Supplementary data 1. Range, mean and standard deviation (SD) of the depth of catch, total length and body weight of *Dissostichus mawsoni* caught in each research block (in subarea 88.3) and fishing season.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Research  block** | **Fishing season** | **Number** | **Depth of catch (m)** | | | **Total length (cm)** | | | **Body weight (kg)** | | |
| **Range** | **Mean** | **SD** | **Range** | **Mean** | **SD** | **Range** | **Mean** | **SD** |
| **88.3\_1** | 2016 | 46 | 1,238-1,616 | 1,434 | 152 | 51.0-184.0 | 120.9 | 40.2 | 1.7-98.0 | 31.2 | 25.5 |
| 2019 | 107 | 1,397-1,663 | 1,582 | 85 | 59.7-184.2 | 123.3 | 37.7 | 1.5-68.5 | 28.7 | 20.0 |
| **Total** | 153 | 1,238-1,663 | 1,538 | 128 | 51.0-184.2 | 122.6 | 38.4 | 1.5-98.0 | 29.4 | 21.8 |
| **88.3\_2** | 2017 | 28 | 969-1,378 | 1,238 | 118 | 88.0-169.0 | 129.0 | 22.9 | 8.0-58.5 | 28.4 | 15.4 |
| 2019 | 62 | 603-968 | 814 | 108 | 58.0-184.0 | 136.0 | 33.4 | 2.0-68.0 | 37.4 | 20.5 |
| **Total** | 90 | 603-1,378 | 946 | 226 | 58.0-184.0 | 133.8 | 30.6 | 2.0-68.0 | 34.6 | 19.4 |
| **88.3\_3** | 2016 | 91 | 1,390-1,615 | 1,526 | 70 | 53.0-176.0 | 120.6 | 26.6 | 1.6-65.0 | 25.4 | 15.7 |
| 2017 | 48 | 1,279-1,598 | 1,395 | 113 | 85.0-179.0 | 144.9 | 19.1 | 7.5-63.0 | 38.7 | 13.4 |
| 2018 | 90 | 645-1,607 | 1,090 | 397 | 55.0-175.0 | 118.9 | 37.3 | 2.0-68.0 | 26.9 | 19.1 |
| 2019 | 136 | 664-2,113 | 1,295 | 381 | 51.0-185.1 | 131.4 | 35.5 | 2.0-71.3 | 33.0 | 17.9 |
| 2020 | 22 | 889-1,561 | 1,323 | 238 | 117.0-157.0 | 142.9 | 11.1 | 22.0-58.0 | 41.6 | 9.3 |
| **Total** | 387 | 645-2,113 | 1,316 | 341 | 51.0-185.1 | 128.3 | 32.6 | 1.6-71.3 | 31.0 | 17.5 |
| **88.3\_4** | 2016 | 119 | 1,075-1,583 | 1,385 | 131 | 57.0-167.0 | 119.7 | 24.6 | 1.8-62.0 | 25.2 | 14.7 |
| 2017 | 128 | 1,259-1,780 | 1,488 | 129 | 52.0-176.0 | 130.4 | 24.1 | 4.0-61.5 | 30.5 | 13.7 |
| 2018 | 173 | 1,090-1,768 | 1,420 | 208 | 52.0-189.0 | 117.3 | 37.2 | 1.6-78.5 | 26.0 | 20.3 |
| 2019 | 212 | 694-2,010 | 1,424 | 417 | 44.5-178.0 | 119.7 | 40.2 | 1.3-80.5 | 28.6 | 19.9 |
| 2020 | 224 | 1,329-1,990 | 1,578 | 157 | 53.0-182.0 | 129.7 | 25.9 | 2.0-83.0 | 35.6 | 18.2 |
| **Total** | 856 | 694-2,010 | 1,468 | 261 | 44.5-189.0 | 123.4 | 32.4 | 1.3-83.0 | 29.7 | 18.5 |
| **88.3\_5** | 2016 | 38 | 871-1,530 | 1,202 | 232 | 52.0-168.0 | 120.8 | 36.5 | 1.3-75.0 | 28.4 | 19.7 |
| 2017 | 35 | 1,300-1,479 | 1,351 | 56 | 81.0-165.0 | 133.7 | 21.7 | 6.5-57.0 | 32.1 | 14.6 |
| 2018 | 33 | 1,264-1,827 | 1,551 | 184 | 63.0-173.0 | 124.6 | 35.1 | 3.1-75.5 | 33.5 | 21.9 |
| 2019 | 14 | 1,080-1,570 | 1,335 | 184 | 56.1-180.3 | 137.4 | 36.2 | 1.5-76.4 | 41.7 | 23.1 |
| **Total** | 120 | 871-1,827 | 1,357 | 220 | 52.0-180.3 | 127.5 | 32.6 | 1.3-76.4 | 32.4 | 19.6 |
| **88.3\_6** | 2020 | 33 | 773-965 | 867 | 63 | 58.0-160.0 | 119.1 | 27.8 | 2.2-63.0 | 27.0 | 17.3 |
| **Total** | 33 | 773-965 | 867 | 63 | 58.0-160.0 | 119.1 | 27.8 | 2.2-63.0 | 27.0 | 17.3 |
| **Total** | | 1,639 | 603-2,113 | 1,389 | 306 | 44.5-189.0 | 125.3 | 33.0 | 1.3-98.0 | 30.4 | 18.7 |