
| 140 | | | <i>Paroedicerus lynceus</i> | 102911 | | | <i>Prionospio</i> sp. | 129620 |
| 141 | | | <i>Patellogastropoda</i> | 382158 | | | <i>Prophebela harpularia</i> | 160451 |
| 142 | | | <i>Pholoe longa</i> | 130602 | | | <i>Prophebela</i> sp. | 159999 |
| 143 | | | <i>Pholoe minuta</i> | 130603 | | | <i>Protomediea fasciata</i> | 102443 |
| 144 | | | <i>Pholoe</i> sp. | 129439 | | | <i>Pseudoscalibregma parvum</i> | 130978 |
| 145 | | | <i>Photidae</i> spp. | 148558 | | | <i>Pygospio elegans</i> | 131170 |
| 146 | | | <i>Phyllodoce groenlandica</i> | 334506 | | | <i>Retusa obtusa</i> | 141134 |
| 147 | | | <i>Phyllodoce maculata</i> | 334510 | | | <i>Rhamphostomella</i> sp. | 110836 |
| 148 | | | <i>Phyllodoce</i> sp. | 129455 | | | <i>Rissoidae</i> spp. | 123 |
| 149 | | | <i>Podoplea</i> | 155879 | | | <i>Robertsonites</i> sp. | 127678 |
| 150 | | | <i>Praxillella praetermissa</i> | 130326 | | | <i>Sabellinae</i> spp. | 154917 |
| 151 | | | <i>Praxillella</i> sp. | 129360 | | | <i>Saduria sabini</i> | 119036 |
| 152 | | | <i>Priapulidae</i> spp. | 101078 | | | <i>Sarsicytheridea</i> sp. | 127599 |
| 153 | | | <i>Priapulus caudatus</i> | 101160 | | | <i>Scalibregma inflatum</i> | 130980 |
| 154 | | | <i>Priapulus</i> sp. | 101095 | | | <i>Scalibregma</i> sp. | 129555 |
| 155 | | | <i>Prionospio</i> sp. | 129620 | | | <i>Schizoporellidae</i> spp. | 110772 |
| 156 | | | <i>Prionospio steenstrupi</i> | 131164 | | | <i>Sclerochilus</i> sp. | 127583 |
| 157 | | | <i>Protomediea fasciata</i> | 102443 | | | <i>Sclerocrangon boreas</i> | 107568 |
| 158 | | | <i>Protomediea grandimana</i> | 102444 | | | <i>Scolelepis</i> sp. | 129623 |
| 159 | | | <i>Protomediea</i> sp. | 101574 | | | <i>Scoloplos armiger</i> | 334772 |
| 160 | | | <i>Puncturella noachina</i> | 139975 | | | <i>Scrupocellaria minor</i> | 156419 |
| 161 | | | <i>Pygospio elegans</i> | 131170 | | | <i>Securiflustra securifrons</i> | 111374 |
| 162 | | | <i>Retusa obtusa</i> | 141134 | | | <i>Serpulidae</i> spp. | 988 |
| 163 | | | <i>Rhamphostomella</i> sp. | 110836 | | | <i>Serripes groenlandicus</i> | 582749 |
| 164 | | | <i>Rhodine</i> sp. | 129363 | | | <i>Sertulariidae</i> spp. | 1614 |
| 165 | | | <i>Rissoidae</i> spp. | 123 | | | <i>Sphaerodoropsis minuta</i> | 131096 |
| 166 | | | <i>Robertsonites</i> sp. | 127678 | | | <i>Spiro / Pygospio</i> | 129625 |
| 167 | | | <i>Sabellinae</i> spp. | 154917 | | | <i>Spiro</i> sp. | 129625 |
| 168 | | | <i>Sarsicytheridea</i> sp. | 127599 | | | <i>Spionidae</i> spp. | 913 |
| 169 | | | <i>Scalibregma inflatum</i> | 130980 | | | <i>Stegophiura nodosa</i> | 124943 |
| 170 | | | <i>Schistomerings caeca</i> | 130043 | | | <i>Syllides</i> sp. | 129679 |
| 171 | | | <i>Schizoporella crustacea</i> | 111524 | | | <i>Tachyrhynchus erosus</i> | 196391 |
| 172 | | | <i>Schizoporella</i> sp. | 110975 | | | <i>Tachyrhynchus reticulatus</i> | 156447 |
| 173 | | | <i>Schizoporellidae</i> spp. | 110772 | | | <i>Tanaidacea</i> | 1133 |
| 174 | | | <i>Scoletoma fragilis</i> | 130261 | | | <i>Tegella arctica</i> | 111223 |
| 175 | | | <i>Scoloplos gr armiger</i> | 130537 | | | <i>Tegella</i> sp. | 110863 |
| 176 | | | <i>Scoloplos</i> sp. | 129425 | | | <i>Terebellidae</i> spp. | 982 |
| 177 | | | <i>Spiro</i> sp. | 129625 | | | <i>Terebellides stroemii</i> | 131573 |

| | | | | | | | | |
|-----|--|--|----------------------------------|--------|--|--|---------------------------|---------|
| 178 | | | <i>Spirorbis</i> sp. | 129642 | | | <i>Thyasira</i> sp. | 138552 |
| 179 | | | <i>Styelidae</i> spp. | 103450 | | | <i>Thyasiridae</i> spp. | 219 |
| 180 | | | <i>Syllides</i> sp. | 129679 | | | <i>Tonicella rubra</i> | 140152 |
| 181 | | | <i>Syllinae</i> spp. | 152223 | | | <i>Travisia forbesii</i> | 130512 |
| 182 | | | <i>Syllis</i> sp. | 129680 | | | <i>Tubuliporidae</i> spp. | 110814 |
| 183 | | | <i>Tachyrhynchus erosus</i> | 196391 | | | | 180 |
| 184 | | | <i>Tachyrhynchus</i> sp. | 138614 | | | | 181 |
| 185 | | | <i>Tegella arctica</i> | 111223 | | | | Showing |
| 186 | | | <i>Tegella</i> sp. | 110863 | | | | |
| 187 | | | <i>Terebellides</i> sp. | 129717 | | | | |
| 188 | | | <i>Terebellides stroemii</i> | 131573 | | | | |
| 189 | | | <i>Testudinalia testudinalis</i> | 234208 | | | | |
| 190 | | | <i>Tharyx</i> sp. | 129249 | | | | |
| 191 | | | <i>Thraciidae</i> spp. | 256 | | | | |
| 192 | | | <i>Thyasira gouldi</i> | 141663 | | | | |
| 193 | | | <i>Thyasira</i> sp. | 138552 | | | | |
| 194 | | | <i>Thyasiridae</i> spp. | 219 | | | | |
| 195 | | | <i>Trachyleberididae</i> spp. | 127509 | | | | |
| 196 | | | <i>Travisia forbesi</i> | 156679 | | | | |
| 197 | | | <i>Tubuliporidae</i> spp. | 110814 | | | | |
| 198 | | | <i>Tubuliporina</i> | 160488 | | | | |
| 199 | | | <i>Umbonulomorpha</i> | 152298 | | | | |

Table S3. Literature review on taxa feeding habits.

| Taxa | aphiaID | Feeding habit | Diet | Sources |
|-----------------------------|---------|---------------------------|--|--|
| <i>Ampelisca</i> sp. | 101445 | Filter/suspension feeder | | Divine, L., Iken, K., Bluhm, B. (2015) Regional benthic food web structure on the Alaska Beaufort Sea shelf. <i>Marine Ecology Progress Series</i> , 531:15-32. McTigue, N.D., Dunton, K.H. (2014) Trophodynamics and organic matter assimilation pathways in the northeast Chukchi Sea, Alaska. <i>Deep Sea Research Part II: Topical Studies in Oceanography</i> , 102:84-96. Roy, V., Iken, K., Gosselin, M., Tremblay, J., Bélanger, S., Archambault, P. (2015) Benthic faunal assimilation pathways and depth-related changes in food-web structure across the Canadian Arctic. <i>Deep Sea Research Part I: Oceanographic Research Papers</i> , 102:55-71. Coyle, K., Highsmith, R. (1994) Benthic amphipod community in the northern Bering Sea: analysis of potential structuring mechanisms. <i>Marine Ecology Progress Series</i> , 107:233-244. Conlan, K., Aitken, A., Hendrycks, E., McClelland, C., Melling, H. (2008) Distribution patterns of Canadian Beaufort Shelf macrobenthos. <i>Journal of Marine Systems</i> , 74:864-886. |
| <i>Cirratulidae</i> spp. | 919 | Surface deposit feeder | | Fauchald, K., & Jumars, P. A. (1979). The diet of worms: a study of polychaete feeding guilds. <i>Oceanography and marine Biology annual review</i> . |
| <i>Sarsicytheridea</i> sp. | 127599 | Surface deposit feeder | Plankton | Gemery, L., Cronin, T. M., Cooper, L. W., Dowsett, H. J., & Grebmeier, J. M. (2021). Biogeography and ecology of Ostracoda in the US northern Bering, Chukchi, and Beaufort Seas. <i>PloS one</i> , 16(5), e0251164. Gemery, L., Cooper, L. W., Magen, C., Cronin, T. M., & Grebmeier, J. M. (2022). Stable oxygen isotopes in shallow marine ostracodes from the northern Bering and Chukchi Seas. <i>Marine Micropaleontology</i> , 174, 102001. Majoran, S., & Agrenius, S. (1995). Preliminary observations on living <i>Krithe praetexta praetexta</i> (Sars, 1866), <i>Sarsicytheridea bradii</i> (Norman, 1865) and other marine ostracods in aquaria. <i>Journal of Micropalaeontology</i> , 14(2), 96-96. |
| <i>Spio filicornis</i> | 131183 | Surface deposit feeder | | Surugiu, V. I. C. T. O. R. (2005). The use of polychaetes as indicators of eutrophication and organic enrichment of coastal waters: A study case—Romanian Black Sea coast. <i>Analele Științifice ale Universității "Al. I. Cuza" Iași, s. Biologie animală</i> , 51, 55-62. Reise, K. (1983). Biotic enrichment of intertidal sediments by experimental aggregates of the deposit-feeding bivalve <i>Macoma balthica</i> . <i>Marine Ecology Progress Series</i> , 229-236. |
| <i>Eteone</i> sp. | 129443 | Predator/scavenger | | Fauchald, K., & Jumars, P. A. (1979). The diet of worms: a study of polychaete feeding guilds. <i>Oceanography and marine Biology annual review</i> . |
| <i>Chone</i> sp. | 129525 | Filter/suspension feeder | | Jumars, P. A., Dorgan, K. M., & Lindsay, S. M. (2015). Diet of worms emended: an update of polychaete feeding guilds. <i>Annual review of marine science</i> , 7(1), 497-520. Macdonald, T. A., Burd, B. J., Macdonald, V. I., & Van Roodselaar, A. (2010). Taxonomic and feeding guild classification for the marine benthic macroinvertebrates of the Strait of Georgia, British Columbia (p. 63). <i>Fisheries and Oceans Canada= Pêches et océans Canada</i> . |
| <i>Capitella capitata</i> | 129876 | Subsurface deposit feeder | | Jumars, P. A., Dorgan, K. M., & Lindsay, S. M. (2015). Diet of worms emended: an update of polychaete feeding guilds. <i>Annual review of marine science</i> , 7(1), 497-520. |
| Harpacticoida | 1102 | Surface deposit feeder | Phytodetritus (bacteria, algae, diatoms) | Montagna, P. (1995). Rates of metazoan meiofaunal microbivory: a review. <i>Vie et Milieu/Life & Environment</i> , 1-9. Rieper, M. (1982). Feeding Preferences of Marine Harpacticoid. <i>Marine ecologyprogress series</i> , 7, 303-307. Marcotte, B. M. (1977). An introduction to the architecture and kinematics of harpacticoid (Copepoda) feeding: <i>Tisbe furcata</i> (Baird, 1837). <i>Mikrofauna Meeresboden</i> , 61, 183-196. |
| <i>Pontoporeia femorata</i> | 103079 | Subsurface deposit feeder | Sediment | Lopez, G., & Elmgren, R. (1989). Feeding depths and organic absorption for the deposit feeding benthic amphipods <i>Pontoporeia affinis</i> and <i>Pontoporeia femorata</i> . <i>Limnology and Oceanography</i> , 34(6), 982-991. |
| <i>Spiophanes</i> sp. | 129626 | Surface deposit feeder | | Risk, M. J., & Tunnicliffe, V. J. (1978). Intertidal spiral burrows; <i>Paraonis fulgens</i> and <i>Spiophanes wigleyi</i> in the Minas Basin, Bay of Fundy. <i>Journal of Sedimentary Research</i> , 48(4), 1287-1292. Woodin, S. A. (1984). Effects of browsing predators: activity changes in infauna following tissue loss. <i>The Biological Bulletin</i> , 166(3), 558-573. |
| <i>Gammarus</i> sp. | 740304 | Omnivorous/detritivorous | | MacNeil, C., Dick, J. T., & Elwood, R. W. (1997). The trophic ecology of freshwater <i>Gammarus</i> spp. (Crustacea: Amphipoda): problems and perspectives concerning the functional feeding group concept. <i>Biological Reviews</i> , 72(3), 349-364. |
| <i>Alcyonidium</i> sp. | 110993 | Filter/suspension feeder | | Sanderson, W. G., & Thorpe, J. P. (1996). Effects of temperature on the feeding activity of some temperate intertidal Bryozoa. <i>Bryozoans in space and time</i> , 271-281. |

| | | | | |
|-------------------------------|--------|---------------------------|------------------------|--|
| <i>Ampharete finmarchica</i> | 129778 | Surface deposit feeder | | Fauchald, K., & Jumars, P. A. (1979). The diet of worms: a study of polychaete feeding guilds. Oceanography and marine Biology annual review. |
| <i>Pholoe</i> sp. | 129439 | Predator/scavenger | | Jumars, P. A., Dorgan, K. M., & Lindsay, S. M. (2015). Diet of worms emended: an update of polychaete feeding guilds. Annual review of marine science, 7(1), 497-520. |
| <i>Sabellinae</i> spp. | 154917 | Filter/suspension feeder | | Fauchald, K., & Jumars, P. A. (1979). The diet of worms: a study of polychaete feeding guilds. Oceanography and marine Biology annual review. |
| <i>Brada villosa</i> | 130099 | Surface deposit feeder | | Fauchald, K., & Jumars, P. A. (1979). The diet of worms: a study of polychaete feeding guilds. Oceanography and marine Biology annual review. |
| <i>Euchone</i> sp. | 129528 | Filter/suspension feeder | | Jumars, P. A., Dorgan, K. M., & Lindsay, S. M. (2015). Diet of worms emended: an update of polychaete feeding guilds. Annual review of marine science, 7(1), 497-520. |
| <i>Capitellidae</i> spp. | 921 | Subsurface deposit feeder | | Jumars, P. A., Dorgan, K. M., & Lindsay, S. M. (2015). Diet of worms emended: an update of polychaete feeding guilds. Annual review of marine science, 7(1), 497-520. |
| <i>Oenopota bicarinata</i> | 158012 | Predator/scavenger | Polychaetes (spionids) | Shimek, R. L. (1983). The biology of the northeastern Pacific Turridae II. Oenopota. Journal of Molluscan Studies, 49(2), 146-163. |
| <i>Saduria sabini</i> | 119036 | Predator/scavenger | | Premke, K., Muyakshin, S., Klages, M., & Wegner, J. (2003). Evidence for long-range chemoreceptive tracking of food odour in deep-sea scavengers by scanning sonar data. Journal of Experimental Marine Biology and Ecology, 285, 283-294. Haahtela, I. (1990, January). What do Baltic studies tell us about the isopod Saduria entomon (L.)?. In Annales Zoologici Fennici (pp. 269-278). Finnish Zoological Publishing Board, formed by the Finnish Academy of Sciences, Societas Scientiarum Fennica, Societas Biologica Fennica Vanamo and Societas pro Fauna et Flora Fennica. |
| <i>Thracia</i> sp. | 138549 | Filter/suspension feeder | | Rueda, J. L., Gofas, S., Urrea, J., & Salas, C. (2009). A highly diverse molluscan assemblage associated with eelgrass beds (<i>Zostera marina</i> L.) in the Alboran Sea: Micro-habitat preference, feeding guilds and biogeographical distribution. Scientia Marina, 73(4), 679-700. Macdonald, T.A., Burd, B.J., Macdonald, V.I., Van Roodselaar, A. (2010) Taxonomic and Feeding Guild Classification for the Marine Benthic Macroinvertebrates of the Strait of Georgia, British Columbia. Canadian Technical Report of Fisheries and Aquatic Sciences, 2874:63. |
| <i>Nephtys ciliata</i> | 130356 | Predator/scavenger | | Link, H., Piepenburg, D., Archambault, P. (2013) Are Hotspots Always Hotspots? The Relationship between Diversity, Resource and Ecosystem Functions in the Arctic. PLoS ONE, 8:e74077-.Penry, D. L., & Jumars, P. A. (1990). Gut architecture, digestive constraints and feeding ecology of deposit-feeding and carnivorous polychaetes. Oecologia, 82(1), 1-11. Liebermann, A. (1999). The diversity of Polychaeta and their feeding habits related to types of sediments in Mellemfjord, Disko Island, West Greenland. Berichte zur Polarforschung, 330, 152-163. Tamelander, T., Renaud, P., Hop, H., Carroll, M., WG, J.A., Hobson, K. (2006) Trophic relationships and pelagic–benthic coupling during summer in the Barents Sea Marginal Ice Zone, revealed by stable carbon and nitrogen isotope measurements. Marine Ecology Progress Series, 310:33-46. |
| <i>Thracia septentionalis</i> | 156454 | Filter/suspension feeder | | Rueda, J. L., Gofas, S., Urrea, J., & Salas, C. (2009). A highly diverse molluscan assemblage associated with eelgrass beds (<i>Zostera marina</i> L.) in the Alboran Sea: Micro-habitat preference, feeding guilds and biogeographical distribution. Scientia Marina, 73(4), 679-700. Macdonald, T.A., Burd, B.J., Macdonald, V.I., Van Roodselaar, A. (2010) Taxonomic and Feeding Guild Classification for the Marine Benthic Macroinvertebrates of the Strait of Georgia, British Columbia. Canadian Technical Report of Fisheries and Aquatic Sciences, 2874:63. |
| <i>Terebellidae</i> spp. | 982 | Surface deposit feeder | | Fauchald, K., Jumars, P. (1979) The Diet of Worms: a Study of Polychaete Feeding Guilds. Oceanography and Marine Biology, Annual Review, 17:193-284. |
| <i>Lysianassidae</i> spp. | 101395 | Predator/scavenger | | Legezynska, J., Wfôs-Ławski, J.M., Presler, P. (2000) Benthic scavengers collected by baited traps in the high Arctic. Polar Biology, 23:539-544.Link, H., Piepenburg, D., Archambault, P. (2013) Are Hotspots Always Hotspots? The Relationship between Diversity, Resource and Ecosystem Functions in the Arctic. PLoS ONE, 8:e74077-. Macdonald, T.A., Burd, B.J., Macdonald, V.I., Van Roodselaar, A. (2010) Taxonomic and Feeding Guild Classification for the Marine Benthic Macroinvertebrates of the Strait of Georgia, British Columbia. Canadian Technical Report of Fisheries and Aquatic Sciences, 2874:63. |
| Oligochaeta | 2036 | Subsurface deposit feeder | | Giere, O. (2006) Ecology and biology of marine oligochaeta ,Ã¢ an inventory rather than another review. In: Verdonschot, P., Pinder, A., Nijboer, R. (Eds.). Aquatic Oligochaete Biology IX. Developments in Hydrobiology, vol 186.. Springer, Dordrecht. 103-116pp. |

| | | | | |
|--------------------------------|--------|------------------------------|--|--|
| <i>Cyrtodaria siliqua</i> | 140102 | Filter/suspension feeder | | Herrmann, M. (2004). Makrozoobenthos—Gemeinschaften arktischer Weichböden: Struktur und Bedeutung als Nahrungsgrundlage demersaler Fische (Doctoral dissertation, Leibnitz Institut fuer Meeresswissenschaften in Kiel, IFM-GEOMAR, Alemanha.). |
| <i>Stegophiura nodosa</i> | 124943 | Surface deposit feeder | | Denisenko, S. G., Denisenko, N. V., Lehtonen, K. K., Andersin, A. B., & Laine, A. O. (2003). Macrozoobenthos of the Pechora Sea (SE Barents Sea): community structure and spatial distribution in relation to environmental conditions. Marine Ecology Progress Series, 258, 109-123. |
| <i>Lamprops fuscatus</i> | 110517 | NA | | |
| <i>Podocopida</i> | 1091 | Parasite/commensal/symbiotic | | Smith, A.J., Horne, D.J. (2002) Ecology of Marine, Marginal Marine and Nonmarine Ostracodes Alison. In: Holmes Jonathan A.; Chivas, A.R. (Eds.). The Ostracoda - Applications in Quaternary Research. American Geophysical Union, Washington, DC. 37-64pp. |
| <i>Tanaidacea</i> | 1133 | Omnivorous/detritivorous | | Drumm, D. T. (2005). Comparison of feeding mechanisms, respiration, and cleaning behavior in two kalliapseudids, <i>Kalliapseudes macsweenyi</i> and <i>Psammokalliapseudes granulosus</i> (Peracarida: Tanaidacea). Journal of crustacean Biology, 25(2), 203-211. Blazewicz-Paszkowycz, M., & Ligowski, R. (2002). Diatoms as food source indicator for some Antarctic Cumacea and Tanaidacea (Crustacea). Antarctic Science, 14(1), 11-15. |
| <i>Harpinia propinqua</i> | 102974 | Omnivorous/detritivorous | | Navarro-Barranco, C., Tierno-de-Figueroa, J. M., Guerra-García, J. M., Sánchez-Tocino, L., & García-Gómez, J. C. (2013). Feeding habits of amphipods (Crustacea: Malacostraca) from shallow soft bottom communities: Comparison between marine caves and open habitats. Journal of Sea Research, 78, 1-7. Fanelli, E., Cartes, J. E., Badalamenti, F., Rumolo, P., & Sprovieri, M. (2009). Trophodynamics of suprabenthic fauna on coastal muddy bottoms of the southern Tyrrhenian Sea (western Mediterranean). Journal of Sea Research, 61(3), 174-187. Fanelli, E., Papiol, V., Cartes, J. E., Rumolo, P., Brunet, C., & Sprovieri, M. (2011). Food web structure of the epibenthic and infaunal invertebrates on the Catalan slope (NW Mediterranean): Evidence from $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ analysis. Deep Sea Research Part I: Oceanographic Research Papers, 58(1), 98-109. |
| <i>Oediceros saginatus</i> | 102908 | Predator/scavenger | | Farlin, J. P., Lewis, L. S., Anderson, T. W., & Lai, C. T. (2010). Functional diversity in amphipods revealed by stable isotopes in an eelgrass ecosystem. Marine Ecology Progress Series, 420, 277-281. Yu, O. H., & Suh, H. L. (2006). Life history and reproduction of the amphipod <i>Synchelidium triostegitum</i> (Crustacea, Oedicerotidae) on a sandy shore in Korea. Marine biology, 150, 141-148. Guerra-García, J. M., De Figueroa, J. T., Navarro-Barranco, C., Ros, M., Sánchez-Moyano, J. E., & Moreira, J. (2014). Dietary analysis of the marine Amphipoda (Crustacea: Peracarida) from the Iberian Peninsula. Journal of Sea Research, 85, 508-517. |
| <i>Harmothoe</i> sp. | 129491 | Omnivorous/detritivorous | | Fauchald, K., & Jumars, P. A. (1979). The diet of worms: a study of polychaete feeding guilds. Oceanography and marine Biology annual review. |
| <i>Microphthalmus</i> sp. | 129313 | Surface deposit feeder | | Reise, K. (2002) Sediment mediated species interactions in coastal waters. Journal of Sea Research, 48:127-141. Hartmann-Schröder, G. (1996). Annelida, Borstenwürmer, Polychaeta—Tierwelt Deutschlands, Teil 58. Veb Gustav Fischer Verlag Jena, Hamburg. Fauchald, K., & Jumars, P. A. (1979). The diet of worms: a study of polychaete feeding guilds. Oceanography and marine Biology annual review. Ashley, M., & Marshall, C. (2007). <i>Hesionura elongata</i> and <i>Microphthalmus similis</i> with other interstitial polychaetes in infralittoral mobile coarse sand. |
| <i>Prionospio</i> sp. | 129620 | Surface deposit feeder | Phytodetritus (bacteria, algae, diatoms) | Jumars, P., Dorgan, K.M., Lindsay, S.M. (2015) Diet of Worms Emended: An Update of Polychaete Feeding Guilds. Annual Review of Marine Science, 7:497-520. |
| <i>Oenopota</i> sp. | 137826 | Predator/scavenger | | Shimek, R. (1983) THE BIOLOGY OF THE NORTHEASTERN PACIFIC TURRIDAE: OENOPOTA. Journal of Molluscan Studies, 49:146-163. Serratos, C. (2015) Spatial and temporal patterns of epibenthic community and food web structure in the Chukchi Sea between 2004-2012. Master thesis, University of Alaska Fairbanks. |
| <i>Nephtyidae</i> spp. | 956 | Predator/scavenger | | Kędra, M., Kuliniński, K., Walkusz, W., & Legeżyńska, J. (2012). The shallow benthic food web structure in the high Arctic does not follow seasonal changes in the surrounding environment. Estuarine, Coastal and Shelf Science, 114, 183-191. Penry, D. L., & Jumars, P. A. (1990). Gut architecture, digestive constraints and feeding ecology of deposit-feeding and carnivorous polychaetes. Oecologia, 82(1), 1-11. Jumars, P. A., Dorgan, K. M., & Lindsay, S. M. (2015). Diet of worms emended: an update of polychaete feeding guilds. Annual review of marine science, 7, 497-520. |
| <i>Akanthophoreus gracilis</i> | 136340 | Omnivorous/detritivorous | | Drumm, D. T. (2005). Comparison of feeding mechanisms, respiration, and cleaning behavior in two kalliapseudids, <i>Kalliapseudes macsweenyi</i> and <i>Psammokalliapseudes granulosus</i> (Peracarida: Tanaidacea). Journal of crustacean Biology, 25(2), 203-211. Blazewicz-Paszkowycz, M., & Ligowski, R. (2002). Diatoms as food source indicator for some Antarctic Cumacea and Tanaidacea (Crustacea). Antarctic Science, 14(1), 11-15. |

| | | | | |
|----------------------------------|--------|---------------------------|---------------------------|--|
| <i>Prionospio cirrifera</i> | 131153 | Surface deposit feeder | | Kokarev, V., Vedenin, A., Basin, A., Azovsky, A. (2017) Taxonomic and functional patterns of macrobenthic communities on a high-Arctic shelf: A case study from the Laptev Sea. Journal of Sea Research, 129:61-69. Polychaeta_IOPAN Project Webpage. http://www.iopan.gda.pl/projects/Polychaeta/ |
| <i>Oedicerotidae</i> spp. | 101400 | Omnivorous/detritivorous | Phytodetritus & meiofauna | Farlin, J. P., Lewis, L. S., Anderson, T. W., & Lai, C. T. (2010). Functional diversity in amphipods revealed by stable isotopes in an eelgrass ecosystem. Marine Ecology Progress Series, 420, 277-281. Legeżyńska, J., Kędra, M., & Walkusz, W. (2012). When season does not matter: summer and winter trophic ecology of Arctic amphipods. Hydrobiologia, 684(1), 189-214. Link, H., Piepenburg, D., Archambault, P. (2013) Are Hotspots Always Hotspots? The Relationship between Diversity, Resource and Ecosystem Functions in the Arctic. PLoS ONE, 8:e74077-. Chapman, J.W. (2007) The Light and Smith Manual: Intertidal Invertebrates from Central California to Oregon. Chapter 39: Amphipoda. |
| <i>Paroediceros lynceus</i> | 102911 | Omnivorous/detritivorous | Phytodetritus & meiofauna | Legeżyńska, J., Kędra, M., & Walkusz, W. (2012). When season does not matter: summer and winter trophic ecology of Arctic amphipods. Hydrobiologia, 684(1), 189-214. |
| <i>Calanoida</i> | 1100 | NA | Very broad | |
| <i>Philomedes</i> sp. | 127524 | Predator/scavenger | | Macquart-Moulin, C. (1999). Diel vertical migration and endogenous swimming rhythm in <i>Asterope mariae</i> (Baird) and <i>Philomedes interpuncta</i> (Baird) (Crustacea Ostracoda Cypridinidae). Journal of Plankton Research, 21(10). |
| <i>Scoloplos</i> sp. | 129425 | Subsurface deposit feeder | | Thomsen, H. A., & Brandt, A. (1999). The 1998 Danish-German excursion to Disko Island, West Greenland. In The 1998 Danish-German Excursion to Disko Island, West Greenland (pp. 1-10). Alfred Wegener Institut für Polar und Meeresforschung. Jumars, P., Dorgan, K.M., Lindsay, S.M. (2015) Diet of Worms Emended: An Update of Polychaete Feeding Guilds. Annual Review of Marine Science, 7:497-520. |
| <i>Amphiura sundevalli</i> | 125100 | Surface deposit feeder | | Sokołowski, A., Szczepańska, A., Richard, P., Kędra, M., Wołowicz, M., & Węsławski, J. M. (2014). Trophic structure of the macrobenthic community of Hornsund, Spitsbergen, based on the determination of stable carbon and nitrogen isotopic signatures. Polar Biology, 37, 1247-1260. Kędra, M., Gromisz, S., Jaskuła, R., Legeżyńska, J., Maciejewska, B., Malec, E., ... & Węsławski, J. M. (2010). Soft bottom macrofauna of an All Taxa biodiversity site: Hornsund (77°N, Svalbard). Polish Polar Research, 309-326. |
| <i>Astarte elliptica complex</i> | 137683 | Filter/suspension feeder | Brown macroalgae | Huber, M. (2010) Compendium of Bivalves. ConchBooks, Hackenheim. 901pp. Gaillard, B., Meziane, T., Tremblay, R., Archambault, P., Blicher, M. E., Chauvaud, L., ... & Olivier, F. (2017). Food resources of the bivalve <i>Astarte elliptica</i> in a sub-Arctic fjord: a multi-biomarker approach. Marine Ecology Progress Series, 567, 139-156. |
| <i>Laphania boecki</i> | 131496 | Surface deposit feeder | | Kędra, M., Kuliniński, K., Walkusz, W., & Legeżyńska, J. (2012). The shallow benthic food web structure in the high Arctic does not follow seasonal changes in the surrounding environment. Estuarine, Coastal and Shelf Science, 114, 183-191. Holte, B., Oug, E., & Dahle, S. (2005). Soft-bottom fauna and oxygen minima in sub-arctic north Norwegian marine sill basins. Marine Biology Research, 1(2), 85-96. Oug, E., Sundet, J. H., & Cochran, S. K. (2018). Structural and functional changes of soft-bottom ecosystems in northern fjords invaded by the red king crab (<i>Paralithodes camtschaticus</i>). Journal of Marine Systems, 180, 255-264. |
| <i>Paraonidae</i> spp. | 903 | Subsurface deposit feeder | | Jumars, P., Dorgan, K.M., Lindsay, S.M. (2015) Diet of Worms Emended: An Update of Polychaete Feeding Guilds. Annual Review of Marine Science, 7:497-520. Thomsen, H. A., & Brandt, A. (1999). The 1998 Danish-German excursion to Disko Island, West Greenland. In The 1998 Danish-German Excursion to Disko Island, West Greenland (pp. 1-10). Alfred Wegener Institut für Polar und Meeresforschung. |
| <i>Syllides</i> sp. | 129679 | Surface deposit feeder | | Haines, J. L., & Maurer, D. (1980). Benthic invertebrates associated with a serpulid polychaete assemblage in a temperate estuary. Internationale Revue der gesamten Hydrobiologie und Hydrographie, 65(5), 643-656. |
| <i>Maldanidae</i> spp. | 923 | Subsurface deposit feeder | | Jumars, P., Dorgan, K.M., Lindsay, S.M. (2015) Diet of Worms Emended: An Update of Polychaete Feeding Guilds. Annual Review of Marine Science, 7:497-520. Thomsen, H. A., & Brandt, A. (1999). The 1998 Danish-German excursion to Disko Island, West Greenland. In The 1998 Danish-German Excursion to Disko Island, West Greenland (pp. 1-10). Alfred Wegener Institut für Polar und Meeresforschung. |
| <i>Thelepus cincinnatus</i> | 131543 | Surface deposit feeder | | Jumars, P., Dorgan, K.M., Lindsay, S.M. (2015) Diet of Worms Emended: An Update of Polychaete Feeding Guilds. Annual Review of Marine Science, 7:497-520. Pabis, K., & Sicinski, J. (2010). Distribution and diversity of polychaetes collected by trawling in Admiralty Bay: an Antarctic glacial fiord. Polar Biology, 33, 141-151. |
| <i>Ophiura</i> sp. | 123574 | Predator/scavenger | | Boos, K., Gutow, L., Munday, R., & Franke, H. D. (2010). Sediment preference and burrowing behaviour in the sympatric brittlestars <i>Ophiura albida</i> Forbes, 1839 and <i>Ophiura ophiura</i> (Linnaeus, 1758) (Ophiuroidea, Echinodermata). Journal of Experimental Marine Biology and Ecology, 393(1-2), 176-181. |

| | | | | |
|---------------------------------|--------|---------------------------|---------------|---|
| | | | | Harris, J. L., MacIsaac, K., Gilkinson, K. D., & Kenchington, E. L. (2009). Feeding biology of <i>Ophiura sarsii</i> Lütken, 1855 on Banquereau bank and the effects of fishing. <i>Marine biology</i> , 156, 1891-1902. Feder, H. M. (1981). Aspects of the feeding biology of the brittle star <i>Ophiura texturata</i> . <i>Ophelia</i> , 20(2), 215-235. Pearson, M., & Gage, J. D. (1984). Diets of some deep-sea brittle stars in the Rockall Trough. <i>Marine Biology</i> , 82, 247-258. |
| Mytilidae spp. | 211 | Filter/suspension feeder | | Beesley P.L.; Ross G.J.B.; Wells, A. (1998) <i>Mollusca - The Southern Synthesis</i> . CSIRO Publishing, Melbourne. 1-1234pp. |
| <i>Photis</i> sp. | 101563 | Filter/suspension feeder | | Wildish, D.J., Dadswell, M.J. (1985) Sublittoral Gammaridean Amphipods of soft sediments in the Bay of Fundy. <i>Proceedings of the National Institute of Science</i> , 35:1-15. Sivadas, S.K., Ingole, B.S., Fernandes, C.E.G. (2013) Environmental Gradient Favours Functionally Diverse Macrofauna Community in a Placer Rich Tropical Bay. <i>The Scientific World Journal</i> , 2013:1-12. |
| Oweniidae spp. | 975 | Surface deposit feeder | | Jumars, P., Dorgan, K.M., Lindsay, S.M. (2015) Diet of Worms Emended: An Update of Polychaete Feeding Guilds. <i>Annual Review of Marine Science</i> , 7:497-520. Fauchald, K., & Jumars, P. A. (1979). The diet of worms: a study of polychaete feeding guilds. <i>Oceanography and marine Biology annual review</i> . |
| <i>Musculus discors</i> | 140472 | Filter/suspension feeder | | Tyler-Walters, H. (2001). <i>Musculus discors</i> . Green crenella. Aitken, A. E., & Fournier, J. (1993). Macrofauna communities of Cambridge, McBeth and Itirbilung Fiords, Baffin Island, Northwest Territories, Canada. Arctic, 60-71. |
| <i>Buccinum glaciale</i> | 138864 | Predator/scavenger | | Heller, J. (2015) <i>Sea Snails. A natural history</i> . Springer International Publishing, Cham. 354pp. |
| <i>Owenia borealis</i> | 329882 | Surface deposit feeder | | Link, H., Piepenburg, D., Archambault, P. (2013) Are Hotspots Always Hotspots? The Relationship between Diversity, Resource and Ecosystem Functions in the Arctic. <i>PLoS ONE</i> , 8:e74077-. |
| <i>Anonyx nugax</i> | 102514 | Predator/scavenger | | Nygård, H., Berge, J., Søreide, J. E., Vihtakari, M., & Falk-Petersen, S. (2012). The amphipod scavenging guild in two Arctic fjords: seasonal variations, abundance and trophic interactions. <i>Aquatic Biology</i> , 14(3), 247-264. Sainte-Marie, B., Lamarche, G. (1985) The diets of six species of the carrion-feeding lysianassid amphipod genus <i>Anonyx</i> and their relation with morphology and swimming behaviour. <i>Sarsia</i> , 70:119-126. |
| Porifera | 558 | Filter/suspension feeder | | |
| <i>Oediceros borealis</i> | 102906 | Omnivorous/detritivorous | Red algae | Farlin, J. P., Lewis, L. S., Anderson, T. W., & Lai, C. T. (2010). Functional diversity in amphipods revealed by stable isotopes in an eelgrass ecosystem. <i>Marine Ecology Progress Series</i> , 420, 277-281. |
| <i>Lichenopora crassiuscula</i> | 156210 | Filter/suspension feeder | | Hayward, P.J., Ryland, J.S., Taylor, P.D. (1994) <i>Biology and Palaeobiology of Bryozoans</i> . Olsen & Olsen, Fredensborg. 240pp. |
| <i>Hiatella arctica</i> | 140103 | Filter/suspension feeder | Phytodetritus | Kędra, M., Kuliński, K., Walkusz, W., & Legeżyńska, J. (2012). The shallow benthic food web structure in the high Arctic does not follow seasonal changes in the surrounding environment. <i>Estuarine, Coastal and Shelf Science</i> , 114, 183-191. McMeans, B. C., Rooney, N., Arts, M. T., & Fisk, A. T. (2013). Food web structure of a coastal Arctic marine ecosystem and implications for stability. <i>Marine Ecology Progress Series</i> , 482, 17-28. |
| <i>Margarites helcinus</i> | 141821 | Grazer | | Wiencke, C., Hop, H. (2016) Ecosystem Kongsfjorden: new views after more than a decade of research. <i>Polar Biology</i> , 39:1679-Å11687. |
| Serpulidae spp. | 988 | Filter/suspension feeder | | Jumars, P., Dorgan, K.M., Lindsay, S.M. (2015) Diet of Worms Emended: An Update of Polychaete Feeding Guilds. <i>Annual Review of Marine Science</i> , 7:497-520. |
| <i>Nebalia bipes</i> | 147032 | Surface deposit feeder | | Vassilenko S V & Petryashov, V.V. (2009) <i>Illustrated Keys to Free-Living Invertebrates of Eurasian Arctic Seas and Adjacent Deep Waters</i> , Vol. 1 Rotifera, Pycnogonida, Cirripedia, Leptostraca, Mysidacea, Hyperiidea, Caprellidea, Euphausiacea, Dendrobranchiata, Pleocyemata, Anomura, and Brachyura. Alaska Sea Grant College Program, Fairbanks. 186pp. |
| Ampharetidae spp. | 152252 | Surface deposit feeder | | Fauchald, K., Jumars, P. (1979) The Diet of Worms : a Study of Polychaete Feeding Guilds. <i>Oceanography and Marine Biology, Annual Review</i> , 17:193-284. |
| Hydrobiidae spp. | 120 | Subsurface deposit feeder | | Newell, R. (1965, January). The role of detritus in the nutrition of two marine deposit feeders, the prosobranch <i>Hydrobia ulvae</i> and the bivalve <i>Macoma balthica</i> . In <i>Proceedings of the Zoological Society of London</i> (Vol. 144, No. 1, pp. 25-45). Oxford, UK: Blackwell Publishing Ltd. Forbes, V. E., & Lopez, G. R. (1986). Changes in feeding and crawling rates of <i>Hydrobia truncata</i> (Prosobranchia: Hydrobiidae) in response to sedimentary chlorophyll-a and recently egested sediment. <i>Mar Ecol Prog Ser</i> , 33, 287-294. |
| <i>Parexogone hebes</i> | 131302 | Subsurface deposit feeder | | Maurer, D., & Leathem, W. (1981). Polychaete feeding guilds from Georges Bank, USA. <i>Marine Biology</i> , 62(2), 161-171. |

| | | | | |
|--------------------------------|--------|---------------------------|--|---|
| | | | | Gaston, G. R. (1987). Benthic polychaeta of the Middle Atlantic Bight: feeding and distribution. <i>Marine Ecology Progress Series</i> , 36(3), 251-262. |
| <i>Eusyllis</i> sp. | 129653 | Predator/scavenger | | Fauchald, K., & Jumars, P. A. (1979). The diet of worms: a study of polychaete feeding guilds. <i>Oceanography and marine Biology annual review</i> . Macdonald, T. A., Burd, B. J., Macdonald, V. I., & Van Roodselaar, A. (2010). Taxonomic and feeding guild classification for the marine benthic macroinvertebrates of the Strait of Georgia, British Columbia (p. 63). <i>Fisheries and Oceans Canada= Pêches et océans Canada</i> . |
| <i>Ampharete sibirica</i> | 332933 | Surface deposit feeder | | Fauchald, K., & Jumars, P. A. (1979). The diet of worms: a study of polychaete feeding guilds. <i>Oceanography and marine Biology annual review</i> . Macdonald, T. A., Burd, B. J., Macdonald, V. I., & Van Roodselaar, A. (2010). Taxonomic and feeding guild classification for the marine benthic macroinvertebrates of the Strait of Georgia, British Columbia (p. 63). <i>Fisheries and Oceans Canada= Pêches et océans Canada</i> . |
| <i>Ampharete</i> sp. | 129155 | Surface deposit feeder | | Fauchald, K., & Jumars, P. A. (1979). The diet of worms: a study of polychaete feeding guilds. <i>Oceanography and marine Biology annual review</i> . Macdonald, T. A., Burd, B. J., Macdonald, V. I., & Van Roodselaar, A. (2010). Taxonomic and feeding guild classification for the marine benthic macroinvertebrates of the Strait of Georgia, British Columbia (p. 63). <i>Fisheries and Oceans Canada= Pêches et océans Canada</i> . |
| <i>Ophryotrocha</i> sp. | 129266 | Surface deposit feeder | | Salvo, F., Hamoutene, D., & Dufour, S. C. (2015). Trophic analyses of opportunistic polychaetes (<i>Ophryotrocha cyclops</i>) at salmonid aquaculture sites. <i>Journal of the Marine Biological Association of the United Kingdom</i> , 95(4), 713-722. Fauchald, K., & Jumars, P. A. (1979). The diet of worms: a study of polychaete feeding guilds. <i>Oceanography and marine Biology annual review</i> . Macdonald, T. A., Burd, B. J., Macdonald, V. I., & Van Roodselaar, A. (2010). Taxonomic and feeding guild classification for the marine benthic macroinvertebrates of the Strait of Georgia, British Columbia (p. 63). <i>Fisheries and Oceans Canada= Pêches et océans Canada</i> . |
| <i>Dipolydora quadrilobata</i> | 131121 | Filter/suspension feeder | | Riordan Jr, T. J., & Lindsay, S. M. (2002). Feeding responses to particle-bound cues by a deposit-feeding spionid polychaete, <i>Dipolydora quadrilobata</i> (Jacobi 1883). <i>Journal of Experimental Marine Biology and Ecology</i> , 277(1), 79-95. Fauchald, K., & Jumars, P. A. (1979). The diet of worms: a study of polychaete feeding guilds. <i>Oceanography and marine Biology annual review</i> . Macdonald, T. A., Burd, B. J., Macdonald, V. I., & Van Roodselaar, A. (2010). Taxonomic and feeding guild classification for the marine benthic macroinvertebrates of the Strait of Georgia, British Columbia (p. 63). <i>Fisheries and Oceans Canada= Pêches et océans Canada</i> . |
| <i>Spirorbis</i> sp. | 129642 | Filter/suspension feeder | | Ni, S., Taubner, I., Böhm, F., Winde, V., & Böttcher, M. E. (2018). Effect of temperature rise and ocean acidification on growth of calcifying tubeworm shells (<i>Spirorbis spirorbis</i>): an <i>in situ</i> benthocosm approach. <i>Biogeosciences</i> , 15(5), 1425-1445. |
| <i>Macoma</i> sp. | 138531 | Surface deposit feeder | | Rossi, F., Herman, P. M. J., & Middelburg, J. J. (2004). Interspecific and intraspecific variation of δC and δN in deposit-and suspension-feeding bivalves (<i>Macoma balthica</i> and <i>Cerastoderma edule</i>): Evidence of ontogenetic changes in feeding mode of <i>Macoma balthica</i> . <i>Limnology and Oceanography</i> , 49(2), 408-414. Hummel, H. (1985). Food intake of <i>Macoma balthica</i> (Mollusca) in relation to seasonal changes in its potential food on a tidal flat in the Dutch Wadden Sea. <i>Netherlands Journal of Sea Research</i> , 19(1), 52-76. |
| <i>Macoma calcarea</i> | 141580 | Surface deposit feeder | | Iken, K., Bluhm, B., Dunton, K. (2010) Benthic food-web structure under differing water mass properties in the southern Chukchi Sea. <i>Deep Sea Research Part II: Topical Studies in Oceanography</i> , 57:71-85. Sun, M., Clough, L.M., Carroll, M.L., Dai, J., Ambrose, W.G., Lopez, G.R. (2009) Different responses of two common Arctic macrobenthic species (<i>Macoma balthica</i> and <i>Monoporeia affinis</i>) to phytoplankton and ice algae: Will climate change impacts be species specific? <i>Journal of Experimental Marine Biology and Ecology</i> , 376:110-121. Naumov, A., Scarlato, O., Fedyakov, V. (1987) Class Bivalvia. In: Scarlato, O., Naumov, A. (Eds.). <i>Molluscs of the White Sea. Opredeliteli po faune SSSR, izdavaemye zoologicheskim institutom Akademii nauk SSSR</i> , 151. Nauka, Leningrad. 205-258pp. |
| <i>Balanus crenatus</i> | 106215 | Filter/suspension feeder | | Glassetter, M., & Senn, D. G. (1986). Oral feeding apparatus and feeding behaviour of <i>Balanus crenatus</i> (Cirripedia, Crustacea) on the coast of Luc-sur-Mer (Normandy, France). <i>Vie et Milieu/Life & Environment</i> , 75-79. |
| <i>Ophelia</i> sp. | 129413 | Subsurface deposit feeder | | Clifton, H. E., & Thompson, J. K. (1978). <i>Macaronichnus segregatis</i> ; a feeding structure of shallow marine polychaetes. <i>Journal of Sedimentary Research</i> , 48(4), 1293-1302. Würzberg, L., Peters, J., Schüller, M., & Brandt, A. (2011). Diet insights of deep-sea polychaetes derived from fatty acid analyses. <i>Deep Sea Research Part II: Topical Studies in Oceanography</i> , 58(1-2), 153-162. |

| | | | | |
|----------------------------------|--------|---------------------------|-----------------------|---|
| <i>Ophelia limacina</i> | 130494 | Subsurface deposit feeder | | Clifton, H. E., & Thompson, J. K. (1978). Macaronichnus segregatis; a feeding structure of shallow marine polychaetes. <i>Journal of Sedimentary Research</i> , 48(4), 1293-1302. Würzberg, L., Peters, J., Schüller, M., & Brandt, A. (2011). Diet insights of deep-sea polychaetes derived from fatty acid analyses. <i>Deep Sea Research Part II: Topical Studies in Oceanography</i> , 58(1-2), 153-162. |
| <i>Schistomeringos caeca</i> | 130043 | Subsurface deposit feeder | | Gaston, G. R. (1987). Benthic polychaeta of the Middle Atlantic Bight: feeding and distribution. <i>Marine Ecology Progress Series</i> , 36(3), 251-262. |
| <i>Nemertea</i> | 152391 | Predator/scavenger | | Thiel, M., & Kruse, I. (2001). Status of the Nemertea as predators in marine ecosystems. <i>Hydrobiologia</i> , 456(1), 21-32. |
| <i>Scalibregma inflatum</i> | 130980 | Subsurface deposit feeder | | Blair, N. E., Levin, L. A., DeMaster, D. J., & Plaia, G. (1996). The short-term fate of fresh algal carbon in continental slope sediments. <i>Limnology and Oceanography</i> , 41(6), 1208-1219. |
| <i>Terebellides stroemii</i> | 131573 | Surface deposit feeder | | Jumars, P. A., Dorgan, K. M., & Lindsay, S. M. (2015). Diet of worms emended: an update of polychaete feeding guilds. <i>Annual review of marine science</i> , 7, 497-520. Dales, R. P. (1955). Feeding and digestion in terebellid polychaetes. <i>Journal of the marine Biological Association of the United Kingdom</i> , 34(1), 55-79. |
| <i>Tachyrhynchus erosus</i> | 196391 | Filter/suspension feeder | | Allmon, W. D. (1988). Ecology of Recent turritelline gastropods (Prosobranchia, Turritellidae): current knowledge and paleontological implications. <i>Palaios</i> , 259-284. Allmon, W. D. (2011). Natural history of turritelline gastropods (Cerithioidea: Turritellidae): a status report. <i>Malacologia</i> , 54(1-2), 159-202. Iken, K., Bluhm, B., & Dunton, K. (2010). Benthic food-web structure under differing water mass properties in the southern Chukchi Sea. <i>Deep Sea Research Part II: Topical Studies in Oceanography</i> , 57(1-2), 71-85. Link, H., Piepenburg, D., & Archambault, P. (2013). Are hotspots always hotspots? The relationship between diversity, resource, and ecosystem functions in the Arctic. <i>PLoS One</i> , 8(9), e74077. |
| <i>Corophium</i> sp. | 101489 | Filter/suspension feeder | | Fenchel, T., Kofoed, L. H., & Lappalainen, A. (1975). Particle size-selection of two deposit feeders: the amphipod Corophium volutator and the prosobranch Hydrobia ulvae. <i>Marine Biology</i> , 30(2), 119-128. |
| <i>Erginus rubellus</i> | 140275 | Grazer | | Kaczmarek, H., Włodarska-Kowalcuk, M., Legeżyńska, J., & Zajączkowski, M. (2005). Shallow sublittoral macrozoobenthos in Kongsfjord, west Spitsbergen, Svalbard. <i>Polish Polar Research</i> , 137-155. |
| <i>Testudinalia testudinalis</i> | 234208 | Grazer | Coralline, macroalgae | Lord, J. P., Lyczkowski, E. R., & Wilson Jr, W. H. (2011). Behavior and microhabitat selection of the tortoiseshell limpet Testudinalia testudinalis in the northwest Atlantic intertidal zone. <i>Journal of experimental marine biology and ecology</i> , 407(2), 234-240. |
| <i>Paraonides nordica</i> | 330349 | Subsurface deposit feeder | | Gaston, G. R., McLellan, J. A., & Heard, R. W. (1992). Feeding biology, distribution, and ecology of two species of benthic polychaetes: Paraonis fulgens and Paraonis pygoenigmatica (Polychaeta: Paraonidae). <i>Gulf and Caribbean Research</i> , 8(4), 395-399. Flint, R. W., & Rabalais, N. N. (1980). Polychaete ecology and niche patterns: Texas continental shelf. <i>Mar. Ecol. Prog. Ser.</i> , 3(3), 193-202. JUMARS, P. A. Environmental grain and polychaete species' diversity in a bathyal benthic community. <i>Marine Biology</i> , 1975, vol. 30, p. 253-266. |
| <i>Lysippe</i> sp. | 129166 | Surface deposit feeder | | Liebermann, A. (1999). The diversity of Polychaeta and their feeding habits related to types of sediments in Mellemfjord, Disko Island, West Greenland. <i>Berichte zur Polarforschung</i> , 330, 152-163. Kędra, M., Kuliniński, K., Walkusz, W., & Legeżyńska, J. (2012). The shallow benthic food web structure in the high Arctic does not follow seasonal changes in the surrounding environment. <i>Estuarine, Coastal and Shelf Science</i> , 114, 183-191. |
| <i>Praxillella</i> sp. | 129360 | Subsurface deposit feeder | | Hughes, T. G. (1979). Mode of life and feeding in maldanid polychaetes from St. Margaret's Bay, Nova Scotia. <i>Journal of the Fisheries Board of Canada</i> , 36(12), 1503-1507. Iken, K., Bluhm, B., & Dunton, K. (2010). Benthic food-web structure under differing water mass properties in the southern Chukchi Sea. <i>Deep Sea Research Part II: Topical Studies in Oceanography</i> , 57(1-2), 71-85. |
| <i>Praxillella praetermissa</i> | 130326 | Subsurface deposit feeder | | Kokarev, V., Vedenin, A., Basin, A., Azovsky, A. (2017) Taxonomic and functional patterns of macrobenthic communities on a high-Arctic shelf: A case study from the Laptev Sea. <i>Journal of Sea Research</i> , 129:61-69. Jumars, P., Dorgan, K.M., Lindsay, S.M. (2015) Diet of Worms Emended: An Update of Polychaete Feeding Guilds. <i>Annual Review of Marine Science</i> , 7:497-520. |
| <i>Praxillella affinis</i> | 130322 | Subsurface deposit feeder | | Macdonald, T.A., Burd, B.J., Macdonald, V.I., Van Roodselaar, A. (2010) Taxonomic and Feeding Guild Classification for the Marine Benthic Macroinvertebrates of the Strait of Georgia, British Columbia. <i>Canadian Technical Report of Fisheries and Aquatic Sciences</i> , 2874:63. |
| <i>Euchone analis</i> | 130903 | Filter/suspension feeder | | McMahon KW, Ambrose WG, Johnson BJ, Sun M-Y, Lopez GR, et al. 2006. Benthic community response to ice algae and phytoplankton in Ny Ålesund, Svalbard. <i>Mar. Ecol. Prog. Ser.</i> 310:1-14 |
| <i>Chaetozone</i> sp. | 129242 | Surface deposit feeder | | Iken, K., Bluhm, B., & Dunton, K. (2010). Benthic food-web structure under differing water mass properties in the southern Chukchi Sea. <i>Deep Sea Research Part II: Topical Studies in Oceanography</i> , 57(1-2), 71-85. |

| | | | | |
|---------------------------------|--------|--------------------------|--|---|
| <i>Travisia forbesii</i> | 130512 | Surface deposit feeder | | Jumars, P. A., Dorgan, K. M., & Lindsay, S. M. (2015). Diet of worms emended: an update of polychaete feeding guilds. Annual review of marine science, 7, 497-520. |
| <i>Rostroculodes schneideri</i> | 423729 | NA | | |
| <i>Monoculodes borealis</i> | 102881 | Surface deposit feeder | | Kędra, M., Kuliniński, K., Walkusz, W., & Legeżyńska, J. (2012). The shallow benthic food web structure in the high Arctic does not follow seasonal changes in the surrounding environment. Estuarine, Coastal and Shelf Science, 114, 183-191. Bousfield, E. L., & Chevrier, A. (1996). The amphipod family Oedicerotidae on the Pacific coast of North America. Part 1. The Monoculodes and Synchelidium generic complexes: Systematics and distributional ecology. AMPHIPACIFICA-VICTORIA BC-, 2, 75-148. |
| <i>Monoculodes</i> sp. | 101694 | Predator/scavenger | | Beare, D. J., & Moore, P. G. (1994). Observations on the biology of a rare British marine amphipod: Monoculodes gibbosus (Crustacea: Amphipoda: Oedicerotidae). Journal of the Marine Biological Association of the United Kingdom, 74(1), 193-201. Beare, D. J., & Moore, P. G. (1998). The life histories of the offshore oedicerotids Westwoodilla caecula and Monoculodes packardi (Crustacea: Amphipoda) from Loch Fyne, Scotland. Journal of the Marine Biological Association of the United Kingdom, 78(3), 835-852. Navarro-Barranco, C., Tierno-de-Figueroa, J. M., Guerra-García, J. M., Sánchez-Tocino, L., & García-Gómez, J. C. (2013). Feeding habits of amphipods (Crustacea: Malacostraca) from shallow soft bottom communities: Comparison between marine caves and open habitats. Journal of Sea Research, 78, 1-7. |
| <i>Protomedenia</i> sp. | 101574 | Surface deposit feeder | | Feder, H. M., Jewett, S. C., & Blanchard, A. L. (2007). Southeastern Chukchi Sea (Alaska) macrobenthos. Polar Biology, 30(3), 261-275. |
| <i>Protomedenia fasciata</i> | 102443 | Surface deposit feeder | | Serratos, C. (2015) Spatial and temporal patterns of epibenthic community and food web structure in the Chukchi Sea between 2004-2012. Master thesis, University of Alaska Fairbanks. Stoker, S.W. (1978) Benthic invertebrate macrofauna of the Eastern continental shelf of the Bering and Chukchi Seas. Doctoral thesis, Universiy of Alaska. 259 pp. |
| <i>Protomedenia grandimana</i> | 102444 | Filter/suspension feeder | | Serratos, C. (2015) Spatial and temporal patterns of epibenthic community and food web structure in the Chukchi Sea between 2004-2012. Master thesis, University of Alaska Fairbanks. |
| <i>Pholoe minuta</i> | 130603 | Predator/scavenger | | Pleijel, F. (1983). On feeding of Pholoe minuta (Fabricius, 1780)(Polychaeta: Sigalionidae). Sarsia, 68(1), 21-23. |
| <i>Mya truncata</i> | 140431 | Filter/suspension feeder | | Wood, J. M. (2020). Keeping Arctic fisheries as happy as a clam: assessing the life history and density of truncated soft-shell clams (Mya truncata) of southern Baffin Island, Nunavut, to promote sustainable fishery development (Doctoral dissertation, Memorial University of Newfoundland). Birkely, S. R., Grahl-Nielsen, O., & Gulliksen, B. (2003). Temporal variations and anatomical distributions of fatty acids in the bivalve Mya truncata, L. 1758, from Isfjorden, Spitsbergen. Polar Biology, 26(2), 83-92. |
| <i>Mya</i> sp. | 138211 | Filter/suspension feeder | | Yonge, C. M. (1923). Studies on the Comparative Physiology of Digestion: I--The Mechanism of Feeding, Digestion, and Assimilation in the Lamellibranch Mya. Journal of Experimental Biology, 1(1), 15-64. |
| <i>Mya pseudoarenaria</i> | 156249 | Filter/suspension feeder | | Renz, J., Powilleit, M., Gogina, M., Zettler, M., Morys, C., Forster, S. (2018) Community bioirrigation potential (BIPc), an index to quantify the potential for solute exchange at the sediment-water interface. Marine Environmental Research, :-. Fish, J., Fish, S. (2011) A student's Guide to the Seashore. Cambridge University Press, Cambridge. 527pp. |
| <i>Caulleriella</i> sp. | 129241 | Surface deposit feeder | | Fauchald, K., & Jumars, P. A. (1979). The diet of worms: a study of polychaete feeding guilds. Oceanography and marine Biology annual review. Dolbeth, M., Teixeira, H., Marques, J. C., & Pardal, M. Á. (2009). Feeding guild composition of a macrobenthic subtidal community along a depth gradient. Scientia Marina, 73(2), 225-237. |
| <i>Axinopsida</i> sp. | 138550 | Chemosymbiotic | | Kamenev, G. M. (1995). Fatty acids as markers of food sources in a shallow-water hydrothermal ecosystem (Kraternaya Bight, Yankich Island, Kurile Islands). Marine Ecology Progress Series, 120, 231-241. Zhukova, N. V., Kharlamenko, V. I., Svetashev, V. I., & Rodionov, I. A. (1992). Fatty acids as markers of bacterial symbionts of marine bivalve molluscs. Journal of Experimental Marine Biology and Ecology, 162(2), 253-263. |
| <i>Axinopsida orbiculata</i> | 141652 | Chemosymbiotic | | Kamenev, G. M. (1995). Fatty acids as markers of food sources in a shallow-water hydrothermal ecosystem (Kraternaya Bight, Yankich Island, Kurile Islands). Marine Ecology Progress Series, 120, 231-241. Zhukova, N. V., Kharlamenko, V. I., Svetashev, V. I., & Rodionov, I. A. (1992). Fatty acids as markers of bacterial symbionts of marine bivalve molluscs. Journal of Experimental Marine Biology and Ecology, 162(2), 253-263. |
| <i>Aphelochaeta</i> sp. | 129240 | Filter/suspension feeder | | Jumars, P. A., Dorgan, K. M., & Lindsay, S. M. (2015). Diet of worms emended: an update of polychaete feeding guilds. Annual review of marine science, 7, 497-520. |

| | | | | |
|-----------------------------|--------|---------------------------|---------------------|--|
| | | | | Magalhães, W. F., & Bailey-Brock, J. H. (2017). Particle selection and feeding behaviour in two cirratulid polychaetes. Journal of the Marine Biological Association of the United Kingdom, 97(5), 1069-1074. |
| <i>Scoloplos armiger</i> | 334772 | Subsurface deposit feeder | | Kędra, M., Kuliński, K., Walkusz, W., & Legeżyńska, J. (2012). The shallow benthic food web structure in the high Arctic does not follow seasonal changes in the surrounding environment. Estuarine, Coastal and Shelf Science, 114, 183-191. Herman, P. M., Middelburg, J. J., Widdows, J., Lucas, C. H., & Heip, C. H. (2000). Stable isotopes as trophic tracers: combining field sampling and manipulative labelling of food resources for macrobenthos. Marine Ecology Progress Series, 204, 79-92. Jumars, P. A., Dorgan, K. M., & Lindsay, S. M. (2015). Diet of worms emended: an update of polychaete feeding guilds. Annual review of marine science, 7(1), 497-520. |
| <i>Priapulus caudatus</i> | 101160 | Predator/scavenger | | Iken, K., Bluhm, B., & Dunton, K. (2010). Benthic food-web structure under differing water mass properties in the southern Chukchi Sea. Deep Sea Research Part II: Topical Studies in Oceanography, 57(1-2), 71-85. Shirley, T. C. (1990). Ecology of Priapulus caudatus Lamarck, 1816 (Priapulida) in an Alaskan subarctic ecosystem. Bulletin of Marine Science, 47(1), 149-158. |
| <i>Ennucula tenuis</i> | 140584 | Surface deposit feeder | | Oxtoby, L. E., Budge, S. M., Iken, K., Brien, D. O., & Wooller, M. J. (2016). Feeding ecologies of key bivalve and polychaete species in the Bering Sea as elucidated by fatty acid and compound-specific stable isotope analyses. Marine Ecology Progress Series, 557, 161-175. |
| <i>Onisimus littoralis</i> | 102646 | Omnivorous/detritivorous | | Carey, A. G., & Boudrias, M. A. (1987). Feeding ecology of <i>Pseudalibrotus</i> (= <i>Onisimus</i>) <i>littoralis</i> Krøyer (Crustacea: Amphipoda) on the Beaufort Sea inner continental shelf. Polar Biology, 8(1), 29-33. Gradinger, R., & Bluhm, B. (2010). Timing of ice algal grazing by the Arctic nearshore benthic amphipod <i>Onisimus littoralis</i> . Arctic, 355-358. |
| <i>Spio</i> sp. | 129625 | Surface deposit feeder | | Dauer, D. M. (2000). Functional morphology and feeding behavior of <i>Spio setosa</i> (Polychaeta: Spionidae). Bulletin of marine science, 67(1), 269-275. Dauer, D. M., Maybury, C. A., & Ewing, R. M. (1981). Feeding behavior and general ecology of several spionid polychaetes from the Chesapeake Bay. Journal of Experimental Marine Biology and Ecology, 54(1), 21-38. |
| <i>Rhodine</i> sp. | 129363 | Subsurface deposit feeder | | Josefson, A. B., Forbes, T. L., & Rosenberg, R. (2002). Fate of phytodetritus in marine sediments: functional importance of macrofaunal community. Marine Ecology Progress Series, 230, 71-85. |
| <i>Aoridae</i> spp. | 101368 | Surface deposit feeder | | Myers, A. A. (1981). Amphipod Crustacea I. Family Aoridae. Norderhaug, K. M., Fredriksen, S., & Nygaard, K. (2003). Trophic importance of <i>Laminaria hyperborea</i> to kelp forest consumers and the importance of bacterial degradation to food quality. Marine Ecology Progress Series, 255, 135-144. Taylor, R. B., & Brown, P. J. (2006). Herbivory in the gammarid amphipod <i>Aora typica</i> : relationships between consumption rates, performance and abundance across ten seaweed species. Marine Biology, 149(3), 455-463. |
| <i>Aricidea</i> sp. | 129430 | Surface deposit feeder | | Blair, N. E., Levin, L. A., DeMaster, D. J., & Plaia, G. (1996). The short-term fate of fresh algal carbon in continental slope sediments. Limnology and Oceanography, 41(6), 1208-1219. Levin, L. A., Blair, N. E., Martin, C. M., DeMaster, D. J., Plaia, G., & Thomas, C. J. (1999). Macrofaunal processing of phytodetritus at two sites on the Carolina margin: in situ experiments using ¹³ C-labeled diatoms. Marine Ecology Progress Series, 182, 37-54. Pagliosa, P. R. (2005). Another diet of worms: the applicability of polychaete feeding guilds as a useful conceptual framework and biological variable. Marine Ecology, 26(3-4), 246-254. |
| <i>Aricidea hartmani</i> | 130561 | Surface deposit feeder | | Kokarev, V., Vedenin, A., Basin, A., Azovsky, A. (2017) Taxonomic and functional patterns of macrobenthic communities on a high-Arctic shelf: A case study from the Laptev Sea. Journal of Sea Research, 129:61-69. |
| <i>Aricidea nolani</i> | 157218 | NA | | |
| <i>Monoporeia affinis</i> | 103077 | Surface deposit feeder | Fresh phytodetritus | Byrén, L., Ejdung, G., & Elmgren, R. (2006). Uptake of sedimentary organic matter by the deposit-feeding Baltic amphipods <i>Monoporeia affinis</i> and <i>Pontoporeia femorata</i> . Marine Ecology Progress Series, 313, 135-143. Kotta, J., & Olafsson, E. (2003). Competition for food between the introduced polychaete <i>Marenzelleria viridis</i> (Verrill) and the native amphipod <i>Monoporeia affinis</i> Lindström in the Baltic Sea. Journal of Sea Research, 50(1), 27-35. |
| <i>Pygospio elegans</i> | 131170 | Surface deposit feeder | | Piesik, Z., & Obolewski, K. (2007). Is the bristleworm <i>Pygospio elegans</i> Claparede (Spionidae) really a deposit-feeder? Baltic Coastal Zone. Journal of Ecology and Protection of the Coastline, 11. |
| <i>Cistenides granulata</i> | 238377 | Subsurface deposit feeder | | Jumars, P., Dorgan, K. M., Lindsay, S. M. (2015) Diet of Worms Emended: An Update of Polychaete Feeding Guilds. Annual Review of Marine Science, 7:497-520. |
| <i>Onoba</i> sp. | 138451 | Surface deposit feeder | | Stolyarov, A. (2017) Peculiarities of the Structure of and Trends in the Macrobenthos Community of the Ermolinskaya Bay Lagoon Ecosystem, Kandalaksha Bay, White Sea. Biology Bulletin, 44:1019-1034. |

| | | | | |
|-----------------------------|--------|--------------------------|-------------------|--|
| <i>Myriapora</i> sp. | 110949 | Filter/suspension feeder | | Hayward, P.J., Ryland, J.S., Taylor, P.D. (1994) Biology and Palaeobiology of Bryozoans. Olsen & Olsen, Fredensborg. 240pp. |
| <i>Margarites</i> sp. | 138592 | Grazer | | Weslawski, J.M., Kwasniewski, S., Stempniewicz, L., Blachowiak-Samolyk, K. (2006) Biodiversity and energy transfer to top trophic levels in two contrasting Arctic fjords. Polish Polar Research, 27:259–278. Graham, A. (1988) Molluscs: Prosobranch and Pyramidellid Gastropods. E.J. Brill/Dr W. Backhuys, Leiden, New York, København, København. 662pp. |
| <i>Glycera capitata</i> | 130118 | Predator/scavenger | | Renaud, P.E., Tessmann, M., Evensen, A., Christensen, G.N. (2010) Benthic food-web structure of an Arctic fjord (Kongsfjorden, Svalbard). Marine Biology Research, 7:13–26. Jumars, P. A., Dorgan, K. M., & Lindsay, S. M. (2015). Diet of worms emended: an update of polychaete feeding guilds. Annual review of marine science, 7, 497–520. |
| <i>Rissoidae</i> spp. | 123 | Grazer | | Thormar, J., Hasler-Sheetal, H., Baden, S., Boström, C., Clausen, K. K., Krause-Jensen, D., ... & Holmer, M. (2016). Eelgrass (<i>Zostera marina</i>) food web structure in different environmental settings. PLoS One, 11(1), e0146479. Hoffman, L., & Freiwald, A. Bathyal species in Rissoidae (Gastropoda) from Azorean seamounts. Warén, A. (1996). Ecology and systematics of the north European species of Rissoidae and Pusillina (Prosobranchia: Rissoidae). Journal of the Marine Biological Association of the United Kingdom, 76(4), 1013–1059. |
| <i>Filellum serpens</i> | 117690 | Filter/suspension feeder | Epiphyte on algae | Llobet, I., Gili, J. M., & Hughes, R. G. (1991). Horizontal, vertical and seasonal distributions of epiphytic hydrozoa on the alga <i>Halimeda tuna</i> in the Northwestern Mediterranean Sea. Marine Biology, 110(1), 151–159. |
| <i>Tubuliporidae</i> spp. | 110814 | Filter/suspension feeder | | Hayward, P.J., Ryland, J.S., Taylor, P.D. (1994) Biology and Palaeobiology of Bryozoans. Olsen & Olsen, Fredensborg. 240pp. |
| <i>Spirorbinae</i> spp. | 989 | Filter/suspension feeder | Epiphyte on algae | Fauchald, K., & Jumars, P. A. (1979). The diet of worms: a study of polychaete feeding guilds. Oceanography and marine Biology annual review. |
| <i>Schizoporella</i> sp. | 110975 | Filter/suspension feeder | | Hayward, P.J., Ryland, J.S., Taylor, P.D. (1994) Biology and Palaeobiology of Bryozoans. Olsen & Olsen, Fredensborg. 240pp. Macdonald, T.A., Burd, B.J., Macdonald, V.I., Van Roodselar, A. (2010) Taxonomic and Feeding Guild Classification for the Marine Benthic Macroinvertebrates of the Strait of Georgia, British Columbia. Canadian Technical Report of Fisheries and Aquatic Sciences, 2874:63. |
| <i>Rhamphostomella</i> sp. | 110836 | Filter/suspension feeder | | Hayward, P.J., Ryland, J.S., Taylor, P.D. (1994) Biology and Palaeobiology of Bryozoans. Olsen & Olsen, Fredensborg. 240pp. |
| <i>Photidae</i> spp. | 148558 | Filter/suspension feeder | | Sivadas, S.K., Ingole, B.S., Fernandes, C.E.G. (2013) Environmental Gradient Favours Functionally Diverse Macrofaunal Community in a Placer Rich Tropical Bay. The Scientific World Journal, 2013:1–12. |
| <i>Nereis</i> sp. | 129379 | Predator/scavenger | | Hartmann-Schröder, G. (1996). Annelida, Borstenwürmer, Polychaeta—Tierwelt Deutschlands, Teil 58. Veb Gustav Fischer Verlag Jena, Hamburg. Roy, V., Iken, K., Gosselin, M., Tremblay, J., Bélanger, S., Archambault, P. (2015) Benthic faunal assimilation pathways and depth-related changes in food-web structure across the Canadian Arctic. Deep Sea Research Part I: Oceanographic Research Papers, 102:55–71. |
| <i>Margarites costalis</i> | 141819 | Grazer | | Smith, B., Cabot, E., Foreman, R. (1985) Seaweed detritus versus benthic diatoms as important food resources for two dominant subtidal gastropods. Journal of Experimental Marine Biology and Ecology, 92:143–156. |
| <i>Heterostigma</i> sp. | 103521 | Filter/suspension feeder | | https://www.marinespecies.org/aphia.php?p=taxdetails&id=103521#attributes |
| <i>Dipolydora caulleryi</i> | 131116 | Surface deposit feeder | | Flint, R. W., & Kalke, R. D. (1986). Biological enhancement of estuarine benthic community structure. Marine Ecology Progress Series, 23–33. Link, H., Piepenburg, D., Archambault, P. (2013) Are Hotspots Always Hotspots? The Relationship between Diversity, Resource and Ecosystem Functions in the Arctic. PLoS ONE, 8:e74077–. |
| <i>Campanulariidae</i> spp. | 1606 | Filter/suspension feeder | | Macdonald, T.A., Burd, B.J., Macdonald, V.I., Van Roodselar, A. (2010) Taxonomic and Feeding Guild Classification for the Marine Benthic Macroinvertebrates of the Strait of Georgia, British Columbia. Canadian Technical Report of Fisheries and Aquatic Sciences, 2874:63. |
| <i>Calloporidae</i> spp. | 110733 | Filter/suspension feeder | | Hayward, P.J., Ryland, J.S., Taylor, P.D. (1994) Biology and Palaeobiology of Bryozoans. Olsen & Olsen, Fredensborg. 240pp. |

| | | | | |
|--------------------------------|--------|---------------------------|--|---|
| <i>Ampharete</i> sp. | 129155 | Surface deposit feeder | | Jumars, P., Dorgan, K.M., Lindsay, S.M. (2015) Diet of Worms Emended: An Update of Polychaete Feeding Guilds. Annual Review of Marine Science, 7:497-520. Fauchald, K., & Jumars, P. A. (1979). The diet of worms: a study of polychaete feeding guilds. Oceanography and marine Biology annual review. |
| Asciidiacea | 1839 | Filter/suspension feeder | | Brusca, R.C., Brusca, G.J. (2003) Invertebrates, 2nd Ed.. Sinauer Associates, Sunderland, Massachusetts. 936pp. |
| Styelidae spp. | 103450 | Filter/suspension feeder | | Brusca, R.C., Brusca, G.J. (2003) Invertebrates, 2nd Ed.. Sinauer Associates, Sunderland, Massachusetts. 936pp. |
| Anthozoa | 1292 | Predator/scavenger | | Brusca, R.C., Brusca, G.J. (2003) Invertebrates, 2nd Ed.. Sinauer Associates, Sunderland, Massachusetts. 936pp. |
| Dorvilleidae spp. | 971 | Omnivorous/detritivorous | | Jumars, P., Dorgan, K.M., Lindsay, S.M. (2015) Diet of Worms Emended: An Update of Polychaete Feeding Guilds. Annual Review of Marine Science, 7:497-520. Fauchald, K., Jumars, P. (1979) The Diet of Worms : a Study of Polychaete Feeding Guilds. Oceanography and Marine Biology, Annual Review, 17:193-284. |
| <i>Eugerda tenuimana</i> | 118559 | Filter/suspension feeder | | Węsławski, J. M., Opanowski, A., Legeżyńska, J., Maciejewska, B., Włodarska-Kowalczuk, M., & Kędra, M. (2010). Hidden diversity in Arctic crustaceans. How many roles can a species play. Pol. Polar Res, 31(3), 205-216. Link, H., Piepenburg, D., Archambault, P. (2013) Are Hotspots Always Hotspots? The Relationship between Diversity, Resource and Ecosystem Functions in the Arctic. PLoS ONE, 8:e74077-. |
| <i>Cossura</i> sp. | 129251 | Subsurface deposit feeder | | Jumars, P., Dorgan, K.M., Lindsay, S.M. (2015) Diet of Worms Emended: An Update of Polychaete Feeding Guilds. Annual Review of Marine Science, 7:497-520. |
| <i>Ciliatocardium ciliatum</i> | 139000 | Filter/suspension feeder | | Huber, M. (2010) Compendium of Bivalves. ConchBooks, Hackenheim. 901pp.Serratos, C. (2015) Spatial and temporal patterns of epibenthic community and food web structure in the Chukchi Sea between 2004-2012. Master thesis, University of Alaska Fairbanks. Beesley P.L.; Ross G.J.B.; Wells, A.(. (1998) Mollusca - The Southern Synthesis. CSIRO Publishing, Melbourne. 1-1234pp. |
| Cardiidae spp. | 229 | Filter/suspension feeder | | Huber, M. (2010) Compendium of Bivalves. ConchBooks, Hackenheim. 901pp. Beesley P.L.; Ross G.J.B.; Wells, A.(. (1998) Mollusca - The Southern Synthesis. CSIRO Publishing, Melbourne. 1-1234pp. |
| <i>Mytilus</i> sp. | 138228 | Filter/suspension feeder | | Riisgård, H. U., Egele, P. P., & Barreiro Saavedra, I. (2011). Feeding behaviour of the mussel, <i>Mytilus edulis</i> : new observations, with a minireview of current knowledge. Journal of Marine Biology, 2011. |
| <i>Pholoe longa</i> | 130602 | Predator/scavenger | | Kokarev, V., Vedenin, A., Basin, A., Azovsky, A. (2017) Taxonomic and functional patterns of macrobenthic communities on a high-Arctic shelf: A case study from the Laptev Sea. Journal of Sea Research, 129:61-69. Link, H., Piepenburg, D., Archambault, P. (2013) Are Hotspots Always Hotspots? The Relationship between Diversity, Resource and Ecosystem Functions in the Arctic. PLoS ONE, 8:e74077-. Macdonald, T.A., Burd, B.J., Macdonald, V.I., Van Roodselar, A. (2010) Taxonomic and Feeding Guild Classification for the Marine Benthic Macroinvertebrates of the Strait of Georgia, British Columbia. Canadian Technical Report of Fisheries and Aquatic Sciences, 2874:63. |
| <i>Thyasira</i> sp. | 138552 | Chemosymbiotic | | Dufour, S. C., & Felbeck, H. (2006). Symbiont abundance in thyasirids (Bivalvia) is related to particulate food and sulphide availability. Marine Ecology Progress Series, 320, 185-194. |
| <i>Astarte</i> sp. | 137683 | Filter/suspension feeder | | Huber, M. (2010) Compendium of Bivalves. ConchBooks, Hackenheim. 901pp. |
| <i>Bipalponephthys neotena</i> | 558192 | Predator/scavenger | | Link, H., Piepenburg, D., Archambault, P. (2013) Are Hotspots Always Hotspots? The Relationship between Diversity, Resource and Ecosystem Functions in the Arctic. PLoS ONE, 8:e74077-. Penry, D. L., & Jumars, P. A. (1990). Gut architecture, digestive constraints and feeding ecology of deposit-feeding and carnivorous polychaetes. Oecologia, 82(1), 1-11. Liebermann, A. (1999). The diversity of Polychaeta and their feeding habits related to types of sediments in Mellemfjord, Disko Island, West Greenland. Berichte zur Polarforschung, 330, 152-163. |
| Fabriciidae spp. | 154918 | Surface deposit feeder | | Jumars, P., Dorgan, K.M., Lindsay, S.M. (2015) Diet of Worms Emended: An Update of Polychaete Feeding Guilds. Annual Review of Marine Science, 7:497-520. Fauchald, K., & Jumars, P. A. (1979). The diet of worms: a study of polychaete feeding guilds. Oceanography and marine Biology annual review. |
| <i>Dipolydora</i> sp. | 129611 | NA | | |
| <i>Cylichna alba</i> | 139474 | Predator/scavenger | | Taylor, J. D., Cleevely, R. J., & Morris, N. J. (1983). Greensand (Albian) of England. Palaeontology, 26(Part 3), 521-553. |

| | | | | |
|----------------------------------|--------|--------------------------|--|--|
| | | | | Cedhagen, T. (1996). Foraminiferans as food for cephalaspideans (Gastropoda: Opisthobranchia), with notes on secondary tests around calcareous foraminiferans. Phuket Marine Biological Center Special Publication, 16, 279-290. Shonman, D. (1979). A study of feeding in two sympatric opisthobranch snails from Monterey Bay, California (Master's thesis, Calif. State University, Hayward.). Feder, H.M., Naidu, A.S., Hameedi, J.M., Jewett, S.C., Johnson, W.R.(1991)The Chukchi Sea continental shelf: benthos environmental interactions.In: IMS Report. Institute of Marine Science, University of Alaska Fairbanks:250 |
| <i>Priapulus</i> sp. | 101095 | Omnivorous/detritivorous | | Shirley, T. C. (1990). Ecology of Priapulus caudatus Lamarck, 1816 (Priapulida) in an Alaskan subarctic ecosystem. Bulletin of Marine Science, 47(1), 149-158.Trott, T. J. (1998). Gustatory responses of Priapulus caudatus de Lamarck, 1816 (Priapulida, Priapulidae): feeding behavior and chemoreception by a living fossil. |
| <i>Priapulidae</i> spp. | 101078 | Omnivorous/detritivorous | | Shirley, T. C. (1990). Ecology of Priapulus caudatus Lamarck, 1816 (Priapulida) in an Alaskan subarctic ecosystem. Bulletin of Marine Science, 47(1), 149-158. Trott, T. J. (1998). Gustatory responses of Priapulus caudatus de Lamarck, 1816 (Priapulida, Priapulidae): feeding behavior and chemoreception by a living fossil. |
| <i>Apiastobranchus tullbergi</i> | 129851 | Surface deposit feeder | | Jumars, P., Dorgan, K.M., Lindsay, S.M. (2015) Diet of Worms Emended: An Update of Polychaete Feeding Guilds. Annual Review of Marine Science, 7:497-520. Kędra, M., Kuliński, K., Walkusz, W., & Legeżyńska, J. (2012). The shallow benthic food web structure in the high Arctic does not follow seasonal changes in the surrounding environment. Estuarine, Coastal and Shelf Science, 114, 183-191. |
| <i>Scoletoma fragilis</i> | 130261 | Predator/scavenger | | Morata, N., Michaud, E. (2013) Impact of early food input on the Arctic benthos activities during the polar night. Polar Biology, 38:99-114. Jumars, P., Dorgan, K.M., Lindsay, S.M. (2015) Diet of Worms Emended: An Update of Polychaete Feeding Guilds. Annual Review of Marine Science, 7:497-520. |
| <i>Tharyx</i> sp. | 129249 | Surface deposit feeder | | Penry, D. L., & Jumars, P. A. (1990). Gut architecture, digestive constraints and feeding ecology of deposit-feeding and carnivorous polychaetes. Oecologia, 82(1), 1-11. Fauchald, K., & Jumars, P. A. (1979). The diet of worms: a study of polychaete feeding guilds. Oceanography and marine Biology annual review. |
| <i>Phyllodoce maculata</i> | 334510 | Predator/scavenger | | Hartmann-Schröder, G. (1996). Annelida, Borstenwürmer, Polychaeta—Tierwelt Deutschlands, Teil 58. Veb Gustav Fischer Verlag Jena, Hamburg, 648. Blake, J. A. (1994). Family Phyllodocidae Savigny 1818. Taxonomic atlas of the benthic fauna of the Santa Maria Basin and Western Santa Barbara Channel. The Annelida, (Part 2), 115-186. |
| <i>Caprella</i> sp. | 101430 | Omnivorous/detritivorous | | Guerra-García, J. M., & Tierno de Figueroa, J. M. (2009). What do caprellids (Crustacea: Amphipoda) feed on?. Marine Biology, 156(9), 1881-1890. |
| <i>Prionospio steenstrupi</i> | 131164 | Surface deposit feeder | | Abd-Elnaby, F. A. (2009). Polychaete study in Northeastern Mediterranean coast of Egypt. World Journal of Fish and Marine Sciences, 1(2), 85-93. Jumars, P., Dorgan, K.M., Lindsay, S.M. (2015) Diet of Worms Emended: An Update of Polychaete Feeding Guilds. Annual Review of Marine Science, 7:497-520. |
| <i>Orchomenella</i> sp. | 101634 | Omnivorous/detritivorous | | Thiel, M., Hinojosa, I. (2009) Peracarida ,Äi Amphipods, Isopods, Tanaidaceans & Cumaceans. In: Haussermann Vreni; Gorsterra, G. (Eds.). Marine Benthic Fauna of Chilean Patagonia. Nature in Focus. 671-738pp. Chapman, J.W. (2007) Amphipoda: Chapter 39 of The Light and Smith Manual: Intertidal Invertebrates from Central California to Oregon. Univ. of California Press Kędra, M., Kuliński, K., Walkusz, W., & Legeżyńska, J. (2012). The shallow benthic food web structure in the high Arctic does not follow seasonal changes in the surrounding environment. Estuarine, Coastal and Shelf Science, 114, 183-191.Sainte-Marie, B., Percy, J. A., & Shea, J. R. (1989). A comparison of meal size and feeding rate of the lysianassid amphipods Anonyx nugax, Onisimus (= Pseudalibrotus) litoralis and Orchomenella pinguis. Marine Biology, 102(3), 361-368. Legeżyńska, J. (2008). Food resource partitioning among Arctic sublittoral lysianassoid amphipods in summer. Polar Biology, 31(6), 663-670. |
| <i>Phyllodoce groenlandica</i> | 334506 | Predator/scavenger | | Hartmann-Schröder, G. (1996). Annelida, Borstenwürmer, Polychaeta—Tierwelt Deutschlands, Teil 58. Veb Gustav Fischer Verlag Jena, Hamburg, 648. Blake, J. A. (1994). Family Phyllodocidae Savigny 1818. Taxonomic atlas of the benthic fauna of the Santa Maria Basin and Western Santa Barbara Channel. The Annelida, (Part 2), 115-186. |

| | | | | |
|-------------------------|--------|--------------------------|--|---|
| <i>Phyllodoce</i> sp. | 129455 | Predator/scavenger | | Hartmann-Schröder, G. (1996). Annelida, Borstenwürmer, Polychaeta—Tierwelt Deutschlands, Teil 58. Veb Gustav Fischer Verlag Jena, Hamburg, 648. |
| <i>Astarte montagui</i> | 138823 | Filter/suspension feeder | | Blake, J. A. (1994). Family Phyllocoidae Savigny 1818. Taxonomic atlas of the benthic fauna of the Santa Maria Basin and Western Santa Barbara Channel. The Annelida, (Part 2), 115–186. |
| <i>Lysippe labiata</i> | 129800 | Surface deposit feeder | | Huber, M. (2010) Compendium of Bivalves. ConchBooks, Hackenheim. 901pp. |
| <i>Thyasira gouldi</i> | 141663 | Chemosymbiotic | | Liebermann, A. (1999). The diversity of Polychaeta and their feeding habits related to types of sediments in Mellemfjord, Disko Island, West Greenland. Berichte zur Polarforschung, 330, 152–163. |
| Thyasiridae spp. | 219 | Chemosymbiotic | | Kędra, M., Kuliński, K., Walkusz, W., & Legeżyńska, J. (2012). The shallow benthic food web structure in the high Arctic does not follow seasonal changes in the surrounding environment. Estuarine, Coastal and Shelf Science, 114, 183–191. |
| | | | | Dufour, S. C., & Felbeck, H. (2006). Symbiont abundance in thyasirids (Bivalvia) is related to particulate food and sulphide availability. Marine Ecology Progress Series, 320, 185–194. |
| | | | | Dufour, S. C., & Felbeck, H. (2006). Symbiont abundance in thyasirids (Bivalvia) is related to particulate food and sulphide availability. Marine Ecology Progress Series, 320, 185–194. |

Literature cited

Assis J, Tyberghein L, Bosch S, Verbruggen H, Serrão EA, De Clerck O (2018) Bio-ORACLE v2. 0: extending marine data layers for bioclimatic modelling. Glob Ecol Biogeogr 27: 277– 284 <https://doi.org/10.1111/geb.12693>

Shi W, Wang M (2010) Characterization of global ocean turbidity from Moderate Resolution Imaging Spectroradio meter ocean color observations. J Geophys Res Oceans 115: C11022