

Ascension Island Inshore Fisheries Strategy

1. Purpose and Scope of Strategy

This strategy sets out how the inshore fisheries around Ascension will be managed to secure social, economic and environmental objectives. It is based on recommendations made by the Inshore Fisheries Advisory Committee (IFAC), a group composed of members of the Ascension fishing community and Ascension Island Government (AIG) marine scientists, formed following public meetings in September 2018 (Appendix 1).

Inshore fisheries are defined as those operating within 12NM of the island. No large-scale commercial fishing is permitted within any part of Ascension's MPA, which extends out to 200NM from the island. However, recreational, sports and small-scale extractive fisheries are permitted within 12NM of the island and it is these fisheries that this strategy seeks to manage to ensure they are sustainable and generate benefits for the whole island.

Operation of the management system will be the responsibility of the AIG Conservation and Fisheries Directorate (AIGCFD), but members of the local fishing community and elected members of the Ascension Island Council will be central to decision making.

2. Strategy Objectives

This strategy aims to bring about:

- A sustainable, thriving recreational fishery that balances current needs with the long-term health of fish stocks and inshore marine ecosystems for future generations to enjoy
- A well-managed sports fishing sector that follows the best environmental practices and generates financial benefit for everyone living on Ascension
- A management system with Ascension's fishing community at the heart of decision making, leading to a sense of ownership and high levels of compliance and cooperation
- Full compliance with all of Ascension's international obligations relating to coastal fisheries

3. Background

i) Description of inshore ecosystem

Ascension Island is the top of a steep sided volcano rising 3000m from the surrounding sea floor. There is only a narrow 110km² band of shallow water (less than 200m) around the island and in places the 200m depth contour is only 600m from the coast (Figure 1).

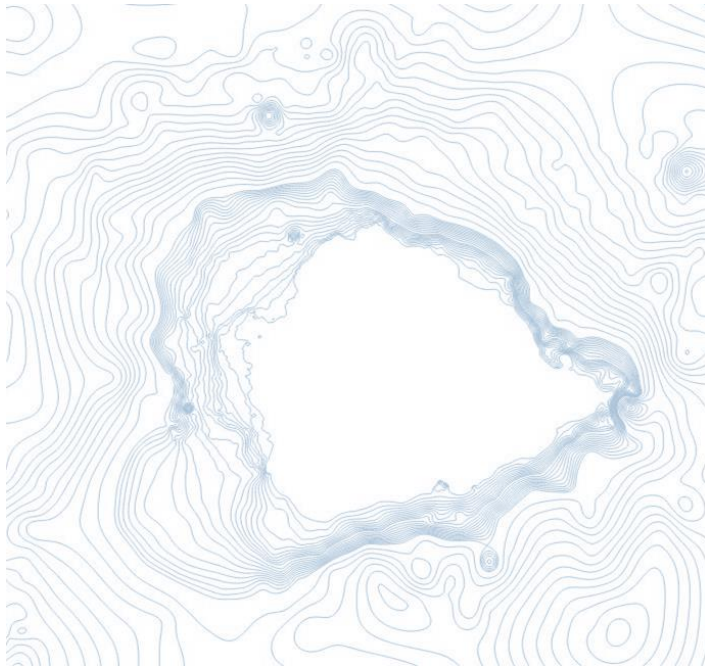


Figure 1. Map showing depth contours around Ascension Island. There is a much steeper drop off on the eastern side of the island.

The hundreds of kilometres of deep ocean surrounding Ascension effectively isolate it from other areas of shallow water and make it difficult for inshore species to reach Ascension from other Atlantic islands or the South American and African coasts. The result is that a relatively small number of inshore species is found around Ascension compared to other islands. However, the mix of species is unique since it contains those that originate from both the east and west coasts of the Atlantic as well as eleven endemic fish species that have evolved around Ascension and are found nowhere else on the planet. The proximity of deep water also means that species usually associated with open oceans such as yellowfin tuna and blue marlin are found close to the coast.

ii) Description of inshore fishery

Recreational and subsistence fishery

The sea plays a prominent role in Ascension life and fishing is part of the identity of many people on the island. Fishing for food and recreation is carried out by people living on Ascension and visitors to the island. Small boats moored at Georgetown are used to fish with rod and line up to around 3 miles from the shore. Rod and line fishing also takes place from the coast (rock fishing), and spear fishing using SCUBA or while freediving is quite common. The principal species targeted by these methods are yellowfin tuna, wahoo, rockhind grouper, glasseye snapper (locally called bullseye) and moray eel. Hand-picking of spiny lobster and octopus is also practised by a smaller number of individuals. Fishing by all methods is concentrated around the north and west coasts of the island and occurs throughout the year. There are currently no data available on the fishing effort or size of catch. Most of the fish caught are for personal consumption or shared with friends and family. Some fish are exported frozen from the island and sent to friends and family in St Helena, the USA, UK or Falkland Islands and there is a small commercial trade on the island with the military bases being the main customers.

Sports fishery

Ascension has a world class reputation for its sports fishing, which is defined here as a commercial operation where the main purpose is the experience of catching fish, and the fish caught could either be retained or released following capture. In practice, the dividing line between this and recreational fishing is not always clear and the same boat can take friends and family on a

non-commercial basis as well as paying customers. At the extreme, however, there are dedicated sports fishing businesses that have charged international clients £1000s for the opportunity to fish around Ascension.

Currently, the US Base operates a boat that allows US Base personnel to book fishing trips twice a week for up to 8 people. Another operator on the island combines fishing and diving trips. Before the suspension of the South Atlantic Airbridge in 2017, which provided a direct flight between the UK and Ascension, three sports fishing companies operated on the island with most customers flying in from Europe or the USA. The boats operated out of Georgetown and targeted tuna and billfish by rod or spear fishing out to around 3NM from the coast. When the Airbridge resumes it is likely that sports fishing businesses will seek to return to Ascension and this could be a potential source of revenue for the island.

iii) History of Fisheries Management

To date there has been very little control of the sports or recreational fisheries on Ascension.

Customs legislation limits the amount of fish that can be exported from Ascension to 10kg per person per voyage. This was not introduced as a fisheries conservation measure, but has effectively limited demand for fish. The likely result of this is an overall reduction in fishing effort but a concentration of effort in the period before a ship leaves for St Helena.

In 2013 the introduction of the Wildlife Protection Ordinance (WPO) made it illegal to kill many of Ascension's most vulnerable fish species, and in 2016 this protection was extended to cover 40 fish species, including all shark species recorded from Ascension's waters (Appendix 2). There has been some landing of sharks in the past for consumption on the island, but most species covered by the WPO have never been targeted by the fisheries. The exception is female spiny lobster in berry, which are specifically protected by the WPO legislation. There are some provisions within the WPO to introduce closed areas or seasons for the fishery, but to date these powers have not been used.

4. Potential threat of a poorly managed fishery

Fishing can be carried out sustainably without damage to marine environments. However, globally there are many examples of commercial and recreational fisheries that have severely depleted fish stocks and damaged marine ecosystems, demonstrating the risk posed by poorly-managed fisheries.

The fishing pressure on Ascension is constrained by the small size of the island population and limited routes for export, but that doesn't prevent all risk of damage to inshore fish stocks (Choat & Robertson 2008; Armstrong & Reeves 2015). The isolation of Ascension and limited area of shallow water habitat means that exploited species such as rockhind grouper, moray eel, glassseye snapper and spiny lobster may have little capacity for replenishment if stocks are severely depleted.

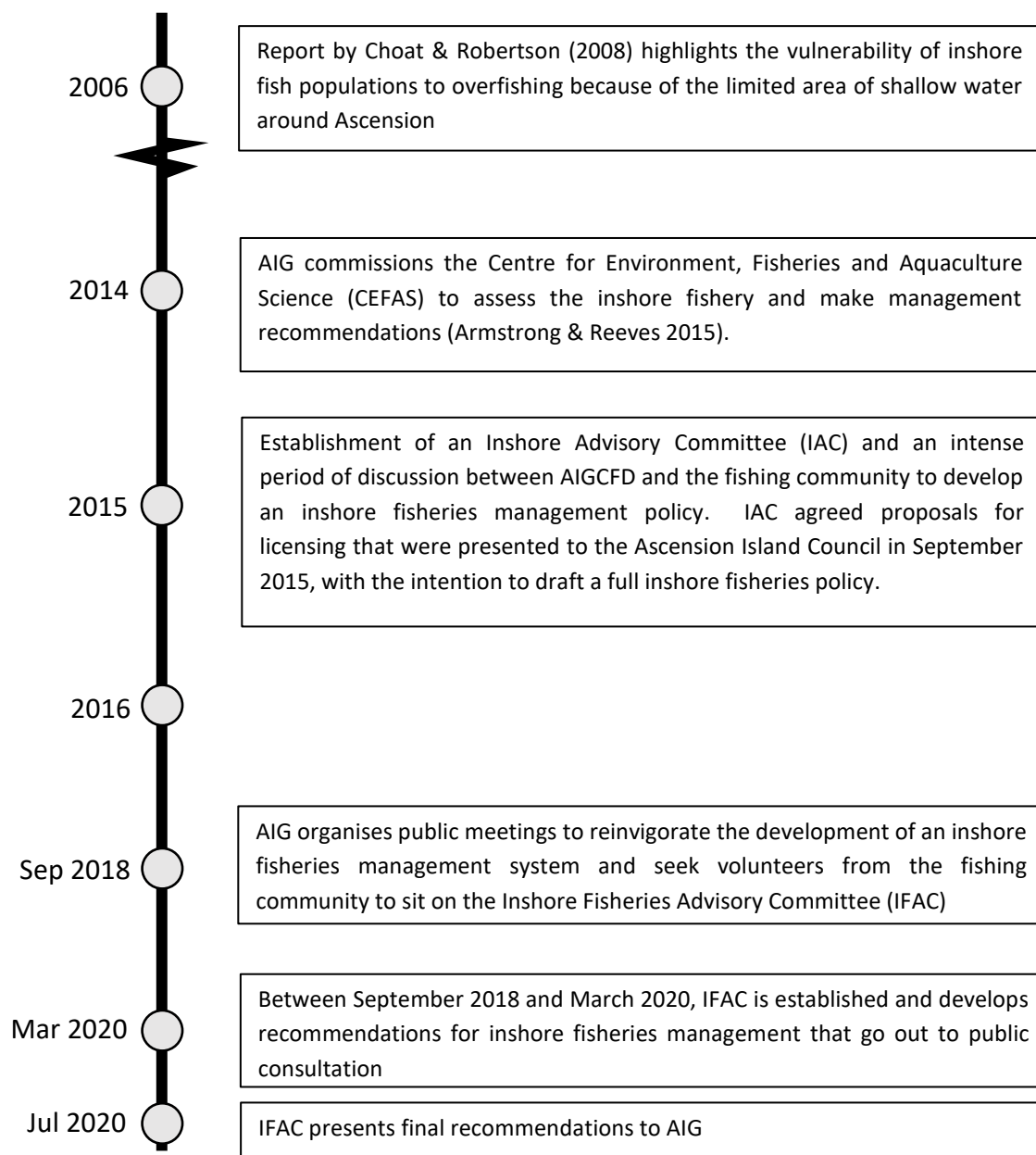
Highly-migratory pelagic species such as yellowfin tuna and wahoo are much less likely to be impacted by recreational fishing around Ascension. The fish caught in inshore waters around Ascension are part of the wider Atlantic population and the Ascension catch is negligible compared to quotas for the commercial fleet exploiting the same stocks. However, any local depletion of tuna and wahoo around Ascension could reduce feeding opportunities for seabirds that depend on predatory fish forcing flying fish and other prey closer to the surface.

Most of the fish caught in the recreational and sports fisheries are apex predators and, based on studies from other areas, the selective removal of these species will likely have impacts on their prey and other species further down the food chain. Fishing can also indirectly affect other non-target species such as seabirds, sharks and turtles that can be accidentally hooked or become entangled in discarded gear (referred to as 'bycatch').

There are also social and economic consequences of a poorly-managed fishery. If recreational and sports fisheries aren't properly managed then future generations may not be able to enjoy the same fishing opportunities seen today and the money generated from visiting fishermen will not benefit everyone living on the island.

5. Development of the Inshore Fisheries Strategy

The need for some form of management of Ascension's inshore fisheries has been raised numerous times over many years. The timeline below shows the major events that have led to this strategy.



The Inshore Fisheries Management System

6. Principles of Management

- Inshore fishing will be sustainable in the long-term and not have a negative impact on Ascension's marine environment, so that future generations have the same fishing and recreational opportunities we enjoy today.
- The ocean around Ascension is a precious resource that should be used wisely and shared fairly for the benefit of the whole island.
- The people who know and use Ascension's waters will be its best stewards and should play an important and active role in its management.
- Management decisions will be based on evidence, but a lack of full scientific certainty should not be an excuse for inaction.
- The way the fishery is managed should be transparent and accountable to the people living on Ascension.

7. Legislation

The powers required to implement this strategy will be provided by an addition to the regulation-making powers in the existing [Fisheries \(Conservation and Management\) Ordinance, 2015](#) and a set of Inshore Zone Regulations introduced in 2021. The Inshore Zone Regulations provide the legal basis for the registration and licensing system. An addition to existing powers within the [Fisheries \(Conservation and Management\) Ordinance, 2015](#) will provide the legal powers to introduce management measures described below. The [Fisheries \(Conservation and Management\) Ordinance, 2015](#) already allows for the warranting of Fisheries Protection Officers, who will now be able to enforce regulations in the inshore fishery.

Other pieces of Ascension legislation contain provisions relevant to the inshore fishery and these will be retained:

- [Customs Ordinance, 2002](#) - limits fish exports to 10kg per person per voyage
- [Wildlife Protection Ordinance, 2013](#) - includes a list of 40 fish species that cannot be intentionally captured or killed in Ascension's waters and prohibits the taking of berried lobsters (Appendix 2).

In addition, Ascension is a member of the International Commission for the Conservation of Atlantic Tuna (ICCAT) and has an obligation to meet its requirements for coastal states. The requirements that apply to Ascension are:

- Providing of catch data for all tuna and billfish species from the recreational and sports fisheries
- Minimum landing sizes for marlin and swordfish
- Prohibition on the sale of recreationally caught marlin
- Observer coverage of billfish fishing tournaments

8. Management System

This section describes the management system and how it will achieve the objectives described in section 2 and uphold the principles stated in section 6.

i) Prohibited fishing methods

The following fishing methods are not compatible with sustainable fishing and will not be allowed in Ascension's waters:

- Bottom and mid-water trawling
- Tangle/gill netting
- Drift netting
- Longlining
- Purse seine netting
- Unconventional fishing methods (dynamite, poison, electricity)

ii) Registration and Licensing

Everyone over 18 will need to register each year or obtain a licence to fish on Ascension (details below). This includes all types of fishing (boat, rock and spear) and all species of fish targeted. A system that includes everyone is essential to ensure that good data can be gathered from the fishery and so that any new management measures can be effectively communicated to everyone who needs to know about them.

Individuals ordinarily resident on Ascension (i.e. those with contracts longer than 6 months to work on Ascension and their dependents) will only be required to sign an annual register to fish by any legal method from the shore or boat. The registration will be free of charge and easy to do online, in person at the post office or at annual sign up events. There will be a two-month grace period at the start of each year to allow people on leave to register on their return. Registration will be possible at other times through the year for new arrivals and people who have recently taken up the activity. A schedule in primary legislation will specifically state that Registration for people living on Ascension will be free. Fees for registration will not be introduced unless recommended by the IFAC.

Anyone not covered by the registration scheme (e.g. visitors and businesses) will need a licence to fish from a boat or from the shore. In keeping with the principle that the benefits of the marine environment should be shared by the island, there will be a tiered system of licence fees. This means those who are likely to make the most money from using Ascension's resources will contribute the most to the island (Table 1). Businesses are defined as commercial enterprises designed to generate an income. Boat owners taking friends out fishing and receiving a contribution towards the running costs of the boat would not be classed as a business.

Table 1. The inshore fishery registration and tiered licence scheme

Category	Registration or licence	Time period	Cost
Under 18s	None required	-	Free
People ordinarily resident on Ascension and their dependants	Registration	Annual	Free
Visitors/short term contractors	Licence	Annual	£15
Visiting sports fishing vessel	Licence	Up to 30 days	£2,500
Sports fishing business licenced on Ascension	Licence	Annual	£2,000
Sports fishing client	Licence	Weekly	£50
Retail fish businesses	Licence	Annual	£100
Scientific research fishing	Licence	Annual	£100

Sports fishing businesses will pay an annual licence fee and there will be an additional weekly fee for each client. These licence fees are felt to be proportionate given the large amounts charged for the opportunity to fish in locations such as Ascension, and the fee structure means the amount paid will relate to the success of the business. Assistance will be provided to people ordinarily resident on Ascension to ensure that the licence fee is not a barrier to starting a sports fishing business.

The money raised from fishing licences will contribute to AIG revenue that supports core infrastructure and services on the island.

Fishermen who register will be asked to provide data as described in section 8(iii). This will be introduced as a voluntary measure, but if sufficient data aren't received to enable management to be carried out effectively then providing data could become a requirement in the future. Everyone who is issued a licence will have to provide the data described in section 8 (iii) as a condition of their licence.

Everyone fishing as part of the registration or licence schemes will have to abide by any management measures introduced as outlined in section 8(v). In addition, businesses will be expected to comply with additional conditions specific to their licence. Example licence conditions are shown in Appendices 3.

There will be no limit on the number of people who can register. The intention is that there will also be no limit on the number of licences that can be issued, but this will be kept under review. Registration or licence applications may be refused if a business or person has failed to meet conditions in the previous years.

iii) Data collection

Good data are needed so that any problems with the health of a fish stock are identified early and the right management measures can be introduced to protect and restore the stock as quickly as possible. Without good data we risk not intervening to stop a stock collapsing or alternatively imposing measures that restrict the fishery when they are unnecessary.

The fishing community has the best information about the health of fish stocks. By recording the number, species, size and location of fish caught, and combining this with monitoring surveys carried out by AIGCFD (Appendix 6) we can build up an accurate picture of what is going on and intervene only if required in a targeted way to protect any stocks in trouble. Everyone registering to fish will be asked to do this by filling in a logbook provided by AIGCFD. The logbook should be completed on

every fishing trip and handed in to the Conservation Office every six months. Licences will contain details of how the licensee should collect data and supply it to AIGCFD.

Data collected on the catch of tuna and billfish species will also be provided to ICCAT so that Ascension meets its international obligations.

iv) Assessment of stock health and sustainable fishing levels

The data collection described above will be the starting point for assessing how well Ascension's inshore fish stocks are doing. This will be done for each fished species separately and at first will be based on any trends we observe in the data. For example, if we see a very rapid decline in the number of eels caught or a reduction in the size of grouper recorded in surveys, then we may be concerned about these stocks and consider recommending management measures (section 8(v)). Obviously we need to take into account how many people are going out to fish and there will be natural seasonal trends in the number or size of fish present around the island, so we will analyse the data closely to see if any trend in the data does reflect a real decline.

In time, we want to introduce a more sophisticated modelling system used in other fisheries around the world that identifies the number of fish of a particular species that can be taken by a fishery without compromising future reproduction and replenishment of the stock. This requires detailed data on the lifespan, age at maturity, mating pattern and number of offspring produced for each species. We have these data for rockhind grouper and are working to collect the same information for other species. This method is more complicated and more accurate, but is essentially a better way of doing the same job of identifying any stocks that are in trouble and need intervention.

If the data do show a decline in a fish species, it does not necessarily mean overfishing is to blame. There are other factors such as climate change and pollution that could be affecting our fish stocks. Solving the actual problem will always be our first aim, but adjusting the fishing pressure through management measures may still be necessary to maintain good fish stocks in the face of factors such as climate change that we can do little about.

AIGCFD scientists will compile and analyse the data, but science alone cannot dictate management. In reality there will be a level of uncertainty in the data and a value judgement will need to be made about how to balance the risk of restricting fishing too harshly now against the risk of not acting soon enough to prevent a stock collapsing and ruining fishing in the future. It is the fishing community that will be most affected and so it is right that they are at the heart of decision making and take responsibility for finding this balance between the needs of today and tomorrow.

Figure 2 sets out how data will be used to make management decisions and who will be involved at crucial stages. IFAC and AIGCFD will review the need for management measures every six months. AIGCFD will then report to the Ascension Island Council (or a suitable Council Committee if one has been created) any recommended changes to management measures (e.g. either the introduction of new measures or the removal of existing measures). Even if no changes are recommended, AIGCFD and the IFAC will provide the AIC with an annual report on the status of the inshore fishery.

In the event that changes to the policy approach to the management of the inshore fishery are required, AIG will consult the Ascension Island Council and seek a recommendation before any changes are made.

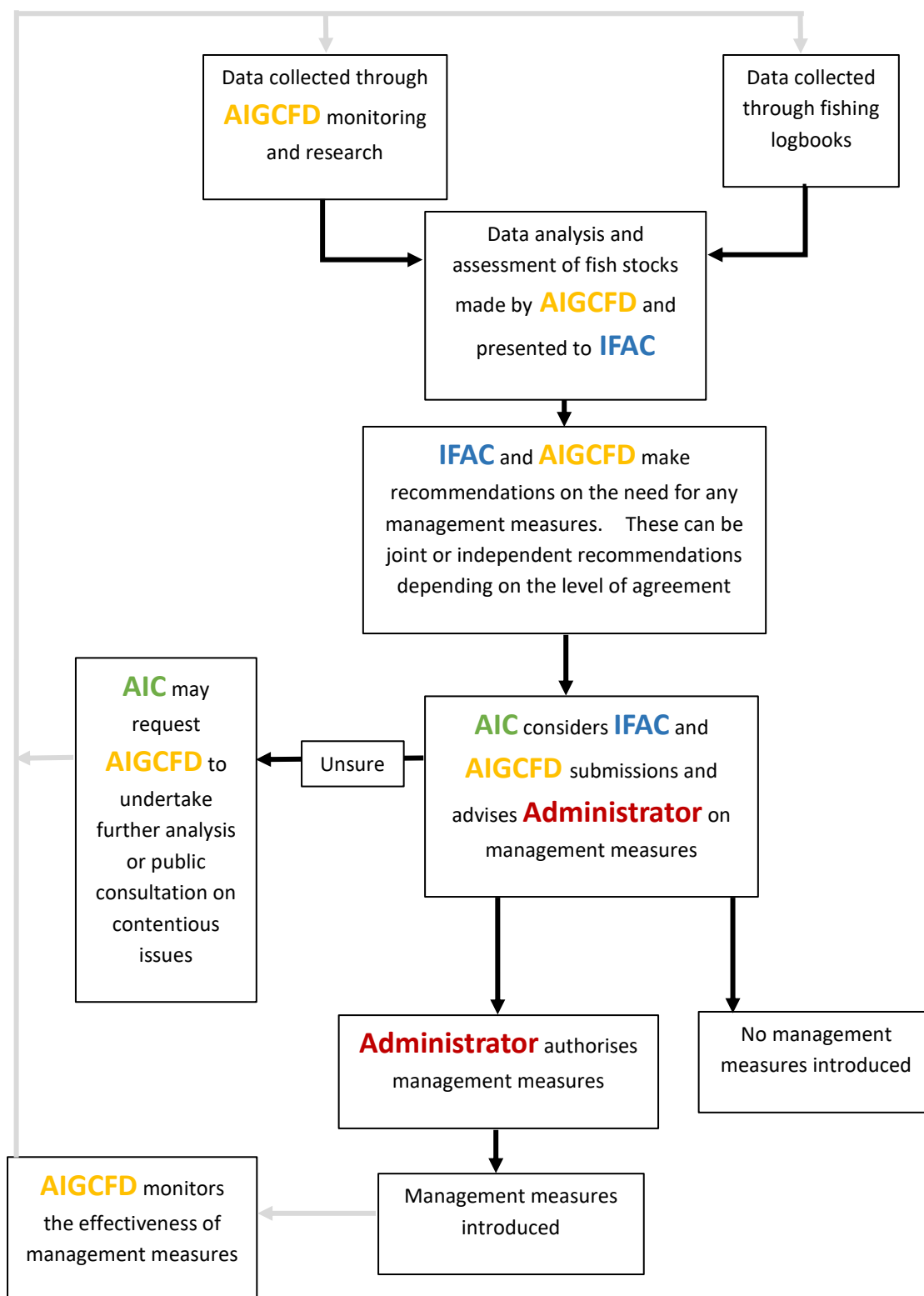


Figure 2. Mechanism to decide if management measures should be implemented in the inshore fishery

v) Management measures

In order that Ascension meets its international obligations under ICCAT, a minimum landing size of 251cm lower jaw fork length for blue marlin, 168cm for white marlin and 125cm or 25kg for swordfish will be introduced immediately along with a requirement that the carcasses of these species are never sold. This should have little impact on the recreational fishery and is already common practice in many sports fisheries so should not prove contentious.

Other management measures will only be introduced if it is felt necessary to protect the stock based on an analysis of the data collected. Management measures may never be recommended for many species. There is a feeling among some people on the island that there are so few people fishing and so many fish around Ascension that there will never be a problem. That view may well be correct. However, factors such as climate change may mean past experience isn't a reliable guide for the future and there are many examples around the world where the assumption that the sea will be ever bountiful has been shown to be incorrect. With such a small area of isolated inshore habitat and little chance of replenishment from elsewhere (Section 3(i)), having a system of early warning and response in place is a sensible precaution to protect something so valuable.

If the system described in section 8(iv) recommends management action, then there are a suite of potential measures that would be implemented by means of regulations made under the [Fisheries \(Conservation and Management\) Ordinance, 2015](#), and could be introduced depending on the nature of the problem (Table 2). The same decision making and approval process described in section 8(iv) will also be responsible for selecting the most appropriate measure or measures to be introduced. As well as reacting to the data that become available, the IFAC may seek to prioritise research in areas where there are existing concerns and may decide to recommend early action based on a precautionary approach. An example of an existing concern would be the taking of small spiny lobster before they have had a chance to reproduce. This could be addressed through a minimum landing size for this species.

It is very hard to predict with absolute certainty how effective a management measure will be and when any restrictions will no longer be needed. That is why we will take an adaptive management approach shown below.



If a measure is introduced, then we will monitor its effect using data from logbooks and survey methods (Appendix 6) to see if it is working. Depending on the problem that is being addressed, it may take time to know how well it is working, but we will design the monitoring to establish this as quickly as possible. In some cases we may try two or more management approaches in different places or at different times so we can compare them and then adopt the best option.

As a minimum all management measures will be reviewed by AIGCFD and the IFAC every six months to ensure they are still relevant and necessary.

9. Information Sharing

To retain the trust and support of the fishing community, all stages of the management process will be open and transparent. It is essential that people see how the data they have gathered and the collective knowledge of the IFAC are being used to inform decisions.

- The data and assessments on which management decisions will be made will be available on the website and summaries published in the Islander
- The minutes of all IFAC meetings will continue to be published online and in the Islander
- IFAC members are representatives of the fishing community and will actively seek their views and raise suggestions and concerns
- Public meetings to go through stock assessments and management decisions will be jointly held by AIGCFD and the IFAC at least once a year
- AIGCFD will undertake a public consultation ahead of any particularly contentious management decisions

It is important that the regulations and any management measures are well publicised so people know and understand the requirements. This will be achieved by:

- Noticeboards at the Pierhead and popular fishing sites displaying up to date information
- Copies of current management measures provided at registration and with each fishing licence issued
- All current management measures published in the Islander each year and on the introduction of any new measures
- All regulations and current management measures published on the website and any new measures circulated via social media
- Information provided with all new contracts and entry visas explaining the management system

These methods will also be used to share other important information with fishermen including: how to collect accurate measurements; best practice guidance for the release of birds, turtles or sharks that are unintentionally hooked; the damage done by discarded fishing gear and requests to look out for and report tagged fish.

Table 2. Potential management measures that could be introduced to protect fish stocks

Measure	Description	Situation suitable for	Enforcement method	Ease of enforcement
Closed areas	Fishing would not be allowed in a certain area. The size of the area could be varied depending on the situation. The area closure could apply to all species and fishing types, or be specific to certain fishing types and species. The closed area would be shown on maps displayed at prominent locations around the island and could be marked on the ground with buoys is necessary.	Particularly effective where a fish stock is in poor health and has a defined area for a key part of its lifecycle such as breeding or nursery grounds. Can also be useful for reducing overall fishing pressure and resulting in spillover benefits to adjacent fished areas	Observations from the island, fishery patrols, reporting by other fishermen and potential use of remote tracking technology	Easy
Closed seasons	Fishing would not be allowed for a particular period in the year. The length of the period would depend on the situation and could apply to specific areas, species or gear types. The closed season would be well-advertised in advance through public notices, posters and media articles. If a closed season becomes established and is repeated over many years, it will allow fishermen to adapt and prepare for it.	Particularly effective to protect stocks or bycatch species that congregate during a defined period for breeding activities.	Observations from the island, fishery patrols, reporting by other fishermen and potential use of remote tracking technology	Easy
Size limits	Only individual fish of a certain size can be landed. Efforts should be made to avoid catching smaller fish and all other fish should be released with as little disturbance as possible. The size limit would be different for each species and are most likely to be a minimum landing size, but could also include a maximum size. The size limit ensures that all fish reach maturity and are able to reproduce and contribute to the next generation before they are at risk of being caught	Effective for stocks in poor health where individuals need to be given the opportunity to reproduce to rebuild numbers. It is particularly effective for long-lived species that may experience many years of being exposed to fishing pressure before they reproduce.	Random inspections at landing sites, observers on sports fishing vessels, reporting by other fishermen.	Difficult

	Information about the limits would be prominently displayed at fishing locations and fishermen would be given measuring tapes to help them comply.			
Bag limits	A limit would be placed on the maximum number of fish of a certain species that could be landed during a fishing trip. The limit is usually expressed as per rod.	This is effective for stocks in poor health where the overall pressure needs to be reduced.	Random inspections at landing sites, observers on sports fishing vessels.	Very difficult
Restriction on gear type	Certain types of fishing would be restricted (e.g. spearfishing, potting). It is unlikely these would be blanket prohibitions and are more likely to be in a particular area or for a discrete time period. The restriction would be communicated by notices at fishing locations and in the media.	This is particularly effective when a fish stock in poor health is especially vulnerable to a gear type.	Random inspections at landing sites, observers on sports fishing vessels, reporting by other fishermen.	Moderately easy
Prohibition on catching particular species	This would be a broad prohibition on the catching of a fish species in all areas at all times of year. The restriction would be communicated by notices at fishing locations and in the media.	This is a drastic option that would only be considered if a stock is in severe difficulty and other less restrictive measures had been exhausted.	Random inspections at landing sites, observers on sports fishing vessels, reporting by other fishermen, checks of fish exports.	Moderately easy

10. Enforcement of Regulations and Management Measures

The aims of this strategy (to protect inshore fish stocks and ensure the benefits derived from the fisheries are fairly shared across the island) will only be achieved if there is good compliance with the regulations. Putting the fishing community at the heart of decision making should help to encourage cooperation, but there may also be a need for enforcement. Fishery Protection Officers will be warranted under the Fisheries (Management and Conservation) Ordinance, 2015 and, along with Police Officers, will have the power to enforce the regulations.

Enforcement action will always be carried out with proportionality, consistency and accountability to ensure it is fair and seen to be fair.

In carrying out any enforcement, the aims are:

- To raise awareness
- To change behaviour
- To deter non-compliance
- To limit any financial or other benefit from non-compliance
- To reassure those who are complying
- To impose sanctions that are proportionate to the offence
- To pursue prosecutions for very serious and deliberate non-compliance or repeated non-compliance

Education and awareness raising are the preferred methods to ensure compliance and proportionate enforcement action will only be taken when this approach has been exhausted. Fishing licences may be suspended or revoked in the event of non-compliance. For the most serious and culpable breaches, those responsible may be prosecuted and fined.

11. Improvement of facilities for fishing

The focus of this strategy is to ensure there are healthy stocks of fish to be caught for future generations. However, where possible we want to improve the experience for people fishing on Ascension and make it easy to follow the regulations and guidance. The fishing community is best placed to identify ways to do this and the IFAC have already recommended the following:

- At Georgetown Pier:
 - Sunshade
 - Scales
 - Measuring board
 - Pump
- Noticeboards at the main fishing sites

We will work to install these. The IFAC have also suggested the following further improvements and funding for these and other future ideas could come from the Ascension Island MPA Conservation Trust Fund.

- Fisheries education
- Safer rock fishing spots and improved site access
- Lifesaving courses
- Protection for boats coming alongside the pier such as fixed fenders

- Fishing lessons or taster sessions for young people

Support to develop Ascension businesses linked to the marine environment

The sports fishing around Ascension is world class and potentially very lucrative. In the past most of the income from this industry has gone to businesses based off island. There are large barriers to local businesses entering this market due to the huge investment required to purchase the type of vessel many international fishermen will be expecting.

However, the knowledge and expertise of local community is valuable and we want to provide support to ensure there are business opportunities for people on island. This could include:

- Collection of data from target market to identify opportunities and standards expected.
- Assistance with online marketing and booking
- Advice on safety and insurance requirements
- Ideas and support for indirect business opportunities (e.g. car hire, meals and souvenirs)

12. Monitoring the success of strategy

Each year AIGCFD will make and publish an assessment of how well this strategy is achieving its objectives. This will be done using the methods and targets in Table 3.

13. References

Armstrong, M. & Reeves, S. (2015). A review of fisheries management options for Ascension Island waters. 2. Inshore fisheries. Centre for Environment, Fisheries and Aquaculture Science report to AIG.

Choat, J. and Robertson, D. (2008). An ecological survey of the St Helena and Ascension Island populations of the Jack (*Epinephelus adscensionis*) with a review of management options. Report to AIG.

Table 3. Framework for monitoring the achievements of the Inshore Fisheries Strategy

Objective	Monitoring method	Target
People living on Ascension have access to fishing opportunities that are equitably shared and enjoyed by the community	Record number of people on the fishing register Annual/biennial repetition of satisfaction surveys with responses from at least 20 fishermen.	Number of people on the fishing register as a percentage of the Ascension population is at least 90% of baseline at the introduction of the strategy At least 75% of respondents to survey report being satisfied or very satisfied with management of the fishery.
No species are fished unsustainably	Catch data and abundance surveys.	All stocks are above maximum sustainable yield or abundance is at least 80% of baseline at strategy introduction in all years.
No damage to other species that are connected to fished species or otherwise affected by fishing activity	Abundance surveys for a set of indicator species that are linked ecologically to fished species, caught as bycatch or vulnerable to discarded fishing gear. Stable isotope analysis to assess the trophic position of indicator species.	For all indicator species, abundance is at least 80% of baseline at strategy introduction. No change in trophic position of all indicator dependent species.
A significant proportion of revenue from sports fishing and ecotourism is retained on island	Businesses required to collect and share data on the number of customers and their spend on an annual basis. Questionnaires/face to face surveys of visitors at departure to give estimate of average indirect spend.	Total tourist spend increases each year and is 50% higher than 2017 baseline by 2025 (subject to outcome of 'Future of Ascension' discussions). At least 50% of total tourist spend goes to businesses licensed on Ascension.
Ecotourism and sports fishing activities have no negative impact on the behaviour or health of protected species	Annual checks of compliance with licence conditions carried out on all sports fishing and ecotourism businesses.	At least 90% compliance rate across all inspection criteria and all businesses. Infractions are reported in less than 5% of trips and less than 1% of people engaging activities.
International treaty obligations are met.	ICCAT compliance records	ICCAT report submitted on time every year. 100% compliance with ICCAT obligations.

Appendices

Appendix 1 - a) Terms of Reference of Inshore Fisheries Advisory Committee

Scope

- IFACs focus is the sustainable management of all inshore fisheries. Inshore fisheries are defined as any fishing effort taking place within 12nm of Ascension Island.
- IFAC will not address any issues that do not have a significant impact on the inshore fisheries of Ascension. For example, the management of off-shore fisheries.

Purpose

- The IFAC will be an advisory body to the AIG and the Island Council in which members will be representative of the 'inshore sector'. The 'inshore sector' encompasses fishermen using boats of less than 12m overall length, those fishing from the rocks and those who spear fish.
- IFAC will provide a platform on which fishermen can interact with the marine and fisheries department, wider government and the island Council.

Objectives

- IFAC will assist with the development of policies and initiatives relating to the sustainable management of the inshore fisheries, ensuring the protection of the marine environment.
- Help develop and implement measures that enable fishermen using Ascension's waters to contribute to inshore management policy.
- IFAC will consult on proposals for the management of inshore fishing to be put to the Island Council for consideration.
- Provide advice and guidance on maintaining or improving facilities for the fishing communities on Ascension.
- Assist with factual dissemination of information back to other stakeholders and the public.
- Assist with the development of initiatives for collecting data from fisherman, especially with respect to catch per unit effort (CPUE) data.
- To develop ways in which to improve public understanding of sustainable fisheries management.

Governance

- IFAC will comprise no more than 10 members. Of these at least five positions are to be held by long-term (5+yrs) representatives of each fishing group using the inshore waters. These are; spear fishermen, Cray fishermen, rock fishermen, boat fishermen and those that catch octopus. At least one position is to be held by a scientist from the Marine & Fisheries Team.
- An independent Chair may be voted in at a later date to reside over the IFAC, if deemed appropriate. The Chair will not be able to vote, but will be empowered to enforce the TOR appropriately. The Chair must respect the principles of non-partisanship and act dutifully to ensure the TOR are adhered to by all members. The Chair will sit for the same period of time as the members.
- Recommendations will be made to the AIG or the Island Council on inshore fisheries management in an agreed formal format.
- Minutes will be drafted following each meeting and sent to all members for agreement and approval.
- Information will be made available and shared amongst members to ensure all Committee members are effectively able to participate and contribute to the IFAC meetings.
- Pertinent information from each meeting will be disseminated to the public. This will include, but not be limited to, publishing information in the Islander and the Ascension Island Facebook page.
- Decisions on the advice provided by IFAC will be agreed through a system of voting – It has been agreed that this will take the form of a unanimous vote by all IFAC members.
- IFAC is an advisory body without statutory authority.

Operation

- IFAC will meet regularly, at least monthly, in person.
- An agenda and relevant information will be shared in advance of each meeting to allow suitable time for members to prepare.
- Within reason, out-of-session advice and document review may be needed.
- Upon adoption by the Island Council of measures relating to the sustainable management of the inshore fishery, the Committee will continue in its current form until a new TOR can be agreed. The new TOR should ensure the ongoing role of the fishing community in the management of the inshore fishery. A new TOR must be agreed within six months of the adoption of management measures.

Obligations and responsibility of members

Being a member has important obligations and responsibilities. In accepting the appointment, members must be prepared to:

1. Contribute knowledge of, and experience in, inshore/recreational fisheries.
2. If requested, consult with stakeholder peers, industry bodies and other interested parties as necessary.
3. Ensure all stakeholder views are accurately reflected and considered in working group discussions.
4. Constructively participate in discussions to achieve acceptable outcomes in line with the TOR.
5. Respect the views expressed by other members whilst conducting discussions respectfully and in good faith.
6. Act in the best interests of the fishery as a whole. Although members should bring their own experience and knowledge to discussions decisions taken should not favour any particular individual, organisation, or interest group.
7. Avoid pursuing personal agendas or matters of self-interest, and participate in discussions in an objective and impartial manner.
8. Promptly advise of any conflict of interest issues that arise subsequent to appointment. Conflict of interest issues should be communicated as soon as they arise in writing to the IFAC.

Non-disclosure:

Some information that is sensitive in nature may be provided to working group members to enable them to provide the best advice to the AIG. Given their privileged position, members are required to:

- Observe confidentiality and exercise tact and discretion when dealing with sensitive issues. If a member is unsure or concerned about disclosure to non-IFAC members, the member should seek advice from the Chair.
- At all times act honestly, exercise care and diligence in the discharge of their duties and not make improper use of working group information. Improper use may include, but is not restricted to, a member gaining an advantage either directly or indirectly (financial or otherwise) over another individual or group, or causing detriment to the Committee's work or to another individual or group.
- Not publish or communicate to any person, who they are not authorised to publish or communicate to, any information that comes to their knowledge or possession due to their membership of the Committee

Inshore Fisheries Advisory Committee

Recommendations to the AIG

The IFAC was created in 2018 as an advisory body to the AIG in matters pertaining to fishing activities in the inshore. Their remit was to establish a way forward in managing the recreational and sports fishing sectors on Ascension Island in a way that ensured the sustainable use of this precious resource and allowed for the collection of enough data to enable informed management decisions to be made and where appropriate measures put in place to protect individual species.

Since its creation the IFAC have been engaging with fishermen on island through individual members talking one-on-one and feeding back to the group, Islander articles, public meetings and questionnaires. Information from this has directly fed into the recommendations outlined below as has the knowledge of individual IFAC members the majority of whom are themselves local fishermen.

Moving forward, IFAC believe it is important that the local community is involved wherever possible in the development of the new Inshore Fisheries Policy to ensure maximum engagement, buy-in and compliance. It is also important that for those living and working on Ascension their right to fish is protected and any new policy isn't prohibitively complicated.

IFAC Recommendations:

- 1) Two schemes operating in tandem:
 - i. A free annual registration scheme for all members of the community on contracts of >6 months. This will be available to all members of their immediate family (ie spouse/partner and children).
 - ii. A licensing scheme with a scale of associated fees for all other individuals and business wishing to fish in the inshore waters of Ascension. All licenses will be renewable annually and fees will be on a sliding scale based on likely impact to fish stocks.

It is recommended that for those sports fishermen using an on-island organisation to book their trip or weekly excursions would have the cost of a license incorporated into the fees charged by the sports fishing company and the onus is on the company to ensure all individuals using their services are compliant with this. Sports fishermen arriving independently will be responsible for their own licence. An example of a potential licencing scheme can be seen here:

Tier	Category	Sub-Category	Annual Charges/Tariff (based on global research)
1	Sports Fishing Companies	Sports Fishing Super Yacht/MotherShip	£1000-£5000
		Off-island Business	£200-£2000
		Local Business	£100-£1000
2	Retail Fishing Business (EG selling to Chandlery or one of the Bases)	None	£60-£100
3	Individual Sports Fisherman	None	£50-500
4	Scientific Research Fishing (incl non-lethal fishing)	None	£100 per project
5	Visiting yachts	None	£10-20
6	Individual Tourist/Visiting friends & family	None	£1-£15

- 2) In the supporting ordinance to this policy it must be clearly stated that the registration scheme must remain free to qualifying persons for the duration of the policy's implementation.
- 3) Under any policy local fishermen taking out friends and charging for fuel will not be classed as a business .
- 4) Catch data will be recorded in a complementary fishing log. These have already been printed and were sponsored by Blue Marine with money raised from the Monaco cycle ride. Small handheld scales and a tape measure will also to be given to fishermen living on Ascension to allow for additional data collection. Data will be submitted annually as a minimum, but it is recommended that this be collected every 6 months.
- 5) Fishing companies will be required to log the catch data of their customers and submit as above.
- 6) Registration days will be held in January every year at the four bars on Ascension to ensure all fishermen can sign up quickly and easily. It will also be possible to sign up at the Conservation Office. Failure to sign up will come with a penalty, but there is to be a 1 month grace period to allow for those off-island to register on their return.
- 7) Licences can be purchased from the Post Office or at the Conservation Office directly.
- 8) Fishermen will be required to have their licence with them whenever they are fishing and be subject to spot checks.
- 9) By registering or purchasing a licence you agree to abide by any management put in place.
- 10) Log book data will be analysed by the Marine & Fisheries team and combined with their data collection to look at CPUE and morphometric trends within the fishery and identify any causes for concern (e.g. a drop in catch, smaller fish).
- 11) Only if the data highlights an issue will management measures be put in place. The data will have been analysed and then presented to IFAC members for review and recommendations on appropriate measure will be made to the AIG and its conservation department. It will be written into the law that the power to implement these tools would lie with the Administrator. These measures could be:
 - i. Catch limits
 - ii. Minimum or maximum size restrictions
 - iii. Closed seasons or areas
 - iv. Restrictions on type of fishing gear used
- 12) Transparent public reporting of data analysis and any management measure adopted will take place as appropriate via email, public notice posters, The Islander, on relevant Facebook pages and other social media.

- 13) Failure to sign up to a relevant scheme and/or comply with management measures should result in enforcement via warnings, fines and in more serious cases the revocation of an individuals or companies fishing rights. Reporting of non-compliance will be encouraged and the public should feel empowered to protect this precious island resource.
- 14) Money obtained from the sale of licences and the implementation of fines should be ring-fenced from other AIG finances and used to enhance fishing on Ascension. A number of suggestions have been made by IFAC and the public:
 - i. Improved filleting facilities at the pier head (already being developed alongside the pier head renovations)
 - ii. Fisheries education
 - iii. Improved signage and notice boards
 - iv. Safer rock fishing spots and improved site access
 - v. Lifesaving courses
 - vi. Protection for boats coming alongside the pier such as fixed fenders
- 15) Restrictions with regards to chumming are to be considered under this policy.
- 16) Prior to policy being submitted to the Island Council for final consideration and feedback, public consultation must take place in some form.

Appendix 2 – Species protected by the Wildlife Protection Ordinance, 2013, relevant to the inshore fishery

Common Name	Scientific name
Fish	
Ascension snake eel	<i>Ichthyapus insularis</i>
Ascension scorpionfish	<i>Scorpaena ascensionis</i>
St Helena deepwater scorpion fish	<i>Pontinus nigropunctatus</i>
Ascension red scorpionfish	<i>Scorpaenodes insularis</i>
Resplendent angelfish	<i>Centropyge resplendens</i>
Ascension hawkfish	<i>Amblycirrhitus earnshawi</i>
Lubbock's gregory also known as yellowtail damselfish	<i>Stegastes lubbocki</i>
Auxillary spot cardinalfish	<i>Apogon axillaris</i>
St Helena wrasse	<i>Thalassoma sanctaehelenae</i>
Ascension wrasse	<i>Thalassoma ascensionis</i>
Ascension goby	<i>Priolepis ascensionis</i>
St Helena butterflyfish	<i>Chaetodon sanctaehelenae</i>
Bicolour butterflyfish also known as hedgehog butterflyfish	<i>Prognathodes dichrous</i>
Saint Helena sharpnose pufferfish	<i>Canthigaster sanctaehelenae</i>
Marmalade razorfish	<i>Xyrichtys blanchardi</i>
Yellow razorfish	<i>Xyrichtys sanctaehelenae</i>
Atlantic goliath grouper	<i>Epinephelus itajara</i>
Dog snapper	<i>Lutjanus jocu</i>
Mottled blenny	<i>Scartella nuchifilis</i>
St Helena flounder	<i>Bothus mellissi</i>
Island hogfish	<i>Bodianus insularis</i>
Strigate parrotfish	<i>Sparisoma strigatum</i>
St Helena sea perch	<i>Serranus sanctahelenae</i>
Ascension seabream	<i>Diplodus sargus ascensionis</i>
Whale shark	<i>Rhincodon typus</i>
Hammerhead shark	<i>Sphyrna spp.</i>
Tiger Shark	<i>Galeocerdo cuvier</i>
Galapagos shark	<i>Carcharhinus galapagensis</i>
Oceanic whitetip shark	<i>Cacharhinus longimanus</i>
Blue shark	<i>Prionace glauca</i>
Shortfin Mako shark	<i>Isurus oxyrinchus</i>
Bigeye Thresher shark	<i>Alopias superciliosus</i>
Invertebrates	
Land crab	<i>Johngarthia lagostoma</i>
Female Spiny Lobster carrying eggs (berried female)	<i>Panulirus echinatus</i>
Reptiles	
Green turtles	<i>Chelonia mydas</i>
Hawksbill turtles	<i>Eretmochelys imbricata</i>
Seabirds	
Ascension Island frigate birds	<i>Fregata aquila</i>

Masked boobies	<i>Sula dactylatra</i>
Brown boobies	<i>Sula leucogaster</i>
Red-footed boobies	<i>Sula sula</i>
Sooty terns, also known as Wideawake terns	<i>Onychoprion fuscatus</i>
Fairy terns, also known as white terns	<i>Gygis alba</i>
Black noddies	<i>Anous minutus</i>
Brown noddies	<i>Anous stolidus</i>
Red-billed tropic birds	<i>Phaethon aethereus</i>
Yellow-billed tropic birds	<i>Phaethon lepturus</i>
Storm petrels	<i>Oceanodroma spp.</i>

Appendix 3 – Example conditions for inshore fisheries licences

Sports fishing business

- The licence holder must comply with all regulations and management measures applied to the inshore fishery and take steps to ensure they are aware of any changes to these.
- No fish caught can be sold.
- Catch and release of all billfish except world record attempts.
- Minimum landing sizes of 251cm lower jaw fork length for blue marlin, 168cm for white marlin and 125cm or 25kg for swordfish must be complied with.
- No chumming is permitted anywhere in the Ascension MPA.
- All fish retained must be filleted onshore and the fish waste disposed of through island waste collection services.
- No fish aggregated devices (FADs) are permitted anywhere in the Ascension MPA.
- All employees must participate in an AIGCFD training briefing that covers protected species and release of bycatch species.
- Catch data must be provided on the prescribed form to the Ascension Island Government Conservation and Fisheries Directorate (AIGCFD) every 6 months or on request.
- The licence holder must allow the installation of remote electronic monitoring equipment on the fishing vessel if requested by AIGCFD.
- The licence holder must permit an observer to be present on the vessel if requested by AIGCFD.
- The licence holder must cooperate with all reasonable requests to participate in research projects being undertaken on Ascension. This includes the reporting of any tagged fish caught.
- Ascension Island Guidelines on wildlife watching and diving must be followed where applicable.

Retail fish business

- The licence holder must comply with all regulations and management measures applied to the inshore fishery and take steps to ensure they are aware of any changes to these.
- All fish caught must be filleted onshore and the fish waste disposed of through island waste collection services.
- No chumming is permitted anywhere in the Ascension MPA.
- No fish aggregated devices (FADs) are permitted anywhere in the Ascension MPA.
- Catch data must be provided on the prescribed form to the Ascension Island Government Conservation and Fisheries Directorate (AIGCFD) every 6 months or on request.
- The licence holder must cooperate with all reasonable requests to participate in research projects being undertaken on Ascension. This includes the reporting of any tagged fish caught.
- Ascension Island Guidelines on wildlife watching and diving must be followed where applicable.

Individual visitor

- The licence holder must comply with all regulations and management measures applied to the inshore fishery and take steps to ensure they are aware of any changes to these.
- No chumming is permitted anywhere in the Ascension MPA.
- No fish aggregated devices (FADs) are permitted anywhere in the Ascension MPA.
- Catch data must be provided on the prescribed form to the Ascension Island Government Conservation and Fisheries Directorate (AIGCFD) at the end of the licence period.
- The licence holder must cooperate with all reasonable requests to participate in research projects being undertaken on Ascension. This includes the reporting of any tagged fish caught.
- Ascension Island Guidelines on wildlife watching and diving must be followed where applicable.

Appendix 4 – Scientific monitoring of inshore fish stocks carried out by AIGCFD

Measuring the abundance of fish species

Visual transect surveys grouper and moray

RUV surveys

Lobster potting

Monitoring life history parameters of fish species

Sampling fish catches

Research fishing

Light trapping to monitor timing of spawning events

Grouper movement

Mapping fish habitat

Multibeam echosound habitat survey

Inshore current modeling

Appendix 7 – Scientific names of species included in the strategy

Common name	Scientific name
Ascension frigatebird	<i>Fregata aquila</i>
Bigeye tuna	<i>Thunnus obesus</i>
Black triggerfish	<i>Melichthys niger</i>
Blue shark	<i>Prionace glauca</i>
Blue marlin	<i>Makaira nigricans</i>
Bluntnose sixgill shark	<i>Hexanchus griseus</i>
Bottlenose dolphin	<i>Tursiops truncatus</i>
Broadbanded eel	<i>Channomuraena vittata</i>
Galapagos shark	<i>Carcharhinus galapagensis</i>
Glasseye snapper	<i>Heteropriacanthus cruentatus</i>
Green turtle	<i>Chelonia mydas</i>
Humpback whale	<i>Megaptera novaeangliae</i>
Land crab	<i>Johngarthia lagostoma</i>
Masked Booby	<i>Sula dactylatra</i>
Rockhind grouper	<i>Epinephelus adscensionis</i>
Sailfish	<i>Istiophorus platypterus</i>
Sooty tern	<i>Oncychoprion fuscatus</i>
Spiny lobster	<i>Panulirus echinatus</i>
Swordfish	<i>Xiphias gladius</i>
Wahoo	<i>Acanthocybium solandri</i>
White Spotted Moray	<i>Muraena pavonina</i>
Yellow Spotted Moray	<i>Gymnothorax moringa</i>
Yellowfin tuna	<i>Thunnus albacares</i>