

**NORTHERN COMMITTEE**

**EIGHTEENTH REGULAR SESSION**

ELECTRONIC MEETING

4-6 October 2021

**Catch and Effort Information on North Pacific swordfish**

**WCPFC-NC18-2022/IP-05 (Rev.01)**

**WCPFC Secretariat**

This paper provides catch and effort data by CCM and fishery for the North Pacific swordfish fishery to support discussions on reference year(s) that may be useful to consider for the development of a CMM for North Pacific Swordfish. The North Pacific swordfish catch data in **Table 1** were extracted from Table 18-3 in the ISC22 Plenary Report. As effort data are not public domain data within the ISC, historical effort data are not available at this time and would require an ISC member’s consent for compilation. As the unit of effort data varies by CCM, fishing method or year, NC18 may consider and determine an appropriate approach to compile effort data for management purposes.

On 3rd October 2022, China provided their catch history of swordfish in the North Pacific Ocean from 2008 to 2021. **Table 2** provides China’s catch of North Pacific swordfish by longline vessels with specified fishing areas.

**Table 1.** North Pacific swordfish (*Xiphias gladius*) catch[[1]](#footnote-1) by vessels for years 2000-2021 in the North Pacific Ocean, north of the equator. (Source: Table 18-3, ISC22 Plenary Report)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | **Japan** | **Korea** | **Mexico** | **Chinese Taipei** |
| Setnet | Drift gillnet | LL | Others | Not specified | **Japan total** | LL | **Korea total** | others | Sports | **Mexico total** | Setnet | Gillnet (not specified) | Harpoon | LL | Others | PS | **TPE Total** |
| 2000 | 5 | 808 | 7,301 | 497 | 49 | **8,660** | 202 | **202** | 602 | - | **602** | 5 | 6 | 74 | 3,716 | - | - | **3,801** |
| 2001 | 15 | 732 | 7,840 | 230 | 30 | **8,847** | 438 | **438** | 516 | - | **516** | 8 | 18 | 64 | 4,853 | - | - | **4,943** |
| 2002 | 11 | 1,164 | 7,195 | 201 | 29 | **8,600** | 438 | **438** | 215 | - | **215** | 16 | 8 | 1 | 5,400 | 1 | - | **5,426** |
| 2003 | 4 | 1,198 | 6,439 | 149 | 28 | **7,818** | 380 | **380** | 237 | - | **237** | 8 | 3 | - | 4,771 | - | - | **4,782** |
| 2004 | 4 | 1,062 | 6,904 | 229 | 30 | **8,229** | 410 | **410** | 268 | - | **268** | 7 | 6 | 1 | 4,248 | 2 | - | **4,264** |
| 2005 | 3 | 956 | 6,653 | 187 | 337 | **8,136** | 403 | **403** | 234 | - | **234** | 5 | 3 | 16 | 3,964 | 2 | - | **3,990** |
| 2006 | 5 | 796 | 7,690 | 244 | 343 | **9,078** | 465 | **465** | 328 | - | **328** | 7 | 2 | 49 | 4,382 | 3 | - | **4,443** |
| 2007 | 2 | 829 | 8,125 | 122 | 368 | **9,446** | 453 | **453** | 172 | - | **172** | 2 | 2 | 20 | 4,099 | 2 | - | **4,125** |
| 2008 | 3 | 648 | 6,189 | 173 | 349 | **7,362** | 794 | **794** | 242 | - | **242** | 3 | 6 | 39 | 3,745 | + | - | **3,793** |
| 2009 | 3 | 682 | 6,007 | 239 | 249 | **7,180** | 993 | **993** | 394 | - | **394** | 83 | 7 | 31 | 3,550 | - | - | **3,671** |
| 2010 | 8 | 494 | 5,400 | 110 | 230 | **6,242** | 662 | **662** | 222 | - | **222** | 6 | 4 | 42 | 2,844 | - | - | **2,896** |
| 2011 | 2 | 193 | 4,022 | 10 | 233 | **4,460** | 962 | **962** | - | - | **-** | 8 | 17 | 52 | 3,577 | 1 | + | **3,655** |
| 2012 | 8 | 371 | 4,034 | 59 | 288 | **4,760** | 856 | **856** | - | - | **-** | 3 | 15 | 30 | 3,746 | + | - | **3,794** |
| 2013 | 13 | 290 | 4,248 | 163 | 291 | **5,005** | 1,071 | **1,071** | - | - | **-** | 2 | 8 | - | 2,846 | 1 | - | **2,857** |
| 2014 | 7 | 269 | 4,381 | 0 | 291 | **4,948** | 829 | **829** | - | - | **-** | 4 | 4 | - | 2,817 | + | + | **2,825** |
| 2015 | 3 | 277 | 5,012 | 204 | 281 | **5,777** | 776 | **776** | - | - |  | 4 | 4 | - | 3,199 | - | - | **3,207** |
| 2016 | 2 | 303 | 5,605 | 169 | 256 | **6,335** | 582 | **582** | - | - |  | 2 | 3 | + | 2,054 | + | - | **2,059** |
| 2017 | 3 | 291 | 4,837 | 274 | 289 | **5,694** | 583 | **583** |  |  |  | + | 3 | 0 | 2,194 | + | + | **2,197** |
| 2018 | 5 | 230 | 5,015 | 480 | 267 | **5,997** | 664 | **664** |  |  |  | 1 | + | 0 | 2,124 | + | - | **2,125** |
| 2019 | 6 | 242 | 3,897 | 339 | 210 | **4,694** | 468 | **468** |  |  |  | 2 | + | 0 | 2,113 | + | - | **2,115** |
| 2020 | 7 | 290 | 5,273 | 179 | 305 | **6,054** | 392 | **392** |  |  |  | 3 | + | 0 | 1,868 | + | - | **1,871** |
| 2021 | 7 | 290 | 2,315 | 179 | 305 | **3,096** | 335 | **335** |  |  |  | 3 | + | 0 | 1,067 | + | - | **1,070** |
| **Average** | **6** | **564** | **5654** | **202** | **230** | **6,655** | **598** | **598** | **312** |  | **312** | **9** | **7** | **25** | **3326** | **2** |  | **3,368** |

(Table 1 continued)

|  |  |  |
| --- | --- | --- |
| Year | **USA** | **GRAND TOTAL** |
| Draft gillnet | Harpoon | Handline | LL | Pole&line | Troll | Hook&line | Other | PS | **USA Total** |
| 2000 | 649 | 90 |  | 4,834 |  |  |  | 33 |  | **5,606** | **18,871** |
| 2001 | 375 | 52 |  | 1,969 |  |  |  | 19 |  | **2,415** | **17,159** |
| 2002 | 302 | 90 |  | 1,524 |  |  |  | 3 |  | **1,919** | **16,598** |
| 2003 | 216 | 107 | 10 | 1,958 |  |  |  | 11 |  | **2,302** | **15,519** |
| 2004 | 182 | 69 | 7 | 1,185 |  |  |  | 44 |  | **1,487** | **14,658** |
| 2005 | 220 | 77 | 5 | 1,622 |  |  |  | 5 |  | **1,929** | **14,692** |
| 2006 | 443 | 71 | 4 | 1,211 |  |  |  | 5 |  | **1,734** | **16,048** |
| 2007 | 490 | 59 | 5 | 1,735 |  | 1 |  |  |  | **2,290** | **16,486** |
| 2008 | 405 | 48 | 6 | 2,014 |  |  |  | 19 |  | **2,492** | **14,683** |
| 2009 | 253 | 50 | 5 | 1,817 |  | 0 |  | 0 |  | **2,125** | **14,363** |
| 2010 | 62 | 37 | 3 | 1,676 |  |  |  | 18 |  | **1,796** | **11,818** |
| 2011 | 119 | 24 | 5 | 1,623 |  |  |  | 90 |  | **1,861** | **10,938** |
| 2012 | 118 | 5 | 6 | 1,395 |  | 1 |  | 1 |  | **1,526** | **10,936** |
| 2013 | 95 | 6 | 6 | 1,270 |  | 1 |  | 7 |  | **1,385** | **10,318** |
| 2014 | 127 | 6 | 7 | 1,665 |  | 1 | 0 | 4 |  | **1,811** | **10,413** |
| 2015 | 101 | 5 | 5 | 1,515 |  | 1 | 0 | 12 |  | **1,639** | **11,399** |
| 2016 | 183 | 26 | 4 | 1,092 |  |  | 1 | 42 |  | **1,348** | **10,324** |
| 2017 | 180 | 28 | 6 | 1,618 |  | 0 | 1 | 44 |  | **1,877** | **10,350** |
| 2018 | 148 | 10 | 3 | 1,053 |  | 1 | 0 | 67 |  | **1,281** | **10,067** |
| 2019 | 52 | 11 | 3 | 734 |  | 0 | 1 | 186 |  | **987** | **8,265** |
| 2020 | 35 | 6 | 2 | 543 |  |  | 1 | 125 |  | **711** | **9,028** |
| 2021 | 13 | 7 | 1 | 690 |  | 0 | 2 | 54 |  | **768** | **5,269** |
| **Average** | **217** | **40** | **5** | **1579** |  | **1** | **1** | **38** |  | **1,880** | **12,813** |

**Table 2.** China’s catch history forNorth Pacific swordfish (*Xiphias gladius*) by longline vessels for years 2008-2021.

|  |  |  |
| --- | --- | --- |
| **WCPO-SWO-N** | **EPO-SWO-N** | **WHOLE PACIFIC SWO-N** |
| Year | 0-20°N | North of 20°N | Sub-total | Year | 0-20°N | North of 20°N | Sub-total | Year | 0-20°N | North of 20°N | Sub-total |
| 2008 | 188.7 | 2.5 | 191.2 | 2008 | 1.81 | 0 | 1.81 | 2008 | 190.51 | 2.5 | 193.01 |
| 2009 | 124.36 | 0 | 124.36 | 2009 | 54.9 | 0 | 54.9 | 2009 | 179.26 | 0 | 179.26 |
| 2010 | 304.9 | 0 | 304.9 | 2010 | 290.96 | 0 | 290.96 | 2010 | 595.86 | 0 | 595.86 |
| 2011 | 277.78 | 0.12 | 277.9 | 2011 | 111.91 | 0 | 111.91 | 2011 | 389.69 | 0.12 | 389.81 |
| 2012 | 282.95 | 3.9 | 286.85 | 2012 | 43.93 | 0.5 | 44.43 | 2012 | 326.88 | 4.4 | 331.28 |
| 2013 | 201.73 | 6.99 | 208.72 | 2013 | 53.82 | 0 | 53.82 | 2013 | 255.55 | 6.99 | 262.54 |
| 2014 | 317.93 | 5.02 | 322.95 | 2014 | 111.52 | 9.99 | 121.51 | 2014 | 429.45 | 15.01 | 444.46 |
| 2015 | 909.65 | 18.96 | 928.61 | 2015 | 175.92 | 0 | 175.92 | 2015 | 1,085.57 | 18.96 | 1,104.53 |
| 2016 | 678.44 | 10.27 | 688.71 | 2016 | 201.71 | 0 | 201.71 | 2016 | 880.15 | 10.27 | 890.42 |
| 2017 | 409.75 | 6.63 | 416.38 | 2017 | 483.12 | 0.038 | 483.158 | 2017 | 892.87 | 6.668 | 899.538 |
| 2018 | 1,079.16 | 6.22 | 1,085.38 | 2018 | 841.89 | 0.237 | 842.127 | 2018 | 1,921.05 | 6.457 | 1,927.507 |
| 2019 | 593.25 | 10.57 | 603.82 | 2019 | 565 | 0 | 565 | 2019 | 1,158.25 | 10.57 | 1168.82 |
| 2020 | 428.45 | 4.48 | 432.93 | 2020 | 392.45 | 0 | 392.45 | 2020 | 820.9 | 4.48 | 825.38 |
| 2021 | 159.14 | 5.92 | 165.06 | 2021 | 3.31 | 0.26 | 3.57 | 2021 | 162.45 | 6.18 | 168.63 |

1. “0”: Fishing effort was reported but no catch; “+”: Below 499kg catch; “-”: Unreported catch or catch information not available. “\*”: Data from the most recent years are provisional. [↑](#footnote-ref-1)