HOKKAIDO UNIVERSITY

| | |
|---|---|
| Title | 4. The "Oshoro Maru" Cruise 215 to the Northwest Pacific Ocean in May 2010 |
| Citation | 海洋調査漁業試験要報, 54, 25-39 |
| Issue Date | 2012-03-30 |
| Doc URL | https://hdl.handle.net/2115/77162 |
| Type | dataset |
| File Information | Data.Rec.Oceanogr.Obs.Expl.Fish.54.25.pdf |

Hokkaido University Collection of Scholarly and Academic Papers : HUSCAP

4

# THE " OSHORO MARU " CRUISE 215 TO THE NORTHWEST PACIFIC OCEAN

IN MAY 2010

1. Cruise Itinerary

Cruise 215

| | | | |
|---|---|---|---|
| Departure from Hakodate | May | 9 | , 2010 |
| Start hydrographic research (OS10052) | | 10 | |
| Start Gillnet research (OSG1001) | | 12 | |
| Finish Gillnet research (OSG1004) | | 17 | |
| Finish hydrographic research (OS10067) | | 19 | |
| Return to Hakodate | | 21 | |

Total coverage 1991.5 miles

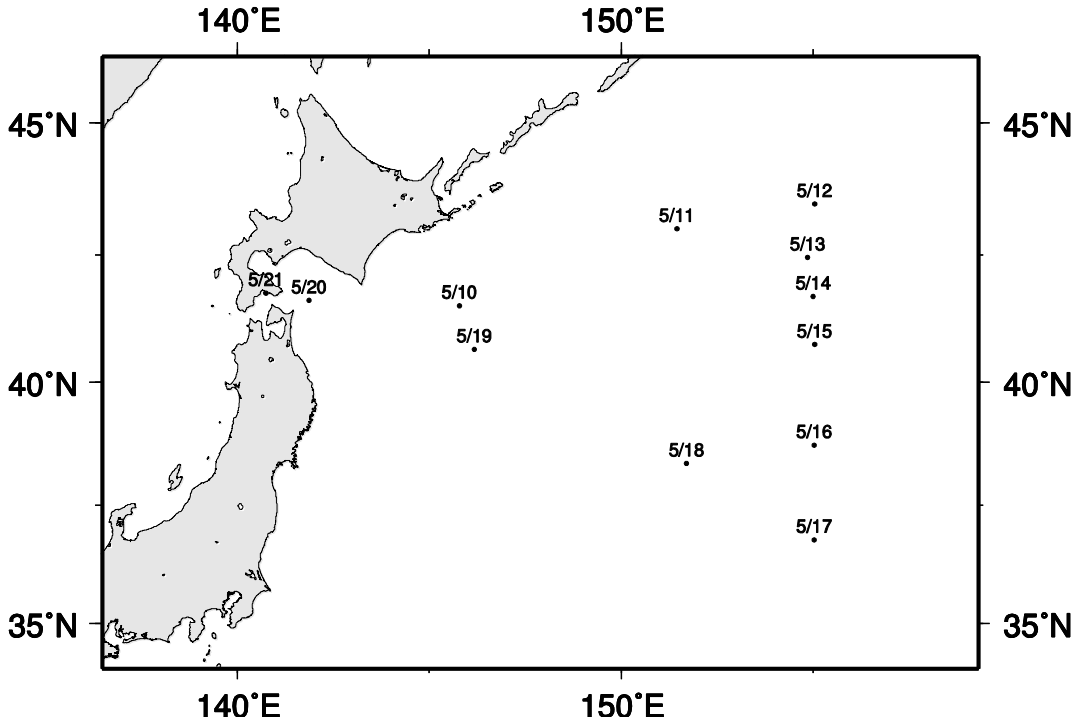


Figure 1. Noon position

2. Vessel Personnel

| | | | |
|---|---|---|---|
| Captain: | | Associate Professor | Shogo Takagi |
| Crew: | Chief Officer | Instructor | Yoshihiko Kamei |
| | First Officer | Instructor | Keiichiro Sakaoka |
| | Second Officer | Technical official | Naoki Hoshi |
| | Third Officer | Technical official | Takuzo Abe |
| | Science Officer | Technical official | Keiri Imai |
| | Chief Engineer | Instructor | Jyunichi Kimura |
| | And 22 men | | |

Cruise 215

Research Staff:

Associate Professor (Laboratory of Strategic Studies on Marine Bioresource Conservation and Management) Hideaki Kudo

| | |
|---|---|
| Research Fellow: | 1 Person |
| Teaching Assistant: | 1 Person |
| Graduate Students: | 1 Person |
| Under Graduate Students: | 8 Persons |
| | Total 12 persons |

3. Items of Research

| | | |
|---|---|---|
| Hydrographic observations: | Fig. 2 | Table 1,2 |
| Biological research for fishes caught by non-selective drift gillnets: | Fig. 3 | Table 3 - 8 |
| Salmon hook-and-line research: | Fig. 4 | Table 9 - 11 |
| Plankton sampling: | | Table 12 |

## 4. Data on Temperature, Salinity and Computed Dynamic Depth Anomaly

Hydrographic work on deck and the data processing were made by the deck officers, crews, research staff and cadets of the "Oshoro Maru". Temperature and salinity were measured by CTD (Seabird SBE9Plus and SBE-19). Dynamic computations were made using a desk-top computer aboard the "Oshoro Maru".

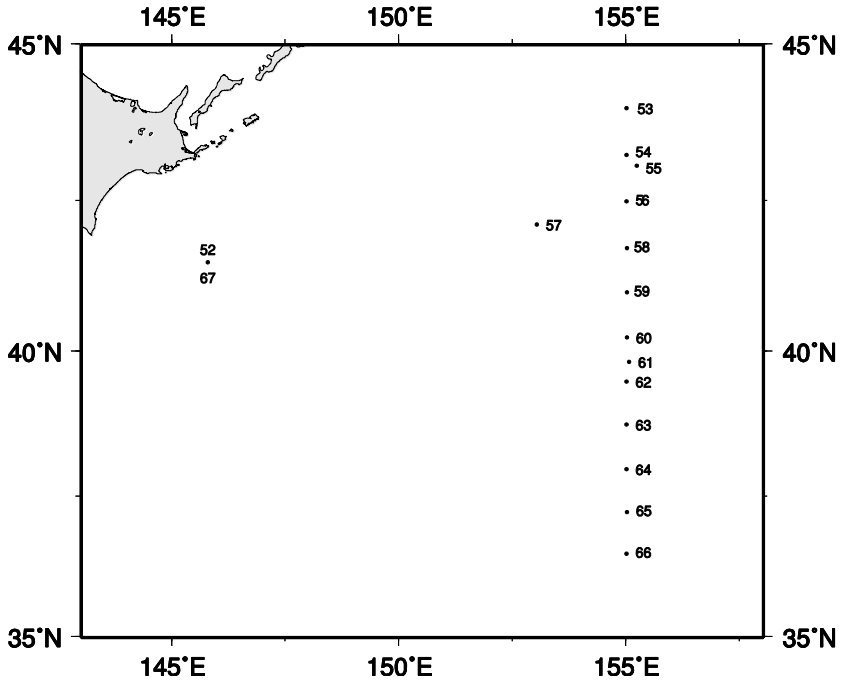


Figure 2. Oceanographic station

Table 1. List of Oceanographic Station

| Station | Lat.(*) | Long.(*) | Date | S.M.T | T.Z. | Depth | COL. | TR. | S.S.T. | WR. | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OS10052 | 41-30.1N | 145-46.8E | 5/10 | 0050 | 9 | 6950 | 5 | 5.5 | 3.5 | b | 9Plus-0769 |
| OS10053 | 44-00.0N | 155-00.0E | 5/11 | - | 10 | 5290 | - | - | - | o | 19Plus-4636 |
| OS10054 | 43-15.2N | 155-00.0E | 5/12 | - | 10 | 5490 | 4 | - | - | f | 19Plus-4636 |
| OS10055 | 43-04.9N | 155-13.3E | 5/12 | 0842 | 10 | 5190 | - | - | 8.3 | o | 9Plus-91588 |
| OS10056 | 42-29.9N | 155-00.0E | 5/13 | 0010 | 10 | 5155 | - | - | 7.1 | o | 19Plus-4636 |
| OS10057 | 42-07.5N | 153-01.5E | 5/13 | 0938 | 10 | 5322 | - | - | 5.6 | r | XCTD |
| OS10058 | 41-44.3N | 155-00.7E | 5/14 | 0304 | 10 | 5540 | 4 | 17.5 | 8.6 | o | 9Plus-91588 |
| OS10059 | 41-00.0N | 155-00.1E | 5/14 | 2311 | 10 | 5475 | 3 | 13.8 | 10.6 | c | 9Plus-91588 |
| OS10060 | 40-15.0N | 155-00.2E | 5/15 | 0452 | 10 | 5550 | 4 | 12.5 | 11.9 | c | 9Plus-91588 |
| OS10061 | 39-50.2N | 155-02.9E | 5/15 | 0901 | 10 | 5550 | - | - | 11.2 | c | 9Plus-91588 |
| OS10062 | 39-30.0N | 155-00.0E | 5/15 | 2015 | 10 | 5620 | 4 | 17.5 | 10.6 | c | 9Plus-91588 |
| OS10063 | 38-45.6N | 154-59.8E | 5/16 | 0135 | 10 | 5775 | 4 | 12.4 | 13.5 | c | 9Plus-91588 |
| OS10064 | 37-59.5N | 154-59.6E | 5/16 | 0743 | 10 | 5970 | - | - | 12.8 | c | 9Plus-91588 |
| OS10065 | 37-14.4N | 155-00.4E | 5/16 | 2341 | 10 | 5755 | 4 | 15.4 | 14.5 | o | XCTD-2 |
| OS10066 | 36-30.0N | 154-59.9E | 5/17 | 0340 | 10 | 5705 | 4 | 14 | 17.6 | bc | XCTD-2 |
| OS10067 | 41-30.1N | 145-46.8E | 5/19 | 0809 | 9 | 6867 | - | - | 4.3 | f | 9Plus-91588 |

(*) : Fixed position by Global Positioning System

# Table 2. Oceanographic data

Station OS10052
Longitude 145-46.8E
Latitude 41-30.1N
Depth(m) 6950

| Press. | Temp. | Sal. | SIG-T |
|---|---|---|---|
| 5 | 2.382 | 32.800 | 26.180 |
| 10 | 2.422 | 32.819 | 26.192 |
| 20 | 2.153 | 32.839 | 26.229 |
| 30 | 2.011 | 32.856 | 26.253 |
| 40 | 2.410 | 32.988 | 26.329 |
| 50 | 1.508 | 32.897 | 26.322 |
| 75 | 0.494 | 32.882 | 26.372 |
| 100 | 2.211 | 33.145 | 26.470 |
| 125 | 1.550 | 33.160 | 26.530 |
| 150 | 0.549 | 33.137 | 26.574 |
| 175 | 0.912 | 33.203 | 26.606 |
| 200 | 0.830 | 33.231 | 26.633 |
| 250 | 1.247 | 33.352 | 26.705 |
| 300 | 1.703 | 33.455 | 26.755 |
| 400 | 2.040 | 33.635 | 26.875 |
| 500 | 3.301 | 33.912 | 26.989 |
| 600 | 3.404 | 34.049 | 27.089 |
| 700 | 3.261 | 34.129 | 27.166 |
| 800 | 3.194 | 34.215 | 27.241 |
| 900 | 3.147 | 34.269 | 27.288 |
| 1000 | 2.968 | 34.320 | 27.345 |
| 1200 | 2.646 | 34.372 | 27.416 |
| 1500 | 2.443 | 34.468 | 27.509 |

Station OS10053
Longitude 155-00.0E
Latitude 44-00.0N
Depth(m) 5290

| Press. | Temp. | Sal. | SIG-T |
|---|---|---|---|
| 5 | 3.834 | 33.112 | 26.301 |
| 10 | 3.838 | 33.112 | 26.300 |
| 20 | 3.839 | 33.112 | 26.301 |
| 30 | 3.768 | 33.106 | 26.302 |
| 40 | 3.516 | 33.080 | 26.306 |
| 50 | 3.478 | 33.083 | 26.312 |
| 75 | 3.251 | 33.123 | 26.365 |
| 100 | 3.060 | 33.251 | 26.484 |
| 125 | 2.853 | 33.398 | 26.619 |
| 150 | 2.369 | 33.461 | 26.710 |
| 175 | 2.589 | 33.555 | 26.767 |
| 200 | 2.672 | 33.635 | 26.824 |
| 250 | 2.843 | 33.740 | 26.893 |
| 300 | 3.525 | 33.907 | 26.963 |
| 400 | 3.137 | 33.980 | 27.058 |
| 500 | 3.215 | 34.107 | 27.152 |
| 600 | 3.194 | 34.208 | 27.235 |
| 700 | 3.107 | 34.284 | 27.304 |
| 800 | 2.947 | 34.330 | 27.355 |
| 900 | 2.845 | 34.371 | 27.397 |
| 1000 | 2.713 | 34.408 | 27.438 |
| 1200 | 2.402 | 34.457 | 27.504 |
| 1500 | 2.196 | 34.527 | 27.577 |

Station OS10054
Longitude 155-00.0E
Latitude 43-15.2N
Depth(m) 5490

| Press. | Temp. | Sal. | SIG-T |
|---|---|---|---|
| 5 | 5.245 | 33.364 | 26.351 |
| 10 | 5.250 | 33.364 | 26.350 |
| 20 | 5.197 | 33.366 | 26.357 |
| 30 | 5.130 | 33.372 | 26.370 |
| 40 | 5.078 | 33.390 | 26.390 |
| 50 | 5.072 | 33.399 | 26.398 |
| 75 | 4.932 | 33.443 | 26.449 |
| 100 | 5.232 | 33.542 | 26.493 |
| 125 | 5.336 | 33.578 | 26.509 |
| 150 | 5.308 | 33.598 | 26.528 |
| 175 | 4.589 | 33.612 | 26.620 |
| 200 | 3.981 | 33.635 | 26.702 |
| 250 | 3.153 | 33.658 | 26.800 |
| 300 | 3.211 | 33.735 | 26.856 |
| 400 | 3.506 | 33.909 | 26.967 |
| 500 | 3.962 | 34.122 | 27.092 |
| 600 | 3.228 | 34.137 | 27.175 |
| 700 | 3.060 | 34.210 | 27.249 |
| 800 | 3.157 | 34.309 | 27.319 |
| 900 | 2.940 | 34.344 | 27.367 |
| 1000 | 2.762 | 34.389 | 27.418 |
| 1200 | 2.527 | 34.449 | 27.487 |
| 1500 | 2.270 | 34.518 | 27.564 |

Station OS10055
Longitude 155-13.3E
Latitude 43-04.9N
Depth(m) 5190

| Press. | Temp. | Sal. | SIG-T |
|---|---|---|---|
| 5 | 8.198 | 33.897 | 26.378 |
| 10 | 8.191 | 33.895 | 26.377 |
| 20 | 8.189 | 33.901 | 26.385 |
| 30 | 7.491 | 33.791 | 26.398 |
| 40 | 6.611 | 33.651 | 26.408 |
| 50 | 6.641 | 33.660 | 26.411 |
| 75 | 6.284 | 33.615 | 26.423 |
| 100 | 6.559 | 33.737 | 26.483 |
| 125 | 5.951 | 33.647 | 26.490 |
| 150 | 6.392 | 33.757 | 26.520 |
| 175 | 5.759 | 33.746 | 26.592 |
| 200 | 4.727 | 33.694 | 26.670 |
| 250 | 4.562 | 33.826 | 26.793 |
| 300 | 3.658 | 33.784 | 26.853 |
| 400 | 3.491 | 33.907 | 26.967 |
| 500 | 3.394 | 34.009 | 27.058 |
| 600 | 3.276 | 34.104 | 27.145 |
| 700 | 3.108 | 34.187 | 27.226 |
| 800 | 3.156 | 34.285 | 27.300 |
| 900 | 2.929 | 34.330 | 27.356 |
| 1000 | 2.800 | 34.372 | 27.402 |
| 1200 | 2.596 | 34.441 | 27.474 |
| 1500 | 2.290 | 34.509 | 27.555 |

Station OS10056
Longitude 155-00.0E
Latitude 42-29.9N
Depth(m) 5155

| Press. | Temp. | Sal. | SIG-T |
|---|---|---|---|
| 5 | 6.731 | 33.701 | 26.432 |
| 10 | 6.728 | 33.701 | 26.432 |
| 20 | 6.728 | 33.701 | 26.432 |
| 30 | 6.728 | 33.701 | 26.432 |
| 40 | 6.638 | 33.700 | 26.443 |
| 50 | 6.535 | 33.713 | 26.467 |
| 75 | 6.097 | 33.704 | 26.517 |
| 100 | 6.257 | 33.759 | 26.539 |
| 125 | 6.201 | 33.756 | 26.544 |
| 150 | 6.138 | 33.751 | 26.548 |
| 175 | 5.861 | 33.723 | 26.561 |
| 200 | 5.671 | 33.708 | 26.572 |
| 250 | 4.891 | 33.753 | 26.699 |
| 300 | 4.087 | 33.757 | 26.788 |
| 400 | 3.888 | 33.889 | 26.914 |
| 500 | 3.738 | 34.018 | 27.031 |
| 600 | 3.779 | 34.147 | 27.130 |
| 700 | 3.601 | 34.229 | 27.213 |
| 800 | 3.347 | 34.299 | 27.293 |
| 900 | 3.156 | 34.340 | 27.344 |
| 1000 | 2.866 | 34.371 | 27.395 |
| 1200 | 2.608 | 34.432 | 27.466 |
| 1500 | 2.270 | 34.504 | 27.552 |

Station OS10057
Longitude 153-01.5E
Latitude 42-07.5N
Depth(m) 5322

| Press. | Temp. | Sal. | SIG-T |
|---|---|---|---|
| 5 | 5.623 | 33.132 | 26.123 |
| 10 | 5.623 | 33.141 | 26.130 |
| 20 | 5.613 | 33.155 | 26.142 |
| 30 | 6.463 | 33.565 | 26.360 |
| 40 | 6.632 | 33.634 | 26.392 |
| 50 | 5.994 | 33.579 | 26.431 |
| 75 | 4.251 | 33.391 | 26.481 |
| 100 | 4.182 | 33.460 | 26.543 |
| 125 | 3.824 | 33.479 | 26.594 |
| 150 | 3.172 | 33.502 | 26.674 |
| 200 | 5.469 | 33.943 | 26.783 |
| 250 | 3.979 | 33.812 | 26.843 |
| 300 | 2.878 | 33.761 | 26.907 |
| 400 | 3.713 | 34.015 | 27.032 |
| 500 | 3.206 | 34.078 | 27.130 |
| 600 | 3.352 | 34.234 | 27.241 |
| 700 | 3.110 | 34.297 | 27.314 |
| 800 | 2.908 | 34.340 | 27.367 |
| 900 | 2.782 | 34.385 | 27.414 |
| 1000 | 2.637 | 34.428 | 27.461 |

Station OS10058
Longitude 155-00.7E
Latitude 41-44.3N
Depth(m) 5540

| Press. | Temp. | Sal. | SIG-T |
|---|---|---|---|
| 5 | 8.757 | 33.901 | 26.296 |
| 10 | 8.725 | 33.896 | 26.297 |
| 20 | 8.532 | 33.879 | 26.313 |
| 30 | 8.080 | 33.845 | 26.355 |
| 40 | 7.405 | 33.825 | 26.437 |
| 50 | 6.576 | 33.708 | 26.458 |
| 75 | 6.108 | 33.686 | 26.501 |
| 100 | 6.184 | 33.723 | 26.520 |
| 125 | 5.969 | 33.698 | 26.528 |
| 150 | 5.744 | 33.673 | 26.536 |
| 175 | 5.740 | 33.691 | 26.550 |
| 200 | 5.881 | 33.761 | 26.588 |
| 250 | 4.899 | 33.767 | 26.709 |
| 300 | 4.100 | 33.766 | 26.794 |
| 400 | 4.463 | 34.003 | 26.944 |
| 500 | 3.906 | 34.066 | 27.053 |
| 600 | 3.661 | 34.144 | 27.140 |
| 700 | 3.586 | 34.243 | 27.225 |
| 800 | 3.259 | 34.274 | 27.282 |
| 900 | 3.057 | 34.319 | 27.336 |
| 1000 | 2.874 | 34.363 | 27.388 |
| 1200 | 2.692 | 34.439 | 27.465 |
| 1500 | 2.326 | 34.503 | 27.547 |

Station OS10059
Longitude 155-00.1E
Latitude 41-00.0N
Depth(m) 5475

| Press. | Temp. | Sal. | SIG-T |
|---|---|---|---|
| 5 | 10.521 | 34.096 | 26.156 |
| 10 | 10.483 | 34.098 | 26.165 |
| 20 | 10.452 | 34.093 | 26.166 |
| 30 | 10.419 | 34.090 | 26.170 |
| 40 | 9.571 | 33.968 | 26.217 |
| 50 | 8.417 | 33.847 | 26.306 |
| 75 | 7.514 | 33.781 | 26.387 |
| 100 | 7.488 | 33.837 | 26.434 |
| 125 | 6.249 | 33.672 | 26.472 |
| 150 | 6.435 | 33.740 | 26.501 |
| 175 | 5.980 | 33.721 | 26.545 |
| 200 | 5.507 | 33.699 | 26.585 |
| 250 | 5.122 | 33.797 | 26.708 |
| 300 | 4.075 | 33.748 | 26.783 |
| 400 | 4.554 | 33.980 | 26.916 |
| 500 | 4.418 | 34.077 | 27.008 |
| 600 | 3.852 | 34.128 | 27.108 |
| 700 | 3.798 | 34.233 | 27.197 |
| 800 | 3.470 | 34.296 | 27.279 |
| 900 | 3.230 | 34.335 | 27.333 |
| 1000 | 3.016 | 34.377 | 27.387 |
| 1200 | 2.623 | 34.428 | 27.462 |
| 1500 | 2.315 | 34.506 | 27.550 |

Station OS10060
Longitude 155-00.2E
Latitude 40-15.0N
Depth(m) 5550

| Press. | Temp. | Sal. | SIG-T |
|---|---|---|---|
| 5 | 11.748 | 34.275 | 26.074 |
| 10 | 11.710 | 34.275 | 26.080 |
| 20 | 11.646 | 34.278 | 26.095 |
| 30 | 11.634 | 34.278 | 26.097 |
| 40 | 11.629 | 34.278 | 26.098 |
| 50 | 11.619 | 34.278 | 26.100 |
| 75 | 11.162 | 34.256 | 26.167 |
| 100 | 10.825 | 34.232 | 26.209 |
| 125 | 10.477 | 34.190 | 26.237 |
| 150 | 10.151 | 34.164 | 26.273 |
| 175 | 9.689 | 34.114 | 26.313 |
| 200 | 9.326 | 34.079 | 26.344 |
| 250 | 7.976 | 33.945 | 26.449 |
| 300 | 7.077 | 33.959 | 26.588 |
| 400 | 5.026 | 33.880 | 26.784 |
| 500 | 4.109 | 33.930 | 26.924 |
| 600 | 4.037 | 34.064 | 27.038 |
| 700 | 3.925 | 34.206 | 27.162 |
| 800 | 3.554 | 34.267 | 27.248 |
| 900 | 3.252 | 34.304 | 27.307 |
| 1000 | 3.073 | 34.355 | 27.364 |
| 1200 | 2.709 | 34.425 | 27.452 |
| 1500 | 2.339 | 34.499 | 27.543 |

Station OS10061
Longitude 155-02.9E
Latitude 39-50.2N
Depth(m) 5550

| Press. | Temp. | Sal. | SIG-T |
|---|---|---|---|
| 5 | 11.186 | 34.212 | 26.128 |
| 10 | 11.181 | 34.214 | 26.130 |
| 20 | 11.165 | 34.212 | 26.132 |
| 30 | 11.072 | 34.212 | 26.149 |
| 40 | 11.072 | 34.214 | 26.150 |
| 50 | 11.061 | 34.212 | 26.151 |
| 75 | 10.442 | 34.135 | 26.201 |
| 100 | 7.729 | 33.798 | 26.369 |
| 125 | 6.506 | 33.714 | 26.472 |
| 150 | 6.007 | 33.662 | 26.495 |
| 175 | 6.122 | 33.690 | 26.502 |
| 200 | 6.012 | 33.690 | 26.516 |
| 250 | 5.857 | 33.772 | 26.600 |
| 300 | 4.973 | 33.769 | 26.702 |
| 400 | 3.907 | 33.812 | 26.851 |
| 500 | 4.077 | 33.969 | 26.958 |
| 600 | 4.110 | 34.138 | 27.089 |
| 700 | 3.786 | 34.201 | 27.172 |
| 800 | 3.368 | 34.269 | 27.267 |
| 900 | 3.152 | 34.320 | 27.328 |
| 1000 | 2.994 | 34.352 | 27.368 |
| 1200 | 2.657 | 34.424 | 27.455 |
| 1500 | 2.352 | 34.503 | 27.545 |

Station OS10062
Longitude 155-00.0E
Latitude 39-30.0N
Depth(m) 5620

| Press. | Temp. | Sal. | SIG-T |
|---|---|---|---|
| 5 | 10.439 | 34.113 | 26.184 |
| 10 | 10.440 | 34.113 | 26.184 |
| 20 | 10.444 | 34.114 | 26.184 |
| 30 | 10.346 | 34.094 | 26.186 |
| 40 | 10.024 | 34.059 | 26.213 |
| 50 | 10.018 | 34.060 | 26.215 |
| 75 | 8.944 | 34.039 | 26.375 |
| 100 | 8.576 | 34.015 | 26.413 |
| 125 | 7.580 | 33.890 | 26.463 |
| 150 | 6.762 | 33.780 | 26.490 |
| 175 | 6.283 | 33.744 | 26.525 |
| 200 | 6.484 | 33.816 | 26.555 |
| 250 | 6.108 | 33.874 | 26.649 |
| 300 | 5.393 | 33.885 | 26.746 |
| 400 | 4.350 | 33.924 | 26.894 |
| 500 | 4.071 | 34.036 | 27.012 |
| 600 | 3.849 | 34.136 | 27.114 |
| 700 | 3.711 | 34.224 | 27.198 |
| 800 | 3.424 | 34.279 | 27.270 |
| 900 | 3.205 | 34.322 | 27.325 |
| 1000 | 3.057 | 34.368 | 27.375 |
| 1200 | 2.717 | 34.429 | 27.455 |
| 1500 | 2.326 | 34.505 | 27.549 |

Station OS10063
Longitude 154-59.8E
Latitude 38-45.6N
Depth(m) 5775

| Press. | Temp. | Sal. | SIG-T |
|---|---|---|---|
| 5 | 13.476 | 34.417 | 25.845 |
| 10 | 13.403 | 34.414 | 25.858 |
| 20 | 13.311 | 34.411 | 25.874 |
| 30 | 13.276 | 34.407 | 25.878 |
| 40 | 13.248 | 34.402 | 25.880 |
| 50 | 13.213 | 34.397 | 25.883 |
| 75 | 13.121 | 34.384 | 25.892 |
| 100 | 11.905 | 34.272 | 26.042 |
| 125 | 10.935 | 34.193 | 26.159 |
| 150 | 10.374 | 34.180 | 26.247 |
| 175 | 9.880 | 34.132 | 26.294 |
| 200 | 9.624 | 34.109 | 26.319 |
| 250 | 8.362 | 33.977 | 26.416 |
| 300 | 6.884 | 33.810 | 26.497 |
| 400 | 4.735 | 33.833 | 26.780 |
| 500 | 4.953 | 34.030 | 26.912 |
| 600 | 4.413 | 34.139 | 27.058 |
| 700 | 4.069 | 34.208 | 27.149 |
| 800 | 3.721 | 34.277 | 27.239 |
| 900 | 3.410 | 34.333 | 27.315 |
| 1000 | 3.144 | 34.375 | 27.373 |
| 1200 | 2.646 | 34.425 | 27.458 |
| 1500 | 2.383 | 34.497 | 27.537 |

Station OS10064
Longitude 154-59.6E
Latitude 37-59.5N
Depth(m) 5970

| Press. | Temp. | Sal. | SIG-T |
|---|---|---|---|
| 5 | 12.888 | 34.304 | 25.876 |
| 10 | 12.876 | 34.303 | 25.878 |
| 20 | 12.820 | 34.302 | 25.888 |
| 30 | 12.383 | 34.279 | 25.956 |
| 40 | 12.103 | 34.266 | 26.000 |
| 50 | 12.047 | 34.261 | 26.007 |
| 75 | 10.857 | 34.211 | 26.187 |
| 100 | 10.594 | 34.207 | 26.230 |
| 125 | 10.183 | 34.159 | 26.264 |
| 150 | 9.357 | 34.069 | 26.332 |
| 175 | 8.745 | 34.009 | 26.382 |
| 200 | 8.404 | 33.978 | 26.411 |
| 250 | 7.728 | 33.898 | 26.449 |
| 300 | 6.386 | 33.857 | 26.600 |
| 400 | 4.526 | 33.843 | 26.811 |
| 500 | 4.512 | 34.006 | 26.941 |
| 600 | 4.359 | 34.124 | 27.051 |
| 700 | 3.986 | 34.191 | 27.144 |
| 800 | 3.603 | 34.265 | 27.242 |
| 900 | 3.327 | 34.314 | 27.307 |
| 1000 | 3.039 | 34.354 | 27.366 |
| 1200 | 2.758 | 34.430 | 27.452 |
| 1500 | 2.380 | 34.502 | 27.542 |

Station OS10065
Longitude 155-00.4E
Latitude 37-14.4N
Depth(m) 5755

| Press. | Temp. | Sal. | SIG-T |
|---|---|---|---|
| 5 | 14.477 | 34.405 | 25.627 |
| 10 | 14.455 | 34.427 | 25.649 |
| 20 | 14.441 | 34.437 | 25.659 |
| 30 | 14.415 | 34.437 | 25.665 |
| 40 | 14.390 | 34.436 | 25.670 |
| 50 | 14.334 | 34.436 | 25.681 |
| 75 | 13.687 | 34.390 | 25.781 |
| 100 | 12.299 | 34.264 | 25.961 |
| 125 | 11.547 | 34.224 | 26.072 |
| 150 | 11.012 | 34.204 | 26.154 |
| 200 | 10.784 | 34.210 | 26.199 |
| 250 | 10.510 | 34.189 | 26.231 |
| 300 | 9.778 | 34.096 | 26.284 |
| 400 | 7.353 | 33.971 | 26.559 |
| 500 | 5.340 | 33.942 | 26.797 |
| 600 | 4.421 | 34.002 | 26.948 |
| 700 | 4.193 | 34.126 | 27.071 |
| 800 | 3.822 | 34.207 | 27.174 |
| 900 | 3.493 | 34.270 | 27.256 |
| 1000 | 3.223 | 34.314 | 27.317 |
| 1200 | 2.778 | 34.418 | 27.440 |
| 1500 | 2.361 | 34.508 | 27.548 |

Station OS10066
Longitude 154-59.9E
Latitude 36-30.0N
Depth(m) 5705

| Press. | Temp. | Sal. | SIG-T |
|---|---|---|---|
| 5 | 17.582 | 34.631 | 25.093 |
| 10 | 17.532 | 34.651 | 25.120 |
| 20 | 17.510 | 34.656 | 25.129 |
| 30 | 17.501 | 34.660 | 25.134 |
| 40 | 17.492 | 34.668 | 25.143 |
| 50 | 17.295 | 34.654 | 25.179 |
| 75 | 17.098 | 34.636 | 25.213 |
| 100 | 16.162 | 34.585 | 25.392 |
| 125 | 15.358 | 34.529 | 25.531 |
| 150 | 14.874 | 34.521 | 25.631 |
| 200 | 14.016 | 34.451 | 25.760 |
| 250 | 12.245 | 34.326 | 26.019 |
| 300 | 10.471 | 34.176 | 26.228 |
| 400 | 8.236 | 34.060 | 26.501 |
| 500 | 5.893 | 33.946 | 26.733 |
| 600 | 4.846 | 33.969 | 26.875 |
| 700 | 4.488 | 34.114 | 27.030 |
| 800 | 4.021 | 34.205 | 27.152 |
| 900 | 3.592 | 34.275 | 27.251 |
| 1000 | 3.301 | 34.349 | 27.338 |
| 1200 | 2.868 | 34.421 | 27.435 |
| 1500 | 2.412 | 34.521 | 27.554 |

Station OS10067
Longitude 145-46.8E
Latitude 41-30.1N
Depth(m) 6867

| Press. | Temp. | Sal. | SIG-T |
|---|---|---|---|
| 5 | 3.796 | 32.828 | 26.078 |
| 10 | 3.793 | 32.828 | 26.079 |
| 20 | 2.688 | 32.848 | 26.194 |
| 30 | 1.668 | 32.868 | 26.288 |
| 40 | 1.729 | 32.896 | 26.306 |
| 50 | 1.387 | 32.898 | 26.331 |
| 75 | 0.670 | 32.977 | 26.438 |
| 100 | 0.442 | 33.041 | 26.502 |
| 125 | 0.499 | 33.094 | 26.542 |
| 150 | 0.758 | 33.160 | 26.580 |
| 175 | 0.944 | 33.225 | 26.621 |
| 200 | 1.238 | 33.293 | 26.658 |
| 250 | 1.521 | 33.409 | 26.732 |
| 300 | 1.849 | 33.508 | 26.787 |
| 400 | 2.034 | 33.647 | 26.885 |
| 500 | 2.637 | 33.830 | 26.983 |
| 600 | 3.322 | 34.018 | 27.071 |
| 700 | 3.256 | 34.118 | 27.157 |
| 800 | 3.171 | 34.196 | 27.228 |
| 900 | 3.004 | 34.260 | 27.294 |
| 1000 | 2.844 | 34.315 | 27.352 |
| 1200 | 2.630 | 34.394 | 27.434 |
| 1500 | 2.307 | 34.469 | 27.522 |

5. Data on drift gillnet research

Four gillnet researches were performed during this cruise. The operations were supervised by the captain, and were conducted by deck officers, crews and research staff.

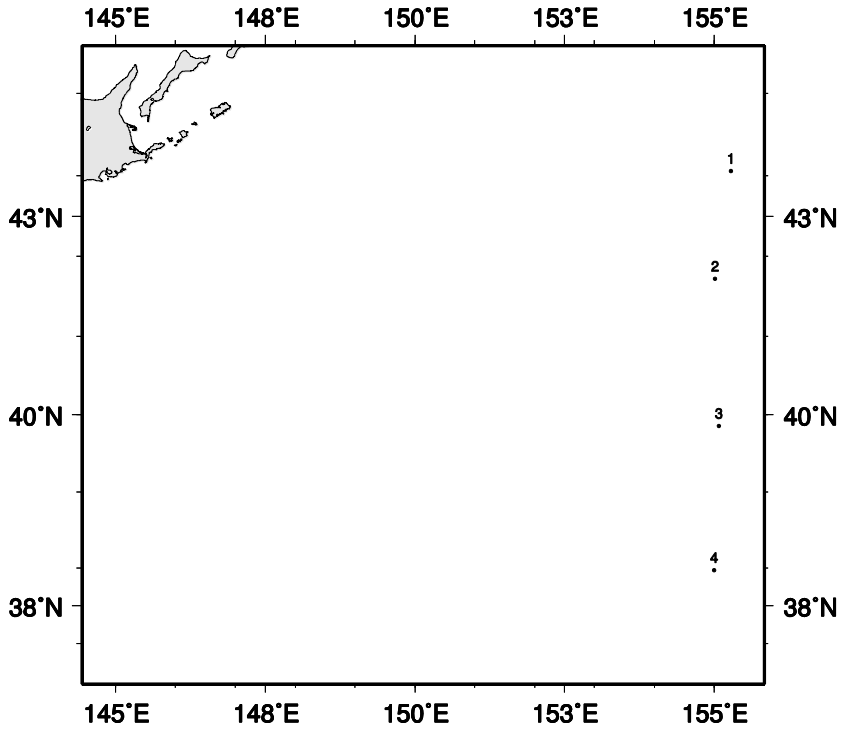


Figure 3. Locations of drift gillnet research

Table 3. Data on drift gillnet research

| No. of research | Date and Time (S.M.T.) Net set | | Net haul | | T.D. | Position Lat.(N) | Long. | | D.D. | Bottom depth(m) | Wr | Wind | S.T. (℃) | Tr (m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OSG1001 | 13-May | 1745- | 14-May | 0440- | 10 | 43-04.0 | 155-16.0 | (E) | 275 | 5245 | o | ESE-5 | 8.1 | - |
| OSG1002 | 14-May | 1745- | 15-May | 0423- | 10 | 41-44.0 | 155-00.0 | (E) | 165 | 5548 | o | NNW-5 | 7.8 | - |
| OSG1003 | 15-May | 1810- | 16-May | 0420- | 10 | 39-52.0 | 155-04.0 | (E) | 30 | 5500 | d | North-5 | 11.2 | - |
| OSG1004 | 16-May | 1850- | 17-May | 0423- | 10 | 37-59.0 | 154-59.0 | (E) | 230 | 5970 | o | NNE-3 | 12.8 | - |

T.D.: Time Difference between Greenwich Mean Time (G.M.T.) and S.M.T. D.D : Direction of Drift toward
Wr.: Weather ( o: 100% clouded, f: 75-99% clouded, d: drizzling rain) S.T. : Surface temperature Tr : Transparency

Table 4. Nets composition

| No. of research | Mesh size (mm) 48 | 55 | 63 | 72 | 82 | 93 | 106 | 121 | 138 | 157 | 112 | 115 | 118 | 121 | 19 | 22 | 25 | 29 | 33 | 37 | 42 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OSG1001 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 3 | 3 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 49 |
| OSG1002 | 3 | 3 | 3 | 5 | 5 | 5 | 3 | 3 | 3 | 3 | 5 | 2 | 3 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 49 |
| OSG1003 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 49 |
| OSG1004 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 49 |

Table 5. Data on catch number of salmonids by drift gillnet research

Sockeye (catch number)

| No. of research | Mesh size (mm) | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 48 | 55 | 63 | 72 | 82 | 93 | 106 | 121 | 138 | 157 | 112 | 115 | 118 | 121 | 19 | 22 | 25 | 29 | 33 | 37 | 42 | Total |
| OSG1001 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OSG1002 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OSG1003 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OSG1004 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Chum (catch number)

| No. of research | Mesh size (mm) | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 48 | 55 | 63 | 72 | 82 | 93 | 106 | 121 | 138 | 157 | 112 | 115 | 118 | 121 | 19 | 22 | 25 | 29 | 33 | 37 | 42 | Total |
| OSG1001 | 0 | 0 | 1 | 0 | 2 | 3 | 10 | 12 | 0 | 1 | 17 | 16 | 11 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 80 |
| OSG1002 | 0 | 0 | 0 | 2 | 3 | 4 | 15 | 9 | 1 | 0 | 33 | 8 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 86 |
| OSG1003 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 5 | 3 | 1 | 2 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 |
| OSG1004 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Pink (catch number)

| No. of research | Mesh size (mm) | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 48 | 55 | 63 | 72 | 82 | 93 | 106 | 121 | 138 | 157 | 112 | 115 | 118 | 121 | 19 | 22 | 25 | 29 | 33 | 37 | 42 | Total |
| OSG1001 | 0 | 0 | 4 | 74 | 54 | 16 | 2 | 1 | 0 | 1 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 156 |
| OSG1002 | 0 | 0 | 8 | 97 | 92 | 53 | 3 | 1 | 0 | 0 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 260 |
| OSG1003 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| OSG1004 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Coho (catch number)

| No. of research | Mesh size (mm) | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 48 | 55 | 63 | 72 | 82 | 93 | 106 | 121 | 138 | 157 | 112 | 115 | 118 | 121 | 19 | 22 | 25 | 29 | 33 | 37 | 42 | Total |
| OSG1001 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OSG1002 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OSG1003 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OSG1004 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Chinook (catch number)

| No. of research | Mesh size (mm) | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 48 | 55 | 63 | 72 | 82 | 93 | 106 | 121 | 138 | 157 | 112 | 115 | 118 | 121 | 19 | 22 | 25 | 29 | 33 | 37 | 42 | Total |
| OSG1001 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OSG1002 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OSG1003 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OSG1004 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Steelhead (catch number)

| No. of research | Mesh size (mm) | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 48 | 55 | 63 | 72 | 82 | 93 | 106 | 121 | 138 | 157 | 112 | 115 | 118 | 121 | 19 | 22 | 25 | 29 | 33 | 37 | 42 | Total |
| OSG1001 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OSG1002 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OSG1003 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OSG1004 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Table 6. Biological characteristics of salmonids caught by drift gillnet research

CHUM SALMON

| St. | Gear | F.L. (mm) | B.W. (gr) | Sex | G.W. (gr) | St. | Gear | F.L. (mm) | B.W. (gr) | Sex | G.W. (gr) | St. | Gear | F.L. (mm) | B.W. (gr) | Sex | G.W. (gr) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G01 | A112 | 560 | 2020 | M | 2 | G01 | C106 | 542 | 1854 | F | 45 | G02 | A118 | 512 | 1700 | F | 29 |
| G01 | A112 | 616 | 2890 | F | 35 | G01 | C106 | 592 | 2304 | M | 12 | G02 | A118 | 551 | 2025 | F | 53 |
| G01 | A112 | 511 | 1550 | M | 4 | G01 | C106 | 536 | 1603 | M | 9 | G02 | A118 | 550 | 2040 | F | 49 |
| G01 | A112 | 580 | 1860 | M | 2 | G01 | C106 | | | F | 37 | G02 | A118 | 523 | 1622 | M | 5 |
| G01 | A112 | 542 | 1880 | M | 7 | G01 | C121 | 540 | 1894 | F | 45 | G02 | A118 | 548 | 1836 | F | 62 |
| G01 | A112 | 532 | 1760 | M | 7 | G01 | C121 | 552 | 1987 | M | 5 | G02 | A118 | 592 | 2401 | F | 38 |
| G01 | A112 | 548 | 1910 | M | 7 | G01 | C121 | 530 | 1720 | M | 5 | G02 | A118 | 552 | 1996 | F | 42 |
| G01 | A112 | 556 | 1780 | F | 3 | G01 | C121 | 562 | 2056 | M | 10 | G02 | C072 | 530 | 1758 | F | 39 |
| G01 | A112 | 560 | 1836 | M | 2 | G01 | C121 | 576 | 2030 | M | 7 | G02 | C072 | 582 | 1911 | M | 6 |
| G01 | A112 | 544 | 1880 | F | 21 | G01 | C121 | 510 | 1600 | M | 6 | G02 | C082 | 541 | 1800 | F | 60 |
| G01 | A112 | 532 | 1620 | F | 15 | G01 | C121 | 536 | 1842 | M | 4 | G02 | C082 | 558 | 1980 | F | 66 |
| G01 | A112 | 528 | 1660 | F | 16 | G01 | C121 | 562 | 2407 | M | 21 | G02 | C082 | 528 | 1790 | F | 50 |
| G01 | A112 | 520 | 1890 | F | 31 | G01 | C121 | 564 | 2218 | M | 10 | G02 | C093 | 497 | 1480 | F | 31 |
| G01 | A112 | 520 | 1932 | F | 36 | G01 | C121 | 524 | 1530 | F | 24 | G02 | C093 | 540 | 1800 | M | 14 |
| G01 | A112 | 558 | 1900 | F | 34 | G01 | C121 | 536 | 1667 | F | 18 | G02 | C093 | 508 | 1480 | F | 45 |
| G01 | A112 | 570 | 2294 | M | 5 | G01 | C121 | 542 | 1780 | M | 5 | G02 | C106 | 538 | 2032 | F | 55 |
| G01 | A112 | 546 | 1920 | F | 32 | G01 | C157 | 532 | 1765 | M | 2 | G02 | C106 | 485 | 1200 | F | 10 |
| G01 | A115 | 600 | 2260 | M | 1 | G02 | A112 | 528 | 1719 | M | 5 | G02 | C106 | 492 | 1380 | M | 1 |
| G01 | A115 | 532 | 1560 | F | 27 | G02 | A112 | 478 | 1439 | M | 23 | G02 | C106 | 458 | 1109 | M | 2 |
| G01 | A115 | 542 | 1710 | F | 46 | G02 | A112 | 556 | 2123 | M | 15 | G02 | C106 | 536 | 1697 | F | 37 |
| G01 | A115 | 563 | 2000 | F | 42 | G02 | A112 | 542 | 1877 | F | 47 | G02 | C106 | 592 | 2306 | M | 4 |
| G01 | A115 | 556 | 1900 | F | 49 | G02 | A112 | 513 | 1766 | M | 7 | G02 | C106 | 532 | 1924 | F | 32 |
| G01 | A115 | 590 | 2400 | F | 32 | G02 | A112 | 533 | 1790 | F | 52 | G02 | C106 | 556 | 2024 | F | 23 |
| G01 | A115 | 591 | 2300 | F | 58 | G02 | A112 | 560 | 2011 | M | 5 | G02 | C106 | 542 | 1745 | F | 47 |
| G01 | A115 | 522 | 1780 | F | 25 | G02 | A112 | 560 | 1883 | M | 2 | G02 | C106 | 510 | 1776 | M | 6 |
| G01 | A115 | 560 | 2280 | F | 170 | G02 | A112 | 528 | 1769 | M | 61 | G02 | C106 | 536 | 1893 | M | 6 |
| G01 | A115 | 578 | 2050 | F | 65 | G02 | A112 | 530 | 2086 | F | 24 | G02 | C106 | 545 | 1822 | M | 2 |
| G01 | A115 | 514 | 1770 | F | 55 | G02 | A112 | 550 | 1913 | F | 3 | G02 | C106 | 586 | 2683 | M | 4 |
| G01 | A115 | 534 | 1730 | F | 42 | G02 | A112 | 496 | 1471 | M | 12 | G02 | C106 | 540 | 1748 | F | 38 |
| G01 | A115 | 575 | 1650 | F | 42 | G02 | A112 | 572 | 2130 | M | 23 | G02 | C106 | 550 | 1891 | M | 1 |
| G01 | A115 | 535 | 1730 | F | 43 | G02 | A112 | 528 | 1750 | M | 22 | G02 | C121 | 587 | 2227 | M | 3 |
| G01 | A115 | 530 | 1550 | F | 57 | G02 | A112 | 502 | 1654 | M | 32 | G02 | C121 | 524 | 1761 | F | 45 |
| G01 | A115 | 542 | 1660 | M | 6 | G02 | A112 | 532 | 1730 | F | 2 | G02 | C121 | 530 | 1756 | M | 3 |
| G01 | A118 | 596 | 2340 | F | 24 | G02 | A112 | 546 | 1850 | M | 11 | G02 | C121 | 603 | 2641 | F | 27 |
| G01 | A118 | 588 | 2200 | F | 33 | G02 | A112 | 564 | 2134 | M | 5 | G02 | C121 | 563 | 2149 | M | 5 |
| G01 | A118 | 570 | 2082 | M | 1 | G02 | A112 | 556 | 1987 | M | 51 | G02 | C121 | 604 | 2916 | M | 29 |
| G01 | A118 | 632 | 2720 | M | 5 | G02 | A112 | 550 | 1923 | M | 9 | G02 | C121 | 548 | 2140 | F | 54 |
| G01 | A118 | 542 | 1810 | F | 19 | G02 | A112 | 544 | 2355 | M | 8 | G02 | C121 | 536 | 2087 | F | 37 |
| G01 | A118 | 570 | 2132 | M | 10 | G02 | A112 | 570 | 2107 | M | 8 | G02 | C121 | 562 | 2059 | M | 2 |
| G01 | A118 | 580 | 2160 | F | 22 | G02 | A112 | 568 | 1995 | M | 7 | G02 | C138 | 592 | 2619 | F | 48 |
| G01 | A118 | 586 | 2391 | F | 50 | G02 | A112 | 523 | 1729 | M | 14 | G03 | A112 | 552 | 1843 | F | 18 |
| G01 | A118 | 554 | 1920 | M | 2 | G02 | A112 | 521 | 1851 | F | 41 | G03 | A112 | 554 | 2089 | M | 2 |
| G01 | A118 | 564 | 1950 | F | 26 | G02 | A112 | 479 | 1524 | F | 27 | G03 | A115 | 511 | 1621 | F | 32 |
| G01 | A121 | 498 | 1490 | F | 26 | G02 | A112 | 576 | 2247 | F | 28 | G03 | A115 | 550 | 2301 | F | 41 |
| G01 | A121 | 518 | 1728 | M | 8 | G02 | A112 | 580 | 2069 | M | 9 | G03 | A115 | 585 | 2204 | F | 31 |
| G01 | A121 | 532 | 1836 | M | 7 | G02 | A112 | 540 | 1937 | F | 40 | G03 | A118 | 565 | 2301 | M | 3 |
| G01 | A121 | 584 | 2066 | M | 6 | G02 | A112 | 530 | 1816 | M | 3 | G03 | A118 | 553 | 2213 | M | 5 |
| G01 | A121 | 540 | 1786 | F | 27 | G02 | A112 | 528 | 1822 | M | 7 | G03 | A121 | 547 | 2196 | F | 49 |
| G01 | A121 | 528 | 1800 | F | 38 | G02 | A112 | 484 | 1336 | 0 | | G03 | C093 | 558 | 2221 | F | 70 |
| G01 | A121 | 534 | 1920 | M | 12 | G02 | A115 | 528 | 1855 | F | 39 | G03 | C093 | 586 | 2703 | M | 34 |
| G01 | C063 | 536 | 1932 | M | 32 | G02 | A115 | 518 | 1833 | F | 40 | G03 | C106 | 563 | 2057 | F | 20 |
| G01 | C082 | 500 | 1540 | 0 | | G02 | A115 | 500 | 1715 | M | 5 | G03 | C106 | 521 | 2004 | M | 3 |
| G01 | C082 | 466 | 1200 | 0 | | G02 | A115 | 517 | 1937 | M | 6 | G03 | C121 | 528 | 1931 | F | 13 |
| G01 | C093 | 546 | 1830 | M | 5 | G02 | A115 | 572 | 2200 | F | 27 | G03 | C121 | 532 | 2077 | M | 6 |
| G01 | C093 | 548 | 1860 | M | 7 | G02 | A115 | 540 | 1904 | F | 70 | G03 | C121 | 663 | 3310 | M | 3 |
| G01 | C106 | | | M | 6 | G02 | A115 | 514 | 1717 | M | 5 | G03 | C121 | 568 | 2102 | M | 1 |
| G01 | C106 | 484 | 1312 | M | 2 | G02 | A115 | 578 | 2354 | M | 9 | G03 | C121 | 600 | 2682 | M | 2 |
| G01 | C106 | 548 | 1665 | M | 9 | G02 | A118 | 554 | 2083 | M | 6 | G03 | C138 | 564 | 2304 | M | 5 |
| G01 | C106 | 558 | 2032 | M | 18 | G02 | A118 | 504 | 1661 | F | 36 | G03 | C138 | 562 | 2228 | M | 3 |
| G01 | C106 | 588 | 2024 | M | 5 | G02 | A118 | 552 | 2392 | M | 11 | G03 | C138 | 606 | 3034 | M | 12 |
| G01 | C106 | 510 | 1810 | F | 60 | G02 | A118 | 546 | 1689 | M | 4 | G03 | C157 | 700 | 4338 | M | 6 |

Table 6. Biological characteristics of salmonids caught by drift gillnet research (continued)

PINK SALMON

| St. | Gear (mm) | F.L. (mm) | B.W. (gr) | Sex | G.W. (gr) | St. | Gear (mm) | F.L. (mm) | B.W. (gr) | Sex | G.W. (gr) | St. | Gear (mm) | F.L. (mm) | B.W. (gr) | Sex | G.W. (gr) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G01 | C072 | 350 | 451 | | | G01 | C082 | 410 | 700 | M | 4 | G02 | C072 | 341 | 357 | M | 1 |
| G01 | C072 | 372 | 573 | M | 4 | G01 | C082 | 388 | 618 | M | 2 | G02 | C072 | 381 | 522 | F | 9 |
| G01 | C072 | 380 | 616 | | | G01 | C082 | 374 | 612 | F | 18 | G02 | C072 | 368 | 453 | F | 9 |
| G01 | C072 | 370 | 550 | | | G01 | C082 | 380 | 604 | M | 3 | G02 | C072 | 388 | 637 | F | 5 |
| G01 | C072 | 378 | 531 | | | G01 | C082 | 344 | 460 | M | 1 | G02 | C072 | 362 | 467 | F | 5 |
| G01 | C072 | 360 | 482 | | | G01 | C082 | 382 | 608 | F | 22 | G02 | C072 | 346 | 385 | F | 8 |
| G01 | C072 | 388 | 688 | | | G01 | C082 | 390 | 671 | F | 13 | G02 | C072 | 406 | 654 | F | 8 |
| G01 | C072 | 408 | 733 | F | 12 | G01 | C082 | 392 | 626 | M | 5 | G02 | C072 | 392 | 616 | F | 7 |
| G01 | C072 | 324 | 402 | M | 1 | G01 | C082 | 558 | 524 | M | 5 | G02 | C072 | 402 | 656 | F | 7 |
| G01 | C072 | 336 | 398 | F | 4 | G01 | C082 | 360 | 516 | F | 39 | G02 | C072 | 397 | | M | 1 |
| G01 | C072 | 370 | 552 | M | 2 | G01 | C082 | 370 | 588 | F | 8 | G02 | C072 | 370 | 540 | M | 2 |
| G01 | C072 | 378 | 630 | | | G01 | C082 | 384 | 620 | F | 8 | G02 | C072 | 409 | 684 | M | 3 |
| G01 | C072 | 368 | 568 | | | G01 | C082 | 676 | 532 | F | 8 | G02 | C072 | 378 | 531 | F | 8 |
| G01 | C072 | 368 | 610 | | | G01 | C082 | 362 | 552 | F | 6 | G02 | C072 | 368 | 491 | M | 3 |
| G01 | C072 | 372 | 565 | | | G01 | C082 | 392 | 693 | M | 2 | G02 | C072 | 389 | 564 | F | 5 |
| G01 | C072 | 360 | 532 | | | G01 | C082 | 390 | 664 | F | 11 | G02 | C072 | 370 | 556 | F | 4 |
| G01 | C072 | 362 | 514 | | | G01 | C082 | 380 | 595 | M | 1 | G02 | C072 | 401 | 683 | F | 16 |
| G01 | C072 | 372 | 601 | | | G01 | C082 | 368 | 582 | M | 3 | G02 | C072 | 368 | 549 | M | 2 |
| G01 | C072 | 362 | 532 | | | G01 | C082 | 432 | 838 | M | 3 | G02 | C072 | 418 | 743 | F | 17 |
| G01 | C072 | 354 | 467 | | | G01 | C082 | 402 | 752 | F | 10 | G02 | C072 | 397 | 651 | F | 7 |
| G01 | C072 | 388 | 605 | | | G01 | C082 | 408 | 715 | M | 2 | G02 | C072 | 436 | | M | 5 |
| G01 | C072 | 342 | 472 | | | G01 | C082 | 382 | 619 | F | 10 | G02 | C072 | 368 | 524 | F | 7 |
| G01 | C072 | 388 | 614 | | | G01 | C082 | 394 | 710 | M | 2 | G02 | C072 | 354 | 414 | M | 1 |
| G01 | C072 | 404 | 702 | | | G01 | C082 | 392 | 615 | F | 11 | G02 | C072 | 383 | | F | 9 |
| G01 | C072 | 356 | 467 | | | G01 | C082 | 394 | 653 | M | 4 | G02 | C072 | 390 | 620 | F | 7 |
| G01 | C072 | 360 | 470 | | | G01 | C093 | | | M | 5 | G02 | C072 | 360 | 466 | F | 9 |
| G01 | C072 | 410 | 706 | | | G01 | C093 | | | M | 7 | G02 | C072 | 386 | 638 | F | 14 |
| G01 | C072 | 344 | 489 | | | G01 | C093 | 394 | 696 | M | 2 | G02 | C072 | 382 | 581 | F | 9 |
| G01 | C072 | 354 | 484 | | | G01 | C093 | 398 | 680 | M | 6 | G02 | C072 | 363 | 506 | M | 2 |
| G01 | C072 | 336 | 484 | | | G01 | C093 | 394 | 680 | M | 3 | G02 | C072 | 396 | 605 | M | 1 |
| G01 | C072 | 366 | 547 | | | G01 | C093 | 470 | 1160 | M | 5 | G02 | C072 | 361 | 363 | M | 2 |
| G01 | C072 | 392 | 615 | | | G01 | C093 | 410 | 782 | F | 14 | G02 | C072 | 374 | 433 | F | 7 |
| G01 | C072 | 350 | 471 | F | 5 | G01 | C093 | 448 | 955 | M | 7 | G02 | C072 | 388 | 575 | F | 18 |
| G01 | C072 | 368 | 617 | | | G01 | C093 | 372 | 694 | F | 21 | G02 | C072 | 406 | 582 | F | 13 |
| G01 | C072 | 404 | 732 | F | 13 | G01 | C093 | 446 | 840 | M | 5 | G02 | C072 | 426 | 855 | M | 3 |
| G01 | C072 | 362 | 482 | F | 6 | G01 | C093 | 386 | 660 | F | 13 | G02 | C072 | 396 | 650 | M | 5 |
| G01 | C072 | 364 | 568 | F | 8 | G01 | C093 | 382 | 621 | F | 13 | G02 | C072 | 348 | 400 | M | 3 |
| G01 | C072 | 366 | 463 | M | 2 | G01 | C093 | 426 | 625 | M | 5 | G02 | C072 | 382 | 520 | F | 5 |
| G01 | C072 | 384 | 620 | M | 3 | G01 | C093 | 376 | 638 | M | 5 | G02 | C072 | 398 | 620 | F | 7 |
| G01 | C072 | 360 | 551 | F | 8 | G01 | C093 | 420 | 808 | M | 6 | G02 | C072 | 388 | 656 | F | 2 |
| G01 | C072 | 384 | 547 | M | 3 | G01 | C093 | 400 | 695 | M | 5 | G02 | C072 | 346 | 420 | M | 3 |
| G01 | C072 | 368 | 527 | F | 8 | G01 | C106 | 440 | 976 | M | 6 | G02 | C072 | 368 | 560 | F | 12 |
| G01 | C072 | 402 | 694 | F | 12 | G01 | C106 | 386 | 607 | F | 10 | G02 | C072 | 412 | 720 | F | 22 |
| G01 | C072 | 348 | 476 | M | 2 | G01 | C121 | 374 | 570 | M | 4 | G02 | C072 | 363 | 460 | F | 11 |
| G01 | C072 | 398 | 660 | M | 4 | G01 | C157 | 402 | 688 | F | 10 | G02 | C072 | 383 | 530 | M | 4 |
| G01 | C072 | 372 | 471 | F | 8 | G02 | A112 | 456 | 1129 | M | 7 | G02 | C072 | 417 | 830 | F | 18 |
| G01 | C072 | 400 | 691 | M | 4 | G02 | A112 | 496 | 1423 | F | 7 | G02 | C082 | 405 | 669 | F | 6 |
| G01 | C072 | 366 | 520 | M | 2 | G02 | A112 | 398 | 710 | F | 13 | G02 | C082 | 368 | 515 | F | 2 |
| G01 | C072 | 394 | 647 | M | 4 | G02 | A115 | 399 | | M | 2 | G02 | C082 | 416 | 731 | M | 1 |
| G01 | C072 | 364 | 598 | F | 10 | G02 | A115 | 378 | 522 | M | 2 | G02 | C082 | 403 | | F | 11 |
| G01 | C072 | 358 | 503 | F | 10 | G02 | A118 | 400 | 682 | M | 6 | G02 | C082 | 395 | 618 | M | 1 |
| G01 | C072 | 364 | 528 | F | 8 | G02 | C063 | 358 | 463 | F | 5 | G02 | C082 | 382 | 616 | F | 9 |
| G01 | C072 | 354 | 490 | F | 4 | G02 | C063 | 372 | 519 | F | 6 | G02 | C082 | 398 | 807 | M | 3 |
| G01 | C082 | 358 | 532 | M | 2 | G02 | C063 | 355 | 446 | F | 3 | G02 | C082 | 414 | 705 | M | 1 |
| G01 | C082 | 360 | 546 | F | 16 | G02 | C063 | 336 | 405 | F | 1 | G02 | C082 | 401 | 663 | M | 2 |
| G01 | C082 | 384 | 586 | F | 11 | G02 | C063 | 336 | 397 | M | 1 | G02 | C082 | 370 | 557 | F | 10 |
| G01 | C082 | 382 | 609 | F | 8 | G02 | C072 | 378 | 528 | F | 11 | G02 | C082 | 442 | 868 | M | 3 |
| G01 | C082 | 358 | 542 | F | 6 | G02 | C072 | 363 | 542 | M | 1 | G02 | C082 | 392 | 574 | F | 6 |
| G01 | C082 | 336 | 462 | F | 12 | G02 | C072 | 396 | 635 | M | 3 | G02 | C082 | 370 | 545 | F | 6 |
| G01 | C082 | 430 | 816 | M | 1 | G02 | C072 | 362 | 533 | F | 16 | G02 | C082 | 432 | 815 | M | 2 |
| G01 | C082 | 380 | 612 | M | 3 | G02 | C072 | 391 | 554 | M | 2 | G02 | C082 | 370 | 443 | F | 6 |
| G01 | C082 | 376 | 695 | F | 11 | G02 | C072 | 376 | 488 | F | 3 | G02 | C082 | 382 | 599 | M | 2 |
| G01 | C082 | 358 | 542 | F | 7 | G02 | C072 | 408 | 697 | F | 15 | G02 | C082 | 400 | 633 | M | 2 |
| G01 | C082 | 384 | 620 | M | 2 | G02 | C072 | 340 | 424 | F | 5 | G02 | C082 | 404 | 676 | F | 14 |
| G01 | C082 | 370 | 584 | M | 2 | G02 | C072 | 395 | 630 | M | 2 | G02 | C082 | 358 | 507 | F | 3 |
| G01 | C082 | 424 | 790 | M | 2 | G02 | C072 | 346 | 416 | M | 2 | G02 | C082 | 376 | 630 | F | 10 |
| G01 | C082 | 388 | 674 | F | 5 | G02 | C072 | 367 | 523 | M | 6 | G02 | C082 | 395 | 719 | F | 14 |
| G01 | C082 | 364 | 546 | F | 4 | G02 | C072 | 358 | 504 | M | 1 | G02 | C082 | 367 | 607 | M | 3 |
| G01 | C082 | 400 | 702 | F | 24 | G02 | C072 | 374 | 507 | M | 2 | G02 | C082 | 384 | 651 | M | 2 |
| G01 | C082 | 400 | 620 | M | 2 | G02 | C072 | 388 | 604 | M | 6 | G02 | C082 | 382 | 505 | M | 1 |

Table 6. Biological characteristics of salmonids caught by drift gillnet research (continued)

PINK SALMON

| St. | Gear | F.L. (mm) | B.W. (gr) | Sex | G.W. (gr) | St. | Gear | F.L. (mm) | B.W. (gr) | Sex | G.W. (gr) | St. | Gear | F.L. (mm) | B.W. (gr) | Sex | G.W. (gr) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G02 | C082 | 391 | 691 | F | 23 | G02 | C082 | 386 | 573 | F | 10 | G02 | C093 | 422 | 760 | F | 12 |
| G02 | C082 | 420 | 702 | F | 5 | G02 | C082 | 402 | 708 | F | 21 | G02 | C093 | 406 | 780 | M | 2 |
| G02 | C082 | 382 | 605 | M | 5 | G02 | C082 | 369 | 557 | F | 10 | G02 | C093 | 396 | 710 | M | 2 |
| G02 | C082 | 420 | 755 | M | 7 | G02 | C082 | 377 | 555 | M | 2 | G02 | C093 | 402 | 640 | F | 10 |
| G02 | C082 | 390 | 679 | M | 2 | G02 | C082 | 396 | 654 | M | 2 | G02 | C093 | 391 | 600 | M | 5 |
| G02 | C082 | 395 | 665 | F | 10 | G02 | C093 | 409 | 700 | F | 13 | G02 | C093 | 409 | 680 | F | 13 |
| G02 | C082 | 408 | 754 | M | 4 | G02 | C093 | 429 | 720 | M | 6 | G02 | C093 | 410 | 700 | F | 16 |
| G02 | C082 | 462 | 1081 | M | 5 | G02 | C093 | 380 | 550 | F | 10 | G02 | C093 | 392 | 600 | F | 11 |
| G02 | C082 | 406 | 748 | M | 8 | G02 | C093 | 408 | 650 | F | 10 | G02 | C093 | 396 | 620 | F | 10 |
| G02 | C082 | 375 | 584 | M | 56 | G02 | C093 | 370 |  | F | 8 | G02 | C093 | 425 | 630 | M | 4 |
| G02 | C082 | 380 | 660 | F | 10 | G02 | C093 | 421 |  | F | 20 | G02 | C093 | 380 | 560 | M | 4 |
| G02 | C082 | 354 | 525 | F | 9 | G02 | C093 | 398 |  | M | 7 | G02 | C093 | 416 | 750 | F | 10 |
| G02 | C082 | 423 | 769 | M | 7 | G02 | C093 | 431 |  | M | 4 | G02 | C093 | 400 | 670 | F | 14 |
| G02 | C082 | 381 | 638 | F | 10 | G02 | C093 | 382 |  | F | 14 | G02 | C093 | 408 | 720 | M | 5 |
| G02 | C082 | 412 | 808 | F | 38 | G02 | C093 | 419 |  | F | 13 | G02 | C093 | 374 | 560 | F | 11 |
| G02 | C082 | 388 | 585 | F | 12 | G02 | C093 | 400 |  | M | 6 | G02 | C093 | 410 | 690 | M | 5 |
| G02 | C082 | 422 | 758 | M | 1 | G02 | C093 | 468 | 1060 | M | 9 | G02 | C093 | 408 | 700 | M | 7 |
| G02 | C082 | 405 | 694 | M | 2 | G02 | C093 | 402 | 680 | F | 10 | G02 | C093 | 470 | 1040 | M | 6 |
| G02 | C082 | 384 | 592 | M | 1 | G02 | C093 | 460 | 1060 | M | 8 | G02 | C093 | 414 | 700 | F | 14 |
| G02 | C082 | 377 | 633 | M | 6 | G02 | C093 | 402 | 640 | M | 4 | G02 | C106 | 432 | 925 | M | 2 |
| G02 | C082 | 380 | 560 | M | 1 | G02 | C093 | 405 | 840 | F | 20 | G02 | C106 | 420 | 857 | M | 5 |
| G02 | C082 | 410 | 712 | M | 3 | G02 | C093 | 406 | 660 | F | 15 | G02 | C106 | 450 | 937 | M | 3 |
| G02 | C082 | 393 | 696 | M | 3 | G02 | C093 | 428 | 780 | M | 5 | G02 | C121 | 393 | 642 | M | 3 |
| G02 | C082 | 408 | 705 | M | 5 | G02 | C093 | 424 | 780 | M | 4 | G03 | A112 | 469 | 1140 | M | 5 |
| G02 | C082 | 374 | 529 | F | 8 | G02 | C093 | 418 | 700 | M | 7 | G03 | A112 | 501 | 1541 | M | 4 |
| G02 | C082 | 410 | 750 | F | 16 | G02 | C093 | 400 | 680 | M | 3 | G03 | A112 | 502 | 1604 | M | 5 |
| G02 | C082 | 396 | 647 | F | 17 | G02 | C093 | 398 | 600 | F | 9 | G03 | C082 | 376 | 627 | F | 14 |
| G02 | C082 | 385 | 595 | F | 8 | G02 | C093 | 422 | 800 | M | 7 | G03 | C082 | 395 | 555 | M | 1 |
| G02 | C082 | 446 | 938 | M | 5 | G02 | C093 | 418 | 720 | F | 12 | G03 | C082 | 415 | 768 | F | 9 |
| G02 | C082 | 391 | 640 | F | 10 | G02 | C093 | 450 | 840 | M | 8 | G03 | C082 | 364 | 521 | F | 5 |
| G02 | C082 | 370 | 577 | F | 15 | G02 | C093 | 422 | 820 | F | 25 |  |  |  |  |  |  |

Table 7. The number of organisms caught by drift gillnet during the Oshoro maru Cruise # 215 in May, 2010.CPUE and (%) indicate mumerical catch per tan and percentage of total catch by C-gear gillnet at the station, respectively.

| Common name | Station / Gear | OSG 1001 | | | | | OSG 1002 | | | | | OSG 1003 | | | | | OSG 1004 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Scientific name | C CPUE | C (%) | A | F | Total | C CPUE | C (%) | A | F | Total | C CPUE | C (%) | A | F | Total | C CPUE | C (%) | A | F | Total |
| Sockeye salmon | *Oncorhynchus nerka* | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 |
| Chum salmon | *Oncorhynchus keta* | 29 | 1.0 (14.3) | 51 | 0 | 80 | 34 | 0.9 (9.5) | 52 | 0 | 86 | 13 | 0.4 (25.5) | 8 | 0 | 21 | 0 | 0.0 (0.0) | 0 | 0 | 0 |
| Pink salmon | *Oncorhynchus gorbuscha* | 152 | 5.1 (74.9) | 4 | 0 | 156 | 254 | 7.1 (70.9) | 6 | 0 | 260 | 4 | 0.1 (7.8) | 3 | 0 | 7 | 0 | 0.0 (0.0) | 0 | 0 | 0 |
| Coho salmon | *Oncorhynchus kisutch* | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 |
| Chinook salmon | *Oncorhynchus tshawytscha* | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 |
| Steelhead | *Oncorhynchus mykiss* | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 |
| Boreal clubhook squid | *Onychoteuthis borealijaponica* | 20 | 0.7 (9.9) | 0 | 0 | 20 | 60 | 1.7 (16.8) | 0 | 0 | 60 | 13 | 0.4 (25.5) | 0 | 0 | 13 | 4 | 0.1 (21.1) | 0 | 11 | 15 |
| Eight-armed squid | *Gonatopsis borealis* | 0 | 0.0 (0.0) | 0 | 0 | 0 | 2 | 0.1 (0.6) | 0 | 0 | 2 | 7 | 0.2 (13.7) | 0 | 0 | 7 | 0 | 0.0 (0.0) | 0 | 0 | 0 |
| Flying squid | *Ommastrephes bartramii* | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 1 | 0.0 (5.3) | 0 | 0 | 1 |
| Blue shark | *Prionace glauca* | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 1 | 0 | 1 |
| Salmon shark | *Lamna ditropis* | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 1 | 0 | 1 | 0 | 0.0 (0.0) | 0 | 0 | 0 |
| Spiny dogfish | *Squalus acanthias* | 1 | 0.0 (0.5) | 1 | 0 | 2 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 |
| Japanese scaled sardine | *Sardinops melanostictus* | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 2 | 2 |
| Japanese anchovy | *Engraulis japonicus* | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 13 | 0.4 (68.4) | 4 | 8361 | 8378 |
| Lantern fishes | Myctophidae | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 8 | 8 | 0 | 0.0 (0.0) | 0 | 0 | 0 |
| Pacific saury | *Cololabis saira* | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 6 | 6 |
| Pilotfish | *Naucrates ductor* | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 1 | 0.0 (5.3) | 0 | 0 | 1 |
| Pacific pomfret | *Brama japonica* | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 14 | 0.5 (27.5) | 7 | 1 | 22 | 0 | 0.0 (0.0) | 0 | 0 | 0 |
| Chub mackerel | *Scomber japonicus* | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 1 | 1 |
| Smalleye squaretail | *Tetragonurus atlanticus* | 0 | 0.0 (0.0) | 0 | 0 | 0 | 2 | 0.1 (0.6) | 0 | 0 | 2 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 |
| Atka mackerel | *Pleurogrammus monopterygius* | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 |
| Common Murre | *Uria aalge* | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 |
| Short-tailed shearwater | *Puffinus tenuirostris* | 1 | 0.0 (0.5) | 0 | 0 | 1 | 6 | 0.2 (1.7) | | | 6 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 |
| Horned puffin | *Fratercula corniculata* | 0 | 0.0 (0.0) | 0 | | 0 | 0 | 0.0 (0.0) | 1 | 0 | 1 | 0 | 0.0 (0.0) | 0 | 0 | 0 | 0 | 0.0 (0.0) | 0 | 0 | 0 |

Table 8. Biological characteristics of fishes caught by drift gillnet

NEON FLYING SQUID

| St. | Gear | M. L. (mm) | B. W. (gr) | St. | Gear | M. L. (mm) | B. W. (gr) | St. | Gear | M. L. (mm) | B. W. (gr) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | G04 | C093 | 345 | 1319 | | | | |

BOREAL CLUBHOOK SQUID

| St. | Gear | M. L. (mm) | B. W. (gr) | St. | Gear | M. L. (mm) | B. W. (gr) | St. | Gear | M. L. (mm) | B. W. (gr) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| G01 | C072 | 316 | 640 | G02 | C072 | 302 | 494 | G02 | C093 | 310 | |
| G01 | C072 | 298 | 550 | G02 | C072 | 294 | 486 | G02 | C093 | 300 | |
| G01 | C072 | 332 | 710 | G02 | C072 | 316 | 681 | G02 | C093 | 318 | |
| G01 | C072 | 312 | 650 | G02 | C072 | 312 | 595 | G02 | C093 | 308 | |
| G01 | C072 | 292 | 600 | G02 | C072 | 312 | 547 | G02 | C093 | 314 | |
| G01 | C072 | 304 | 590 | G02 | C072 | 294 | 569 | G02 | C093 | 284 | 422 |
| G01 | C072 | 304 | 580 | G02 | C072 | 296 | 479 | G02 | C093 | 314 | 325 |
| G01 | C072 | 312 | 580 | G02 | C072 | 318 | 706 | G02 | C106 | 288 | |
| G01 | C072 | 335 | 620 | G02 | C072 | 284 | 477 | G03 | C055 | 224 | |
| G01 | C082 | 292 | 600 | G02 | C072 | 306 | 566 | G03 | C055 | 208 | |
| G01 | C082 | 304 | 610 | G02 | C072 | 296 | 513 | G03 | C055 | 228 | 213 |
| G01 | C082 | 304 | 600 | G02 | C072 | 284 | 456 | G03 | C055 | 214 | 190 |
| G01 | C082 | 314 | 580 | G02 | C072 | 306 | | G03 | C055 | 221 | 212 |
| G01 | C082 | 310 | 570 | G02 | C072 | 322 | | G03 | C063 | 228 | 237 |
| G01 | C082 | 314 | 680 | G02 | C072 | 308 | | G03 | C063 | 234 | 255 |
| G01 | C082 | 314 | 680 | G02 | C072 | 306 | | G03 | C063 | 258 | 334 |
| G01 | C082 | 318 | 700 | G02 | C072 | 298 | | G03 | C072 | 278 | 470 |
| G01 | C082 | 326 | 600 | G02 | C072 | 388 | | G03 | C072 | 286 | 445 |
| G01 | C082 | 290 | 560 | G02 | C082 | 298 | 643 | G03 | C072 | 274 | 393 |
| G01 | C138 | 312 | 620 | G02 | C082 | 302 | 608 | G03 | C072 | 271 | 416 |
| G02 | C063 | 282 | 504 | G02 | C082 | 388 | 469 | G03 | C082 | 324 | 679 |
| G02 | C063 | 292 | 503 | G02 | C082 | 394 | 492 | G04 | C048 | 186 | 162 |
| G02 | C063 | | | G02 | C082 | 294 | 605 | G04 | C048 | 208 | 209 |
| G02 | C072 | 306 | | G02 | C082 | 316 | | G04 | C055 | 160 | 152 |
| G02 | C072 | 286 | | G02 | C082 | 310 | 593 | G04 | C072 | 260 | 431 |
| G02 | C072 | 306 | | G02 | C082 | 320 | 584 | G04 | F025 | 102 | 40 |
| G02 | C072 | 252 | | G02 | C082 | 332 | 670 | G04 | F029 | 103 | 29 |
| G02 | C072 | 308 | 552 | G02 | C082 | 308 | 554 | G04 | F029 | 110 | 31 |
| G02 | C072 | 284 | 495 | G02 | C082 | 306 | 543 | G04 | F033 | 122 | 55 |
| G02 | C072 | 320 | 623 | G02 | C082 | 324 | 690 | G04 | F037 | 160 | 100 |
| G02 | C072 | 304 | 563 | G02 | C082 | 342 | 768 | G04 | F037 | 165 | 103 |
| G02 | C072 | 306 | 545 | G02 | C082 | 300 | 549 | G04 | F037 | 178 | 130 |
| G02 | C072 | 318 | 605 | G02 | C082 | 318 | 494 | G04 | F042 | 142 | 83 |
| G02 | C072 | 202 | 437 | G02 | C082 | 314 | 638 | G04 | F042 | 178 | 125 |
| G02 | C072 | 300 | | G02 | C093 | 320 | 630 | G04 | F042 | 164 | 112 |
| G02 | C072 | 304 | 618 | G02 | C093 | 291 | 542 | G04 | F042 | 193 | 147 |

PACIFIC SAURY

| St. | Gear | F. L. (mm) | B. W. (gr) | St. | Gear | F. L. (mm) | B. W. (gr) | St. | Gear | F. L. (mm) | B. W. (gr) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| G04 | F019 | 150 | 12 | G04 | F033 | 282 | 96 | G04 | F033 | 280 | 90 |
| G04 | F033 | 260 | 82 | G04 | F033 | 268 | 85 | G04 | F033 | 283 | 94 |

PACIFIC POMFRET

| St. | Gear | F. L. (mm) | B. W. (gr) | St. | Gear | F. L. (mm) | B. W. (gr) | St. | Gear | F. L. (mm) | B. W. (gr) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| G03 | A115 | 402 | 1107 | G03 | C121 | 474 | 1759 | G03 | C138 | 460 | 1610 |
| G03 | A115 | 400 | 1176 | G03 | C121 | 402 | 1343 | G03 | C157 | 436 | 1675 |
| G03 | A121 | 450 | 1377 | G03 | C121 | 401 | 1162 | G03 | C157 | 406 | 1143 |
| G03 | A121 | 412 | 1149 | G03 | C121 | 428 | 1290 | G03 | C157 | 460 | 1616 |
| G03 | A121 | 406 | 1157 | G03 | C138 | 406 | 1118 | G03 | C157 | 459 | 1712 |
| G03 | A121 | 418 | 1569 | G03 | C138 | 449 | 1617 | G03 | F029 | 415 | 1270 |
| G03 | A121 | 407 | 1158 | G03 | C138 | 456 | 1595 | | | | |
| G03 | C055 | 458 | 1583 | G03 | C138 | 418 | 1208 | | | | |

6. Data on salmon hook-and-line Research

To collect salmons, hook-and-line gears were used along 155◦E line in the Central North Pacific during Cruise#215. Five to ten anglers were engaged in the work. These samplings were mainly conducted with observations when ship was under drifting.

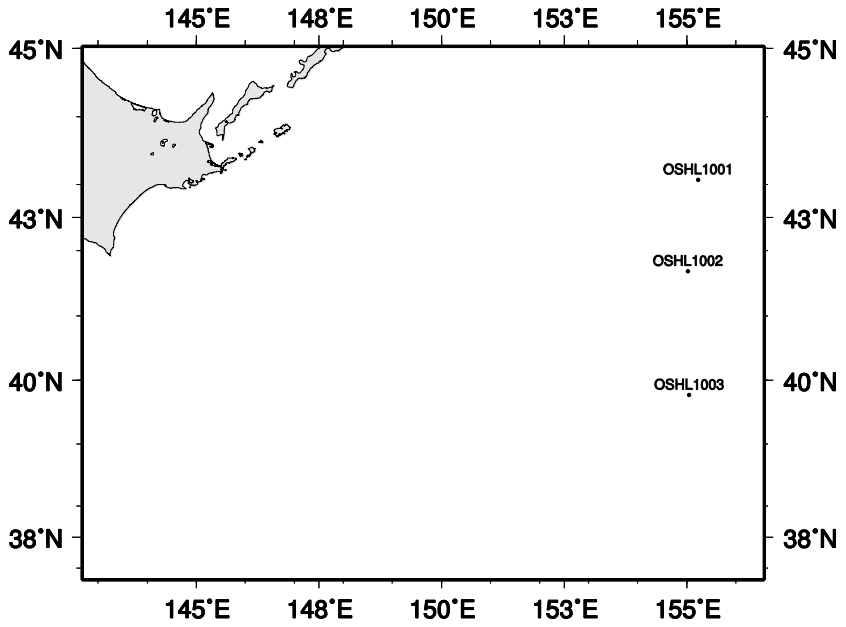


Figure 4. Locations of salmon hook-and-line Research

Table 9. List of hook-and-line sampling (OSHL 10XX) station during the "Oshoro Maru" Cruise #215

| Station | Date and Time (S.M.T.) | | | | | Set Position | | D.S. | No. of hooks | Wr. | Wind (Force) | Oceanographic Station No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Line set | | Line haul | | T.D. | Lat. | Long. | | | | | |
| OSHL 1001 | 13-May | 20:30- | 14-May | 03:30- | 10 | 43-05.0N | 155-13.0E | - | - | d | East-5 | OS10055 |
| OSHL 1002 | 15-May | 20:35- | 16-May | 03:15- | 10 | 41-42.0N | 155-00.0E | - | - | o | NNW-5 | OS10058 |
| OSHL 1003 | 16-May | 21:30- | 17-May | 01:30- | 10 | 39-47.0N | 155-02.0E | - | - | d | NNW-4 | OS10061 |

S.M.T. : Ship's Mean Time T.D.: Time Difference between Greenwich Mean Time (G.M.T.) and S.M.T.
D.S. : Direction in which line was set Wr.: Weather ( o: 100% clouded, f: fog, d: drizzling rain)

Table 10. The catch number of each salmonid at each station where salmonids were collected by hook-and-line gear, surface longline

| Station Name | Sampling gear | Species name | | | | | | Total |
|---|---|---|---|---|---|---|---|---|
| | | Sockeye | Chum | Pink | Coho | Chinook | Stellhead | |
| Cruise #215 | | | | | | | | |
| OSHL 1001 | Hook-and-line | 0 | 12 | 51 | 0 | 0 | 0 | 63 |
| OSHL 1002 | Hook-and-line | 0 | 6 | 439 | 0 | 0 | 0 | 445 |
| OSHL 1003 | Hook-and-line | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| | total | 0 | 22 | 490 | 0 | 0 | 0 | 512 |

Table 11. Biological characteristics of salmonids caught by hook-and-line research

CHUM SALMON

| St. | F.L. (mm) | B.W. (gr) | Sex | G.W. (gr) | St. | F.L. (mm) | B.W. (gr) | Sex | G.W. (gr) | St. | F.L. (mm) | B.W. (gr) | Sex | G.W. (gr) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HL01 | 572 | 2360 | F | 55 | HL01 | 482 | 1258 | M | 2 | HL02 | 582 | 2190 | F | 20 |
| HL01 | 539 | 1980 | M | 4 | HL01 | 454 | 1037 | F | 12 | HL02 | 532 | 1563 | M | 4 |
| HL01 | 534 | 1764 | M | 5 | HL01 | 452 | 1080 | F | 11 | HL03 | 590 | 2000 | F | 28 |
| HL01 | 558 | 2130 | M | 5 | HL01 | 554 | 1860 | F | 64 | HL03 | 540 | 2100 | M | 12 |
| HL01 | 508 | 1620 | M | 6 | HL02 | 595 | 2459 | M | 3 | HL03 | 587 | 2530 | M | 23 |
| HL01 | 604 | 2840 | M | 3 | HL02 | 600 | 2390 | M | 2 | HL03 | 610 | 2750 | M | 12 |
| HL01 | 530 | 1980 | F | 40 | HL02 | 529 | 1700 | M | 3 | | | | | |
| HL01 | 568 | 2360 | F | 56 | HL02 | 470 | 1208 | M | 2 | | | | | |

PINK SALMON

| St. | F.L. (mm) | B.W. (gr) | Sex | G.W. (gr) | St. | F.L. (mm) | B.W. (gr) | Sex | G.W. (gr) | St. | F.L. (mm) | B.W. (gr) | Sex | G.W. (gr) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HL01 | 380 | 590 | F | 6 | HL01 | 391 | 500 | M | 4 | HL02 | 438 | 930 | M | 5 |
| HL01 | 400 | 720 | M | 4 | HL01 | 389 | 600 | F | 7.3 | HL02 | 422 | 830 | M | 2 |
| HL01 | 402 | 730 | M | 2 | HL01 | 370 | 500 | M | 1 | HL02 | 385 | 651 | F | 9 |
| HL01 | 397 | 633 | M | 2 | HL01 | 378 | 537 | M | 1 | HL02 | 410 | 650 | F | 7 |
| HL01 | 352 | 594 | 0 | | HL01 | 430 | 777 | M | 4 | HL02 | 405 | 660 | M | 4 |
| HL01 | 382 | 630 | F | 9 | HL01 | 391 | 610 | M | 1.3 | HL02 | 368 | 570 | M | 2 |
| HL01 | 405 | 727 | M | 2 | HL01 | 400 | 630 | M | 1.9 | HL02 | 378 | 569 | F | 5 |
| HL01 | 364 | 541 | F | 5 | HL01 | 408 | 650 | M | 6.7 | HL02 | 418 | 837 | F | 16 |
| HL01 | 414 | 729 | M | 3 | HL01 | 378 | 520 | M | 0.9 | HL02 | 380 | 574 | F | 6 |
| HL01 | 485 | 574 | M | 2 | HL01 | 376 | 580 | M | 1.7 | HL02 | 400 | 657 | F | 14 |
| HL01 | 400 | 683 | M | 3 | HL01 | 420 | 730 | M | 0.7 | HL02 | 382 | 598 | M | 3 |
| HL01 | 365 | 540 | F | 4 | HL01 | 355 | 415 | F | 4.2 | HL02 | 390 | 577 | F | 8 |
| HL01 | 390 | 600 | F | 10 | HL01 | 387 | 600 | M | 1.5 | HL02 | 385 | 623 | F | 13 |
| HL01 | 386 | 641 | M | 2 | HL01 | 380 | 570 | F | 10 | HL02 | 392 | 728 | F | 12 |
| HL01 | 490 | 510 | F | 5 | HL02 | 391 | 670 | F | 12 | HL02 | 393 | 690 | F | 10 |
| HL01 | 370 | 570 | F | 6 | HL02 | 355 | 470 | F | 4 | HL02 | 395 | 459 | M | 2 |
| HL01 | 415 | 766 | F | 10 | HL02 | 379 | 617 | F | 9 | HL02 | 401 | 688 | M | 2 |
| HL01 | 429 | 805 | M | 2 | HL02 | 390 | 709 | F | 14 | HL02 | 391 | 655 | F | 9 |
| HL01 | 360 | 551 | F | 7 | HL02 | 392 | 632 | F | 7 | HL02 | 363 | 528 | M | 2 |
| HL01 | 383 | 584 | M | 2 | HL02 | 391 | 665 | F | 6 | HL02 | 336 | 426 | M | 2 |
| HL01 | 352 | 462 | M | 1 | HL02 | 397 | 670 | M | 4 | HL02 | 329 | 430 | F | 12 |
| HL01 | 394 | 660 | F | 11 | HL02 | 382 | 634 | F | 11 | HL02 | 374 | 514 | M | 2 |
| HL01 | 382 | 641 | M | 2 | HL02 | 388 | 566 | F | 10 | HL02 | 386 | 548 | F | 9 |
| HL01 | 375 | 573 | F | 5 | HL02 | 389 | 666 | M | 3 | HL02 | 400 | 752 | M | 4 |
| HL01 | 376 | 530 | M | 3 | HL02 | 411 | 676 | M | 1 | HL02 | 398 | 680 | F | 9 |
| HL01 | 400 | 659 | M | 3 | HL02 | 377 | 559 | M | 2 | HL02 | 370 | 541 | F | 8 |
| HL01 | 408 | 700 | M | 4 | HL02 | 358 | 525 | M | 2 | HL02 | 409 | 663 | F | 8 |
| HL01 | 421 | 770 | F | 21.7 | HL02 | 394 | 683 | F | 9 | HL02 | 400 | 655 | F | 14 |
| HL01 | 387 | 600 | F | 11.8 | HL02 | 374 | 587 | F | 6 | HL02 | 388 | 622 | F | 10 |
| HL01 | 411 | 750 | M | 2.3 | HL02 | 420 | 769 | M | 2 | HL02 | 362 | 497 | M | 1 |
| HL01 | 396 | 595 | M | 1.2 | HL02 | 401 | 676 | F | 10 | HL02 | 376 | 564 | F | 9 |
| HL01 | 420 | 770 | F | 18.8 | HL02 | 409 | 738 | M | 3 | HL02 | 399 | 643 | M | 4 |
| HL01 | 404 | 690 | F | 13.2 | HL02 | 361 | 461 | F | 6 | HL02 | 401 | 742 | M | 6 |
| HL01 | 371 | 540 | F | 6.6 | HL02 | 408 | 712 | F | 13 | HL02 | 400 | 725 | F | 16 |
| HL01 | 398 | 640 | M | 1.5 | HL02 | 418 | 795 | M | 4 | HL02 | 435 | 830 | M | 4 |
| HL01 | 404 | 670 | F | 27.8 | HL02 | 386 | 564 | M | 2 | HL02 | 400 | 661 | M | 3 |
| HL01 | 372 | 560 | M | 1.4 | HL02 | 375 | 565 | F | 8 | HL02 | 419 | 686 | M | 2 |

7. Data on plankton collected by vertical hauls with twin NORPAC net.

Vertical hauls with twin-NORPAC net were made at hydrographic stations. This net was composed of 45 cm mouth diameter and 180 cm long conical one which was made of GG54 and XX13 having 0.33 mm and 0.10 mm mesh, respectively. The net was lowered to the estimated depth of 150 m, 500 m or near the bottom when the bottom depth was shallower than 150 m, and immediately hauled to the surface at a speed about 1 m $s^{-1}$. A flowmeter was mounted at the center of mouth of the net to estimate the volume water filtered. Sampling was conducted by research staffs and measurement of wet weight of the samples were made by A. Yamaguchi, K. Ishii, K. Matsuno, R. Saito, K. Ohgi, Y. Onishi, T. Homma, R. Ohashi, C. Tsukazaki, A. Kuroda, Y. Abe, M. Kawaguchi, T. Shiota, S. Mizuhara, K. Moribe and J. Fukuda (Laboratory of Marine Biology).

Table 12. Data on plankton samples collected by vertical hauls with twin NORPAC net.

**GG54: 0.33 mm mesh, XX13: 0.10 mm mesh.**

| Station no. | Position | | S.M.T. | | Length of wire (m) | Angle of wire (°) | Depth estimated by wire angle (m) | Kind of cloth | Flowmeter | | Estimated volume of water filtered ($m^3$) | Wet weight (g) | | | Sample no. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Lat. (N) | Lon. | Date | Hour | | | | | No. | Reading | | per haul | per 1000 $m^3$ | | |
| OS10052 (Site H) | 41-30 | 145-47 E | 10 May | 11:20 | 150 | 1 | 150 | GG54 | 2562 | 1420 | 22.33 | 23.0 | 1031 | 1) | 10101 |
| | | | | | | | | XX13 | 3006 | 1161 | 16.84 | | | 1) | 10102 |
| | | | | 11:36 | 500 | 1 | 500 | GG54 | 2562 | 4746 | 74.62 | 29.2 | 391 | 1) | 10103 |
| | | | | | | | | XX13 | 3006 | 4356 | 63.20 | | | 1) | 10104 |
| OS10053 (St. KNOT) | 44-00 | 155-00 E | 12 May | 4:26 | 152 | 9 | 150 | GG54 | 2562 | 1827 | 28.73 | 15.3 | 532 | | 10105 |
| | | | | | | | | XX13 | 3006 | 1811 | 26.27 | | | | 10106 |
| OS10054 | 43-15 | 155-00 E | 12 May | 13:52 | 152 | 10 | 150 | GG54 | 2562 | 1720 | 27.04 | 12.4 | 459 | | 10107 |
| | | | | | | | | XX13 | 3006 | 1598 | 23.18 | | | | 10108 |
| OS10055 | 43-04 | 155-14 E | 12 May | 20:21 | 151 | 5 | 150 | GG54 | 2562 | 1642 | 25.82 | 10.7 | 413 | | 10109 |
| | | | | | | | | XX13 | 3006 | 1568 | 22.75 | | | | 10110 |
| OS10058 | 41-45 | 155-00 E | 14 May | 14:42 | 163 | 23 | 150 | GG54 | 2562 | 2074 | 32.61 | 6.5 | 200 | | 10111 |
| | | | | | | | | XX13 | 3006 | 2056 | 29.83 | | | | 10112 |
| OS10059 | 41-00 | 155-00 E | 15 May | 10:35 | 152 | 10 | 150 | GG54 | 2562 | 1758 | 27.64 | 4.3 | 155 | | 10113 |
| | | | | | | | | XX13 | 3006 | 1640 | 23.79 | | | | 10114 |
| OS10060 | 40-15 | 155-00 E | 15 May | 15:52 | 151 | 8 | 150 | GG54 | 2562 | 1678 | 26.38 | 8.0 | 304 | 2) | 10115 |
| | | | | | | | | XX13 | 3006 | 1766 | 25.62 | | | | 10116 |
| OS10061 | 39-48 | 155-02 E | 15 May | 21:04 | 151 | 8 | 150 | GG54 | 2562 | 1587 | 24.95 | 11.3 | 452 | | 10117 |
| | | | | | | | | XX13 | 3006 | 1642 | 23.82 | | | | 10118 |
| OS10062 | 39-30 | 155-00 E | 16 May | 7:34 | 154 | 13 | 150 | GG54 | 2562 | 1613 | 25.36 | 8.5 | 333 | | 10119 |
| | | | | | | | | XX13 | 3006 | 1471 | 21.34 | | | | 10120 |
| OS10063 | 38-45 | 155-00 E | 16 May | 12:47 | 154 | 13 | 150 | GG54 | 2562 | 1688 | 26.54 | 3.5 | 130 | | 10121 |
| | | | | | | | | XX13 | 3006 | 1219 | 17.69 | | | | 10122 |
| OS10064 | 38-00 | 155-00 E | 16 May | 16:50 | 154 | 13 | 150 | GG54 | 2562 | 1705 | 26.81 | 6.1 | 229 | | 10123 |
| | | | | | | | | XX13 | 3006 | 1164 | 16.89 | | | | 10124 |
| OS10065 | 37-15 | 155-00 E | 17 May | 9:29 | 156 | 15 | 151 | GG54 | 2562 | 1750 | 27.52 | 9.9 | 361 | 5) | 10125 |
| | | | | | | | | XX13 | 3006 | 1717 | 24.91 | | | | 10126 |
| OS10066 | 36-30 | 155-00 E | 17 May | 13:51 | 151 | 5 | 150 | GG54 | 2562 | 1498 | 23.55 | 5.9 | 252 | | 10127 |
| | | | | | | | | XX13 | 3006 | 1333 | 19.34 | | | | 10128 |
| OS10067 | 41-30 | 145-47 E | 19 May | 18:30 | 153 | 11 | 150 | GG54 | 2562 | 1500 | 23.59 | 28.6 | 1215 | 1) | 10129 |
| | | | | | | | | XX13 | 3006 | 950 | 13.78 | | | 1) | 10130 |
| | | | | 18:45 | 518 | 15 | 500 | GG54 | 2562 | 5180 | 81.45 | 31.6 | 389 | 1) | 10131 |
| | | | | | | | | XX13 | 3006 | 4425 | 64.20 | | | 1) | 10132 |

**1) Exclusively phytoplankton**
**2) Including some fragments of medusae.**
**3) *Neocalanus* abundant.**
**4) Gelatinous zooplankton abundant.**
**5) Salpida abundant.**
**6) Chaetognaths abundant.**

## 8. Data on Calibration of Flowmeters

Flowmeters used for plankton nets were calibrated once in the cruise.

Table 13. Calibration data on flowmeters used for a twin or single NORPAC net and other kind of nets.

100-m wire out at St. OS10067, 19 May 2010.

| Flowmeter No. | Wire length (m) | Revolution | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | Mean |
| RG2562 | 100 | 1028 | 1003 | 1097* | 977* | 999 | 1016 | 1012 |
| RG3006 | 100 | 1125* | 1115 | 1091 | 1082* | 1096 | 1083 | 1096 |

*: omitted from calculation