Table 1S. Mean density ± standard error (individuals m-3) and composition of the holoplankton groups considered in this study at Bilbao 35, Urdaibai 35, Plymouth L4 and Stonehaven. The value in parentheses is the contribution in percentage of each identified category to the total.

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| **Taxa** | **Bilbao 35** | **Urdaibai 35** | **Plymouth L4** | **Stonehaven** |
| Siphonophores | 46.99 ± 6.74  *Muggiaea* (71.0)  Siphonophores (23.8)  *Muggiaea atlantica* (3.4)  *Muggiaea kochii* (1.4)  Sphaeronectidae (0.4) | 13.72 ± 3.26  *Muggiaea* (74.4)  Siphonophores (20.9)  *Muggiaea kochii* (2.8)  *Muggiaea atlantica* (1.8) | 79.39 ± 10.89  *Muggiaea* (47.2)  Siphonophores (41.8)  *Muggiaea atlantica* (10.3)  Other species (0.6) | 8.87 ± 2.29  Diphyidae (51.8)  *Muggiaea atlantica* (47.9)  Other species (0.3) |
| Chaetognaths | 21.69 ± 4.63  Sagittidae (90.4)  *Parasagitta friderici* (9.6) | 6.95 ± 1.63  Sagittidae (94.8)  *Parasagitta friderici* (5.2) | 40.38 ± 3.52  Chaetognathes (86.6)  *Parasagitta setosa* (11.9)  *Parasagitta elegans* (1.5) | 20.54 ± 2.36  Sagittidae (81.6)  *Parasagitta elegans* (17.7)  Other chaetognaths (0.7) |
| Cladocerans | 264.66 ± 39.61  *Evadne* (58.0)  *Podon* (35.3)  *Penilia avirostris* (6.7) | 82.72 ± 17.52  *Evadne* (61.2)  *Podon* (25.7)  *Penilia avirostris* (13.1) | 171.46 ± 28.33  *Evadne* (74.6)  *Podon* (25.4)  *Penilia avirostris* (>0.01) | 37.19 ± 9.48  *Podon* (54.1)  *Evadne* (45.9) |
| Copepods | 2019.19 ± 174.23  *Acartia* (51.4)  PCPC-calanus (25.8)  *Oithona* (10.2)  Other copepods (4.0)  *Temora* (2.7)  *Centropages* (2.5)  *Oncaea* (2.3)  Calanidae (1.0)  Corycaeidae (0.2) | 2205.03 ± 395.01  *Acartia* (55.2)  PCPCalanus (23.1)  *Oithona* (9.0)  Other copepods (5.3)  *Oncaea* (3.4)  *Centropages* (1.7)  *Temora* (1.8)  Corycaeidae*s* (0.3)  Calanidae (0.2) | 2336.27 ± 110.17  PCPCalanus (33.1)  *Oithona* (17.6)  *Oncaea* (15.4)  *Temora* (9.3)  Other copepods (9.2)  *Acartia* (6.5)  Calanidae (3.8)  Corycaeidae (3.7)  *Centropages* (1.2) | 1356.88 ± 124.08  *Acartia* (41.0)  PCPCalanus (19.9)  *Oithona* (19.1)  *Temora* (10.9)  Calanidae (5.1)  *Centropages* (2.8  Other copepods (1.1)  *Oncaea* (0.1)  Corycaeidae (0.1) |
| Appendicularians | 197.43 ± 24.61  *Oikopleura* (67.4)  *Oikopleura dioica* (17.4)  *Fritillaria pellucida* (4.4)  *Fritillaria* (3.6)  *Fritillaria borealis* (2.8)  *Oikopleura fusiformis* (2.4)  *Oikopleura longicauda* (1.9)  *Fritillaria haplostoma* (0.02) | 80.69 ± 13.21  *Oikopleura* (77.5)  *Oikopleura dioica* (12.7)  *Oikopleura fusiformis* (3.9)  *Fritillaria* (2.6)  *Fritillaria pellucida* (2.0)  *Fritillaria borealis* (0.8)  *Oikopleura longicauda* (0.5) | 114.34 ± 12.49  Appendicularia | 134.75 ± 18.62  Appendicularia |
| Doliolids | 29.74 ± 6.65  *Doliolum nationalis* (67.0)  *Doliolum* (33.0) | 13.80 ± 5.02  *Doliolum nationalis* (61.0)  *Doliolum* (39.0) | 4.07 ± 1.67  Doliolidae | 0.05 ± 0.03  Doliolidae |

Table 2S. Mean density ± standard error (individuals m-3) and composition of the meroplankton groups considered in this study at Bilbao 35, Urdaibai 35, Plymouth L4 and Stonehaven. The value in parentheses is the contribution in percentage of each identified category to the total.

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| **Taxa** | **Bilbao 35** | **Urdaibai 35** | **Plymouth L4** | **Stonehaven** |
| Medusae | 15.24 ± 1.94  *Obelia* (37.0)  Medusae (22.2)  Hydromedusae (10.3)  *Lizzia blondina* (9.8)  *Sarsia* (8.8)  *Liriope tetraphylla* (7.8)  Anthomedusae (3.3)  Hydractiniidae (0.9) | 8.10 ± 1.81  *Lizzia blondina* (24.9)  *Obelia* (23.1)  Medusae (20.5)  *Sarsia* (12.8)  Hydromedusae (12.1)  *Liriope tetraphylla* (6.2) | 41.73 ± 7.88  *Obelia* (24.6)  Hydromedusae (21.9)  *Lizzia blondina* (19.4)  *Liriope tetraphylla* (16.2)  *Solmaris corona* (13.7)  *Aglantha digitale* (2.5)  Other medusae (1.6) | 2.91 ± 0.50  *Obelia* (43.6)  *Hybocodon prolifer* (14.7)  *Aglantha digitale* (13.4)  *Rathkea octopunctata* (10.4)  *Clytia hemisphaerica* (5.0)  *Lizzia blondina* (4.18)  Other medusae (3.5)  *Sarsia* (2.4)  *Corymorpha nutans* (1.7)  *Leuckartiara octona* (1.2) |
| Bryozoans | 3.15 ± 0.58  Cyphonaute | 4.28 ± 0.92  Cyphonaute | 16.29 ± 1.51  Cyphonaute | 43.31 ± 3.80  Cyphonaute |
| Gastropods | 74.10 ± 11.28  Gastropod veliger | 254.11 ± 60.55  Gastropod veliger | 63.57 ± 17.09  Gastropod veliger (81.2)  *Limacina retroversa* (18.5)  Other gastropods (0.3) | 81.37 ± 28.64  *Limacina. retroversa* (70.8)  Gastropod veliger (23.3), Gymnosomata (5.6)  Other gastropds (0.3) |
| Bivalves | 52.37 ± 8.92  Bivalve veliger | 45.72 ± 7.37  Bivalve veliger | 54.50 ± 9.93  Bivalve veliger | 86.67 ± 12.39  Bivalve veliger |
| Polychaetes | 7.85 ± 1.29  Spionidae larvae (68.6)  Polychaete larvae (15.7)  Magelonidae larvae (5.6)  Sabellariidae larvae (4.0)  Polynoidae larvae (3.2)  Aphroditidae larvae (2.7)  Other polychaetes (0.2) | 11.10 ± 1.61  Spionidae larvae (90.5)  Polychaete larvae (2.6)  Sabellariidae larvae (4.6)  Polynoidae larvae (1.2)  Other polychaetes (1.0) | 20.96 ± 1.97  Polychaete larvae (98.8)  *Tomopteris helgolandica* (1.2) | 124.37 ± 33.04  Polychaete larvae (99.4)  Other polychaetes (0.6) |
| Cirripedes | 1061.93 ± 138.88  Cirriped nauplius (95.7) and cypris (4.3) larvae | 314.41 ± 67.63  Cirriped nauplius (68.1) and cypris (31.9) larvae | 356.89 ± 69.82  Cirriped nauplius (93.4), cypris (6.6) and rhizocephalan (0.02) larvae | 55.55 ± 7.34  Cirriped nauplius (58.5) and cypris (41.5) larvae |
| Decapods | 26.06 ± 5.15  Brachiura (36.4)  Decapod (15.9)  Caridea (15.3)  Crangonidae (5.5)  Hyppolitidae (4.2)  *Processa* (4.0)  *Pisidia longicornis* (4.0)  Paguridea (3.4)  *Crangon crangon* (2.9)  *Athanas* (2.5)  Other decapods (2.3)  *Porcellana* (2.0)  Porcessidae (1.4) | 9.03 ± 1.78  Brachiura (63.7)  Decapod (11.5)  Caridea (11.1)  Crangonidae (6.8)  Other decapods (3.6)  *Phyllocheras* (1.1)  Alpheidae (1.1)  *Porcellana* (1.0) | 16.68 ± 1.11  Decapod (55.9)  Brachyura (30.6)  Porcellanid (6.3)  Other decapoda (1.9)  *Necora* (1.8)  Paguridae (1.7)  *Upogebia* (1.7) | 9.29 ± 1.01  Decapoda |
| Echinoderms | 4.80 ± 1.24  Ophiopluteus (61.5)  Echinopluteus (32.7)  Auricularia (5.8) | 1.15 ± 0.34  Ophiopluteus (45.9)  Echinopluteus (33.3)  Auricularia (11.7)  Brachiolaria (6.1)  Bipinnaria (2.9) | 106.26 ± 18.99  Echinoderm larvae (63.3)  Ophiopluteus (29.7)  Echinopluteus (4.0)  Auricularia (1.9)  Other echinodermata (1.1) | 47.17 ± 7.63  Echinodermata larvae |
| Pisces | 17.00 ± 4.12  *Engraulis encrasicolus* eggs and larvae (45.5)  Fish eggs and larvae (36.0)  Sardine eggs and larvae (18.5) | 2.40 ± 0.56  Fish eggs and larvae (89.6)  Sardine eggs and larvae (9.7)  *Engraulis encrasicolus* eggs and larvae (0.7) | 6.74 ± 0.57  Fish eggs and larvae (96.6)  Clupeidae (sardine) eggs and larvae (3.4) | 0.79 ± 0.12  Fish eggs and larvae (92.4)  Ammodytidae larvae (7.5)  Clupeidae (sardine) larvae (0.1) |

Table 3S. Mean density ± standard error (individuals m-3) and composition of cladoceran and copepod genera considered in this study at Bilbao 35, Urdaibai 35, Plymouth L4 and Stonehaven. The value in parentheses is the contribution in percentage of each identified category to the total.

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| **Taxa** | **Bilbao 35** | **Urdaibai 35** | **Plymouth L4** | **Stonehaven** |
| *Evadne* | 153.49 ± 30.56  *Evadne nordmanii* (75.9)  *Evadne spinifera* (12.8)  *Evadne* (10.6)  *Pseudoevadne tergestina* (0.7) | 50.64 ± 13.10  *Evadne nordmanii* (89.1)  *Evadne spinifera* (9.6)  *Evadne* (1.0)  *Pseudoevadne tergestina* (0.3) | 127.98 ± 25.15  *Evadne* | 17.06 ± 4.25  *Evadne nordmanni* |
| *Podon* | 93.51 ± 18.35  *Podon* (52.2)  *Podon intermedius* (47.8) | 21.26 ± 6.14  *Podon* (80.7)  *Podon intermedius* (19.3) | 43.48 ± 6.31  *Podon* | 20.14 ± 6.32  *Podon leuckartii* (57.3)  *Podon intermedius* (20.6)  *Pleopis polyphaemoides* (16.0)  *Podon* (6.1) |
| *Acartia* | 1036.97 ± 126.20  *Acartia clausi* (96.0)  *Acartia tonsa* (3.7)  Other *Acartia* (0.1) | 1217.33 ± 325.22  *Acartia clausi* (99.0)  Other *Acartia* (0.4) | 152.48 ± 19.68  *Acartia clausi* | 556.34 ± 82.28  *Acartia clausi* (99.8)  *Acartia longiremis* (0.2) |
| Calanidae | 20.02 ± 6.62  *Calanus* (93.7)  *Eucalanus* (3.7)  *Calanus helgolandicus* (2.5) | 4.78 ± 0.96  *Calanus* (83.2)  *Eucalanus* (10.5)  *Calanus helgolandicus* (6.4) | 89.48 ± 7.78  *Calanus helgolandicus* (96.8)  *Calanus* (3.0)  Other Calanidae (0.1) | 69.02 ± 9.62  *Calanus* (55.9)  *Calanus helgolandicus* (31.5)  *Calanus finmarchicus* (7.1)  Calanoida (5.6) |
| PCPCalanus | 520.24 ± 56.76  *Paracalanus* *parvus* (48.1)  P-calanus (33.6)  *Paracalanus* (12.2)  *Clausocalanus* (5.6)  Other PCPC (0.5) | 509.06 ± 95.83  *Paracalanus parvus* (43.6)  P-calanus (37.6)  *Paracalanus* (12.4)  *Clausocalanus* (5.8)  Other PCPC (0.5) | 774.23 ± 41.99  *Pseudocalanus elongatus* (36.4)  *Paracalanus parvus* (33.4)  Other PCPC (26.0)  *Clausocalanus* (3.6)  *Ctenocalanus vanus* (0.6) | 269.46 ± 19.41  *Pseudocalanus elongatus* (79.6)  *Paracalanus. parvus* (20.3)  Other PCPC (0.1) |
| *Centropages* | 50.50 ± 11.53  *Centropages typicus* (62.9)  *Centropages* (37.1) | 37.18 ± 10.70  *Centropages* (71.3)  *Centropages typicus* (28.7) | 29.00 ± 3.62  *Centropages typicus* (98.9)  *Centropages hamatus* (1.0)  *Centropages chierchiae* (0.02) | 37.50 ± 5.30  *Centropages. hamatus* (73.6)  *Centropages. typicus* (26.4) |
| *Temora* | 55.10 ± 11.05  *Temora stylifera* (67.1), *Temora* (16.6)  *Temora. longicornis* (16.3) | 40.53 ± 9.85  *Temora stylifera* (53.8)  *Temora longicornis* (29.4)  *Temora* (16.8) | 216.48 ± 30.04  *Temora longicornis* (99.9)  *Temora stylifera* (0.1) | 147.30 ± 16.36  *Temora longicornis* |
| *Oithona* | 205.21 ± 26.39  *Oithona nana* (52.2)  *Oithona. similis* (37.5)  *Oithona. plumifera* (6.5)  *Oithona* (2.2)  *Oithona. davisae* (1.6) | 199.18 ± 22.41  *Oithona similis* (62.0)  *Oithona nana* (29.9)  *Oithona plumifera* (5.9)  *Oithona* (1.6)  *Oithona davisae* (0.3) | 411.22 ± 35.80  *Oithona* | 259.21 ± 20.39  *Oithona* |
| *Oncaea* | 47.74 ± 14.05  *Oncaea media* (87.6)  *Oncaea* (12.3)  *Monothula subtilis* (0.1) | 74.87 ± 19.40  *Oncaea media* (89.7)  *Oncaea* (10.2)  *Monothul subtilis* (0.1) | 361.05 ± 32.76  *Oncaea* | 1.81 ± 0.23  *Oncaea* |
| *Corycaeus* | 3.45 ± 0.57  *Ditrichocorycaeus anglicus* | 5.99 ± 1.11  *Ditrichocorycaeus anglicus* | 87.45 ± 8.65  *Ditrichocorycaeus anglicus* | 1.25 ± 0.25  Corycaeidae |