IDENTIFICATION
SCIENTIFIC NAME
Xiphias gladius
SPECIES NAME(S)
Swordfish
STOCK IDENTIFICATION
Genetic studies have been inconclusive on the population structure of swordfish in the Indian Ocean. They are assessed at the regional level with a sub-assessment conducted for the SW Indian Ocean population (IOTC 2013). This profile covers the fishery improvement project (fip) large pelagic species including swordfish caught by longline and handline in Indonesian EEZ waters of the Indian Ocean. The fip is currently run by PT Intimas Surya (http://fisheriesimprovementindonesia.org/tuna-fip/).

ASSESSMENT
Strengths
Stock assessments have been carried out regularly using a range of assessment methods. The reliability of the estimates of total catch has continued to improve over the past few years and the aggregate population is considered healthy and fishing mortality rates are sustainable (IOTC 2014). The IOTC adopted a measure to implement the precautionary approach in 2012, which includes the use of stock-specific reference points, associated harvest control rules, the ability to enact emergency measures in the face of natural phenomena having a negative impact on resources, and to evaluate the performance of reference points and potential harvest control rules through management strategy evaluation (IOTC 2013c). The IOTC recently adopted additional measures (i.e. countries are to provide a record of vessels authorized to operate in the IOTC area) to aid in controlling IUU fishing (IOTC 2013c).

Weaknesses
Although important progress in the quality and quantity of analyses have been conducted, the stock structure of swordfish in the Indian Ocean is still uncertain – potentially allowing for localized depletion in regions such as the southwest Indian Ocean (IOTC 2013). Currently, there are no catch limits for Swordfish stock in the southwest Indian Ocean despite scientific advice (IOTC 2013). IUU fishing and piracy has been a major issue in the Indian Ocean and there are compliance issues with regard to the quality of reported data (IOTC 2013b). Observer coverage rates in this fishery are low and there is a lack of information on bycatch of ETP species including sharks, sea turtles, sea birds and marine mammals. Few bycatch mitigation methods have been adopted by the IOTC.

SCORES
Management Quality:
- Management Strategy: ≥ 6
- Managers Compliance: ≥ 6
- Fishers Compliance: < 6

Stock Health:
- Current Health: 10
- Future Health: 9

FIPS
- Indonesia Indian Ocean tuna - longline: Stage 4, Progress Rating B, Type: Fip, Evaluation Start Date: 11 Jul 2014
- Drifting longlines: Stage 4, Progress Rating D, Type: Fip, Evaluation Start Date: 8 Jul 2015

MSC
No related MSC fisheries

RECOMMENDATIONS
CATCHERS & REGULATORS
1. Ensure member countries comply with all Indian Ocean Tuna Commission’s (IOTC’s) conservation and management measures (CMMs), including measures aimed at both target and incidental market and non-market species, and all other obligations. Through your delegation to IOTC, encourage the compliance committee to make information on non-compliance by individual members and cooperating non-members publicly available in order to increase the incentive for compliance by all IOTC members and cooperating non-members.
2. Promote the adoption by the Indian Ocean Tuna Commission (IOTC) of precautionary and ecosystem-based management measures, including formal biological reference points (them currently implicit), harvest control rules, increased observer coverage for longline fleets, and monitoring efforts adequate to ensure harvest strategy objectives are being met. Adopt domestic laws and regulation to implement IOTC measures and provide monitoring and surveillance adequate for compliance. Encourage IOTC and parties to comply with current required onboard observer coverage rates.
3. Encourage member countries to improve data collection, reporting and analysis to reduce uncertainty in stock assessments. Catches of swordfish in the southwest Indian Ocean catches should be limited to...
1. Ensure member countries comply with all Indian Ocean Tuna Commission’s (IOTC’s) conservation and management measures (CMMs), including measures aimed at both target and incidental market and non-market species, and all other obligations. Through your delegation to IOTC, encourage the compliance committee to make information on non-compliance by individual members and cooperating non-members publicly available in order to increase the incentive for compliance by all IOTC members and cooperating non-members.

2. Promote the adoption by the Indian Ocean Tuna Commission (IOTC) of precautionary and ecosystem-based management measures, including formal biological reference points (interim currently in place), harvest control rules, increased observer coverage for longline fleets, and monitoring efforts adequate to ensure harvest strategy objectives are being met. Adopt domestic laws and regulation to implement IOTC measures and provide monitoring and surveillance adequate for compliance. Encourage IOTC and parties to comply with current required onboard observer coverage rates.

3. Encourage member countries to improve data collection, reporting and analysis to reduce uncertainty in stock assessments. Catchers of swordfish in the southwest Indian Ocean catches should be limited to below 6,000 t to allow the population to rebuild.

4. Encourage IOTC to conduct studies, increase monitoring where needed to meet scientific recommendations and make resulting datasets available for assessments of longline interactions with endangered, threatened and protected (ETP) species and other bycatch species. Call upon IOTC to identify and mandate best practices bycatch mitigation techniques and to adopt other management measures such as size and catch limits for species such as sharks. Comply with recently adopted IOTC management measures prohibiting the retention of oceanic whitetip and thresher sharks.

RETAILERS & SUPPLY CHAIN

1. Ask the Indian Ocean Tuna Commission (IOTC) and individual member countries to adopt precautionary and ecosystem-based management measures including effective harvest strategies and to increase observer coverage in fisheries where this is needed to meet scientific recommendations.

2. Require your suppliers to source only from fisheries that comply with all IOTC Conservation and Management Measures, and request that IOTC make information on compliance by members and cooperating non-members publicly available. An example of how this might be achieved is a control document that ensures recording and reporting interactions, and prohibition on retaining threshers and oceanic whitetip sharks.

3. Ensure all products are traceable back to legal sources. Verify source information and full chain traceability through traceability desk audits or third party traceability certification for fisheries without robust traceability systems in place, invest in meaningful improvements to bring the fisheries and supply chain in compliance with best practices.

4. Contact SFP to learn more about fishery improvement projects (FIPs) and SFP’s Supplier Roundtables.