



ANNOTATED AGENDA FOR THE 21ST WORKING PARTY ON BILLFISH

Updated: 29 August 2023

Date: 6–9 September 2023 Location: Hotel le Récif, La Salins-les-Bains, Reunion, France Time: 09:00 – 17:00 daily (Seychelles time) Chair: Dr Denham Parker (South Africa); Vice-Chair: Dr Jie Cao (China)

- 1. OPENING OF THE MEETING (Chairperson)
- 2. ADOPTION OF THE AGENDA AND ARRANGEMENTS FOR THE SESSION (Chairperson)
 - ▶ IOTC-2023-WPB21-01a: Draft: Agenda for the 21st Working Party on Billfish
 - > IOTC-2023-WPB21-01b: Draft: Annotated agenda for the 21st Working Party on Billfish
 - > IOTC-2023-WPB21-02: Draft: List of documents for the 21st Working Party on Billfish

3. THE IOTC PROCESS: OUTCOMES, UPDATES AND PROGRESS

- 3.1. Outcomes of the 25th Session of the Scientific Committee (IOTC Secretariat)
 - > IOTC-2023-WPB21-03: Outcomes of the 25th Session of the Scientific Committee (IOTC Secretariat)
- 3.2. Outcomes of the 27th Session of the Commission (IOTC Secretariat)
- ▶ IOTC-2023-WPB21-04: Outcomes of the 27th Session of the Commission (IOTC Secretariat)
- 3.3. Review of Conservation and Management Measures relevant to billfish (IOTC Secretariat)
 - IOTC-2023-WPB21-05: Review of Conservation and Management Measures relevant to billfish (IOTC Secretariat)
- 3.4. Progress on the recommendations of WPB20 (IOTC Secretariat)
 - IOTC-2023-WPB21-06: Progress made on the recommendations and requests of WPB20 and SC25 (IOTC Secretariat)

4. NEW INFORMATION ON FISHERIES AND ASSOCIATED ENVIRONMENTAL DATA FOR BILLFISH

- 4.1. Review of the statistical data available for billfish at the Secretariat (IOTC Secretariat)
 - IOTC-2023-WPB21-07: Review of the statistical data and fishery trends for billfish species (IOTC Secretariat)
- 4.2. New information on sport fisheries (all)

5. SWORDFISH

- 5.1. Review new information on swordfish biology, stock structure, fisheries and associated environmental data (all)
 - IOTC-2023-WPB21-09: Population structure of swordfish across the ICCAT/IOTC management boundary (West W, da Silva C and Kerwath S)
 - IOTC-2023-WPB21-10: Industrial longlining catch rates, temporal variation and length-frequency of swordfish (Xiphias gladius) fishery in the Kenyan Marine waters (Lukhwenda P)
 - IOTC-2023-WPB21-11: Population structural dynamics of the swordfish, Xiphias gladius, across the Indian Ocean using Next Generation Sequencing (Chevrier T, Cowart D, Nieblas A-E, Charrier G, Bernard S, Evano H, Brisset B, Chanut J, Bourjea J, Bonhommeau S)
 - IOTC-2023-WPB21-23: Habitat and movements of the swordfish *Xiphias gladius* in the southern Indian Ocean oligotrophic gyre and beyond: preliminary results of swordfish tagging experiments in Reunion Island (Romanov E, Sabarros P, Guillon N, Le Foulgoc L, Dardalhon C, Bach P, Marsac F)
- 5.2. Review of new information on the status of swordfish (all)

- Nominal and standardised CPUE indices
- IOTC-2023-WPB21-12: Update of the Swordfish Catch, Effort and Standardized CPUEs by the Portuguese Pelagic Longline Fleet Operating in the Indian Ocean, Between 1998 and 2022 (Coelho R, Rosa D and Lino P)
- IOTC-2023-WPB21-13: Standardized CPUE of swordfish (*Xiphias gladius*) from Indonesian tuna longline fleets in the north-eastern Indian Ocean (Setyadji B, Spencer M, Kell L, Wright S, Ferson S, Budiarto A, Hernuyadin Y)
- IOTC-2023-WPB21-14: CPUE standardization for swordfish (*Xiphias gladius*) by Japanese longline fishery in the Indian Ocean using zero-inflated Bayesian hierarchical spatial model (Matsumoto T, Taki K, Ijima H, and Kai M)
- IOTC-2023-WPB21-15: Updated Standardized Catch Rates of Swordfish (*Xiphias gladius*) Caught by the Spanish Surface Longline Fleet in the Indian Ocean During the 2001-2021 Period (Fernández-Costa J, Ramos-Cartelle A, García-Cortés B and Mejuto J)
- IOTC-2023-WPB21-16: CPUE standardization of swordfish (*Xiphias gladius*) caught by Taiwanese largescale longline fishery in the Indian Ocean (Lin C-Y, Wang S-P, Xu W-Q)
 - Stock assessments
- IOTC-2023-WPB21-17: Population size estimation of swordfish through Close-Kin Mark Recapture (Chevrier T, Cowart D, Nieblas A-E, Baylis S, Bravington M, Bernard S, Evano H, Brisset B, Chanut J, Bonhommeau S)
- IOTC-2023-WPB21-18: Stock assessment of swordfish (*Xiphias gladius*) in the Indian Ocean using A Stock-Production Model Incorporating Covariates (ASPIC) (Xu W-Q, Wang S-P, Lin C-Y)
- > IOTC-2023-WPB21-19: Indian Ocean Swordfish Stock Assessment 1950-2021 (Stock Synthesis) (Fu D)
 - Selection of Stock Status indicators
- 5.3. Development of management advice for swordfish and update of species Executive Summaries for the consideration of the Scientific Committee, including discussion on current catch limits as per standing IOTC Resolutions (all)

6. PROGRESS ON THE SWORDFISH MANAGEMENT STRATEGY EVALUATION

> IOTC-2023-WPB21-26: IOTC Swordfish Management Strategy Evaluation Update (Brunel T, Mosqueira I)

7. OTHER BILLFISHES (new information for informing future assessments)

- 7.1. Review of new information on other billfishes biology, stock structure, fisheries and associated environmental data (all)
 - IOTC-2023-WPB21-20: Billfish from Purse Seiners fisheries in the Andaman Sea of Thailand (Hoimuk S and Piabpabrattana S)
 - IOTC-2023-WPB21-21: Evaluating the Status of Large Pelagic Fisheries in Iran: A Focus on Sustainable Management of Billfish fisheries (Dafrazi RN)
 - IOTC-2023-WPB21-22: Analysis of the at-haulback mortality of striped marlin (*Tetrapturus audax*) in the western Indian Ocean by Chinese longline fishing using a GLM (Li X, Wang X, Guo Y, Wu F and Zhu J)
 - IOTC-2023-WPB21-24: Effect of bait types on the catchability of billfish in tuna long line fishery in Sri Lanka (Jayasinghe P)
 - > IOTC-2023-WPB21-25: Larval billfish in the WIO and future research endeavor (Shiroza A)
 - IOTC-2023-WPB21-27: Findings from 101 satellite tags deployed on Indian Ocean billfish during the FLOPPED project (Nieblas AE, Bernard S, Big Game Fishing Réunion, Brisset B, Bury M, Chanut J, Chevrier T, Coelho R, Colas Y, Evano H, Faure C, Hervé G, Kerzerho V, Nithard A, Newton R, Newton T, Rouyer T, Tracey S, Worthington J, Bonhommeau S)
 - IOTC-2023-WPB21-28: The Status of Billfish Populations in Somalia: Challenges and Opportunities for Conservation and Management (Nor SA)

- IOTC-2023-WPB21-29: Shortbill spearfish *Tetrapturus angustirostris*: a note on the distribution and occurrence in the Indian Ocean fisheries (Romanov E, Ramos ML, Baez JC, Coelho R, Ruiz J, Sabarros P, and Merino G)
- 7.2. Resolution 18/05 Catch Limits

8. WPB PROGRAM OF WORK

- 8.1. Revision of the WPB Program of Work (2024–2028) (Chairperson and IOTC Secretariat)
 > IOTC-2023-WPB21-08: Revision of the WPB Program of Work (2024-2028) (IOTC Secretariat)
- 8.2. Development of priorities for an Invited Expert at the next WPB meeting (Chairperson)

9. OTHER BUSINESS

- 9.1. Election of the Chairperson and Vice-Chairperson of the WPB for the next biennium (Secretariat)
- 9.2. Date and place of the 22nd and 23rd Sessions of the Working Party on Billfish (Chairperson and IOTC Secretariat)
- 9.3. Review of the draft, and adoption of the Report of the 21st Session of the Working Party on Billfish (Chairperson)