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** | **Fishingseason** | **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  |