UK (British Indian Ocean Territory) National Report to the Scientific Committee of the Indian Ocean Tuna Commission, 2020

J. Moir Clark¹, C.C. Mees¹ and J. Pearce¹

1. MRAG Ltd 18 Queen Street, London W1J 5PN, UK for the BIOT Administration

INFORMATION ON FISHERIES, RESEARCH AND STATISTICS

In accordance with IOTC Resolution 15/02, final	YES
scientific data for the previous year was provided	
to the IOTC Secretariat by 30 June of the current	26/03/2020
year, for all fleets other than longline [e.g. for a	
National Report submitted to the IOTC Secretariat	
in 2020, final data for the 2019 calendar year must	
be provided to the Secretariat by 30 June 2020)	
In accordance with IOTC Resolution 15/02,	NO
provisional longline data for the previous year was	
provided to the IOTC Secretariat by 30 June of the	
current year [e.g. for a National Report submitted	
to the IOTC Secretariat in 2020, preliminary data	
for the 2019 calendar year was provided to the	
IOTC Secretariat by 30 June 2020).	
REMINDER: Final longline data for the previous	
year is due to the IOTC Secretariat by 30 Dec of the	
current year [e.g. for a National Report submitted	
to the IOTC Secretariat in 2020, final data for the	
2019 calendar year must be provided to the	
Secretariat by 30 December 2020).	
If no, please indicate the reason(s) and intended activ	ons:

The UK British Indian Ocean Territory (BIOT) Administration does not operate a flag registry, BIOT does not have a fleet of commercial fishing vessels, and there is no commercial port in BIOT. The waters of the Territory are a no-take Marine Protected Area (MPA) to commercial fishing. An MPA exclusion zone covering Diego Garcia and its territorial waters exists where pelagic and demersal recreational fisheries are permitted. The recreational fishery catches some tuna and tuna like species.





Executive Summary

The United Kingdom (BIOT) waters are a no take Marine Protected Area (MPA) to commercial fishing. Diego Garcia and its territorial waters are excluded from the MPA and include a recreational fishery. UK (BIOT) does not operate a flag registry and has no commercial tuna fleet or fishing port. The UK(BIOT) National Report summarises fishing in its recreational fishery in 2019 and provides details of research activities undertaken to date within the MPA.

The recreational fishery landed 8.7 tonnes of tuna and tuna like species on Diego Garcia in 2019. Principle target tuna species of the industrial fisheries (yellowfin and skipjack tunas, no bigeye were caught) contributed 34.7% of the total catch of tuna and tuna like species of the recreational fishery. Recognising that yellowfin tuna are currently overfished and subject to overfishing in the Indian Ocean and that Resolution 19/01 seeks to address this, UK(BIOT) have been taking action to reduce the number of yellowfin tuna caught in the BIOT recreational fishery and encouraging their live-release. Length frequency data were recorded for a sample of 211 yellowfin tuna from this fishery. The mean length was 89cm. Sharks caught in the recreational fishery are released alive.

IUU fishing remains one of the greatest threats to the BIOT ecosystem but a range of other threats exist including invasive and pest species, climate change, coastal change, disease, and pollution, included discarded fishing gear such as Fish Aggregating Devices. During 2019 the BIOT Environment Officer continued to take forward the current conservation priorities. In 2019/20 Recommendations of the Scientific Committee and those translated into Resolutions of the Commission have been implemented as appropriate by the BIOT Authorities and are reported.

Contents

Executive Summary

Contents

- 1. Background/General
- 2. Fleet structure
- 3. Catch and effort (by species and gear)
- 4. Recreational fishery
- 5. Ecosystem and bycatch issues
 - 5.1 Sharks
 - 5.2 Seabirds
 - 5.3 Marine Turtles
 - 5.4 Other ecologically related species (e.g. marine mammals, whale sharks)
- 6. National data collection and processing systems
 - 6.1. Logsheet data collection and verification (including date commenced and status of implementation)
 - 6.2. Vessel Monitoring System (including date commenced and status of implementation)

6.3. Observer programme (including date commenced and status; number of observer, include percentage coverage by gear type)

6.4. Port sampling programme [including date commenced and status of implementation]

- 6.5. Unloading/Transhipment [including date commenced and status of implementation]
- 7. National research programs





8. Implementation of Scientific Committee Recommendations and Resolutions of the IOTC relevant to the SC.

1. BACKGROUND/GENERAL FISHERY INFORMATION

The waters of the British Indian Ocean Territory (BIOT) are a no-take Marine Protected Area (MPA) to commercial fishing. An MPA exclusion zone covering Diego Garcia and its territorial waters exists where pelagic and demersal recreational fisheries are permitted. The recreational fishery catches some tuna and tuna like species. Permitted recreational fisheries also include visiting yachts that fish outside the exclusion zone within the waters of the MPA, but not within Strict Nature Reserves. Such fishing must be for consumption within three days. Yachts must apply for a permit to moor in designated areas.

The UK (BIOT) Administration (BIOTA) does not operate a flag registry, BIOT does not have a fleet of commercial fishing vessels, and there is no commercial port in BIOT.

2. FLEET STRUCTURE

N/A: As stated above, UK (BIOT) does not have a flag registry or fleet of commercial fishing vessels. The recreational fishery is described in Section 4.

3. CATCH AND EFFORT (BY SPECIES AND GEAR)

N/A: As stated above, UK (BIOT) does not have a flag registry or a fleet of commercial fishing vessels.

4. **RECREATIONAL FISHERY**

A small recreational fishery occurs in Diego Garcia. A total of 8.7 tonnes of tuna and tuna like species were caught in 2019, reef associated species are also caught in this fishery. The principle commercial tuna species (yellowfin, and skipjack tunas, no bigeye were landed) contributed 34.7% of the total catch of tuna and tuna like species of the recreational fishery (Recognising that yellowfin tuna are currently overfished and subject to overfishing in the Indian Ocean and that Resolution 19/01 seeks to address this, UK(BIOT) have been taking action to reduce the number of yellowfin tuna caught in the BIOT recreational fishery and encouraging their live-release.

Table 1).

Recognising that yellowfin tuna are currently overfished and subject to overfishing in the Indian Ocean and that Resolution 19/01 seeks to address this, UK(BIOT) have been taking action to reduce the number of yellowfin tuna caught in the BIOT recreational fishery and encouraging their live-release.

Table 1:Catches of tuna and tuna like species landed from the UK (BIOT) recreational fishery
during the period 2015-2019.

Year		Estimated catch of tuna and tuna like species (kg)									Т	'OTAL (kş	g)
Species	Blue marlin	Dolphinfish	Kawakawa	Rainbow runner	Sailfish	Wahoo	Dogtooth tuna	Skipjack tuna	Yellowfin tuna	Other tuna nei	Tunas	Tuna like spp	ЧI





Year	Estimated catch of tuna and tuna like species (kg)										TOTAL (kg)		
Species	Blue marlin	Dolphinfish	Kawakawa	Rainbow runner	Sailfish	Wahoo	Dogtooth tuna	Skipjack tuna	Yellowfin tuna	Other tuna nei	Tunas	Tuna like spp	All
2015	0	27	977	152	73	9005	197	179	1741	0	2118	10233	12351
2016	0	73	1033	169	0	4076	203	251	2075	0	2529	5350	7879
2017	0	70	1525	288	0	7899	569	107	2425	0	3401	9783	13184
2018	0	94	1189	153	0	5163	189	176	4313	0	4678	6599	11277
2019	0	32	1201	186	0	3859	109	257	2770	299	3434	5279	8713

Length data have been collected for yellowfin tuna (*T. albacares*) from the recreational fishery since June 2009. A total of 211 fish were measured in 2019. The mean length of the *T. albacares* sampled was 89cm. For comparison, observer programmes on purse seiners (2005/6) and longliners (2003/4) operating in BIOT recorded mean lengths of 98cm (n=378) and 123cm (n=2385) respectively and the mean length in the recreational fishery in 2018 was 78.83cm.



Figure 1: Yellowfin tuna length frequency plot using data from the recreational fishery in 2019 (n=211)

5. ECOSYSTEM AND BYCATCH ISSUES

The BIOT zone, excluding territorial waters around Diego Garcia, is a no-take MPA closed to commercial fishing. The recreational fishery on Diego Garcia is monitored. Beyond the blanket protection of all species through the declaration of the MPA, there are currently no separate national plans of action in place for





individual species or species groups. However, in its recreational fishery, all sharks and billfish caught must be released alive and fishers are encouraged to release yellowfin tuna.

The current ecosystem threats relate to illegal unreported and unregulated fishing of which a number of events were detected by the BIOT Patrol Vessel in 2019 and are reported separately to the Compliance Committee. Controlling IUU is a core element of the current conservation priorities (see https://biot.gov.io/environment/).

Other threats to the ecosystem that have been identified include invasive and pest species (e.g. introduced by visiting vessels), climate change (including weather changes; coral bleaching and mortality, sea level rise, likely increasing rates of erosion or inundation events; and oceanic chemical composition change), coastal change, disease (particularly of corals), and pollution. The latter includes lost and abandoned fishing gear including fish aggregating devices (FADs) which can have harmful impacts on species and habitats within BIOT, research has been undertaken on their potential impacts (MRAG 2019a) and how currents and oceanic conditions may influence their movement throughout BIOT (MRAG 2019c). Consequently, these also form a core element of the current conservation priorities.

5.1 Sharks

Sharks must be released alive when caught in BIOT's recreational fishery. Sharks continue to be caught illegally by IUU vessels in BIOT waters.

Research, including tagging of sharks in BIOT waters is ongoing through the Bertarelli Programme on Marine Science which includes scientific research expeditions in BIOT (see Table 2).

5.2 Seabirds

Seabird bycatch does not occur in the recreational fishery and has not been observed in IUU fisheries.

5.3 Marine Turtles

No turtle bycatch / interaction was reported in the BIOT recreational fishery in 2019. The BIOT area includes undisturbed and recovering populations of hawksbill and green turtles. Island sweeps are conducted as part of the normal monitoring programme, where part or entire islands are inspected, turtle nesting tracks are regularly encountered and recorded. Field work continued up into 2019 but was suspended in 2020 due to COVID-19 (See Table 2).

5.4 Other ecologically related species (e.g. marine mammals, whale sharks)

No incidental mortality / annual catches on other ecologically related species such as marine mammals and whale sharks has been observed in the recreational fishery.

6. NATIONAL DATA COLLECTION AND PROCESSING SYSTEMS

6.1. Logsheet data collection and verification (including date commenced and status of implementation) Logbook data collection for the recreational fishery is completed by the vessel charterer for each trip conducted. The system was introduced in 2006 and provides 100% coverage of all boat based recreational fishing activity. Prior to that a system of logbooks to be completed by fishers was utilised but proved less effective and did not achieve 100% coverage. A similar fisher-based system was introduced in 2016 for shore based recreational fishers, although they tend not to catch tuna and tuna like species.

6.2. Vessel Monitoring System (including date commenced and status of implementation)





As there are no vessels flagged by the BIOT Authorities and no commercial vessels are licensed to fish inside the BIOT MPA, the BIOT VMS is currently not operational.

6.3. Observer programme (including date commenced and status; number of observers, include percentage coverage by gear type)

There is no observer programme operational in BIOT, however length frequency data collection was initiated for the recreational fishery on Diego Garcia in June 2009.

- **6.4. Port sampling programme [including date commenced and status of implementation]** NA. BIOT has no commercial port
- **6.5.** Unloading/Transhipment [including date commenced and status of implementation] As BIOT has no commercial ports there is no unloading or transhipment allowed. Transhipment by foreign fishing vessels is not permitted anywhere within BIOT waters.

7. NATIONAL RESEARCH PROGRAMS

The BIOT Administration supports and encourages high-quality scientific expedition research applications from all scientists, particularly anyone from the Indian Ocean region and those which provide opportunities for members of the Chagossian community to be involved. Applications where regional and / or international organisations collaborate together on projects are also strongly encouraged. Scientific research will contribute to the delivery of the current conservation priorities and tell BIOTA something new about the environment of the Territory. All research applications are reviewed for approval by BIOTA.

Currently research is conducted through a series of expeditions funded under the Bertarelli Programme in Marine Science (BPMS, see Table 2). Some activities that were initiated under the Interim Conservation Management Framework (reported on in previous National Reports), which has since been replaced, are continuing in one form or another through this programme. Research under the BPMS particularly links to the current conservation priorities through 'Key Species' research.

Outputs of research conducted in BIOT can be accessed through the Chagos Information Portal (ChIP, <u>https://chagosinformationportal.org/</u>), the BPMS website (<u>www.marine.science</u>) and the BIOT website <u>https://biot.gov.io/</u> where details of expeditions up to those conducted in 2019 are currently available <u>https://biot.gov.io/science/2019-science-expeditions/</u>. Table 2 gives an update on the outcomes of expeditions carried out in 2019, not previously reported on, and summarises the expeditions conducted during 2020. Some of these were only partially completed due to COVID-19, the majority of planned trips were postponed until 2021.

Project title	Period	Institutions involved	Objectives	Outcomes (results, publications, future work)
Tuna tagging from DG BPMS expedition 15	Sept 2019	ZSL/Stanford University	Overall objective: To continue the use of the Morale, Welfare and Recreational (MWR) fishing vessels as tagging research platforms Specific objectives	As with BPMS expedition 10 it demonstrated that MWR vessels are capable of providing a platform for science activity in the lagoon of Diego Garcia, although the expedition was hindered by bad weather.
			 Analyse available recreational fisheries datasets to quantify seasonal patterns in the catch composition. Establish a protocol for the deployment and reporting of mark recapture floy tags on yellowfin tuna (<i>Thunnus albacares</i>) and billfish within the DG recreational fishery. Deploy up to 10 satellite tags on yellowfin tuna and billfish (if encountered) to quantify off-shore movement behaviour. Collect tissue (fin, muscle and blood) and water samples for isotopic and DNA analyses to provide information on the trophic ecology and habitat use of species within BIOT and on the patterns of connectivity of elasmobranchs and teleosts across the Indian Ocean. Train the Environment Officer in tagging methods and the taking and storing of DNA and isotope samples. Communicate our work to the personnel on Diego Garcia and ensure findings are made available to the ladit on othe same for a mathematical archiver and an available to the ladit on potential of the same available to the ladit of a same for a same findings are made available to the ladit of the same for a same findings are made available to the ladit of the same for a same findings are made available to the ladit of the same for a same findings are made available to the ladit of the same findings are made available to the ladit of the same findings are made available to the ladit of the same findings are made available to the ladit of the same findings are made available to the ladit of the same findings are made available to the ladit of the same findings are made available to the ladit of the same findings are made available to the ladit of the same findings are made available to the ladit of the same findings are made available to the ladit field with the same findings are made available to the ladit of the same findings are made available to the ladit field with the same field and the same field and the same field and the same field available to the same field available to the same	Mark recapture floy tags were deployed on four yellowfin tuna, two skipjack tuna (<i>Katsuwonus pelamis</i>), and one dogtooth tuna (<i>Gymnosarda unicolor</i>). No satellite tags were deployed. 84 teleost and 14 algal samples were collected for isotopic analysis and 96 waster samples collected for eDNA analysis. Training provided to SFPOs and EOs in tagging and storing DNA and isotope samples.
Turtle survey	Nov –	Swansea University	the UK Blue Belt Programme. Overall objective: Denset DDMS %	Satellite tags were attached to 18 female hawksbill turtles on Diego Garcia in November-December and their movements
BPMS expedition 16	2019		turtles in DG/juvenile hawksbills. Specific objectives:	were tracked. Below are the results of the tracking up to 6 February 2020:
			1. To increase understanding of sea turtle movements within and outside of BIOT by attachment of satellite tags to nesting hawksbill turtles.	• All 18 hawksbills were still in BIOT. Some of them still had not reached their foraging destination and were still migrating.
			2. To increase understanding of the immature turtle population in Diego Garcia lagoon through (a) the mark (flipper tagging) and recapture monitoring programme commenced in 1996 and through (b) tagging of turtles with Fastloc-GPS satellite tags.	 12 hawksbills migrated to the Great Chagos Bank over 80 km to the north of Diego Garcia. Some stopped at foraging grounds close to the turtles that were tracked there in 2018. Others migrated further north and some had not settled. 3 hawksbills were on Pitt Bank, which is a large submerged atoll (>10m depth) west of Diego Garcia. This is the first time they had tracked turtles to Pitt Bank.

Table 2. Summary table of national research programs: BPMS Scientific Expeditions to the British Indian Ocean Territory during 2019 and 2020





Project title	Period	Institutions involved	Objectives	Outcomes (results, publications, future work)
			3. To improve our knowledge of the turtle population in Diego Garcia lagoon by commencing a UAV (quadcopter drone) monitoring survey of the lagoon including seagrass survey.	• 1 hawksbill travelled beyond Pitt Bank to the southwest to a much smaller submerged and unstudied atoll called Centurion Bank.
Deep reefs and seamounts BPMS expedition 17	Nov/Dec 2019	ZSL	Overall objective: To study seamounts and mesophotic reefs as hotspots of biodiversity and sources of recovery for damaged shallow reefs Specific objectives To study the oceanography, mesophotic coral reef ecology and animal behaviour by using: • moored oceanographic instrumentation • ship-based oceanographic instrumentation • surveys using a remotely-operated vehicle (ROV) • multibeam acoustic surveys	 A complete survey, with triplicate repeat surveys, to a depth of 160 m of the mesophotic1 reef community off Ile de Rats, Egmont Island, in addition to a complete survey of 'Manta Alley' on the north shore. Collection of 37 coral samples from the mesophotic reef for genetic analysis. Deployment of 20 acoustic tags and 5 receivers at Egmont alongside sightings of 67 reef manta rays. Comprehensive, survey-grade multibeam bathymetry surveys to a depth of 400 m of Sandes seamount, Egmont, and the western half of Salomon Island. Deployment and recovery of comprehensive mooring arrays over Sandes and Egmont to resolve how internal waves aggregate biomass and cause zonation in the mesophotic reef community. Extensive surveys (>290 hours) of fish aggregation over the flanks of Sandes Seamount and Egmont, including 2 continuous 24 hour surveys (one over Sandes, one over Egmont) combined with vessel based physical oceanographic measurements.
Seabird/drone research.	14 th January to 26 th	ZSL/Exeter University/MMO/ Loughborough University	Overall objective: To undertake research to assess the importance of the BIOT MPA for seabirds and to further test UAVs in situ Specific objectives:	Seabird team successfully completed survey of Red footed booby colony at Barton Point on Diego Garcia and ad hoc census counts of all seabird species in the northern atolls. They





Project title	Period	Institutions involved	Objectives	Outcomes (results, publications, future work)
BPMS expedition 18	February 2020		 To document the year round biology and foraging ecology of breeding RFBs at Barton Point Nature Reserve and RFBs and BBs at Nelson Island. To document the distribution of non-breeding RFBs from Barton Point Nature Reserve on DG. To establish the status and distribution of breeding seabirds on Nelson Island. To conduct test flights of fixed wing UAV's from the BPV fixed-wing for megafauna and ghost net surveying and IUU surveillence in conjunction with intelligence from satellite surveillance. 	were unable to complete their survey work on Nelson Island and that has been re-scheduled to Spring 2021. The UAV work was limited by long AMC flight delays and adverse weather. Further testing is planned for 2021
Reef 0 BPMS expedition 19	3 rd to 9 th March 2020	Oxford University/ZSL/WWF/Macquarie	 Overall objective: Assess population size and reproductive status of corals on DG's reefs Specific objectives: 1. Survey reefs around Diego Garcia to obtain a more accurate estimate of population size for the critically endangered brain coral <i>Ctenella chagius</i>. 2. Asses coral reproductive status. The dates for the planned Reef 0 expedition coincide with what is suspected to be the annual period of synchronous spawning for corals on the reefs of BIOT. 3. Survey the small cryptic invertebrates (cryptofauna) that live on/in the reef by deploying a set of 9 ARMS for a period of one year (all will be collected in 2021). 	 Objectives completed. 1.Very few Ctenella colonies seen but further surveys required on seaward reefs. Large areas of good quality reef established. 2. Samples established that corals were gravid with ripe gametes. This confirms a likely spawning in Feb which concurs with dates proposed after spawning slicks seen during fieldwork last year 3. ARMS collected and processed as planned data submitted to global ARMS dataset
ZDF filming trip. BPMS expedition 20	12 th to 29 th March 2020	ZSL/Oregon/Stanford/ZDF	 Overall objective: Film footage for a documentary on BIOT and the science work of the programme. Specific objectives: 1. Give introduction to BIOT and the marine science programme. 2. Use on board team to record activities around tagging sharks and birds and island ecosystems. 	Only partially completed, team pulled out early due to COVID- 19. Repeat trip to complete footage planned in 2021





Project title	Period	Institutions involved	Objectives	Outcomes (results, publications, future work)
			 Meet the Reef 1 team and film them conducting a range of reef research activities. Meet the Plymouth team and film them Manta tagging using ROVs to film deep reefs. 	
Deep reefs and seamounts BPMS expedition 21	7 th to 25 th March 2020	Plymouth University and Manta Trust	Overall objective: To study seamounts and mesophotic reefs as hotspots of biodiversity and sources of recovery for damaged shallow reefs. Specific objectives: To study the oceanography, mesophotic coral reef ecology and animal behaviour by using: 1. moored oceanographic instrumentation 2. ship-based oceanographic instrumentation 3. surveys using a remotely-operated vehicle (ROV) 4. multibeam acoustic surveys	Objectives largely met other than ROV surveys on seamounts which were postponed due to adverse weather. Extensive surveys done round Egmont atoll, mantas tagged and receivers serviced.
Reef 1 BPMS expedition 22	10 th to 31 st March 2020	Exeter University/Lancaster University/Stanford/AIMS	 Overall objective: Assessing the composition and structure of reef communities in BIOT pre and post bleaching event and to explore their relationship with reef resilience and the value of the MPA. Specific objectives: Reef fish surveys. Sampling and studying of fish otoliths and gut contents to assess nutrient flows. Retrieving plates to study recruitment rates. Retrieval and processing of ARMS devices. Deployment of BEAMS instruments to measure reef productivity. 	Largely incomplete because team pulled out early due to COVID-19. Team were able to complete planned work at Egmont atoll before having to return to DG.

8. IMPLEMENTATION OF SCIENTIFIC COMMITTEE RECOMMENDATIONS AND RESOLUTIONS OF THE IOTC RELEVANT TO THE SC.

Res. No.	Resolution	Scientific requirement	CPC progress
15/01	On the recording of catch and effort by fishing vessels in the IOTC area of competence	Paragraphs 1–10	Not applicable as BIOT has no flag registry or fleet of vessels.
15/02	Mandatory statistical reporting requirements for IOTC Contracting Parties and Cooperating Non-Contracting Parties (CPCs)	Paragraphs 1–7	BIOT submits all mandatory statistical reports, including null reports
18/05	On management measures for the conservation of the billfishes: striped marlin, black marlin, blue marlin and Indo-Pacific sailfish	Paragraphs 7-9	Not applicable as BIOT has no flag registry or fleet of vessels.
13/04	On the conservation of cetaceans	Paragraphs 7–9	Not applicable as BIOT has no flag registry. Cetaceans are not associated with the recreational fishery
13/05	On the conservation of whale sharks (<i>Rhincodon typus</i>)	Paragraphs 7–9	Not applicable as BIOT has no flag registry. Whale sharks are not associated with the recreational fishery
13/06	On a scientific and management framework on the conservation of shark species caught in association with IOTC managed fisheries	Paragraph 5–6	Not applicable as BIOT has no flag registry and releases all sharks alive from the recreational fishery.
12/09	On the conservation of thresher sharks (family alopiidae) caught in association with fisheries in the IOTC area of competence	Paragraphs 4–8	BIOT releases all sharks alive from the recreational fishery
12/06	On reducing the incidental bycatch of seabirds in longline fisheries.	Paragraphs 3–7	Not applicable as BIOT does not have a flag registry.
12/04	On the conservation of marine turtles	Paragraphs 3, 4, 6–10	Parts relating to flag vessels are not applicable as BIOT does not have a flag registry. Nesting sites in BIOT are monitored on island visits.
11/04	On a regional observer scheme	Paragraph 9	Not applicable as BIOT does not have a flag registry.
17/05	On the conservation of sharks caught in association with fisheries managed by IOTC	Paragraphs 6, 9, 11	No sharks are retained in BIOT. Sharks caught in the recreational fishery are released alive. Sharks caught by IUU fishing vessels are reported in communications to the Compliance Committee.
18/02	On management measures for the conservation of blue shark caught in association with IOTC fisheries	Paragraphs 2-5	Not applicable as BIOT does not have a flag registry.
18/07	On measures applicable in case of non- fulfilment of reporting obligations in the IOTC	Paragraphs 1, 4	As set out in this report, BIOT does not operate a flag registry, nor have a fleet of commercial fishing vessels, but a small recreational fishery exists on Diego Garcia that catches tuna and tuna like species. BIOT consistently fulfils all reporting obligations in a timely manner in respect of this fishery. Sharks caught in the recreational fishery are released alive. In 2016 steps were taken to improve data collection for catches taken by shore-based fishers, though it is not anticipated this will include significant catches of tuna or tuna like species. Reference to this information will be included in the Annual Report of Implementation.
19/01	On an interim plan for rebuilding the Indian Ocean yellowfin tuna stock in the IOTC Area of Competence	Paragraphs 8 - 12	N/a (For 'all other gears', that would include recreational fishing in Diego Garcia, the measure only applies to catches>5000 t in 2014). Nevertheless, from 2017 BIOT has encouraged the live release of all yellowfin tuna caught in its recreational fishery.
19/02	Procedures on a fish aggregating devices (FADs) management plan.	Paragraph 4	N/A. Reduced FAD numbers may benefit BIOT.

Table 9. Scientific requirements contained in Resolutions of the Commission, adopted between 2011 and 2020.

9. LITERATURE CITED

MRAG (2019a) Review of FAD papers from the 2nd Joint Tuna RFMO FAD WG Final Report June 2019.





MRAG (2019b) Ocean Currents in structuring FAD and ALDFG beaching in BIOT. MRAG (2019c) Pilot results of modelling of passive particles through BIOT. October 2019.